

## CERTIFICATE OF ANALYSIS

<b>Work Order</b> : <b>EW2205234</b> <b>Client</b> : <b>WINGECARRIBEE SHIRE COUNCIL</b> <b>Contact</b> : Resource <b>Address</b> : PO BOX 141 MOSSVALE NSW AUSTRALIA  <b>Telephone</b> : ---- <b>Project</b> : RCC ANNUAL <b>Order number</b> : ---- <b>C-O-C number</b> : ---- <b>Sampler</b> : Michael Santos <b>Site</b> : ---- <b>Quote number</b> : WO/067/12 <b>No. of samples received</b> : 7 <b>No. of samples analysed</b> : 7	<b>Page</b> : 1 of 18 <b>Laboratory</b> : Environmental Division NSW South Coast <b>Contact</b> : Aneta Prosaroski <b>Address</b> : 1/19 Ralph Black Dr, North Wollongong 2500 NSW Australia  <b>Telephone</b> : 02 42253125 <b>Date Samples Received</b> : 14-Nov-2022 16:38 <b>Date Analysis Commenced</b> : 14-Nov-2022 <b>Issue Date</b> : 21-Nov-2022 17:57
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This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. 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>
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Robert DaLio	Sampler	Laboratory - Wollongong, NSW
Wisam Marassa	Inorganics Coordinator	Sydney Inorganics, Smithfield, NSW



## General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the 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.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract 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  
ø = ALS is not NATA accredited for these tests.  
~ = Indicates an estimated value.

- **Analytical work for this work order will be conducted at ALS Sydney.**
- EP075 (SIM): Where reported, Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) 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.
- EP075: Where reported, Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) 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.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074: Where reported, Total Trihalomethanes is the sum of the reported concentrations of all Trihalomethanes at or above the LOR.
- EP074: Where reported, Total Trimethylbenzenes is the sum of the reported concentrations of 1.2.3-Trimethylbenzene, 1.2.4-Trimethylbenzene and 1.3.5-Trimethylbenzene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- As per QWI – EN55-3 Data Interpreting Procedures, Ionic balances are typically calculated using Major Anions - Chloride, Alkalinity and Sulfate; and Major Cations - Calcium, Magnesium, Potassium and Sodium. Where applicable and dependent upon sample matrix, the Ionic Balance may also include the additional contribution of Ammonia, Dissolved Metals by ICPMS and H+ to the Cations and Nitrate, SiO2 and Fluoride to the Anions.
- Sampling and sample data supplied by ALS Wollongong.
- Sampling completed as per FWI-EN001 Groundwater Sampling.
- Sampling completed as per FWI-EN002 Surface Water Sampling.
- Field tests completed on day of sampling/receipt.
- EP075: Where reported, 'Sum of PAH' is the sum of the USEPA 16 priority PAHs
- Sodium Adsorption Ratio (where reported): Where results for Na, Ca or Mg are <LOR, a concentration at half the reported LOR is incorporated into the SAR calculation. This represents a conservative approach for Na relative to the assumption that <LOR = zero concentration and a conservative approach for Ca & Mg relative to the assumption that <LOR is equivalent to the LOR concentration.



## Analytical Results

Sub-Matrix: WATER  
 (Matrix: WATER)

Sample ID

				Point 1 - MW1B (FRONT GATE)	Point 2 - MW06 (CAR PARK)	Point 3 - MW7 (SOUTH OF POND)	Point 4 - LT1 (LEACHATE)	Point 5 - SW01 (UPSTREAM STORMWATER)
Sampling date / time				14-Nov-2022 13:30	14-Nov-2022 15:05	14-Nov-2022 13:55	14-Nov-2022 14:50	14-Nov-2022 15:00
Compound	CAS Number	LOR	Unit	EW2205234-001	EW2205234-002	EW2205234-003	EW2205234-004	EW2205234-005
				Result	Result	Result	Result	Result
<b>EA005FD: Field pH</b>								
pH	----	0.1	pH Unit	5.3	4.4	4.4	7.5	----
<b>EA010FD: Field Conductivity</b>								
Electrical Conductivity (Non Compensated)	----	1	µS/cm	1170	329	1890	880	----
<b>EA015: Total Dissolved Solids dried at 180 ± 5 °C</b>								
Total Dissolved Solids @180°C	----	10	mg/L	842	180	956	498	----
<b>EA025: Total Suspended Solids dried at 104 ± 2°C</b>								
Suspended Solids (SS)	----	5	mg/L	----	----	----	50	----
<b>ED037P: Alkalinity by PC Titrator</b>								
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	39	<1	<1	328	----
Total Alkalinity as CaCO3	----	1	mg/L	39	<1	<1	328	----
<b>ED041G: Sulfate (Turbidimetric) as SO4 2- by DA</b>								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	277	24	2	30	----
<b>ED045G: Chloride by Discrete Analyser</b>								
Chloride	16887-00-6	1	mg/L	78	74	618	74	----
<b>ED093F: Dissolved Major Cations</b>								
Calcium	7440-70-2	1	mg/L	110	1	8	76	----
Magnesium	7439-95-4	1	mg/L	24	2	26	30	----
Sodium	7440-23-5	1	mg/L	48	56	310	50	----
Potassium	7440-09-7	1	mg/L	49	<1	2	35	----
<b>EG020F: Dissolved Metals by ICP-MS</b>								
Aluminium	7429-90-5	0.01	mg/L	0.15	0.04	0.64	<0.01	----
Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	<0.001	0.001	----
Barium	7440-39-3	0.001	mg/L	0.048	0.121	0.835	0.129	----
Cadmium	7440-43-9	0.0001	mg/L	0.0011	<0.0001	0.0002	<0.0001	----
Cobalt	7440-48-4	0.001	mg/L	0.009	0.005	0.159	0.002	----
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	----
Copper	7440-50-8	0.001	mg/L	0.024	<0.001	0.004	0.047	----
Manganese	7439-96-5	0.001	mg/L	0.212	0.035	1.00	0.141	----
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.002	<0.001	----
Zinc	7440-66-6	0.005	mg/L	1.01	0.098	0.250	0.117	----



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				Result	Result	Result	Result	Result	
<b>EG020F: Dissolved Metals by ICP-MS - Continued</b>									
<b>EG035F: Dissolved Mercury by FIMS</b>									
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	----	
<b>EG050F: Dissolved Hexavalent Chromium</b>									
Hexavalent Chromium	18540-29-9	0.01	mg/L	<0.01	<0.01	<0.01	<0.01	----	
<b>EK040P: Fluoride by PC Titrator</b>									
Fluoride	16984-48-8	0.1	mg/L	0.2	<0.1	0.3	0.2	----	
<b>EK055G: Ammonia as N by Discrete Analyser</b>									
Ammonia as N	7664-41-7	0.01	mg/L	0.60	0.14	0.03	0.40	----	
<b>EK057G: Nitrite as N by Discrete Analyser</b>									
Nitrite as N	14797-65-0	0.01	mg/L	0.04	<0.01	0.02	0.02	----	
<b>EK058G: Nitrate as N by Discrete Analyser</b>									
Nitrate as N	14797-55-8	0.01	mg/L	40.0	0.04	3.06	0.59	----	
<b>EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser</b>									
Nitrite + Nitrate as N	----	0.01	mg/L	40.0	0.04	3.08	0.61	----	
<b>EK067G: Total Phosphorus as P by Discrete Analyser</b>									
Total Phosphorus as P	----	0.01	mg/L	----	----	----	0.30	----	
<b>EN055: Ionic Balance</b>									
∅ Total Anions	----	0.01	meq/L	11.6	----	----	----	----	
∅ Total Anions	----	0.01	meq/L	----	2.59	17.5	9.26	----	
∅ Total Cations	----	0.01	meq/L	10.8	2.65	16.1	9.33	----	
∅ Ionic Balance	----	0.01	%	3.57	----	----	----	----	
∅ Ionic Balance	----	0.01	%	----	----	4.17	0.36	----	
<b>EN67 PK: Field Tests</b>									
Field Observations	----	0.01	--	----	----	----	----	DRY	
<b>EP005: Total Organic Carbon (TOC)</b>									
Total Organic Carbon	----	1	mg/L	44	10	5	14	----	
<b>EP030: Biochemical Oxygen Demand (BOD)</b>									
Biochemical Oxygen Demand	----	2	mg/L	----	----	----	<2	----	
<b>EP068A: Organochlorine Pesticides (OC)</b>									
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	----	



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				Result	Result	Result	Result	Result
<b>EP068A: Organochlorine Pesticides (OC) - Continued</b>								
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	----
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	----
^ 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	----
<b>EP068B: Organophosphorus Pesticides (OP)</b>								
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	----



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				Result	Result	Result	Result	Result
<b>EP068B: Organophosphorus Pesticides (OP) - Continued</b>								
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	----
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	----
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	----
<b>EP074A: Monocyclic Aromatic Hydrocarbons</b>								
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	----	----
Styrene	100-42-5	5	µg/L	<5	<5	<5	----	----
ortho-Xylene	95-47-6	2	µg/L	<2	<2	<2	----	----
Isopropylbenzene	98-82-8	5	µg/L	<5	<5	<5	----	----
n-Propylbenzene	103-65-1	5	µg/L	<5	<5	<5	----	----
1,3,5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	<5	----	----
sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	<5	----	----
1,2,4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	<5	----	----
tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	<5	----	----
p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	<5	----	----
n-Butylbenzene	104-51-8	5	µg/L	<5	<5	<5	----	----
<b>EP074B: Oxygenated Compounds</b>								
Vinyl Acetate	108-05-4	50	µg/L	<50	<50	<50	----	----
2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	<50	----	----
4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	<50	----	----
2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	<50	----	----
<b>EP074C: Sulfonated Compounds</b>								
Carbon disulfide	75-15-0	5	µg/L	<5	<5	<5	----	----
<b>EP074D: Fumigants</b>								
2,2-Dichloropropane	594-20-7	5	µg/L	<5	<5	<5	----	----



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				Result	Result	Result	Result	Result
<b>EP074D: Fumigants - Continued</b>								
1,2-Dichloropropane	78-87-5	5	µg/L	<5	<5	<5	----	----
cis-1,3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	<5	----	----
trans-1,3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	<5	----	----
1,2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	<5	----	----
<b>EP074E: Halogenated Aliphatic Compounds</b>								
Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	<50	----	----
Chloromethane	74-87-3	50	µg/L	<50	<50	<50	----	----
Vinyl chloride	75-01-4	50	µg/L	<50	<50	<50	----	----
Bromomethane	74-83-9	50	µg/L	<50	<50	<50	----	----
Chloroethane	75-00-3	50	µg/L	<50	<50	<50	----	----
Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	<50	----	----
1,1-Dichloroethene	75-35-4	5	µg/L	<5	<5	<5	----	----
Iodomethane	74-88-4	5	µg/L	<5	<5	<5	----	----
trans-1,2-Dichloroethene	156-60-5	5	µg/L	<5	<5	<5	----	----
1,1-Dichloroethane	75-34-3	5	µg/L	<5	<5	<5	----	----
cis-1,2-Dichloroethene	156-59-2	5	µg/L	<5	<5	<5	----	----
1,1,1-Trichloroethane	71-55-6	5	µg/L	<5	<5	<5	----	----
1,1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	<5	----	----
Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	<5	----	----
1,2-Dichloroethane	107-06-2	5	µg/L	<5	<5	<5	----	----
Trichloroethene	79-01-6	5	µg/L	<5	<5	<5	----	----
Dibromomethane	74-95-3	5	µg/L	<5	<5	<5	----	----
1,1,2-Trichloroethane	79-00-5	5	µg/L	<5	<5	<5	----	----
1,3-Dichloropropane	142-28-9	5	µg/L	<5	<5	<5	----	----
Tetrachloroethene	127-18-4	5	µg/L	<5	<5	<5	----	----
1,1,1,2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	<5	----	----
trans-1,4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	<5	----	----
cis-1,4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	<5	----	----
1,1,2,2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	<5	----	----
1,2,3-Trichloropropane	96-18-4	5	µg/L	<5	<5	<5	----	----
Pentachloroethane	76-01-7	5	µg/L	<5	<5	<5	----	----
1,2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	<5	----	----
<b>EP074F: Halogenated Aromatic Compounds</b>								





## Analytical Results

Sub-Matrix: WATER  
 (Matrix: WATER)

Sample ID

				Point 1 - MW1B (FRONT GATE)	Point 2 - MW06 (CAR PARK)	Point 3 - MW7 (SOUTH OF POND)	Point 4 - LT1 (LEACHATE)	Point 5 - SW01 (UPSTREAM STORMWATER)
Sampling date / time				14-Nov-2022 13:30	14-Nov-2022 15:05	14-Nov-2022 13:55	14-Nov-2022 14:50	14-Nov-2022 15:00
Compound	CAS Number	LOR	Unit	EW2205234-001	EW2205234-002	EW2205234-003	EW2205234-004	EW2205234-005
				Result	Result	Result	Result	Result
<b>EP074F: Halogenated Aromatic Compounds - Continued</b>								
Chlorobenzene	108-90-7	5	µg/L	<5	<5	<5	----	----
Bromobenzene	108-86-1	5	µg/L	<5	<5	<5	----	----
2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	<5	----	----
4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	<5	----	----
1,2,3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	<5	----	----
<b>EP074G: Trihalomethanes</b>								
Chloroform	67-66-3	5	µg/L	<5	<5	<5	----	----
Bromodichloromethane	75-27-4	5	µg/L	<5	<5	<5	----	----
Dibromochloromethane	124-48-1	5	µg/L	<5	<5	<5	----	----
Bromoform	75-25-2	5	µg/L	<5	<5	<5	----	----
<b>EP075(SIM)A: Phenolic Compounds</b>								
Phenol	108-95-2	1.0	µg/L	----	----	----	<1.0	----
2-Chlorophenol	95-57-8	1.0	µg/L	----	----	----	<1.0	----
2-Methylphenol	95-48-7	1.0	µg/L	----	----	----	<1.0	----
3- & 4-Methylphenol	1319-77-3	2.0	µg/L	----	----	----	<2.0	----
2-Nitrophenol	88-75-5	1.0	µg/L	----	----	----	<1.0	----
2,4-Dimethylphenol	105-67-9	1.0	µg/L	----	----	----	<1.0	----
2,4-Dichlorophenol	120-83-2	1.0	µg/L	----	----	----	<1.0	----
2,6-Dichlorophenol	87-65-0	1.0	µg/L	----	----	----	<1.0	----
4-Chloro-3-methylphenol	59-50-7	1.0	µg/L	----	----	----	<1.0	----
2,4,6-Trichlorophenol	88-06-2	1.0	µg/L	----	----	----	<1.0	----
2,4,5-Trichlorophenol	95-95-4	1.0	µg/L	----	----	----	<1.0	----
Pentachlorophenol	87-86-5	2.0	µg/L	----	----	----	<2.0	----
<b>EP075(SIM)B: Polynuclear Aromatic Hydrocarbons</b>								
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	----
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	----





## Analytical Results

Sub-Matrix: WATER  
 (Matrix: WATER)

Sample ID

				Point 1 - MW1B (FRONT GATE)	Point 2 - MW06 (CAR PARK)	Point 3 - MW7 (SOUTH OF POND)	Point 4 - LT1 (LEACHATE)	Point 5 - SW01 (UPSTREAM STORMWATER)
Sampling date / time				14-Nov-2022 13:30	14-Nov-2022 15:05	14-Nov-2022 13:55	14-Nov-2022 14:50	14-Nov-2022 15:00
Compound	CAS Number	LOR	Unit	EW2205234-001	EW2205234-002	EW2205234-003	EW2205234-004	EW2205234-005
				Result	Result	Result	Result	Result
<b>EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued</b>								
Chrysene	218-01-9	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	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	----
^ 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	----
<b>EP075A: Phenolic Compounds</b>								
Phenol	108-95-2	2	µg/L	<2	<2	<2	----	----
2-Chlorophenol	95-57-8	2	µg/L	<2	<2	<2	----	----
2-Methylphenol	95-48-7	2	µg/L	<2	<2	<2	----	----
3- & 4-Methylphenol	1319-77-3	4	µg/L	<4	<4	<4	----	----
2-Nitrophenol	88-75-5	2	µg/L	<2	<2	<2	----	----
2,4-Dimethylphenol	105-67-9	2	µg/L	<2	<2	<2	----	----
2,4-Dichlorophenol	120-83-2	2	µg/L	<2	<2	<2	----	----
2,6-Dichlorophenol	87-65-0	2	µg/L	<2	<2	<2	----	----
4-Chloro-3-methylphenol	59-50-7	2	µg/L	<2	<2	<2	----	----
2,4,6-Trichlorophenol	88-06-2	2	µg/L	<2	<2	<2	----	----
2,4,5-Trichlorophenol	95-95-4	2	µg/L	<2	<2	<2	----	----
Pentachlorophenol	87-86-5	4	µg/L	<4	<4	<4	----	----
<b>EP075B: Polynuclear Aromatic Hydrocarbons</b>								
Naphthalene	91-20-3	2	µg/L	<2	<2	<2	----	----
2-Methylnaphthalene	91-57-6	2	µg/L	<2	<2	<2	----	----
2-Chloronaphthalene	91-58-7	2	µg/L	<2	<2	<2	----	----
Acenaphthylene	208-96-8	2	µg/L	<2	<2	<2	----	----
Acenaphthene	83-32-9	2	µg/L	<2	<2	<2	----	----
Fluorene	86-73-7	2	µg/L	<2	<2	<2	----	----
Phenanthrene	85-01-8	2	µg/L	<2	<2	<2	----	----
Anthracene	120-12-7	2	µg/L	<2	<2	<2	----	----
Fluoranthene	206-44-0	2	µg/L	<2	<2	<2	----	----
Pyrene	129-00-0	2	µg/L	<2	<2	<2	----	----



## Analytical Results

Sub-Matrix: WATER  
 (Matrix: WATER)

Sample ID

				Point 1 - MW1B (FRONT GATE)	Point 2 - MW06 (CAR PARK)	Point 3 - MW7 (SOUTH OF POND)	Point 4 - LT1 (LEACHATE)	Point 5 - SW01 (UPSTREAM STORMWATER)
Sampling date / time				14-Nov-2022 13:30	14-Nov-2022 15:05	14-Nov-2022 13:55	14-Nov-2022 14:50	14-Nov-2022 15:00
Compound	CAS Number	LOR	Unit	EW2205234-001	EW2205234-002	EW2205234-003	EW2205234-004	EW2205234-005
				Result	Result	Result	Result	Result
<b>EP075B: Polynuclear Aromatic Hydrocarbons - Continued</b>								
N-2-Fluorenyl Acetamide	53-96-3	2	µg/L	<2	<2	<2	----	----
Benz(a)anthracene	56-55-3	2	µg/L	<2	<2	<2	----	----
Chrysene	218-01-9	2	µg/L	<2	<2	<2	----	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	4	µg/L	<4	<4	<4	----	----
7.12-Dimethylbenz(a)anthracene	57-97-6	2	µg/L	<2	<2	<2	----	----
Benzo(a)pyrene	50-32-8	2	µg/L	<2	<2	<2	----	----
3-Methylcholanthrene	56-49-5	2	µg/L	<2	<2	<2	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	2	µg/L	<2	<2	<2	----	----
Dibenz(a.h)anthracene	53-70-3	2	µg/L	<2	<2	<2	----	----
Benzo(g.h.i)perylene	191-24-2	2	µg/L	<2	<2	<2	----	----
^ Sum of PAHs	----	2	µg/L	<2	<2	<2	----	----
^ Benzo(a)pyrene TEQ (zero)	----	2	µg/L	<2	<2	<2	----	----
<b>EP075C: Phthalate Esters</b>								
Dimethyl phthalate	131-11-3	2	µg/L	<2	<2	<2	----	----
Diethyl phthalate	84-66-2	2	µg/L	<2	<2	<2	----	----
Di-n-butyl phthalate	84-74-2	2	µg/L	<2	<2	<2	----	----
Butyl benzyl phthalate	85-68-7	2	µg/L	<2	<2	<2	----	----
bis(2-ethylhexyl) phthalate	117-81-7	10	µg/L	12	12	<10	----	----
Di-n-octylphthalate	117-84-0	2	µg/L	<2	<2	<2	----	----
<b>EP075D: Nitrosamines</b>								
N-Nitrosomethylethylamine	10595-95-6	2	µg/L	<2	<2	<2	----	----
N-Nitrosodiethylamine	55-18-5	2	µg/L	<2	<2	<2	----	----
N-Nitrosopyrrolidine	930-55-2	4	µg/L	<4	<4	<4	----	----
N-Nitrosomorpholine	59-89-2	2	µg/L	<2	<2	<2	----	----
N-Nitrosodi-n-propylamine	621-64-7	2	µg/L	<2	<2	<2	----	----
N-Nitrosopiperidine	100-75-4	2	µg/L	<2	<2	<2	----	----
N-Nitrosodibutylamine	924-16-3	2	µg/L	<2	<2	<2	----	----
N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	4	µg/L	<4	<4	<4	----	----
Methapyrilene	91-80-5	2	µg/L	<2	<2	<2	----	----
<b>EP075E: Nitroaromatics and Ketones</b>								
2-Picoline	109-06-8	2	µg/L	<2	<2	<2	----	----



## Analytical Results

Sub-Matrix: WATER  
 (Matrix: WATER)

Sample ID

				Point 1 - MW1B (FRONT GATE)	Point 2 - MW06 (CAR PARK)	Point 3 - MW7 (SOUTH OF POND)	Point 4 - LT1 (LEACHATE)	Point 5 - SW01 (UPSTREAM STORMWATER)
Sampling date / time				14-Nov-2022 13:30	14-Nov-2022 15:05	14-Nov-2022 13:55	14-Nov-2022 14:50	14-Nov-2022 15:00
Compound	CAS Number	LOR	Unit	EW2205234-001	EW2205234-002	EW2205234-003	EW2205234-004	EW2205234-005
				Result	Result	Result	Result	Result
<b>EP075E: Nitroaromatics and Ketones - Continued</b>								
Acetophenone	98-86-2	2	µg/L	<2	<2	<2	----	----
Nitrobenzene	98-95-3	2	µg/L	<2	<2	<2	----	----
Isophorone	78-59-1	2	µg/L	<2	<2	<2	----	----
2,6-Dinitrotoluene	606-20-2	4	µg/L	<4	<4	<4	----	----
2,4-Dinitrotoluene	121-14-2	4	µg/L	<4	<4	<4	----	----
1-Naphthylamine	134-32-7	2	µg/L	<2	<2	<2	----	----
4-Nitroquinoline-N-oxide	56-57-5	2	µg/L	<2	<2	<2	----	----
5-Nitro-o-toluidine	99-55-8	2	µg/L	<2	<2	<2	----	----
Azobenzene	103-33-3	2	µg/L	<2	<2	<2	----	----
1,3,5-Trinitrobenzene	99-35-4	2	µg/L	<2	<2	<2	----	----
Phenacetin	62-44-2	2	µg/L	<2	<2	<2	----	----
4-Aminobiphenyl	92-67-1	2	µg/L	<2	<2	<2	----	----
Pentachloronitrobenzene	82-68-8	2	µg/L	<2	<2	<2	----	----
Pronamide	23950-58-5	2	µg/L	<2	<2	<2	----	----
Dimethylaminoazobenzene	60-11-7	2	µg/L	<2	<2	<2	----	----
Chlorobenzilate	510-15-6	2	µg/L	<2	<2	<2	----	----
<b>EP075F: Haloethers</b>								
Bis(2-chloroethyl) ether	111-44-4	2	µg/L	<2	<2	<2	----	----
Bis(2-chloroethoxy) methane	111-91-1	2	µg/L	<2	<2	<2	----	----
4-Chlorophenyl phenyl ether	7005-72-3	2	µg/L	<2	<2	<2	----	----
4-Bromophenyl phenyl ether	101-55-3	2	µg/L	<2	<2	<2	----	----
<b>EP075G: Chlorinated Hydrocarbons</b>								
1,3-Dichlorobenzene	541-73-1	2	µg/L	<2	<2	<2	----	----
1,4-Dichlorobenzene	106-46-7	2	µg/L	<2	<2	<2	----	----
1,2-Dichlorobenzene	95-50-1	2	µg/L	<2	<2	<2	----	----
Hexachloroethane	67-72-1	2	µg/L	<2	<2	<2	----	----
1,2,4-Trichlorobenzene	120-82-1	2	µg/L	<2	<2	<2	----	----
Hexachloropropylene	1888-71-7	2	µg/L	<2	<2	<2	----	----
Hexachlorobutadiene	87-68-3	2	µg/L	<2	<2	<2	----	----
Hexachlorocyclopentadiene	77-47-4	10	µg/L	<10	<10	<10	----	----
Pentachlorobenzene	608-93-5	2	µg/L	<2	<2	<2	----	----
Hexachlorobenzene (HCB)	118-74-1	4	µg/L	<4	<4	<4	----	----
<b>EP075H: Anilines and Benzidines</b>								



## Analytical Results

Sub-Matrix: WATER  
 (Matrix: WATER)

Sample ID

				Point 1 - MW1B (FRONT GATE)	Point 2 - MW06 (CAR PARK)	Point 3 - MW7 (SOUTH OF POND)	Point 4 - LT1 (LEACHATE)	Point 5 - SW01 (UPSTREAM STORMWATER)
Sampling date / time				14-Nov-2022 13:30	14-Nov-2022 15:05	14-Nov-2022 13:55	14-Nov-2022 14:50	14-Nov-2022 15:00
Compound	CAS Number	LOR	Unit	EW2205234-001	EW2205234-002	EW2205234-003	EW2205234-004	EW2205234-005
				Result	Result	Result	Result	Result
<b>EP075H: Anilines and Benzidines - Continued</b>								
Aniline	62-53-3	2	µg/L	<2	<2	<2	----	----
4-Chloroaniline	106-47-8	2	µg/L	<2	<2	<2	----	----
2-Nitroaniline	88-74-4	4	µg/L	<4	<4	<4	----	----
3-Nitroaniline	99-09-2	4	µg/L	<4	<4	<4	----	----
Dibenzofuran	132-64-9	2	µg/L	<2	<2	<2	----	----
4-Nitroaniline	100-01-6	2	µg/L	<2	<2	<2	----	----
Carbazole	86-74-8	2	µg/L	<2	<2	<2	----	----
3,3'-Dichlorobenzidine	91-94-1	2	µg/L	<2	<2	<2	----	----
<b>EP075I: Organochlorine Pesticides</b>								
alpha-BHC	319-84-6	2	µg/L	<2	<2	<2	----	----
beta-BHC	319-85-7	2	µg/L	<2	<2	<2	----	----
gamma-BHC	58-89-9	2	µg/L	<2	<2	<2	----	----
delta-BHC	319-86-8	2	µg/L	<2	<2	<2	----	----
Heptachlor	76-44-8	2	µg/L	<2	<2	<2	----	----
Aldrin	309-00-2	2	µg/L	<2	<2	<2	----	----
Heptachlor epoxide	1024-57-3	2	µg/L	<2	<2	<2	----	----
alpha-Endosulfan	959-98-8	2	µg/L	<2	<2	<2	----	----
4,4'-DDE	72-55-9	2	µg/L	<2	<2	<2	----	----
Dieldrin	60-57-1	2	µg/L	<2	<2	<2	----	----
Endrin	72-20-8	2	µg/L	<2	<2	<2	----	----
beta-Endosulfan	33213-65-9	2	µg/L	<2	<2	<2	----	----
4,4'-DDD	72-54-8	2	µg/L	<2	<2	<2	----	----
Endosulfan sulfate	1031-07-8	2	µg/L	<2	<2	<2	----	----
4,4'-DDT	50-29-3	4	µg/L	<4	<4	<4	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	4	µg/L	<4	<4	<4	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-29-3	4	µg/L	<4	<4	<4	----	----
<b>EP075J: Organophosphorus Pesticides</b>								
Dichlorvos	62-73-7	2	µg/L	<2	<2	<2	----	----
Dimethoate	60-51-5	2	µg/L	<2	<2	<2	----	----
Diazinon	333-41-5	2	µg/L	<2	<2	<2	----	----
Chlorpyrifos-methyl	5598-13-0	2	µg/L	<2	<2	<2	----	----
Malathion	121-75-5	2	µg/L	<2	<2	<2	----	----



## Analytical Results

Sub-Matrix: WATER  
 (Matrix: WATER)

Sample ID

				Point 1 - MW1B (FRONT GATE)	Point 2 - MW06 (CAR PARK)	Point 3 - MW7 (SOUTH OF POND)	Point 4 - LT1 (LEACHATE)	Point 5 - SW01 (UPSTREAM STORMWATER)
Sampling date / time				14-Nov-2022 13:30	14-Nov-2022 15:05	14-Nov-2022 13:55	14-Nov-2022 14:50	14-Nov-2022 15:00
Compound	CAS Number	LOR	Unit	EW2205234-001	EW2205234-002	EW2205234-003	EW2205234-004	EW2205234-005
				Result	Result	Result	Result	Result
<b>EP075J: Organophosphorus Pesticides - Continued</b>								
Fenthion	55-38-9	2	µg/L	<2	<2	<2	----	----
Chlorpyrifos	2921-88-2	2	µg/L	<2	<2	<2	----	----
Pirimphos-ethyl	23505-41-1	2	µg/L	<2	<2	<2	----	----
Chlorfenvinphos	470-90-6	2	µg/L	<2	<2	<2	----	----
Prothiofos	34643-46-4	2	µg/L	<2	<2	<2	----	----
Ethion	563-12-2	2	µg/L	<2	<2	<2	----	----
<b>EP080/071: Total Petroleum Hydrocarbons</b>								
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	<b>540</b>	<b>200</b>	<100	<100	----
C29 - C36 Fraction	----	50	µg/L	<b>260</b>	<b>190</b>	<50	<50	----
^ C10 - C36 Fraction (sum)	----	50	µg/L	<b>800</b>	<b>390</b>	<50	<50	----
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions</b>								
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	----
>C10 - C16 Fraction	----	100	µg/L	<100	<100	<100	<100	----
>C16 - C34 Fraction	----	100	µg/L	<b>690</b>	<b>290</b>	<100	<100	----
>C34 - C40 Fraction	----	100	µg/L	<b>160</b>	<b>150</b>	<100	<100	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L	<b>850</b>	<b>440</b>	<100	<100	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L	<100	<100	<100	<100	----
<b>EP080: BTEXN</b>								
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	----	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	----
<b>QWI-EN 67.11 Sampling of Groundwaters</b>								
Depth	----	0.01	m	<b>1.50</b>	<b>1.68</b>	<b>1.74</b>	----	----



## Analytical Results

Sub-Matrix: WATER  
 (Matrix: WATER)

Sample ID

				Point 1 - MW1B (FRONT GATE)	Point 2 - MW06 (CAR PARK)	Point 3 - MW7 (SOUTH OF POND)	Point 4 - LT1 (LEACHATE)	Point 5 - SW01 (UPSTREAM STORMWATER)
Sampling date / time				14-Nov-2022 13:30	14-Nov-2022 15:05	14-Nov-2022 13:55	14-Nov-2022 14:50	14-Nov-2022 15:00
Compound	CAS Number	LOR	Unit	EW2205234-001	EW2205234-002	EW2205234-003	EW2205234-004	EW2205234-005
				Result	Result	Result	Result	Result
<b>EP068S: Organochlorine Pesticide Surrogate</b>								
Dibromo-DDE	21655-73-2	0.5	%	91.1	98.8	95.5	57.6	----
<b>EP068T: Organophosphorus Pesticide Surrogate</b>								
DEF	78-48-8	0.5	%	89.8	97.8	95.3	56.8	----
<b>EP074S: VOC Surrogates</b>								
1,2-Dichloroethane-D4	17060-07-0	5	%	117	124	112	----	----
Toluene-D8	2037-26-5	5	%	107	117	101	----	----
4-Bromofluorobenzene	460-00-4	5	%	102	111	98.6	----	----
<b>EP075(SIM)S: Phenolic Compound Surrogates</b>								
Phenol-d6	13127-88-3	1.0	%	18.6	24.1	19.2	17.6	----
2-Chlorophenol-D4	93951-73-6	1.0	%	36.7	47.2	37.1	30.0	----
2,4,6-Tribromophenol	118-79-6	1.0	%	69.5	83.7	64.0	41.2	----
<b>EP075(SIM)T: PAH Surrogates</b>								
2-Fluorobiphenyl	321-60-8	1.0	%	59.8	69.8	56.0	55.2	----
Anthracene-d10	1719-06-8	1.0	%	74.2	87.2	67.9	58.3	----
4-Terphenyl-d14	1718-51-0	1.0	%	72.7	86.5	67.0	58.8	----
<b>EP075S: Acid Extractable Surrogates</b>								
2-Fluorophenol	367-12-4	2	%	30.4	33.8	38.6	----	----
Phenol-d6	13127-88-3	2	%	20.4	24.6	25.5	----	----
2-Chlorophenol-D4	93951-73-6	2	%	49.1	53.4	61.2	----	----
2,4,6-Tribromophenol	118-79-6	2	%	56.6	65.2	59.7	----	----
<b>EP075T: Base/Neutral Extractable Surrogates</b>								
Nitrobenzene-D5	4165-60-0	2	%	48.4	55.0	59.9	----	----
1,2-Dichlorobenzene-D4	2199-69-1	2	%	51.8	59.2	63.3	----	----
2-Fluorobiphenyl	321-60-8	2	%	58.5	63.4	69.0	----	----
Anthracene-d10	1719-06-8	2	%	74.7	79.6	86.6	----	----
4-Terphenyl-d14	1718-51-0	2	%	72.2	77.9	81.7	----	----
<b>EP080S: TPH(V)/BTEX Surrogates</b>								
1,2-Dichloroethane-D4	17060-07-0	2	%	123	131	118	125	----
Toluene-D8	2037-26-5	2	%	96.1	105	91.1	94.8	----
4-Bromofluorobenzene	460-00-4	2	%	93.3	104	89.2	96.8	----



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)		Sample ID		Point 6 - SW02 (HOLDING POND)	Point 7 - SW03 (POLISHING POND)	----	----	----
Sampling date / time		14-Nov-2022 14:25		14-Nov-2022 14:20		----	----	----
Compound	CAS Number	LOR	Unit	EW2205234-006	EW2205234-007	-----	-----	-----
				Result	Result	---	---	---
<b>EA005FD: Field pH</b>								
pH	----	0.1	pH Unit	8.4	8.2	----	----	----
<b>EA010FD: Field Conductivity</b>								
Electrical Conductivity (Non Compensated)	----	1	µS/cm	301	711	----	----	----
<b>EA015: Total Dissolved Solids dried at 180 ± 5 °C</b>								
Total Dissolved Solids @180°C	----	10	mg/L	182	406	----	----	----
<b>EA025: Total Suspended Solids dried at 104 ± 2°C</b>								
Suspended Solids (SS)	----	5	mg/L	24	164	----	----	----
<b>ED041G: Sulfate (Turbidimetric) as SO4 2- by DA</b>								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	22	----	----	----	----
<b>EG020T: Total Metals by ICP-MS</b>								
Aluminium	7429-90-5	0.01	mg/L	0.85	----	----	----	----
Copper	7440-50-8	0.001	mg/L	0.005	----	----	----	----
Lead	7439-92-1	0.001	mg/L	0.003	----	----	----	----
Zinc	7440-66-6	0.005	mg/L	0.024	----	----	----	----
Iron	7439-89-6	0.05	mg/L	0.86	----	----	----	----
<b>EK055G: Ammonia as N by Discrete Analyser</b>								
Ammonia as N	7664-41-7	0.01	mg/L	0.10	0.23	----	----	----
<b>EK086: Sulfite as SO3 2-</b>								
Sulfite as SO3 2-	14265-45-3	2	mg/L	<2	----	----	----	----
<b>EP005: Total Organic Carbon (TOC)</b>								
Total Organic Carbon	----	1	mg/L	5	22	----	----	----
<b>EP030: Biochemical Oxygen Demand (BOD)</b>								
Biochemical Oxygen Demand	----	2	mg/L	4	11	----	----	----





## Surrogate Control Limits

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
<b>EP068S: Organochlorine Pesticide Surrogate</b>			
Dibromo-DDE	21655-73-2	67	111
<b>EP068T: Organophosphorus Pesticide Surrogate</b>			
DEF	78-48-8	67	111
<b>EP074S: VOC Surrogates</b>			
1,2-Dichloroethane-D4	17060-07-0	78	133
Toluene-D8	2037-26-5	79	129
4-Bromofluorobenzene	460-00-4	81	124
<b>EP075(SIM)S: Phenolic Compound Surrogates</b>			
Phenol-d6	13127-88-3	10	44
2-Chlorophenol-D4	93951-73-6	14	94
2,4,6-Tribromophenol	118-79-6	17	125
<b>EP075(SIM)T: PAH Surrogates</b>			
2-Fluorobiphenyl	321-60-8	20	104
Anthracene-d10	1719-06-8	27	113
4-Terphenyl-d14	1718-51-0	32	112
<b>EP075S: Acid Extractable Surrogates</b>			
2-Fluorophenol	367-12-4	10	117
Phenol-d6	13127-88-3	10	69
2-Chlorophenol-D4	93951-73-6	21	130
2,4,6-Tribromophenol	118-79-6	10	151
<b>EP075T: Base/Neutral Extractable Surrogates</b>			
Nitrobenzene-D5	4165-60-0	29	142
1,2-Dichlorobenzene-D4	2199-69-1	24	121
2-Fluorobiphenyl	321-60-8	27	135
Anthracene-d10	1719-06-8	27	113
4-Terphenyl-d14	1718-51-0	21	123
<b>EP080S: TPH(V)/BTEX Surrogates</b>			
1,2-Dichloroethane-D4	17060-07-0	71	137
Toluene-D8	2037-26-5	79	131
4-Bromofluorobenzene	460-00-4	70	128



## **Inter-Laboratory Testing**

Analysis conducted by ALS Sydney, NATA accreditation no. 825, site no. 10911 (Chemistry) 14913 (Biology).

(WATER) EP005: Total Organic Carbon (TOC)  
(WATER) EK055G: Ammonia as N by Discrete Analyser  
(WATER) ED093F: Dissolved Major Cations  
(WATER) EA015: Total Dissolved Solids dried at  $180 \pm 5$  °C  
(WATER) EP080/071: Total Petroleum Hydrocarbons  
(WATER) EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions  
(WATER) EP080: BTEXN  
(WATER) EP080S: TPH(V)/BTEX Surrogates  
(WATER) EP075(SIM)B: Polynuclear Aromatic Hydrocarbons  
(WATER) EP075(SIM)T: PAH Surrogates  
(WATER) EP075(SIM)S: Phenolic Compound Surrogates  
(WATER) EP068A: Organochlorine Pesticides (OC)  
(WATER) EP068B: Organophosphorus Pesticides (OP)  
(WATER) EP068S: Organochlorine Pesticide Surrogate  
(WATER) EP068T: Organophosphorus Pesticide Surrogate  
(WATER) EP074E: Halogenated Aliphatic Compounds  
(WATER) EP074D: Fumigants  
(WATER) EP074F: Halogenated Aromatic Compounds  
(WATER) EP074G: Trihalomethanes  
(WATER) EP074A: Monocyclic Aromatic Hydrocarbons  
(WATER) EP074C: Sulfonated Compounds  
(WATER) EP074B: Oxygenated Compounds  
(WATER) EP074S: VOC Surrogates  
(WATER) EP075B: Polynuclear Aromatic Hydrocarbons  
(WATER) EP075I: Organochlorine Pesticides  
(WATER) EP075J: Organophosphorus Pesticides  
(WATER) EP075C: Phthalate Esters  
(WATER) EP075G: Chlorinated Hydrocarbons  
(WATER) EP075H: Anilines and Benzidines  
(WATER) EP075F: Haloethers  
(WATER) EP075E: Nitroaromatics and Ketones  
(WATER) EP075D: Nitrosamines  
(WATER) EP075A: Phenolic Compounds  
(WATER) EP075S: Acid Extractable Surrogates  
(WATER) EP075T: Base/Neutral Extractable Surrogates  
(WATER) ED045G: Chloride by Discrete Analyser  
(WATER) ED037P: Alkalinity by PC Titrator  
(WATER) EK040P: Fluoride by PC Titrator



(WATER) ED041G: Sulfate (Turbidimetric) as SO<sub>4</sub><sup>2-</sup> by DA  
(WATER) EK057G: Nitrite as N by Discrete Analyser  
(WATER) EK058G: Nitrate as N by Discrete Analyser  
(WATER) EK059G: Nitrite plus Nitrate as N (NO<sub>x</sub>) by Discrete Analyser  
(WATER) EN055: Ionic Balance  
(WATER) EG050F: Dissolved Hexavalent Chromium  
(WATER) EG020F: Dissolved Metals by ICP-MS  
(WATER) EG035F: Dissolved Mercury by FIMS  
(WATER) EP075(SIM)A: Phenolic Compounds  
(WATER) EP030: Biochemical Oxygen Demand (BOD)  
(WATER) EK067G: Total Phosphorus as P by Discrete Analyser  
(WATER) EA025: Total Suspended Solids dried at 104 ± 2°C  
(WATER) EK086: Sulfite as SO<sub>3</sub><sup>2-</sup>  
(WATER) EG020T: Total Metals by ICP-MS

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