

Multiquip Aggregates P/L 260 Tenth Ave Austral NSW 2179 Hac-MRA



# Certificate of Analysis

NATA Accredited Accreditation Number 1261 Site Number 1254

Accredited for compliance with ISO/IEC 17025 – Testing The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: - Steve Mikosic

Report 552660-A

Project name ARDMORE PARK QUARRY

Received Date Jul 03, 2017

Client Sample ID  Sample Matrix Eurofins   mgt Sample No.  Date Sampled  Test/Reference	LOR	Unit	1 Dust Deposition M17-JI01801 Jun 10, 2017	Dust Deposition M17-JI01802 Jun 10, 2017	3 Dust Deposition M17-JI01803 Jun 10, 2017	Dust Deposition M17-JI01804 Jun 10, 2017
Insoluble Solids	0.1	g/m2/mth	0.4	0.5	0.4	0.2
Soluble Solids	0.1	g/m2/mth	< 0.1	< 0.1	< 0.1	< 0.1
Total Solids	0.1	g/m2/mth	0.4	0.5	0.4	0.2
Volume (total)*	1	mL	860	860	840	760



## Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	<b>Testing Site</b>	Extracted	<b>Holding Time</b>
Insoluble Solids	Melbourne	Jul 04, 2017	7 Day
- Method: Insoluble Solids - Deposited Matter AS/NZ 3580.10.1 : 2003			
Soluble Solids	Melbourne	Jul 04, 2017	7 Day
- Method: Total Solids calculated by addition & Insoluble Lead results calculated by difference.			
Total Solids	Melbourne	Jul 04, 2017	7 Day

- Method: Total Solids - Deposited Matter AS/NZ 3580.10.1 : 2003

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**Eurofins | mgt Analytical Services Manager : Andrew Black** 

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Company Name: Multiquip Aggregates P/L Order No.: Received: Jul 3, 2017 1:29 PM

 Address:
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 Report #:
 552660
 Due:
 Jul 10, 2017

 Austral
 Phone:
 02 9606 9011
 Priority:
 5 Day

 NSW 2179
 Fax:
 02 9606 0557
 Contact Name:
 - Steve Mikosic

Project Name: ARDMORE PARK QUARRY

Sample Detail						Insoluble Solids	Soluble Solids	Total Solids	Volume (total)*
Melbourne Laboratory - NATA Site # 1254 & 14271						Х	Х	Х	Х
Sydney Laboratory - NATA Site # 18217									
Brisbane Laboratory - NATA Site # 20794									
Perth Laboratory - NATA Site # 18217									
External Laboratory									
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
1	1	Jun 10, 2017		Dust Deposition	M17-JI01801	Х	Х	Х	Х
2	2	Jun 10, 2017	·	Dust Deposition	M17-JI01802	Х	Х	Х	х
3	3	Jun 10, 2017		Dust Deposition	M17-JI01803	Х	Х	х	Х
4	4	Jun 10, 2017	_	Dust Deposition	M17-JI01804	Х	Х	х	Х
Test Counts					4	4	4	4	

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## **Internal Quality Control Review and Glossary**

#### General

- 1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil results are reported on a dry basis, unless otherwise stated.
- 3. All biota results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- 4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences
- 5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds
- 6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 7. Samples were analysed on an 'as received' basis
- 8. This report replaces any interim results previously issued.

#### **Holding Times**

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

\*\*NOTE: pH duplicates are reported as a range NOT as RPD

Units

 mg/kg: milligrams per kilogram
 mg/L: milligrams per litre

 ug/L: micrograms per litre
 ppm: Parts per million

 ppb: Parts per billion
 %: Percentage

org/100mL: Organisms per 100 millilitres NTU: Nephelometric Turbidity Units

MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry Where a moisture has been determined on a solid sample the result is expressed on a dry basis.

LOR Limit of Reporting

SPIKE Addition of the analyte to the sample and reported as percentage recovery.

RPD Relative Percent Difference between two Duplicate pieces of analysis.

LCS Laboratory Control Sample - reported as percent recovery.

CRM Certified Reference Material - reported as percent recovery.

Method Blank In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.

Surr - Surrogate The addition of a like compound to the analyte target and reported as percentage recovery.

**Duplicate** A second piece of analysis from the same sample and reported in the same units as the result to show comparison.

USEPA United States Environmental Protection Agency

APHA American Public Health Association
TCLP Toxicity Characteristic Leaching Procedure

COC Chain of Custody

SRA Sample Receipt Advice

QSM Quality Systems Manual ver 5.1 US Department of Defense
CP Client Parent - QC was performed on samples pertaining to this report

NCP Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within

TEQ Toxic Equivalency Quotient

## QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR: RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 50-150%-Phenols & PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.1 where no positive PFAS results have been reported have been reviewed and no data was affected.

## **QC Data General Comments**

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. Organochlorine Pesticide analysis where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
- 4. Organochlorine Pesticide analysis where reporting Spike data, Toxaphene is not added to the Spike.
- 5. Total Recoverable Hydrocarbons where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
- 6. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time.

  Analysis will begin as soon as possible after sample receipt.
- 7. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
- 8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
- 9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
- 10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

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## Comments

# Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	No
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

# **Authorised By**

Andrew Black Analytical Services Manager
Huong Le Senior Analyst-Inorganic (VIC)

## Glenn Jackson

# **National Operations Manager**

Final report - this Report replaces any previously issued Report

- Indicates Not Requested
- \* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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