ALcontrol Laboratories

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Newport City Council
Civic Centre
Newport
NP20 4UR

Attention: Meirion Humphreys

CERTIFICATE OF ANALYSIS

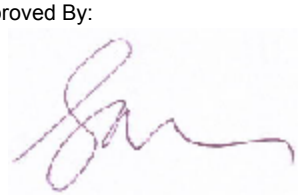
Date:	03 July 2015
Customer:	H_NCC_NPT
Sample Delivery Group (SDG):	150618-23
Your Reference:	
Location:	Docksway Landfill Site
Report No:	319572

We received 12 samples on Thursday June 18, 2015 and 12 of these samples were scheduled for analysis which was completed on Friday July 03, 2015. 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.

Approved By:



Sonia McWhan

Operations Manager

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CERTIFICATE OF ANALYSIS

SDG:	150618-23	**Location:**	Docksway Landfill Site	**Order Number:**	700077119
Job:	H_NCC_NPT-3	**Customer:**	Newport City Council	**Report Number:**	319572
Client Reference:		**Attention:**	Meirion Humphreys	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
11553737	GW03-09			17/06/2015
11553744	GW06-13			17/06/2015
11553739	GW06-34			17/06/2015
11553741	GW06-36			17/06/2015
11553742	GW06-37			17/06/2015
11553746	GW06-39			17/06/2015
11553748	GW07-40			17/06/2015
11553736	GW09-32			17/06/2015
11553740	GW09-35			17/06/2015
11553738	GW12-33			17/06/2015
11553743	GW12-38			17/06/2015
11553745	GW06-14A			17/06/2015

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

ALcontrol Laboratories

CERTIFICATE OF ANALYSIS

Validated

SDG:	150618-23	**Location:**	Dockswav Landfill Site	**Order Number:**	700077119
Job:	H_NCC_NPT-3	**Customer:**	Newport City Council	**Report Number:**	319572
Client Reference:		**Attention:**	Meirion Humphreys	**Superseded Report:**	

LIQUID

Results Legend

- X — Test
- N — No Determination Possible

Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)
11553737	GW03-09		
11553744	GW06-13		
11553739	GW06-34		
11553741	GW06-36		
11553742	GW06-37		

11553737 / GW03-09

Test			1000ml glass bottle	1plastic (ALE221)	250ml BOD (ALE21	H2SO4 (ALE244)	HNO3 Filtered (ALE	NaOH (ALE245)	Vial (ALE297)	ZnAc (ALE246)
Alkalinity as CaCO3	All	NDPs: 0 Tests: 12		X						
Ammoniacal Nitrogen	All	NDPs: 0 Tests: 12				X				
Anions by Kone (w)	All	NDPs: 0 Tests: 12		X						
BOD True Total	All	NDPs: 0 Tests: 12			X					
COD Unfiltered	All	NDPs: 0 Tests: 12			X					
Conductivity (at 20 deg.C)	All	NDPs: 0 Tests: 12		X						
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 12						X		
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 12					X			
Dissolved Organic/Inorganic Carbon	All	NDPs: 0 Tests: 12	X							
EPH (DRO) (C10-C40) Aqueous (W)	All	NDPs: 0 Tests: 12	X							
Ionic Balance	All	NDPs: 0 Tests: 12		X						
Metals by iCap-OES Dissolved (W)	All	NDPs: 0 Tests: 12					X			
Nitrite by Kone (w)	All	NDPs: 0 Tests: 12						X		
pH Value	All	NDPs: 0 Tests: 12		X						
Sulphide	All	NDPs: 0 Tests: 12								X

11553744 / GW06-13

Test	1000ml glass bottle	1plastic (ALE221)	250ml BOD (ALE21	H2SO4 (ALE244)	HNO3 Filtered (ALE	NaOH (ALE245)	Vial (ALE297)	ZnAc (ALE246)
Alkalinity as CaCO3		X						
Ammoniacal Nitrogen				X				
Anions by Kone (w)		X						
BOD True Total			X					
COD Unfiltered			X					
Conductivity (at 20 deg.C)		X						
Cyanide Comp/Free/Total/Thiocyanate						X		
Dissolved Metals by ICP-MS					X			
Dissolved Organic/Inorganic Carbon	X							
EPH (DRO) (C10-C40) Aqueous (W)	X							
Ionic Balance		X						
Metals by iCap-OES Dissolved (W)					X			
Nitrite by Kone (w)						X		
pH Value		X						
Sulphide								X

11553739 / GW06-34

Test	1000ml glass bottle	1plastic (ALE221)	250ml BOD (ALE21	H2SO4 (ALE244)	HNO3 Filtered (ALE	NaOH (ALE245)	Vial (ALE297)	ZnAc (ALE246)
Alkalinity as CaCO3		X						
Ammoniacal Nitrogen				X				
Anions by Kone (w)		X						
BOD True Total			X					
COD Unfiltered			X					
Conductivity (at 20 deg.C)		X						
Cyanide Comp/Free/Total/Thiocyanate						X		
Dissolved Metals by ICP-MS					X			
Dissolved Organic/Inorganic Carbon	X							
EPH (DRO) (C10-C40) Aqueous (W)	X							
Ionic Balance		X						
Metals by iCap-OES Dissolved (W)					X			
Nitrite by Kone (w)						X		
pH Value		X						
Sulphide								X

11553741 / GW06-36

Test	1000ml glass bottle	1plastic (ALE221)	250ml BOD (ALE21	H2SO4 (ALE244)	HNO3 Filtered (ALE	NaOH (ALE245)	Vial (ALE297)	ZnAc (ALE246)
Alkalinity as CaCO3		X						
Ammoniacal Nitrogen				X				
Anions by Kone (w)		X						
BOD True Total			X					
COD Unfiltered			X					
Conductivity (at 20 deg.C)		X						
Cyanide Comp/Free/Total/Thiocyanate						X		
Dissolved Metals by ICP-MS					X			
Dissolved Organic/Inorganic Carbon	X							
EPH (DRO) (C10-C40) Aqueous (W)	X							
Ionic Balance		X						
Metals by iCap-OES Dissolved (W)					X			
Nitrite by Kone (w)						X		
pH Value		X						
Sulphide								X

11553742 / GW06-37

Test	1000ml glass bottle	1plastic (ALE221)	250ml BOD (ALE21	H2SO4 (ALE244)	HNO3 Filtered (ALE	NaOH (ALE245)	Vial (ALE297)	ZnAc (ALE246)
Alkalinity as CaCO3		X						
Ammoniacal Nitrogen				X				
Anions by Kone (w)		X						
BOD True Total			X					
COD Unfiltered			X					
Conductivity (at 20 deg.C)		X						
Cyanide Comp/Free/Total/Thiocyanate						X		
Dissolved Metals by ICP-MS					X			
Dissolved Organic/Inorganic Carbon	X							
EPH (DRO) (C10-C40) Aqueous (W)	X							
Ionic Balance		X						
Metals by iCap-OES Dissolved (W)					X			
Nitrite by Kone (w)						X		
pH Value		X						
Sulphide								X

CERTIFICATE OF ANALYSIS

SDG:	150618-23	**Location:**	Docksway Landfill Site	**Order Number:**	700077119
Job:	H_NCC_NPT-3	**Customer:**	Newport City Council	**Report Number:**	319572
Client Reference:		**Attention:**	Meirion Humphreys	**Superseded Report:**	

LIQUID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			11553737	GW03-09			1000ml glass bottle
							1lplastic (ALE221)
							250ml BOD (ALE21
							H2SO4 (ALE244)
							HNO3 Filtered (ALE
							NaOH (ALE245)
							Vial (ALE297)
							ZnAc (ALE246)
			11553744	GW06-13			1000ml glass bottle
							1lplastic (ALE221)
							250ml BOD (ALE21
							H2SO4 (ALE244)
							HNO3 Filtered (ALE
							NaOH (ALE245)
							Vial (ALE297)
							ZnAc (ALE246)
			11553739	GW06-34			1000ml glass bottle
							1lplastic (ALE221)
							250ml BOD (ALE21
							H2SO4 (ALE244)
							HNO3 Filtered (ALE
							NaOH (ALE245)
							Vial (ALE297)
							ZnAc (ALE246)
			11553741	GW06-36			1000ml glass bottle
							1lplastic (ALE221)
							250ml BOD (ALE21
							H2SO4 (ALE244)
							HNO3 Filtered (ALE
							NaOH (ALE245)
							Vial (ALE297)
							ZnAc (ALE246)
			11553742	GW06-37			1000ml glass bottle
							1lplastic (ALE221)
							250ml BOD (ALE21
							H2SO4 (ALE244)
							HNO3 Filtered (ALE
							NaOH (ALE245)
							Vial (ALE297)
							ZnAc (ALE246)
VOC MS (W)	All	NDPs: 0 Tests: 12					
				X			
				X			
				X			
				X			

CERTIFICATE OF ANALYSIS

SDG:	150618-23	**Location:**	Docksway Landfill Site	**Order Number:**	700077119
Job:	H_NCC_NPT-3	**Customer:**	Newport City Council	**Report Number:**	319572
Client Reference:		**Attention:**	Meirion Humphreys	**Superseded Report:**	

LIQUID

Results Legend

- X — Test
- N — No Determination Possible

Lab Sample No(s): 11553746 — **Customer Sample Reference:** GW06-39 — **AGS Reference:** — **Depth (m):**

Container			1000ml glass bottle	1plastic (ALE221)	250ml BOD (ALE21	H2SO4 (ALE244)	HNO3 Filtered (ALE	NaOH (ALE245)	Vial (ALE297)	ZnAc (ALE246)
Alkalinity as CaCO3	All	NDPs: 0 Tests: 12		X						
Ammoniacal Nitrogen	All	NDPs: 0 Tests: 12				X				
Anions by Kone (w)	All	NDPs: 0 Tests: 12		X						
BOD True Total	All	NDPs: 0 Tests: 12			X					
COD Unfiltered	All	NDPs: 0 Tests: 12			X					
Conductivity (at 20 deg.C)	All	NDPs: 0 Tests: 12		X						
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 12						X		
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 12					X			
Dissolved Organic/Inorganic Carbon	All	NDPs: 0 Tests: 12	X							
EPH (DRO) (C10-C40) Aqueous (W)	All	NDPs: 0 Tests: 12	X							
Ionic Balance	All	NDPs: 0 Tests: 12		X						
Metals by iCap-OES Dissolved (W)	All	NDPs: 0 Tests: 12					X			
Nitrite by Kone (w)	All	NDPs: 0 Tests: 12						X		
pH Value	All	NDPs: 0 Tests: 12		X						
Sulphide	All	NDPs: 0 Tests: 12								X

Lab Sample No(s): 11553748 — **Customer Sample Reference:** GW07-40 — **AGS Reference:** — **Depth (m):**

Container	1000ml glass bottle	1plastic (ALE221)	250ml BOD (ALE21	H2SO4 (ALE244)	HNO3 Filtered (ALE	NaOH (ALE245)	Vial (ALE297)	ZnAc (ALE246)
Alkalinity as CaCO3		X						
Ammoniacal Nitrogen				X				
Anions by Kone (w)		X						
BOD True Total			X					
COD Unfiltered			X					
Conductivity (at 20 deg.C)		X						
Cyanide Comp/Free/Total/Thiocyanate						X		
Dissolved Metals by ICP-MS					X			
Dissolved Organic/Inorganic Carbon	X							
EPH (DRO) (C10-C40) Aqueous (W)	X							
Ionic Balance		X						
Metals by iCap-OES Dissolved (W)					X			
Nitrite by Kone (w)						X		
pH Value		X						
Sulphide								X

Lab Sample No(s): 11553736 — **Customer Sample Reference:** GW09-32 — **AGS Reference:** — **Depth (m):**

Container	1000ml glass bottle	1plastic (ALE221)	250ml BOD (ALE21	H2SO4 (ALE244)	HNO3 Filtered (ALE	NaOH (ALE245)	Vial (ALE297)	ZnAc (ALE246)
Alkalinity as CaCO3		X						
Ammoniacal Nitrogen				X				
Anions by Kone (w)		X						
BOD True Total			X					
COD Unfiltered			X					
Conductivity (at 20 deg.C)		X						
Cyanide Comp/Free/Total/Thiocyanate						X		
Dissolved Metals by ICP-MS					X			
Dissolved Organic/Inorganic Carbon	X							
EPH (DRO) (C10-C40) Aqueous (W)	X							
Ionic Balance		X						
Metals by iCap-OES Dissolved (W)					X			
Nitrite by Kone (w)						X		
pH Value		X						
Sulphide								X

Lab Sample No(s): 11553740 — **Customer Sample Reference:** GW09-35 — **AGS Reference:** — **Depth (m):**

Container	1000ml glass bottle	1plastic (ALE221)	250ml BOD (ALE21	H2SO4 (ALE244)	HNO3 Filtered (ALE	NaOH (ALE245)	Vial (ALE297)	ZnAc (ALE246)
Alkalinity as CaCO3		X						
Ammoniacal Nitrogen				X				
Anions by Kone (w)		X						
BOD True Total			X					
COD Unfiltered			X					
Conductivity (at 20 deg.C)		X						
Cyanide Comp/Free/Total/Thiocyanate						X		
Dissolved Metals by ICP-MS					X			
Dissolved Organic/Inorganic Carbon	X							
EPH (DRO) (C10-C40) Aqueous (W)	X							
Ionic Balance		X						
Metals by iCap-OES Dissolved (W)					X			
Nitrite by Kone (w)						X		
pH Value		X						
Sulphide								X

Lab Sample No(s): 11553738 — **Customer Sample Reference:** GW12-33 — **AGS Reference:** — **Depth (m):**

Container	1000ml glass bottle	1plastic (ALE221)	250ml BOD (ALE21	H2SO4 (ALE244)	HNO3 Filtered (ALE	NaOH (ALE245)	Vial (ALE297)	ZnAc (ALE246)
Alkalinity as CaCO3		X						
Ammoniacal Nitrogen				X				
Anions by Kone (w)		X						
BOD True Total			X					
COD Unfiltered			X					
Conductivity (at 20 deg.C)		X						
Cyanide Comp/Free/Total/Thiocyanate						X		
Dissolved Metals by ICP-MS					X			
Dissolved Organic/Inorganic Carbon	X							
EPH (DRO) (C10-C40) Aqueous (W)	X							
Ionic Balance		X						
Metals by iCap-OES Dissolved (W)					X			
Nitrite by Kone (w)						X		
pH Value		X						
Sulphide								X

CERTIFICATE OF ANALYSIS

SDG:	150618-23	**Location:**	Docksway Landfill Site	**Order Number:**	700077119
Job:	H_NCC_NPT-3	**Customer:**	Newport City Council	**Report Number:**	319572
Client Reference:		**Attention:**	Meirion Humphreys	**Superseded Report:**	

LIQUID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
VOC MS (W)	All	NDPs: 0 Tests: 12	11553746	GW06-39			1000ml glass bottle
							1lplastic (ALE221)
							250ml BOD (ALE21
							H2SO4 (ALE244)
							HNO3 Filtered (ALE
							NaOH (ALE245)
							Vial (ALE297)
							ZnAc (ALE246)
			11553748	GW07-40			1000ml glass bottle
							1lplastic (ALE221)
							250ml BOD (ALE21
							H2SO4 (ALE244)
							HNO3 Filtered (ALE
							NaOH (ALE245)
							Vial (ALE297)
							ZnAc (ALE246)
			11553736	GW09-32			1000ml glass bottle
							1lplastic (ALE221)
							250ml BOD (ALE21
							H2SO4 (ALE244)
							HNO3 Filtered (ALE
							NaOH (ALE245)
							Vial (ALE297)
							ZnAc (ALE246)
			11553740	GW09-35			1000ml glass bottle
							1lplastic (ALE221)
							250ml BOD (ALE21
							H2SO4 (ALE244)
							HNO3 Filtered (ALE
							NaOH (ALE245)
							Vial (ALE297)
							ZnAc (ALE246)
			11553738	GW12-33			1000ml glass bottle
							1lplastic (ALE221)
							250ml BOD (ALE21
							H2SO4 (ALE244)
							HNO3 Filtered (ALE
							NaOH (ALE245)
							Vial (ALE297)
							ZnAc (ALE246)
							X
							X
							X
							X

CERTIFICATE OF ANALYSIS

SDG:	150618-23	**Location:**	Docksway Landfill Site	**Order Number:**	700077119
Job:	H_NCC_NPT-3	**Customer:**	Newport City Council	**Report Number:**	319572
Client Reference:		**Attention:**	Meirion Humphreys	**Superseded Report:**	

LIQUID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	11553743	11553745
			Customer Sample Reference	GW12-38	GW06-14A
			AGS Reference		
			Depth (m)		
			Container	1000ml glass bottle	1000ml glass bottle
				1lplastic (ALE221)	1lplastic (ALE221)
				250ml BOD (ALE21	250ml BOD (ALE21
				H2SO4 (ALE244)	H2SO4 (ALE244)
				NaOH (ALE245)	NaOH (ALE245)
				Vial (ALE297)	Vial (ALE297)
				ZnAc (ALE246)	ZnAc (ALE246)
				1000ml glass bottle	1lplastic (ALE221)
				250ml BOD (ALE21	250ml BOD (ALE21
				H2SO4 (ALE244)	H2SO4 (ALE244)
				NaOH (ALE245)	NaOH (ALE245)
				Vial (ALE297)	Vial (ALE297)
				ZnAc (ALE246)	ZnAc (ALE246)
Alkalinity as CaCO3	All	NDPs: 0 Tests: 12		X	X
Ammoniacal Nitrogen	All	NDPs: 0 Tests: 12		X	X
Anions by Kone (w)	All	NDPs: 0 Tests: 12		X	X
BOD True Total	All	NDPs: 0 Tests: 12		X	X
COD Unfiltered	All	NDPs: 0 Tests: 12		X	X
Conductivity (at 20 deg.C)	All	NDPs: 0 Tests: 12		X	X
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 12		X	X
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 12		X	X
Dissolved Organic/Inorganic Carbon	All	NDPs: 0 Tests: 12	X		X
EPH (DRO) (C10-C40) Aqueous (W)	All	NDPs: 0 Tests: 12	X		X
Ionic Balance	All	NDPs: 0 Tests: 12		X	X
Metals by iCap-OES Dissolved (W)	All	NDPs: 0 Tests: 12		X	X
Nitrite by Kone (w)	All	NDPs: 0 Tests: 12		X	X
pH Value	All	NDPs: 0 Tests: 12		X	X
Sulphide	All	NDPs: 0 Tests: 12			X

CERTIFICATE OF ANALYSIS

SDG:	150618-23	**Location:**	Docksway Landfill Site	**Order Number:**	700077119
Job:	H_NCC_NPT-3	**Customer:**	Newport City Council	**Report Number:**	319572
Client Reference:		**Attention:**	Meirion Humphreys	**Superseded Report:**	

LIQUID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			11553743	GW12-38			1000ml glass bottle
							1lplastic (ALE221)
							250ml BOD (ALE21
							H2SO4 (ALE244)
							NaOH (ALE245)
			X				Vial (ALE297)
							ZnAc (ALE246)
			11553745	GW06-14A			1000ml glass bottle
							1lplastic (ALE221)
							250ml BOD (ALE21
							H2SO4 (ALE244)
							NaOH (ALE245)
			X				Vial (ALE297)
							ZnAc (ALE246)
VOC MS (W)	All	NDPs: 0 Tests: 12					

CERTIFICATE OF ANALYSIS

SDG:	150618-23	**Location:**	Docksway Landfill Site	**Order Number:**	700077119
Job:	H_NCC_NPT-3	**Customer:**	Newport City Council	**Report Number:**	319572
Client Reference:		**Attention:**	Meirion Humphreys	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	GW03-09	GW06-13	GW06-34	GW06-36	GW06-37	GW06-39
			Depth (m)	.	.	.	.	.	.
			Sample Type	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)
			Date Sampled	17/06/2015	17/06/2015	17/06/2015	17/06/2015	17/06/2015	17/06/2015
			Sample Time	.	.	.	.	.	.
			Date Received	18/06/2015	18/06/2015	18/06/2015	18/06/2015	18/06/2015	18/06/2015
			SDG Ref	150618-23	150618-23	150618-23	150618-23	150618-23	150618-23
			Lab Sample No.(s)	11553737	11553744	11553739	11553741	11553742	11553746
			AGS Reference						
Ionic balance	% Diff	Calulation		0.364	-24.9	-0.319	5.94	-3.97	-3.86
Alkalinity, Total as CaCO3	<2 mg/l	TM043		1310 #	847 #	558 #	909 #	940 #	548 #
BOD, unfiltered	<1 mg/l	TM045		<1 #	<1 #	13.9 #	<1 #	39.6 #	2.98 #
Carbon, Organic (diss.filt)	<3 mg/l	TM090		13.7 ♦	25.5	9.87 ♦	14.4	31.5	14
Ammoniacal Nitrogen as N	<0.2 mg/l	TM099		6.73 #	3.84 #	4.1 #	14.4 #	30.4 #	2.98 #
Sulphide	<0.01 mg/l	TM101		0.71 #	0.226 #	4.63 #	0.0513 #	8.41 #	<0.01 #
COD, unfiltered	<7 mg/l	TM107		91.5 #	60.4 #	71 #	281 #	483 #	70.2 #
Conductivity @ 20 deg.C	<0.005 mS/cm	TM120		8.15 #	6.25 #	1.34 #	9.86 #	10.5 #	3.71 #
Arsenic (diss.filt)	<0.12 µg/l	TM152		<0.12 #	5.1 #	19.4 #	<0.12 #	26.5 #	8.46 #
Boron (diss.filt)	<9.4 µg/l	TM152		1220 #	836 #	565 #	1290 #	1850 #	923 #
Cadmium (diss.filt)	<0.1 µg/l	TM152		<0.1 #	<0.1 #	<0.1 #	0.171 #	<0.1 #	<0.1 #
Chromium (diss.filt)	<0.22 µg/l	TM152		5.05 #	3.02 #	1.51 #	4.72 #	5.12 #	3.16 #
Copper (diss.filt)	<0.85 µg/l	TM152		3.22 #	2.53 #	1.66 #	3.23 #	3.53 #	6.71 #
Lead (diss.filt)	<0.02 µg/l	TM152		1.42 #	4.57 #	1.58 #	5.29 #	2.27 #	1.7 #
Manganese (diss.filt)	<0.04 µg/l	TM152		494 #	149 #	2470 #	575 #	379 #	508 #
Nickel (diss.filt)	<0.15 µg/l	TM152		3.19 #	3.65 #	4.42 #	7.87 #	4.21 #	6.76 #
Selenium (diss.filt)	<0.39 µg/l	TM152		<0.39 #	3.37 #	19.9 #	<0.39 #	<0.39 #	6.64 #
Zinc (diss.filt)	<0.41 µg/l	TM152		15.8 #	54.2 #	42.9 #	29.2 #	22 #	21.6 #
EPH Range >C10 - C40 (aq)	<46 µg/l	TM172		<46 #	<46 #	<46 #	<46 #	197 #	<46 #
Nitrite as NO2	<0.05 mg/l	TM184		<0.05 #	<0.05 #	<0.05 #	<0.05 #	<0.05 #	0.099 #
Sulphate	<2 mg/l	TM184		310 #	101 #	80.5 #	60.8 #	20.6 #	51.4 #
Chloride	<2 mg/l	TM184		2490 #	1980 #	128 #	3600 #	4290 #	1110 #
Phosphate (ortho) as PO4	<0.05 mg/l	TM184		6.64 #	4.28 #	3.54 #	5.25 #	10.9 #	1.02 #
Nitrate as NO3	<0.3 mg/l	TM184		<0.3 #	<0.3 #	<0.3 #	<0.3 #	<0.3 #	2.57 #
Total Oxidised Nitrogen as N	<0.1 mg/l	TM184		<0.1 #	<0.1 #	<0.1 #	<0.1 #	<0.1 #	0.61 #
Cyanide, Total	<0.05 mg/l	TM227		<0.05 #	<0.05 #	<0.05 #	<0.05 #	<0.05 #	<0.05 #
Potassium (diss.filt)	<1 mg/l	TM228		50.1 #	37.4 #	22.1 #	87 #	72.4 #	43 #
Iron (diss.filt)	<0.019 mg/l	TM228		2.6 #	1.07 #	15 #	6.89 #	26.9 #	0.904 #
Hardness, Total as CaCO3	<1 mg/l	TM228		761 #	634 #	539 #	1320 #	1280 #	534 #
pH	<1 pH Units	TM256		8.35 #	7.86 #	7.63 #	7.81 #	7.57 #	7.71 #

CERTIFICATE OF ANALYSIS

SDG:	150618-23	**Location:**	Docksway Landfill Site	**Order Number:**	700077119
Job:	H_NCC_NPT-3	**Customer:**	Newport City Council	**Report Number:**	319572
Client Reference:		**Attention:**	Meirion Humphreys	**Superseded Report:**	

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	GW07-40	GW09-32	GW09-35	GW12-33	GW12-38	GW06-14A
			Depth (m)	.	.	.	.	.	.
			Sample Type	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)
			Date Sampled	17/06/2015	17/06/2015	17/06/2015	17/06/2015	17/06/2015	17/06/2015
			Sample Time	.	.	.	.	.	.
			Date Received	18/06/2015	18/06/2015	18/06/2015	18/06/2015	18/06/2015	18/06/2015
			SDG Ref	150618-23	150618-23	150618-23	150618-23	150618-23	150618-23
			Lab Sample No.(s)	11553748	11553736	11553740	11553738	11553743	11553745
			AGS Reference						
Ionic balance	% Diff	Calulation		-4.28	-6.27	4	-5.03	6.71	-4.46
Alkalinity, Total as CaCO3	<2 mg/l	TM043		718 #	1070 #	910 #	957 #	940 #	1440 #
BOD, unfiltered	<1 mg/l	TM045		4.87 #	<1 #	<1 #	2.26 #	9.7 #	50.5 #
Carbon, Organic (diss.filt)	<3 mg/l	TM090		20.1 ♦	15.9 ♦	10.9	19.2 ♦	12	8.97
Ammoniacal Nitrogen as N	<0.2 mg/l	TM099		10.1 #	3.1 #	14.6 #	11.8 #	4.67 #	18.1 #
Sulphide	<0.01 mg/l	TM101		0.304 #	0.12 #	0.399 #	0.153 #	<0.01 #	0.227 #
COD, unfiltered	<7 mg/l	TM107		85.6 #	59.5 #	185 #	62.4 #	213 #	820 #
Conductivity @ 20 deg.C	<0.005 mS/cm	TM120		1.99 #	4.94 #	11.5 #	2.57 #	6.25 #	7.96 #
Arsenic (diss.filt)	<0.12 µg/l	TM152		14.4 #	21.6 #	<0.12 #	287 #	2.19 #	8.84 #
Boron (diss.filt)	<9.4 µg/l	TM152		1370 #	1110 #	1110 #	1170 #	1220 #	1410 #
Cadmium (diss.filt)	<0.1 µg/l	TM152		<0.1 #	<0.1 #	<0.1 #	<0.1 #	0.147 #	<0.1 #
Chromium (diss.filt)	<0.22 µg/l	TM152		4.05 #	3.77 #	5.98 #	2.4 #	10.3 #	11.4 #
Copper (diss.filt)	<0.85 µg/l	TM152		8.17 #	1.15 #	3.84 #	1.57 #	4.9 #	1.31 #
Lead (diss.filt)	<0.02 µg/l	TM152		1.25 #	0.378 #	1.91 #	0.693 #	0.046 #	0.044 #
Manganese (diss.filt)	<0.04 µg/l	TM152		868 #	976 #	907 #	567 #	806 #	6050 #
Nickel (diss.filt)	<0.15 µg/l	TM152		8.46 #	2.42 #	7.03 #	2.04 #	6.51 #	4.69 #
Selenium (diss.filt)	<0.39 µg/l	TM152		4.25 #	10.4 #	<0.39 #	6.85 #	0.435 #	3.58 #
Zinc (diss.filt)	<0.41 µg/l	TM152		17.4 #	65.6 #	22.2 #	36.4 #	3.34 #	1.86 #
EPH Range >C10 - C40 (aq)	<46 µg/l	TM172		<46 #	156 #	<46 #	47.7 #	79.7 #	882 #
Nitrite as NO2	<0.05 mg/l	TM184		<0.05 #	<0.05 #	<0.05 #	<0.05 #	<0.05 #	0.46 #
Sulphate	<2 mg/l	TM184		33.9 #	45 #	137 #	<2 #	896 #	79.2 #
Chloride	<2 mg/l	TM184		292 #	1360 #	4460 #	452 #	1670 #	2580 #
Phosphate (ortho) as PO4	<0.05 mg/l	TM184		8.81 #	3.19 #	10.3 #	0.053 #	0.127 #	0.08 #
Nitrate as NO3	<0.3 mg/l	TM184		<0.3 #	<0.3 #	<0.3 #	<0.3 #	1.95 #	<0.3 #
Total Oxidised Nitrogen as N	<0.1 mg/l	TM184		<0.1 #	<0.1 #	<0.1 #	<0.1 #	0.447 #	<0.1 #
Cyanide, Total	<0.05 mg/l	TM227		<0.05 #	<0.05 #	<0.05 #	<0.05 #	<0.05 #	<0.05 #
Potassium (diss.filt)	<1 mg/l	TM228		32.2 #	26.9 #	75 #	30.9 #	168 #	67.3 #
Iron (diss.filt)	<0.019 mg/l	TM228		0.491 #	2.39 #	7.46 #	7.75 #	<0.19 #	4.13 #
Hardness, Total as CaCO3	<1 mg/l	TM228		377 #	453 #	1920 #	576 #	1090 #	1130 #
pH	<1 pH Units	TM256		7.89 #	8.18 #	7.73 #	7.98 #	7.31 #	7.36 #

CERTIFICATE OF ANALYSIS

SDG:	150618-23	**Location:**	Docksway Landfill Site	**Order Number:**	700077119
Job:	H_NCC_NPT-3	**Customer:**	Newport City Council	**Report Number:**	319572
Client Reference:		**Attention:**	Meirion Humphreys	**Superseded Report:**	

VOC MS (W)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	Depth (m)	Sample Type	Date Sampled	Sample Time	Date Received	SDG Ref	Lab Sample No.(s)	AGS Reference
			GW03-09	.	Water(GW/SW)	17/06/2015	.	18/06/2015	150618-23	11553737	
			GW06-13	.	Water(GW/SW)	17/06/2015	.	18/06/2015	150618-23	11553744	
			GW06-34	.	Water(GW/SW)	17/06/2015	.	18/06/2015	150618-23	11553739	
			GW06-36	.	Water(GW/SW)	17/06/2015	.	18/06/2015	150618-23	11553741	
			GW06-37	.	Water(GW/SW)	17/06/2015	.	18/06/2015	150618-23	11553742	
			GW06-39	.	Water(GW/SW)	17/06/2015	.	18/06/2015	150618-23	11553746	
Benzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
m,p-Xylene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
o-Xylene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Naphthalene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG:	150618-23	**Location:**	Docksway Landfill Site	**Order Number:**	700077119
Job:	H_NCC_NPT-3	**Customer:**	Newport City Council	**Report Number:**	319572
Client Reference:		**Attention:**	Meirion Humphreys	**Superseded Report:**	

VOC MS (W)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	Depth (m)	Sample Type	Date Sampled	Sample Time	Date Received	SDG Ref	Lab Sample No.(s)	AGS Reference
			GW07-40	.	Water(GW/SW)	17/06/2015	.	18/06/2015	150618-23	11553748	
			GW09-32	.	Water(GW/SW)	17/06/2015	.	18/06/2015	150618-23	11553736	
			GW09-35	.	Water(GW/SW)	17/06/2015	.	18/06/2015	150618-23	11553740	
			GW12-33	.	Water(GW/SW)	17/06/2015	.	18/06/2015	150618-23	11553738	
			GW12-38	.	Water(GW/SW)	17/06/2015	.	18/06/2015	150618-23	11553743	
			GW06-14A	.	Water(GW/SW)	17/06/2015	.	18/06/2015	150618-23	11553745	
Benzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
m,p-Xylene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
o-Xylene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Naphthalene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #

CERTIFICATE OF ANALYSIS

SDG:	150618-23	**Location:**	Docksway Landfill Site	**Order Number:**	700077119
Job:	H_NCC_NPT-3	**Customer:**	Newport City Council	**Report Number:**	319572
Client Reference:		**Attention:**	Meirion Humphreys	**Superseded Report:**	

Table of Results - Appendix

Method No	Reference	Description	Wet/Dry Sample [1]	Surrogate Corrected
Calulation				
TM043	Method 2320B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part109 1984	Determination of alkalinity in aqueous samples		
TM045	MEWAM BOD5 2nd Ed.HMSO 1988 / Method 5210B, AWWA/APHA, 20th Ed., 1999; SCA Blue Book 130	Determination of BOD5 (ATU) Filtered by Oxygen Meter on liquids		
TM061	Method for the Determination of EPH,Massachusetts Dept.of EP, 1998	Determination of Extractable Petroleum Hydrocarbons by GC-FID (C10-C40)		
TM090	Method 5310, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 415.1 & 9060	Determination of Total Organic Carbon/Total Inorganic Carbon in Water and Waste Water		
TM099	BS 2690: Part 7:1968 / BS 6068: Part2.11:1984	Determination of Ammonium in Water Samples using the Kone Analyser		
TM101	Method 4500B & C, AWWA/APHA, 20th Ed., 1999	Determination of Sulphide in soil and water samples using the Kone Analyser		
TM107	ISO 6060-1989	Determination of Chemical Oxygen Demand using COD Dr Lange Kit		
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter		
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS		
TM172	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	EPH in Waters		
TM184	EPA Methods 325.1 & 325.2,	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers		
TM208	Modified: US EPA Method 8260b & 624	Determination of Volatile Organic Compounds by Headspace / GC-MS in Waters		
TM227	Standard methods for the examination of waters and wastewaters 20th Edition, AWWA/APHA Method 4500.	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate		
TM228	US EPA Method 6010B	Determination of Major Cations in Water by iCap 6500 Duo ICP-OES		
TM256	The measurement of Electrical Conductivity and the Laboratory determination of pH Value of Natural, Treated and Wastewaters. HMSO, 1978. ISBN 011 751428 4.	Determination of pH in Water and Leachate using the GLpH pH Meter		

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

CERTIFICATE OF ANALYSIS

SDG:	150618-23	**Location:**	Docksway Landfill Site	**Order Number:**	700077119
Job:	H_NCC_NPT-3	**Customer:**	Newport City Council	**Report Number:**	319572
Client Reference:		**Attention:**	Meirion Humphreys	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	11553737	11553744	11553739	11553741	11553742	11553746	11553748	11553736	11553740	11553738
Customer Sample Ref.	GW03-09	GW06-13	GW06-34	GW06-36	GW06-37	GW06-39	GW07-40	GW09-32	GW09-35	GW12-33
AGS Ref.										
Depth										
Type	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID
Alkalinity as CaCO3	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	29-Jun-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	27-Jun-2015	01-Jul-2015
Alkalinity Filtered as CaCO3	25-Jun-2015	25-Jun-2015	25-Jun-2015	25-Jun-2015	25-Jun-2015	25-Jun-2015	25-Jun-2015	25-Jun-2015	25-Jun-2015	25-Jun-2015
Ammoniacal Nitrogen	30-Jun-2015	30-Jun-2015	30-Jun-2015	30-Jun-2015	30-Jun-2015	30-Jun-2015	30-Jun-2015	30-Jun-2015	30-Jun-2015	30-Jun-2015
Anions by Kone (w)	01-Jul-2015	01-Jul-2015	30-Jun-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015
BOD True Total	24-Jun-2015	24-Jun-2015	24-Jun-2015	24-Jun-2015	24-Jun-2015	24-Jun-2015	24-Jun-2015	24-Jun-2015	24-Jun-2015	24-Jun-2015
COD Unfiltered	26-Jun-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	26-Jun-2015	01-Jul-2015	01-Jul-2015
Conductivity (at 20 deg.C)	30-Jun-2015	30-Jun-2015	30-Jun-2015	30-Jun-2015	30-Jun-2015	30-Jun-2015	30-Jun-2015	30-Jun-2015	30-Jun-2015	30-Jun-2015
Cyanide Comp/Free/Total/Thiocyanate	25-Jun-2015	25-Jun-2015	25-Jun-2015	25-Jun-2015	25-Jun-2015	25-Jun-2015	25-Jun-2015	25-Jun-2015	25-Jun-2015	25-Jun-2015
Dissolved Metals by ICP-MS	02-Jul-2015	02-Jul-2015	03-Jul-2015	02-Jul-2015	02-Jul-2015	30-Jun-2015	02-Jul-2015	02-Jul-2015	02-Jul-2015	02-Jul-2015
Dissolved Organic/Inorganic Carbon	25-Jun-2015	24-Jun-2015	25-Jun-2015	24-Jun-2015	24-Jun-2015	24-Jun-2015	25-Jun-2015	25-Jun-2015	24-Jun-2015	25-Jun-2015
EPH (DRO) (C10-C40) Aqueous (W)	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	30-Jun-2015	01-Jul-2015	01-Jul-2015
Ionic Balance	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015
Metals by iCap-OES Dissolved (W)	23-Jun-2015	23-Jun-2015	22-Jun-2015	23-Jun-2015	24-Jun-2015	24-Jun-2015	23-Jun-2015	26-Jun-2015	24-Jun-2015	19-Jun-2015
Nitrite by Kone (w)	19-Jun-2015	19-Jun-2015	19-Jun-2015	19-Jun-2015	19-Jun-2015	27-Jun-2015	27-Jun-2015	19-Jun-2015	19-Jun-2015	19-Jun-2015
pH Value	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015
Sulphide	30-Jun-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	01-Jul-2015	30-Jun-2015	01-Jul-2015	30-Jun-2015	30-Jun-2015
VOC MS (W)	27-Jun-2015	27-Jun-2015	27-Jun-2015	27-Jun-2015	27-Jun-2015	27-Jun-2015	27-Jun-2015	27-Jun-2015	27-Jun-2015	27-Jun-2015

Lab Sample No(s)	11553743	11553745
Customer Sample Ref.	GW12-38	GW06-14A
AGS Ref.		
Depth		
Type	LIQUID	LIQUID
Alkalinity as CaCO3	01-Jul-2015	01-Jul-2015
Alkalinity Filtered as CaCO3	25-Jun-2015	25-Jun-2015
Ammoniacal Nitrogen	30-Jun-2015	30-Jun-2015
Anions by Kone (w)	01-Jul-2015	01-Jul-2015
BOD True Total	24-Jun-2015	24-Jun-2015
COD Unfiltered	01-Jul-2015	01-Jul-2015
Conductivity (at 20 deg.C)	30-Jun-2015	30-Jun-2015
Cyanide Comp/Free/Total/Thiocyanate	25-Jun-2015	25-Jun-2015
Dissolved Metals by ICP-MS	30-Jun-2015	03-Jul-2015
Dissolved Organic/Inorganic Carbon	24-Jun-2015	24-Jun-2015
EPH (DRO) (C10-C40) Aqueous (W)	01-Jul-2015	01-Jul-2015
Ionic Balance	01-Jul-2015	01-Jul-2015
Metals by iCap-OES Dissolved (W)	24-Jun-2015	24-Jun-2015
Nitrite by Kone (w)	19-Jun-2015	19-Jun-2015
pH Value	01-Jul-2015	01-Jul-2015
Sulphide	01-Jul-2015	01-Jul-2015
VOC MS (W)	27-Jun-2015	27-Jun-2015

SDG:	150618-23	**Location:**	Docksway Landfill Site	**Order Number:**	700077119
Job:	H_NCC_NPT-3	**Customer:**	Newport City Council	**Report Number:**	319572
Client Reference:		**Attention:**	Meirion Humphreys	**Superseded Report:**	

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH_4 by the BRE method, VOC TICS and SVOC 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 all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples 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 analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2005), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible. The quantity of asbestos present is not determined unless specifically requested.

7. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised. This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

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. Results relate only to the items tested.

12. LODs for wet tests reported on a dry weight basis are not corrected for moisture content.

13. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%, they are generally wider for volatiles analysis, 50-150%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

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

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

16. Total of 5 speciated phenols by HPLC includes Phenol, 2,3,5-Trimethyl Phenol, 2-Isopropylphenol, Cresols and Xylenols (as detailed in 15).

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

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 C5-C12 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.

Sample Deviations

1	Container with Headspace provided for volatiles analysis
2	Incorrect container received
3	Deviation from method
4	Holding time exceeded before sample received
5	Samples exceeded holding time before presevation was performed
§	Sampled on date not provided
♦	Sample holding time exceeded in laboratory
@	Sample holding time exceeded due to sampled on date
&	Sample Holding Time exceeded - Late arrival of instructions.

Asbestos

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk 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).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using Alcontrol Laboratories (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

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

Visual Estimation Of Fibre Content

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

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.

The identification of asbestos containing materials and soils 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.