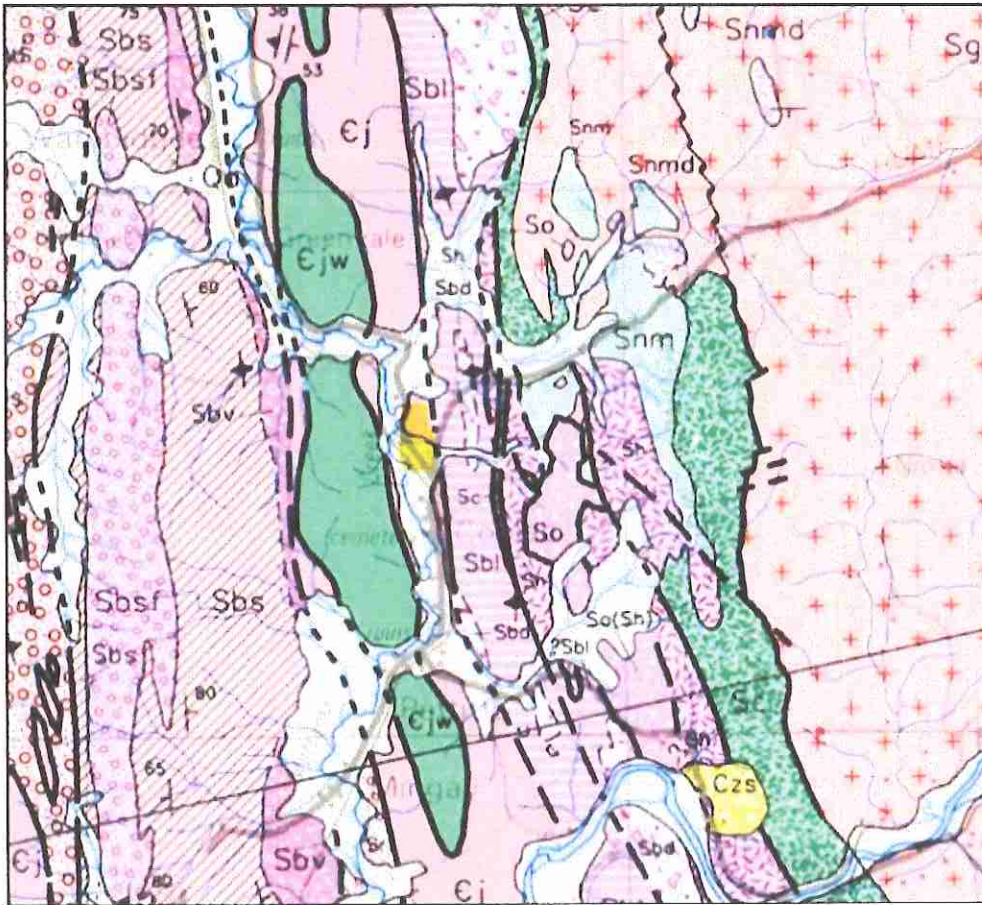
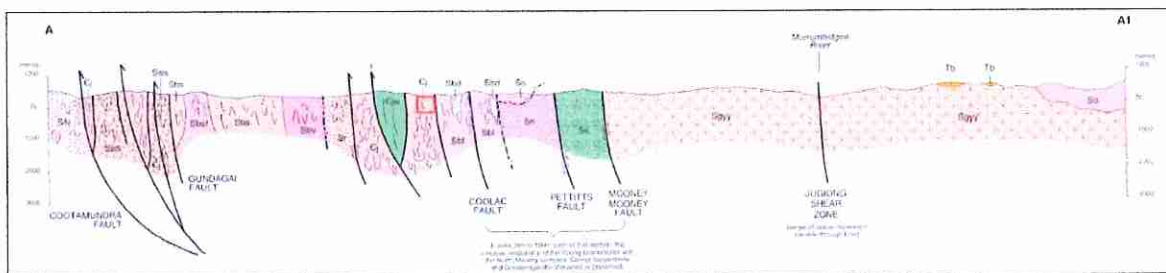


Appendix G
Portable Water Supply Details

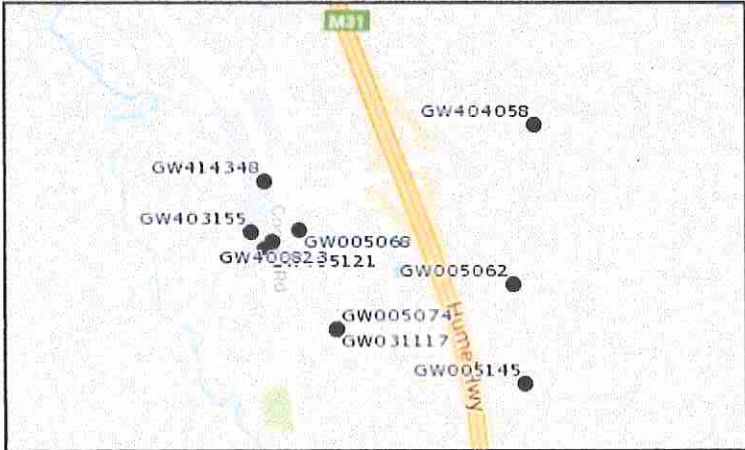
Geology in the vicinity of the propose Coolac service centre (Yellow highlighted area is the location of the proposed service centre).



A geological cross section of the area of the proposed service centre, with the approximate location of the service centre shown in the red box.



The location of existing bores in the vicinity of the proposed service centre





CERTIFICATE OF ANALYSIS

Work Order : **ES1717326**

Client : **DM MCMAHON PTY LTD**

Contact : **MR DAVID MCMAHON**

Address : **4a Norton Street**

Wagga Wagga NSW, AUSTRALIA 2650

Telephone : **02 6931 0510**

Project : **Alspec and Partners**

Order number : **4569**

C-O-C number : **----**

Sampler : **DAVID MCMAHON**

Site : **----**

Quote number : **SYBQ/516/16**

No. of samples received : **2**

No. of samples analysed : **2**

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.

Signatories	Position	Accreditation Category
Ankhi Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Ashesh Patel	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Raymond Commodore	Instrument Chemist	Sydney Inorganics, Smithfield, NSW

Page : 1 of 4

Laboratory : **Environmental Division Sydney**

Contact : **Customer Services ES**

Address : **277-289 Woodpark Road Smithfield NSW Australia 2164**

Telephone : **+61-2-8784 8555**

Date Samples Received : **13-Jul-2017 14:00**

Date Analysis Commenced : **13-Jul-2017**

Issue Date : **19-Jul-2017 17:16**



Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing



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 NEMP. 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 no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component.

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

Δ = 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.

- It has been noted that Nitrite is greater than NOx for sample 2, however this difference is within the limits of experimental variation.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)	Client sample ID	Cottage	Main Bore
Compound	CAS Number	Client sampling date / time	Result
EA005P: pH by PC Titrator			
pH Value		10-Jul-2017 13:15	10-Jul-2017 13:40
	0.01	8.19	7.81
EA010P: Conductivity by PC Titrator			
Electrical Conductivity @ 25°C	1	1300	985
Unit	µS/cm		
EA015: Total Dissolved Solids dried at 180 ± 5 °C			
Total Dissolved Solids @180°C	10	825	496
Unit	mg/L		
EA020EC: Salinity			
Salinity	0.01	0.60	0.50
Unit	g/kg		
ED037P: Alkalinity by PC Titrator			
Hydroxide Alkalinity as CaCO3	1	<1	<1
Unit	mg/L		
Carbonate Alkalinity as CaCO3	1	<1	<1
Unit	mg/L		
Bicarbonate Alkalinity as CaCO3	1	534	435
Unit	mg/L		
Total Alkalinity as CaCO3	1	534	435
Unit	mg/L		
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA			
Sulfate as SO4 - Turbidimetric	1	13	9
Unit	mg/L		
ED045G: Chloride by Discrete Analyser			
Chloride	1	74	39
Unit	mg/L		
ED093F: Dissolved Major Cations			
Calcium	1	39	40
Unit	mg/L		
Magnesium	1	75	53
Unit	mg/L		
Sodium	1	88	54
Unit	mg/L		
Potassium	1	<1	<1
Unit	mg/L		
EG020T: Total Metals by ICP-MS			
Silver	0.001	<0.001	<0.001
Unit	mg/L		
Arsenic	0.001	<0.001	<0.001
Unit	mg/L		
Boron	0.05	<0.05	<0.05
Unit	mg/L		
Barium	0.001	0.061	0.036
Unit	mg/L		
Cadmium	0.0001	<0.0001	<0.0001
Unit	mg/L		
Chromium	0.001	<0.001	<0.001
Unit	mg/L		
Copper	0.001	0.044	0.002
Unit	mg/L		
Manganese	0.001	<0.001	<0.001
Unit	mg/L		
Molybdenum	0.001	<0.001	<0.001
Unit	mg/L		
Nickel	0.001	<0.001	0.002
Unit	mg/L		
Lead	0.001	<0.001	<0.001
Unit	mg/L		
Antimony	0.001	<0.001	<0.001
Unit	mg/L		





Analytical Results

Compound	CAS Number	LOR	Unit	Client sample ID		Cottage	Main Bore				
				Client sampling date / time	Result						
Sub-Matrix: WATER											
(Matrix: WATER)											
EG020T: Total Metals by ICP-MS - Continued	7782-49-2	0.01	mg/L	10-Jul-2017 13:15	ES1717326-001	<0.01	10-Jul-2017 13:40	ES1717326-002			
Selenium											
EG035T: Total Recoverable Mercury by FIMS	7439-97-6	0.0001	mg/L			<0.0001		<0.0001			
Mercury											
EK025G: Free cyanide by Discrete Analyser	57-12-5	0.004	mg/L			<0.004		<0.004			
Total Cyanide											
EK040P: Fluoride by PC Titrator	16984-48-8	0.1	mg/L			0.4		0.5			
Fluoride											
EK057G: Nitrite as N by Discrete Analyser	14797-65-0	0.01	mg/L			<0.01		<0.01			
Nitrite as N											
EK058G: Nitrate as N by Discrete Analyser	14797-55-8	0.01	mg/L			12.4		10.9			
Nitrate as N											
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser			mg/L			12.4		10.9			
Nitrite + Nitrate as N											
EN055: Ionic Balance											
Total Anions		0.01	meq/L			13.0		9.98			
Total Cations		0.01	meq/L			11.9		8.71			
Ionic Balance		0.01	%			4.33		6.81			