

Multiquip Aggregates P/L 260 Tenth Ave Austral NSW 2179 Certificate of Analysis

NATA
WORLD RECOGNISED
ACCREDITATION

NATA Accredited Accreditation Number 1261 Site Number 1254

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

Attention: Steve Mikosic

Report 402345-A

Client Reference ARDMORE PARK QUARRY

Received Date Dec 04, 2013

Client Sample ID Sample Matrix Eurofins   mgt Sample No. Date Sampled			1 Dust Deposition M13-De03540 Nov 30, 2013	Dust Deposition M13-De03541 Nov 30, 2013	3 Dust Deposition M13-De03542 Nov 30, 2013	Dust Deposition M13-De03543 Nov 30, 2013
Test/Reference	LOR	Unit				
Insoluble Solids	0.1	g/m2/mth	0.8	0.6	0.4	0.5
Soluble Solids	0.1	g/m2/mth	1.7	2.2	2.3	1.7
Total Solids	0.1	g/m2/mth	2.5	2.8	2.7	2.2
Volume (total)	1	mL	930	1000	840	1000



### **Eurofins | mgt 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 PQLs are matrix dependant. Quoted PQLs 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 Acknowledgment.

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
ora/100ml: Organisms per 100 millilitres NTU: 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

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

ASLP Australian Standard Leaching Procedure (AS4439.3)

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 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, Toxophene & Chlordane are not added to the LCS.
- 4. Organochlorine Pesticide analysis where reporting Spike data, Toxophene is not added to the Spike.
- 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 Arochlor 1260 in Matrix Spikes and LCS's.
- 9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
- $10. \ \ Duplicate \ RPD's \ are \ calculated \ from \ raw \ analytical \ data \ thus \ it \ is \ possible \ to \ have \ two \ sets \ of \ data.$

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### Comments

## Sample Integrity

Custody Seals Intact (if used)

Attempt to Chill was evident

No
Sample correctly preserved

Yes
Organic samples had Teflon liners

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 Thexton Client Services

Huong Le Senior Analyst-Inorganic (VIC)



### Glenn Jackson

# Laboratory Manager

Final report - this Report replaces any previously issued Report

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

Uncertainty data is available on request

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