

Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: EW1300536	Page	: 1 of 30
Client	: SHOALHAVEN CITY COUNCIL	Laboratory	: Environmental Division NSW South Coast
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Project	: West Nowra Landfill Annual	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Order number	: 15425 16780	Date Samples Received	: 22-FEB-2013
C-O-C number	: ----	Issue Date	: 14-MAR-2013
Sampler	: ----	No. of samples received	: 24
Site	: ----	No. of samples analysed	: 24
Quote number	: ----		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

^ = This result is computed from individual analyte detections at or above the level of reporting

- EA015 TDS may bias high for various samples due to the presence of fine particulate matter, which may pass through the prescribed GF/C paper.
- EA015 TDS, LOR raised for sample #24 due to insufficient volume.
- ED041G: LOR raised for Sulfate analysis on sample ID: Leachate Pumphouse due to sample matrix.
- EK057G/EK059G:LOR raised for Nitrite/NOx analysis on sample ID(BH11) due to sample matrix.
- EK057G/EK059G:LOR raised for Nitrite/NOx analysis on sample ID(Leachate Pumphouse) due to sample matrix.
- EP075: 'Sum of PAH' is the sum of the USEPA 16 priority PAHs
- Sites BH2, BH5, BH15 & MW3 - Dry atime of sampling.



NATA Accredited Laboratory 825

Accredited for compliance with
ISO/IEC 17025.

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
Ankit Joshi	Inorganic Chemist	Sydney Inorganics
Ashesh Patel	Inorganic Chemist	Sydney Inorganics
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics
Eric Chau	Metals Team Leader	Melbourne Inorganics
Glenn Davies	Environmental Services Representative	Laboratory - Wollongong
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Pabi Subba	Senior Organic Chemist	Sydney Organics
Stephen Hislop	Senior Inorganic Chemist	Brisbane Inorganics



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)

Client sample ID

Client sampling date / time

				SW1	SW2	SW3	BH2	BH3
				22-FEB-2013 10:45	22-FEB-2013 08:30	22-FEB-2013 11:30	22-FEB-2013 11:20	22-FEB-2013 11:10
Compound	CAS Number	LOR	Unit	EW1300536-001	EW1300536-002	EW1300536-003	EW1300536-004	EW1300536-005
EA015: Total Dissolved Solids								
Total Dissolved Solids @180°C	----	1	mg/L	328	126	288	----	208
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	----	----	----	----	<1
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	----	----	----	----	<1
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	----	----	----	----	2
Total Alkalinity as CaCO3	----	1	mg/L	----	----	----	----	2
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	----	----	----	----	47
ED045G: Chloride Discrete analyser								
Chloride	16887-00-6	1	mg/L	----	----	----	----	52
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	----	----	----	----	4
Magnesium	7439-95-4	1	mg/L	----	----	----	----	3
Sodium	7440-23-5	1	mg/L	----	----	----	----	46
Potassium	7440-09-7	1	mg/L	12	3	9	----	<1
EG020T: Total Metals by ICP-MS								
Aluminium	7429-90-5	0.01	mg/L	----	----	----	----	0.74
Arsenic	7440-38-2	0.001	mg/L	----	----	----	----	<0.001
Barium	7440-39-3	0.001	mg/L	----	----	----	----	0.010
Cadmium	7440-43-9	0.0001	mg/L	----	----	----	----	<0.0001
Cobalt	7440-48-4	0.001	mg/L	----	----	----	----	0.002
Chromium	7440-47-3	0.001	mg/L	----	----	----	----	0.001
Copper	7440-50-8	0.001	mg/L	----	----	----	----	0.002
Manganese	7439-96-5	0.001	mg/L	----	----	----	----	0.030
Lead	7439-92-1	0.001	mg/L	----	----	----	----	<0.001
Zinc	7440-66-6	0.005	mg/L	----	----	----	----	0.036
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	----	----	----	----	<0.0001
EG050T: Total Hexavalent Chromium								
Hexavalent Chromium	18540-29-9	0.01	mg/L	----	----	----	----	<0.01
EK040P: Fluoride by PC Titrator								
Fluoride	16984-48-8	0.1	mg/L	----	----	----	----	<0.1
EK055G: Ammonia as N by Discrete Analyser								



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)

Client sample ID

				SW1	SW2	SW3	BH2	BH3
				22-FEB-2013 10:45	22-FEB-2013 08:30	22-FEB-2013 11:30	22-FEB-2013 11:20	22-FEB-2013 11:10
Compound	CAS Number	LOR	Unit	EW1300536-001	EW1300536-002	EW1300536-003	EW1300536-004	EW1300536-005
EK055G: Ammonia as N by Discrete Analyser - Continued								
Ammonia as N	7664-41-7	0.01	mg/L	0.04	0.03	<0.01	----	<0.01
EK057G: Nitrite as N by Discrete Analyser								
Nitrite as N	----	0.01	mg/L	----	----	----	----	<0.01
EK058G: Nitrate as N by Discrete Analyser								
Nitrate as N	14797-55-8	0.01	mg/L	----	----	----	----	<0.01
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	----	----	----	----	<0.01
EK071G: Reactive Phosphorus as P by discrete analyser								
Reactive Phosphorus as P	----	0.01	mg/L	----	----	----	----	<0.01
EN055: Ionic Balance								
Total Anions	----	0.01	meq/L	----	----	----	----	2.49
Total Cations	----	0.01	meq/L	----	----	----	----	2.45
EN67 PK: Field Tests								
pH	----	0.1	pH Unit	7.0	6.2	6.5	----	4.7
Electrical Conductivity (Non Compensated)	----	1	µS/cm	464	122	460	----	----
Dissolved Oxygen	----	0.01	mg/L	8.45	7.69	7.44	----	----
Redox Potential	----	0.1	mV	----	----	----	----	152
Field Observations	----	0.01	--	----	----	----	DRY	----
Standing Water Level	----	0.01	m AHD	----	----	----	----	30.4
EP005: Total Organic Carbon (TOC)								
Total Organic Carbon	----	1	mg/L	10	10	9	----	13
EP030: Biochemical Oxygen Demand (BOD)								
Biochemical Oxygen Demand	----	2	mg/L	<2	<2	<2	----	----
EP035G: Total Phenol by Discrete Analyser								
Phenols (Total)	----	0.05	mg/L	----	----	----	----	<0.05
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.5	µg/L	----	----	----	----	<0.5
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	----	----	----	----	<0.5
beta-BHC	319-85-7	0.5	µg/L	----	----	----	----	<0.5
gamma-BHC	58-89-9	0.5	µg/L	----	----	----	----	<0.5
delta-BHC	319-86-8	0.5	µg/L	----	----	----	----	<0.5
Heptachlor	76-44-8	0.5	µg/L	----	----	----	----	<0.5



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)

Client sample ID

Client sampling date / time

				SW1	SW2	SW3	BH2	BH3
				22-FEB-2013 10:45	22-FEB-2013 08:30	22-FEB-2013 11:30	22-FEB-2013 11:20	22-FEB-2013 11:10
Compound	CAS Number	LOR	Unit	EW1300536-001	EW1300536-002	EW1300536-003	EW1300536-004	EW1300536-005
EP068A: Organochlorine Pesticides (OC) - Continued								
Aldrin	309-00-2	0.5	µg/L	----	----	----	----	<0.5
Heptachlor epoxide	1024-57-3	0.5	µg/L	----	----	----	----	<0.5
trans-Chlordane	5103-74-2	0.5	µg/L	----	----	----	----	<0.5
alpha-Endosulfan	959-98-8	0.5	µg/L	----	----	----	----	<0.5
cis-Chlordane	5103-71-9	0.5	µg/L	----	----	----	----	<0.5
Dieldrin	60-57-1	0.5	µg/L	----	----	----	----	<0.5
4,4'-DDE	72-55-9	0.5	µg/L	----	----	----	----	<0.5
Endrin	72-20-8	0.5	µg/L	----	----	----	----	<0.5
beta-Endosulfan	33213-65-9	0.5	µg/L	----	----	----	----	<0.5
4,4'-DDD	72-54-8	0.5	µg/L	----	----	----	----	<0.5
Endrin aldehyde	7421-93-4	0.5	µg/L	----	----	----	----	<0.5
Endosulfan sulfate	1031-07-8	0.5	µg/L	----	----	----	----	<0.5
4,4'-DDT	50-29-3	2.0	µg/L	----	----	----	----	<2.0
Endrin ketone	53494-70-5	0.5	µg/L	----	----	----	----	<0.5
Methoxychlor	72-43-5	2.0	µg/L	----	----	----	----	<2.0
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.5	µg/L	----	----	----	----	<0.5
Demeton-S-methyl	919-86-8	0.5	µg/L	----	----	----	----	<0.5
Monocrotophos	6923-22-4	2.0	µg/L	----	----	----	----	<2.0
Dimethoate	60-51-5	0.5	µg/L	----	----	----	----	<0.5
Diazinon	333-41-5	0.5	µg/L	----	----	----	----	<0.5
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	----	----	----	----	<0.5
Parathion-methyl	298-00-0	2.0	µg/L	----	----	----	----	<2.0
Malathion	121-75-5	0.5	µg/L	----	----	----	----	<0.5
Fenthion	55-38-9	0.5	µg/L	----	----	----	----	<0.5
Chlorpyrifos	2921-88-2	0.5	µg/L	----	----	----	----	<0.5
Parathion	56-38-2	2.0	µg/L	----	----	----	----	<2.0
Pirimphos-ethyl	23505-41-1	0.5	µg/L	----	----	----	----	<0.5
Bromophos-ethyl	4824-78-6	0.5	µg/L	----	----	----	----	<0.5
Fenamiphos	22224-92-6	0.5	µg/L	----	----	----	----	<0.5
Prothiofos	34643-46-4	0.5	µg/L	----	----	----	----	<0.5
Ethion	563-12-2	0.5	µg/L	----	----	----	----	<0.5
Carbophenothion	786-19-6	0.5	µg/L	----	----	----	----	<0.5
Azinphos Methyl	86-50-0	0.5	µg/L	----	----	----	----	<0.5



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)

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				SW1	SW2	SW3	BH2	BH3
				22-FEB-2013 10:45	22-FEB-2013 08:30	22-FEB-2013 11:30	22-FEB-2013 11:20	22-FEB-2013 11:10
Compound	CAS Number	LOR	Unit	EW1300536-001	EW1300536-002	EW1300536-003	EW1300536-004	EW1300536-005
EP068B: Organophosphorus Pesticides (OP) - Continued								
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	1.0	µg/L	----	----	----	----	<1.0
Acenaphthylene	208-96-8	1.0	µg/L	----	----	----	----	<1.0
Acenaphthene	83-32-9	1.0	µg/L	----	----	----	----	<1.0
Fluorene	86-73-7	1.0	µg/L	----	----	----	----	<1.0
Phenanthrene	85-01-8	1.0	µg/L	----	----	----	----	<1.0
Anthracene	120-12-7	1.0	µg/L	----	----	----	----	<1.0
Fluoranthene	206-44-0	1.0	µg/L	----	----	----	----	<1.0
Pyrene	129-00-0	1.0	µg/L	----	----	----	----	<1.0
Benz(a)anthracene	56-55-3	1.0	µg/L	----	----	----	----	<1.0
Chrysene	218-01-9	1.0	µg/L	----	----	----	----	<1.0
Benzo(b)fluoranthene	205-99-2	1.0	µg/L	----	----	----	----	<1.0
Benzo(k)fluoranthene	207-08-9	1.0	µg/L	----	----	----	----	<1.0
Benzo(a)pyrene	50-32-8	0.5	µg/L	----	----	----	----	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L	----	----	----	----	<1.0
Dibenz(a,h)anthracene	53-70-3	1.0	µg/L	----	----	----	----	<1.0
Benzo(g,h,i)perylene	191-24-2	1.0	µg/L	----	----	----	----	<1.0
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	µg/L	----	----	----	----	280
C10 - C14 Fraction	----	50	µg/L	----	----	----	----	<50
C15 - C28 Fraction	----	100	µg/L	----	----	----	----	<100
C29 - C36 Fraction	----	50	µg/L	----	----	----	----	<50
C10 - C36 Fraction (sum)	----	50	µg/L	----	----	----	----	<50
EP080: BTEXN								
Benzene	71-43-2	1	µg/L	----	----	----	----	<1
Toluene	108-88-3	2	µg/L	----	----	----	----	<2
Ethylbenzene	100-41-4	2	µg/L	----	----	----	----	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	----	----	----	----	<2
ortho-Xylene	95-47-6	2	µg/L	----	----	----	----	<2
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	----	----	----	----	72.1
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	----	----	----	----	51.4



Analytical Results

Sub-Matrix: **WATER** (Matrix: **WATER**)

Client sample ID

Client sampling date / time

				SW1	SW2	SW3	BH2	BH3
				22-FEB-2013 10:45	22-FEB-2013 08:30	22-FEB-2013 11:30	22-FEB-2013 11:20	22-FEB-2013 11:10
Compound	CAS Number	LOR	Unit	EW1300536-001	EW1300536-002	EW1300536-003	EW1300536-004	EW1300536-005
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	----	----	----	18.0
2-Chlorophenol-D4	93951-73-6	0.1	%	----	----	----	----	48.1
2,4,6-Tribromophenol	118-79-6	0.1	%	----	----	----	----	54.7
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	----	----	----	56.8
Anthracene-d10	1719-06-8	0.1	%	----	----	----	----	49.2
4-Terphenyl-d14	1718-51-0	0.1	%	----	----	----	----	65.3
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	----	----	----	----	103
Toluene-D8	2037-26-5	0.1	%	----	----	----	----	98.8
4-Bromofluorobenzene	460-00-4	0.1	%	----	----	----	----	99.0



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)

Client sample ID

Client sampling date / time

				BH4	BH5	BH6	BH7	BH10
				22-FEB-2013 11:00	22-FEB-2013 10:40	22-FEB-2013 09:45	22-FEB-2013 10:00	22-FEB-2013 09:30
Compound	CAS Number	LOR	Unit	EW1300536-006	EW1300536-007	EW1300536-008	EW1300536-009	EW1300536-010
EA015: Total Dissolved Solids								
Total Dissolved Solids @180°C	----	1	mg/L	2500	----	1290	482	840
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	----	<1	<1	<1
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	----	<1	<1	<1
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	<1	----	22	35	14
Total Alkalinity as CaCO3	----	1	mg/L	<1	----	22	35	14
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	30	----	60	26	15
ED045G: Chloride Discrete analyser								
Chloride	16887-00-6	1	mg/L	31	----	644	251	116
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	2	----	28	26	4
Magnesium	7439-95-4	1	mg/L	4	----	27	18	5
Sodium	7440-23-5	1	mg/L	20	----	418	127	73
Potassium	7440-09-7	1	mg/L	<1	----	4	4	2
EG020T: Total Metals by ICP-MS								
Aluminium	7429-90-5	0.01	mg/L	6.32	----	1.83	0.51	12.7
Arsenic	7440-38-2	0.001	mg/L	0.006	----	0.002	<0.001	0.008
Barium	7440-39-3	0.001	mg/L	0.017	----	0.076	0.048	0.075
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	----	0.0003	<0.0001	0.0001
Cobalt	7440-48-4	0.001	mg/L	0.003	----	0.054	0.017	0.006
Chromium	7440-47-3	0.001	mg/L	0.006	----	0.002	0.001	0.009
Copper	7440-50-8	0.001	mg/L	0.003	----	0.013	0.009	0.008
Manganese	7439-96-5	0.001	mg/L	0.028	----	0.462	0.515	0.162
Lead	7439-92-1	0.001	mg/L	0.004	----	0.007	0.001	0.009
Zinc	7440-66-6	0.005	mg/L	0.040	----	0.080	0.034	0.051
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	----	<0.0001	<0.0001	<0.0001
EG050T: Total Hexavalent Chromium								
Hexavalent Chromium	18540-29-9	0.01	mg/L	<0.01	----	<0.01	<0.01	<0.01
EK040P: Fluoride by PC Titrator								
Fluoride	16984-48-8	0.1	mg/L	<0.1	----	0.1	<0.1	<0.1
EK055G: Ammonia as N by Discrete Analyser								



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)

Client sample ID

Client sampling date / time

				BH4	BH5	BH6	BH7	BH10
				22-FEB-2013 11:00	22-FEB-2013 10:40	22-FEB-2013 09:45	22-FEB-2013 10:00	22-FEB-2013 09:30
Compound	CAS Number	LOR	Unit	EW1300536-006	EW1300536-007	EW1300536-008	EW1300536-009	EW1300536-010
EK055G: Ammonia as N by Discrete Analyser - Continued								
Ammonia as N	7664-41-7	0.01	mg/L	0.11	----	0.03	0.31	1.62
EK057G: Nitrite as N by Discrete Analyser								
Nitrite as N	----	0.01	mg/L	<0.01	----	0.01	<0.01	<0.01
EK058G: Nitrate as N by Discrete Analyser								
Nitrate as N	14797-55-8	0.01	mg/L	<0.01	----	0.01	0.01	<0.01
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	----	0.02	0.01	<0.01
EK071G: Reactive Phosphorus as P by discrete analyser								
Reactive Phosphorus as P	----	0.01	mg/L	<0.01	----	<0.01	<0.01	<0.01
EN055: Ionic Balance								
Total Anions	----	0.01	meq/L	1.50	----	19.9	8.32	3.86
Total Cations	----	0.01	meq/L	1.30	----	21.9	8.41	3.84
Ionic Balance	----	0.01	%	----	----	4.89	0.50	0.36
EN67 PK: Field Tests								
pH	----	0.1	pH Unit	4.7	----	5.3	6.5	5.6
Redox Potential	----	0.1	mV	52.0	----	93.0	-31.0	-42.0
Field Observations	----	0.01	--	----	DRY	----	----	----
Standing Water Level	----	0.01	m AHD	29.6	----	30.2	29.7	34.4
EP005: Total Organic Carbon (TOC)								
Total Organic Carbon	----	1	mg/L	<1	----	177	56	<1
EP035G: Total Phenol by Discrete Analyser								
Phenols (Total)	----	0.05	mg/L	<0.05	----	<0.05	<0.05	<0.05
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
beta-BHC	319-85-7	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
gamma-BHC	58-89-9	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
delta-BHC	319-86-8	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Heptachlor	76-44-8	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Aldrin	309-00-2	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	BH4	BH5	BH6	BH7	BH10
				22-FEB-2013 11:00	22-FEB-2013 10:40	22-FEB-2013 09:45	22-FEB-2013 10:00	22-FEB-2013 09:30
				EW1300536-006	EW1300536-007	EW1300536-008	EW1300536-009	EW1300536-010
EP068A: Organochlorine Pesticides (OC) - Continued								
cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Dieldrin	60-57-1	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
4,4'-DDE	72-55-9	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Endrin	72-20-8	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
4,4'-DDD	72-54-8	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
4,4'-DDT	50-29-3	2.0	µg/L	<2.0	----	<2.0	<2.0	<2.0
Endrin ketone	53494-70-5	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Methoxychlor	72-43-5	2.0	µg/L	<2.0	----	<2.0	<2.0	<2.0
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Monocrotophos	6923-22-4	2.0	µg/L	<2.0	----	<2.0	<2.0	<2.0
Dimethoate	60-51-5	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Diazinon	333-41-5	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Parathion-methyl	298-00-0	2.0	µg/L	<2.0	----	<2.0	<2.0	<2.0
Malathion	121-75-5	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Fenthion	55-38-9	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Parathion	56-38-2	2.0	µg/L	<2.0	----	<2.0	<2.0	<2.0
Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Fenamiphos	22224-92-6	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Prothiofos	34643-46-4	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Ethion	563-12-2	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Carbophenothion	786-19-6	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	1.0	µg/L	<1.0	----	<1.0	<1.0	<1.0
Acenaphthylene	208-96-8	1.0	µg/L	<1.0	----	<1.0	<1.0	<1.0



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	BH4	BH5	BH6	BH7	BH10
				22-FEB-2013 11:00	22-FEB-2013 10:40	22-FEB-2013 09:45	22-FEB-2013 10:00	22-FEB-2013 09:30
				EW1300536-006	EW1300536-007	EW1300536-008	EW1300536-009	EW1300536-010
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Acenaphthene	83-32-9	1.0	µg/L	<1.0	----	<1.0	<1.0	<1.0
Fluorene	86-73-7	1.0	µg/L	<1.0	----	<1.0	<1.0	<1.0
Phenanthrene	85-01-8	1.0	µg/L	<1.0	----	<1.0	<1.0	<1.0
Anthracene	120-12-7	1.0	µg/L	<1.0	----	<1.0	<1.0	<1.0
Fluoranthene	206-44-0	1.0	µg/L	<1.0	----	<1.0	<1.0	<1.0
Pyrene	129-00-0	1.0	µg/L	<1.0	----	<1.0	<1.0	<1.0
Benz(a)anthracene	56-55-3	1.0	µg/L	<1.0	----	<1.0	<1.0	<1.0
Chrysene	218-01-9	1.0	µg/L	<1.0	----	<1.0	<1.0	<1.0
Benzo(b)fluoranthene	205-99-2	1.0	µg/L	<1.0	----	<1.0	<1.0	<1.0
Benzo(k)fluoranthene	207-08-9	1.0	µg/L	<1.0	----	<1.0	<1.0	<1.0
Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L	<1.0	----	<1.0	<1.0	<1.0
Dibenz(a,h)anthracene	53-70-3	1.0	µg/L	<1.0	----	<1.0	<1.0	<1.0
Benzo(g,h,i)perylene	191-24-2	1.0	µg/L	<1.0	----	<1.0	<1.0	<1.0
EP075A: Phenolic Compounds								
2-Chlorophenol	95-57-8	0.3	µg/L	----	----	<1	----	----
2,4-Dichlorophenol	120-83-2	0.3	µg/L	----	----	<1	----	----
2,6-Dichlorophenol	87-65-0	0.3	µg/L	----	----	<1	----	----
2,4,6-Trichlorophenol	88-06-2	0.3	µg/L	----	----	<1	----	----
2,4,5-Trichlorophenol	95-95-4	0.3	µg/L	----	----	<1	----	----
Pentachlorophenol	87-86-5	0.6	µg/L	----	----	<2	----	----
EP075A: Phenolic Compounds (Additional Chlorinated)								
2,5-Dichlorophenol	583-78-8	0.5	µg/L	----	----	<4.9	----	----
2,3-Dichlorophenol	576-24-9	0.5	µg/L	----	----	<4.9	----	----
3,5-Dichlorophenol	591-35-5	0.5	µg/L	----	----	<4.9	----	----
3,4-Dichlorophenol	95-77-2	0.5	µg/L	----	----	<4.9	----	----
2,3,5-Trichlorophenol	933-78-8	0.5	µg/L	----	----	<4.9	----	----
2,3,4-Trichlorophenol	15950-66-0	0.5	µg/L	----	----	<4.9	----	----
2,3,6-Trichlorophenol	933-75-5	0.5	µg/L	----	----	<4.9	----	----
3,4,5-Trichlorophenol	609-19-8	0.5	µg/L	----	----	<4.9	----	----
2,3,5,6-Tetrachlorophenol	935-95-5	0.5	µg/L	----	----	<4.9	----	----
2,3,4,5-Tetrachlorophenol	4901-51-3	0.5	µg/L	----	----	<4.9	----	----
2,3,4,6-Tetrachlorophenol	58-90-2	0.5	µg/L	----	----	<4.9	----	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)

Client sample ID

Client sampling date / time

				BH4	BH5	BH6	BH7	BH10
				22-FEB-2013 11:00	22-FEB-2013 10:40	22-FEB-2013 09:45	22-FEB-2013 10:00	22-FEB-2013 09:30
Compound	CAS Number	LOR	Unit	EW1300536-006	EW1300536-007	EW1300536-008	EW1300536-009	EW1300536-010
EP075K: Miscellaneous Compounds								
2,3,4,6-Tetrachlorophenol	58-90-2	0.3	µg/L	---	---	<5	---	---
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	---	20	µg/L	<20	---	5540	1910	<20
C10 - C14 Fraction	---	50	µg/L	<50	---	<50	<50	100
C15 - C28 Fraction	---	100	µg/L	<100	---	<100	<100	<100
C29 - C36 Fraction	---	50	µg/L	<50	---	<50	<50	<50
^ C10 - C36 Fraction (sum)	---	50	µg/L	<50	---	<50	<50	100
EP080: BTEXN								
Benzene	71-43-2	1	µg/L	<1	---	<1	<1	<1
Toluene	108-88-3	2	µg/L	<2	---	<2	<2	<2
Ethylbenzene	100-41-4	2	µg/L	<2	---	<2	<2	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	---	<2	<2	<2
ortho-Xylene	95-47-6	2	µg/L	<2	---	<2	<2	<2
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	61.7	---	70.3	56.4	67.5
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	51.8	---	51.1	46.2	51.1
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	17.0	---	16.8	15.6	19.7
2-Chlorophenol-D4	93951-73-6	0.1	%	42.3	---	46.6	32.8	46.6
2,4,6-Tribromophenol	118-79-6	0.1	%	49.5	---	56.9	42.2	57.3
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	53.9	---	66.9	42.4	56.2
Anthracene-d10	1719-06-8	0.1	%	42.4	---	49.4	38.5	44.9
4-Terphenyl-d14	1718-51-0	0.1	%	57.0	---	67.4	55.6	61.1
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.1	%	---	---	13.0	---	---
Phenol-d6	13127-88-3	0.1	%	---	---	15.3	---	---
2-Chlorophenol-D4	93951-73-6	0.1	%	---	---	39.9	---	---
2,4,6-Tribromophenol	118-79-6	0.1	%	---	---	53.6	---	---
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.1	%	---	---	67.5	---	---
1,2-Dichlorobenzene-D4	2199-69-1	0.1	%	---	---	46.7	---	---



Analytical Results

Sub-Matrix: **WATER** (Matrix: **WATER**)

Client sample ID

Client sampling date / time

				BH4	BH5	BH6	BH7	BH10
				22-FEB-2013 11:00	22-FEB-2013 10:40	22-FEB-2013 09:45	22-FEB-2013 10:00	22-FEB-2013 09:30
Compound	CAS Number	LOR	Unit	EW1300536-006	EW1300536-007	EW1300536-008	EW1300536-009	EW1300536-010
EP075T: Base/Neutral Extractable Surrogates - Continued								
2-Fluorobiphenyl	321-60-8	0.1	%	----	----	52.7	----	----
Anthracene-d10	1719-06-8	0.1	%	----	----	57.8	----	----
4-Terphenyl-d14	1718-51-0	0.1	%	----	----	70.3	----	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	104	----	117	115	125
Toluene-D8	2037-26-5	0.1	%	86.9	----	115	111	105
4-Bromofluorobenzene	460-00-4	0.1	%	94.2	----	114	111	94.1



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)

Client sample ID

Client sampling date / time

				BH11	BH12A	BH13	BH14	BH15
				22-FEB-2013 10:30	22-FEB-2013 10:15	22-FEB-2013 11:50	22-FEB-2013 12:30	22-FEB-2013 12:15
Compound	CAS Number	LOR	Unit	EW1300536-011	EW1300536-012	EW1300536-013	EW1300536-014	EW1300536-015
EA015: Total Dissolved Solids								
Total Dissolved Solids @180°C	----	1	mg/L	2390	1550	1970	420	----
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	<1	<1	----
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	<1	<1	----
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	<1	8	2	<1	----
Total Alkalinity as CaCO3	----	1	mg/L	<1	8	2	<1	----
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	12	37	3	82	----
ED045G: Chloride Discrete analyser								
Chloride	16887-00-6	1	mg/L	1250	800	780	139	----
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	9	45	5	1	----
Magnesium	7439-95-4	1	mg/L	65	51	15	6	----
Sodium	7440-23-5	1	mg/L	698	443	428	112	----
Potassium	7440-09-7	1	mg/L	2	<1	<1	<1	----
EG020T: Total Metals by ICP-MS								
Aluminium	7429-90-5	0.01	mg/L	9.04	0.08	1.27	0.73	----
Arsenic	7440-38-2	0.001	mg/L	0.001	0.002	0.047	0.002	----
Barium	7440-39-3	0.001	mg/L	0.115	0.111	0.181	0.014	----
Cadmium	7440-43-9	0.0001	mg/L	0.0002	0.0001	<0.0001	<0.0001	----
Cobalt	7440-48-4	0.001	mg/L	0.020	0.018	0.003	0.003	----
Chromium	7440-47-3	0.001	mg/L	0.004	<0.001	<0.001	<0.001	----
Copper	7440-50-8	0.001	mg/L	0.023	0.003	<0.001	0.001	----
Manganese	7439-96-5	0.001	mg/L	0.104	0.227	0.238	0.072	----
Lead	7439-92-1	0.001	mg/L	0.016	<0.001	<0.001	<0.001	----
Zinc	7440-66-6	0.005	mg/L	0.044	0.042	0.023	0.027	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	----
EG050T: Total Hexavalent Chromium								
Hexavalent Chromium	18540-29-9	0.01	mg/L	<0.01	<0.01	<0.01	<0.01	----
EK040P: Fluoride by PC Titrator								
Fluoride	16984-48-8	0.1	mg/L	0.2	<0.1	0.1	<0.1	----
EK055G: Ammonia as N by Discrete Analyser								



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)

Client sample ID

				BH11	BH12A	BH13	BH14	BH15
				22-FEB-2013 10:30	22-FEB-2013 10:15	22-FEB-2013 11:50	22-FEB-2013 12:30	22-FEB-2013 12:15
Compound	CAS Number	LOR	Unit	EW1300536-011	EW1300536-012	EW1300536-013	EW1300536-014	EW1300536-015
EK055G: Ammonia as N by Discrete Analyser - Continued								
Ammonia as N	7664-41-7	0.01	mg/L	0.30	0.14	1.52	0.03	----
EK057G: Nitrite as N by Discrete Analyser								
Nitrite as N	----	0.01	mg/L	<0.10	<0.01	0.68	0.08	----
EK058G: Nitrate as N by Discrete Analyser								
Nitrate as N	14797-55-8	0.01	mg/L	<0.10	0.02	0.06	0.02	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	<0.10	0.02	0.74	0.10	----
EK071G: Reactive Phosphorus as P by discrete analyser								
Reactive Phosphorus as P	----	0.01	mg/L	<0.01	<0.01	<0.01	<0.01	----
EN055: Ionic Balance								
Total Anions	----	0.01	meq/L	35.5	23.5	22.1	5.63	----
Total Cations	----	0.01	meq/L	36.2	25.7	20.1	5.42	----
Ionic Balance	----	0.01	%	0.96	4.49	4.77	1.96	----
EN67 PK: Field Tests								
pH	----	0.1	pH Unit	3.9	4.7	4.7	4.6	----
Redox Potential	----	0.1	mV	238	159	125	154	----
Field Observations	----	0.01	--	----	----	----	----	DRY
Standing Water Level	----	0.01	m AHD	30.5	29.9	33.3	36.7	----
EP005: Total Organic Carbon (TOC)								
Total Organic Carbon	----	1	mg/L	8	<1	<1	1	----
EP035G: Total Phenol by Discrete Analyser								
Phenols (Total)	----	0.05	mg/L	<0.05	<0.05	<0.05	<0.05	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
beta-BHC	319-85-7	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
gamma-BHC	58-89-9	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
delta-BHC	319-86-8	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Heptachlor	76-44-8	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Aldrin	309-00-2	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	BH11	BH12A	BH13	BH14	BH15
				22-FEB-2013 10:30	22-FEB-2013 10:15	22-FEB-2013 11:50	22-FEB-2013 12:30	22-FEB-2013 12:15
				EW1300536-011	EW1300536-012	EW1300536-013	EW1300536-014	EW1300536-015
EP068A: Organochlorine Pesticides (OC) - Continued								
cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Dieldrin	60-57-1	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
4,4'-DDE	72-55-9	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Endrin	72-20-8	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
4,4'-DDD	72-54-8	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
4,4'-DDT	50-29-3	2.0	µg/L	<2.0	<2.0	<2.0	<2.0	----
Endrin ketone	53494-70-5	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Methoxychlor	72-43-5	2.0	µg/L	<2.0	<2.0	<2.0	<2.0	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Monocrotophos	6923-22-4	2.0	µg/L	<2.0	<2.0	<2.0	<2.0	----
Dimethoate	60-51-5	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Diazinon	333-41-5	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Parathion-methyl	298-00-0	2.0	µg/L	<2.0	<2.0	<2.0	<2.0	----
Malathion	121-75-5	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Fenthion	55-38-9	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Parathion	56-38-2	2.0	µg/L	<2.0	<2.0	<2.0	<2.0	----
Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Fenamiphos	22224-92-6	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Prothiofos	34643-46-4	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Ethion	563-12-2	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Carbophenothion	786-19-6	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	----
Acenaphthylene	208-96-8	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)

Client sample ID

Client sampling date / time

				BH11	BH12A	BH13	BH14	BH15
				22-FEB-2013 10:30	22-FEB-2013 10:15	22-FEB-2013 11:50	22-FEB-2013 12:30	22-FEB-2013 12:15
Compound	CAS Number	LOR	Unit	EW1300536-011	EW1300536-012	EW1300536-013	EW1300536-014	EW1300536-015
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Acenaphthene	83-32-9	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	----
Fluorene	86-73-7	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	----
Phenanthrene	85-01-8	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	----
Anthracene	120-12-7	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	----
Fluoranthene	206-44-0	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	----
Pyrene	129-00-0	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	----
Benz(a)anthracene	56-55-3	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	----
Chrysene	218-01-9	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	----
Benzo(b)fluoranthene	205-99-2	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	----
Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	----
Dibenz(a,h)anthracene	53-70-3	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	----
Benzo(g,h,i)perylene	191-24-2	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	----
EP075A: Phenolic Compounds								
2-Chlorophenol	95-57-8	0.3	µg/L	----	<0.9	----	----	----
2,4-Dichlorophenol	120-83-2	0.3	µg/L	----	<0.9	----	----	----
2,6-Dichlorophenol	87-65-0	0.3	µg/L	----	<0.9	----	----	----
2,4,6-Trichlorophenol	88-06-2	0.3	µg/L	----	<0.9	----	----	----
2,4,5-Trichlorophenol	95-95-4	0.3	µg/L	----	<0.9	----	----	----
Pentachlorophenol	87-86-5	0.6	µg/L	----	<2	----	----	----
EP075A: Phenolic Compounds (Additional Chlorinated)								
2,5-Dichlorophenol	583-78-8	0.5	µg/L	----	<4.7	----	----	----
2,3-Dichlorophenol	576-24-9	0.5	µg/L	----	<4.7	----	----	----
3,5-Dichlorophenol	591-35-5	0.5	µg/L	----	<4.7	----	----	----
3,4-Dichlorophenol	95-77-2	0.5	µg/L	----	<4.7	----	----	----
2,3,5-Trichlorophenol	933-78-8	0.5	µg/L	----	<4.7	----	----	----
2,3,4-Trichlorophenol	15950-66-0	0.5	µg/L	----	<4.7	----	----	----
2,3,6-Trichlorophenol	933-75-5	0.5	µg/L	----	<4.7	----	----	----
3,4,5-Trichlorophenol	609-19-8	0.5	µg/L	----	<4.7	----	----	----
2,3,5,6-Tetrachlorophenol	935-95-5	0.5	µg/L	----	<4.7	----	----	----
2,3,4,5-Tetrachlorophenol	4901-51-3	0.5	µg/L	----	<4.7	----	----	----
2,3,4,6-Tetrachlorophenol	58-90-2	0.5	µg/L	----	<4.7	----	----	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)

Client sample ID

				BH11	BH12A	BH13	BH14	BH15
				22-FEB-2013 10:30	22-FEB-2013 10:15	22-FEB-2013 11:50	22-FEB-2013 12:30	22-FEB-2013 12:15
Compound	CAS Number	LOR	Unit	EW1300536-011	EW1300536-012	EW1300536-013	EW1300536-014	EW1300536-015
EP075K: Miscellaneous Compounds								
2,3,4,6-Tetrachlorophenol	58-90-2	0.3	µg/L	---	<5	---	---	---
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	µg/L	<20	<20	<20	<20	----
C10 - C14 Fraction	----	50	µg/L	<50	<50	<50	<50	----
C15 - C28 Fraction	----	100	µg/L	<100	<100	<100	<100	----
C29 - C36 Fraction	----	50	µg/L	<50	<50	<50	<50	----
^ C10 - C36 Fraction (sum)	----	50	µg/L	<50	<50	<50	<50	----
EP080: BTEXN								
Benzene	71-43-2	1	µg/L	<1	<1	<1	<1	----
Toluene	108-88-3	2	µg/L	<2	<2	<2	<2	----
Ethylbenzene	100-41-4	2	µg/L	<2	<2	<2	<2	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	<2	<2	----
ortho-Xylene	95-47-6	2	µg/L	<2	<2	<2	<2	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	60.3	61.0	75.1	62.8	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	51.3	44.6	52.0	44.4	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	14.6	14.7	14.9	15.3	----
2-Chlorophenol-D4	93951-73-6	0.1	%	38.2	38.4	41.3	42.0	----
2,4,6-Tribromophenol	118-79-6	0.1	%	44.2	37.1	52.5	37.5	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	50.3	45.6	52.6	50.7	----
Anthracene-d10	1719-06-8	0.1	%	40.2	38.0	46.8	42.4	----
4-Terphenyl-d14	1718-51-0	0.1	%	54.6	53.1	66.5	58.1	----
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.1	%	----	27.3	----	----	----
Phenol-d6	13127-88-3	0.1	%	----	15.3	----	----	----
2-Chlorophenol-D4	93951-73-6	0.1	%	----	32.0	----	----	----
2,4,6-Tribromophenol	118-79-6	0.1	%	----	32.1	----	----	----
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.1	%	----	45.3	----	----	----
1,2-Dichlorobenzene-D4	2199-69-1	0.1	%	----	32.6	----	----	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)

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Client sampling date / time

				BH11	BH12A	BH13	BH14	BH15
				22-FEB-2013 10:30	22-FEB-2013 10:15	22-FEB-2013 11:50	22-FEB-2013 12:30	22-FEB-2013 12:15
Compound	CAS Number	LOR	Unit	EW1300536-011	EW1300536-012	EW1300536-013	EW1300536-014	EW1300536-015
EP075T: Base/Neutral Extractable Surrogates - Continued								
2-Fluorobiphenyl	321-60-8	0.1	%	----	35.7	----	----	----
Anthracene-d10	1719-06-8	0.1	%	----	44.1	----	----	----
4-Terphenyl-d14	1718-51-0	0.1	%	----	50.7	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	124	125	99.1	101	----
Toluene-D8	2037-26-5	0.1	%	108	108	116	117	----
4-Bromofluorobenzene	460-00-4	0.1	%	94.6	95.0	115	116	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	Leachate Pumphouse	LD1 Leachate Dam	MW1D	MW1S	MW2
				22-FEB-2013 12:00	22-FEB-2013 11:40	22-FEB-2013 09:00	22-FEB-2013 08:50	22-FEB-2013 09:15
				EW1300536-016	EW1300536-017	EW1300536-018	EW1300536-019	EW1300536-020
EA015: Total Dissolved Solids								
Total Dissolved Solids @180°C	----	1	mg/L	----	2300	----	----	----
Total Dissolved Solids @180°C	----	1	mg/L	5840	----	----	----	----
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	<1	<1	<1
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	89	<1	<1	<1
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	5760	392	<1	<1	36
Total Alkalinity as CaCO3	----	1	mg/L	5760	481	<1	<1	36
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<10	38	5	7	11
ED045G: Chloride Discrete analyser								
Chloride	16887-00-6	1	mg/L	1480	925	192	200	530
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	263	23	12	5	34
Magnesium	7439-95-4	1	mg/L	402	89	11	12	29
Sodium	7440-23-5	1	mg/L	987	630	89	104	294
Potassium	7440-09-7	1	mg/L	508	156	1	<1	1
EG020F: Dissolved Metals by ICP-MS								
Iron	7439-89-6	0.05	mg/L	----	----	<0.05	0.31	9.37
EG020T: Total Metals by ICP-MS								
Aluminium	7429-90-5	0.01	mg/L	0.07	0.16	----	----	----
Arsenic	7440-38-2	0.001	mg/L	0.015	0.002	----	----	----
Barium	7440-39-3	0.001	mg/L	0.223	0.042	----	----	----
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	----	----	----
Cobalt	7440-48-4	0.001	mg/L	0.030	0.002	----	----	----
Chromium	7440-47-3	0.001	mg/L	0.102	0.002	----	----	----
Copper	7440-50-8	0.001	mg/L	0.002	<0.001	----	----	----
Manganese	7439-96-5	0.001	mg/L	1.52	0.015	----	----	----
Lead	7439-92-1	0.001	mg/L	0.003	<0.001	----	----	----
Zinc	7440-66-6	0.005	mg/L	0.102	<0.005	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	----	----	----
EG050T: Total Hexavalent Chromium								
Hexavalent Chromium	18540-29-9	0.01	mg/L	<0.01	<0.01	----	----	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)

Client sample ID

				Leachate Pumphouse	LD1 Leachate Dam	MW1D	MW1S	MW2
				22-FEB-2013 12:00	22-FEB-2013 11:40	22-FEB-2013 09:00	22-FEB-2013 08:50	22-FEB-2013 09:15
				EW1300536-016	EW1300536-017	EW1300536-018	EW1300536-019	EW1300536-020
Compound	CAS Number	LOR	Unit					
EK040P: Fluoride by PC Titrator								
Fluoride	16984-48-8	0.1	mg/L	0.4	0.3	----	----	----
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	627	2.95	0.08	0.14	0.20
EK057G: Nitrite as N by Discrete Analyser								
Nitrite as N	----	0.01	mg/L	<0.10	2.50	----	----	----
EK058G: Nitrate as N by Discrete Analyser								
Nitrate as N	14797-55-8	0.01	mg/L	<0.10	0.43	----	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	<0.10	2.93	----	----	----
EK071G: Reactive Phosphorus as P by discrete analyser								
Reactive Phosphorus as P	----	0.01	mg/L	5.78	<0.01	----	----	----
EN055: Ionic Balance								
Total Anions	----	0.01	meq/L	157	36.5	5.52	5.79	15.9
Total Cations	----	0.01	meq/L	----	39.9	5.40	5.76	16.9
Total Cations	----	0.01	meq/L	147	----	----	----	----
Ionic Balance	----	0.01	%	----	4.40	1.10	0.24	3.03
Ionic Balance	----	0.01	%	3.30	----	----	----	----
EN67 PK: Field Tests								
pH	----	0.1	pH Unit	7.2	8.9	4.4	3.6	5.2
Electrical Conductivity (Non Compensated)	----	1	µS/cm	<1	<1	666	770	1780
Redox Potential	----	0.1	mV	-75.0	32.0	----	----	----
Standing Water Level	----	0.01	m AHD	----	----	38.9	38.7	35.6
EP005: Total Organic Carbon (TOC)								
Total Organic Carbon	----	1	mg/L	201	38	3	1	2
EP030: Biochemical Oxygen Demand (BOD)								
Biochemical Oxygen Demand	----	2	mg/L	----	----	<2	<2	<2
EP035G: Total Phenol by Discrete Analyser								
Phenols (Total)	----	0.05	mg/L	0.15	<0.05	<0.05	<0.05	<0.05
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.5	µg/L	<0.5	<0.5	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	<0.5	----	----	----
beta-BHC	319-85-7	0.5	µg/L	<0.5	<0.5	----	----	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	Leachate Pumphouse	LD1 Leachate Dam	MW1D	MW1S	MW2
				22-FEB-2013 12:00	22-FEB-2013 11:40	22-FEB-2013 09:00	22-FEB-2013 08:50	22-FEB-2013 09:15
				EW1300536-016	EW1300536-017	EW1300536-018	EW1300536-019	EW1300536-020
EP068A: Organochlorine Pesticides (OC) - Continued								
gamma-BHC	58-89-9	0.5	µg/L	<0.5	<0.5	----	----	----
delta-BHC	319-86-8	0.5	µg/L	<0.5	<0.5	----	----	----
Heptachlor	76-44-8	0.5	µg/L	<0.5	<0.5	----	----	----
Aldrin	309-00-2	0.5	µg/L	<0.5	<0.5	----	----	----
Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	<0.5	----	----	----
trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	<0.5	----	----	----
alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	<0.5	----	----	----
cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	<0.5	----	----	----
Dieldrin	60-57-1	0.5	µg/L	<0.5	<0.5	----	----	----
4,4'-DDE	72-55-9	0.5	µg/L	<0.5	<0.5	----	----	----
Endrin	72-20-8	0.5	µg/L	<0.5	<0.5	----	----	----
beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	<0.5	----	----	----
4,4'-DDD	72-54-8	0.5	µg/L	<0.5	<0.5	----	----	----
Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	<0.5	----	----	----
Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	<0.5	----	----	----
4,4'-DDT	50-29-3	2.0	µg/L	<2.0	<2.0	----	----	----
Endrin ketone	53494-70-5	0.5	µg/L	<0.5	<0.5	----	----	----
Methoxychlor	72-43-5	2.0	µg/L	<2.0	<2.0	----	----	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.5	µg/L	<0.5	<0.5	----	----	----
Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	<0.5	----	----	----
Monocrotophos	6923-22-4	2.0	µg/L	<2.0	<2.0	----	----	----
Dimethoate	60-51-5	0.5	µg/L	<0.5	<0.5	----	----	----
Diazinon	333-41-5	0.5	µg/L	<0.5	<0.5	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	<0.5	----	----	----
Parathion-methyl	298-00-0	2.0	µg/L	<2.0	<2.0	----	----	----
Malathion	121-75-5	0.5	µg/L	<0.5	<0.5	----	----	----
Fenthion	55-38-9	0.5	µg/L	<0.5	<0.5	----	----	----
Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	<0.5	----	----	----
Parathion	56-38-2	2.0	µg/L	<2.0	<2.0	----	----	----
Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	<0.5	----	----	----
Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	<0.5	----	----	----
Fenamiphos	22224-92-6	0.5	µg/L	<0.5	<0.5	----	----	----
Prothiofos	34643-46-4	0.5	µg/L	<0.5	<0.5	----	----	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)

Client sample ID

Client sampling date / time

				Leachate Pumphouse	LD1 Leachate Dam	MW1D	MW1S	MW2
				22-FEB-2013 12:00	22-FEB-2013 11:40	22-FEB-2013 09:00	22-FEB-2013 08:50	22-FEB-2013 09:15
Compound	CAS Number	LOR	Unit	EW1300536-016	EW1300536-017	EW1300536-018	EW1300536-019	EW1300536-020
EP068B: Organophosphorus Pesticides (OP) - Continued								
Ethion	563-12-2	0.5	µg/L	<0.5	<0.5	----	----	----
Carbophenothion	786-19-6	0.5	µg/L	<0.5	<0.5	----	----	----
Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	<0.5	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	1.0	µg/L	3.9	<1.0	----	----	----
Acenaphthylene	208-96-8	1.0	µg/L	<1.0	<1.0	----	----	----
Acenaphthene	83-32-9	1.0	µg/L	<1.0	<1.0	----	----	----
Fluorene	86-73-7	1.0	µg/L	<1.0	<1.0	----	----	----
Phenanthrene	85-01-8	1.0	µg/L	<1.0	<1.0	----	----	----
Anthracene	120-12-7	1.0	µg/L	<1.0	<1.0	----	----	----
Fluoranthene	206-44-0	1.0	µg/L	<1.0	<1.0	----	----	----
Pyrene	129-00-0	1.0	µg/L	<1.0	<1.0	----	----	----
Benz(a)anthracene	56-55-3	1.0	µg/L	<1.0	<1.0	----	----	----
Chrysene	218-01-9	1.0	µg/L	<1.0	<1.0	----	----	----
Benzo(b)fluoranthene	205-99-2	1.0	µg/L	<1.0	<1.0	----	----	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L	<1.0	<1.0	----	----	----
Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L	<1.0	<1.0	----	----	----
Dibenz(a,h)anthracene	53-70-3	1.0	µg/L	<1.0	<1.0	----	----	----
Benzo(g,h,i)perylene	191-24-2	1.0	µg/L	<1.0	<1.0	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	µg/L	760	<20	----	----	----
C10 - C14 Fraction	----	50	µg/L	2250	<50	----	----	----
C15 - C28 Fraction	----	100	µg/L	4510	120	----	----	----
C29 - C36 Fraction	----	50	µg/L	80	<50	----	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L	6840	120	----	----	----
EP080: BTEXN								
Benzene	71-43-2	1	µg/L	20	<1	----	----	----
Toluene	108-88-3	2	µg/L	24	<2	----	----	----
Ethylbenzene	100-41-4	2	µg/L	252	<2	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	94	<2	----	----	----
ortho-Xylene	95-47-6	2	µg/L	49	<2	----	----	----
EP068S: Organochlorine Pesticide Surrogate								



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)

Client sample ID

Client sampling date / time

				Leachate Pumphouse	LD1 Leachate Dam	MW1D	MW1S	MW2
				22-FEB-2013 12:00	22-FEB-2013 11:40	22-FEB-2013 09:00	22-FEB-2013 08:50	22-FEB-2013 09:15
Compound	CAS Number	LOR	Unit	EW1300536-016	EW1300536-017	EW1300536-018	EW1300536-019	EW1300536-020
EP068S: Organochlorine Pesticide Surrogate - Continued								
Dibromo-DDE	21655-73-2	0.1	%	54.6	65.9	----	----	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	54.4	51.0	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	14.7	17.7	----	----	----
2-Chlorophenol-D4	93951-73-6	0.1	%	38.0	39.7	----	----	----
2,4,6-Tribromophenol	118-79-6	0.1	%	48.9	48.4	----	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	37.2	58.2	----	----	----
Anthracene-d10	1719-06-8	0.1	%	34.0	43.7	----	----	----
4-Terphenyl-d14	1718-51-0	0.1	%	35.6	58.3	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	97.2	125	----	----	----
Toluene-D8	2037-26-5	0.1	%	118	108	----	----	----
4-Bromofluorobenzene	460-00-4	0.1	%	112	95.3	----	----	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)

Client sample ID

Client sampling date / time

				MW3	MW4	Duplicate	Blank	----
				22-FEB-2013 08:40	22-FEB-2013 12:10	22-FEB-2013 10:15	22-FEB-2013 08:00	----
Compound	CAS Number	LOR	Unit	EW1300536-021	EW1300536-022	EW1300536-023	EW1300536-024	----
EA015: Total Dissolved Solids								
Total Dissolved Solids @180°C	----	1	mg/L	----	----	1600	----	----
Total Dissolved Solids @180°C	----	1	mg/L	----	----	----	<2	----
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	----	<1	<1	<1	----
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	----	<1	<1	<1	----
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	----	16	10	<1	----
Total Alkalinity as CaCO3	----	1	mg/L	----	16	10	<1	----
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	----	28	38	<1	----
ED045G: Chloride Discrete analyser								
Chloride	16887-00-6	1	mg/L	----	651	812	<1	----
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	----	<1	46	<1	----
Magnesium	7439-95-4	1	mg/L	----	17	51	<1	----
Sodium	7440-23-5	1	mg/L	----	410	452	<1	----
Potassium	7440-09-7	1	mg/L	----	<1	<1	<1	----
EG020F: Dissolved Metals by ICP-MS								
Iron	7439-89-6	0.05	mg/L	----	11.6	----	----	----
EG020T: Total Metals by ICP-MS								
Aluminium	7429-90-5	0.01	mg/L	----	----	0.05	<0.01	----
Arsenic	7440-38-2	0.001	mg/L	----	----	<0.001	<0.001	----
Barium	7440-39-3	0.001	mg/L	----	----	0.109	<0.001	----
Cadmium	7440-43-9	0.0001	mg/L	----	----	0.0001	<0.0001	----
Cobalt	7440-48-4	0.001	mg/L	----	----	0.018	<0.001	----
Chromium	7440-47-3	0.001	mg/L	----	----	<0.001	<0.001	----
Copper	7440-50-8	0.001	mg/L	----	----	0.002	<0.001	----
Manganese	7439-96-5	0.001	mg/L	----	----	0.228	<0.001	----
Lead	7439-92-1	0.001	mg/L	----	----	<0.001	<0.001	----
Zinc	7440-66-6	0.005	mg/L	----	----	0.042	<0.005	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	----	----	<0.0001	<0.0001	----
EG050T: Total Hexavalent Chromium								
Hexavalent Chromium	18540-29-9	0.01	mg/L	----	----	<0.01	<0.01	----



Analytical Results

Sub-Matrix: **WATER** (Matrix: **WATER**)

Client sample ID

Client sampling date / time

				MW3	MW4	Duplicate	Blank	----
				22-FEB-2013 08:40	22-FEB-2013 12:10	22-FEB-2013 10:15	22-FEB-2013 08:00	----
Compound	CAS Number	LOR	Unit	EW1300536-021	EW1300536-022	EW1300536-023	EW1300536-024	----
EK040P: Fluoride by PC Titrator								
Fluoride	16984-48-8	0.1	mg/L	----	----	<0.1	<0.1	----
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	----	<0.01	0.13	0.02	----
EK057G: Nitrite as N by Discrete Analyser								
Nitrite as N	----	0.01	mg/L	----	----	0.01	<0.01	----
EK058G: Nitrate as N by Discrete Analyser								
Nitrate as N	14797-55-8	0.01	mg/L	----	----	0.01	<0.01	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	----	----	0.02	<0.01	----
EK071G: Reactive Phosphorus as P by discrete analyser								
Reactive Phosphorus as P	----	0.01	mg/L	----	----	<0.01	<0.01	----
EN055: Ionic Balance								
Total Anions	----	0.01	meq/L	----	19.3	23.9	<0.01	----
Total Cations	----	0.01	meq/L	----	19.2	26.2	<0.01	----
Ionic Balance	----	0.01	%	----	0.11	4.50	----	----
EN67 PK: Field Tests								
pH	----	0.1	pH Unit	----	4.9	4.7	----	----
Electrical Conductivity (Non Compensated)	----	1	µS/cm	----	159	----	----	----
Redox Potential	----	0.1	mV	----	----	159	----	----
Field Observations	----	0.01	--	DRY	----	----	----	----
Standing Water Level	----	0.01	m AHD	----	35.4	29.9	----	----
EP005: Total Organic Carbon (TOC)								
Total Organic Carbon	----	1	mg/L	----	18	2	<1	----
EP030: Biochemical Oxygen Demand (BOD)								
Biochemical Oxygen Demand	----	2	mg/L	----	<2	----	----	----
EP035G: Total Phenol by Discrete Analyser								
Phenols (Total)	----	0.05	mg/L	----	<0.05	<0.05	<0.05	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.5	µg/L	----	----	<0.5	<0.5	----
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	----	----	<0.5	<0.5	----
beta-BHC	319-85-7	0.5	µg/L	----	----	<0.5	<0.5	----
gamma-BHC	58-89-9	0.5	µg/L	----	----	<0.5	<0.5	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)

Client sample ID

Client sampling date / time

				MW3	MW4	Duplicate	Blank	----
				22-FEB-2013 08:40	22-FEB-2013 12:10	22-FEB-2013 10:15	22-FEB-2013 08:00	----
Compound	CAS Number	LOR	Unit	EW1300536-021	EW1300536-022	EW1300536-023	EW1300536-024	----
EP068A: Organochlorine Pesticides (OC) - Continued								
delta-BHC	319-86-8	0.5	µg/L	----	----	<0.5	<0.5	----
Heptachlor	76-44-8	0.5	µg/L	----	----	<0.5	<0.5	----
Aldrin	309-00-2	0.5	µg/L	----	----	<0.5	<0.5	----
Heptachlor epoxide	1024-57-3	0.5	µg/L	----	----	<0.5	<0.5	----
trans-Chlordane	5103-74-2	0.5	µg/L	----	----	<0.5	<0.5	----
alpha-Endosulfan	959-98-8	0.5	µg/L	----	----	<0.5	<0.5	----
cis-Chlordane	5103-71-9	0.5	µg/L	----	----	<0.5	<0.5	----
Dieldrin	60-57-1	0.5	µg/L	----	----	<0.5	<0.5	----
4,4'-DDE	72-55-9	0.5	µg/L	----	----	<0.5	<0.5	----
Endrin	72-20-8	0.5	µg/L	----	----	<0.5	<0.5	----
beta-Endosulfan	33213-65-9	0.5	µg/L	----	----	<0.5	<0.5	----
4,4'-DDD	72-54-8	0.5	µg/L	----	----	<0.5	<0.5	----
Endrin aldehyde	7421-93-4	0.5	µg/L	----	----	<0.5	<0.5	----
Endosulfan sulfate	1031-07-8	0.5	µg/L	----	----	<0.5	<0.5	----
4,4'-DDT	50-29-3	2.0	µg/L	----	----	<2.0	<2.0	----
Endrin ketone	53494-70-5	0.5	µg/L	----	----	<0.5	<0.5	----
Methoxychlor	72-43-5	2.0	µg/L	----	----	<2.0	<2.0	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.5	µg/L	----	----	<0.5	<0.5	----
Demeton-S-methyl	919-86-8	0.5	µg/L	----	----	<0.5	<0.5	----
Monocrotophos	6923-22-4	2.0	µg/L	----	----	<2.0	<2.0	----
Dimethoate	60-51-5	0.5	µg/L	----	----	<0.5	<0.5	----
Diazinon	333-41-5	0.5	µg/L	----	----	<0.5	<0.5	----
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	----	----	<0.5	<0.5	----
Parathion-methyl	298-00-0	2.0	µg/L	----	----	<2.0	<2.0	----
Malathion	121-75-5	0.5	µg/L	----	----	<0.5	<0.5	----
Fenthion	55-38-9	0.5	µg/L	----	----	<0.5	<0.5	----
Chlorpyrifos	2921-88-2	0.5	µg/L	----	----	<0.5	<0.5	----
Parathion	56-38-2	2.0	µg/L	----	----	<2.0	<2.0	----
Pirimphos-ethyl	23505-41-1	0.5	µg/L	----	----	<0.5	<0.5	----
Bromophos-ethyl	4824-78-6	0.5	µg/L	----	----	<0.5	<0.5	----
Fenamiphos	22224-92-6	0.5	µg/L	----	----	<0.5	<0.5	----
Prothiofos	34643-46-4	0.5	µg/L	----	----	<0.5	<0.5	----
Ethion	563-12-2	0.5	µg/L	----	----	<0.5	<0.5	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)

Client sample ID

Client sampling date / time

				MW3	MW4	Duplicate	Blank	----
				22-FEB-2013 08:40	22-FEB-2013 12:10	22-FEB-2013 10:15	22-FEB-2013 08:00	----
Compound	CAS Number	LOR	Unit	EW1300536-021	EW1300536-022	EW1300536-023	EW1300536-024	----
EP068B: Organophosphorus Pesticides (OP) - Continued								
Carbophenothion	786-19-6	0.5	µg/L	----	----	<0.5	<0.5	----
Azinphos Methyl	86-50-0	0.5	µg/L	----	----	<0.5	<0.5	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	1.0	µg/L	----	----	<1.0	<1.0	----
Acenaphthylene	208-96-8	1.0	µg/L	----	----	<1.0	<1.0	----
Acenaphthene	83-32-9	1.0	µg/L	----	----	<1.0	<1.0	----
Fluorene	86-73-7	1.0	µg/L	----	----	<1.0	<1.0	----
Phenanthrene	85-01-8	1.0	µg/L	----	----	<1.0	<1.0	----
Anthracene	120-12-7	1.0	µg/L	----	----	<1.0	<1.0	----
Fluoranthene	206-44-0	1.0	µg/L	----	----	<1.0	<1.0	----
Pyrene	129-00-0	1.0	µg/L	----	----	<1.0	<1.0	----
Benz(a)anthracene	56-55-3	1.0	µg/L	----	----	<1.0	<1.0	----
Chrysene	218-01-9	1.0	µg/L	----	----	<1.0	<1.0	----
Benzo(b)fluoranthene	205-99-2	1.0	µg/L	----	----	<1.0	<1.0	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L	----	----	<1.0	<1.0	----
Benzo(a)pyrene	50-32-8	0.5	µg/L	----	----	<0.5	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L	----	----	<1.0	<1.0	----
Dibenz(a,h)anthracene	53-70-3	1.0	µg/L	----	----	<1.0	<1.0	----
Benzo(g,h,i)perylene	191-24-2	1.0	µg/L	----	----	<1.0	<1.0	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	µg/L	----	----	<20	<20	----
C10 - C14 Fraction	----	50	µg/L	----	----	<50	<50	----
C15 - C28 Fraction	----	100	µg/L	----	----	<100	<100	----
C29 - C36 Fraction	----	50	µg/L	----	----	<50	<50	----
^ C10 - C36 Fraction (sum)	----	50	µg/L	----	----	<50	<50	----
EP080: BTEXN								
Benzene	71-43-2	1	µg/L	----	----	<1	<1	----
Toluene	108-88-3	2	µg/L	----	----	<2	<2	----
Ethylbenzene	100-41-4	2	µg/L	----	----	<2	<2	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	----	----	<2	<2	----
ortho-Xylene	95-47-6	2	µg/L	----	----	<2	<2	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	----	----	60.8	61.1	----



Analytical Results

Sub-Matrix: **WATER** (Matrix: **WATER**)

Client sample ID

Client sampling date / time

				MW3	MW4	Duplicate	Blank	----
				22-FEB-2013 08:40	22-FEB-2013 12:10	22-FEB-2013 10:15	22-FEB-2013 08:00	----
Compound	CAS Number	LOR	Unit	EW1300536-021	EW1300536-022	EW1300536-023	EW1300536-024	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	----	----	51.7	50.1	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	----	15.1	15.7	----
2-Chlorophenol-D4	93951-73-6	0.1	%	----	----	41.3	42.0	----
2,4,6-Tribromophenol	118-79-6	0.1	%	----	----	45.6	37.1	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	----	51.7	50.2	----
Anthracene-d10	1719-06-8	0.1	%	----	----	40.4	40.9	----
4-Terphenyl-d14	1718-51-0	0.1	%	----	----	54.6	56.4	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	----	----	129	105	----
Toluene-D8	2037-26-5	0.1	%	----	----	109	90.0	----
4-Bromofluorobenzene	460-00-4	0.1	%	----	----	95.5	79.8	----



Surrogate Control Limits

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	30	120
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	26.8	129
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10.0	44
2-Chlorophenol-D4	93951-73-6	15.9	102
2,4,6-Tribromophenol	118-79-6	17	125
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	20.4	112
Anthracene-d10	1719-06-8	29.6	118
4-Terphenyl-d14	1718-51-0	21.5	126
EP075S: Acid Extractable Surrogates			
2-Fluorophenol	367-12-4	10.0	116.6
Phenol-d6	13127-88-3	10.0	69.0
2-Chlorophenol-D4	93951-73-6	20.9	129.7
2,4,6-Tribromophenol	118-79-6	10.0	150.7
EP075T: Base/Neutral Extractable Surrogates			
Nitrobenzene-D5	4165-60-0	29.4	141.7
1,2-Dichlorobenzene-D4	2199-69-1	23.6	120.7
2-Fluorobiphenyl	321-60-8	27.2	134.9
Anthracene-d10	1719-06-8	29.7	140.7
4-Terphenyl-d14	1718-51-0	27.6	143.6
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	71	137
Toluene-D8	2037-26-5	79	131
4-Bromofluorobenzene	460-00-4	70	128