

Twynam Pastoral Company Pty Limited
The Mount Bedgerabong Road
Forbes NSW 2871
Attention: Michael Fisher

Wednesday, November 13, 2013



NATA Accredited Laboratory
Number: 9597

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LABORATORY ANALYSIS REPORT

Report Number: 1311-0022

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<u>Facility:</u>	<u>Order #</u>	<u>Date Received</u>
<u>Sample Type</u>	<u>Collected By</u>	
Water	P. Paradice	06-November-2013

<u>EAL ID</u>	<u>Client ID.</u> Date/Time sample taken	<u>Test</u>	<u>Result (units)</u>	<u>Method Reference</u>	<u>Limit of Reporting</u>
13Nov-0072	9403-8443 03.11.13	Alkalinity, Bicarbonate as CaCO ₃	372 mg/L	APHA 2320 B	2
		Ammonia as N	<0.2 mg/L	APHA 4500-NH ₃ F	0.2
		Calcium (dissolved)	47.6 mg/L	APHA 3030 B/3120 B	0.03
		Chloride	1320 mg/L	APHA 4110 B	0.5
		Conductivity	4940 µS/cm	APHA 2510 B	1
		Calcium Hardness as CaCO ₃	119 mg/L	APHA 2340 B	2
		Nitrate-Nitrite as N	1.0 mg/L	LTM-W-014	0.1
		Phosphorus, Total	0.12 mg/L	APHA 4500-P B5/4500-P E	0.01
		pH	6.9 pH units	APHA 4500-H+ B	
		Potassium (dissolved)	61.3 mg/L	APHA 3030 B/3120 B	0.2
		Sodium (dissolved)	892 mg/L	APHA 3030 B/3120 B	0.5
		Sulphate	97.9 mg/L	APHA 4110 B	3
13Nov-0073	FB-8444 03.11.13	Alkalinity, Bicarbonate as CaCO ₃	175 mg/L	APHA 2320 B	2
		Ammonia as N	<0.2 mg/L	APHA 4500-NH ₃ F	0.2
		Calcium (dissolved)	48.0 mg/L	APHA 3030 B/3120 B	0.03
		Chloride	254 mg/L	APHA 4110 B	0.5
		Conductivity	1270 µS/cm	APHA 2510 B	1
		Calcium Hardness as CaCO ₃	120 mg/L	APHA 2340 B	2
		Nitrate-Nitrite as N	2.1 mg/L	LTM-W-014	0.1
		Phosphorus, Total	0.04 mg/L	APHA 4500-P B5/4500-P E	0.01
		pH	6.9 pH units	APHA 4500-H+ B	

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Water	P. Paradice			06-November-2013

<u>EAL ID</u>	<u>Client ID.</u> Date/Time sample taken	<u>Test</u>	<u>Result (units)</u>	<u>Method Reference</u>	<u>Limit of Reporting</u>
13Nov-0073	FB-8444 03.11.13	Potassium (dissolved)	2.0 mg/L	APHA 3030 B/3120 B	0.2
		Sodium (dissolved)	126 mg/L	APHA 3030 B/3120 B	0.05
		Sulphate	42.7 mg/L	APHA 4110 B	3
13Nov-0074	AB3-8445 03.11.13	Alkalinity, Bicarbonate as CaCO ₃	412 mg/L	APHA 2320 B	2
		Ammonia as N	<0.2 mg/L	APHA 4500-NH ₃ F	0.2
		Calcium (dissolved)	62.5 mg/L	APHA 3030 B/3120 B	0.03
		Chloride	513 mg/L	APHA 4110 B	0.5
		Conductivity	2580 µS/cm	APHA 2510 B	1
		Calcium Hardness as CaCO ₃	156 mg/L	APHA 2340 B	2
		Nitrate-Nitrite as N	0.6 mg/L	LTM-W-014	0.1
		Phosphorus, Total	0.04 mg/L	APHA 4500-P B5/4500-P E	0.01
		pH	7.6 pH units	APHA 4500-H+ B	
		Potassium (dissolved)	2.4 mg/L	APHA 3030 B/3120 B	0.2
		Sodium (dissolved)	432 mg/L	APHA 3030 B/3120 B	0.5
		Sulphate	129 mg/L	APHA 4110 B	3
13Nov-0075	AB4-8446 03.11.13	Alkalinity, Bicarbonate as CaCO ₃	170 mg/L	APHA 2320 B	2
		Ammonia as N	<0.2 mg/L	APHA 4500-NH ₃ F	0.2
		Calcium (dissolved)	18.4 mg/L	APHA 3030 B/3120 B	0.03
		Chloride	73.6 mg/L	APHA 4110 B	0.5
		Conductivity	634 µS/cm	APHA 2510 B	1

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<u>Facility:</u>	<u>Order #</u>	<u>Date Received</u>
Water	P. Paradise	06-November-2013

<u>EAL ID</u>	<u>Client ID.</u> Date/Time sample taken	<u>Test</u>	<u>Result (units)</u>	<u>Method Reference</u>	<u>Limit of Reporting</u>
13Nov-0075	AB4-8446 03.11.13	Calcium Hardness as CaCO ₃	46 mg/L	APHA 2340 B	2
		Nitrate-Nitrite as N	0.5 mg/L	LTM-W-014	0.1
		Phosphorus, Total	0.08 mg/L	APHA 4500-P B5/4500-P E	0.01
		pH	7.5 pH units	APHA 4500-H+ B	
		Potassium (dissolved)	0.6 mg/L	APHA 3030 B/3120 B	0.2
		Sodium (dissolved)	88.4 mg/L	APHA 3030 B/3120 B	0.05
		Sulphate	29.7 mg/L	APHA 4110 B	3
13Nov-0076	AB5-8447 03.11.13	Alkalinity, Bicarbonate as CaCO ₃	183 mg/L	APHA 2320 B	2
		Ammonia as N	<0.2 mg/L	APHA 4500-NH3 F	0.2
		Calcium (dissolved)	23.3 mg/L	APHA 3030 B/3120 B	0.03
		Chloride	82.2 mg/L	APHA 4110 B	0.5
		Conductivity	686 µS/cm	APHA 2510 B	1
		Calcium Hardness as CaCO ₃	58 mg/L	APHA 2340 B	2
		Nitrate-Nitrite as N	0.8 mg/L	LTM-W-014	0.1
		Phosphorus, Total	0.07 mg/L	APHA 4500-P B5/4500-P E	0.01
		pH	7.6 pH units	APHA 4500-H+ B	
		Potassium (dissolved)	0.7 mg/L	APHA 3030 B/3120 B	0.2
		Sodium (dissolved)	88.7 mg/L	APHA 3030 B/3120 B	0.05
		Sulphate	36.4 mg/L	APHA 4110 B	3
13Nov-0077	AB6-8448 03.11.13	Alkalinity, Bicarbonate as CaCO ₃	115 mg/L	APHA 2320 B	2

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Water	P. Paradice	06-November-2013

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13Nov-0077	AB6-8448 03.11.13	Ammonia as N	<0.2 mg/L	APHA 4500-NH3 F	0.2
		Calcium (dissolved)	11.0 mg/L	APHA 3030 B/3120 B	0.03
		Chloride	43.9 mg/L	APHA 4110 B	0.5
		Conductivity	404 µS/cm	APHA 2510 B	1
		Calcium Hardness as CaCO3	27 mg/L	APHA 2340 B	2
		Nitrate-Nitrite as N	<0.1 mg/L	LTM-W-014	0.1
		Phosphorus, Total	0.06 mg/L	APHA 4500-P B5/4500-P E	0.01
		pH	7.6 pH units	APHA 4500-H+ B	
		Potassium (dissolved)	0.6 mg/L	APHA 3030 B/3120 B	0.2
		Sodium (dissolved)	62.7 mg/L	APHA 3030 B/3120 B	0.05
		Sulphate	17.3 mg/L	APHA 4110 B	3

Note:

*NATA accreditation not held for tests marked with **

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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.
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