

## CERTIFICATE OF ANALYSIS

<b>Work Order</b> : <b>EN1513628</b> <b>Client</b> : <b>Challenger Mines PTY LTD</b> <b>Contact</b> : Brett Hampel <b>Address</b> : <b>E-mail</b> : Brett@challengermines.com.au <b>Telephone</b> : ---- <b>Facsimile</b> : ---- <b>Project</b> : Challenger Gold Mine <b>Order number</b> : 108 <b>C-O-C number</b> : ---- <b>Sampler</b> : ---- <b>Site</b> : ----  <b>Quote number</b> : ----	<b>Page</b> : 1 of 2 <b>Laboratory</b> : Environmental Division Newcastle <b>Contact</b> : <b>Address</b> : 5/585 Maitland Road Mayfield West NSW Australia 2304 <b>E-mail</b> : <b>Telephone</b> : +61 2 4014 2500 <b>Facsimile</b> : +61 2 4967 7382 <b>QC Level</b> : NEPM 2013 B3 & ALS QC Standard <b>Date Samples Received</b> : 27-Oct-2015 10:00 <b>Date Analysis Commenced</b> : 27-Oct-2015 <b>Issue Date</b> : 18-Nov-2015 10:10  <b>No. of samples received</b> : 5 <b>No. of samples analysed</b> : 5
---	---

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



WORLD RECOGNISED  
**ACCREDITATION**

NATA Accredited Laboratory 825

Accredited for compliance with  
ISO/IEC 17025.

### *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.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Alison Graham	Supervisor - Inorganic	Newcastle - 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.

- Analysis as per AS3580.10.1-2003. Samples passed through a 1mm sieve prior to analysis. NATA accreditation does not apply for results reported in g/m<sup>2</sup>.mth as sampling data was provided by the client.
- Sample exposure period outside AS3580.10.1 specifications of 30 +/- 2 days.

## Analytical Results

Sub-Matrix: **DEPOSITIONAL DUST**  
 (Matrix: **AIR**)

Client sample ID

				<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
				<b>17/09/15 - 22/10/15</b>	<b>17/09/15 - 22/10/15</b>	<b>17/09/15 - 22/10/15</b>	<b>17/09/15 - 22/10/15</b>	<b>17/09/15 - 22/10/15</b>
				22-Oct-2015 14:25	22-Oct-2015 14:35	22-Oct-2015 10:30	22-Oct-2015 10:25	22-Oct-2015 14:40
<i>Client sampling date / time</i>								
<i>Compound</i>	<i>CAS Number</i>	<i>LOR</i>	<i>Unit</i>	<b>EN1513628-001</b>	<b>EN1513628-002</b>	<b>EN1513628-003</b>	<b>EN1513628-004</b>	<b>EN1513628-005</b>
				Result	Result	Result	Result	Result
<b>EA142: Total Solids</b>								
<b>Total Solids</b>	----	0.1	g/m <sup>2</sup> .month	<b>0.8</b>	<b>0.9</b>	<b>1.1</b>	<b>1.6</b>	<b>1.4</b>
<b>Total Solids (mg)</b>	----	1	mg	<b>18</b>	<b>19</b>	<b>22</b>	<b>31</b>	<b>30</b>