The Hay Sewerage Treatment Plant EPA Licence (3520) requires Council to monitor concentration of pollutants discharged at 7 monitoring locations around the Treatment Plant. The frequency of the testing is yearly with the following test results sampled on 12 August 2014 and the results forwarded to Council on 29 August 2014. The full EPA licence can be viewed on the EPA website.

Please find attached Laboratory Analysis Report 1408-0055 from Charles Sturt University.

Charles Sturt University

ENVIRONMENTAL AND ANALYTICAL LABORATORIES

Locked Bag 588
Wagga Wagga NSW 2678

Tel: +61 2 6933 2849
Fax: +61 2 6933 2477
Email: eal@csu.edu.au
www.csu.edu.au/faculty/science/eal

Hay Shire Council

PO Box 141

Hay NSW 2711

Attention:

Friday, August 29, 2014

NATA Accredited Laboratory Number: 9597

LABORATORY ANALYSIS REPORT

Report Number:1408-0055
Page 1 of 6

For all enquiries related to this report please quote document number: 1408-0055

Facility:

Order #

Sample Type
Water

Collected By
Clint Taylor

Date Received
14-August-2014

EAL ID	Client ID. / Date/Time sample taken	Test	Result (units)		Method Reference	Limit of Reporting
14Aug-0262	**Piezo No. 6** 12.08.14 3.05pm					
		Ammonia as N	**<0.2**	mg/L	APHA 4500-NH3 F	0.2
		Chloride	**4270**	mg/L	APHA 4110 B	5
		Chemical Oxygen Demand	**63**	mg/L	APHA 5220 D	10
		Conductivity	**14600**	µS/cm	APHA 2510 B	1
		Nitrate as N	**2**	mg/L	APHA 4110 B	1
		Nitrogen, total	**6**	mg/L	APHA 4500-Norg B + 4110 B	2
		Nitrate/Nitrite as N	**2**	mg/L	APHA 4110 B	1
		Ortho-Phosphate as P	**1.81**	mg/L	APHA 4500-P E	0.01
		Phosphorus, Total	**2.21**	mg/L	APHA 4500-P B5/4500-P E	0.01
		pH	**7.0**	pH units	APHA 4500-H+ B	
		Total Kjeldahl Nitrogen	**4**	mg/L	APHA 4500-Norg B	2
		Total Organic Carbon	**3**	mg/L	Analysis by Ecowise, Melbourne (acc no: 992)	
		Total Suspended Solids	**4650**	mg/L	APHA 2540 D	2
14Aug-0263	**Piezo No. 10** 12.08.14 2.25pm					
		Ammonia as N	**<0.2**	mg/L	APHA 4500-NH3 F	0.2
		Chloride	**1140**	mg/L	APHA 4110 B	1
		Chemical Oxygen Demand	**24**	mg/L	APHA 5220 D	10
		Conductivity	**4790**	µS/cm	APHA 2510 B	1
		Nitrate as N	**22**	mg/L	APHA 4110 B	1
		Nitrogen, total	**22**	mg/L	APHA 4500-Norg B + 4110 B	2
		Nitrate/Nitrite as N	**22**	mg/L	APHA 4110 B	1

Charles Sturt University

ENVIRONMENTAL AND ANALYTICAL LABORATORIES

Locked Bag 588
Wagga Wagga NSW 2678

Tel: +61 2 6933 2849
Fax: +61 2 6933 2477
Email: eal@csu.edu.au
www.csu.edu.au/faculty/science/eal

Hay Shire Council

PO Box 141

Hay NSW 2711

Attention:

Friday, August 29, 2014

NATA Accredited Laboratory Number: 9597

LABORATORY ANALYSIS REPORT

Report Number:1408-0055
Page 2 of 6
For all enquiries related to this report please quote document number: 1408-0055

Facility:

Order #

Sample Type
Water

Collected By
Clint Taylor

Date Received
14-August-2014

EAL ID	Client ID. / Date/Time sample taken	Test	Result (units)		Method Reference	Limit of Reporting
14Aug-0263	**Piezo No. 10** 12.08.14 2.25pm					
		Ortho-Phosphate as P	**0.22**	mg/L	APHA 4500-P E	0.01
		Phosphorus, Total	**0.26**	mg/L	APHA 4500-P B5/4500-P E	0.01
		pH	**8.2**	pH units	APHA 4500-H+ B	
		Total Kjeldahl Nitrogen	**<2**	mg/L	APHA 4500-Norg B	2
		Total Organic Carbon	**2**	mg/L	Analysis by Ecowise, Melbourne (acc no: 992)	
		Total Suspended Solids	**204**	mg/L	APHA 2540 D	2
14Aug-0264	**Piezo No. 12** 12.08.14 2.20pm					
		Ammonia as N	**<0.2**	mg/L	APHA 4500-NH3 F	0.2
		Chloride	**311**	mg/L	APHA 4110 B	1
		Chemical Oxygen Demand	**43**	mg/L	APHA 5220 D	10
		Conductivity	**1930**	µS/cm	APHA 2510 B	1
		Nitrate as N	**<1**	mg/L	APHA 4110 B	1
		Nitrogen, total	**<2**	mg/L	APHA 4500-Norg B + 4110 B	2
		Nitrate/Nitrite as N	**<1**	mg/L	APHA 4110 B	1
		Ortho-Phosphate as P	**0.30**	mg/L	APHA 4500-P E	0.01
		Phosphorus, Total	**0.32**	mg/L	APHA 4500-P B5/4500-P E	0.01
		pH	**8.2**	pH units	APHA 4500-H+ B	
		Total Kjeldahl Nitrogen	**<2**	mg/L	APHA 4500-Norg B	2
		Total Organic Carbon	**5**	mg/L	Analysis by Ecowise, Melbourne (acc no: 992)	
		Total Suspended Solids	**18**	mg/L	APHA 2540 D	2

Charles Sturt University

ENVIRONMENTAL AND ANALYTICAL LABORATORIES

Locked Bag 588
Wagga Wagga NSW 2678

Tel: +61 2 6933 2849
Fax: +61 2 6933 2477
Email: eal@csu.edu.au
www.csu.edu.au/faculty/science/eal

Hay Shire Council

PO Box 141

Hay NSW 2711

Attention:

Friday, August 29, 2014

NATA Accredited Laboratory Number: 9597

LABORATORY ANALYSIS REPORT

Report Number:1408-0055

For all enquiries related to this report please quote document number: 1408-0055

Facility:

Order #

Sample Type
Water

Collected By
Clint Taylor

Date Received
14-August-2014

EAL ID	Client ID. / Date/Time sample taken	Test	Result	(units)	Method Reference	Limit of Reporting
14Aug-0265	**Piezo No. 14** 12.08.14 2.10pm					
		Ammonia as N	**<0.2**	mg/L	APHA 4500-NH3 F	0.2
		Chloride	**2830**	mg/L	APHA 4110 B	1
		Chemical Oxygen Demand	**48**	mg/L	APHA 5220 D	10
		Conductivity	**10700**	µS/cm	APHA 2510 B	1
		Nitrate as N	**1**	mg/L	APHA 4110 B	1
		Nitrogen, total	**3**	mg/L	APHA 4500-Norg B + 4110 B	2
		Nitrate/Nitrite as N	**1**	mg/L	APHA 4110 B	1
		Ortho-Phosphate as P	**0.08**	mg/L	APHA 4500-P E	0.01
		Phosphorus, Total	**0.15**	mg/L	APHA 4500-P B5/4500-P E	0.01
		pH	**8.0**	pH units	APHA 4500-H+ B	
		Total Kjeldahl Nitrogen	**2**	mg/L	APHA 4500-Norg B	2
		Total Organic Carbon	**3**	mg/L	Analysis by Ecowise, Melbourne (acc no: 992)	
		Total Suspended Solids	**138**	mg/L	APHA 2540 D	2
14Aug-0266	**Piezo No. 15** 12.08.14 1.46pm					
		Ammonia as N	**3.1**	mg/L	APHA 4500-NH3 F	0.2
		Chloride	**3000**	mg/L	APHA 4110 B	1
		Chemical Oxygen Demand	**57**	mg/L	APHA 5220 D	10
		Conductivity	**10600**	µS/cm	APHA 2510 B	1
		Nitrate as N	**<1**	mg/L	APHA 4110 B	1
		Nitrogen, total	**5**	mg/L	APHA 4500-Norg B + 4110 B	2
		Nitrate/Nitrite as N	**<1**	mg/L	APHA 4110 B	1

Charles Sturt University

ENVIRONMENTAL AND ANALYTICAL LABORATORIES

Locked Bag 588
Wagga Wagga NSW 2678

Tel: +61 2 6933 2849
Fax: +61 2 6933 2477
Email: eal@csu.edu.au
www.csu.edu.au/faculty/science/eal

Hay Shire Council

PO Box 141

Hay NSW 2711

Attention:

Friday, August 29, 2014

NATA Accredited Laboratory Number: 9597

LABORATORY ANALYSIS REPORT

Report Number:1408-0055
Page 4 of 6
For all enquiries related to this report please quote document number: 1408-0055

Facility:

Order #

Sample Type
Water

Collected By
Clint Taylor

Date Received
14-August-2014

EAL ID	Client ID. / Date/Time sample taken	Test	Result (units)		Method Reference	Limit of Reporting
14Aug-0266	**Piezo No. 15** 12.08.14 1.46pm					
		Ortho-Phosphate as P	**1.42**	mg/L	APHA 4500-P E	0.01
		Phosphorus, Total	**1.74**	mg/L	APHA 4500-P B5/4500-P E	0.01
		pH	**7.5**	pH units	APHA 4500-H+ B	
		Total Kjeldahl Nitrogen	**5**	mg/L	APHA 4500-Norg B	2
		Total Organic Carbon	**4**	mg/L	Analysis by Ecowise, Melbourne (acc no: 992)	
		Total Suspended Solids	**156**	mg/L	APHA 2540 D	2
14Aug-0267	**Piezo No. 16** 12.08.14 2.05pm					
		Ammonia as N	**0.3**	mg/L	APHA 4500-NH3 F	0.2
		Chloride	**275**	mg/L	APHA 4110 B	1
		Chemical Oxygen Demand	**70**	mg/L	APHA 5220 D	10
		Conductivity	**1820**	µS/cm	APHA 2510 B	1
		Nitrate as N	**<1**	mg/L	APHA 4110 B	1
		Nitrogen, total	**4**	mg/L	APHA 4500-Norg B + 4110 B	2
		Nitrate/Nitrite as N	**<1**	mg/L	APHA 4110 B	1
		Ortho-Phosphate as P	**1.40**	mg/L	APHA 4500-P E	0.01
		Phosphorus, Total	**1.54**	mg/L	APHA 4500-P B5/4500-P E	0.01
		pH	**8.0**	pH units	APHA 4500-H+ B	
		Total Kjeldahl Nitrogen	**4**	mg/L	APHA 4500-Norg B	2
		Total Organic Carbon	**9**	mg/L	Analysis by Ecowise, Melbourne (acc no: 992)	
		Total Suspended Solids	**162**	mg/L	APHA 2540 D	2

Charles Sturt University

ENVIRONMENTAL AND ANALYTICAL LABORATORIES

Locked Bag 588
Wagga Wagga NSW 2678

Tel: +61 2 6933 2849
Fax: +61 2 6933 2477
Email: eal@csu.edu.au
www.csu.edu.au/faculty/science/eal

Hay Shire Council

PO Box 141

Hay NSW 2711

Attention:

Friday, August 29, 2014

NATA Accredited Laboratory Number: 9597

LABORATORY ANALYSIS REPORT

Report Number:1408-0055
Page 5 of 6
For all enquiries related to this report please quote document number: 1408-0055

Facility:

Order #

Sample Type
Water

Collected By
Clint Taylor

Date Received
14-August-2014

EAL ID	Client ID. / Date/Time sample taken	Test	Result (units)		Method Reference	Limit of Reporting
14Aug-0268	**Piezo No. 17** 12.08.14 2.50pm					
		Ammonia as N	**<0.2**	mg/L	APHA 4500-NH3 F	0.2
		Chloride	**889**	mg/L	APHA 4110 B	1
		Chemical Oxygen Demand	**25**	mg/L	APHA 5220 D	10
		Conductivity	**4770**	µS/cm	APHA 2510 B	1
		Nitrate as N	**2**	mg/L	APHA 4110 B	1
		Nitrogen, total	**2**	mg/L	APHA 4500-Norg B + 4110 B	2
		Nitrate/Nitrite as N	**2**	mg/L	APHA 4110 B	1
		Ortho-Phosphate as P	**1.31**	mg/L	APHA 4500-P E	0.01
		Phosphorus, Total	**1.32**	mg/L	APHA 4500-P B5/4500-P E	0.01
		pH	**8.4**	pH units	APHA 4500-H+ B	
		Total Kjeldahl Nitrogen	**<2**	mg/L	APHA 4500-Norg B	2
		Total Organic Carbon	**4**	mg/L	Analysis by Ecowise, Melbourne (acc no: 992)	
		Total Suspended Solids	**80**	mg/L	APHA 2540 D	2
14Aug-0269	**Piezo No. 18** 12.08.14 1.50pm					
		Ammonia as N	**<0.2**	mg/L	APHA 4500-NH3 F	0.2
		Chloride	**7930**	mg/L	APHA 4110 B	5
		Chemical Oxygen Demand	**111**	mg/L	APHA 5220 D	10
		Conductivity	**25000**	µS/cm	APHA 2510 B	1
		Nitrate as N	**6**	mg/L	APHA 4110 B	1
		Nitrogen, total	**6**	mg/L	APHA 4500-Norg B + 4110 B	2
		Nitrate/Nitrite as N	**6**	mg/L	APHA 4110 B	1

Charles Sturt University

ENVIRONMENTAL AND ANALYTICAL LABORATORIES

Locked Bag 588
Wagga Wagga NSW 2678

Tel: +61 2 6933 2849
Fax: +61 2 6933 2477
Email: eal@csu.edu.au
www.csu.edu.au/faculty/science/eal

Hay Shire Council

PO Box 141

Hay NSW 2711

Attention:

Friday, August 29, 2014

NATA Accredited Laboratory Number: 9597

This document is issued in accordance with NATA's accreditation requirements. Accredited for compliance with ISO/IEC 17025. This document shall not be reproduced, except in full.

LABORATORY ANALYSIS REPORT

Report Number:1408-0055
Page 6 of 6

For all enquiries related to this report please quote document number: 1408-0055

Facility:

Order #

Sample Type
Water

Collected By
Clint Taylor

Date Received
14-August-2014

EAL ID	Client ID. / Date/Time sample taken	Test	Result (units)		Method Reference	Limit of Reporting
14Aug-0269	**Piezo No. 18** 12.08.14 1.50pm					
		Ortho-Phosphate as P	**0.16**	mg/L	APHA 4500-P E	0.01
		Phosphorus, Total	**0.20**	mg/L	APHA 4500-P B5/4500-P E	0.01
		pH	**8.0**	pH units	APHA 4500-H+ B	
		Total Kjeldahl Nitrogen	**<2**	mg/L	APHA 4500-Norg B	2
		Total Organic Carbon	**3**	mg/L	Analysis by Ecowise, Melbourne (acc no: 992)	
		Total Suspended Solids	**92**	mg/L	APHA 2540 D	2

Note:

NATA accreditation not held for tests marked with *

Signed ..... David Wade, Laboratory Manager.

All samples analysed as received.
All soil results are reported on a dry basis.
The EAL takes no responsibility for the end use of results within this report.
This report shall not be reproduced except in full.
This report replaces any previously issued report