

CERTIFICATE OF ANALYSIS

Work Order : WN1602106

Client : OBERON COUNCIL

Contact : Mr Richard Robinson

Address : 137-139 OBERON STREET

OBERON NSW, AUSTRALIA 2787

Telephone : +61 02 6393 5000

 Project
 : ---

 Order number
 : 50834

 C-O-C number

 Sampler
 : ---

 Site
 : ---

 Quote number
 : ---

 No. of samples received
 : 4

No. of samples analysed

Page : 1 of 3

Laboratory : ALS Water - Newcastle

Contact :

Address : 5/585 Maitland Road Newcastle West NSW Australia 2304

Telephone : +61 2 4014 2500

Date Samples Received : 05-Jul-2016 10:15

Date Analysis Commenced : 05-Jul-2016

Issue Date : 12-Jul-2016 16:18



NATA Accredited Laboratory 825 Accredited for compliance with ISO/IEC 17025.

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted.

This Certificate of Analysis contains the following information:

: 4

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories Position Accreditation Category

Andrea Swan Manager Chemistry, Newcastle West, NSW
Neil Martin Team Leader - Chemistry Chemistry, Newcastle West, NSW
Robin Woodward Principal Microbiologist Microbiology, Newcastle West, NSW

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Project · ---



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key: CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

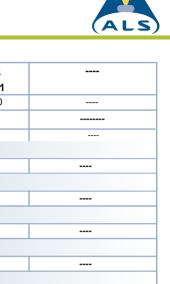
- ^ = This result is computed from individual analyte detections at or above the level of reporting
- ø = ALS is not NATA accredited for these tests.
- ~ = Indicates an estimated value.

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Analytical Results



Sub-Matrix: WATER (Matrix: WATER)	Client sample ID			ExPond Works Discharge EMP1	Up-Stream EMP3	Down-Stream EMP4	ExPond Works Discharge EMP1	
	Cli	ent sampli	ing date / time	04-Jul-2016 08:00	04-Jul-2016 08:00	04-Jul-2016 08:00	04-Jul-2016 13:30	
Compound	CAS Number	LOR	Unit	WN1602106-001	WN1602106-002	WN1602106-003	WN1602106-004	
				Result	Result	Result	Result	
EA005: pH								
pH Value		0.1	pH Unit	7.7	7.1	7.1		
EA025: Total Suspended Solids dried	at 104 ± 2°C							
Suspended Solids (SS)		1	mg/L	4				
EK055A: Ammonia as N								
Ammonia as N	7664-41-7	0.05	mg/L	5.00				
EK059A: Nitrite and Nitrate as N (NOx)							
Nitrite + Nitrate as N		0.05	mg/L	6.90	0.09	1.90		
EK061A: Total Kjeldahl Nitrogen as N								
Total Kjeldahl Nitrogen as N		0.2	mg/L	9.8	0.4	1.4		
EK062A: Total Nitrogen as N								
Total Nitrogen as N		0.1	mg/L	16.7	0.5	3.3		
EK067A: Total Phosphorus as P								
Total Phosphorus as P		0.05	mg/L	0.14	0.11	0.08		
EP008.WN: Chlorophyll a and Pheoph	vtin a							
Chlorophyll a		1	μg/L	35.8				
EP021: Total Oil and Grease								
Total Oil and Grease		2	mg/L	<2				
EP030.WN: Biochemical Oxygen Dem	and (BOD)							
Biochemical Oxygen Demand		2	mg/L	3				
MW006.WN: Thermotolerant Coliform	s & F coli (MF)							
Faecal Coliforms		1	CFU/100mL				<9	