ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **EM2203091**	Page	: 1 of 12
Client	: **Dept for Environment & Water**	Laboratory	: Environmental Division Melbourne
Contact	: Mr FRANK MANGERUCA	Contact	: Kieren Burns
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Telephone	: ----	Telephone	: +61881625130
Project	: HCHB - Phase 1	Date Samples Received	: 24-Feb-2022 12:27
Order number	: ----	Date Analysis Commenced	: 24-Feb-2022
C-O-C number	: ----	Issue Date	: 09-Mar-2022 12:06
Sampler	: ----		
Site	: ----		
Quote number	: AD/052/20 V2		
No. of samples received	: 22		
No. of samples analysed	: 22		

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.

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Jarwis Nheu	Senior Inorganic Chemist	Melbourne Inorganics, Springvale, VIC
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Samantha Smith	Assistant Laboratory Manager	WRG Subcontracting, Springvale, VIC

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 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
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EP005:EP002:It is recognised that total organic carbon is less than dissolved organic carbon for samples EM2203091 #4. However, the difference is within experimental variation of the methods.
- EP002:EP005:It is recognised that total organic carbon is less than dissolved organic carbon for samples EM2203091 #1. However, the difference is within experimental variation of the methods.
- EP008, Chlorophylla- standard does not contained Pheophytin-a standard.
- EP008B- LOR raised for various samples due to samples matrix.
- EP008/EP008B, Invalidated results for sample #22 due to sample not recieved.
- EA015H: EM2203091 #1-3, #7-9, #13-14, #17-19: TDS by method EA-015 may bias high due to the presence of fine particulate matter, which may pass through the prescribed GF/C paper.
- EA015H: EM2203091 #10-12: TDS by method EA-015 may bias high due to the presence of fine particulate matter, which may pass through the prescribed GF/C paper.
- EK067G: EM2203091 #8 Poor duplicate precision for Total phosphorus due to sample heterogeneity. Confirmed by re-extraction and re-analysis.
- EP002: EM2203091 #2 Poor matrix spike recovery for dissolved mercury due to sample matrix. Insufficient sample provided to confirmed by re-extraction and re-analysis.
- EP005:EP002:It is recognised that total organic carbon is less than dissolved organic carbon for samples EM2203091 #21. However, the difference is within experimental variation of the methods.
- 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.
- Algal Count (BM010) has been performed by ALS Water Resources Group, NATA Accreditation no. 992, Site no. 989.

Analytical Results

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

Compound	CAS Number	LOR	Unit	Sample ID	Murray Mouth	US Tauwitchere	DS Tauwitchere	Mark Point	Long Point
				Sampling date / time	22-Feb-2022 11:25	22-Feb-2022 12:40	22-Feb-2022 12:40	22-Feb-2022 13:20	22-Feb-2022 13:52
					EM2203091-001	EM2203091-002	EM2203091-003	EM2203091-004	EM2203091-005
					Result	Result	Result	Result	Result
BM010: Algal Count									
Algal Count	----	-	-		**NRind**	**NRind**	**NRind**	**NRind**	**NRind**
EA015: Total Dissolved Solids dried at 180 ± 5 °C									
Total Dissolved Solids @180°C	----	10	mg/L		**1630**	**363**	**376**	**1290**	**7780**
EA045: Turbidity									
Turbidity	----	0.1	NTU		**71.9**	**69.1**	**51.8**	**24.2**	**8.3**
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		**79**	**72**	**77**	**85**	**102**
Total Alkalinity as CaCO3	----	1	mg/L		**79**	**72**	**77**	**85**	**102**
ED045G: Chloride by Discrete Analyser									
Chloride	16887-00-6	1	mg/L		**568**	**52**	**53**	**653**	**4100**
EG052G: Silica by Discrete Analyser									
Reactive Silica	----	0.05	mg/L		**0.59**	**0.19**	**0.71**	**1.40**	**3.42**
EK055G-SW: Ammonia as N by Discrete Analyser in Saline Water									
Ammonia as N	7664-41-7	0.02	mg/L		**0.21**	**0.22**	**0.10**	**0.06**	**0.55**
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		**0.11**	**0.02**	**0.22**	**0.02**	**0.02**
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L		**0.11**	**0.02**	**0.22**	**0.02**	**0.02**
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		**1.2**	**1.7**	**1.4**	**1.0**	**2.2**
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L		**1.3**	**1.7**	**1.6**	**1.0**	**2.2**
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L		**0.10**	**0.12**	**0.15**	**0.05**	**0.11**
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	<0.01
EP002: Dissolved Organic Carbon (DOC)									
Dissolved Organic Carbon	----	1	mg/L		**14**	**11**	**----**	**9**	**12**
EP005: Total Organic Carbon (TOC)									

Analytical Results

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

Compound	CAS Number	LOR	Unit	Sample ID	Murray Mouth	US Tauwitchere	DS Tauwitchere	Mark Point	Long Point
				Sampling date / time	22-Feb-2022 11:25	22-Feb-2022 12:40	22-Feb-2022 12:40	22-Feb-2022 13:20	22-Feb-2022 13:52
					EM2203091-001	EM2203091-002	EM2203091-003	EM2203091-004	EM2203091-005
					Result	Result	Result	Result	Result
EP005: Total Organic Carbon (TOC) - Continued									
Total Organic Carbon	----	1	mg/L		**13**	**15**	**8**	**8**	**13**
EP008: Chlorophyll									
Chlorophyll a	----	1	mg/m³		**11**	**15**	**7**	**21**	**2**
Chlorophyll b	----	1	mg/m³		<5	<5	<2	<2	<1
Pheophytin a	----	1	mg/m³		**9**	**8**	**4**	**7**	<1

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	Noonameena	Bonneys	McGrath Flat North	Parnka Point	Villa de Yumpa
				Sampling date / time	22-Feb-2022 14:40	22-Feb-2022 15:00	22-Feb-2022 15:50	22-Feb-2022 15:25	23-Feb-2022 09:42
Compound	CAS Number	LOR	Unit		EM2203091-006	EM2203091-007	EM2203091-008	EM2203091-009	EM2203091-010
					Result	Result	Result	Result	Result
BM010: Algal Count									
Algal Count	----	-	-		NRind	NRind	NRind	NRind	NRind
EA015: Total Dissolved Solids dried at 180 ± 5 °C									
Total Dissolved Solids @180°C	----	10	mg/L		31500	49200	70200	70200	93900
EA045: Turbidity									
Turbidity	----	0.1	NTU		1.8	8.3	14.5	21.6	14.6
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		23	16	<1	<1	<1
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L		106	146	191	196	202
Total Alkalinity as CaCO3	----	1	mg/L		129	163	191	196	202
ED045G: Chloride by Discrete Analyser									
Chloride	16887-00-6	1	mg/L		15000	24500	33800	33200	46100
EG052G: Silica by Discrete Analyser									
Reactive Silica	----	0.05	mg/L		<0.05	<0.05	0.15	0.54	2.61
EK055G-SW: Ammonia as N by Discrete Analyser in Saline Water									
Ammonia as N	7664-41-7	0.02	mg/L		0.05	0.03	0.20	<0.02	<0.02
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	0.02
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	0.02
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		0.2	0.4	1.4	1.4	2.9
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L		0.2	0.4	1.4	1.4	2.9
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L		0.02	0.04	0.76	0.15	1.06
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	<0.01
EP002: Dissolved Organic Carbon (DOC)									
Dissolved Organic Carbon	----	1	mg/L		17	22	27	26	32
EP005: Total Organic Carbon (TOC)									

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	Noonameena	Bonneys	McGrath Flat North	Parnka Point	Villa de Yumpa
				Sampling date / time	22-Feb-2022 14:40	22-Feb-2022 15:00	22-Feb-2022 15:50	22-Feb-2022 15:25	23-Feb-2022 09:42
Compound	CAS Number	LOR	Unit		EM2203091-006	EM2203091-007	EM2203091-008	EM2203091-009	EM2203091-010
					Result	Result	Result	Result	Result
EP005: Total Organic Carbon (TOC) - Continued									
Total Organic Carbon	----	1	mg/L		**17**	**22**	**31**	**28**	**40**
EP008: Chlorophyll									
Chlorophyll a	----	1	mg/m³		**2**	**9**	**6**	**8**	**11**
Chlorophyll b	----	1	mg/m³		<1	<1	<1	<2	<2
Pheophytin a	----	1	mg/m³		<1	**3**	**2**	**3**	**10**

Analytical Results

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

Compound	CAS Number	LOR	Unit	Sample ID	Stony Well	North Jacks Point	South Policeman Point	Snipe Point	Morella Basin @ outlet regulator
				Sampling date / time	23-Feb-2022 09:25	23-Feb-2022 09:00	23-Feb-2022 08:40	23-Feb-2022 08:25	23-Feb-2022 07:55
					EM2203091-011	EM2203091-012	EM2203091-013	EM2203091-014	EM2203091-015
					Result	Result	Result	Result	Result
BM010: Algal Count									
Algal Count	----	-	-		**NRind**	**NRind**	**NRind**	**NRind**	**NRind**
EA015: Total Dissolved Solids dried at 180 ± 5 °C									
Total Dissolved Solids @180°C	----	10	mg/L		**119000**	**129000**	**121000**	**120000**	**18000**
EA045: Turbidity									
Turbidity	----	0.1	NTU		**24.3**	**25.3**	**27.6**	**25.6**	**2.2**
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	**200**
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L		**226**	**228**	**243**	**246**	**125**
Total Alkalinity as CaCO3	----	1	mg/L		**226**	**228**	**243**	**246**	**326**
ED045G: Chloride by Discrete Analyser									
Chloride	16887-00-6	1	mg/L		**60400**	**60700**	**57300**	**57000**	**8540**
EG052G: Silica by Discrete Analyser									
Reactive Silica	----	0.05	mg/L		**5.80**	**7.00**	**8.05**	**7.99**	**0.17**
EK055G-SW: Ammonia as N by Discrete Analyser in Saline Water									
Ammonia as N	7664-41-7	0.02	mg/L		<0.02	<0.02	<0.02	<0.02	**0.03**
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		**5.0**	**4.7**	**5.8**	**4.6**	**0.8**
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L		**5.0**	**4.7**	**5.8**	**4.6**	**0.8**
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L		**2.09**	**2.50**	**1.84**	**1.41**	**0.03**
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	<0.01
EP002: Dissolved Organic Carbon (DOC)									
Dissolved Organic Carbon	----	1	mg/L		**44**	**44**	**42**	**40**	**22**
EP005: Total Organic Carbon (TOC)									

Analytical Results

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

Compound	CAS Number	LOR	Unit	Sample ID	Stony Well	North Jacks Point	South Policeman Point	Snipe Point	Morella Basin @ outlet regulator
				Sampling date / time	23-Feb-2022 09:25	23-Feb-2022 09:00	23-Feb-2022 08:40	23-Feb-2022 08:25	23-Feb-2022 07:55
					EM2203091-011	EM2203091-012	EM2203091-013	EM2203091-014	EM2203091-015
					Result	Result	Result	Result	Result
EP005: Total Organic Carbon (TOC) - Continued									
Total Organic Carbon	----	1	mg/L		**63**	**62**	**61**	**60**	**22**
EP008: Chlorophyll									
Chlorophyll a	----	1	mg/m³		**55**	**33**	**41**	**49**	**7**
Chlorophyll b	----	1	mg/m³		**3**	**2**	**4**	**4**	<1
Pheophytin a	----	1	mg/m³		**10**	**46**	**48**	**23**	<1

Analytical Results

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

Compound	CAS Number	LOR	Unit	Sample ID	Morella Creek @ gauge	Salt Creek Outlet	1.8km west of Salk Creek	3.2km south of Salt Creek (land)	Tilley Swamp Drain U/S Morella
				Sampling date / time	23-Feb-2022 08:40	23-Feb-2022 08:00	23-Feb-2022 08:10	23-Feb-2022 08:15	23-Feb-2022 10:00
					EM2203091-016	EM2203091-017	EM2203091-018	EM2203091-019	EM2203091-020
					Result	Result	Result	Result	Result
BM010: Algal Count									
Algal Count	----	-	-		**NRind**	**NRind**	**NRind**	**NRind**	**NRind**
EA015: Total Dissolved Solids dried at 180 ± 5 °C									
Total Dissolved Solids @180°C	----	10	mg/L		**14200**	**118000**	**118000**	**120000**	**6240**
EA045: Turbidity									
Turbidity	----	0.1	NTU		**3.1**	**25.3**	**27.0**	**26.2**	**2.8**
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		**93**	<1	<1	<1	**39**
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L		**440**	**250**	**246**	**250**	**414**
Total Alkalinity as CaCO3	----	1	mg/L		**533**	**250**	**246**	**250**	**454**
ED045G: Chloride by Discrete Analyser									
Chloride	16887-00-6	1	mg/L		**6760**	**57700**	**57300**	**60000**	**3310**
EG052G: Silica by Discrete Analyser									
Reactive Silica	----	0.05	mg/L		**33.0**	**7.90**	**7.93**	**8.25**	**17.9**
EK055G-SW: Ammonia as N by Discrete Analyser in Saline Water									
Ammonia as N	7664-41-7	0.02	mg/L		<0.02	<0.02	<0.02	<0.02	**0.05**
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		**0.7**	**4.4**	**3.9**	**3.6**	**0.6**
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L		**0.7**	**4.4**	**3.9**	**3.6**	**0.6**
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L		**0.09**	**1.78**	**1.78**	**2.08**	**0.04**
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
EP002: Dissolved Organic Carbon (DOC)									
Dissolved Organic Carbon	----	1	mg/L		**20**	**43**	**42**	**43**	**8**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	Morella Creek @ gauge	Salt Creek Outlet	1.8km west of Salk Creek	3.2km south of Salt Creek (land)	Tilley Swamp Drain U/S Morella
				Sampling date / time	23-Feb-2022 08:40	23-Feb-2022 08:00	23-Feb-2022 08:10	23-Feb-2022 08:15	23-Feb-2022 10:00
Compound	CAS Number	LOR	Unit		EM2203091-016	EM2203091-017	EM2203091-018	EM2203091-019	EM2203091-020
					Result	Result	Result	Result	Result
EP005: Total Organic Carbon (TOC)									
Total Organic Carbon	----	1	mg/L		23	59	59	62	9
EP008: Chlorophyll									
Chlorophyll a	----	1	mg/m³		2	57	72	25	3
Chlorophyll b	----	1	mg/m³		<1	6	7	2	<1
Pheophytin a	----	1	mg/m³		1	24	74	12	<1

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	Tilley Swamp Drain Nth outlet	Tilley Swamp Drain Watercourse outlet	----	----	----
				Sampling date / time	23-Feb-2022 09:25	23-Feb-2022 09:40	----	----	----
Compound	CAS Number	LOR	Unit		EM2203091-021	EM2203091-022	--------	--------	--------
					Result	Result	----	----	----
BM010: Algal Count									
Algal Count	----	-	-		NRind	NRind	----	----	----
EA015: Total Dissolved Solids dried at 180 ± 5 °C									
Total Dissolved Solids @180°C	----	10	mg/L		6140	6040	----	----	----
EA045: Turbidity									
Turbidity	----	0.1	NTU		6.0	4.6	----	----	----
ED037P: Alkalinity by PC Titrator									
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L		<1	<1	----	----	----
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L		36	36	----	----	----
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L		420	419	----	----	----
Total Alkalinity as CaCO3	----	1	mg/L		456	456	----	----	----
ED045G: Chloride by Discrete Analyser									
Chloride	16887-00-6	1	mg/L		3170	3210	----	----	----
EG052G: Silica by Discrete Analyser									
Reactive Silica	----	0.05	mg/L		19.3	19.4	----	----	----
EK055G-SW: Ammonia as N by Discrete Analyser in Saline Water									
Ammonia as N	7664-41-7	0.02	mg/L		0.04	0.06	----	----	----
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		0.02	0.01	----	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L		0.02	0.01	----	----	----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		0.7	0.4	----	----	----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L		0.7	0.4	----	----	----
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L		0.05	0.01	----	----	----
EK071G: Reactive Phosphorus as P by discrete analyser									
Reactive Phosphorus as P	14265-44-2	0.01	mg/L		<0.01	<0.01	----	----	----
EP002: Dissolved Organic Carbon (DOC)									
Dissolved Organic Carbon	----	1	mg/L		9	6	----	----	----
EP005: Total Organic Carbon (TOC)									

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	Tilley Swamp Drain Nth outlet	Tilley Swamp Drain Watercourse outlet	----	----	----
				Sampling date / time	23-Feb-2022 09:25	23-Feb-2022 09:40	----	----	----
Compound	CAS Number	LOR	Unit		EM2203091-021	EM2203091-022	--------	--------	--------
					Result	Result	----	----	----
EP005: Total Organic Carbon (TOC) - Continued									
Total Organic Carbon	----	1	mg/L		**6**	**6**	**----**	**----**	**----**
EP008: Chlorophyll									
Chlorophyll a	----	1	mg/m³		**5**	**----**	**----**	**----**	**----**
Chlorophyll b	----	1	mg/m³		<1	**----**	**----**	**----**	**----**
Pheophytin a	----	1	mg/m³		<1	**----**	**----**	**----**	**----**

Inter-Laboratory Testing

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

(WATER) EP008: Chlorophyll