

## **QUALITY CONTROL REPORT**

**Work Order** : **EM2207234** Page : 1 of 8

Client : Dept for Environment & Water Laboratory : Environmental Division Melbourne

Contact : STEPHEN MADIGAN Contact : Kieren Burns

Address : GPO BOX 2834 Address : 4 Westall Rd Springvale VIC Australia 3171

 Telephone
 : --- Telephone
 : +61881625130

 Project
 : HCHB
 Date Samples Received
 : 22-Apr-2022

Project: HCHBDate Samples Received: 22-Apr-2022Order number: ----Date Analysis Commenced: 22-Apr-2022C-O-C number: ----Issue Date: 02-May-2022

Sampler : RD

Site : ---Quote number : AD/052/20 V2

No. of samples analysed : 22

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

This Quality Control Report contains the following information:

: 22

Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits

ADELAIDE SA. AUSTRALIA 5001

- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

### **Signatories**

No. of samples received

not be reproduced, except in full.

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
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC
Samantha Smith	Assistant Laboratory Manager	WRG Subcontracting, Springvale, VIC

Page : 2 of 8
Work Order : EM2207234

Client : Dept for Environment & Water

Project : HCHE



#### **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.

Key: Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot

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

RPD = Relative Percentage Difference

# = Indicates failed QC

## Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

EM02207234-010   Murray Mouth   EK055G-SW: Ammonia as N by Discrete Analyser in Saline Water (QC Lot: 4303604)	Sub-Matrix: WATER			Laboratory Duplicate (DUP) Report							
EM2207234-001 Murray Mouth EK055G-SW: Ammonia as N 7664-41-7 0.02 mg/L 0.07 0.06 0.0 No Limit EM2207234-010 Villa de Yumpa EK055G-SW: Ammonia as N 7664-41-7 0.02 mg/L <0.02 <0.02 0.0 No Limit EK055G-SW: Ammonia as N by Discrete Analyser in Saline Water (QC Lot: 4303605)  EK0520734-021 Tilley Swamp Drain U/S Morella  EM207134-021 Tilley Swamp Drain U/S Morella  EA015H: Total Dissolved Solids dried at 180 ± 5 °C (QC Lot: 4302458)  EM2207149-008 Anonymous EA015H: Total Dissolved Solids @180°C — 10 mg/L 6110 6160 0.9 0% - 20% EM2207195-004 Anonymous EA015H: Total Dissolved Solids @180°C — 10 mg/L 268 267 0.6 0% - 20% EM2207234-003 DS Tauwitchere EA015H: Total Dissolved Solids @180°C — 10 mg/L 268 267 0.6 0% - 20% EA0207234-001 Anonymous EA015H: Total Dissolved Solids @180°C — 10 mg/L 268 267 0.6 0% - 20% EA015H: Total Dissolved Solids @180°C — 10 mg/L 268 267 0.6 0% - 20% EA0207234-015 Snipe Point EA015H: Total Dissolved Solids @180°C — 10 mg/L 225 227 0.6 0% - 20% EM2207234-015 Snipe Point EA015H: Total Dissolved Solids @180°C — 10 mg/L 128000 116000 10.2 0% - 20% EM2207285-006 Anonymous EA015H: Total Dissolved Solids @180°C — 10 mg/L 4180 4270 2.1 0% - 20% EM2207285-006 Anonymous EA015H: Total Dissolved Solids @180°C — 10 mg/L 4920 5170 5.0 0% - 20% EM2207255-002 Anonymous EA015H: Total Dissolved Solids @180°C — 10 mg/L 4920 5170 5.0 0% - 20% EA025* Turbidity (QC Lot: 430044)  EM2207255-002 Anonymous EA015H: Total Dissolved Solids @180°C — 10 mg/L 4920 5170 5.0 0% - 20% EA025* Turbidity (QC Lot: 4300465)  EM2207234-000 Parka Point EA045: Turbidity — 0.1 NTU 12.7 12.6 0.8 0% - 20% EA025* Turbidity (QC Lot: 4304348)	Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)	
EM2207234-010 Villa de Yumpa EK055G-SW: Ammonia as N 7664-41-7 0.02 mg/L <0.02 <0.02 0.0 No Limit EK055G-SW: Ammonia as N by Discrete Analyser in Saline Water (QC Lot: 4303606)  EM2207234-021 Tilley Swamp Drain U/S Morella  EA015: Total Dissolved Solids dried at 180 ± 5 °C (QC Lot: 4302458)  EM2207149-008 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 31200 32100 2.7 0% - 20% EM2207234-003 DS Tauwitchere EA015H: Total Dissolved Solids @180°C 10 mg/L 268 267 0.6 0% - 20% EM2207234-001 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 225 227 0.6 0% - 20% EM2207234-015 Snipe Point EA015H: Total Dissolved Solids @180°C 10 mg/L 225 227 0.6 0% - 20% EM2207234-015 Snipe Point EA015H: Total Dissolved Solids @180°C 10 mg/L 225 227 0.6 0% - 20% EM2207234-003 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 268 267 0.6 0% - 20% EM2207234-015 Snipe Point EA015H: Total Dissolved Solids @180°C 10 mg/L 225 227 0.6 0% - 20% EM2207234-003 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 28000 116000 10.2 0% - 20% EM2207234-015 Snipe Point EA015H: Total Dissolved Solids @180°C 10 mg/L 9060 9100 0.5 0% - 20% EM2207249-003 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 9060 9100 0.5 0% - 20% EM2207249-003 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4920 5170 5.0 0% - 20% EM2207249-001 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4920 5170 5.0 0% - 20% EM2207234-002 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4920 5170 5.0 0% - 20% EA025* Turbidity (OC Lot: 4300464)  EM2207234-002 Anonymous EA045: Turbidity 0.1 NTU 0.2 0.2 0.2 0.0 No Limit EM2207234-009 Paraka Point EA045: Turbidity 0.1 NTU 12.7 12.6 0.8 0% - 20% EA025* Turbidity (OC Lot: 430464)  EM2207234-009 Paraka Point EA045: Turbidity 0.1 NTU 12.7 12.6 0.8 0% - 20% EA025* Turbidity (OC Lot: 4304464)  EM2207234-009 Paraka Point EA045: Turbidity 0.1 NTU 29.6 29.4 0.7 0% - 20% EA025* Turbidity (OC Lot: 4304485)	EK055G-SW: Ammo	nia as N by Discrete Analyse	er in Saline Water (QC Lot: 4303604)								
EK055G-SW: Ammonia as N by Discrete Analyser in Saline Water (QC Lot: 4303606)  EM2207234-021 Tilley Swamp Drain U/S	EM2207234-001	Murray Mouth	EK055G-SW: Ammonia as N	7664-41-7	0.02	mg/L	0.07	0.06	0.0	No Limit	
EM2207234-021 Tilley Swamp Drain U/S Morella  EA015: Total Dissolved Solids dried at 180 ± 5 °C (QC Lot: 4302458)  EM2207149-008 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 6110 6160 0.9 0% - 20% EM2207234-003 DS Tauwitchere EA015H: Total Dissolved Solids @180°C 10 mg/L 258 267 0.6 0% - 20% EM2207234-001 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 225 227 0.6 0% - 20% EM2207234-003 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 225 227 0.6 0% - 20% EM2207234-015 Snipe Point EA015H: Total Dissolved Solids @180°C 10 mg/L 225 227 0.6 0% - 20% EM2207245-003 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 2000 116000 10.2 0% - 20% EM2207245-003 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 9060 9100 0.5 0% - 20% EM2207245-003 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 9060 9100 0.5 0% - 20% EM2207245-006 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4180 4270 2.1 0% - 20% EM2207245-001 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4920 5170 5.0 0% - 20% EM2207245-002 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4920 5170 5.0 0% - 20% EA025T turbidity (QC Lot: 430464)  EM2207234-009 Parrika Point EA045: Turbidity 0.1 NTU 0.2 0.2 0.0 No Limit EM2207234-009 Parrika Point EA045: Turbidity 0.1 NTU 12.7 12.6 0.8 0% - 20% EA045: Turbidity (QC Lot: 4304368)  ED037P: Alkalinity by PC Titrator (QC Lot: 4304348)	EM2207234-010	Villa de Yumpa	EK055G-SW: Ammonia as N	7664-41-7	0.02	mg/L	<0.02	<0.02	0.0	No Limit	
EA015: Total Dissolved Solids dried at 180 ± 5 °C (QC Lot: 4302458)   EM2207195-004   Anonymous   EA015H: Total Dissolved Solids @180°C   10   mg/L   6110   6160   0.9   0% - 20%   610207195-004   Anonymous   EA015H: Total Dissolved Solids @180°C   10   mg/L   31200   32100   2.7   0% - 20%   610207195-004   Anonymous   EA015H: Total Dissolved Solids @180°C   10   mg/L   268   267   0.6   0% - 20%   610207028-001   Anonymous   EA015H: Total Dissolved Solids @180°C   10   mg/L   225   227   0.6   0% - 20%   610207028-001   Anonymous   EA015H: Total Dissolved Solids @180°C   10   mg/L   225   227   0.6   0% - 20%   610207234-015   Snipe Point   EA015H: Total Dissolved Solids @180°C   10   mg/L   128000   116000   10.2   0% - 20%   610207234-015   Snipe Point   EA015H: Total Dissolved Solids @180°C   10   mg/L   9060   9100   0.5   0% - 20%   610207234-003   Anonymous   EA015H: Total Dissolved Solids @180°C   10   mg/L   4180   4270   2.1   0% - 20%   610207180-001   Anonymous   EA015H: Total Dissolved Solids @180°C   10   mg/L   4180   4270   2.1   0% - 20%   610207180-001   Anonymous   EA015H: Total Dissolved Solids @180°C   10   mg/L   4180   4270   2.1   0% - 20%   610207180-001   Anonymous   EA015H: Total Dissolved Solids @180°C   10   mg/L   4190   5170   5.0   0% - 20%   610207180-001   Anonymous   EA045: Turbidity   0.1   NTU   0.2   0.2   0.0   No Limit   610207235-002   Anonymous   EA045: Turbidity   0.1   NTU   12.7   12.6   0.8   0% - 20%   610207234-009   Parika Point   EA045: Turbidity   0.1   NTU   29.6   29.4   0.7   0% - 20%   610207234-000   20.2   20.0	EK055G-SW: Ammonia as N by Discrete Analyser in Saline Water (QC Lot: 4303606)										
EM2207149-008	EM2207234-021	'	EK055G-SW: Ammonia as N	7664-41-7	0.02	mg/L	0.36	0.34	3.2	0% - 50%	
EM2207195-004 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 268 267 0.6 0% - 20% EM2207028-001 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 225 227 0.6 0% - 20% EM2207028-001 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 225 227 0.6 0% - 20% EM2207234-015 Snipe Point EA015H: Total Dissolved Solids @180°C 10 mg/L 128000 116000 10.2 0% - 20% EM2207246-003 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 9060 9100 0.5 0% - 20% EM2207285-006 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4180 4270 2.1 0% - 20% EM2207180-001 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4180 4270 2.1 0% - 20% EM2207180-001 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4920 5170 5.0 0% - 20% EA045: Turbidity (QC Lot: 4300464)  EM2207225-002 Anonymous EA045: Turbidity 0.1 NTU 0.2 0.2 0.0 No Limit EA045: Turbidity (QC Lot: 4300465)  EM2207234-020 3.2km south of Salt Creek (and)  EA045: Turbidity (QC Lot: 4300465)  EM2207234-020 3.2km south of Salt Creek (and)  EA045: Turbidity by C Titrator (QC Lot: 4304348)	EA015: Total Dissolv	ved Solids dried at 180 ± 5 °C	QC Lot: 4302458)								
EM2207234-003 DS Tauwitchere EA015H: Total Dissolved Solids @180°C 10 mg/L 268 267 0.6 0% - 20% EM2207028-001 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 225 227 0.6 0% - 20% EM2207234-015 Snipe Point EA015H: Total Dissolved Solids @180°C 10 mg/L 128000 116000 10.2 0% - 20% EM2207246-003 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 9060 9100 0.5 0% - 20% EM2207285-006 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4180 4270 2.1 0% - 20% EM2207180-001 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4480 4270 2.1 0% - 20% EM2207180-001 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4920 5170 5.0 0% - 20% EM2207180-001 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4920 5170 5.0 0% - 20% EM2207180-001 Anonymous EA045: Turbidity (QC Lot: 4300464) EM2207225-002 Anonymous EA045: Turbidity 0.1 NTU 0.2 0.2 0.2 0.0 No Limit EM2207234-009 Parnka Point EA045: Turbidity 0.1 NTU 12.7 12.6 0.8 0% - 20% EA045: Turbidity (QC Lot: 4300465) EM2207234-000 3.2km south of Salt Creek (land)  ED037P: Alkalinity by PC Titrator (QC Lot: 4304348)	EM2207149-008	Anonymous	EA015H: Total Dissolved Solids @180°C		10	mg/L	6110	6160	0.9	0% - 20%	
EM2207028-001 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 225 227 0.6 0% - 20% EA015: Total Dissolved Solids dried at 180 ± 5 °C (QC Lot: 4305214)  EM2207234-015 Snipe Point EA015H: Total Dissolved Solids @180°C 10 mg/L 128000 116000 10.2 0% - 20% EM2207246-003 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 9060 9100 0.5 0% - 20% EM2207285-006 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4180 4270 2.1 0% - 20% EM2207180-001 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4920 5170 5.0 0% - 20% EM2207180-001 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4920 5170 5.0 0% - 20% EM2207180-001 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4920 5170 5.0 0% - 20% EM2207225-002 Anonymous EA045: Turbidity 0.1 NTU 0.2 0.2 0.2 0.0 No Limit EM2207234-009 Parnka Point EA045: Turbidity 0.1 NTU 12.7 12.6 0.8 0% - 20% EA045: Turbidity (QC Lot: 4300465)  EM2207234-020 3.2km south of Salt Creek (land)  EM2207234-020 3.2km south of Salt Creek (land)  ED037P: Alkalinity by PC Titrator (QC Lot: 4304348)	EM2207195-004	Anonymous	EA015H: Total Dissolved Solids @180°C		10	mg/L	31200	32100	2.7	0% - 20%	
EA015: Total Dissolved Solids dried at 180 ± 5 °C (QC Lot: 4305214)  EM2207234-015 Snipe Point EA015H: Total Dissolved Solids @180°C	EM2207234-003	DS Tauwitchere	EA015H: Total Dissolved Solids @180°C		10	mg/L	268	267	0.6	0% - 20%	
EM2207234-015 Snipe Point EA015H: Total Dissolved Solids @180°C 10 mg/L 128000 116000 10.2 0% - 20% EM2207246-003 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 9060 9100 0.5 0% - 20% EM2207285-006 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4180 4270 2.1 0% - 20% EM2207180-001 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4920 5170 5.0 0% - 20% EM2207180-001 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4920 5170 5.0 0% - 20% EM2207225-002 Anonymous EA045: Turbidity 0.1 NTU 0.2 0.2 0.2 0.0 No Limit EM2207234-009 Parnka Point EA045: Turbidity 0.1 NTU 12.7 12.6 0.8 0% - 20% EM2207234-009 Banka Point EA045: Turbidity 0.1 NTU 12.7 12.6 0.8 0% - 20% EM2207234-020 3.2km south of Salt Creek (land)  EM2207234-020 3.2km south of Salt Creek (land)  ED037P: Alkalinity by PC Titrator (QC Lot: 4304348)	EM2207028-001	Anonymous	EA015H: Total Dissolved Solids @180°C		10	mg/L	225	227	0.6	0% - 20%	
EM2207246-003 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 9060 9100 0.5 0% - 20% EM2207285-006 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4180 4270 2.1 0% - 20% EM2207180-001 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4920 5170 5.0 0% - 20% EA045: Turbidity (QC Lot: 4300464)  EM2207225-002 Anonymous EA045: Turbidity 0.1 NTU 0.2 0.2 0.0 No Limit EM2207234-009 Parnka Point EA045: Turbidity 0.1 NTU 12.7 12.6 0.8 0% - 20% EA045: Turbidity (QC Lot: 4300465)  EM2207234-020 3.2km south of Salt Creek EA045: Turbidity 0.1 NTU 29.6 29.4 0.7 0% - 20% (land)  ED037P: Alkalinity by PC Titrator (QC Lot: 4304348)	EA015: Total Dissolv	ved Solids dried at 180 ± 5 °C	C (QC Lot: 4305214)								
EM2207285-006 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4180 4270 2.1 0% - 20% EM2207180-001 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4920 5170 5.0 0% - 20% EA045: Turbidity (QC Lot: 4300464)  EM2207225-002 Anonymous EA045: Turbidity 0.1 NTU 0.2 0.2 0.0 No Limit EM2207234-009 Parnka Point EA045: Turbidity 0.1 NTU 12.7 12.6 0.8 0% - 20% EA045: Turbidity (QC Lot: 4300465)  EM2207234-020 3.2km south of Salt Creek (land)  EM2207234-020 Tirbidity (QC Lot: 4304348)	EM2207234-015	Snipe Point	EA015H: Total Dissolved Solids @180°C		10	mg/L	128000	116000	10.2	0% - 20%	
EM2207180-001 Anonymous EA015H: Total Dissolved Solids @180°C 10 mg/L 4920 5170 5.0 0% - 20%  EA045: Turbidity (QC Lot: 4300464)  EM2207225-002 Anonymous EA045: Turbidity 0.1 NTU 0.2 0.2 0.0 No Limit EM2207234-009 Parnka Point EA045: Turbidity 0.1 NTU 12.7 12.6 0.8 0% - 20%  EA045: Turbidity (QC Lot: 4300465)  EM2207234-020 3.2km south of Salt Creek (land) (land)  ED037P: Alkalinity by PC Titrator (QC Lot: 4304348)	EM2207246-003	Anonymous	EA015H: Total Dissolved Solids @180°C		10	mg/L	9060	9100	0.5	0% - 20%	
EA045: Turbidity (QC Lot: 4300464)  EM2207225-002 Anonymous EA045: Turbidity 0.1 NTU 0.2 0.2 0.0 No Limit EM2207234-009 Parnka Point EA045: Turbidity 0.1 NTU 12.7 12.6 0.8 0% - 20% EA045: Turbidity (QC Lot: 4300465)  EM2207234-020 3.2km south of Salt Creek (land) EA045: Turbidity 0.1 NTU 29.6 29.4 0.7 0% - 20% ED037P: Alkalinity by PC Titrator (QC Lot: 4304348)	EM2207285-006	Anonymous	EA015H: Total Dissolved Solids @180°C		10	mg/L	4180	4270	2.1	0% - 20%	
EM2207225-002         Anonymous         EA045: Turbidity	EM2207180-001	Anonymous	EA015H: Total Dissolved Solids @180°C		10	mg/L	4920	5170	5.0	0% - 20%	
EM2207234-009 Parnka Point EA045: Turbidity ————————————————————————————————————	EA045: Turbidity (Q	C Lot: 4300464)									
EA045: Turbidity (QC Lot: 4300465)  EM2207234-020 3.2km south of Salt Creek (land)  ED037P: Alkalinity by PC Titrator (QC Lot: 4304348)	EM2207225-002	Anonymous	EA045: Turbidity		0.1	NTU	0.2	0.2	0.0	No Limit	
EM2207234-020 3.2km south of Salt Creek [EA045: Turbidity] 0.1 NTU 29.6 29.4 0.7 0% - 20% (land)  ED037P: Alkalinity by PC Titrator (QC Lot: 4304348)	EM2207234-009	Parnka Point	EA045: Turbidity		0.1	NTU	12.7	12.6	8.0	0% - 20%	
(land)  ED037P: Alkalinity by PC Titrator (QC Lot: 4304348)	EA045: Turbidity (Q	C Lot: 4300465)									
	EM2207234-020		EA045: Turbidity		0.1	NTU	29.6	29.4	0.7	0% - 20%	
EM2207050-020 Anonymous ED037-P: Hydroxide Alkalinity as CaCO3 DMO-210-001 1 mg/L <1 <1 0.0 No Limit	ED037P: Alkalinity b	y PC Titrator (QC Lot: 4304	348)								
	EM2207050-020	Anonymous	ED037-P: Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	0.0	No Limit	

Page : 3 of 8
Work Order : EM2207234

Client : Dept for Environment & Water



Laboratory sample   D   Member   Compound	Sub-Matrix: WATER									
EB0297195-020	Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
ED037-P. BicActionate Askalinity as CaCO3	ED037P: Alkalinity b	by PC Titrator (QC Lot: 4304	348) - continued							
EM2207195-014 Anonymous	EM2207050-020	Anonymous	ED037-P: Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	0.0	No Limit
E0037P   Anonymous   E0037P   Anonymous   E0037P   Anonymous   E0037P   Anonymous   E0037P   Cathonate Alkalinity as CaCO3   3812-32.6   1 mg/L 41 41 41 0.0   No. Limit   E0037P   Education Alkalinity as CaCO3   71-62-3   1 mg/L 829   829   0.0   05x-20%   E0037P   Cathonate Alkalinity as CaCO3   The Cathonate Alka			ED037-P: Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	1	<1	0.0	No Limit
ED037.P: Carbonate Alkalinity as CaCO3			ED037-P: Total Alkalinity as CaCO3		1	mg/L	1	<1	0.0	No Limit
ED037P. Bicarbonate Alkalinity as CaCO3	EM2207195-014	Anonymous	ED037-P: Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	0.0	No Limit
ED037P. Rikalinily by PC Titrator (QC Lot: 4304352)   EM2207234-007   Bonneys   ED037-P: Hydroxide Alkalimity as CaCO3   DMO-210-001   1 mg/L   -1   -1   0.0   No Limit   ED037-P: Carbonate Alkalimity as CaCO3   3812-326   1 mg/L   -1   -1   0.0   No Limit   ED037-P: Carbonate Alkalimity as CaCO3   71-52-3   1 mg/L   132   133   0.0   0% - 20%   ED037-P: Total Alkalimity as CaCO3   T1-52-3   1 mg/L   132   133   0.0   0% - 20%   ED037-P: Total Alkalimity as CaCO3   DMO-210-001   1 mg/L   112   133   0.0   0% - 20%   ED037-P: Total Alkalimity as CaCO3   DMO-210-001   1 mg/L   117   122   3.6   0% - 20%   ED037-P: Carbonate Alkalimity as CaCO3   3812-32-6   1 mg/L   117   122   3.6   0% - 20%   ED037-P: Carbonate Alkalimity as CaCO3   71-52-3   1 mg/L   202   288   1.3   0% - 20%   ED037-P: Carbonate Alkalimity as CaCO3   71-52-3   1 mg/L   202   288   1.3   0% - 20%   ED037-P: Carbonate Alkalimity as CaCO3   71-52-3   1 mg/L   202   288   1.3   0% - 20%   ED037-P: Carbonate Alkalimity as CaCO3   71-52-3   1 mg/L   202   288   1.3   0% - 20%   ED037-P: Carbonate Alkalimity as CaCO3   71-52-3   1 mg/L   202   288   1.3   0% - 20%   ED037-P: Carbonate Alkalimity as CaCO3   71-52-3   1 mg/L   202   288   1.3   0% - 20%   ED037-P: Carbonate Alkalimity as CaCO3   71-52-3   1 mg/L   202   288   1.3   0% - 20%   ED037-P: Carbonate Alkalimity as CaCO3   71-52-3   1 mg/L   202   202   203   0.0   0% - 20%   ED037-P: Carbonate Alkalimity as CaCO3   71-52-3   1 mg/L   200   2500   0.5   0% - 20%   ED037-P: Carbonate Alkalimity as CaCO3   71-52-3   1 mg/L   2500   2500   0.5   0% - 20%   ED037-P: Carbonate Alkalimity as CaCO3   71-52-3   1 mg/L   2500   2500   0.5   0% - 20%   ED037-P: Carbonate Alkalimity as CaCO3   71-52-3   1 mg/L   200   2500   0.5   0% - 20%   ED037-P: Carbonate Alkalimity as CaCO3   71-52-3   1 mg/L   200   2500   0.5   0% - 20%   ED037-P: Carbonate Alkalimity as CaCO3   200			ED037-P: Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	0.0	No Limit
EM2207234-007 Bonneys			ED037-P: Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	829	829	0.0	0% - 20%
EM2207234-007   Benneys			ED037-P: Total Alkalinity as CaCO3		1	mg/L	829	829	0.0	0% - 20%
ED037-P: Carbonate Alkalinity as CaCO3	ED037P: Alkalinity b	by PC Titrator (QC Lot: 4304	352)							
ED037-P: Ricarbonate Akalinity as CaCO3	EM2207234-007	Bonneys	ED037-P: Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	0.0	No Limit
EM2207234-017 Morella Creek @ gauge			ED037-P: Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	0.0	No Limit
EM2207234-017   Morella Creek @ gauge   ED037-P: Hydroxide Alkalinity as CaCO3   DMO-210-001   1   mg/L   11   12   3.8   0.8   2.90			ED037-P: Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	132	133	0.0	0% - 20%
ED037-P: Carbonate Alkalinify as CaCO3   3812-32.6   1   mg/L   117   122   3.6   0% - 20%			ED037-P: Total Alkalinity as CaCO3		1	mg/L	132	133	0.0	0% - 20%
ED037-P. Bicarbonate Alkalinity as CaCO3	EM2207234-017	Morella Creek @ gauge	ED037-P: Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	0.0	No Limit
ED045G: Chloride by Discrete Analyser (QC Lot: 4300286)   ED045G: Chloride y Discrete Analyser (QC Lot: 4300286)   EM2207234-001   Murray Mouth   ED045G: Chloride   16887-00-6   1 mg/L   25300   25500   0.6   0%-20%   EM2207234-001   Murray Mouth   ED045G: Chloride   16887-00-6   1 mg/L   25300   25500   0.6   0%-20%   EM2207234-001   Murray Mouth   ED045G: Chloride   16887-00-6   1 mg/L   2670   2660   0.5   0%-20%   ED045G: Chloride y Discrete Analyser (QC Lot: 4300280)   EM2207234-001   Murray Mouth   EC052G: Reactive Silica			ED037-P: Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	117	122	3.6	0% - 20%
ED045G: Chloride by Discrete Analyser (QC Lot: 4300286)			ED037-P: Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	292	288	1.3	0% - 20%
EM2207234-009   Parmka Point   ED045G: Chloride   16887-00-6   1 mg/L   25300   25500   0.6   0% - 20%   EM2207234-010   Murray Mouth   ED045G: Chloride   16887-00-6   1 mg/L   4100   4110   0.4   0% - 20%   ED045G: Chloride by Discrete Analyser (QC Lot: 4300290)			ED037-P: Total Alkalinity as CaCO3		1	mg/L	410	410	0.0	0% - 20%
EM2207234-001   Murray Mouth   ED045G: Chloride   16887-00-6   1 mg/L   4100   4110   0.4   0%-20%	ED045G: Chloride by	y Discrete Analyser (QC Lot	: 4300286)							
ED045G: Chloride by Discrete Analyser (QC Lot: 4300290)  EM2207234-021 Tilley Swamp Drain U/S Morella  EG052G: Silica by Discrete Analyser (QC Lot: 4300285)  EM2207234-011 Tilley Swamp Drain D/S Nth Outlet  EM2207234-011 Tilley Swamp Drain D/S Nth Outlet  EM2207234-011 Tilley Swamp Drain U/S EG052G: Reactive Silica 0.05 mg/L 12.8 12.7 0.3 0% - 20%  EM2207234-010 Murray Mouth EG052G: Reactive Silica 0.05 mg/L 2.04 2.02 1.0 0% - 20%  EM2207234-021 Tilley Swamp Drain U/S EG052G: Reactive Silica 0.05 mg/L 12.0 12.1 0.3 0% - 20%  EM2207234-021 Tilley Swamp Drain U/S EG052G: Reactive Silica 0.05 mg/L 12.0 12.1 0.3 0% - 20%  EM2207234-010 Villa de Yumpa EK057G: Nitrite as N 14797-65-0 0.01 mg/L < 0.01 < 0.01 0.0 No Limit exception of the Control of the	EM2207234-009	Parnka Point	ED045G: Chloride	16887-00-6	1	mg/L	25300	25500	0.6	0% - 20%
EM2207234-021   Tilley Swamp Drain U/S Morella   ED045G: Chloride   16887-00-6   1   mg/L   2670   2660   0.5   0% - 20%	EM2207234-001	Murray Mouth	ED045G: Chloride	16887-00-6	1	mg/L	4100	4110	0.4	0% - 20%
Morella   More	ED045G: Chloride by	y Discrete Analyser (QC Lot	: 4300290)							
EM2207234-011 Tilley Swamp Drain D/S Nth Outlet	EM2207234-021	Tilley Swamp Drain U/S	ED045G: Chloride	16887-00-6	1	mg/L	2670	2660	0.5	0% - 20%
EM2207234-011   Tilley Swamp Drain D/S Nth Outlet		Morella								
Coutlet   Cout	EG052G: Silica by D	Discrete Analyser (QC Lot: 4	300285)							
Murray Mouth   EG052G: Reactive Silica     0.05   mg/L   2.04   2.02   1.0   0% - 20%					0.05	mg/L	12.8	12.7	0.3	0% - 20%
EG052G: Silica by Discrete Analyser (QC Lot: 4300289)  EM2207234-021 Tilley Swamp Drain U/S Morella  EK057G: Nitrite as N by Discrete Analyser (QC Lot: 4300284)  EM2207234-010 Villa de Yumpa EK057G: Nitrite as N 14797-65-0 0.01 mg/L <0.01 <0.01 0.0 No Limit exception of the Norella  EK057G: Nitrite as N by Discrete Analyser (QC Lot: 4300284)  EM2207234-001 Murray Mouth EK057G: Nitrite as N 14797-65-0 0.01 mg/L <0.01 <0.01 0.0 No Limit exception of the Norella  EK057G: Nitrite as N by Discrete Analyser (QC Lot: 4300288)  EM2207234-021 Tilley Swamp Drain U/S Morella  EK057G: Nitrite as N (NOx) by Discrete Analyser (QC Lot: 4303603)  EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QC Lot: 4303603)  EM2207234-001 Murray Mouth EK059G: Nitrite + Nitrate as N 0.01 mg/L 0.07 0.09 25.7 No Limit exception of the Norella except		'								
EM2207234-021 Tilley Swamp Drain U/S Morella EM052G: Reactive Silica	EM2207234-001	Murray Mouth	EG052G: Reactive Silica		0.05	mg/L	2.04	2.02	1.0	0% - 20%
EK057G: Nitrite as N by Discrete Analyser (QC Lot: 4300284)   EM2207234-010   Villa de Yumpa   EK057G: Nitrite as N   14797-65-0   0.01   mg/L   <0.01   <0.01   0.0   No Limit	EG052G: Silica by D	Discrete Analyser (QC Lot: 4	300289)							
Morella   More	EM2207234-021	Tilley Swamp Drain U/S	EG052G: Reactive Silica		0.05	mg/L	12.0	12.1	0.3	0% - 20%
EM2207234-010         Villa de Yumpa         EK057G: Nitrite as N         14797-65-0         0.01         mg/L         <0.01         <0.01         0.0         No Limit           EM2207234-001         Murray Mouth         EK057G: Nitrite as N         14797-65-0         0.01         mg/L         <0.01		'								
EM2207234-001         Murray Mouth         EK057G: Nitrite as N by Discrete Analyser (QC Lot: 4300288)           EM2207234-021         Tilley Swamp Drain U/S Morella         EK057G: Nitrite as N (NOx) by Discrete Analyser (QC Lot: 4303603)           EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QC Lot: 4303603)           EM2207234-001         Murray Mouth         EK059G: Nitrite + Nitrate as N          0.01         mg/L         0.07         0.09         25.7         No Limit           EM2207234-010         Villa de Yumpa         EK059G: Nitrite + Nitrate as N          0.01         mg/L         0.01         0.09         25.7         No Limit	EK057G: Nitrite as I	N by Discrete Analyser (QC	Lot: 4300284)							
EM2207234-001         Murray Mouth         EK057G: Nitrite as N by Discrete Analyser (QC Lot: 4300288)           EM2207234-021         Tilley Swamp Drain U/S Morella         EK057G: Nitrite as N (NOx) by Discrete Analyser (QC Lot: 430603)           EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QC Lot: 4303603)           EM2207234-001         Murray Mouth         EK059G: Nitrite + Nitrate as N          0.01         mg/L         0.07         0.09         25.7         No Limit           EM2207234-010         Villa de Yumpa         EK059G: Nitrite + Nitrate as N          0.01         mg/L         0.01         0.09         25.7         No Limit	EM2207234-010	Villa de Yumpa	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	0.0	No Limit
EK057G: Nitrite as N by Discrete Analyser (QC Lot: 4300288)  EM2207234-021 Tilley Swamp Drain U/S Morella EK057G: Nitrite as N 14797-65-0 0.01 mg/L <0.01 <0.01 0.0 No Limit 0.00 No Lim	EM2207234-001	Murray Mouth		14797-65-0	0.01	-	<0.01	<0.01	0.0	No Limit
EM2207234-021         Tilley Swamp Drain U/S Morella         EK057G: Nitrite as N         14797-65-0         0.01         mg/L         <0.01         <0.01         0.0         No Limit           EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QC Lot: 4303603)         8         0.01         0.01         0.07         0.09         25.7         No Limit           EM2207234-010         Villa de Yumpa         EK059G: Nitrite + Nitrate as N         0.01         mg/L         <0.01	EK057G: Nitrite as I	N by Discrete Analyser (QC								
Morella   More				14797-65-0	0.01	ma/L	<0.01	<0.01	0.0	No Limit
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QC Lot: 4303603)           EM2207234-001         Murray Mouth         EK059G: Nitrite + Nitrate as N         0.01         mg/L         0.07         0.09         25.7         No Limit           EM2207234-010         Villa de Yumpa         EK059G: Nitrite + Nitrate as N         0.01         mg/L         <0.01		'	EROOF O. INIURO GO IN				3.0.		0	
EM2207234-001         Murray Mouth         EK059G: Nitrite + Nitrate as N          0.01         mg/L         0.07         0.09         25.7         No Limit           EM2207234-010         Villa de Yumpa         EK059G: Nitrite + Nitrate as N          0.01         mg/L         <0.01	EK059G: Nitrite plu		rete Analyser (QC Lot: 4303603)							
EM2207234-010 Villa de Yumpa EK059G: Nitrite + Nitrate as N 0.01 mg/L <0.01 <0.01 0.0 No Limit					0.01	ma/l	0.07	0.09	25.7	No Limit
2. Company of the contract of	1 1 11	•				-	1 1			-
					0.01	mg/L	.0.01	.0.01	0.0	110 Ellin

Page : 4 of 8
Work Order : EM2207234

Client : Dept for Environment & Water



Sub-Matrix: WATER				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EK059G: Nitrite plus	s Nitrate as N (NOx) by Disc	crete Analyser (QC Lot: 4303605) - continued							
EM2207234-021	Tilley Swamp Drain U/S	EK059G: Nitrite + Nitrate as N		0.01	mg/L	<0.01	<0.01	0.0	No Limit
	Morella								
EK061G: Total Kjeld	ahl Nitrogen By Discrete An	alyser (QC Lot: 4301067)							
EM2207206-001	Anonymous	EK061G: Total Kjeldahl Nitrogen as N		0.1	mg/L	4.7	3.2	37.2	No Limit
EM2207206-010	Anonymous	EK061G: Total Kjeldahl Nitrogen as N		0.1	mg/L	1.8	2.0	9.4	No Limit
EK061G: Total Kjeld	ahl Nitrogen By Discrete An	alyser (QC Lot: 4301070)							
EM2207234-003	DS Tauwitchere	EK061G: Total Kjeldahl Nitrogen as N		0.1	mg/L	1.2	1.3	0.0	0% - 50%
EM2207234-012	Stoney Well	EK061G: Total Kjeldahl Nitrogen as N		0.1	mg/L	1.2	1.4	13.2	0% - 50%
EK067G: Total Phos	phorus as P by Discrete An	alyser (QC Lot: 4301068)							
EM2207206-001	Anonymous	EK067G: Total Phosphorus as P		0.01	mg/L	0.09	<0.05	54.3	No Limit
EM2207206-010	Anonymous	EK067G: Total Phosphorus as P		0.01	mg/L	0.21	0.13	47.8	No Limit
EK067G: Total Phos	phorus as P by Discrete An	alyser (QC Lot: 4301069)							
EM2207234-003	DS Tauwitchere	EK067G: Total Phosphorus as P		0.01	mg/L	0.08	0.09	0.0	No Limit
EM2207234-012	Stoney Well	EK067G: Total Phosphorus as P		0.01	mg/L	0.08	0.09	15.9	No Limit
EK071G: Reactive P	hosphorus as P by discrete	analyser (QC Lot: 4300287)							
EM2207234-010	Villa de Yumpa	EK071G: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	<0.01	0.0	No Limit
EM2207234-001	Murray Mouth	EK071G: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	<0.01	0.0	No Limit
EK071G: Reactive P	hosphorus as P by discrete	analyser (QC Lot: 4300291)							
EM2207234-021	Tilley Swamp Drain U/S	EK071G: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	<0.01	0.0	No Limit
	Morella								
EP002: Dissolved Or	rganic Carbon (DOC) (QC L	ot: 4306634)							
EM2207234-001	Murray Mouth	EP002: Dissolved Organic Carbon		1	mg/L	10	10	0.0	No Limit
EP002: Dissolved Or	rganic Carbon (DOC) (QC L	ot: 4308787)							
EM2207234-008	McGrath Flat North	EP002: Dissolved Organic Carbon		1	mg/L	21	21	0.0	0% - 20%
EM2207234-017	Morella Creek @ gauge	EP002: Dissolved Organic Carbon		1	mg/L	18	19	0.0	0% - 50%
EP005: Total Organi	c Carbon (TOC) (QC Lot: 43	06633)							
EM2207146-003	Anonymous	EP005: Total Organic Carbon		1	mg/L	12	12	0.0	0% - 50%
EM2207225-003	Anonymous	EP005: Total Organic Carbon		1	mg/L	5	<1	135	No Limit
EP005: Total Organi	c Carbon (TOC) (QC Lot: 43	08788)							
EM2207234-008	McGrath Flat North	EP005: Total Organic Carbon		1	mg/L	22	23	0.0	0% - 20%
EM2207234-017	Morella Creek @ gauge	EP005: Total Organic Carbon		1	mg/L	18	18	0.0	0% - 50%
	-								-

Page : 5 of 8
Work Order : EM2207234

Client : Dept for Environment & Water

Project : HCHB



# Method Blank (MB) and Laboratory Control Sample (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: WATER			Method Blank (MB)	Laboratory Control Spike (LCS) Report					
				Report	Spike	Spike Recovery (%)	Acceptable	Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High	
:K055G-SW: Ammonia as N by Discrete Analyser in Saline W	ater (QCLot: 4	1303604)							
EK055G-SW: Ammonia as N	7664-41-7	0.02	mg/L	<0.02	0.5 mg/L	97.5	81.1	124	
K055G-SW: Ammonia as N by Discrete Analyser in Saline W	ater (QCLot: 4	1303606)							
EK055G-SW: Ammonia as N	7664-41-7	0.02	mg/L	<0.02	0.5 mg/L	85.2	81.1	124	
EA015: Total Dissolved Solids dried at 180 ± 5 °C (QCLot: 430	02458)								
EA015H: Total Dissolved Solids @180°C		10	mg/L	<10	2000 mg/L	102	91.0	110	
				<10	2460 mg/L	100	81.7	118	
				<10	293 mg/L	104	91.0	110	
A015: Total Dissolved Solids dried at 180 ± 5 °C (QCLot: 430	05214)								
A015H: Total Dissolved Solids @180°C		10	mg/L	<10	2000 mg/L	102	91.0	110	
				<10	2460 mg/L	105	81.7	118	
				<10	293 mg/L	109	91.0	110	
EA045: Turbidity (QCLot: 4300464)									
A045: Turbidity		0.1	NTU	<0.1	40 NTU	104	88.1	110	
:A045: Turbidity (QCLot: 4300465)									
EA045: Turbidity		0.1	NTU	<0.1	40 NTU	104	88.1	110	
ED037P: Alkalinity by PC Titrator (QCLot: 4304348)									
ED037-P: Total Alkalinity as CaCO3			mg/L		200 mg/L	104	85.0	116	
ED037P: Alkalinity by PC Titrator (QCLot: 4304352)									
ED037-P: Total Alkalinity as CaCO3			mg/L		200 mg/L	105	85.0	116	
ED045G: Chloride by Discrete Analyser (QCLot: 4300286)									
	16887-00-6	1	mg/L	<1	10 mg/L	101	85.0	115	
				<1	1000 mg/L	96.8	85.0	122	
ED045G: Chloride by Discrete Analyser (QCLot: 4300290)									
	16887-00-6	1	mg/L	<1	10 mg/L	96.6	85.0	115	
				<1	1000 mg/L	96.2	85.0	122	
EG052G: Silica by Discrete Analyser (QCLot: 4300285)									
EG052G: Reactive Silica		0.05	mg/L	<0.05	5 mg/L	100	78.9	118	
EG052G: Silica by Discrete Analyser (QCLot: 4300289)					-				
G052G: Reactive Silica		0.05	mg/L	<0.05	5 mg/L	101	78.9	118	
EK057G: Nitrite as N by Discrete Analyser (QCLot: 4300284)			- V						
	14797-65-0	0.01	mg/L	<0.01	0.5 mg/L	105	90.9	112	
interior of that to do it	7. 22 2		···•						
EK057G: Nitrite as N by Discrete Analyser (QCLot: 4300288)	14797-65-0	0.01	mg/L	<0.01	0.5 mg/L	97.1	90.9	112	
ENUOTO. MILITE AS IN	17131-03-0	0.01	IIIg/L	~U.U1	0.5 mg/L	97.1	30.3	112	

Page : 6 of 8
Work Order : EM2207234

Client : Dept for Environment & Water

Project : HCHI



Sub-Matrix: WATER			Method Blank (MB)	Laboratory Control Spike (LCS) Report					
			Report	Spike	Spike Recovery (%)	Acceptable	Limits (%)		
Method: Compound CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High		
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 430	3603)								
EK059G: Nitrite + Nitrate as N	0.01	mg/L	<0.01	0.5 mg/L	114	90.0	117		
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 430	3605)								
EK059G: Nitrite + Nitrate as N	0.01	mg/L	<0.01	0.5 mg/L	114	90.0	117		
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QCLot: 4301067)									
EK061G: Total Kjeldahl Nitrogen as N	0.1	mg/L	<0.1	5 mg/L	92.7	70.0	117		
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QCLot: 4301070)									
EK061G: Total Kjeldahl Nitrogen as N	0.1	mg/L	<0.1	5 mg/L	82.3	70.0	117		
EK067G: Total Phosphorus as P by Discrete Analyser (QCLot: 4301068)									
EK067G: Total Phosphorus as P	0.01	mg/L	<0.01	2.21 mg/L	89.6	71.9	114		
EK067G: Total Phosphorus as P by Discrete Analyser (QCLot: 4301069)									
EK067G: Total Phosphorus as P	0.01	mg/L	<0.01	2.21 mg/L	90.4	71.9	114		
EK071G: Reactive Phosphorus as P by discrete analyser (QCLot: 4300287	)								
EK071G: Reactive Phosphorus as P 14265-44-2	0.01	mg/L	<0.01	0.5 mg/L	106	92.7	119		
EK071G: Reactive Phosphorus as P by discrete analyser (QCLot: 4300291	)								
EK071G: Reactive Phosphorus as P 14265-44-2	0.01	mg/L	<0.01	0.5 mg/L	106	92.7	119		
EP002: Dissolved Organic Carbon (DOC) (QCLot: 4306634)									
EP002: Dissolved Organic Carbon	1	mg/L	<1	100 mg/L	91.1	83.0	115		
EP002: Dissolved Organic Carbon (DOC) (QCLot: 4308787)									
EP002: Dissolved Organic Carbon	1	mg/L	<1	100 mg/L	92.7	83.0	115		
EP005: Total Organic Carbon (TOC) (QCLot: 4306633)									
EP005: Total Organic Carbon	1	mg/L	<1	100 mg/L	92.5	81.2	110		
EP005: Total Organic Carbon (TOC) (QCLot: 4308788)									
EP005: Total Organic Carbon	1	mg/L	<1	100 mg/L	91.9	81.2	110		
EP008: Chlorophyll (QCLot: 4307813)									
EP008B: Chlorophyll b	1	mg/m³	<1						
EP008: Chlorophyll (QCLot: 4307814)									
EP008B: Chlorophyll b	1	mg/m³	<1						
EP008: Chlorophyll (QCLot: 4307815)									
EP008: Chlorophyll a	1	mg/m³	<1	20 mg/m³	102	70.0	130		
EP008: Chlorophyll (QCLot: 4307816)									
EP008: Chlorophyll a	1	mg/m³	<1	20 mg/m³	104	70.0	130		

# Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Page : 7 of 8
Work Order : EM2207234

Client : Dept for Environment & Water



Sub-Matrix: WATER				Ma	atrix Spike (MS) Report		
				Spike	SpikeRecovery(%)	Acceptable Li	imits (%)
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EK055G-SW: Amm	onia as N by Discrete Analyser in Saline Water (QCLot:	4303604)					
EM2207234-002	US Tauwitchere	EK055G-SW: Ammonia as N	7664-41-7	0.5 mg/L	119	70.0	130
EK055G-SW: Amm	onia as N by Discrete Analyser in Saline Water (QCLot:	4303606)					
EM2207234-022	Tilley Swamp Drain Watercourse Outlet	EK055G-SW: Ammonia as N	7664-41-7	0.5 mg/L	123	70.0	130
ED045G: Chloride	by Discrete Analyser (QCLot: 4300286)						
EM2207234-002	US Tauwitchere	ED045G: Chloride	16887-00-6	400 mg/L	104	70.0	142
ED045G: Chloride	by Discrete Analyser (QCLot: 4300290)						
EM2207234-022	Tilley Swamp Drain Watercourse Outlet	ED045G: Chloride	16887-00-6	400 mg/L	# Not Determined	70.0	142
EG052G: Silica by	Discrete Analyser (QCLot: 4300285)						
EM2207234-002	US Tauwitchere	EG052G: Reactive Silica		5 mg/L	99.2	80.0	120
EG052G: Silica by	Discrete Analyser (QCLot: 4300289)						
EM2207234-022	Tilley Swamp Drain Watercourse Outlet	EG052G: Reactive Silica		5 mg/L	101	80.0	120
EK057G: Nitrite as	S N by Discrete Analyser (QCLot: 4300284)						
EM2207234-002	US Tauwitchere	EK057G: Nitrite as N	14797-65-0	0.5 mg/L	91.4	80.0	114
EK057G: Nitrite as	S N by Discrete Analyser (QCLot: 4300288)						
EM2207234-022	Tilley Swamp Drain Watercourse Outlet	EK057G: Nitrite as N	14797-65-0	0.5 mg/L	81.8	80.0	114
EK059G: Nitrite p	us Nitrate as N (NOx) by Discrete Analyser (QCLot: 430	3603)					
EM2207234-002	US Tauwitchere	EK059G: Nitrite + Nitrate as N		0.5 mg/L	95.1	70.0	130
EK059G: Nitrite p	us Nitrate as N (NOx) by Discrete Analyser (QCLot: 430	3605)					
EM2207234-022	Tilley Swamp Drain Watercourse Outlet	EK059G: Nitrite + Nitrate as N		0.5 mg/L	96.5	70.0	130
EK061G: Total Kje	Idahl Nitrogen By Discrete Analyser (QCLot: 4301067)						
EM2207206-002	Anonymous	EK061G: Total Kjeldahl Nitrogen as N		5 mg/L	# 43.3	70.0	130
EK061G: Total Kje	Idahl Nitrogen By Discrete Analyser (QCLot: 4301070)						
EM2207234-004	Mark Point	EK061G: Total Kjeldahl Nitrogen as N		5 mg/L	93.3	70.0	130
EK067G: Total Pho	osphorus as P by Discrete Analyser (QCLot: 4301068)						
EM2207206-002	Anonymous	EK067G: Total Phosphorus as P		1 mg/L	104	70.0	130
EK067G: Total Pho	osphorus as P by Discrete Analyser (QCLot: 4301069)						
EM2207234-004	Mark Point	EK067G: Total Phosphorus as P		1 mg/L	76.5	70.0	130
EK071G: Reactive	Phosphorus as P by discrete analyser (QCLot: 4300287	)					
EM2207234-002	US Tauwitchere	EK071G: Reactive Phosphorus as P	14265-44-2	0.5 mg/L	92.0	79.0	123
EK071G: Reactive	Phosphorus as P by discrete analyser (QCLot: 4300291	·					
EM2207234-022	Tilley Swamp Drain Watercourse Outlet	EK071G: Reactive Phosphorus as P	14265-44-2	0.5 mg/L	91.6	79.0	123
	Organic Carbon (DOC) (QCLot: 4306634)						

Page : 8 of 8 Work Order : EM2207234

Client : Dept for Environment & Water



Sub-Matrix: WATER	ub-Matrix: WATER					Matrix Spike (MS) Report				
				Spike	SpikeRecovery(%)	Acceptable L	imits (%)			
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High			
EP002: Dissolved	Organic Carbon (DOC) (QCLot: 4306634) - continued									
EM2207234-002	US Tauwitchere	EP002: Dissolved Organic Carbon		500 mg/L	116	75.0	117			
EP002: Dissolved	Organic Carbon (DOC) (QCLot: 4308787)									
EM2207234-009	Parnka Point	EP002: Dissolved Organic Carbon		100 mg/L	113	75.0	117			
EP005: Total Orga	nic Carbon (TOC) (QCLot: 4306633)									
EM2207147-001	Anonymous	EP005: Total Organic Carbon		100 mg/L	107	76.6	125			
EP005: Total Organic Carbon (TOC) (QCLot: 4308788)										
EM2207234-009	Parnka Point	EP005: Total Organic Carbon		100 mg/L	102	76.6	125			