A CONSULTING DIVISION OF HUNTER WATER AUSTRALIA PTY LIMITED

ABN 19 080 869 905

23 Rosegum Drive WARABROOK NSW 2304 Tele: (02) 4935 0500 Fax: (02) 4935 0505 PO Box 317 Hunter Regional Mail Centre NSW 2310



Report of Analysis

Customer: Oberon Council

PO Box 84, Oberon, NSW 2787

Contact: Ken Robinson

Sample Date: 13 January 2014

Date Received: 14 January 2014

3 samples sampled and submitted by customer and tested as received.

Report Number: HWA-14/00471

Note: This report replaces Preliminary Report Number HWA-14/00457

Sample ID	Date	Time	Description		
H1401120	13/01/2014	8:00 AM	Ex-Pond Works Discharge E	EMP1	····
Analysis	Method / Co	ategory		Result	Unit
Ammonia	APHA (2012	APHA (2012) 4500 - NH3 H (Ammonia)			mg/L N
BOD5 - Total	APHA (2012	?) 5210 B (BOD5)		<2	mg/L
Chlorophyli_a	APHA (2012	?) 10200 H (Chlor	ophyli_a)	<1.0	ug/L
рН	APHA (2012	?) 4500-H+ B (pH)	1	9.97	4
Suspended Solids	APHA (2012	?) 2540 D (Susper	nded Solids)	4	mg/L
Total Kjeldahl Nitrogen	Inhouse 2 ba	ased on APHA (29	012) 4500-Norg B (TKN)	2.0	mg/L N
Total Oil and Grease	APHA (2012	?) 5520 D (Grease)	<2	mg/L
Total Oxidised Nitrogen	APHA (2012	APHA (2012) 4500 - NO3 I (TON)			mg/L N
Total Phosphorus	APHA (2012	APHA (2012) 4500 - P H (Phosphorus)			mg/L P
Sample ID	Date	Time	Description		
H1401121	13/01/2014	8:00 AM	Up-Stream EMP3		
Analysis	Method / Co	ategory		Result	Unit
pH	APHA (2012) 4500-H+ B (pH)		6.82	34
Total Kjeldahl Nitrogen	Inhouse 2 ba	ased on APHA (20	012) 4500-Norg B (TKN)	<0.5	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (T	ON)	0.06	mg/L N
Total Phosphorus	APHA (2012	APHA (2012) 4500 - P H (Phosphorus)		<0.05	mg/L P
Sample ID	Date	Time	Description		
H1401122	13/01/2014	8:00 AM	Down-Stream EMP4		
Analysis	Method / Ca	utegory		Result	Unit

The results of the tests, calibrations &/or measurements included in this document are traceable to Australian/national standards.

The results on this report relate only to the items tested.

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Wednesday, 22 January, 2014 Page 1 of 2

Sample ID	Date	Time	Description		
H1401122	13/01/2014	8:00 AM	Down-Stream EMP4		
Analysis	Method / C	Category		Result	Unit
рН	APHA (201	2) 4500-H+ B (pH)	6.97	EŠ.
Total Kjeldahl Nitrogen	Inhouse 2 b	pased on APHA (2	012) 4500-Norg B (TKN)	<0.5	mg/L N
Total Oxidised Nitrogen	APHA (201	2) 4500 - NO3 I (T	TON)	0.08	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Phosphorus)		0.09	mg/L P	

Neil Martin

Chemical Team Leader

Martin

22 January 2014

A CONSULTING DIVISION OF HUNTER WATER AUSTRALIA PTY LIMITED

ABN 19 080 869 905

23 Rosegum Drive WARABROOK NSW 2304 Tele: (02) 4935 0500 Fax: (02) 4935 0505

PO Box 317 Hunter Regional Mail Centre NSW 2310



Report of Analysis

Customer:

Oberon Council

PO Box 84, Oberon, NSW 2787

Contact:

Ken Robinson

Sample Date:

3 February 2014

Date Received:

4 February 2014

3 samples sampled and submitted by customer and tested as received.

Order Number:

47579

Report Number:

HWA-14/01040

Sample ID	Date Time	Description Description		
H1403017	3/02/2014 8:00 A	M Ex-Pond Works Dischar	ge EMP1	
Analysis	Method / Category		Result	Unit
Ammonia	APHA (2012) 4500	- NH3 H (Ammonia)	0.54	mg/L N
BOD5 - Total	APHA (2012) 5210	B (BOD5)	6	mg/L
Chlorophyll_a	APHA (2012) 10200	H (Chlorophyll_a)	47.9	ug/L
pН	APHA (2012) 4500-	H+ B (pH)	8.54	3
Suspended Solids	APHA (2012) 2540	D (Suspended Solids)	21	mg/L
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (2012) 4500-Norg B (TKN)		3.6	mg/L N
Total Oil and Grease	APHA (2012) 5520 D (Grease)		<2	mg/L
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (TON)		0.39	mg/L N
Total Phosphorus	APHA (2012) 4500	- P H (Phosphorus)	2.7	mg/L P
Sample ID	Date Time	Description		
H1403018	3/02/2014 8:00 Al	M Up-Stream EMP3		
Analysis	Method / Category		Result	Unit
pH	APHA (2012) 4500-H+ B (pH)		7.09	
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (2012) 4500-Norg B (TKN)		1.7	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500	- NO3 I (TON)	0.06	mg/L N
Total Phosphorus	APHA (2012) 4500 -	- P H (Phosphorus)	0.05	mg/L P

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Tuesday, 11 February, 2014 Page 1 of 2

Sample ID	Date Time	Description	
H1403019	3/02/2014 8:00 AM	Down-Stream EMP4	· · · · · · · · · · · · · · · · · · ·
Analysis	Method / Category	Result	Unit
рН	APHA (2012) 4500-H+ B (pH	7.24	¥
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (2	2012) 4500-Norg B (TKN) 0.8	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (TON) 0.07	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Ph	osphorus) 0.14	mg/L P

Neil Martin

Chemical Team Leader

Martin

11 February 2014

A CONSULTING DIVISION OF HUNTER WATER AUSTRALIA PTY LIMITED

ABN 19 080 869 905

23 Rosegum Drive WARABROOK NSW 2304 Tele: (02) 4935 0500 Fax: (02) 4935 0505

PO Box 317 Hunter Regional Mail Centre NSW 2310



Report of Analysis

Customer:

Oberon Council

PO Box 84, Oberon, NSW 2787

Contact:

Ken Robinson

Sample Date:

10 March 2014

Date Received:

11 March 2014

3 samples sampled and submitted by customer and tested as received.

Order Number:

Total Phosphorus

47592

Report Number:

HWA-14/02142

Sample ID	Date	Time	Description		
H1406398	10/03/2014	8:00 AM	Ex-Pond Works Discharg	e EMP1	
Analysis	Method /	Category		Result	Unit
Ammonia	APHA (201	12) 4500 - NH3 H (A	mmonia)	1.7	mg/L N
BOD5 - Total	APHA (201	12) 5210 B (BOD5)		<2	mg/L
Chlorophyll_a	APHA (201	12) 10200 H (Chloro	phyll_a)	2.3	ug/L
pН	APHA (201	12) 4500-H+ B (pH)		7.66	3
Suspended Solids	APHA (201	APHA (2012) 2540 D (Suspended Solids)			mg/L
Total Kjeldahl Nitrogen	Inhouse 2	Inhouse 2 based on APHA (2012) 4500-Norg B (TKN)		5.0	mg/L N
Total Oil and Grease	APHA (201	APHA (2012) 5520 D (Grease)		<2	mg/L
Total Oxidised Nitrogen	APHA (201	APHA (2012) 4500 - NO3 I (TON)		0.81	mg/L N
Total Phosphorus	APHA (201	12) 4500 - P H (Pho	sphorus)	2.1	mg/L P
Sample ID	Date	Time	Description		
H1406399	10/03/2014	8:00 AM	Up-Stream EMP3		
Analysis	Method / (Method / Category		Result	Unit
рН	APHA (201	APHA (2012) 4500-H+ B (pH)		7.79	â
Total Kjeldahl Nitrogen	Inhouse 2	based on APHA (20	12) 4500-Norg B (TKN)	0.6	mg/L N
Total Oxidised Nitrogen	APHA (201	APHA (2012) 4500 - NO3 I (TON)		<0.05	mg/L N

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<0.05

mg/L P

APHA (2012) 4500 - P H (Phosphorus)

Monday, 17 March, 2014 Page 1 of 2

Sample ID	Date Time	Description	
H1406400	10/03/2014 8:00 AM	Down-Stream EMP4	
Analysis	Method / Category	Result	Unit
pН	APHA (2012) 4500-H+ B (pH)	6.97	a .
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (20	012) 4500-Norg B (TKN) 0.6	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (T	ON) <0.05	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Pho	osphorus) 0.24	mg/L P

Neil Martin

Chemical Team Leader

Martin

17 March 2014

Monday, 17 March, 2014 Page 2 of 2

A CONSULTING DIVISION OF HUNTER WATER AUSTRALIA PTY LIMITED

ABN 19 080 869 905

23 Rosegum Drive WARABROOK NSW 2304 Tele: (02) 4935 0500 Fax: (02) 4935 0505

PO Box 317 Hunter Regional Mail Centre NSW 2310



Report of Analysis

Customer:

Oberon Council

PO Box 84, Oberon, NSW 2787

Contact:

Ken Robinson

Sample Date:

1 April 2014

Date Received:

2 April 2014

3 samples sampled and submitted by customer and tested as received.

Order Number:

47596

Report Number:

HWA-14/02685

Note: This report replaces Preliminary Report Number HWA-14/02664

Sample ID	Date	Time	Description		
H1408363	1/04/2014 8	3:00 AM	Ex-Pond Works Discharge	EMP1	
Analysis	Method / Cat	Method / Category		Result	Unit
Ammonia	APHA (2012)	4500 - NH3 H (Ammonia)	1.8	mg/L N
BOD5 - Total	APHA (2012)	5210 B (BOD5))	<2	mg/L
Chlorophyll_a	APHA (2012)	10200 H (Chlor	rophyli_a)	3.7	ug/L
pН	APHA (2012)	APHA (2012) 4500-H+ B (pH)			8
Suspended Solids	APHA (2012)	APHA (2012) 2540 D (Suspended Solids)			mg/L
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (2012) 4500-Norg B (TKN)			3.9	mg/L N
Total Oil and Grease	APHA (2012)	APHA (2012) 5520 D (Grease)			mg/L
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (TON)			1.9	mg/L N
Total Phosphorus	APHA (2012)	4500 - P H (Ph	osphorus)	1.1	mg/L P
Sample ID	Date	Time	Description		
H1408365	1/04/2014 8	:00 AM	Up-Stream EMP3		
Analysis	Method / Cat	egory		Result	Unit
pH	APHA (2012) 4500-H+ B (pH)			6.81	B
Total Kjeldahl Nitrogen	Inhouse 2 bas	Inhouse 2 based on APHA (2012) 4500-Norg B (TKN)		0.6	mg/L N
Total Oxidised Nitrogen	APHA (2012)	4500 - NO3 I (T	ON)	<0.05	mg/L N
Total Phosphorus	APHA (2012)	4500 - P H (Pho	osphorus)	<0.05	mg/L P

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Sample ID	Date Time	Description	
H1408366	1/04/2014 8:00 AM	Down-Stream EMP4	
Analysis	Method / Category	Result	Unit
pH	APHA (2012) 4500-H+ B (pH)	6.97	*
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (201	(2) 4500-Norg B (TKN) 0.8	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (TO	N) 0.07	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Phos	phorus) 0.20	mg/L P

Bob Manevski

Senior Technical Officer

8 April 2014

Tuesday, 8 April, 2014 Page 2 of 2

A CONSULTING DIVISION OF HUNTER WATER AUSTRALIA PTY LIMITED

ABN 19 080 869 905

23 Rosegum Drive WARABROOK NSW 2304 Tele: (02) 4935 0500 Fax: (02) 4935 0505

PO Box 317 Hunter Regional Mail Centre NSW 2310



Report of Analysis

Customer:

Oberon Council

PO Box 84, Oberon, NSW 2787

Contact:

Ken Robinson

Sample Date:

5 May 2014

Date Received:

6 May 2014

3 samples sampled and submitted by customer and tested as received.

Order Number:

47599

Report Number:

HWA-14/03594

Note: This report replaces Preliminary Report Number HWA-14/03583

Sample ID	Date Ti	me	Description		
H1412675	5/05/2014 9:00) AM	Ex-Pond Works Discharge	e EMP1	
Analysis	Method / Catego	ory	· · · · · · · · · · · · · · · · · · ·	Result	Unit
Ammonia	APHA (2012) 450	00 - NH3 H (Ammo	nia)	1.1	mg/L N
BOD5 - Total	APHA (2012) 52	10 B (BOD5)		<2	mg/L
Chlorophyli_a	APHA (2012) 102	200 H (Chlorophyll_	_a)	1.8	ug/L
pH	APHA (2012) 450	00-H+ B (pH)		7.66	2
Suspended Solids	APHA (2012) 254	APHA (2012) 2540 D (Suspended Solids)			mg/L
Total Kjeldahl Nitrogen	Inhouse 2 based	Inhouse 2 based on APHA (2012) 4500-Norg B (TKN)			mg/L N
Total Oil and Grease	APHA (2012) 552	APHA (2012) 5520 D (Grease)			mg/L
Total Oxidised Nitrogen	APHA (2012) 450	APHA (2012) 4500 - NO3 I (TON)			mg/L N
Total Phosphorus	APHA (2012) 450	00 - P H (Phosphore	us)	0.56	mg/L P
Sample ID	Date Til	me	Description		
H1412676	5/05/2014 9:00	MAC	Up-Stream EMP3	····	
Analysis	Method / Catego	ory		Result	Unit
pH	APHA (2012) 4500-H+ B (pH)			6.88	
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (2012) 4500-Norg B (TKN)			0.6	mg/L N
Total Oxidised Nitrogen	APHA (2012) 450	APHA (2012) 4500 - NO3 I (TON)			mg/L N
Total Phosphorus	APHA (2012) 450	00 - P H (Phosphori	us)	<0.05	mg/L P

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Sample ID	Date Time	Description	
H1412677	5/05/2014 9:00 AM	Down-Stream EMP4	
Analysis	Method / Category	Result	Unit
рН	APHA (2012) 4500-H+ B (pl	H) 7.06	9
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (2012) 4500-Norg B (TKN) 0.6	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I ((TON) 0.50	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Pi	hosphorus) 0.08	mg/L P

Neil Martin

Chemical Team Leader

Martin

13 May 2014

Tuesday, 13 May, 2014 Page 2 of 2

A CONSULTING DIVISION OF HUNTER WATER AUSTRALIA PTY LIMITED

ABN 19 080 869 905

23 Rosegum Drive WARABROOK NSW 2304 Tele: (02) 4935 0500 Fax: (02) 4935 0505

PO Box 317 Hunter Regional Mail Centre NSW 2310



Report of Analysis

Customer:

Oberon Council

PO Box 84, Oberon, NSW 2787

Contact:

Ken Robinson

Sample Date:

10 June 2014

Date Received:

11 June 2014

3 samples sampled and submitted by customer and tested as received.

Order Number:

49603

Report Number:

HWA-14/04535

Note: This report replaces Preliminary Report Number HWA-14/04514

Sample ID	Date	Time	Description		
H1414633	10/06/2014	10:00 AM	Ex-Pond Works Dischard	ge EMP1	· -
Analysis	Method / (Category		Result	Unit
Ammonia	APHA (201	12) 4500 - NH3 H (Ammonia)	1.7	mg/L N
BOD5 - Total	APHA (201	2) 5210 B (BOD5))	<2	mg/L
Chiorophyll_a	APHA (201	2) 10200 H (Chlor	rophyll_a)	<1.0	ug/L
рН	APHA (201	2) 4500-H+ B (pH)	7.41	2
Suspended Solids	APHA (201	APHA (2012) 2540 D (Suspended Solids)			mg/L
Total Kjeldahl Nitrogen	Inhouse 2 i	Inhouse 2 based on APHA (2012) 4500-Norg B (TKN)			mg/L N
Total Oil and Grease	APHA (201	APHA (2012) 5520 D (Grease)			mg/L
Total Oxidised Nitrogen	APHA (201	APHA (2012) 4500 - NO3 I (TON)			mg/L N
Total Phosphorus	APHA (201	2) 4500 - P H (Ph	osphorus)	0.54	mg/L P
Sample ID	Date	Time	Description		
H1414634	10/06/2014	10:00 AM	Up-Stream EMP3		
Analysis	Method / C	Category		Result	Unit
pН	APHA (201	APHA (2012) 4500-H+ B (pH)			∵
Total Kjeldahl Nitrogen	inhouse 2 b	based on APHA (2	012) 4500-Norg B (TKN)	<0.5	mg/L N
Total Oxidised Nitrogen	APHA (201	2) 4500 - NO3 I (T	ON)	0.22	mg/L N
Total Phosphorus	APHA (201	2) 4500 - P H (Pho	osphorus)	0.05	mg/L P

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Sample ID	Date Time	Description	
H1414635	10/06/2014 10:00 AM	Down-Stream EMP4	
Analysis	Method / Category	Result	Unit
pH	APHA (2012) 4500-H+ B	(pH) 6.98	
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA	A (2012) 4500-Norg B (TKN) 0.6	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3	I (TON) 0.92	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H ((Phosphorus) 0.08	mg/L P

Andrea Swan

Laboratory Manager

17 June 2014

Tuesday, 17 June, 2014 Page 2 of 2

A CONSULTING DIVISION OF HUNTER WATER AUSTRALIA PTY LIMITED

ABN 19 080 869 905

23 Rosegum Drive WARABROOK NSW 2304 Tele: (02) 4935 0500 Fax: (02) 4935 0505

PO Box 317 Hunter Regional Mail Centre NSW 2310



Report of Analysis

Customer:

Oberon Council

PO Box 84, Oberon, NSW 2787

Contact:

Ken Robinson

Sample Date:

7 July 2014

Date Received:

8 July 2014

3 samples sampled and submitted by customer and tested as received.

Order Number:

49606

Report Number:

HWA-14/05250

Note: This report replaces Preliminary Report Number HWA-14/05241

Sample ID	Date	Time	Description		
H1416340	7/07/2014	8:00 AM	Ex-Pond Works Discharge	e EMP1	
Analysis	Method / (Category		Result	Unit
Ammonia	APHA (201	12) 4500 - NH3 H ((Ammonia)	2.0	mg/L N
BOD5 - Total	APHA (201	12) 5210 B (BOD5)	2	mg/L
Chlorophyll_a	APHA (201	12) 10200 H (Chlo	rophyll_a)	2.0	ug/L
рН	APHA (201	(2) 4500-H+ B (pH)	7.40	
Suspended Solids	APHA (201	2) 2540 D (Suspe	nded Solids)	<1	mg/L
Total Kjeldahl Nitrogen	Inhouse 2	Inhouse 2 based on APHA (2012) 4500-Norg B (TKN)			mg/L N
Total Oil and Grease	APHA (201	APHA (2012) 5520 D (Grease)		<2	mg/L
Total Oxidised Nitrogen	APHA (201	APHA (2012) 4500 - NO3 I (TON)		9.4	mg/L N
Total Phosphorus	APHA (201	2) 4500 - P H (Ph	osphorus)	0.42	mg/L P
Sample ID	Date	Time	Description		
H1416341	7/07/2014	8:00 AM	Up-Stream EMP3		"" "
Analysis	Method / (Category		Result	Unit
pH	APHA (201	АРНА (2012) 4500-H+ В (рН)		6.92	*
Total Kjeldahl Nitrogen	Inhouse 2 t	Inhouse 2 based on APHA (2012) 4500-Norg B (TKN)		1.1	mg/L N
Total Oxidised Nitrogen	APHA (201	2) 4500 - NO3 i (1	ON)	0.12	mg/L N
Total Phosphorus	APHA (201	2) 4500 - P H (Pho	osphorus)	0.05	mg/L P

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Sample ID	Date Time	Description	
H1416342	7/07/2014 8:00 AM	Down-Stream EMP4	
Analysis	Method / Category	Result	Unit
рН	APHA (2012) 4500-H+ B (pH)	7.07	Œ
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (20	12) 4500-Norg B (TKN) 0.8	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (TO	N) 1.3	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Pho	sphorus) 0.09	mg/L P

Neil Martin

Chemical Team Leader

Martin

14 July 2014

A CONSULTING DIVISION OF HUNTER WATER AUSTRALIA PTY LIMITED
ABN 19 080 869 905

23 Rosegum Drive WARABROOK NSW 2304 Tele: (02) 4935 0500 Fax: (02) 4935 0505 PO Box 317 Hunter Regional Mail Centre NSW 2310



Report of Analysis

Customer:

Oberon Council

PO Box 84, Oberon, NSW 2787

Contact:

Ken Robinson

Sample Date:

4 August 2014

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Date Received:

5 August 2014

3 samples sampled and submitted by customer and tested as received.

Order Number:

49611

Report Number:

HWA-14/05925

Note: This report replaces Preliminary Report Number HWA-14/05908

Sample ID	Date Time	Description		
H1418411	4/08/2014 8:00 AM	Ex-Pond Works Discharge	EMP1	
Analysis	Method / Category		Result	Unit
Ammonia	APHA (2012) 4500 - NH3 H (Ammonia)	1.8	mg/L N
BOD5 - Total	APHA (2012) 5210 B (BOD5)		<2	mg/L
Chlorophyll_a	APHA (2012) 10200 H (Chlor	ophyll_a)	7.9	ug/L
рН	APHA (2012) 4500-H+ B (pH)	7.27	18
Suspended Solids	APHA (2012) 2540 D (Suspe	nded Solids)	1	mg/L
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (2	012) 4500-Norg B (TKN)	2.2	mg/L N
Total Oil and Grease	APHA (2012) 5520 D (Grease	APHA (2012) 5520 D (Grease)		mg/L
Sample ID	Date Time	Description		
H1418412	4/08/2014 8:00 AM	Up-Stream EMP3		
Analysis	Method / Category		Result	Unit
эН	APHA (2012) 4500-H+ B (pH)	6.91	-
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (2	012) 4500-Norg B (TKN)	<0.5	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (T	ON)	0.09	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Pho	osphorus)	<0.05	mg/L P
Sample ID	Date Time	Description		
H1418413	4/08/2014 8:00 AM	Down-Stream EMP4		
Analysis	Method / Category		Result	Unit

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The results on this report relate only to the items tested.

This document shall not be reproduced, except in full.

Sample ID	Date Time	Description		
H1418413	4/08/2014 8:00 AM	Down-Stream EMP4	-	
Analysis	Method / Category		Result	Unit
pH	APHA (2012) 4500-H+ B (pH))	7.01	-
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (20	012) 4500-Norg B (TKN)	<0.5	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (T	ON)	1.2	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Pho	osphorus)	0.05	mg/L P

Neil Martin

Chemical Team Leader

Martin

12 August 2014

A CONSULTING DIVISION OF HUNTER WATER AUSTRALIA PTY LIMITED

ABN 19 080 869 905

23 Rosegum Drive WARABROOK NSW 2304 Tele: (02) 4935 0500 Fax: (02) 4935 0505 PO Box 317 Hunter Regional Mail Centre NSW 2310



Report of Analysis

Customer:

Oberon Council

PO Box 84, Oberon, NSW 2787

Contact:

Ken Robinson

Sample Date:

8 September 2014

Date Received:

9 September 2014

3 samples sampled and submitted by customer and tested as received.

Order Number:

49620

Report Number:

HWA-14/07065

Note: This report replaces Preliminary Report Number HWA-14/06970

Sample ID	Date Time	Description		
H1421603	8/09/2014 8:00 AM	Ex-Pond Works Discharg	e EMP1	
Analysis	Method / Category		Result	Unit
Ammonia	APHA (2012) 4500 - NH3 H (A	Ammonia)	0.59	mg/L N
BOD5 - Total	APHA (2012) 5210 B (BOD5)		<2	mg/L
Chlorophyll_a	APHA (2012) 10200 H (Chloro	ophyll_a)	2.3	ug/L
рН	APHA (2012) 4500-H+ B (pH)		7.7	(ē
Suspended Solids	APHA (2012) 2540 D (Susper	nded Solids)	<1	mg/L
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (20	012) 4500-Norg B (TKN)	2.2	mg/L N
Total Oil and Grease	APHA (2012) 5520 D (Grease)		<2	mg/L
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (T	ON)	6.9	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Pho	sphorus)	0.25	mg/L P
Sample ID	Date Time	Description		
H1421604	8/09/2014 8:00 AM	Up-Stream EMP3		
Analysis	Method / Category		Result	Unit
pН	APHA (2012) 4500-H+ B (pH)		6.9	ā
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (20	012) 4500-Norg B (TKN)	<0.5	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (T	ON)	0.09	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Pho	esphorus)	<0.05	mg/L P

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Sample ID	Date	Time	Description		
H1421605	8/09/2014	8:00 AM	Down-Stream EMP4		
Analysis	Method / C	Category		Result	Unit
pH	APHA (201	2) 4500-H+ B (pH)		7.0	8
Total Kjeldahl Nitrogen	Inhouse 2 t	based on APHA (2012) 4:	500-Norg B (TKN)	0.8	mg/L N
Total Oxidised Nitrogen	APHA (201	2) 4500 - NO3 I (TON)		0.92	mg/L N
Total Phosphorus	APHA (201	2) 4500 - P H (Phosphon	us)	0.05	mg/L P

Neil Martin

Chemical Team Leader

Martin

19 September 2014

A CONSULTING DIVISION OF HUNTER WATER AUSTRALIA PTY LIMITED

ABN 19 080 869 905

23 Rosegum Drive WARABROOK NSW 2304 Tele: (02) 4935 0500 Fax: (02) 4935 0505 PO Box 317 Hunter Regional Mail Centre NSW 2310



Report of Analysis

Customer:

Oberon Council

PO Box 84, Oberon, NSW 2787

Contact:

Ken Robinson

Sample Date:

2 September 2014

Date Received:

5 September 2014

1 sample sampled and submitted by customer and tested as received.

Order Number:

49618

Report Number:

HWA-14/06826

Note: This report replaces Preliminary Report Number HWA-14/06765

Sample ID	Date Time	Description		
H1421448	2/09/2014 10:00 AM	Tertiary Pond 2		
Analysis	Method / Category		Result	Unit
Ammonia	APHA (2012) 4500 - NH3 H (Ammonia)	2.6	mg/L N
BOD5 - Total	APHA (2012) 5210 B (BOD5)	APHA (2012) 5210 B (BOD5)		mg/L
pН	APHA (2012) 4500-H+ B (pH)	APHA (2012) 4500-H+ B (pH)		2
Suspended Solids	APHA (2012) 2540 D (Susper	nded Solids)	21	mg/L
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (2	Inhouse 2 based on APHA (2012) 4500-Norg B (TKN)		mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (T	APHA (2012) 4500 - NO3 I (TON)		mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Pho	osphorus)	0.66	mg/L P

Neil Martin

Chemical Team Leader

15 September 2014

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Results from this report are not to be reproduced without acknowledgement.

The results on this report relate only to the items tested.

This document shall not be reproduced, except in full.

A CONSULTING DIVISION OF HUNTER WATER AUSTRALIA PTY LIMITED ABN 19 080 869 905

23 Rosegum Drive WARABROOK NSW 2304 Tele: (02) 4935 0500

Fax: (02) 4935 0505

PO Box 317 Hunter Regional Mail Centre NSW 2310



Report of Analysis

Customer: Oberon Council

PO Box 84, Oberon, NSW 2787

Contact:

Ken Robinson

Sample Date:

7 October 2014

Date Received:

8 October 2014

3 samples sampled and submitted by customer and tested as received.

Order Number:

49625

Report Number:

HWA-14/07709

Sample ID	Date	Time	Description		
H1424932	7/10/2014	8:00 AM	Ex-Pond Works Discharge	EMP1	2.0,700-,-
Analysis	Method / C	ategory		Result	Unit
Ammonia	APHA (2012	2) 4500 - NH3 H (/	Ammonia)	0.53	mg/L N
BOD5 - Total	APHA (2012	2) 5210 B (BOD5)		4	mg/L
Chlorophyll_a	APHA (2012	2) 10200 H (Chloro	ophyll_a)	69.9	ug/L
pΗ	APHA (2012	2) 4500-H+ B (pH)		8.8	32
Suspended Solids	APHA (2012	2) 2540 D (Susper	nded Solids)	15	mg/L
Total Kjeldahi Nitrogen	Inhouse 2 b	Inhouse 2 based on APHA (2012) 4500-Norg B (TKN)		4.8	mg/L N
Total Oil and Grease	APHA (2012	APHA (2012) 5520 D (Grease)		<2	mg/L
Total Oxidised Nitrogen	APHA (2012	APHA (2012) 4500 - NO3 I (TON)		1.8	mg/L N
Total Phosphorus	APHA (2012	2) 4500 - P H (Pho	osphorus)	0.47	mg/L P
Sample ID	Date	Time	Description		
H1424933	7/10/2014	8:00 AM	Up-Stream EMP3		
Analysis	Method / C	ategory		Result	Unit
рН	APHA (2012	APHA (2012) 4500-H+ B (pH)		6.8	14
Total Kjeldahl Nitrogen	Inhouse 2 b	Inhouse 2 based on APHA (2012) 4500-Norg B (TKN)		1.1	mg/L N
Total Oxidised Nitrogen	APHA (2012	2) 4500 - NO3 I (T	ON)	0.09	mg/L N
Total Phosphorus	APHA (201)	2) 4500 - P H (Pho	esphorus)	<0.05	mg/L P

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Sample ID	Date Time	Description		
H1424934	7/10/2014 8:00 AM	Down-Stream EMP4		
Analysis	Method / Category		Result	Unit
Hq	APHA (2012) 4500-H+ B (pH)		7.2	-
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (20	012) 4500-Norg B (TKN)	0.6	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (T	ON)	0.33	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Pho	osphorus)	0.08	mg/L P

Neil Martin

Chemical Team Leader

Martin

14 October 2014

Tuesday, 14 October, 2014 Page 2 of 2

A CONSULTING DIVISION OF HUNTER WATER AUSTRALIA PTY LIMITED

ABN 19 080 869 905

23 Rosegum Drive WARABROOK NSW 2304 Tele: (02) 4935 0500 Fax: (02) 4935 0505

PO Box 317 Hunter Regional Mail Centre NSW 2310



Report of Analysis

Customer:

Oberon Council

PO Box 84, Oberon, NSW 2787

Contact:

Ken Robinson

Sample Date:

3 November 2014

Date Received:

5 November 2014

3 samples sampled and submitted by customer and tested as received.

Order Number:

Report Number:

HWA-14/08625

Note: This report replaces Preliminary Report Number HWA-14/08604

Sample ID	Date Time	Description		
H1427671	3/11/2014 9:00 AM	Ex-Pond Works Discharge E	MP1	
Analysis	Method / Category		Result	Unit
Ammonia	APHA (2012) 4500 - NH3 H (Ammonia)	0.25	mg/L N
BOD5 - Total	APHA (2012) 5210 B (BOD5)	1	12	mg/L
Chlorophyll_a	APHA (2012) 10200 H (Chlor	ophyli_a)	287	ug/L
pH	APHA (2012) 4500-H+ B (pH)	9.8	<i>6</i> 5
Suspended Solids	Inhouse 4 based on APHA (2	012) 2540 D (Suspended Solids)	29	mg/L
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (2	012) 4500-Norg B (TKN)	5.6	mg/L N
Total Oil and Grease	APHA (2012) 5520 D (Grease	e)	2	mg/L
Sample ID	Date Time	Description		
H1 427 672	3/11/2014 9:00 AM	Upstream EMP3		
Analysis	Method / Category		Result	Unit
ьН	APHA (2012) 4500-H+ B (pH)	7.0	Œ.
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (2	012) 4500-Norg B (TKN)	1.1	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (1	ON)	0.14	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Ph	osphorus)	0.11	mg/L P
Sample ID	Date Time	Description		
H1427673	3/11/2014 9:00 AM	Downstream EMP4		
Analysis	Method / Category		Result	Unit

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Sample ID	Date Time	Description	
H1427673	3/11/2014 9:00 AM	Downstream EMP4	
Analysis	Method / Category	Result	Unit
рН	APHA (2012) 4500-H+ B (pH	6.8	=
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (2	2012) 4500-Norg B (TKN) 0.8	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (TON) 0.07	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Ph	osphorus) <0.05	mg/L P

Neil Martin

Chemical Team Leader

Martin

10 November 2014

A CONSULTING DIVISION OF HUNTER WATER AUSTRALIA PTY LIMITED

ABN 19 080 869 905

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Report of Analysis

Customer:

Oberon Council

PO Box 84, Oberon, NSW 2787

Contact:

Ken Robinson

Sample Date:

8 December 2014

Date Received:

9 December 2014

Note: This report replaces Preliminary Report Number HWA-14/09638

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3 samples sampled and submitted by customer and tested as received.

Order Number:

49636

Report Number:

HWA-14/09649

Sample ID	Date	Time	Description		
H1430945	8/12/2014	8:00 AM	Ex-Pond Works Discharge E	MP1	
Analysis	Method / (Category		Result	Unit
Ammonia	APHA (201	2) 4500 - NH3 H ((Ammonia)	4.2	mg/L N
BOD5 - Total	APHA (201	2) 5210 B (BOD5))	3	mg/L
Chlorophyll_a	APHA (201	2) 10200 H (Chlor	rophyll_a)	3.5	ug/L
рН	APHA (201	2) 4500-H+ B (pH)	7.5	£5.
Suspended Solids	Inhouse 4 t	pased on APHA (2	012) 2540 D (Suspended Solids)	9	mg/L
Total Kjeldahl Nitrogen	inhouse 2 t	inhouse 2 based on APHA (2012) 4500-Norg B (TKN)			mg/L N
Total Oil and Grease	APHA (201	APHA (2012) 5520 D (Grease)			mg/L
Total Oxidised Nitrogen	APHA (201	APHA (2012) 4500 - NO3 I (TON)		1.1	mg/L N
Total Phosphorus	APHA (201	2) 4500 - P H (Pho	osphorus)	1.8	mg/L P
Sample ID	Date	Tîme	Description		
H1430946	8/12/2014	8:00 AM	Up-Stream EMP3		
Analysis	Method / C	Category		Result	Unit
рН	APHA (201	2) 45 00-H+ B (pH)	6.7	92
Totai Kjeldahl Nitrogen	Inhouse 2 t	Inhouse 2 based on APHA (2012) 4500-Norg B (TKN)			mg/L N
Total Oxidised Nitrogen	APHA (201	2) 4500 - NO3 I (1	ron)	<0.05	mg/L N
Total Phosphorus	APHA (201	2) 4500 - P H (Ph	osphorus)	0.09	mg/L P

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Sample ID	Date Time	Description	
H1430947	8/12/2014 8:00 AM	Down-Stream EMP4	
Analysis	Method / Category	Result	Unit
рH	APHA (2012) 4500-H+ B (pH	6.9	
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (2	012) 4500-Norg B (TKN) <0.5	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (T	ON) 0.28	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Pho	osphorus) 0.24	mg/L P

Neil Martin

Chemical Team Leader

Martin

15 December 2014

Monday, 15 December, 2014 Page 2 of 2