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Certificate of Analysis

Multiquip Aggregates P/L
260 Tenth Ave
Austral
NSW 2179

Attention:	**- Steve Mikosic**

Report	**505446-A**
Project name	ARDMORE PARK QUARRY
Received Date	Jun 23, 2016

Client Sample ID			**1** **Dust Deposition** **M16-Jn21159** **Jun 08, 2016**	**2** **Dust Deposition** **M16-Jn21160** **Jun 08, 2016**	**3** **Dust Deposition** **M16-Jn21161** **Jun 08, 2016**	**4** **Dust Deposition** **M16-Jn21162** **Jun 08, 2016**
Sample Matrix						
Eurofins | mgt Sample No.						
Date Sampled						
Test/Reference	LOR	Unit				
Insoluble Solids	0.1	g/m2/mth	0.7	20	4.6	0.1
Soluble Solids	0.1	g/m2/mth	0.5	1.3	< 0.1	< 0.1
Total Solids	0.1	g/m2/mth	1.3	21	4.6	0.1
Volume (total)*	1	mL	3800	3400	3500	200

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Date Reported: Jun 30, 2016   *ABN : 50 005 085 521 Telephone: +61 3 8564 5000 Facsimile: +61 3 8564 5090*   Report Number: 505446-A

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	Testing Site	Extracted	Holding Time
Insoluble Solids	Melbourne	Jun 23, 2016	7 Day
- Method: Insoluble Solids - Deposited Matter AS/NZ 3580.10.1 : 2003			
Soluble Solids	Melbourne	Jun 23, 2016	7 Day
- Method: Total Solids calculated by addition & Insoluble Lead results calculated by difference.			
Total Solids	Melbourne	Jun 23, 2016	7 Day
- Method: Total Solids - Deposited Matter AS/NZ 3580.10.1 : 2003			

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Company Name:	Multiquip Aggregates P/L
Address:	260 Tenth Ave
	Austral
	NSW 2179
Project Name:	ARDMORE PARK QUARRY

Order No.:	
Report #:	505446
Phone:	02 9606 9011
Fax:	02 9606 0557

Received:	Jun 23, 2016 10:14 AM
Due:	Jun 30, 2016
Priority:	5 Day
Contact Name:	- Steve Mikosic

Eurofins | mgt Analytical Services Manager : Andrew Black

Sample Detail	Insoluble Solids	Soluble Solids	Total Solids	Volume (total)*
Melbourne Laboratory - NATA Site # 1254 & 14271	X	X	X	X
Sydney Laboratory - NATA Site # 18217				
Brisbane Laboratory - NATA Site # 20794				
External Laboratory				

No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	Insoluble Solids	Soluble Solids	Total Solids	Volume (total)*
1	1	Jun 08, 2016		Dust Deposition	M16-Jn21159	X	X	X	X
2	2	Jun 08, 2016		Dust Deposition	M16-Jn21160	X	X	X	X
3	3	Jun 08, 2016		Dust Deposition	M16-Jn21161	X	X	X	X
4	4	Jun 08, 2016		Dust Deposition	M16-Jn21162	X	X	X	X
Test Counts						4	4	4	4

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. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
4. Results are uncorrected for matrix spikes or surrogate recoveries.
5. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
6. Samples were analysed on an 'as received' basis. 7. 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

ug/l: micrograms per litre

ppb: Parts per billion

org/100ml: Organisms per 100 millilitres

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

mg/l: milligrams per litre

ppm: Parts per million

%: Percentage

NTU: Nephelometric Turbidity Units

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. 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.
Batch Duplicate	A second piece of analysis from a sample outside of the clients batch of samples but run within the laboratory batch of analysis.
Batch SPIKE	Spike recovery reported on a sample from outside of the clients batch of samples but run within the laboratory batch of analysis.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
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 20-130%

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.