



DEW - Department of Environment and Water
ATTN: Patrick Betham
24-26 Tikalara street
Regency Park
SA 5010 AUSTRALIA

13/03/2020

Dear Patrick

Please find attached the Final Analytical Report for

Customer Service Request: 143419-2020-CSR-2
Account: 143419
Project: AWQC-145349 DEW - Healthy Coorong Healthy Basin Phase 0 - Adhoc
AWQC Morella sampling - 19/20

This report has also been sent to: Frank Mangeruca Peter Metten

AWQC Sample Receipt hours are Monday and Tuesday 8:30am to 8pm and Wednesday, Thursday and Friday 8:30am to 4:30pm.

Yours sincerely,

Darren Seebohm
Customer Services Officer
Darren.Seebohm@sawater.com.au
+61 8 7424 2150



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Report Information

Project Name	AWQC-145349
Customer	DEW - Department of Environment and Water
CSR_ID	143419-2020-CSR-2

Analytical Results

Sampling Point	353180-EPA - Tauwitschere
Sampled Date	17/02/2020 1:00:00PM
Sample Received Date	18/02/2020 4:05:34PM
Sample Analysis Completed	2/03/2020 12:44:23PM
Sample ID	2020-001-3726
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt NA</i>			
Chlorophyll a & Phaeophytin a T0380-02(ADEL)			19/02/2020
Chlorophyll a	0.1	12.5 µg/L	
Phaeophytin a	0.1	6.68 µg/L	

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt NA</i>			
Ammonia as N TMZ-M45(ADEL)			02/03/2020
# Ammonia as N	1	9 µg/L	
Chloride T0104-02(ADEL)			20/02/2020
Chloride	4.0	11100 mg/L	
Nitrate + Nitrite as N TMZ-M44(ADEL)			26/02/2020
# Nitrate + Nitrite as N	0.5	1.4 µg/L	
# Nitrate + Nitrite as NO3	2.3	6.20 µg/L	
# Nitrate as Nitrogen		0.100 µg/L	
Nitrite as N TMZ-M43(ADEL)			26/02/2020
# Nitrite as N	0.5	1.3 µg/L	
Nitrogen - Total TMZ-M06(ADEL)			18/02/2020
Nitrogen - Total		1.49 mg/L	
Phosphorus - Filterable Reactive as P TMZ-M42(ADEL)			02/03/2020
# Phosphorus -Filterable Reactive as PO4	1.5	8.073 µg/L	
Phosphorus-Filterable Reactive as P	0.5	2.7 µg/L	
Phosphorus - Total T0109-44(ADEL)			19/02/2020
Phosphorus - Total	0.005	0.150 mg/L	
Silica - Reactive T0111-01(ADEL)			20/02/2020
Silica - Reactive	0.05	0.42 mg/L	
TKN as N T0112-01(ADEL)			19/02/2020
TKN as Nitrogen	0.05	1.49 mg/L	



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Analytical Results

Sampling Point	353180-EPA - Tauwitschere
Sampled Date	17/02/2020 1:00:00PM
Sample Received Date	18/02/2020 4:05:34PM
Sample Analysis Completed	2/03/2020 12:44:23PM
Sample ID	2020-001-3726
Status	Endorsed
Collection Type	Customer Collected

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Dissolved Organic Carbon T0158-07(ADEL)			21/02/2020
Dissolved Organic Carbon	1	6.4 mg/L	
Total Organic Carbon T0158-07(ADEL)			21/02/2020
Total Organic Carbon	1	10.7 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			19/02/2020
Alkalinity as Calcium Carbonate		130 mg/L	
Bicarbonate		159 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			19/02/2020
Conductivity	2	34200 µS/cm	
Total Dissolved Solids (by EC)	1	22400 mg/L	
pH T0010-01(ADEL)			19/02/2020
pH		8.2 pH units	
Temperature at which pH is measured		22.8 °C	
Turbidity T0018-01(ADEL)			19/02/2020
Turbidity	0.1	15 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Suspended Solids T0160-01(ADEL)			27/02/2020
Suspended Solids	1.0	28 mg/L	
Volatile Suspended Solids T0160-01(ADEL)			27/02/2020
Fixed Solids	1	14 mg/L	
Volatile Suspended Solids	1	14 mg/L	



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Analytical Results

Sampling Point	31523-EPA - Long Point
Sampled Date	17/02/2020 1:45:00PM
Sample Received Date	18/02/2020 4:05:05PM
Sample Analysis Completed	3/03/2020 4:28:11PM
Sample ID	2020-001-3727
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt NA</i>			
Chlorophyll a & Phaeophytin a T0380-02(ADEL)			19/02/2020
Chlorophyll a	0.1	3.45 µg/L	
Phaeophytin a	0.1	0.98 µg/L	

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt NA</i>			
Ammonia as N TMZ-M45(ADEL)			02/03/2020
# Ammonia as N	1	59 µg/L	
Chloride T0104-02(ADEL)			20/02/2020
Chloride	4.0	18800 mg/L	
Nitrate + Nitrite as N TMZ-M44(ADEL)			26/02/2020
# Nitrate + Nitrite as N	0.5	35.0 µg/L	
# Nitrate + Nitrite as NO3	2.3	155 µg/L	
# Nitrate as Nitrogen		32.6 µg/L	
Nitrite as N TMZ-M43(ADEL)			26/02/2020
# Nitrite as N	0.5	2.4 µg/L	
Nitrogen - Total TMZ-M06(ADEL)			18/02/2020
Nitrogen - Total		1.44 mg/L	
Phosphorus - Filterable Reactive as P TMZ-M42(ADEL)			02/03/2020
# Phosphorus -Filterable Reactive as PO4	1.5	13.455 µg/L	
Phosphorus-Filterable Reactive as P	0.5	4.5 µg/L	
Phosphorus - Total T0109-44(ADEL)			19/02/2020
Phosphorus - Total	0.005	0.063 mg/L	
Silica - Reactive T0111-01(ADEL)			20/02/2020
Silica - Reactive	0.05	0.91 mg/L	
TKN as N T0112-01(ADEL)			19/02/2020
TKN as Nitrogen	0.05	1.40 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt NA</i>			



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Analytical Results

Sampling Point	31523-EPA - Long Point
Sampled Date	17/02/2020 1:45:00PM
Sample Received Date	18/02/2020 4:05:05PM
Sample Analysis Completed	3/03/2020 4:28:11PM
Sample ID	2020-001-3727
Status	Endorsed
Collection Type	Customer Collected

Dissolved Organic Carbon T0158-07(ADEL)			21/02/2020
Dissolved Organic Carbon	1	10.6 mg/L	
Total Organic Carbon T0158-07(ADEL)			21/02/2020
Total Organic Carbon	1	11.1 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			19/02/2020
Alkalinity as Calcium Carbonate		159 mg/L	
Bicarbonate		170 mg/L	
Carbonate		12 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			19/02/2020
Conductivity	2	55200 µS/cm	
Total Dissolved Solids (by EC)	1	39600 mg/L	
pH T0010-01(ADEL)			19/02/2020
pH		8.5 pH units	
Temperature at which pH is measured		22.6 °C	
Turbidity T0018-01(ADEL)			19/02/2020
Turbidity	0.1	2.5 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Suspended Solids T0160-01(ADEL)			02/03/2020
Suspended Solids	1.0	5 mg/L	
Volatile Suspended Solids T0160-01(ADEL)			02/03/2020
Fixed Solids	1	3 mg/L	
Volatile Suspended Solids	1	2 mg/L	



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Analytical Results

Sampling Point	31512-EPA - McGrath Flat North
Sampled Date	17/02/2020 2:50:00PM
Sample Received Date	18/02/2020 4:04:00PM
Sample Analysis Completed	3/03/2020 4:28:11PM
Sample ID	2020-001-3736
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA

Chlorophyll a & Phaeophytin a T0380-02(ADEL) 19/02/2020

Chlorophyll a	0.1	42.8 µg/L
Phaeophytin a	0.1	7.69 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA

Ammonia as N TMZ-M45(ADEL) 02/03/2020

# Ammonia as N	1	79 µg/L
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Chloride T0104-02(ADEL) 20/02/2020

Chloride	4.0	54500 mg/L
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Nitrate + Nitrite as N TMZ-M44(ADEL) 26/02/2020

# Nitrate + Nitrite as N	0.5	4.0 µg/L
# Nitrate + Nitrite as NO ₃	2.3	17.7 µg/L
# Nitrate as Nitrogen		1.52 µg/L

Nitrite as N TMZ-M43(ADEL) 26/02/2020

# Nitrite as N	0.5	2.5 µg/L
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Nitrogen - Total TMZ-M06(ADEL) 18/02/2020

Nitrogen - Total		6.20 mg/L
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Phosphorus - Filterable Reactive as P TMZ-M42(ADEL) 02/03/2020

# Phosphorus - Filterable Reactive as PO ₄	1.5	8.97 µg/L
Phosphorus-Filterable Reactive as P	0.5	3.0 µg/L

Phosphorus - Total T0109-44(ADEL) 19/02/2020

Phosphorus - Total	0.005	0.264 mg/L
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Silica - Reactive T0111-01(ADEL) 20/02/2020

Silica - Reactive	0.05	6.17 mg/L
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TKN as N T0112-01(ADEL) 19/02/2020

TKN as Nitrogen	0.05	6.20 mg/L
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Organic Chemistry	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA



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Analytical Results

Sampling Point	31512-EPA - McGrath Flat North
Sampled Date	17/02/2020 2:50:00PM
Sample Received Date	18/02/2020 4:04:00PM
Sample Analysis Completed	3/03/2020 4:28:11PM
Sample ID	2020-001-3736
Status	Endorsed
Collection Type	Customer Collected

Dissolved Organic Carbon T0158-07(ADEL)			21/02/2020
Dissolved Organic Carbon	1	26.9 mg/L	
Total Organic Carbon T0158-07(ADEL)			21/02/2020
Total Organic Carbon	1	33.3 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			19/02/2020
Alkalinity as Calcium Carbonate		208 mg/L	
Bicarbonate		254 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
pH T0010-01(ADEL)			19/02/2020
pH		7.7 pH units	
Temperature at which pH is measured		22.7 °C	
Turbidity T0018-01(ADEL)			19/02/2020
Turbidity	0.1	16 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Suspended Solids T0160-01(ADEL)			02/03/2020
Suspended Solids	1.0	25 mg/L	
Total Dissolved Solids by Evaporation T015-05(ADEL)			24/02/2020
Total Dissolved Solids (by evaporation)	1	118000 mg/L	
Volatile Suspended Solids T0160-01(ADEL)			02/03/2020
Fixed Solids	1	1 mg/L	
Volatile Suspended Solids	1	24 mg/L	



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Analytical Results

Sampling Point	31513-EPA - Parnka Point Boat Ramp
Sampled Date	17/02/2020 3:15:00PM
Sample Received Date	18/02/2020 4:04:08PM
Sample Analysis Completed	3/03/2020 4:28:11PM
Sample ID	2020-001-3734
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA

Chlorophyll a & Phaeophytin a T0380-02(ADEL) 19/02/2020

Chlorophyll a	0.1	50.2 µg/L
Phaeophytin a	0.1	8.28 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA

Ammonia as N TMZ-M45(ADEL) 02/03/2020

# Ammonia as N	1	47 µg/L
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Chloride T0104-02(ADEL) 20/02/2020

Chloride	4.0	51900 mg/L
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Nitrate + Nitrite as N TMZ-M44(ADEL) 26/02/2020

# Nitrate + Nitrite as N	0.5	1.8 µg/L
# Nitrate + Nitrite as NO ₃	2.3	7.97 µg/L
# Nitrate as Nitrogen		0.260 µg/L

Nitrite as N TMZ-M43(ADEL) 26/02/2020

# Nitrite as N	0.5	1.5 µg/L
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Nitrogen - Total TMZ-M06(ADEL) 18/02/2020

Nitrogen - Total		6.60 mg/L
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Phosphorus - Filterable Reactive as P TMZ-M42(ADEL) 02/03/2020

# Phosphorus - Filterable Reactive as PO ₄	1.5	9.867 µg/L
Phosphorus - Filterable Reactive as P	0.5	3.3 µg/L

Phosphorus - Total T0109-44(ADEL) 19/02/2020

Phosphorus - Total	0.005	0.295 mg/L
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Silica - Reactive T0111-01(ADEL) 20/02/2020

Silica - Reactive	0.05	1.66 mg/L
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TKN as N T0112-01(ADEL) 19/02/2020

TKN as Nitrogen	0.05	6.60 mg/L
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Organic Chemistry	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA



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Analytical Results

Sampling Point	31513-EPA - Parnka Point Boat Ramp
Sampled Date	17/02/2020 3:15:00PM
Sample Received Date	18/02/2020 4:04:08PM
Sample Analysis Completed	3/03/2020 4:28:11PM
Sample ID	2020-001-3734
Status	Endorsed
Collection Type	Customer Collected

Dissolved Organic Carbon T0158-07(ADEL)			21/02/2020
Dissolved Organic Carbon	1	25.7 mg/L	
Total Organic Carbon T0158-07(ADEL)			21/02/2020
Total Organic Carbon	1	34.1 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			19/02/2020
Alkalinity as Calcium Carbonate		199 mg/L	
Bicarbonate		243 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
pH T0010-01(ADEL)			19/02/2020
pH		7.7 pH units	
Temperature at which pH is measured		22.7 °C	
Turbidity T0018-01(ADEL)			19/02/2020
Turbidity	0.1	22 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Suspended Solids T0160-01(ADEL)			02/03/2020
Suspended Solids	1.0	32 mg/L	
Total Dissolved Solids by Evaporation T015-05(ADEL)			24/02/2020
Total Dissolved Solids (by evaporation)	1	118000 mg/L	
Volatile Suspended Solids T0160-01(ADEL)			02/03/2020
Fixed Solids	1	3 mg/L	
Volatile Suspended Solids	1	29 mg/L	



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Analytical Results

Sampling Point	31511-EPA - 3.2km South Salt Creek
Sampled Date	18/02/2020 8:00:00AM
Sample Received Date	18/02/2020 4:03:53PM
Sample Analysis Completed	3/03/2020 4:28:11PM
Sample ID	2020-001-3730
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA

Chlorophyll a & Phaeophytin a T0380-02(ADEL) 19/02/2020

Chlorophyll a	0.1	42.5 µg/L
Phaeophytin a	0.1	6.60 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA

Ammonia as N TMZ-M45(ADEL) 02/03/2020

# Ammonia as N	1	78 µg/L
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Chloride T0104-02(ADEL) 20/02/2020

Chloride	4.0	61700 mg/L
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Nitrate + Nitrite as N TMZ-M44(ADEL) 26/02/2020

# Nitrate + Nitrite as N	0.5	4.0 µg/L
# Nitrate + Nitrite as NO ₃	2.3	17.7 µg/L
# Nitrate as Nitrogen		0.998 µg/L

Nitrite as N TMZ-M43(ADEL) 26/02/2020

# Nitrite as N	0.5	3.0 µg/L
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Nitrogen - Total TMZ-M06(ADEL) 18/02/2020

Nitrogen - Total		6.45 mg/L
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Phosphorus - Filterable Reactive as P TMZ-M42(ADEL) 02/03/2020

# Phosphorus - Filterable Reactive as PO ₄	1.5	12.558 µg/L
Phosphorus-Filterable Reactive as P	0.5	4.2 µg/L

Phosphorus - Total T0109-44(ADEL) 19/02/2020

Phosphorus - Total	0.005	0.245 mg/L
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Silica - Reactive T0111-01(ADEL) 20/02/2020

Silica - Reactive	0.05	5.65 mg/L
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TKN as N T0112-01(ADEL) 19/02/2020

TKN as Nitrogen	0.05	6.45 mg/L
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Organic Chemistry	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA



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Analytical Results

Sampling Point	31511-EPA - 3.2km South Salt Creek
Sampled Date	18/02/2020 8:00:00AM
Sample Received Date	18/02/2020 4:03:53PM
Sample Analysis Completed	3/03/2020 4:28:11PM
Sample ID	2020-001-3730
Status	Endorsed
Collection Type	Customer Collected

Dissolved Organic Carbon T0158-07(ADEL)			21/02/2020
Dissolved Organic Carbon	1	26.3 mg/L	
Total Organic Carbon T0158-07(ADEL)			21/02/2020
Total Organic Carbon	1	35.9 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			19/02/2020
Alkalinity as Calcium Carbonate		194 mg/L	
Bicarbonate		237 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
pH T0010-01(ADEL)			19/02/2020
pH		7.8 pH units	
Temperature at which pH is measured		23.0 °C	
Turbidity T0018-01(ADEL)			19/02/2020
Turbidity	0.1	15 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Suspended Solids T0160-01(ADEL)			02/03/2020
Suspended Solids	1.0	23 mg/L	
Total Dissolved Solids by Evaporation T015-05(ADEL)			24/02/2020
Total Dissolved Solids (by evaporation)	1	132000 mg/L	
Volatile Suspended Solids T0160-01(ADEL)			02/03/2020
Fixed Solids	1	<1 mg/L	
Volatile Suspended Solids	1	23 mg/L	



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Analytical Results

Sampling Point	31518-EPA - 12 South Salt Creek
Sampled Date	18/02/2020 8:20:00AM
Sample Received Date	18/02/2020 4:04:47PM
Sample Analysis Completed	3/03/2020 4:28:11PM
Sample ID	2020-001-3729
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA

Chlorophyll a & Phaeophytin a T0380-02(ADEL) 19/02/2020

Chlorophyll a	0.1	80.1 µg/L
Phaeophytin a	0.1	13.6 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA

Ammonia as N TMZ-M45(ADEL) 02/03/2020

# Ammonia as N	1	70 µg/L
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Chloride T0104-02(ADEL) 20/02/2020

Chloride	4.0	57400 mg/L
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Nitrate + Nitrite as N TMZ-M44(ADEL) 26/02/2020

# Nitrate + Nitrite as N	0.5	4.1 µg/L
# Nitrate + Nitrite as NO ₃	2.3	18.2 µg/L
# Nitrate as Nitrogen		1.06 µg/L

Nitrite as N TMZ-M43(ADEL) 26/02/2020

# Nitrite as N	0.5	3.0 µg/L
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Nitrogen - Total TMZ-M06(ADEL) 18/02/2020

Nitrogen - Total		6.60 mg/L
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Phosphorus - Filterable Reactive as P TMZ-M42(ADEL) 02/03/2020

# Phosphorus - Filterable Reactive as PO ₄	1.5	8.671 µg/L
Phosphorus-Filterable Reactive as P	0.5	2.9 µg/L

Phosphorus - Total T0109-44(ADEL) 19/02/2020

Phosphorus - Total	0.005	0.235 mg/L
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Silica - Reactive T0111-01(ADEL) 20/02/2020

Silica - Reactive	0.05	5.79 mg/L
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TKN as N T0112-01(ADEL) 19/02/2020

TKN as Nitrogen	0.05	6.60 mg/L
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Organic Chemistry	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA



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Analytical Results

Sampling Point	31518-EPA - 12 South Salt Creek
Sampled Date	18/02/2020 8:20:00AM
Sample Received Date	18/02/2020 4:04:47PM
Sample Analysis Completed	3/03/2020 4:28:11PM
Sample ID	2020-001-3729
Status	Endorsed
Collection Type	Customer Collected

Dissolved Organic Carbon T0158-07(ADEL)			21/02/2020
Dissolved Organic Carbon	1	26.3 mg/L	
Total Organic Carbon T0158-07(ADEL)			21/02/2020
Total Organic Carbon	1	36.9 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			19/02/2020
Alkalinity as Calcium Carbonate		217 mg/L	
Bicarbonate		265 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
pH T0010-01(ADEL)			19/02/2020
pH		7.9 pH units	
Temperature at which pH is measured		23.0 °C	
Turbidity T0018-01(ADEL)			19/02/2020
Turbidity	0.1	16 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Suspended Solids T0160-01(ADEL)			02/03/2020
Suspended Solids	1.0	32 mg/L	
Total Dissolved Solids by Evaporation T015-05(ADEL)			24/02/2020
Total Dissolved Solids (by evaporation)	1	123000 mg/L	
Volatile Suspended Solids T0160-01(ADEL)			02/03/2020
Fixed Solids	1	<1 mg/L	
Volatile Suspended Solids	1	32 mg/L	



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Analytical Results

Sampling Point	315191-EPA - Morella Creek @ guage
Sampled Date	18/02/2020 8:40:00AM
Sample Received Date	18/02/2020 4:04:57PM
Sample Analysis Completed	3/03/2020 4:28:11PM
Sample ID	2020-001-3738
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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<i>Sample temperature at time of receipt NA</i>			
Chlorophyll a & Phaeophytin a T0380-02(ADEL)			19/02/2020
Chlorophyll a	0.1	13.4 µg/L	
Phaeophytin a	0.1	4.96 µg/L	

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
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<i>Sample temperature at time of receipt NA</i>			
Ammonia as N TMZ-M45(ADEL)			02/03/2020
# Ammonia as N	1	5 µg/L	
Chloride T0104-02(ADEL)			20/02/2020
Chloride	4.0	7350 mg/L	
Nitrate + Nitrite as N TMZ-M44(ADEL)			26/02/2020
# Nitrate + Nitrite as N	0.5	2.0 µg/L	
# Nitrate + Nitrite as NO ₃	2.3	8.86 µg/L	
# Nitrate as Nitrogen		1.01 µg/L	
Nitrite as N TMZ-M43(ADEL)			26/02/2020
# Nitrite as N	0.5	1.0 µg/L	
Nitrogen - Total TMZ-M06(ADEL)			18/02/2020
Nitrogen - Total		2.78 mg/L	
Phosphorus - Filterable Reactive as P TMZ-M42(ADEL)			02/03/2020
# Phosphorus -Filterable Reactive as PO ₄	1.5	6.877 µg/L	
Phosphorus-Filterable Reactive as P	0.5	2.3 µg/L	
Phosphorus - Total T0109-44(ADEL)			19/02/2020
Phosphorus - Total	0.005	0.054 mg/L	
Silica - Reactive T0111-01(ADEL)			20/02/2020
Silica - Reactive	0.05	1.38 mg/L	
TKN as N T0112-01(ADEL)			19/02/2020
TKN as Nitrogen	0.05	2.78 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA



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Analytical Results

Sampling Point	315191-EPA - Morella Creek @ guage
Sampled Date	18/02/2020 8:40:00AM
Sample Received Date	18/02/2020 4:04:57PM
Sample Analysis Completed	3/03/2020 4:28:11PM
Sample ID	2020-001-3738
Status	Endorsed
Collection Type	Customer Collected

Dissolved Organic Carbon T0158-07(ADEL)			21/02/2020
Dissolved Organic Carbon	1	22.7 mg/L	
Total Organic Carbon T0158-07(ADEL)			21/02/2020
Total Organic Carbon	1	28.4 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			19/02/2020
Alkalinity as Calcium Carbonate		258 mg/L	
Bicarbonate		189 mg/L	
Carbonate		62 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			19/02/2020
Conductivity	2	22800 µS/cm	
Total Dissolved Solids (by EC)	1	14100 mg/L	
pH T0010-01(ADEL)			19/02/2020
pH		9.1 pH units	
Temperature at which pH is measured		23.0 °C	
Turbidity T0018-01(ADEL)			19/02/2020
Turbidity	0.1	3.2 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Suspended Solids T0160-01(ADEL)			02/03/2020
Suspended Solids	1.0	2 mg/L	
Volatile Suspended Solids T0160-01(ADEL)			02/03/2020
Fixed Solids	1	<1 mg/L	
Volatile Suspended Solids	1	2 mg/L	



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Analytical Results

Sampling Point	300711-Tilley Swamp Drain U/S Morella
Sampled Date	18/02/2020 9:05:00AM
Sample Received Date	18/02/2020 4:03:37PM
Sample Analysis Completed	3/03/2020 4:28:11PM
Sample ID	2020-001-3739
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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<i>Sample temperature at time of receipt NA</i>			
Chlorophyll a & Phaeophytin a T0380-02(ADEL)			19/02/2020
Chlorophyll a	0.1	1.08 µg/L	
Phaeophytin a	0.1	0.35 µg/L	

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
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<i>Sample temperature at time of receipt NA</i>			
Ammonia as N TMZ-M45(ADEL)			02/03/2020
# Ammonia as N	1	6 µg/L	
Chloride T0104-02(ADEL)			20/02/2020
Chloride	4.0	2590 mg/L	
Nitrate + Nitrite as N TMZ-M44(ADEL)			26/02/2020
# Nitrate + Nitrite as N	0.5	5.9 µg/L	
# Nitrate + Nitrite as NO ₃	2.3	26.1 µg/L	
# Nitrate as Nitrogen		4.61 µg/L	
Nitrite as N TMZ-M43(ADEL)			26/02/2020
# Nitrite as N	0.5	1.3 µg/L	
Nitrogen - Total TMZ-M06(ADEL)			18/02/2020
Nitrogen - Total		0.83 mg/L	
Phosphorus - Filterable Reactive as P TMZ-M42(ADEL)			02/03/2020
# Phosphorus -Filterable Reactive as PO ₄	1.5	26.91 µg/L	
Phosphorus-Filterable Reactive as P	0.5	9.0 µg/L	
Phosphorus - Total T0109-44(ADEL)			19/02/2020
Phosphorus - Total	0.005	0.013 mg/L	
Silica - Reactive T0111-01(ADEL)			20/02/2020
Silica - Reactive	0.05	9.88 mg/L	
TKN as N T0112-01(ADEL)			19/02/2020
TKN as Nitrogen	0.05	0.82 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA



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Analytical Results

Sampling Point	300711-Tilley Swamp Drain U/S Morella
Sampled Date	18/02/2020 9:05:00AM
Sample Received Date	18/02/2020 4:03:37PM
Sample Analysis Completed	3/03/2020 4:28:11PM
Sample ID	2020-001-3739
Status	Endorsed
Collection Type	Customer Collected

Dissolved Organic Carbon T0158-07(ADEL)			21/02/2020
Dissolved Organic Carbon	1	7.4 mg/L	
Total Organic Carbon T0158-07(ADEL)			21/02/2020
Total Organic Carbon	1	7.5 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			19/02/2020
Alkalinity as Calcium Carbonate		360 mg/L	
Bicarbonate		404 mg/L	
Carbonate		17 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			19/02/2020
Conductivity	2	9340 µS/cm	
Total Dissolved Solids (by EC)	1	5410 mg/L	
pH T0010-01(ADEL)			19/02/2020
pH		8.6 pH units	
Temperature at which pH is measured		22.8 °C	
Turbidity T0018-01(ADEL)			19/02/2020
Turbidity	0.1	1.2 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Suspended Solids T0160-01(ADEL)			02/03/2020
Suspended Solids	1.0	<1 mg/L	
Volatile Suspended Solids T0160-01(ADEL)			02/03/2020
Fixed Solids	1	<1 mg/L	
Volatile Suspended Solids	1	<1 mg/L	



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Analytical Results

Sampling Point	300713-Tilley Swamp Drain D/S Northern Outlet
Sampled Date	18/02/2020 9:25:00AM
Sample Received Date	18/02/2020 4:03:45PM
Sample Analysis Completed	3/03/2020 4:28:11PM
Sample ID	2020-001-3740
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt NA</i>			
Chlorophyll a & Phaeophytin a T0380-02(ADEL)			19/02/2020
Chlorophyll a	0.1	2.04 µg/L	
Phaeophytin a	0.1	0.67 µg/L	

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt NA</i>			
Ammonia as N TMZ-M45(ADEL)			02/03/2020
# Ammonia as N	1	12 µg/L	
Chloride T0104-02(ADEL)			20/02/2020
Chloride	4.0	2640 mg/L	
Nitrate + Nitrite as N TMZ-M44(ADEL)			26/02/2020
# Nitrate + Nitrite as N	0.5	5.6 µg/L	
# Nitrate + Nitrite as NO3	2.3	24.8 µg/L	
# Nitrate as Nitrogen		4.92 µg/L	
Nitrite as N TMZ-M43(ADEL)			26/02/2020
# Nitrite as N	0.5	0.7 µg/L	
Nitrogen - Total TMZ-M06(ADEL)			18/02/2020
Nitrogen - Total		0.78 mg/L	
Phosphorus - Filterable Reactive as P TMZ-M42(ADEL)			02/03/2020
# Phosphorus -Filterable Reactive as PO4	1.5	8.372 µg/L	
Phosphorus-Filterable Reactive as P	0.5	2.8 µg/L	
Phosphorus - Total T0109-44(ADEL)			19/02/2020
Phosphorus - Total	0.005	0.012 mg/L	
Silica - Reactive T0111-01(ADEL)			20/02/2020
Silica - Reactive	0.05	10.9 mg/L	
TKN as N T0112-01(ADEL)			19/02/2020
TKN as Nitrogen	0.05	0.77 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt NA</i>			



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Analytical Results

Sampling Point	300713-Tilley Swamp Drain D/S Northern Outlet
Sampled Date	18/02/2020 9:25:00AM
Sample Received Date	18/02/2020 4:03:45PM
Sample Analysis Completed	3/03/2020 4:28:11PM
Sample ID	2020-001-3740
Status	Endorsed
Collection Type	Customer Collected

Dissolved Organic Carbon T0158-07(ADEL)			21/02/2020
Dissolved Organic Carbon	1	7.6 mg/L	
Total Organic Carbon T0158-07(ADEL)			21/02/2020
Total Organic Carbon	1	8.3 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
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<i>Sample temperature at time of receipt NA</i>			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			19/02/2020
Alkalinity as Calcium Carbonate		374 mg/L	
Bicarbonate		433 mg/L	
Carbonate		12 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			19/02/2020
Conductivity	2	9260 µS/cm	
Total Dissolved Solids (by EC)	1	5370 mg/L	
pH T0010-01(ADEL)			19/02/2020
pH		8.5 pH units	
Temperature at which pH is measured		22.7 °C	
Turbidity T0018-01(ADEL)			19/02/2020
Turbidity	0.1	4.1 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
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<i>Sample temperature at time of receipt NA</i>			
Suspended Solids T0160-01(ADEL)			02/03/2020
Suspended Solids	1.0	3 mg/L	
Volatile Suspended Solids T0160-01(ADEL)			02/03/2020
Fixed Solids	1	1 mg/L	
Volatile Suspended Solids	1	2 mg/L	



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Analytical Results

Sampling Point	31517-EPA - 1.8km West Salt Creek
Sampled Date	18/02/2020 10:25:00AM
Sample Received Date	18/02/2020 4:04:38PM
Sample Analysis Completed	4/03/2020 11:58:17AM
Sample ID	2020-001-3732
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA

Chlorophyll a & Phaeophytin a T0380-02(ADEL) 19/02/2020

Chlorophyll a	0.1	81.5 µg/L
Phaeophytin a	0.1	12.6 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA

Ammonia as N TMZ-M45(ADEL) 02/03/2020

# Ammonia as N	1	61 µg/L
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Chloride T0104-02(ADEL) 20/02/2020

Chloride	4.0	57800 mg/L
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Nitrate + Nitrite as N TMZ-M44(ADEL) 26/02/2020

# Nitrate + Nitrite as N	0.5	1.3 µg/L
# Nitrate + Nitrite as NO ₃	2.3	5.76 µg/L
# Nitrate as Nitrogen		0.200 µg/L

Nitrite as N TMZ-M43(ADEL) 26/02/2020

# Nitrite as N	0.5	1.1 µg/L
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Nitrogen - Total TMZ-M06(ADEL) 18/02/2020

Nitrogen - Total		5.87 mg/L
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Phosphorus - Filterable Reactive as P TMZ-M42(ADEL) 02/03/2020

# Phosphorus - Filterable Reactive as PO ₄	1.5	8.372 µg/L
Phosphorus-Filterable Reactive as P	0.5	2.8 µg/L

Phosphorus - Total T0109-44(ADEL) 19/02/2020

Phosphorus - Total	0.005	0.277 mg/L
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Silica - Reactive T0111-01(ADEL) 20/02/2020

Silica - Reactive	0.05	4.89 mg/L
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TKN as N T0112-01(ADEL) 19/02/2020

TKN as Nitrogen	0.05	5.87 mg/L
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Organic Chemistry	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA



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Analytical Results

Sampling Point	31517-EPA - 1.8km West Salt Creek
Sampled Date	18/02/2020 10:25:00AM
Sample Received Date	18/02/2020 4:04:38PM
Sample Analysis Completed	4/03/2020 11:58:17AM
Sample ID	2020-001-3732
Status	Endorsed
Collection Type	Customer Collected

Dissolved Organic Carbon T0158-07(ADEL)			21/02/2020
Dissolved Organic Carbon	1	26.0 mg/L	
Total Organic Carbon T0158-07(ADEL)			21/02/2020
Total Organic Carbon	1	37.0 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			19/02/2020
Alkalinity as Calcium Carbonate		213 mg/L	
Bicarbonate		260 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
pH T0010-01(ADEL)			19/02/2020
pH		7.9 pH units	
Temperature at which pH is measured		22.7 °C	
Turbidity T0018-01(ADEL)			19/02/2020
Turbidity	0.1	16 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Suspended Solids T0160-01(ADEL)			03/03/2020
Suspended Solids	1.0	42 mg/L	
Total Dissolved Solids by Evaporation T015-05(ADEL)			24/02/2020
Total Dissolved Solids (by evaporation)	1	122000 mg/L	
Volatile Suspended Solids T0160-01(ADEL)			03/03/2020
Fixed Solids	1	2 mg/L	
Volatile Suspended Solids	1	40 mg/L	



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Analytical Results

Sampling Point	31515-EPA - Snipe Point
Sampled Date	18/02/2020 10:40:00AM
Sample Received Date	18/02/2020 4:04:22PM
Sample Analysis Completed	4/03/2020 11:58:17AM
Sample ID	2020-001-3731
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA

Chlorophyll a & Phaeophytin a T0380-02(ADEL) 19/02/2020

Chlorophyll a	0.1	67.9 µg/L
Phaeophytin a	0.1	11.3 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA

Ammonia as N TMZ-M45(ADEL) 02/03/2020

# Ammonia as N	1	61 µg/L
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Chloride T0104-02(ADEL) 20/02/2020

Chloride	4.0	47700 mg/L
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Nitrate + Nitrite as N TMZ-M44(ADEL) 26/02/2020

# Nitrate + Nitrite as N	0.5	1.6 µg/L
# Nitrate + Nitrite as NO ₃	2.3	7.09 µg/L
# Nitrate as Nitrogen		0.345 µg/L

Nitrite as N TMZ-M43(ADEL) 26/02/2020

# Nitrite as N	0.5	1.3 µg/L
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Nitrogen - Total TMZ-M06(ADEL) 18/02/2020

Nitrogen - Total		6.57 mg/L
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Phosphorus - Filterable Reactive as P TMZ-M42(ADEL) 02/03/2020

# Phosphorus - Filterable Reactive as PO ₄	1.5	7.176 µg/L
Phosphorus-Filterable Reactive as P	0.5	2.4 µg/L

Phosphorus - Total T0109-44(ADEL) 19/02/2020

Phosphorus - Total	0.005	0.282 mg/L
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Silica - Reactive T0111-01(ADEL) 20/02/2020

Silica - Reactive	0.05	4.28 mg/L
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TKN as N T0112-01(ADEL) 19/02/2020

TKN as Nitrogen	0.05	6.57 mg/L
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Organic Chemistry	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA



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Analytical Results

Sampling Point	31515-EPA - Snipe Point
Sampled Date	18/02/2020 10:40:00AM
Sample Received Date	18/02/2020 4:04:22PM
Sample Analysis Completed	4/03/2020 11:58:17AM
Sample ID	2020-001-3731
Status	Endorsed
Collection Type	Customer Collected

Dissolved Organic Carbon T0158-07(ADEL)			21/02/2020
Dissolved Organic Carbon	1	25.7 mg/L	
Total Organic Carbon T0158-07(ADEL)			21/02/2020
Total Organic Carbon	1	36.7 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			19/02/2020
Alkalinity as Calcium Carbonate		213 mg/L	
Bicarbonate		260 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
pH T0010-01(ADEL)			19/02/2020
pH		7.9 pH units	
Temperature at which pH is measured		22.7 °C	
Turbidity T0018-01(ADEL)			19/02/2020
Turbidity	0.1	19 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Suspended Solids T0160-01(ADEL)			03/03/2020
Suspended Solids	1.0	38 mg/L	
Total Dissolved Solids by Evaporation T015-05(ADEL)			24/02/2020
Total Dissolved Solids (by evaporation)	1	126000 mg/L	
Volatile Suspended Solids T0160-01(ADEL)			03/03/2020
Fixed Solids	1	2 mg/L	
Volatile Suspended Solids	1	36 mg/L	



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Analytical Results

Sampling Point	31516-EPA - Seagull Island
Sampled Date	18/02/2020 10:55:00AM
Sample Received Date	18/02/2020 4:04:30PM
Sample Analysis Completed	4/03/2020 11:58:17AM
Sample ID	2020-001-3733
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA

Chlorophyll a & Phaeophytin a T0380-02(ADEL) 19/02/2020

Chlorophyll a	0.1	72.4 µg/L
Phaeophytin a	0.1	10.4 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA

Ammonia as N TMZ-M45(ADEL) 02/03/2020

# Ammonia as N	1	58 µg/L
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Chloride T0104-02(ADEL) 20/02/2020

Chloride	4.0	59800 mg/L
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Nitrate + Nitrite as N TMZ-M44(ADEL) 26/02/2020

# Nitrate + Nitrite as N	0.5	1.6 µg/L
# Nitrate + Nitrite as NO ₃	2.3	7.09 µg/L
# Nitrate as Nitrogen		0.038 µg/L

Nitrite as N TMZ-M43(ADEL) 26/02/2020

# Nitrite as N	0.5	1.6 µg/L
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Nitrogen - Total TMZ-M06(ADEL) 18/02/2020

Nitrogen - Total		5.97 mg/L
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Phosphorus - Filterable Reactive as P TMZ-M42(ADEL) 02/03/2020

# Phosphorus - Filterable Reactive as PO ₄	1.5	10.764 µg/L
Phosphorus-Filterable Reactive as P	0.5	3.6 µg/L

Phosphorus - Total T0109-44(ADEL) 19/02/2020

Phosphorus - Total	0.005	0.239 mg/L
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Silica - Reactive T0111-01(ADEL) 20/02/2020

Silica - Reactive	0.05	3.88 mg/L
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TKN as N T0112-01(ADEL) 19/02/2020

TKN as Nitrogen	0.05	5.97 mg/L
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Organic Chemistry	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA



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Analytical Results

Sampling Point	31516-EPA - Seagull Island
Sampled Date	18/02/2020 10:55:00AM
Sample Received Date	18/02/2020 4:04:30PM
Sample Analysis Completed	4/03/2020 11:58:17AM
Sample ID	2020-001-3733
Status	Endorsed
Collection Type	Customer Collected

Dissolved Organic Carbon T0158-07(ADEL)			21/02/2020
Dissolved Organic Carbon	1	26.2 mg/L	
Total Organic Carbon T0158-07(ADEL)			21/02/2020
Total Organic Carbon	1	36.9 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			19/02/2020
Alkalinity as Calcium Carbonate		212 mg/L	
Bicarbonate		258 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
pH T0010-01(ADEL)			19/02/2020
pH		8.0 pH units	
Temperature at which pH is measured		22.7 °C	
Turbidity T0018-01(ADEL)			19/02/2020
Turbidity	0.1	15 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Suspended Solids T0160-01(ADEL)			03/03/2020
Suspended Solids	1.0	40 mg/L	
Total Dissolved Solids by Evaporation T015-05(ADEL)			24/02/2020
Total Dissolved Solids (by evaporation)	1	123000 mg/L	
Volatile Suspended Solids T0160-01(ADEL)			03/03/2020
Fixed Solids	1	50 mg/L	
Volatile Suspended Solids	1	<1 mg/L	



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Analytical Results

Sampling Point	31526-EPA - Nth Jack Point
Sampled Date	18/02/2020 11:15:00AM
Sample Received Date	18/02/2020 4:05:23PM
Sample Analysis Completed	4/03/2020 11:58:17AM
Sample ID	2020-001-3728
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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<i>Sample temperature at time of receipt NA</i>			
Chlorophyll a & Phaeophytin a T0380-02(ADEL)			19/02/2020
Chlorophyll a	0.1	57.4 µg/L	
Phaeophytin a	0.1	8.42 µg/L	

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
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<i>Sample temperature at time of receipt NA</i>			
Ammonia as N TMZ-M45(ADEL)			02/03/2020
# Ammonia as N	1	49 µg/L	
Chloride T0104-02(ADEL)			20/02/2020
Chloride	4.0	51200 mg/L	
Nitrate + Nitrite as N TMZ-M44(ADEL)			26/02/2020
# Nitrate + Nitrite as N	0.5	1.1 µg/L	
# Nitrate + Nitrite as NO ₃	2.3	4.87 µg/L	
# Nitrate as Nitrogen		0.800 µg/L	
Nitrite as N TMZ-M43(ADEL)			26/02/2020
# Nitrite as N	0.5	<0.5 µg/L	
Nitrogen - Total TMZ-M06(ADEL)			18/02/2020
Nitrogen - Total		6.55 mg/L	
Phosphorus - Filterable Reactive as P TMZ-M42(ADEL)			02/03/2020
# Phosphorus -Filterable Reactive as PO ₄	1.5	7.475 µg/L	
Phosphorus-Filterable Reactive as P	0.5	2.5 µg/L	
Phosphorus - Total T0109-44(ADEL)			19/02/2020
Phosphorus - Total	0.005	0.270 mg/L	
Silica - Reactive T0111-01(ADEL)			20/02/2020
Silica - Reactive	0.05	2.00 mg/L	
TKN as N T0112-01(ADEL)			19/02/2020
TKN as Nitrogen	0.05	6.55 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA



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Analytical Results

Sampling Point	31526-EPA - Nth Jack Point
Sampled Date	18/02/2020 11:15:00AM
Sample Received Date	18/02/2020 4:05:23PM
Sample Analysis Completed	4/03/2020 11:58:17AM
Sample ID	2020-001-3728
Status	Endorsed
Collection Type	Customer Collected

Dissolved Organic Carbon T0158-07(ADEL)			21/02/2020
Dissolved Organic Carbon	1	25.3 mg/L	
Total Organic Carbon T0158-07(ADEL)			21/02/2020
Total Organic Carbon	1	36.6 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			19/02/2020
Alkalinity as Calcium Carbonate		200 mg/L	
Bicarbonate		244 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
pH T0010-01(ADEL)			19/02/2020
pH		7.9 pH units	
Temperature at which pH is measured		22.7 °C	
Turbidity T0018-01(ADEL)			19/02/2020
Turbidity	0.1	17 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Suspended Solids T0160-01(ADEL)			03/03/2020
Suspended Solids	1.0	40 mg/L	
Total Dissolved Solids by Evaporation T015-05(ADEL)			24/02/2020
Total Dissolved Solids (by evaporation)	1	121000 mg/L	
Volatile Suspended Solids T0160-01(ADEL)			03/03/2020
Fixed Solids	1	40 mg/L	
Volatile Suspended Solids	1	<1 mg/L	



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Analytical Results

Sampling Point	31514-EPA - Stoney Well
Sampled Date	18/02/2020 11:30:00AM
Sample Received Date	18/02/2020 4:04:15PM
Sample Analysis Completed	4/03/2020 11:58:17AM
Sample ID	2020-001-3735
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA

Chlorophyll a & Phaeophytin a T0380-02(ADEL) 19/02/2020

Chlorophyll a	0.1	49.3 µg/L
Phaeophytin a	0.1	6.29 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA

Ammonia as N TMZ-M45(ADEL) 02/03/2020

# Ammonia as N	1	42 µg/L
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Chloride T0104-02(ADEL) 20/02/2020

Chloride	4.0	49600 mg/L
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Nitrate + Nitrite as N TMZ-M44(ADEL) 26/02/2020

# Nitrate + Nitrite as N	0.5	<0.5 µg/L
# Nitrate + Nitrite as NO ₃	2.3	<2.3 µg/L
# Nitrate as Nitrogen		0.072 µg/L

Nitrite as N TMZ-M43(ADEL) 26/02/2020

# Nitrite as N	0.5	<0.5 µg/L
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Nitrogen - Total TMZ-M06(ADEL) 18/02/2020

Nitrogen - Total		3.77 mg/L
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Phosphorus - Filterable Reactive as P TMZ-M42(ADEL) 02/03/2020

# Phosphorus - Filterable Reactive as PO ₄	1.5	7.774 µg/L
Phosphorus-Filterable Reactive as P	0.5	2.6 µg/L

Phosphorus - Total T0109-44(ADEL) 19/02/2020

Phosphorus - Total	0.005	0.254 mg/L
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Silica - Reactive T0111-01(ADEL) 20/02/2020

Silica - Reactive	0.05	0.30 mg/L
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TKN as N T0112-01(ADEL) 19/02/2020

TKN as Nitrogen	0.05	3.77 mg/L
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Organic Chemistry	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA



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Analytical Results

Sampling Point	31514-EPA - Stoney Well
Sampled Date	18/02/2020 11:30:00AM
Sample Received Date	18/02/2020 4:04:15PM
Sample Analysis Completed	4/03/2020 11:58:17AM
Sample ID	2020-001-3735
Status	Endorsed
Collection Type	Customer Collected

Dissolved Organic Carbon T0158-07(ADEL)			21/02/2020
Dissolved Organic Carbon	1	24.9 mg/L	
Total Organic Carbon T0158-07(ADEL)			21/02/2020
Total Organic Carbon	1	35.8 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			19/02/2020
Alkalinity as Calcium Carbonate		201 mg/L	
Bicarbonate		246 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			19/02/2020
Conductivity	2	128000 µS/cm	
Total Dissolved Solids (by EC)	1	120000 mg/L	
pH T0010-01(ADEL)			19/02/2020
pH		8.0 pH units	
Temperature at which pH is measured		22.7 °C	
Turbidity T0018-01(ADEL)			19/02/2020
Turbidity	0.1	15 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Suspended Solids T0160-01(ADEL)			03/03/2020
Suspended Solids	1.0	34 mg/L	
Total Dissolved Solids by Evaporation T015-05(ADEL)			24/02/2020
Total Dissolved Solids (by evaporation)	1	117000 mg/L	
Volatile Suspended Solids T0160-01(ADEL)			03/03/2020
Fixed Solids	1	2 mg/L	
Volatile Suspended Solids	1	32 mg/L	



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Analytical Results

Sampling Point	31525-EPA - Villa de Yumpa
Sampled Date	18/02/2020 11:50:00AM
Sample Received Date	18/02/2020 4:05:14PM
Sample Analysis Completed	4/03/2020 11:58:17AM
Sample ID	2020-001-3725
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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<i>Sample temperature at time of receipt NA</i>			
Chlorophyll a & Phaeophytin a T0380-02(ADEL)			19/02/2020
Chlorophyll a	0.1	55.8 µg/L	
Phaeophytin a	0.1	10.5 µg/L	

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
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<i>Sample temperature at time of receipt NA</i>			
Ammonia as N TMZ-M45(ADEL)			02/03/2020
# Ammonia as N	1	74 µg/L	
Chloride T0104-02(ADEL)			20/02/2020
Chloride	4.0	58000 mg/L	
Nitrate + Nitrite as N TMZ-M44(ADEL)			26/02/2020
# Nitrate + Nitrite as N	0.5	3.4 µg/L	
# Nitrate + Nitrite as NO ₃	2.3	15.1 µg/L	
# Nitrate as Nitrogen		0.046 µg/L	
Nitrite as N TMZ-M43(ADEL)			26/02/2020
# Nitrite as N	0.5	3.4 µg/L	
Nitrogen - Total TMZ-M06(ADEL)			18/02/2020
Nitrogen - Total		5.59 mg/L	
Phosphorus - Filterable Reactive as P TMZ-M42(ADEL)			02/03/2020
# Phosphorus -Filterable Reactive as PO ₄	1.5	19.435 µg/L	
Phosphorus-Filterable Reactive as P	0.5	6.5 µg/L	
Phosphorus - Total T0109-44(ADEL)			27/02/2020
Phosphorus - Total	0.005	0.188 mg/L	
Silica - Reactive T0111-01(ADEL)			20/02/2020
Silica - Reactive	0.05	0.64 mg/L	
TKN as N T0112-01(ADEL)			27/02/2020
TKN as Nitrogen	0.05	5.59 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA



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Analytical Results

Sampling Point	31525-EPA - Villa de Yumpa
Sampled Date	18/02/2020 11:50:00AM
Sample Received Date	18/02/2020 4:05:14PM
Sample Analysis Completed	4/03/2020 11:58:17AM
Sample ID	2020-001-3725
Status	Endorsed
Collection Type	Customer Collected

Dissolved Organic Carbon T0158-07(ADEL)			21/02/2020
Dissolved Organic Carbon	1	26.8 mg/L	
Total Organic Carbon T0158-07(ADEL)			21/02/2020
Total Organic Carbon	1	37.8 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			19/02/2020
Alkalinity as Calcium Carbonate		193 mg/L	
Bicarbonate		235 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
pH T0010-01(ADEL)			19/02/2020
pH		7.9 pH units	
Temperature at which pH is measured		22.7 °C	
Turbidity T0018-01(ADEL)			19/02/2020
Turbidity	0.1	39 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Suspended Solids T0160-01(ADEL)			03/03/2020
Suspended Solids	1.0	72 mg/L	
Total Dissolved Solids by Evaporation T015-05(ADEL)			24/02/2020
Total Dissolved Solids (by evaporation)	1	125000 mg/L	
Volatile Suspended Solids T0160-01(ADEL)			03/03/2020
Fixed Solids	1	28 mg/L	
Volatile Suspended Solids	1	44 mg/L	



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AWQC Signatories

Dzung Bui - Supervisor Metals and Physical
Ivana Cech - Technical Officer Chemistry
Thuy Diep - Technical Officer Chemistry
David Evans - Technical Officer Chemistry
Andrew Ford - Technical Officer Chemistry
Kerrie Jooste - Supervisor Nutrients and Waste
Aji John - Technical Officer Chemistry
Dean Newman - Algal Specialist
Melissa Phillips - Technical Officer Chemistry
Gayle Polley - Snr Technical Officer
Kamilla Springer - Senior Technical Officer



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Analytical Method

Analytical Method Code	Description	Reference Method
T0010-01	Determination of pH	AP4500HB
T0016-01	Determination of Conductivity - Corrected to 25C	AP2510B
T0018-01	Turbidity - Nephelometric Measurement	APAWWA-WEF
T0101-01	Alkalinity - Automated Acidimetric Titration	AP2320B
T0104-02	Chloride - Discrete Analyser	AP4500CLE
T0109-44	Phosphorous -total Kjeldahl for seawater by automated flow colorimetry	AP4500PF
T0111-01	Silica by automated fow colorimetry	AP4500SI02
T0112-01	Nitrogen- Total Kjeldahl by discrete analyser	AP4500NORGA
T015-05	Total Dissolved Solids by Evaporation	AP2540C
T0158-07	Total and Dissolved Organic Carbon (OI Analytical)	SM5310C
T0160-01	Suspended Solids 103C to 105C	AP2540DE
T0160-01	Suspended Solids 103C to 105C	AP4500
T0380-02	Chlorophyll a & b and phaeophytin	ISO10260
TMZ-M06	Derived Results and Data Checks	AP4500NORGA
TMZ-M42	Filterable Reactive Phosphorus - Trace Seawater	
TMZ-M43	Nitrite - Trace Seawater	
TMZ-M44	Nitrate + Nitrite (NOx) - Trace Seawater	
TMZ-M45	Ammonia - Trace Seawater	

Laboratory Information

Laboratory	NATA accreditation ID
Inorganic Chemistry - Physical	1115
Inorganic Chemistry - Waste Water	1115
Inorganic Chemistry - Nutrients	1115
Organic Chemistry	1115
Biology Operations	1115



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Notes

1. The last figure of the result value is a significant figure.
2. # determination of the component is not covered by NATA Accreditation.
3. ^ indicates result is out of specification according to the reference guideline. Refer to report footer.
4. * indicates an incident has been recorded against the sample. Refer to report footer.
5. & Indicates the results have changed since the last issued report.
6. The Limit of Reporting (LOR) is the lowest concentration of analyte which is reported at the AWQC and is based on the LOQ rounded up to a more readily used value. The Limit of Quantitation (LOQ) is the lowest concentration of analyte for which quantitative results may be obtained within a specified degree of confidence.
7. Where collection type is AWQC Collect, NATA has confirmed that due to a robust system in place for maintaining the temperature integrity for samples collected by AWQC's Field Laboratory Services, the recording of temperature when samples arrive at the AWQC is out of scope.
8. Where applicable the [Measurement of Uncertainty](https://www.awqc.com.au/our-services/analytical-services/measurement-uncertainty) is available at <https://www.awqc.com.au/our-services/analytical-services/measurement-uncertainty>.
9. If pH has been tested then the pH will be outside of its holding time unless measured in the field.
10. (ADEL) indicates analysed in Adelaide, (MELB) indicates analysed in Melbourne.