



CERTIFICATE OF ANALYSIS

Work Order : **EW1700471**
Client : **WOLLONGONG CITY COUNCIL**
Contact : **MR WAYDE PETERSON**
Address : **41 BURELLI STREET**
WOLLONGONG NSW, AUSTRALIA 2500

Telephone : **+61 02 4227 7111**
Project : **Whytes Gully Stage 3 Bores Annual**
Order number : **3058354**
C-O-C number : **----**
Sampler : **Robert DaLio**
Site : **----**
Quote number : **SY/454/14 Tender**
No. of samples received : **17**
No. of samples analysed : **17**

Page : **1 of 19**
Laboratory : **Environmental Division NSW South Coast**
Contact : **Glenn Davies**
Address : **1/19 Ralph Black Dr, North Wollongong 2500**
4/13 Geary Pl, North Nowra 2541
Australia
Telephone : **02 42253125**
Date Samples Received : **06-Feb-2017 12:46**
Date Analysis Commenced : **06-Feb-2017**
Issue Date : **13-Feb-2017 17:05**



This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

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

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics, Smithfield, NSW
Dian Dao		Sydney Inorganics, Smithfield, NSW
Edwandy Fadjjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Glenn Davies	Environmental Services Representative	Laboratory - Wollongong
Wisam Marassa	Inorganics Coordinator	Sydney Inorganics, Smithfield, NSW



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 no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

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

∅ = ALS is not NATA accredited for these tests.

~ = Indicates an estimated value.

- EG035: Positive Hg results have been confirmed by reanalysis
- Field tests completed on day of sampling/receipt.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a,h)anthracene (1.0), Benzo(g,h,i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero.



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	GMW102 (Point 9)	GMW103 (Point 10)	GMW104 (Point 11)	GMW105 (Point 12)	GMW106 (Point 13)
Client sampling date / time				06-Feb-2017 13:45	06-Feb-2017 13:25	06-Feb-2017 12:05	06-Feb-2017 13:05	06-Feb-2017 13:00	
Compound	CAS Number	LOR	Unit	EW1700471-001	EW1700471-002	EW1700471-003	EW1700471-004	EW1700471-005	
				Result	Result	Result	Result	Result	
EG020T: Total Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L	----	6.34	673	115	----	
Arsenic	7440-38-2	0.001	mg/L	----	0.001	0.018	0.006	----	
Barium	7440-39-3	0.001	mg/L	----	0.052	0.624	0.501	----	
Cadmium	7440-43-9	0.0001	mg/L	----	<0.0001	0.0020	0.0004	----	
Cobalt	7440-48-4	0.001	mg/L	----	0.009	0.448	0.048	----	
Chromium	7440-47-3	0.001	mg/L	----	0.007	0.305	0.068	----	
Copper	7440-50-8	0.001	mg/L	----	0.028	0.962	0.179	----	
Manganese	7439-96-5	0.001	mg/L	----	0.517	21.2	2.42	----	
Lead	7439-92-1	0.001	mg/L	----	0.014	0.230	0.073	----	
Zinc	7440-66-6	0.005	mg/L	----	0.045	1.70	0.310	----	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L	----	<0.0001	<0.0001	0.0004	----	
EG050T: Total Hexavalent Chromium									
Hexavalent Chromium	18540-29-9	0.01	mg/L	----	<0.01	<0.01	<0.01	----	
EK040P: Fluoride by PC Titrator									
Fluoride	16984-48-8	0.1	mg/L	----	0.3	0.7	0.2	----	
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	14797-65-0	0.01	mg/L	----	<0.01	<0.01	0.03	----	
EK058G: Nitrate as N by Discrete Analyser									
Nitrate as N	14797-55-8	0.01	mg/L	----	<0.01	0.02	0.85	----	
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L	----	<0.01	0.02	0.88	----	
EN67 PK: Field Tests									
Field Observations	----	0.01	--	DRY	----	----	----	DRY	
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	<0.5	----	
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	----	<0.5	<0.5	<0.5	----	
beta-BHC	319-85-7	0.5	µg/L	----	<0.5	<0.5	<0.5	----	
gamma-BHC	58-89-9	0.5	µg/L	----	<0.5	<0.5	<0.5	----	
delta-BHC	319-86-8	0.5	µg/L	----	<0.5	<0.5	<0.5	----	
Heptachlor	76-44-8	0.5	µg/L	----	<0.5	<0.5	<0.5	----	



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Client sample ID

				GMW102 (Point 9)	GMW103 (Point 10)	GMW104 (Point 11)	GMW105 (Point 12)	GMW106 (Point 13)
Client sampling date / time				06-Feb-2017 13:45	06-Feb-2017 13:25	06-Feb-2017 12:05	06-Feb-2017 13:05	06-Feb-2017 13:00
Compound	CAS Number	LOR	Unit	EW1700471-001	EW1700471-002	EW1700471-003	EW1700471-004	EW1700471-005
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
Aldrin	309-00-2	0.5	µg/L	----	<0.5	<0.5	<0.5	----
Heptachlor epoxide	1024-57-3	0.5	µg/L	----	<0.5	<0.5	<0.5	----
trans-Chlordane	5103-74-2	0.5	µg/L	----	<0.5	<0.5	<0.5	----
alpha-Endosulfan	959-98-8	0.5	µg/L	----	<0.5	<0.5	<0.5	----
cis-Chlordane	5103-71-9	0.5	µg/L	----	<0.5	<0.5	<0.5	----
Dieldrin	60-57-1	0.5	µg/L	----	<0.5	<0.5	<0.5	----
4,4'-DDE	72-55-9	0.5	µg/L	----	<0.5	<0.5	<0.5	----
Endrin	72-20-8	0.5	µg/L	----	<0.5	<0.5	<0.5	----
beta-Endosulfan	33213-65-9	0.5	µg/L	----	<0.5	<0.5	<0.5	----
4,4'-DDD	72-54-8	0.5	µg/L	----	<0.5	<0.5	<0.5	----
Endrin aldehyde	7421-93-4	0.5	µg/L	----	<0.5	<0.5	<0.5	----
Endosulfan sulfate	1031-07-8	0.5	µg/L	----	<0.5	<0.5	<0.5	----
4,4'-DDT	50-29-3	2	µg/L	----	<2.0	<2.0	<2.0	----
Endrin ketone	53494-70-5	0.5	µg/L	----	<0.5	<0.5	<0.5	----
Methoxychlor	72-43-5	2	µg/L	----	<2.0	<2.0	<2.0	----
[^] Total Chlordane (sum)	----	0.5	µg/L	----	<0.5	<0.5	<0.5	----
[^] Sum of DDD + DDE + DDT	72-54-8/72-55-9/5 0-2	0.5	µg/L	----	<0.5	<0.5	<0.5	----
[^] Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L	----	<0.5	<0.5	<0.5	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.5	µg/L	----	<0.5	<0.5	<0.5	----
Demeton-S-methyl	919-86-8	0.5	µg/L	----	<0.5	<0.5	<0.5	----
Monocrotophos	6923-22-4	2	µg/L	----	<2.0	<2.0	<2.0	----
Dimethoate	60-51-5	0.5	µg/L	----	<0.5	<0.5	<0.5	----
Diazinon	333-41-5	0.5	µg/L	----	<0.5	<0.5	<0.5	----
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	----	<0.5	<0.5	<0.5	----
Parathion-methyl	298-00-0	2	µg/L	----	<2.0	<2.0	<2.0	----
Malathion	121-75-5	0.5	µg/L	----	<0.5	<0.5	<0.5	----
Fenthion	55-38-9	0.5	µg/L	----	<0.5	<0.5	<0.5	----
Chlorpyrifos	2921-88-2	0.5	µg/L	----	<0.5	<0.5	<0.5	----
Parathion	56-38-2	2	µg/L	----	<2.0	<2.0	<2.0	----
Pirimphos-ethyl	23505-41-1	0.5	µg/L	----	<0.5	<0.5	<0.5	----
Chlorfenvinphos	470-90-6	0.5	µg/L	----	<0.5	<0.5	<0.5	----
Bromophos-ethyl	4824-78-6	0.5	µg/L	----	<0.5	<0.5	<0.5	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	GMW102 (Point 9)	GMW103 (Point 10)	GMW104 (Point 11)	GMW105 (Point 12)	GMW106 (Point 13)
Client sampling date / time				06-Feb-2017 13:45	06-Feb-2017 13:25	06-Feb-2017 12:05	06-Feb-2017 13:05	06-Feb-2017 13:00	
Compound	CAS Number	LOR	Unit	EW1700471-001	EW1700471-002	EW1700471-003	EW1700471-004	EW1700471-005	
				Result	Result	Result	Result	Result	
EP068B: Organophosphorus Pesticides (OP) - Continued									
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	µg/L	----	<1.0	<1.0	<1.0	<1.0	----
Acenaphthylene	208-96-8	1	µg/L	----	<1.0	<1.0	<1.0	<1.0	----
Acenaphthene	83-32-9	1	µg/L	----	<1.0	<1.0	<1.0	<1.0	----
Fluorene	86-73-7	1	µg/L	----	<1.0	<1.0	<1.0	<1.0	----
Phenanthrene	85-01-8	1	µg/L	----	<1.0	<1.0	<1.0	<1.0	----
Anthracene	120-12-7	1	µg/L	----	<1.0	<1.0	<1.0	<1.0	----
Fluoranthene	206-44-0	1	µg/L	----	<1.0	<1.0	<1.0	<1.0	----
Pyrene	129-00-0	1	µg/L	----	<1.0	<1.0	<1.0	<1.0	----
Benz(a)anthracene	56-55-3	1	µg/L	----	<1.0	<1.0	<1.0	<1.0	----
Chrysene	218-01-9	1	µg/L	----	<1.0	<1.0	<1.0	<1.0	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1	µg/L	----	<1.0	<1.0	<1.0	<1.0	----
Benzo(k)fluoranthene	207-08-9	1	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	µg/L	----	<1.0	<1.0	<1.0	<1.0	----
Dibenz(a.h)anthracene	53-70-3	1	µg/L	----	<1.0	<1.0	<1.0	<1.0	----
Benzo(g.h.i)perylene	191-24-2	1	µg/L	----	<1.0	<1.0	<1.0	<1.0	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L	----	<0.5	<0.5	<0.5	<0.5	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L	----	<0.5	<0.5	<0.5	<0.5	----
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	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L	----	<20	<20	<20	<20	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L	----	<20	<20	<20	<20	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	GMW102 (Point 9)	GMW103 (Point 10)	GMW104 (Point 11)	GMW105 (Point 12)	GMW106 (Point 13)
Client sampling date / time				06-Feb-2017 13:45	06-Feb-2017 13:25	06-Feb-2017 12:05	06-Feb-2017 13:05	06-Feb-2017 13:00	
Compound	CAS Number	LOR	Unit	EW1700471-001	EW1700471-002	EW1700471-003	EW1700471-004	EW1700471-005	
				Result	Result	Result	Result	Result	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	100	µg/L	----	<100	<100	<100	----	
>C16 - C34 Fraction	----	100	µg/L	----	<100	<100	<100	----	
>C34 - C40 Fraction	----	100	µg/L	----	<100	<100	<100	----	
^ >C10 - C40 Fraction (sum)	----	100	µg/L	----	<100	<100	<100	----	
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L	----	<100	<100	<100	----	
EP080: BTEXN									
Benzene	71-43-2	1	µg/L	----	<1	<1	<1	----	
Toluene	108-88-3	2	µg/L	----	<2	<2	<2	----	
Ethylbenzene	100-41-4	2	µg/L	----	<2	<2	<2	----	
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	----	<2	<2	<2	----	
ortho-Xylene	95-47-6	2	µg/L	----	<2	<2	<2	----	
^ Total Xylenes	1330-20-7	2	µg/L	----	<2	<2	<2	----	
^ Sum of BTEX	----	1	µg/L	----	<1	<1	<1	----	
Naphthalene	91-20-3	5	µg/L	----	<5	<5	<5	----	
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.5	%	----	67.9	76.7	72.0	----	
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.5	%	----	68.1	77.8	70.9	----	
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1	%	----	22.3	25.2	24.5	----	
2-Chlorophenol-D4	93951-73-6	1	%	----	49.6	52.6	52.4	----	
2,4,6-Tribromophenol	118-79-6	1	%	----	38.1	42.5	45.4	----	
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1	%	----	64.6	67.9	66.1	----	
Anthracene-d10	1719-06-8	1	%	----	82.1	88.6	85.3	----	
4-Terphenyl-d14	1718-51-0	1	%	----	64.6	72.2	69.6	----	
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	2	%	----	109	107	105	----	
Toluene-D8	2037-26-5	2	%	----	111	104	99.1	----	
4-Bromofluorobenzene	460-00-4	2	%	----	102	100	93.4	----	



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	GMW108S (Point 14)	GMW108D (Point 15)	GMW109S (Point 16)	GMW109D (Point 19)	GMW110 (Point 17)
Client sampling date / time				06-Feb-2017 14:25	06-Feb-2017 14:35	06-Feb-2017 10:20	06-Feb-2017 10:25	06-Feb-2017 09:55	
Compound	CAS Number	LOR	Unit	EW1700471-006	EW1700471-007	EW1700471-008	EW1700471-009	EW1700471-010	
				Result	Result	Result	Result	Result	
EG020T: Total Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L	21.4	0.12	106	0.24	17.0	
Arsenic	7440-38-2	0.001	mg/L	0.001	<0.001	0.013	<0.001	0.001	
Barium	7440-39-3	0.001	mg/L	0.220	0.013	1.65	0.145	0.051	
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.0033	<0.0001	<0.0001	
Cobalt	7440-48-4	0.001	mg/L	0.009	<0.001	0.195	<0.001	0.010	
Chromium	7440-47-3	0.001	mg/L	0.017	<0.001	0.170	0.001	0.012	
Copper	7440-50-8	0.001	mg/L	0.041	0.003	0.474	0.004	0.022	
Manganese	7439-96-5	0.001	mg/L	0.315	0.006	7.32	0.352	0.434	
Lead	7439-92-1	0.001	mg/L	0.013	<0.001	0.190	0.002	0.008	
Zinc	7440-66-6	0.005	mg/L	0.053	0.005	1.03	0.019	0.051	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0004	<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	<0.01	
EK040P: Fluoride by PC Titrator									
Fluoride	16984-48-8	0.1	mg/L	0.6	0.6	<0.1	0.4	0.4	
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<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	0.13	0.35	
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	0.01	<0.01	0.13	0.35	
EP035G: Total Phenol by Discrete Analyser									
Phenols (Total)	----	0.05	mg/L	<0.05	<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	<0.5	
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	<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	<0.5	
gamma-BHC	58-89-9	0.5	µg/L	<0.5	<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	<0.5	
Heptachlor	76-44-8	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	
Aldrin	309-00-2	0.5	µg/L	<0.5	<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	<0.5	



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	GMW108S (Point 14)	GMW108D (Point 15)	GMW109S (Point 16)	GMW109D (Point 19)	GMW110 (Point 17)
Client sampling date / time				06-Feb-2017 14:25	06-Feb-2017 14:35	06-Feb-2017 10:20	06-Feb-2017 10:25	06-Feb-2017 09:55	
Compound	CAS Number	LOR	Unit	EW1700471-006	EW1700471-007	EW1700471-008	EW1700471-009	EW1700471-010	
				Result	Result	Result	Result	Result	
EP068A: Organochlorine Pesticides (OC) - Continued									
trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	<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	<0.5	
cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	
Dieldrin	60-57-1	0.5	µg/L	<0.5	<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	<0.5	
Endrin	72-20-8	0.5	µg/L	<0.5	<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	<0.5	
4,4'-DDD	72-54-8	0.5	µg/L	<0.5	<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	<0.5	
Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	
4,4'-DDT	50-29-3	2	µg/L	<2.0	<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	<0.5	
Methoxychlor	72-43-5	2	µg/L	<2.0	<2.0	<2.0	<2.0	<2.0	
^ Total Chlordane (sum)	----	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-29-3	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.5	µg/L	<0.5	<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	<0.5	
Monocrotophos	6923-22-4	2	µg/L	<2.0	<2.0	<2.0	<2.0	<2.0	
Dimethoate	60-51-5	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	
Diazinon	333-41-5	0.5	µg/L	<0.5	<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	<0.5	
Parathion-methyl	298-00-0	2	µg/L	<2.0	<2.0	<2.0	<2.0	<2.0	
Malathion	121-75-5	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	
Fenthion	55-38-9	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	
Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	
Parathion	56-38-2	2	µg/L	<2.0	<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	<0.5	
Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	<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	<0.5	
Fenamiphos	22224-92-6	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	
Prothiofos	34643-46-4	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	GMW108S (Point 14)	GMW108D (Point 15)	GMW109S (Point 16)	GMW109D (Point 19)	GMW110 (Point 17)
Client sampling date / time				06-Feb-2017 14:25	06-Feb-2017 14:35	06-Feb-2017 10:20	06-Feb-2017 10:25	06-Feb-2017 09:55	
Compound	CAS Number	LOR	Unit	EW1700471-006	EW1700471-007	EW1700471-008	EW1700471-009	EW1700471-010	
				Result	Result	Result	Result	Result	
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	
Carbophenothion	786-19-6	0.5	µg/L	<0.5	<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	<0.5	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	
Acenaphthylene	208-96-8	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	
Acenaphthene	83-32-9	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	
Fluorene	86-73-7	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	
Phenanthrene	85-01-8	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	
Anthracene	120-12-7	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	
Fluoranthene	206-44-0	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	
Pyrene	129-00-0	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	
Benz(a)anthracene	56-55-3	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	
Chrysene	218-01-9	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	
Benzo(k)fluoranthene	207-08-9	1	µg/L	<1.0	<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	<0.5	
Indeno(1.2.3.cd)pyrene	193-39-5	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	
Dibenz(a,h)anthracene	53-70-3	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	
Benzo(g,h,i)perylene	191-24-2	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L	<20	<20	<20	<20	<20	
C10 - C14 Fraction	----	50	µg/L	<50	<50	<50	<50	<50	
C15 - C28 Fraction	----	100	µg/L	<100	<100	<100	<100	<100	
C29 - C36 Fraction	----	50	µg/L	<50	<50	<50	<50	<50	
^ C10 - C36 Fraction (sum)	----	50	µg/L	<50	<50	<50	<50	<50	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	<20	<20	<20	
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L	<20	<20	<20	<20	<20	
>C10 - C16 Fraction	----	100	µg/L	<100	<100	<100	<100	<100	
>C16 - C34 Fraction	----	100	µg/L	<100	<100	<100	<100	<100	



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	GMW108S (Point 14)	GMW108D (Point 15)	GMW109S (Point 16)	GMW109D (Point 19)	GMW110 (Point 17)
Client sampling date / time				06-Feb-2017 14:25	06-Feb-2017 14:35	06-Feb-2017 10:20	06-Feb-2017 10:25	06-Feb-2017 09:55	
Compound	CAS Number	LOR	Unit	EW1700471-006	EW1700471-007	EW1700471-008	EW1700471-009	EW1700471-010	
				Result	Result	Result	Result	Result	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C34 - C40 Fraction	----	100	µg/L	<100	<100	<100	<100	<100	
^ >C10 - C40 Fraction (sum)	----	100	µg/L	<100	<100	<100	<100	<100	
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L	<100	<100	<100	<100	<100	
EP080: BTEXN									
Benzene	71-43-2	1	µg/L	<1	<1	<1	<1	<1	
Toluene	108-88-3	2	µg/L	<2	<2	<2	<2	<2	
Ethylbenzene	100-41-4	2	µg/L	<2	<2	<2	<2	<2	
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	<2	<2	<2	
ortho-Xylene	95-47-6	2	µg/L	<2	<2	<2	<2	<2	
^ Total Xylenes	1330-20-7	2	µg/L	<2	<2	<2	<2	<2	
^ Sum of BTEX	----	1	µg/L	<1	<1	<1	<1	<1	
Naphthalene	91-20-3	5	µg/L	<5	<5	<5	<5	<5	
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.5	%	73.7	78.8	68.1	63.0	69.7	
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.5	%	65.2	72.6	69.7	64.2	75.0	
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1	%	25.0	25.3	17.6	19.6	19.8	
2-Chlorophenol-D4	93951-73-6	1	%	54.1	54.6	37.3	44.8	43.2	
2,4,6-Tribromophenol	118-79-6	1	%	43.9	42.9	39.0	43.3	41.7	
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1	%	68.2	67.7	53.2	58.0	55.4	
Anthracene-d10	1719-06-8	1	%	89.3	91.4	51.8	77.2	77.8	
4-Terphenyl-d14	1718-51-0	1	%	70.8	73.4	56.9	58.5	60.0	
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	2	%	100	110	109	111	108	
Toluene-D8	2037-26-5	2	%	93.2	107	108	106	115	
4-Bromofluorobenzene	460-00-4	2	%	86.7	95.6	99.0	93.6	93.9	



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	GMW111 (Point 18)	GABH01 (Point 2)	GABH02 (Point 5)	GABH03 (Point 6)	GABH06S (Point 7)
Client sampling date / time				06-Feb-2017 09:20	06-Feb-2017 12:40	06-Feb-2017 12:20	06-Feb-2017 12:25	06-Feb-2017 13:55	
Compound	CAS Number	LOR	Unit	EW1700471-011	EW1700471-012	EW1700471-013	EW1700471-014	EW1700471-015	
				Result	Result	Result	Result	Result	
EG020T: Total Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L	96.2	----	3.37	0.13	2.73	
Arsenic	7440-38-2	0.001	mg/L	0.018	----	<0.001	<0.001	<0.001	
Barium	7440-39-3	0.001	mg/L	0.198	----	0.016	0.012	0.099	
Cadmium	7440-43-9	0.0001	mg/L	0.0006	----	<0.0001	<0.0001	<0.0001	
Cobalt	7440-48-4	0.001	mg/L	0.075	----	0.001	0.002	0.005	
Chromium	7440-47-3	0.001	mg/L	0.045	----	0.003	<0.001	0.002	
Copper	7440-50-8	0.001	mg/L	0.209	----	0.010	0.002	0.011	
Manganese	7439-96-5	0.001	mg/L	2.98	----	0.096	0.335	0.241	
Lead	7439-92-1	0.001	mg/L	0.082	----	0.003	<0.001	0.003	
Zinc	7440-66-6	0.005	mg/L	0.376	----	0.024	0.006	0.019	
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	0.4	----	0.5	0.4	0.9	
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	14797-65-0	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	----	<0.01	<0.01	<0.01	
EN67 PK: Field Tests									
Field Observations	----	0.01	--	----	DESTROYED	----	----	----	
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	



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Client sample ID

				GMW111 (Point 18)	GABH01 (Point 2)	GABH02 (Point 5)	GABH03 (Point 6)	GABH06S (Point 7)
Client sampling date / time				06-Feb-2017 09:20	06-Feb-2017 12:40	06-Feb-2017 12:20	06-Feb-2017 12:25	06-Feb-2017 13:55
Compound	CAS Number	LOR	Unit	EW1700471-011	EW1700471-012	EW1700471-013	EW1700471-014	EW1700471-015
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
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
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	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	µg/L	<2.0	----	<2.0	<2.0	<2.0
^ Total Chlordane (sum)	----	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5
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	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	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	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
Chlorfenvinphos	470-90-6	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



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	GMW111 (Point 18)	GABH01 (Point 2)	GABH02 (Point 5)	GABH03 (Point 6)	GABH06S (Point 7)
Client sampling date / time				06-Feb-2017 09:20	06-Feb-2017 12:40	06-Feb-2017 12:20	06-Feb-2017 12:25	06-Feb-2017 13:55	
Compound	CAS Number	LOR	Unit	EW1700471-011	EW1700471-012	EW1700471-013	EW1700471-014	EW1700471-015	
				Result	Result	Result	Result	Result	
EP068B: Organophosphorus Pesticides (OP) - Continued									
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	µg/L	<1.0	----	<1.0	<1.0	<1.0	
Acenaphthylene	208-96-8	1	µg/L	<1.0	----	<1.0	<1.0	<1.0	
Acenaphthene	83-32-9	1	µg/L	<1.0	----	<1.0	<1.0	<1.0	
Fluorene	86-73-7	1	µg/L	<1.0	----	<1.0	<1.0	<1.0	
Phenanthrene	85-01-8	1	µg/L	<1.0	----	<1.0	<1.0	<1.0	
Anthracene	120-12-7	1	µg/L	<1.0	----	<1.0	<1.0	<1.0	
Fluoranthene	206-44-0	1	µg/L	<1.0	----	<1.0	<1.0	<1.0	
Pyrene	129-00-0	1	µg/L	<1.0	----	<1.0	<1.0	<1.0	
Benz(a)anthracene	56-55-3	1	µg/L	<1.0	----	<1.0	<1.0	<1.0	
Chrysene	218-01-9	1	µg/L	<1.0	----	<1.0	<1.0	<1.0	
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1	µg/L	<1.0	----	<1.0	<1.0	<1.0	
Benzo(k)fluoranthene	207-08-9	1	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	µg/L	<1.0	----	<1.0	<1.0	<1.0	
Dibenz(a,h)anthracene	53-70-3	1	µg/L	<1.0	----	<1.0	<1.0	<1.0	
Benzo(g,h,i)perylene	191-24-2	1	µg/L	<1.0	----	<1.0	<1.0	<1.0	
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5	
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L	<0.5	----	<0.5	<0.5	<0.5	
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	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L	<20	----	<20	<20	<20	
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L	<20	----	<20	<20	<20	



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	GMW111 (Point 18)	GABH01 (Point 2)	GABH02 (Point 5)	GABH03 (Point 6)	GABH06S (Point 7)
Client sampling date / time				06-Feb-2017 09:20	06-Feb-2017 12:40	06-Feb-2017 12:20	06-Feb-2017 12:25	06-Feb-2017 13:55	
Compound	CAS Number	LOR	Unit	EW1700471-011	EW1700471-012	EW1700471-013	EW1700471-014	EW1700471-015	
				Result	Result	Result	Result	Result	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C10 - C16 Fraction	----	100	µg/L	<100	----	<100	<100	<100	
>C16 - C34 Fraction	----	100	µg/L	<100	----	<100	<100	<100	
>C34 - C40 Fraction	----	100	µg/L	<100	----	<100	<100	<100	
^ >C10 - C40 Fraction (sum)	----	100	µg/L	<100	----	<100	<100	<100	
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L	<100	----	<100	<100	<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	
^ Total Xylenes	1330-20-7	2	µg/L	<2	----	<2	<2	<2	
^ Sum of BTEX	----	1	µg/L	<1	----	<1	<1	<1	
Naphthalene	91-20-3	5	µg/L	<5	----	<5	<5	<5	
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.5	%	72.5	----	74.9	70.5	65.2	
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.5	%	63.3	----	70.6	62.8	61.4	
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1	%	23.5	----	22.5	22.6	22.2	
2-Chlorophenol-D4	93951-73-6	1	%	50.0	----	48.1	50.8	50.6	
2,4,6-Tribromophenol	118-79-6	1	%	45.8	----	40.4	36.6	45.0	
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1	%	63.1	----	61.8	63.3	65.0	
Anthracene-d10	1719-06-8	1	%	84.8	----	85.8	87.6	92.1	
4-Terphenyl-d14	1718-51-0	1	%	68.2	----	70.5	67.6	68.3	
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	2	%	116	----	113	113	111	
Toluene-D8	2037-26-5	2	%	107	----	107	104	102	
4-Bromofluorobenzene	460-00-4	2	%	94.9	----	92.0	90.2	91.4	



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID		GABH06D (Point 8)	BH6 (Point 20)	----	----	----
Client sampling date / time				06-Feb-2017 14:00		06-Feb-2017 11:30		----	----	----
Compound	CAS Number	LOR	Unit	EW1700471-016	EW1700471-017	-----	-----	-----	-----	-----
				Result	Result	----	----	----	----	----
EG020T: Total Metals by ICP-MS										
Aluminium	7429-90-5	0.01	mg/L	0.15	1.44	----	----	----	----	----
Arsenic	7440-38-2	0.001	mg/L	<0.001	0.002	----	----	----	----	----
Barium	7440-39-3	0.001	mg/L	0.012	0.073	----	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	----	----	----	----	----
Cobalt	7440-48-4	0.001	mg/L	<0.001	0.019	----	----	----	----	----
Chromium	7440-47-3	0.001	mg/L	<0.001	0.002	----	----	----	----	----
Copper	7440-50-8	0.001	mg/L	0.002	0.004	----	----	----	----	----
Manganese	7439-96-5	0.001	mg/L	0.011	2.84	----	----	----	----	----
Lead	7439-92-1	0.001	mg/L	<0.001	0.010	----	----	----	----	----
Zinc	7440-66-6	0.005	mg/L	0.010	0.010	----	----	----	----	----
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	----	----	----	----	----
EK040P: Fluoride by PC Titrator										
Fluoride	16984-48-8	0.1	mg/L	0.4	0.9	----	----	----	----	----
EK057G: Nitrite as N by Discrete Analyser										
Nitrite as N	14797-65-0	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	<0.01	<0.01	----	----	----	----	----
EP035G: Total Phenol by Discrete Analyser										
Phenols (Total)	----	0.05	mg/L	<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	----	----	----	----	----
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	----	----	----	----	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	GABH06D (Point 8)	BH6 (Point 20)	----	----	----
Client sampling date / time					06-Feb-2017 14:00	06-Feb-2017 11:30	----	----	----
Compound	CAS Number	LOR	Unit	EW1700471-016	EW1700471-017	-----	-----	-----	
				Result	Result	---	---	---	
EP068A: Organochlorine Pesticides (OC) - Continued									
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	µg/L	<2.0	<2.0	----	----	----	
Endrin ketone	53494-70-5	0.5	µg/L	<0.5	<0.5	----	----	----	
Methoxychlor	72-43-5	2	µg/L	<2.0	<2.0	----	----	----	
^ Total Chlordane (sum)	----	0.5	µg/L	<0.5	<0.5	----	----	----	
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/5 0-2	0.5	µg/L	<0.5	<0.5	----	----	----	
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L	<0.5	<0.5	----	----	----	
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	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	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	µg/L	<2.0	<2.0	----	----	----	
Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	<0.5	----	----	----	
Chlorfenvinphos	470-90-6	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	GABH06D (Point 8)	BH6 (Point 20)	----	----	----
Client sampling date / time					06-Feb-2017 14:00	06-Feb-2017 11:30	----	----	----
Compound	CAS Number	LOR	Unit	EW1700471-016	EW1700471-017	-----	-----	-----	
				Result	Result	----	----	----	
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	µg/L	<1.0	<1.0	----	----	----	
Acenaphthylene	208-96-8	1	µg/L	<1.0	<1.0	----	----	----	
Acenaphthene	83-32-9	1	µg/L	<1.0	<1.0	----	----	----	
Fluorene	86-73-7	1	µg/L	<1.0	<1.0	----	----	----	
Phenanthrene	85-01-8	1	µg/L	<1.0	<1.0	----	----	----	
Anthracene	120-12-7	1	µg/L	<1.0	<1.0	----	----	----	
Fluoranthene	206-44-0	1	µg/L	<1.0	<1.0	----	----	----	
Pyrene	129-00-0	1	µg/L	<1.0	<1.0	----	----	----	
Benz(a)anthracene	56-55-3	1	µg/L	<1.0	<1.0	----	----	----	
Chrysene	218-01-9	1	µg/L	<1.0	<1.0	----	----	----	
Benzo(b+j)fluoranthene	205-99-2	205-82-3	1	µg/L	<1.0	----	----	----	
Benzo(k)fluoranthene	207-08-9	1	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	µg/L	<1.0	<1.0	----	----	----	
Dibenz(a,h)anthracene	53-70-3	1	µg/L	<1.0	<1.0	----	----	----	
Benzo(g,h,i)perylene	191-24-2	1	µg/L	<1.0	<1.0	----	----	----	
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L	<0.5	<0.5	----	----	----	
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L	<0.5	<0.5	----	----	----	
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	----	----	----	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	----	----	----	
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L	<20	<20	----	----	----	
>C10 - C16 Fraction	----	100	µg/L	<100	<100	----	----	----	
>C16 - C34 Fraction	----	100	µg/L	<100	<100	----	----	----	



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID		GABH06D (Point 8)	BH6 (Point 20)	----	----	----
Client sampling date / time				06-Feb-2017 14:00	06-Feb-2017 11:30	----	----	----	----	----
Compound	CAS Number	LOR	Unit	EW1700471-016	EW1700471-017	-----	-----	-----	-----	-----
				Result	Result	----	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued										
>C34 - C40 Fraction	----	100	µg/L	<100	<100	----	----	----	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L	<100	<100	----	----	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L	<100	<100	----	----	----	----	----
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	----	----	----	----	----
^ Total Xylenes	1330-20-7	2	µg/L	<2	<2	----	----	----	----	----
^ Sum of BTEX	----	1	µg/L	<1	<1	----	----	----	----	----
Naphthalene	91-20-3	5	µg/L	<5	<5	----	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate										
Dibromo-DDE	21655-73-2	0.5	%	75.8	79.1	----	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate										
DEF	78-48-8	0.5	%	63.9	67.3	----	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates										
Phenol-d6	13127-88-3	1	%	24.6	17.0	----	----	----	----	----
2-Chlorophenol-D4	93951-73-6	1	%	53.3	42.0	----	----	----	----	----
2,4,6-Tribromophenol	118-79-6	1	%	43.8	45.7	----	----	----	----	----
EP075(SIM)T: PAH Surrogates										
2-Fluorobiphenyl	321-60-8	1	%	69.4	67.2	----	----	----	----	----
Anthracene-d10	1719-06-8	1	%	87.5	83.8	----	----	----	----	----
4-Terphenyl-d14	1718-51-0	1	%	75.0	83.9	----	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates										
1,2-Dichloroethane-D4	17060-07-0	2	%	117	123	----	----	----	----	----
Toluene-D8	2037-26-5	2	%	109	119	----	----	----	----	----
4-Bromofluorobenzene	460-00-4	2	%	96.6	99.1	----	----	----	----	----



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	27	129
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	44
2-Chlorophenol-D4	93951-73-6	14	94
2,4,6-Tribromophenol	118-79-6	17	125
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	20	104
Anthracene-d10	1719-06-8	27	113
4-Terphenyl-d14	1718-51-0	32	112
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