

CERTIFICATE OF ANALYSIS

Work Order	: WN1902994	Page	: 1 of 2		
Client	: MOLYCOP WARATAH (COMMONWEALTH STEEL CO)	Laboratory	: ALS Water - Newcastle		
Contact	: Lisa Clarke	Contact	: Andrea Swan		
Address	EPO BOX 14	Address	: 5/585 Maitland Road Newcastle West NSW Australia 2304		
	WARATAH NSW, AUSTRALIA 2298				
Telephone		Telephone	: +61 2 4014 2500		
Project	: Monthly Drains	Date Samples Received	: 08-May-2019 11:43		
Order number	: PO0013311	Date Analysis Commenced	: 09-May-2019		
C-O-C number	:	Issue Date	13-May-2019 15:28		
Sampler	:		Hac-MR		
Site	:				
Quote number	: WN/104/16			Accreditation No. 825	
No. of samples received	: 2			Accredited for compliance with	
No. of samples analysed	: 2			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.

Signatories Position		Accreditation Category	
Gregory Towers	Technical Officer	Chemistry, Newcastle West, NSW	
Neil Martin	Team Leader - Chemistry	Chemistry, Newcastle West, NSW	



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.

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.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)	Client sample ID			6095 - East Drain	6096 - North Drain			
Client sampling date / time			07-May-2019 00:00	07-May-2019 00:00				
Compound	CAS Number	LOR	Unit	WN1902994-001	WN1902994-002			
				Result	Result			
EP021: Total Oil and Grease								
Total Oil and Grease		2	mg/L	<2	<2			
EP026SP.WN: Chemical Oxygen Demand (COD)								
Chemical Oxygen Demand		10	mg/L	14	19			