

## CERTIFICATE OF ANALYSIS

<b>Work Order</b> : <b>ES2029462</b> <b>Amendment</b> : <b>1</b> <b>Client</b> : <b>Paraway Pastoral Company Limited</b> <b>Contact</b> : Paul McDougall <b>Address</b> : 70 McNamara Street Orange 2800 <b>Telephone</b> : ---- <b>Project</b> : 13143-20 <b>Order number</b> : ---- <b>C-O-C number</b> : ---- <b>Sampler</b> : Paul McDougall <b>Site</b> : ---- <b>Quote number</b> : EN/333 <b>No. of samples received</b> : 4 <b>No. of samples analysed</b> : 4	<b>Page</b> : 1 of 2  <b>Laboratory</b> : Environmental Division Sydney <b>Contact</b> : Customer Services ES <b>Address</b> : 277-289 Woodpark Road Smithfield NSW Australia 2164  <b>Telephone</b> : +61-2-8784 8555 <b>Date Samples Received</b> : 21-Aug-2020 10:39 <b>Date Analysis Commenced</b> : 22-Aug-2020 <b>Issue Date</b> : 02-Sep-2020 16:18
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Accreditation No. 825  
Accredited for compliance with  
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- 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.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Ashesh Patel	Senior Chemist	Sydney Inorganics, Smithfield, NSW



## General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the 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.

- EK067G: LOR raised for TP on samples 2, 3 and 4 due to sample matrix.
- EK055G: It has been noted that Ammonia is greater than TKN on sample 3, however this difference is within the limits of experimental variation.

## Analytical Results

Sub-Matrix: **WATER**  
 (Matrix: **WATER**)

Client sample ID

				EPA5 Lateral	EPA6 Feedlot	EPA7 Tip	EPA8 NW of feedlot	----
Client sampling date / time				20-Aug-2020 00:00	20-Aug-2020 00:00	20-Aug-2020 00:00	20-Aug-2020 00:00	----
Compound	CAS Number	LOR	Unit	ES2029462-001	ES2029462-002	ES2029462-003	ES2029462-004	-----
				Result	Result	Result	Result	----
<b>EA005P: pH by PC Titrator</b>								
pH Value	----	0.01	pH Unit	<b>7.64</b>	<b>4.34</b>	<b>3.73</b>	<b>3.91</b>	----
<b>EA010P: Conductivity by PC Titrator</b>								
Electrical Conductivity @ 25°C	----	1	µS/cm	<b>9420</b>	<b>21400</b>	<b>23700</b>	<b>22800</b>	----
<b>EK055G: Ammonia as N by Discrete Analyser</b>								
Ammonia as N	7664-41-7	0.01	mg/L	<b>0.05</b>	<b>0.91</b>	<b>1.81</b>	<b>1.14</b>	----
<b>EK058G: Nitrate as N by Discrete Analyser</b>								
Nitrate as N	14797-55-8	0.01	mg/L	<b>48.3</b>	<b>0.27</b>	<b>0.12</b>	<b>44.3</b>	----
<b>EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser</b>								
Nitrite + Nitrate as N	----	0.01	mg/L	<b>48.4</b>	<b>0.27</b>	<b>0.12</b>	<b>44.3</b>	----
<b>EK061G: Total Kjeldahl Nitrogen By Discrete Analyser</b>								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<b>3.5</b>	<b>3.0</b>	<b>1.8</b>	<b>3.0</b>	----
<b>EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser</b>								
^ Total Nitrogen as N	----	0.1	mg/L	<b>51.9</b>	<b>3.3</b>	<b>1.9</b>	<b>47.3</b>	----
<b>EK067G: Total Phosphorus as P by Discrete Analyser</b>								
Total Phosphorus as P	----	0.01	mg/L	<b>0.14</b>	<0.05	<0.05	<0.05	----