

## CERTIFICATE OF ANALYSIS

**Work Order** : **EM2123012**  
**Client** : **Dept for Environment & Water**  
**Contact** : **Mr FRANK MANGERUCA**  
**Address** : **GPO BOX 2834**  
**ADELAIDE SA, AUSTRALIA 5001**  
**Telephone** : **----**  
**Project** : **HCHB - Phase 1**  
**Order number** : **----**  
**C-O-C number** : **----**  
**Sampler** : **----**  
**Site** : **----**  
**Quote number** : **AD/052/20 V2**  
**No. of samples received** : **22**  
**No. of samples analysed** : **22**

**Page** : 1 of 12  
**Laboratory** : Environmental Division Melbourne  
**Contact** : Kieren Burns  
**Address** : 4 Westall Rd Springvale VIC Australia 3171  
**Telephone** : +61881625130  
**Date Samples Received** : 18-Nov-2021 11:10  
**Date Analysis Commenced** : 18-Nov-2021  
**Issue Date** : 25-Nov-2021 17:40



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	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Jarwis Nheu	Senior Inorganic Chemist	Melbourne Inorganics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC
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.

- EM2123012 #2,12,13,15-18,22; 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.
- EP002:EP005:It is recognised that total organic carbon is less than dissolved organic carbon for samples EM2123012 #5-#6, #8-#10, #17 and #18. However, the difference is within experimental variation of the methods.
- It is recognised that TKN is less than Ammonia as N(Saline water) for sample 20. However, the difference is within experimental variation of the methods.
- EP008, Chlorophyll-a standard does not contained Pheophytin-a standard.
- EP008, LOR raised for Chlorophyll-a, b and Pheophytin -a for various samples due to sample matrix.
- EA015H: EM2123012#3TDS 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: EM2123012#10 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: EM2123012 #21 Poor matrix spike recovery for Total phosphorus due to sample matrix. Confirmed by re-extraction and re-analysis.
- Algal Count (BM010) has been performed by ALS Water Resources Group, NATA Accreditation no. 992, Site no. 989.

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	1.8km west of Salt Creek	3.2km south of Salt Creek (land)	Bonneys	Long Point	Mark Point
				Sampling date / time	16-Nov-2021 14:45	16-Nov-2021 14:45	17-Nov-2021 08:10	17-Nov-2021 09:00	17-Nov-2021 09:45
Compound	CAS Number	LOR	Unit	EM2123012-001	EM2123012-002	EM2123012-003	EM2123012-004	EM2123012-005	
				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	68200	75900	61700	18900	8430	
EA045: Turbidity									
Turbidity	----	0.1	NTU	13.8	14.2	6.0	3.7	5.5	
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	11	<1	<1	<1	
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	231	222	172	101	77	
Total Alkalinity as CaCO3	----	1	mg/L	231	233	172	101	77	
ED045G: Chloride by Discrete Analyser									
Chloride	16887-00-6	1	mg/L	31100	33800	29500	9810	4480	
EG052G: Silica by Discrete Analyser									
Reactive Silica	----	0.05	mg/L	2.37	1.60	0.29	0.60	0.85	
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	0.08	0.09	
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	0.04	0.04	0.05	0.07	
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L	0.03	0.04	0.04	0.05	0.08	
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	4.1	4.0	2.1	0.8	0.1	
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L	4.1	4.0	2.1	0.8	0.2	
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L	0.48	0.31	0.23	0.04	<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	<0.01	<0.01	<0.01	
EP002: Dissolved Organic Carbon (DOC)									
Dissolved Organic Carbon	----	1	mg/L	29	6	23	11	9	
EP005: Total Organic Carbon (TOC)									



## Analytical Results

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

Sample ID

				1.8km west of Salt Creek	3.2km south of Salt Creek (land)	Bonneys	Long Point	Mark Point
Sampling date / time				16-Nov-2021 14:45	16-Nov-2021 14:45	17-Nov-2021 08:10	17-Nov-2021 09:00	17-Nov-2021 09:45
Compound	CAS Number	LOR	Unit	EM2123012-001	EM2123012-002	EM2123012-003	EM2123012-004	EM2123012-005
				Result	Result	Result	Result	Result
<b>EP005: Total Organic Carbon (TOC) - Continued</b>								
Total Organic Carbon	----	1	mg/L	37	38	24	11	7
<b>EP008: Chlorophyll</b>								
Chlorophyll a	----	1	mg/m <sup>3</sup>	15	17	4	4	8
Chlorophyll b	----	1	mg/m <sup>3</sup>	<1	<1	<1	<1	<1
Pheophytin a	----	1	mg/m <sup>3</sup>	6	3	2	<1	<1

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	McGrath Flat North	Morella Basin @ outlet regulator	Morella Creek @ gauge	Murray Mouth	Noonameena
Sampling date / time					17-Nov-2021 07:40	16-Nov-2021 15:30	16-Nov-2021 15:10	16-Nov-2021 11:45	17-Nov-2021 08:30
Compound	CAS Number	LOR	Unit	EM2123012-006	EM2123012-007	EM2123012-008	EM2123012-009	EM2123012-010	
				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	73500	8880	8460	906	51700	
EA045: Turbidity									
Turbidity	----	0.1	NTU	15.0	5.4	2.1	107	7.0	
ED037P: Alkalinity by PC Titrator									
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	7	6	<1	<1	
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	220	221	<1	<1	
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	187	<1	<1	63	158	
Total Alkalinity as CaCO3	----	1	mg/L	187	227	227	63	158	
ED045G: Chloride by Discrete Analyser									
Chloride	16887-00-6	1	mg/L	32000	4270	4160	419	24200	
EG052G: Silica by Discrete Analyser									
Reactive Silica	----	0.05	mg/L	0.99	8.15	7.95	0.67	0.16	
EK055G-SW: Ammonia as N by Discrete Analyser in Saline Water									
Ammonia as N	7664-41-7	0.02	mg/L	<0.02	0.08	0.07	0.18	<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	0.03	0.04	0.04	0.09	0.02	
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L	0.03	0.04	0.04	0.10	0.02	
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	3.0	0.2	0.2	2.2	1.5	
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L	3.0	0.2	0.2	2.3	1.5	
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L	0.25	<0.01	<0.01	0.19	0.48	
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	30	9	13	10	21	
EP005: Total Organic Carbon (TOC)									



## Analytical Results

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

Sample ID

				McGrath Flat North	Morella Basin @ outlet regulator	Morella Creek @ gauge	Murray Mouth	Noonameena
Sampling date / time				17-Nov-2021 07:40	16-Nov-2021 15:30	16-Nov-2021 15:10	16-Nov-2021 11:45	17-Nov-2021 08:30
Compound	CAS Number	LOR	Unit	EM2123012-006	EM2123012-007	EM2123012-008	EM2123012-009	EM2123012-010
				Result	Result	Result	Result	Result
<b>EP005: Total Organic Carbon (TOC) - Continued</b>								
Total Organic Carbon	----	1	mg/L	28	9	6	4	17
<b>EP008: Chlorophyll</b>								
Chlorophyll a	----	1	mg/m <sup>3</sup>	4	1	<1	2	3
Chlorophyll b	----	1	mg/m <sup>3</sup>	<1	<1	<1	<1	1
Pheophytin a	----	1	mg/m <sup>3</sup>	<1	<1	<1	2	<1

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	North Jacks Point	Parnka Point	Salt Creek Outlet	Snipe Point	South Policeman Point / Seagull Island
Sampling date / time				16-Nov-2021 15:35	16-Nov-2021 17:00	16-Nov-2021 14:30	16-Nov-2021 15:00	16-Nov-2021 15:15	
Compound	CAS Number	LOR	Unit	EM2123012-011	EM2123012-012	EM2123012-013	EM2123012-014	EM2123012-015	
				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	71700	84600	77800	73200	91500	
EA045: Turbidity									
Turbidity	----	0.1	NTU	18.5	13.3	14.7	13.6	14.2	
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	8	7	<1	<1	
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	235	188	231	243	240	
Total Alkalinity as CaCO3	----	1	mg/L	235	195	238	243	240	
ED045G: Chloride by Discrete Analyser									
Chloride	16887-00-6	1	mg/L	35800	34700	32300	33400	33000	
EG052G: Silica by Discrete Analyser									
Reactive Silica	----	0.05	mg/L	2.11	1.17	2.26	2.23	2.18	
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	0.08	
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	0.02	0.03	0.04	0.03	0.03	
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L	0.02	0.03	0.04	0.03	0.03	
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	4.8	3.5	2.9	3.8	4.3	
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L	4.8	3.5	2.9	3.8	4.3	
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L	0.25	0.34	0.71	0.44	0.33	
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	30	26	26	26	26	
EP005: Total Organic Carbon (TOC)									





## Analytical Results

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

Sample ID

				North Jacks Point	Parnka Point	Salt Creek Outlet	Snipe Point	South Policeman Point / Seagull Island
Sampling date / time				16-Nov-2021 15:35	16-Nov-2021 17:00	16-Nov-2021 14:30	16-Nov-2021 15:00	16-Nov-2021 15:15
Compound	CAS Number	LOR	Unit	EM2123012-011	EM2123012-012	EM2123012-013	EM2123012-014	EM2123012-015
Result				Result	Result	Result	Result	Result
<b>EP005: Total Organic Carbon (TOC) - Continued</b>								
Total Organic Carbon	----	1	mg/L	36	30	34	33	33
<b>EP008: Chlorophyll</b>								
Chlorophyll a	----	1	mg/m <sup>3</sup>	18	4	17	12	22
Chlorophyll b	----	1	mg/m <sup>3</sup>	<2	<1	<1	<1	<1
Pheophytin a	----	1	mg/m <sup>3</sup>	2	<1	11	2	7





## Analytical Results

Sub-Matrix: WATER  
 (Matrix: WATER)

Sample ID

				Stoney Well	Tauwiche D/S	Tauwiche U/S	Tilley Swamp Drain D/S Nth Outlet	Tilley Swamp Drain U/S Morella
Sampling date / time				16-Nov-2021 16:00	16-Nov-2021 12:30	16-Nov-2021 12:30	16-Nov-2021 16:45	16-Nov-2021 16:00
Compound	CAS Number	LOR	Unit	EM2123012-016	EM2123012-017	EM2123012-018	EM2123012-019	EM2123012-020
				Result	Result	Result	Result	Result
<b>BM010: Algal Count</b>								
Algal Count	----	-	-	NRind	NRind	NRind	NRind	NRind
<b>EA015: Total Dissolved Solids dried at 180 ± 5 °C</b>								
Total Dissolved Solids @180°C	----	10	mg/L	85000	898	354	6020	6470
<b>EA045: Turbidity</b>								
Turbidity	----	0.1	NTU	30.9	70.0	87.2	2.8	2.6
<b>ED037P: Alkalinity by PC Titrator</b>								
Hydroxide Alkalinity as CaCO <sub>3</sub>	DMO-210-001	1	mg/L	<1	<1	<1	<1	<1
Carbonate Alkalinity as CaCO <sub>3</sub>	3812-32-6	1	mg/L	<1	<1	<1	38	37
Bicarbonate Alkalinity as CaCO <sub>3</sub>	71-52-3	1	mg/L	236	61	57	372	376
Total Alkalinity as CaCO <sub>3</sub>	----	1	mg/L	236	61	57	410	413
<b>ED045G: Chloride by Discrete Analyser</b>								
Chloride	16887-00-6	1	mg/L	37200	127	82	3080	3280
<b>EG052G: Silica by Discrete Analyser</b>								
Reactive Silica	----	0.05	mg/L	1.89	0.46	0.25	14.1	13.5
<b>EK055G-SW: Ammonia as N by Discrete Analyser in Saline Water</b>								
Ammonia as N	7664-41-7	0.02	mg/L	<0.02	0.22	1.24	0.42	0.23
<b>EK057G: Nitrite as N by Discrete Analyser</b>								
Nitrite as N	14797-65-0	0.01	mg/L	<0.01	0.01	<0.01	<0.01	<0.01
<b>EK058G: Nitrate as N by Discrete Analyser</b>								
Nitrate as N	14797-55-8	0.01	mg/L	0.02	0.12	0.05	0.12	0.09
<b>EK059G: Nitrite plus Nitrate as N (NO<sub>x</sub>) by Discrete Analyser</b>								
Nitrite + Nitrate as N	----	0.01	mg/L	0.02	0.13	0.05	0.12	0.09
<b>EK061G: Total Kjeldahl Nitrogen By Discrete Analyser</b>								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	4.8	1.3	1.8	0.5	0.2
<b>EK062G: Total Nitrogen as N (TKN + NO<sub>x</sub>) by Discrete Analyser</b>								
^ Total Nitrogen as N	----	0.1	mg/L	4.8	1.4	1.8	0.6	0.3
<b>EK067G: Total Phosphorus as P by Discrete Analyser</b>								
Total Phosphorus as P	----	0.01	mg/L	0.53	0.09	0.13	0.01	0.02
<b>EK071G: Reactive Phosphorus as P by discrete analyser</b>								
Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	<0.01	<0.01	<0.01	0.01
<b>EP002: Dissolved Organic Carbon (DOC)</b>								
Dissolved Organic Carbon	----	1	mg/L	30	10	10	5	6



## Analytical Results

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

Sample ID

				Stoney Well	Tauwitchere D/S	Tauwitchere U/S	Tilley Swamp Drain D/S Nth Outlet	Tilley Swamp Drain U/S Morella
Sampling date / time				16-Nov-2021 16:00	16-Nov-2021 12:30	16-Nov-2021 12:30	16-Nov-2021 16:45	16-Nov-2021 16:00
Compound	CAS Number	LOR	Unit	EM2123012-016	EM2123012-017	EM2123012-018	EM2123012-019	EM2123012-020
				Result	Result	Result	Result	Result
<b>EP005: Total Organic Carbon (TOC)</b>								
Total Organic Carbon	----	1	mg/L	37	7	7	6	6
<b>EP008: Chlorophyll</b>								
Chlorophyll a	----	1	mg/m <sup>3</sup>	<3	11	19	2	1
Chlorophyll b	----	1	mg/m <sup>3</sup>	3	<5	<6	<1	<1
Pheophytin a	----	1	mg/m <sup>3</sup>	78	5	<6	<1	<1

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	Tilley Swamp Drain Watercourse Outlet	Villa de Yumpa	----	----	----
Sampling date / time				16-Nov-2021 16:30	16-Nov-2021 16:25	----	----	----	
Compound	CAS Number	LOR	Unit	EM2123012-021	EM2123012-022	-----	-----	-----	
				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	5170	84400	----	----	----	
EA045: Turbidity									
Turbidity	----	0.1	NTU	8.3	16.0	----	----	----	
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	129	<1	----	----	----	
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	217	207	----	----	----	
Total Alkalinity as CaCO3	----	1	mg/L	345	207	----	----	----	
ED045G: Chloride by Discrete Analyser									
Chloride	16887-00-6	1	mg/L	2640	36700	----	----	----	
EG052G: Silica by Discrete Analyser									
Reactive Silica	----	0.05	mg/L	1.02	1.09	----	----	----	
EK055G-SW: Ammonia as N by Discrete Analyser in Saline Water									
Ammonia as N	7664-41-7	0.02	mg/L	0.18	<0.02	----	----	----	
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	0.03	0.03	----	----	----	
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L	0.03	0.03	----	----	----	
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	1.9	4.1	----	----	----	
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L	1.9	4.1	----	----	----	
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L	0.10	0.33	----	----	----	
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	41	27	----	----	----	
EP005: Total Organic Carbon (TOC)									



## Analytical Results

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

Sample ID

				Tilley Swamp Drain Watercourse Outlet	Villa de Yumpa	----	----	----
Sampling date / time				16-Nov-2021 16:30	16-Nov-2021 16:25	----	----	----
Compound	CAS Number	LOR	Unit	EM2123012-021	EM2123012-022	-----	-----	-----
				Result	Result	----	----	----
<b>EP005: Total Organic Carbon (TOC) - Continued</b>								
Total Organic Carbon	----	1	mg/L	43	34	----	----	----
<b>EP008: Chlorophyll</b>								
Chlorophyll a	----	1	mg/m <sup>3</sup>	5	10	----	----	----
Chlorophyll b	----	1	mg/m <sup>3</sup>	<1	<1	----	----	----
Pheophytin a	----	1	mg/m <sup>3</sup>	2	5	----	----	----

## Inter-Laboratory Testing

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

(WATER) EP008: Chlorophyll