



CERTIFICATE OF ANALYSIS

Work Order : **EW2403969**
Client : **KIAMA COUNCIL**
Contact : Guy Stearn
Address : 11 MANNING STREET
KIAMA NSW, AUSTRALIA 2533
Telephone : ----
Project : Gerroa Landfill Annual
Order number : P023941
C-O-C number : ----
Sampler : Michael Santos, Robert DaLio
Site : ----
Quote number : EW23KIACOU0003 V2
No. of samples received : 20
No. of samples analysed : 20

Page : 1 of 12
Laboratory : Environmental Division NSW South Coast
Contact : Aneta Prosaroski
Address : 1/19 Ralph Black Dr, North Wollongong 2500 NSW Australia
Telephone : 02 42253125
Date Samples Received : 29-Aug-2024 16:23
Date Analysis Commenced : 29-Aug-2024
Issue Date : 18-Dec-2024 18:01



Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

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

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
Prasanna Ganta	Team Leader - Microbiology/Phycology	Sydney Microbiology, 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.

- EK057G: LOR raised for Nitrite onn sample 2 due to sample matrix.
- MF = membrane filtration
- CFU = colony forming unit
- Microbiological Comment: In accordance with ALS work instruction QWI-MIC/04, membrane filtration result is reported an approximate (~) when the count of colonies on the filtered membrane is outside the range of 10 - 100cfu.
- 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.
- MW006 is ALS's internal code and is equivalent to AS4276.5.
- ED041G: LOR raised for Sulfate on sample no.11 and 12 due to sample matrix.
- It has been noted that Ammonia is greater than TKN, however this difference is within the limits of experimental variation.
- EK059G: LOR raised for NOx due to sample matrix.
- ED041G: LOR raised for Sulfate due to sample matrix
- TDS by method EA-015 may bias high for various samples due to the presence of fine particulate matter, which may pass through the prescribed GF/C paper.
- EN055: Ionic Balance out of acceptable limits for sample 11 and 12 due to analytes not quantified in this report.
- pH performed by ALS Wollongong via in-house method EA005FD and EN67 PK.
- Electrical conductivity performed by ALS Wollongong via in-house method EA010FD and EN67 PK.
- ORP (Oxidation Reduction Potential) performed by ALS Wollongong via in-house method EA075FD and EN67 PK.
- Sampling and groundwater depth measurements completed by ALS Wollongong via inhouse sampling method EN/67.11 Groundwater Sampling Via High Flow and Bailer Method.
- Sampling completed by ALS Wollongong in accordance with in-house sampling method EN/67.6 Rivers and Streams.
- Temperature performed by ALS Wollongong via in-house method EA116 and EN67 PK.
- Dissolved oxygen (DO) performed by ALS Wollongong via in-house method EP025FD and EN67 PK.
- All field analysis performed by ALS Wollongong were completed at the time of sampling.
- Sample collection of Ground Waters by in-house EN67 where the "surface layer of the aquifer was sampled".
- MW023 is ALS's internal code and is equivalent to AS4276.9.



- 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.
 - ED045G: The presence of Thiocyanate, Thiosulfate and Sulfite can positively contribute to the chloride result, thereby may bias results higher than expected. Results should be scrutinised accordingly.
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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	MW 1D	MW 1S	MW 3	MW 4	MW 5
Sampling date / time				29-Aug-2024 13:52	29-Aug-2024 14:05	29-Aug-2024 13:02	29-Aug-2024 10:06	29-Aug-2024 12:39	
Compound	CAS Number	LOR	Unit	EW2403969-001	EW2403969-002	EW2403969-003	EW2403969-004	EW2403969-005	
				Result	Result	Result	Result	Result	
EA005FD: Field pH									
pH	----	0.1	pH Unit	7.8	6.1	7.5	7.4	8.1	
EA005P: pH by PC Titrator									
pH Value	----	0.01	pH Unit	7.89	6.39	7.21	7.50	7.51	
EA010FD: Field Conductivity									
Conductivity @ 25oC	----	1	µS/cm	381	149	486	407	302	
EA015: Total Dissolved Solids dried at 180 ± 5 °C									
Total Dissolved Solids @180°C	----	10	mg/L	244	133	311	232	174	
EA116: Temperature									
Temperature	----	0.5	°C	18.6	18.0	16.8	16.2	17.6	
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	<1	<1	<1	<1	
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	179	51	198	214	138	
Total Alkalinity as CaCO3	----	1	mg/L	179	51	198	214	138	
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA									
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<1	<10	<10	3	5	
ED045G: Chloride by Discrete Analyser									
Chloride	16887-00-6	1	mg/L	22	8	32	9	16	
ED093F: Dissolved Major Cations									
Calcium	7440-70-2	1	mg/L	56	7	84	79	50	
Magnesium	7439-95-4	1	mg/L	13	4	6	4	4	
Sodium	7440-23-5	1	mg/L	8	16	12	8	11	
Potassium	7440-09-7	1	mg/L	3	1	2	3	1	
EG020F: Dissolved Metals by ICP-MS									
Iron	7439-89-6	0.05	mg/L	1.44	11.7	10.3	1.64	<0.05	
EK040P: Fluoride by PC Titrator									
Fluoride	16984-48-8	0.1	mg/L	0.2	<0.1	0.2	0.3	0.2	
EK055G: Ammonia as N by Discrete Analyser									



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	MW 1D	MW 1S	MW 3	MW 4	MW 5
Sampling date / time					29-Aug-2024 13:52	29-Aug-2024 14:05	29-Aug-2024 13:02	29-Aug-2024 10:06	29-Aug-2024 12:39
Compound	CAS Number	LOR	Unit		EW2403969-001	EW2403969-002	EW2403969-003	EW2403969-004	EW2403969-005
					Result	Result	Result	Result	Result
EK055G: Ammonia as N by Discrete Analyser - Continued									
Ammonia as N	7664-41-7	0.01	mg/L		0.38	0.04	0.06	0.13	0.07
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	14797-65-0	0.01	mg/L		<0.01	<0.02	<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	<0.02	<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	<0.01
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		0.7	1.1	0.8	0.8	0.4
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L		0.7	1.1	0.8	0.8	0.4
EK071G: Reactive Phosphorus as P by discrete analyser									
Reactive Phosphorus as P	14265-44-2	0.01	mg/L		<0.01	0.09	0.10	0.02	0.05
EN055: Ionic Balance									
∅ Total Anions	----	0.01	meq/L		4.20	1.24	4.86	4.59	3.31
∅ Total Cations	----	0.01	meq/L		4.29	1.40	5.26	4.70	3.33
∅ Ionic Balance	----	0.01	%		1.08	----	3.95	1.12	0.23
EP002: Dissolved Organic Carbon (DOC)									
Dissolved Organic Carbon	----	1	mg/L		6	30	22	6	5
EP025FD: Field Dissolved Oxygen									
Dissolved Oxygen	----	0.01	mg/L		1.19	1.20	1.22	4.88	1.32
QWI-EN 67.11 Sampling of Groundwaters									
Depth	----	0.01	m		2.68	2.77	3.03	3.67	3.61



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	MW 6D	MW 6S	MW 7D	MW 7S	MW 9
Sampling date / time				29-Aug-2024 10:55	29-Aug-2024 11:10	29-Aug-2024 12:14	29-Aug-2024 11:52	29-Aug-2024 08:35	
Compound	CAS Number	LOR	Unit	EW2403969-006	EW2403969-007	EW2403969-008	EW2403969-009	EW2403969-010	
				Result	Result	Result	Result	Result	
EA005FD: Field pH									
pH	----	0.1	pH Unit	7.1	6.7	7.4	7.0	7.0	
EA005P: pH by PC Titrator									
pH Value	----	0.01	pH Unit	7.67	6.97	7.58	7.05	7.15	
EA010FD: Field Conductivity									
Conductivity @ 25oC	----	1	µS/cm	1410	312	595	285	1210	
EA015: Total Dissolved Solids dried at 180 ± 5 °C									
Total Dissolved Solids @180°C	----	10	mg/L	723	186	303	144	658	
EA116: Temperature									
Temperature	----	0.5	°C	18.5	17.0	18.6	17.5	16.2	
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	<1	<1	<1	<1	
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	641	158	295	98	148	
Total Alkalinity as CaCO3	----	1	mg/L	641	158	295	98	148	
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA									
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	11	8	4	8	21	
ED045G: Chloride by Discrete Analyser									
Chloride	16887-00-6	1	mg/L	71	7	15	28	315	
ED093F: Dissolved Major Cations									
Calcium	7440-70-2	1	mg/L	154	13	89	29	21	
Magnesium	7439-95-4	1	mg/L	41	22	12	6	20	
Sodium	7440-23-5	1	mg/L	57	25	18	22	202	
Potassium	7440-09-7	1	mg/L	32	3	8	1	13	
EG020F: Dissolved Metals by ICP-MS									
Iron	7439-89-6	0.05	mg/L	11.1	1.45	5.05	0.29	0.57	
EK040P: Fluoride by PC Titrator									
Fluoride	16984-48-8	0.1	mg/L	0.5	0.2	0.3	0.1	0.3	
EK055G: Ammonia as N by Discrete Analyser									



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	MW 6D	MW 6S	MW 7D	MW 7S	MW 9
Sampling date / time				29-Aug-2024 10:55	29-Aug-2024 11:10	29-Aug-2024 12:14	29-Aug-2024 11:52	29-Aug-2024 08:35	
Compound	CAS Number	LOR	Unit	EW2403969-006	EW2403969-007	EW2403969-008	EW2403969-009	EW2403969-010	
				Result	Result	Result	Result	Result	
EK055G: Ammonia as N by Discrete Analyser - Continued									
Ammonia as N	7664-41-7	0.01	mg/L	21.5	0.70	3.44	0.07	0.10	
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	<0.01	<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	<0.01	
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	20.8	2.0	3.8	0.4	1.5	
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L	20.8	2.0	3.8	0.4	1.5	
EK071G: Reactive Phosphorus as P by discrete analyser									
Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	<0.01	<0.01	0.02	0.03	
EN055: Ionic Balance									
∅ Total Anions	----	0.01	meq/L	15.0	3.52	6.40	2.91	12.3	
∅ Total Cations	----	0.01	meq/L	14.4	3.62	6.42	2.92	11.8	
∅ Ionic Balance	----	0.01	%	2.32	1.44	0.12	0.15	1.94	
EP002: Dissolved Organic Carbon (DOC)									
Dissolved Organic Carbon	----	1	mg/L	19	9	1	8	26	
EP025FD: Field Dissolved Oxygen									
Dissolved Oxygen	----	0.01	mg/L	0.97	4.48	1.32	1.64	2.34	
QWI-EN 67.11 Sampling of Groundwaters									
Depth	----	0.01	m	4.26	4.00	4.01	3.86	1.51	



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	MW 10	MW 11	MW 12	MW 13	MW 14
Sampling date / time				29-Aug-2024 08:56	29-Aug-2024 08:01	29-Aug-2024 14:58	29-Aug-2024 14:34	29-Aug-2024 13:31	
Compound	CAS Number	LOR	Unit	EW2403969-011	EW2403969-012	EW2403969-013	EW2403969-014	EW2403969-015	
				Result	Result	Result	Result	Result	
EA005FD: Field pH									
pH	----	0.1	pH Unit	6.6	6.3	7.6	7.7	7.5	
EA005P: pH by PC Titrator									
pH Value	----	0.01	pH Unit	6.68	6.54	7.64	7.64	7.66	
EA010FD: Field Conductivity									
Conductivity @ 25oC	----	1	µS/cm	207	232	848	449	1360	
EA015: Total Dissolved Solids dried at 180 ± 5 °C									
Total Dissolved Solids @180°C	----	10	mg/L	188	167	434	232	684	
EA116: Temperature									
Temperature	----	0.5	°C	16.1	16.1	18.6	18.5	18.4	
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	<1	<1	<1	<1	
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	46	43	319	215	396	
Total Alkalinity as CaCO3	----	1	mg/L	46	43	319	215	396	
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA									
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<10	<10	11	4	20	
ED045G: Chloride by Discrete Analyser									
Chloride	16887-00-6	1	mg/L	30	40	60	17	199	
ED093F: Dissolved Major Cations									
Calcium	7440-70-2	1	mg/L	1	13	72	54	71	
Magnesium	7439-95-4	1	mg/L	2	6	21	17	39	
Sodium	7440-23-5	1	mg/L	46	27	63	15	123	
Potassium	7440-09-7	1	mg/L	3	4	19	8	28	
EG020F: Dissolved Metals by ICP-MS									
Iron	7439-89-6	0.05	mg/L	0.65	0.82	2.72	1.24	2.48	
EK040P: Fluoride by PC Titrator									
Fluoride	16984-48-8	0.1	mg/L	0.2	<0.1	0.2	0.2	0.2	
EK055G: Ammonia as N by Discrete Analyser									



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	MW 10	MW 11	MW 12	MW 13	MW 14
Sampling date / time				29-Aug-2024 08:56	29-Aug-2024 08:01	29-Aug-2024 14:58	29-Aug-2024 14:34	29-Aug-2024 13:31	
Compound	CAS Number	LOR	Unit	EW2403969-011	EW2403969-012	EW2403969-013	EW2403969-014	EW2403969-015	
				Result	Result	Result	Result	Result	
EK055G: Ammonia as N by Discrete Analyser - Continued									
Ammonia as N	7664-41-7	0.01	mg/L	0.02	0.04	9.34	2.75	17.5	
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	<0.01	<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	<0.01	
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	3.7	1.6	10.2	3.0	18.2	
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L	3.7	1.6	10.2	3.0	18.2	
EK071G: Reactive Phosphorus as P by discrete analyser									
Reactive Phosphorus as P	14265-44-2	0.01	mg/L	0.02	<0.01	<0.01	0.01	<0.01	
EN055: Ionic Balance									
∅ Total Anions	----	0.01	meq/L	1.76	1.99	8.30	4.86	13.9	
∅ Total Cations	----	0.01	meq/L	2.29	2.42	8.55	4.95	12.8	
∅ Ionic Balance	----	0.01	%	----	----	1.50	0.94	4.20	
EP002: Dissolved Organic Carbon (DOC)									
Dissolved Organic Carbon	----	1	mg/L	39	22	12	6	13	
EP025FD: Field Dissolved Oxygen									
Dissolved Oxygen	----	0.01	mg/L	3.10	3.10	1.24	1.00	1.23	
QWI-EN 67.11 Sampling of Groundwaters									
Depth	----	0.01	m	1.96	1.90	2.39	2.63	2.14	



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ML-1	ML-2	ML-3	ML-4	ML-5
Sampling date / time				29-Aug-2024 13:00	29-Aug-2024 13:45	29-Aug-2024 13:20	29-Aug-2024 13:06	29-Aug-2024 08:14	
Compound	CAS Number	LOR	Unit	EW2403969-016	EW2403969-017	EW2403969-018	EW2403969-019	EW2403969-020	
				Result	Result	Result	Result	Result	
EA005FD: Field pH									
pH	----	0.1	pH Unit	6.9	7.0	6.8	6.8	6.9	
EA005P: pH by PC Titrator									
pH Value	----	0.01	pH Unit	7.16	7.30	7.10	7.07	7.22	
EA010FD: Field Conductivity									
Conductivity @ 25oC	----	1	µS/cm	2250	9290	1540	1520	5970	
EA075FD: Field Redox Potential									
Redox Potential	----	0.1	mV	247	234	252	248	261	
EA116: Temperature									
Temperature	----	0.5	°C	15.6	16.7	15.5	15.5	14.8	
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	<1	<1	<1	<1	
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	122	159	107	106	156	
Total Alkalinity as CaCO3	----	1	mg/L	122	159	107	106	156	
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA									
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	143	469	106	119	274	
ED045G: Chloride by Discrete Analyser									
Chloride	16887-00-6	1	mg/L	744	3210	502	497	1660	
ED093F: Dissolved Major Cations									
Calcium	7440-70-2	1	mg/L	47	103	40	41	70	
Magnesium	7439-95-4	1	mg/L	55	222	36	36	119	
Sodium	7440-23-5	1	mg/L	426	1860	275	276	968	
Potassium	7440-09-7	1	mg/L	18	73	13	13	42	
EG020T: Total Metals by ICP-MS									
Manganese	7439-96-5	0.001	mg/L	0.071	0.066	0.086	0.072	0.071	
Iron	7439-89-6	0.05	mg/L	2.97	3.10	4.67	3.01	1.24	
EK055G: Ammonia as N by Discrete Analyser									
Ammonia as N	7664-41-7	0.01	mg/L	0.66	2.09	0.29	0.25	1.98	



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ML-1	ML-2	ML-3	ML-4	ML-5
Sampling date / time				29-Aug-2024 13:00	29-Aug-2024 13:45	29-Aug-2024 13:20	29-Aug-2024 13:06	29-Aug-2024 08:14	
Compound	CAS Number	LOR	Unit	EW2403969-016	EW2403969-017	EW2403969-018	EW2403969-019	EW2403969-020	
				Result	Result	Result	Result	Result	
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	0.03	0.03	0.03	0.02	0.04	
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L	0.03	0.04	0.03	0.02	0.04	
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	1.3	2.8	1.0	1.0	2.6	
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L	1.3	2.8	1.0	1.0	2.6	
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L	0.09	0.10	0.11	0.10	0.08	
EK071G: Reactive Phosphorus as P by discrete analyser									
Reactive Phosphorus as P	14265-44-2	0.01	mg/L	0.01	0.01	<0.01	0.01	0.02	
EN055: Ionic Balance									
∅ Total Anions	----	0.01	meq/L	26.4	103	18.5	18.6	55.6	
∅ Total Cations	----	0.01	meq/L	25.9	106	17.2	17.3	56.5	
∅ Ionic Balance	----	0.01	%	1.03	1.28	3.50	3.53	0.73	
EP025FD: Field Dissolved Oxygen									
Dissolved Oxygen	----	0.01	mg/L	3.24	6.15	3.97	3.23	2.55	
MW006: Thermotolerant Coliforms & E.coli by MF									
Thermotolerant Coliforms	----	1	CFU/100mL	~2	~8	10	~1	~9	
MW023: Enterococci by Membrane Filtration									
Enterococci	----	1	CFU/100mL	16	36	31	42	39	



Inter-Laboratory Testing

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

(WATER) EP002: Dissolved Organic Carbon (DOC)

(WATER) EA005P: pH by PC Titrator

(WATER) EK071G: Reactive Phosphorus as P by discrete analyser

(WATER) EG020F: Dissolved Metals by ICP-MS

(WATER) EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser

(WATER) EK061G: Total Kjeldahl Nitrogen By Discrete Analyser

(WATER) EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser

(WATER) EK058G: Nitrate as N by Discrete Analyser

(WATER) EK057G: Nitrite as N by Discrete Analyser

(WATER) EK055G: Ammonia as N by Discrete Analyser

(WATER) EA015: Total Dissolved Solids dried at 180 ± 5 °C

(WATER) EN055: Ionic Balance

(WATER) ED045G: Chloride by Discrete Analyser

(WATER) ED041G: Sulfate (Turbidimetric) as SO₄²⁻ by DA

(WATER) EK040P: Fluoride by PC Titrator

(WATER) ED037P: Alkalinity by PC Titrator

(WATER) ED093F: Dissolved Major Cations

(WATER) EK067G: Total Phosphorus as P by Discrete Analyser

(WATER) MW023: Enterococci by Membrane Filtration

(WATER) EG020T: Total Metals by ICP-MS

(WATER) MW006: Thermotolerant Coliforms & E.coli by MF