

Wentworth Shire Council
26-28 Adelaide St
Wentworth
NSW 2648



NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
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Arrangement for the mutual recognition of the
equivalence of testing, medical testing, calibration,
inspection, proficiency testing scheme providers and
reference materials producers reports and certificates.

Attention: **Don McKinnon**

Report **812384-W**
Project name **BURONGA LANDFILL**
Received Date **Jul 23, 2021**

Client Sample ID			BH2	BH3	BH4	STORMWATER DAM
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S21-JI42717	S21-JI42718	S21-JI42719	S21-JI42720
Date Sampled			Jul 21, 2021	Jul 21, 2021	Jul 21, 2021	Jul 21, 2021
Test/Reference	LOR	Unit				
BTEX						
Benzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenols (Halogenated)						
2-Chlorophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2,4-Dichlorophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2,4,5-Trichlorophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
2,4,6-Trichlorophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
2,6-Dichlorophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
4-Chloro-3-methylphenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
Pentachlorophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
Tetrachlorophenols - Total	0.03	mg/L	< 0.03	< 0.03	< 0.03	< 0.03
Total Halogenated Phenol*	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
Phenols (non-Halogenated)						
2-Cyclohexyl-4,6-dinitrophenol	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
2-Methyl-4,6-dinitrophenol	0.03	mg/L	< 0.03	< 0.03	< 0.03	< 0.03
2-Nitrophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dimethylphenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2,4-Dinitrophenol	0.03	mg/L	< 0.03	< 0.03	< 0.03	< 0.03
2-Methylphenol (o-Cresol)	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
3&4-Methylphenol (m&p-Cresol)	0.006	mg/L	< 0.006	< 0.006	< 0.006	< 0.006
Total cresols*	0.002	mg/L	^{G01} < 0.006	^{G01} < 0.006	^{G01} < 0.006	^{G01} < 0.006
4-Nitrophenol	0.03	mg/L	< 0.03	< 0.03	< 0.03	< 0.03
Dinoseb	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
Phenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
Phenol-d6 (surr.)	1	%	21	25	21	20
Total Non-Halogenated Phenol*	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
Ammonia (as N)						
Ammonia (as N)	0.01	mg/L	0.38	0.30	0.23	0.08
Chloride						
Chloride	1	mg/L	22000	18000	9200	88
Conductivity (at 25°C)						
Conductivity (at 25°C)	10	uS/cm	54000	46000	26000	890
Fluoride (Total)						
Fluoride (Total)	0.5	mg/L	0.9	< 0.5	1.0	0.9
Nitrate (as N)						
Nitrate (as N)	0.02	mg/L	0.06	< 0.02	1.3	0.43
Nitrite (as N)						
Nitrite (as N)	0.02	mg/L	< 0.02	< 0.02	0.04	< 0.02
pH (at 25 °C)						
pH (at 25 °C)	0.1	pH Units	6.8	5.9	7.2	8.3
Sulphate (as SO4)						
Sulphate (as SO4)	2	mg/L	3200	2400	1300	44
Total Organic Carbon						
Total Organic Carbon	5	mg/L	< 5	49	11	13

Client Sample ID			BH2	BH3	BH4	STORMWATER DAM
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S21-JI42717	S21-JI42718	S21-JI42719	S21-JI42720
Date Sampled			Jul 21, 2021	Jul 21, 2021	Jul 21, 2021	Jul 21, 2021
Test/Reference	LOR	Unit				
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO ₃)	20	mg/L	160	43	130	350
Carbonate Alkalinity (as CaCO ₃)	10	mg/L	< 10	< 10	< 10	22
Hydroxide Alkalinity (as CaCO ₃)	20	mg/L	< 20	< 20	< 20	< 20
Total Alkalinity (as CaCO ₃)	20	mg/L	160	43	130	370
Heavy Metals						
Arsenic	0.001	mg/L	0.033	0.11	0.047	0.010
Lead	0.001	mg/L	0.14	0.078	0.17	0.008
Manganese	0.005	mg/L	4.2	2.7	2.7	0.10
Alkali Metals						
Calcium	0.5	mg/L	410	320	180	22
Magnesium	0.5	mg/L	1500	1200	640	11
Potassium	0.5	mg/L	160	130	79	11
Sodium	0.5	mg/L	11000	9700	4700	160

Client Sample ID			LEACHATE DAM
Sample Matrix			Water
Eurofins Sample No.			S21-JI42721
Date Sampled			Jul 21, 2021
Test/Reference	LOR	Unit	
BTEX			
Benzene	0.001	mg/L	0.002
Phenols (Halogenated)			
2-Chlorophenol	0.003	mg/L	< 0.003
2,4-Dichlorophenol	0.003	mg/L	< 0.003
2,4,5-Trichlorophenol	0.01	mg/L	< 0.01
2,4,6-Trichlorophenol	0.01	mg/L	< 0.01
2,6-Dichlorophenol	0.003	mg/L	< 0.003
4-Chloro-3-methylphenol	0.01	mg/L	< 0.01
Pentachlorophenol	0.01	mg/L	< 0.01
Tetrachlorophenols - Total	0.03	mg/L	< 0.03
Total Halogenated Phenol*	0.01	mg/L	< 0.01
Phenols (non-Halogenated)			
2-Cyclohexyl-4,6-dinitrophenol	0.1	mg/L	< 0.1
2-Methyl-4,6-dinitrophenol	0.03	mg/L	< 0.03
2-Nitrophenol	0.01	mg/L	< 0.01
2,4-Dimethylphenol	0.003	mg/L	< 0.003
2,4-Dinitrophenol	0.03	mg/L	< 0.03
2-Methylphenol (o-Cresol)	0.003	mg/L	< 0.003
3&4-Methylphenol (m&p-Cresol)	0.006	mg/L	< 0.006
Total cresols*	0.002	mg/L	^{G01} < 0.006
4-Nitrophenol	0.03	mg/L	< 0.03
Dinoseb	0.1	mg/L	< 0.1
Phenol	0.003	mg/L	< 0.003
Phenol-d6 (surr.)	1	%	21
Total Non-Halogenated Phenol*	0.1	mg/L	< 0.1

Client Sample ID			LEACHATE DAM
Sample Matrix			Water
Eurofins Sample No.			S21-JI42721
Date Sampled			Jul 21, 2021
Test/Reference	LOR	Unit	
Ammonia (as N)			
	0.01	mg/L	21
Chloride			
	1	mg/L	360
Conductivity (at 25°C)			
	10	uS/cm	3000
Fluoride (Total)			
	0.5	mg/L	1.2
Nitrate (as N)			
	0.02	mg/L	< 0.02
Nitrite (as N)			
	0.02	mg/L	< 0.02
pH (at 25 °C)			
	0.1	pH Units	7.3
Sulphate (as SO4)			
	2	mg/L	< 2
Total Organic Carbon			
	5	mg/L	< 5
Alkalinity (speciated)			
Bicarbonate Alkalinity (as CaCO3)			
	20	mg/L	1500
Carbonate Alkalinity (as CaCO3)			
	10	mg/L	< 10
Hydroxide Alkalinity (as CaCO3)			
	20	mg/L	< 20
Total Alkalinity (as CaCO3)			
	20	mg/L	1500
Heavy Metals			
Arsenic			
	0.001	mg/L	0.014
Lead			
	0.001	mg/L	< 0.001
Manganese			
	0.005	mg/L	0.20
Alkali Metals			
Calcium			
	0.5	mg/L	140
Magnesium			
	0.5	mg/L	66
Potassium			
	0.5	mg/L	41
Sodium			
	0.5	mg/L	410

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
BTEX - Method: LTM-ORG-2010 TRH C6-C40	Sydney	Jul 23, 2021	14 Days
Ammonia (as N) - Method: APHA 4500-NH3 Ammonia Nitrogen by FIA	Melbourne	Jul 26, 2021	28 Days
Chloride - Method: LTM-INO-4090 Chloride by Discrete Analyser	Sydney	Jul 23, 2021	28 Days
Conductivity (at 25°C) - Method: LTM-INO-4030 Conductivity	Sydney	Jul 23, 2021	28 Days
Fluoride (Total) - Method: APHA 4500 F-C Fluoride by Ion Selective Electrode	Melbourne	Jul 26, 2021	28 Days
Nitrate (as N) - Method: LTM-INO-4120 Analysis of NOx NO2 NH3 by FIA	Melbourne	Jul 26, 2021	28 Days
Nitrite (as N) - Method: LTM-INO-4120 Analysis of NOx NO2 NH3 by FIA	Melbourne	Jul 26, 2021	2 Days
pH (at 25 °C) - Method: LTM-GEN-7090 pH in water by ISE	Sydney	Jul 23, 2021	1 Days
Sulphate (as SO4) - Method: E045 Anions by Ion Chromatography	Sydney	Jul 23, 2021	28 Days
Total Organic Carbon - Method: LTM-INO-4060 Total Organic Carbon in water and soil	Melbourne	Jul 26, 2021	28 Days
Alkalinity (speciated) - Method: LTM-INO-4250 Alkalinity by Electrometric Titration	Melbourne	Jul 26, 2021	14 Days
Heavy Metals - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Sydney	Jul 26, 2021	180 Days
Alkali Metals - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Sydney	Jul 26, 2021	180 Days
Phenols (Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Sydney	Jul 23, 2021	7 Days
Phenols (non-Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Sydney	Jul 23, 2021	7 Days

Australia
Melbourne
 6 Monterey Road
 Dandenong South VIC 3175
 Phone : +61 3 8564 5000
 NATA # 1261
 Site # 1254

Sydney
 Unit F3, Building F
 16 Mars Road
 Lane Cove West NSW 2066
 Phone : +61 2 9900 8400
 NATA # 1261 Site # 18217

Brisbane
 1/21 Smallwood Place
 Murarrie QLD 4172
 Phone : +61 7 3902 4600
 NATA # 1261 Site # 20794

Perth
 46-48 Banksia Road
 Welshpool WA 6106
 Phone : +61 8 9251 9600
 NATA # 1261
 Site # 23736

Newcastle
 4/52 Industrial Drive
 Mayfield East NSW 2304
 PO Box 60 Wickham 2293
 Phone : +61 2 4968 8448
 NATA # 1261 Site # 25079

New Zealand
Auckland
 35 O'Rorke Road
 Penrose, Auckland 1061
 Phone : +64 9 526 45 51
 IANZ # 1327

Christchurch
 43 Detroit Drive
 Rolleston, Christchurch 7675
 Phone : 0800 856 450
 IANZ # 1290

ABN: 50 005 085 521 web: www.eurofins.com.au email: EnviroSales@eurofins.com

Company Name:	Wentworth Shire Council	Order No.:		Received:	Jul 23, 2021 8:15 AM
Address:	26-28 Adelaide St Wentworth NSW 2648	Report #:	812384	Due:	Jul 30, 2021
Project Name:	BURONGA LANDFILL	Phone:	03 5027 5027	Priority:	5 Day
		Fax:	03 5027 5000	Contact Name:	Don McKinnon

Eurofins Analytical Services Manager : Andrew Black

Sample Detail						Ammonia (as N)	Arsenic	Benzene	Calcium	CANCELLED	Chloride	Conductivity (at 25°C)	Fluoride (Total)	Lead	Magnesium	Manganese	Nitrate (as N)	Nitrite (as N)	pH (at 25 °C)	Potassium	Sodium	Sulphate (as SO4)	Total Organic Carbon	Alkalinity (specified)	Phenols (Speciated)	
Melbourne Laboratory - NATA Site # 1254						X							X				X	X					X	X		
Sydney Laboratory - NATA Site # 18217							X	X	X	X	X	X		X	X	X			X	X	X	X				X
Brisbane Laboratory - NATA Site # 20794																										
Perth Laboratory - NATA Site # 23736																										
Mayfield Laboratory - NATA Site # 25079																										
External Laboratory																										
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID																					
1	BH2	Jul 21, 2021		Water	S21-JI42717	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
2	BH3	Jul 21, 2021		Water	S21-JI42718	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
3	BH4	Jul 21, 2021		Water	S21-JI42719	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
4	STORMWATER DAM	Jul 21, 2021		Water	S21-JI42720	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
5	LEACHATE DAM	Jul 21, 2021		Water	S21-JI42721	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
6	BH1	Jul 21, 2021		Water	S21-JI42722					X																
Test Counts						5	5	5	5	1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	

Internal Quality Control Review and Glossary
General

- Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
- All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
- SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- Samples were analysed on an 'as received' basis.
- Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
- This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

- Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
- Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
- Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
- pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
- Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
- Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
- For Matrix Spikes and LCS results a dash " - " in the report means that the specific analyte was not added to the QC sample.
- Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
BTEX							
Benzene	mg/L	< 0.001			0.001	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/L	< 0.003			0.003	Pass	
2.4-Dichlorophenol	mg/L	< 0.003			0.003	Pass	
2.4.5-Trichlorophenol	mg/L	< 0.01			0.01	Pass	
2.4.6-Trichlorophenol	mg/L	< 0.01			0.01	Pass	
2.6-Dichlorophenol	mg/L	< 0.003			0.003	Pass	
4-Chloro-3-methylphenol	mg/L	< 0.01			0.01	Pass	
Pentachlorophenol	mg/L	< 0.01			0.01	Pass	
Tetrachlorophenols - Total	mg/L	< 0.03			0.03	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/L	< 0.1			0.1	Pass	
2-Methyl-4.6-dinitrophenol	mg/L	< 0.03			0.03	Pass	
2-Nitrophenol	mg/L	< 0.01			0.01	Pass	
2.4-Dimethylphenol	mg/L	< 0.003			0.003	Pass	
2.4-Dinitrophenol	mg/L	< 0.03			0.03	Pass	
2-Methylphenol (o-Cresol)	mg/L	< 0.003			0.003	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/L	< 0.006			0.006	Pass	
4-Nitrophenol	mg/L	< 0.03			0.03	Pass	
Dinoseb	mg/L	< 0.1			0.1	Pass	
Phenol	mg/L	< 0.003			0.003	Pass	
Method Blank							
Ammonia (as N)	mg/L	< 0.01			0.01	Pass	
Chloride	mg/L	< 1			1	Pass	
Conductivity (at 25°C)	uS/cm	< 10			10	Pass	
Fluoride (Total)	mg/L	< 0.5			0.5	Pass	
Nitrate (as N)	mg/L	< 0.02			0.02	Pass	
Nitrite (as N)	mg/L	< 0.02			0.02	Pass	
Sulphate (as SO4)	mg/L	< 2			2	Pass	
Total Organic Carbon	mg/L	< 5			5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/L	< 0.001			0.001	Pass	
Lead	mg/L	< 0.001			0.001	Pass	
Manganese	mg/L	< 0.005			0.005	Pass	
Method Blank							
Alkali Metals							
Calcium	mg/L	< 0.5			0.5	Pass	
Magnesium	mg/L	< 0.5			0.5	Pass	
Potassium	mg/L	< 0.5			0.5	Pass	
Sodium	mg/L	< 0.5			0.5	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	98			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	71			30-130	Pass	
2.4-Dichlorophenol	%	100			30-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code	
2.4.5-Trichlorophenol	%	69			30-130	Pass		
2.4.6-Trichlorophenol	%	34			30-130	Pass		
2.6-Dichlorophenol	%	33			30-130	Pass		
4-Chloro-3-methylphenol	%	95			30-130	Pass		
Pentachlorophenol	%	108			30-130	Pass		
Tetrachlorophenols - Total	%	31			30-130	Pass		
LCS - % Recovery								
Phenols (non-Halogenated)								
2-Cyclohexyl-4.6-dinitrophenol	%	125			30-130	Pass		
2-Methyl-4.6-dinitrophenol	%	100			30-130	Pass		
2-Nitrophenol	%	113			30-130	Pass		
2.4-Dimethylphenol	%	92			30-130	Pass		
2.4-Dinitrophenol	%	70			30-130	Pass		
2-Methylphenol (o-Cresol)	%	65			30-130	Pass		
3&4-Methylphenol (m&p-Cresol)	%	55			30-130	Pass		
Dinoseb	%	85			30-130	Pass		
LCS - % Recovery								
Ammonia (as N)	%	94			70-130	Pass		
Chloride	%	91			70-130	Pass		
Conductivity (at 25°C)	%	83			70-130	Pass		
Nitrate (as N)	%	103			70-130	Pass		
Nitrite (as N)	%	105			70-130	Pass		
Sulphate (as SO4)	%	91			70-130	Pass		
Total Organic Carbon	%	79			70-130	Pass		
LCS - % Recovery								
Alkalinity (speciated)								
Carbonate Alkalinity (as CaCO3)	%	102			70-130	Pass		
Total Alkalinity (as CaCO3)	%	103			70-130	Pass		
LCS - % Recovery								
Heavy Metals								
Arsenic	%	96			80-120	Pass		
Lead	%	91			80-120	Pass		
Manganese	%	88			80-120	Pass		
LCS - % Recovery								
Alkali Metals								
Calcium	%	85			80-120	Pass		
Magnesium	%	87			80-120	Pass		
Potassium	%	84			80-120	Pass		
Sodium	%	86			80-120	Pass		
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery								
BTEX				Result 1				
Benzene	S21-JI48920	NCP	%	86		70-130	Pass	
Spike - % Recovery								
				Result 1				
Ammonia (as N)	S21-JI42698	NCP	%	97		70-130	Pass	
Spike - % Recovery								
Heavy Metals				Result 1				
Arsenic	B21-JI36507	NCP	%	110		75-125	Pass	
Lead	B21-JI36507	NCP	%	81		75-125	Pass	
Manganese	S21-JI44376	NCP	%	97		75-125	Pass	
Spike - % Recovery								
Alkali Metals				Result 1				
Calcium	S21-JI35279	NCP	%	97		75-125	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Magnesium	B21-JI39273	NCP	%	108			75-125	Pass	
Potassium	B21-JI36507	NCP	%	84			75-125	Pass	
Spike - % Recovery									
				Result 1					
Nitrate (as N)	S21-JI42721	CP	%	108			70-130	Pass	
Nitrite (as N)	S21-JI42721	CP	%	108			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S21-JI44981	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Conductivity (at 25°C)	S21-JI42717	CP	uS/cm	54000	53000	2.0	30%	Pass	
Fluoride (Total)	M21-JI45198	NCP	mg/L	< 0.5	< 0.5	<1	30%	Pass	
Total Organic Carbon	S21-JI42717	CP	mg/L	< 5	< 5	<1	30%	Pass	
Duplicate									
Alkalinity (speciated)				Result 1	Result 2	RPD			
Bicarbonate Alkalinity (as CaCO ₃)	B21-JI43135	NCP	mg/L	55	56	2.0	30%	Pass	
Carbonate Alkalinity (as CaCO ₃)	B21-JI43135	NCP	mg/L	< 10	< 10	<1	30%	Pass	
Hydroxide Alkalinity (as CaCO ₃)	B21-JI43135	NCP	mg/L	< 20	< 20	<1	30%	Pass	
Total Alkalinity (as CaCO ₃)	B21-JI43135	NCP	mg/L	58	59	2.0	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S21-JI42717	CP	mg/L	0.033	0.036	8.0	30%	Pass	
Lead	S21-JI42717	CP	mg/L	0.14	0.13	2.0	30%	Pass	
Manganese	S21-JI42717	CP	mg/L	4.2	4.1	2.0	30%	Pass	
Duplicate									
Alkali Metals				Result 1	Result 2	RPD			
Calcium	S21-JI42717	CP	mg/L	410	420	3.0	30%	Pass	
Magnesium	S21-JI42717	CP	mg/L	1500	1600	3.0	30%	Pass	
Potassium	S21-JI42717	CP	mg/L	160	170	1.0	30%	Pass	
Sodium	S21-JI42717	CP	mg/L	11000	12000	4.0	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Ammonia (as N)	S21-JI42721	CP	mg/L	21	21	2.0	30%	Pass	
Nitrate (as N)	S21-JI42721	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
Nitrite (as N)	S21-JI42721	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass	

Comments
Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
G01	The LORs have been raised due to matrix interference
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised by:

Emma Beesley	Analytical Services Manager
Andrew Sullivan	Senior Analyst-Organic (NSW)
Charl Du Preez	Senior Analyst-Inorganic (NSW)
John Nguyen	Senior Analyst-Metal (NSW)
Roopesh Rangarajan	Senior Analyst-Volatile (NSW)
Scott Beddoes	Senior Analyst-Inorganic (VIC)



Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

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