



22 July 2015

Nathan Wood  
Hamcon Civil Pty Ltd  
PO Box 2356  
Orange NSW 2800

Our ref: L8072.2

Dear Nathan,

### Water analysis - Bald Hill Quarry

Discharge water from the monitoring point of the Final Sediment Basin Overflow was collected on 14 July 2015 by Nathan Wood (sample ID BH1407). The total rainfall collected in the preceding 5 days prior to sampling was 61.2mm.

The water was analysed for oil and grease, pH and total suspended solids at the NATA accredited laboratory of ALS Environmental Smithfield. Concentration limits are listed in the EPA licence and Table 1 however they do not apply when rainfall exceeds a total of 44mm over a 5 day period.

Results for the analysis are listed in Table1.

Table 1. Results of discharge water analysis.

Pollutant	Units	BH1407	Licence concentration limit*
Oil and grease	mg/L	<5	10
pH	pH	7.76	6.5-8.5
Total suspended solids	mg/L	30	50

\*does not apply when rainfall exceeds a total of 44mm over a 5 day period

Regards,

Greg Madafiglio CPSS  
Senior Environmental Scientist

### Attachments

Appendix 1. ALS Laboratory report ES1526194



CERTIFICATE OF ANALYSIS

Table with 4 columns: Field Name, Value, Field Name, Value. Includes Work Order (ES1526194), Amendment (1), Client (ENVIROWEST CONSULTING), Laboratory (Environmental Division Sydney), and various contact and project details.

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted.

This Certificate of Analysis contains the following information:

- General Comments
• Analytical Results



NATA Accredited Laboratory 825

Accredited for compliance with ISO/IEC 17025.

WORLD RECOGNISED ACCREDITATION

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Table with 3 columns: Signatories, Position, Accreditation Category. Row 1: Ankit Joshi, Inorganic Chemist, Sydney Inorganics



## 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 NEPM. 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 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.

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.

## Analytical Results

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

Client sample ID

				<b>BH1407</b>	----	----	----	----
Client sampling date / time				[14-Jul-2015]	----	----	----	----
Compound	CAS Number	LOR	Unit	<b>ES1526194-001</b>	-----	-----	-----	-----
				Result	Result	Result	Result	Result
<b>EA005P: pH by PC Titrator</b>								
pH Value	----	0.01	pH Unit	<b>7.76</b>	----	----	----	----
<b>EA025: Suspended Solids</b>								
<sup>^</sup> Suspended Solids (SS)	----	5	mg/L	<b>30</b>	----	----	----	----
<b>EP020: Oil and Grease (O&amp;G)</b>								
<sup>^</sup> Oil & Grease	----	5	mg/L	<5	----	----	----	----