



Ref: L12718/BH/15-041

4 May 2018

Quarry Solutions Pty Ltd  
c/- Groundwork Plus  
6 Mayneview Street  
MILTON QLD 4064

**Attention: Mr Jim Lawler**

Dear Jim

**Re: March 2018 Noise Compliance Monitoring – Coraki Quarry, Coraki**

MWA Environmental conducted noise compliance monitoring for the Coraki Quarry in March 2018 in accordance with Condition 5(c) of the Development Consent Schedule 3.

Quarry Solutions Pty Ltd has advised that no noise complaints have been received in relation to the Coraki Quarry between the previous December 2017 noise monitoring and the March 2018 noise monitoring events.

Noise monitoring was undertaken between 6:50am and 10:30am on 29 March 2018.

The noise monitoring was interrupted by frequent rain showers and multiple crushing plant breakdown events. Wind speeds increased to above the 3 metres per second threshold for valid compliance monitoring by the time the second crushing plant breakdown was rectified at approximately 11:30am.

Between 8:45am and approximately 11:30am wind speeds were determined by field observation as no data was being reported to the webserver from the on-site weather station. Wind directions were generally from the southeast and very light in the early morning. There was low cloud cover prior to 8am.

For certain locations/measurements, extraneous noise influences included:

- Insect noise (cicadas) consistent with seasonal expectations – filtered out through post-processing of frequency analysis monitoring data for one significantly affected measurement
- Bird calls – significant influence for a number of measurements but able to be substantially but not completely filtered out through post-processing using audio recordings
- Public road traffic noise - filtered out through on-site data exclusion where practical however background noise from Casino-Coraki Road and Lagoon Road was relatively consistent during some measurements and elevated due to wet road conditions
- Rain dripping in trees – affected several measurements due to nearby trees and recent rainfall, not able to be filtered out

Coraki Quarry operations during the noise monitoring period were as follows:

- Main crushing and screening plant (commissioned since the previous December 2017 noise monitoring survey)
- Loading dump trucks by excavator and haulage from pit to plant
- Stockpile management
- Loading and dispatch of product (road) trucks – consistent trucks throughout the monitoring period

Noise monitoring was undertaken over generally 10 minute periods, with the exception of a measurement shortened due to heavy rainfall, at free-field locations within 30 metres of the following five (5) residential dwellings nearest to the Coraki Quarry (refer **Figure 1**):

- R1
- R2
- R3
- R6
- R7

Observations were also made twice during the monitoring period within 30 metres of residence R4 but the quarry noise was inaudible on each occasion so no measurements were taken.

Attended noise monitoring was undertaken using a Bruel & Kjaer Type 2250 frequency analysing sound level meter. The sound level meter was calibrated to a reference signal of 94 dB at 1kHz prior to the monitoring and displayed no variance post-monitoring.

Condition 4 of the Development Consent Schedule 3 prescribes a 35 dB(A)  $L_{Aeq,15min}$  noise limit for privately owned residences unless formal written agreements are in place with landowners.

As allowed for by Development Consent Schedule 3 Condition 4 and EPL Condition L4.2, formal written agreements are in place with the following landowners to the effect that the land owners do not hold objections to the operation of the Coraki Quarry exceeding the noise emission criterion by up to 5 dB(A):

- R1: 200 Lagoon Road, Coraki
- R2: 95 Spring Hill Road, Coraki
- R3: 75 Spring Hill Road, Coraki
- R6: 1905 Casino-Coraki Road, Coraki
- R7: 140 Newmans Road, Coraki

A summary of the 29 March 2018 compliance noise monitoring is provided in **Attachment 1**.

Rainfall, plant breakdowns and extraneous noise (birds, insects and public road traffic noise) affected the 29 March 2018 noise monitoring period and allowed for only a limited dataset to be obtained.

**The Coraki Quarry was assessed to be compliant with the Development Consent and Environment Protection Licence No. 3397 noise limits during the 29 March 2018 noise monitoring period. It is noted that one measurement at location R2 was assessed to be at the limit, not below.**

Further noise compliance monitoring is required by 30 June 2018 in accordance with Condition 5(c) of the Development Consent Schedule 3.

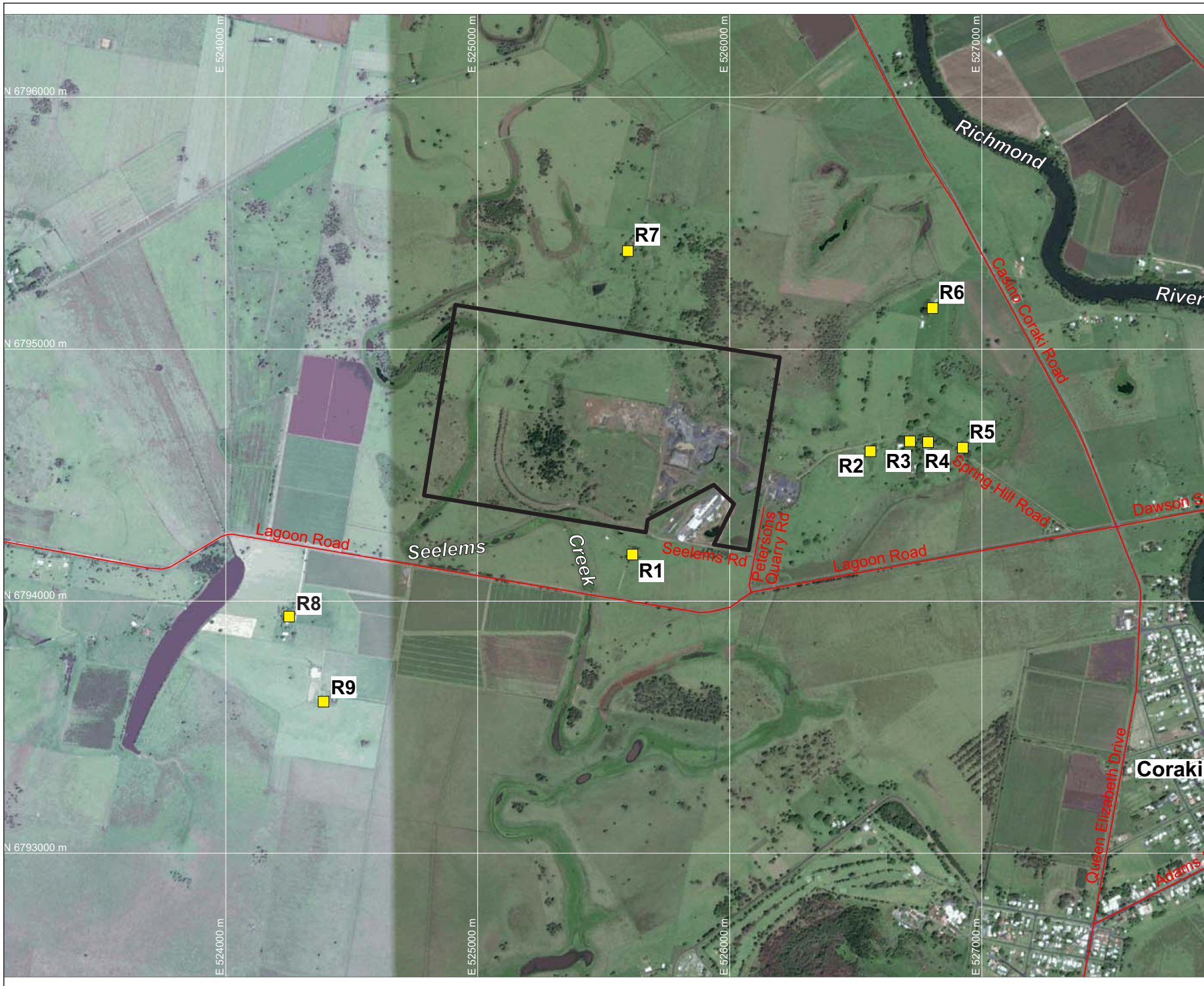
If you require any clarification or additional information please contact the undersigned.

Yours sincerely



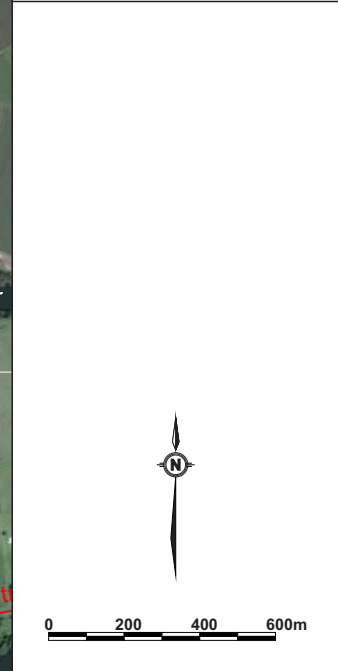
Ben Hyde  
Environmental Engineer

## FIGURES



**LEGEND**  
 — SITE BOUNDARY  
 ■ R9 SURROUNDING RESIDENCES (R1-R9)

**DRAWING REFERENCE**  
 GROUNDWATER PLUS SITE LOCATION PLAN  
 1837.DRG.002, 13/04/15.



CLIENT  
**QUARRY SOLUTIONS PTY LTD**

PROJECT  
**CORAKI  
 NOISE COMPLIANCE  
 ASSESSMENT  
 CORAKI QUARRY**  
 Petersons Quarry Rd Coraki NSW

TITLE  
**AERIAL PHOTOGRAPH  
 SHOWING SURROUNDING  
 RESIDENCES**

JOB	CORAKI	<b>FIGURE 1</b>
JOB NO.	15-041	
DATE	16/12/16	DRAWING NUMBER
SCALE	1:20,000 (A4)	<b>15-041-1</b>
REV.		

Max Winders & Associates Pty Ltd tas MWA Environmental  
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# **ATTACHMENT 1**

*Summary of Compliance Noise Monitoring*

29/03/2018

MONITORING LOCATION	TIME	WIND	ASSESSED QUARRY NOISE Leq - dB(A)	OPERATIONS	NOISE LIMIT LAeq dB(A)	STATUS	NOTES
R7	655	1.3m/s S => 1.8m/s SSE	38.0	Full Operation, no Drilling	40	<b>Compliant</b>	Significant birds excluded to extent possible, some insects, plant rumbles then shutdown (belt fail), rock loading rumbles, light rain
	705						heavier rain
	730						light rain
	735						plant shutdown (bogged)
R3	750	Calm	39	Full Operation, no Drilling	40		rain drip in trees, some birds, plant just audible, quarry <40dBA, lights rain at 755 got heavier
R4	805	Calm			40	<b>Compliant</b>	Inaudible
R6	810	0.4 ESE	<40	Full Operation, no Drilling	40	<b>Compliant</b>	significant insect noise, rain drips from trees, plant just audible, occasional tip/rock loading audible, quad bike at farm paused out
R1	844	Weather station offline, very light wind	<37	Full Operation, no Drilling	40	<b>Compliant</b>	distant road traffic, rain drip in trees quarry generally inaudible aside from occasional truck - mid 30s without bird noise, birds excluded to extent possible, some insect noise
	900						rain
R7	920	Weather station offline, light SE wind but increasing	39	Full Operation, no Drilling	40	<b>Compliant</b>	birds, distant traffic on C-C Rd, plant noise approx. 38dBA
R2	940	Weather station offline, 2ms SSE estimated	40	Full Operation, no Drilling	40	<b>At Limit</b>	Rain started and continued (light), significant birds, traffic on C-C Rd and Lagoon Rd, plant approx. 40dBA
R3	1000	Weather station offline, 2ms SSE estimated	<39	Full Operation, no Drilling	40	<b>Compliant</b>	5 minute measurement as rain started 1008, birds excluded to extent possible
	1010						plant shutdown (genset failure), running by lunch but easterly winds >5m/s