Pollution Monitoring Data - Holcim Lynwood Quarry (EPL Number 12939)

Facility Address	278 Stoney Creek Road, Marulan, NSW, 2579
Link to EPL on Public Register	https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=12939&id=12939&option=licence&searchrange=licence&range=POEO%20licence&prp=no&status=Issued
Date Dataset Updated	Wednesday, December 8, 2021
Date Dataset Published	Thursday, December 9, 2021

Air Quality Monitoring - Hi Volume Sampler Results

Note(s)	DNT = Did Not Trigger

Location	Frequency	Source	Lower Limit	Upper Limit	Unit	Description
HVAS1	24hr average (every 6 days)	EPL	-	50	µg/m3	Particulate Matter < 10 µm (PM10)

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Result (Mean)	10.0	7.3	6.2	6.2	3.0	3.2	3.5	5.2	15.5			
Pass / Fail	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass			

Comments regarding Hi Volume monitoring outcomes at HVAS 1	
Comment 1:	
Comment 2:	
Comment 3:	

Location	Frequency	Source	Lower Limit	Upper Limit	Unit	Description
HVAS2	24hr average (every 6 days)	EPL	-	50	µg/m3	Particulate Matter < 10 µm (PM10)

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Result (Mean)	10.0	8.8	7.1	15.0	5.2	6.2	5.4	8.5	14.1			
Pass / Fail	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass			

Comments regarding Hi Volume monitoring outcomes at HVAS 1	
Comment 1:	
Comment 2:	
Comment 3:	

0.5

Air Quality Monitoring - Deposition Results

Location	Frequency	Source	Lower Limit	Upper Limit	Unit	Description		Jan Date	Feb Date	Mar Date	Apr Date	May Date	Jun Date	Jul Date	Aug Date	Sep Date	Oct Date	Nov Date	Dec Date
DD 5	Monthly	EPL Section P1	-	4	mg/m2/month	Insoluble Solids	Result	0.7	n/a	2.7	0.6	0.9	0.6	0.6	0.4	0.3	0.7		
							Pass / Fail	Pass	Fail	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass		
DD 8	Monthly	EPL Section P1	-	4	mg/m2/month	Insoluble Solids	Result	1.7	1.7	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.5		
							Pass / Fail	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass		
DD11	Monthly	EPL Section P1	-	4	mg/m2/month	Insoluble Solids	Result	0.6	0.8	0.4	0.6	0.4	1	1	0.7	3.4	1.5		
							Pass / Fail	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass		
DD12	Monthly	EPL Section P1	-	4	mg/m2/month	Insoluble Solids	Result	0.6	1.1	0.7	0.4	2.0	0.7	0.7	0.3	0.3	0.7		
							Pass / Fail	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass		
DD13	Monthly	EPL Section P1	-	4	mg/m2/month	Insoluble Solids	Result	2.1	0.9	0.8	1.2	0.2	0.3	0.3	0.3	0.3	0.6		
							Pass / Fail	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass		

Comments regarding deposition monitoring outcomes	
Comment 1:	26/2 - unable to reach location due to flooding
Comment 2:	
Comment 3:	

Noise Monitoring Results

Location	Frequency	Source	Lower Limit	Upper Limit	Unit	Description		Q1 Sample Date	Q2 Sample Date	Q3 Sample Date	Q4 Sample Date
NAL 1 arrick Rd, Marula	Quarterly	EPL Section L3	-	35	dB	LAeq (15 min) Day	Result	33	35	25	30
							Pass / Fail	**Pass**	**Pass**	**Pass**	**Pass**
			-	35	dB	LAeq (15 min) Evening	Result		30	30	35
							Pass / Fail		**Pass**	**Pass**	**Pass**
			-	35	dB	LAeq (15 min) Night	Result	30	30	30	
							Pass / Fail	**Pass**	**Pass**	**Pass**	
			-	45	dB	LA1 (1 min) Night	Result	40	40	45	
							Pass / Fail	**Pass**	**Pass**	**Pass**	

Location	Frequency	Source	Lower Limit	Upper Limit	Unit	Description		Q1 Sample Date	Q2 Sample Date	Q3 Sample Date	Q4 Sample Date
NAL 2 Maclura Dr, Maru	Quarterly	EPL Section L3	-	35	dB	LAeq (15 min) Day	Result	30	35	30	30
							Pass / Fail	**Pass**	**Pass**	**Pass**	**Pass**
			-	37	dB	LAeq (15 min) Evening	Result		37	30	37
							Pass / Fail		**Pass**	**Pass**	**Pass**
			-	36	dB	LAeq (15 min) Night	Result	30	35	36	36
							Pass / Fail	**Pass**	**Pass**	**Pass**	**Pass**
			-	46	dB	LA1 (1 min) Night	Result	40	46	46	46
							Pass / Fail	**Pass**	**Pass**	**Pass**	**Pass**

Location	Frequency	Source	Lower Limit	Upper Limit	Unit	Description		Q1 Sample Date	Q2 Sample Date	Q3 Sample Date	Q4 Sample Date
NAL 3 16038 Hume Hig	Quarterly	EPL Section L3	-	35	dB	LAeq (15 min) Day	Result	32	35	30	35
							Pass / Fail	**Pass**	**Pass**	**Pass**	**Pass**
			-	35	dB	LAeq (15 min) Evening	Result	32	35	35	35
							Pass / Fail		**Pass**	**Pass**	**Pass**
			-	35	dB	LAeq (15 min) Night	Result	35	35	35	35
							Pass / Fail	**Pass**	**Pass**	**Pass**	**Pass**
			-	47	dB	LA1 (1 min) Night	Result	41	45	47	47
							Pass / Fail	**Pass**	**Pass**	**Pass**	**Pass**

Location	Frequency	Source	Lower Limit	Upper Limit	Unit	Description		Q1 Sample Date	Q2 Sample Date	Q3 Sample Date	Q4 Sample Date
NAL 4 tand Suffolk Roa	Quarterly	EPL Section L3	-	37	dB	LAeq (15 min) Day	Result	30	37	30	37
							Pass / Fail	**Pass**	**Pass**	**Pass**	**Pass**
			-	37	dB	LAeq (15 min) Evening	Result		37	30	30
							Pass / Fail		**Pass**	**Pass**	**Pass**
			-	36	dB	LAeq (15 min) Night	Result	30	31	36	30
							Pass / Fail	**Pass**	**Pass**	**Pass**	**Pass**
			-	47	dB	LA1 (1 min) Night	Result		41	47	47
							Pass / Fail		**Pass**	**Pass**	**Pass**

Comments regarding noise monitoring outcomes	
Comment 1:	**The LAeq (Evening and Night) frequency assessment is annual.**
Comment 2:	
Comment 3:	

Blast Monitoring Results

Note(s)	DNT <(X)dB = Did Not Trigger with monitoring equipment set at a trigger point of "X"dB
	DNT <(X)mm/s = Did Not Trigger with monitoring equipment set at a trigger point of "X"mm/s

Blast Monitoring Results at Ignimbrite Pit - WOY 2021

Location	Frequency	Source	Required For:	Lower Limit	Upper Limit	Unit	Description											
B1 Rail	Per Blast	EPL Section L4	Ignimbrite	-	115	dB (Lin Peak)	Over Pressure											
				-	5	mm/s	Ground Vibration											
B2 Pipeline	Per Blast	EPL Section L4	Ignimbrite	-	115	dB (Lin Peak)	Over Pressure											
				-	5	mm/s	Ground Vibration											
B3 Resident	Per Blast	EPL Section L4	Ignimbrite	-	115	dB (Lin Peak)	Over Pressure											
				-	5	mm/s	Ground Vibration											

Blast Monitoring Results at Granite Pit - January 2021

Location	Frequency	Source	Required For:	Lower Limit	Upper Limit	Unit	Description	12/01/2021	14/01/2021	19/01/2021	22/01/2021	28/01/2021	29/01/2021	04/02/2021	09/02/2021	11/02/2021	16/2/2021	23/02/2021
E7246 ameron / Residen	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure	DNT <100dB	DNT <100dB	DNT <100dB	DNT <100dB	DNT <100dB	DNT <100dB	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
E7245 keyersleigh/Resid	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure	DNT <100dB	DNT <100dB	DNT <100dB	DNT <100dB	DNT <100dB	DNT <100dB	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
E7244 Rail/Pipeline	Per Blast	EPL	Granite	-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	1	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	1	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Blast Monitoring Results at Granite Pit - February 2021

Location	Frequency	Source	Required For:	Lower Limit	Upper Limit	Unit	Description	25/02/2021	02/03/2021	04/03/2021	09/03/2021	11/03/2021	16/03/2021	23/03/2021	30/03/2021	13/04/2021	15/04/2021
B4 Resident	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
B5 Resident	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure	DNT <100db	DNT <100db	DNT <100db	106.7 db	DNT <100db	DNT <100db	91.5 db	80.6db	DNT <100db	DNT <100db
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	0.57 mm/s	DNT <0.5mm/s	DNT <0.5mm/s	0.71mm/s	0.65mm/s	DNT <0.5mm/s	DNT <0.5mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
B6 Rail	Per Blast	EPL	Granite	-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	1	0.95 mm/s	DNT <0.5mm/s	1.61 mm/s	1.27mm/s	0.95mm/s	0.79 mm/s	DNT <0.5mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	1	0.95 mm/s	DNT <0.5mm/s	1.61 mm/s	1.27mm/s	0.95mm/s	0.79mm/s	DNT <0.5mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Blast Monitoring Results

Note(s)	DNT <(X)dB = Did Not Trigger with monitoring equipment set at a trigger point of "X"dB
	DNT <(X)mm/s = Did Not Trigger with monitoring equipment set at a trigger point of "X"mm/s

Blast Monitoring Results at Granite Pit - March 2021

Location	Frequency	Source	Required For:	Lower Limit	Upper Limit	Unit	Description	20/04/2021	27/04/2021	29/04/2021	03/05/2021	06/05/2021	17/05/2021	20/05/2021	25/05/2021	27/05/2021	01/06/2021
B4 Resident	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
B5 Resident	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure	DNT <100db	DNT <100db	DNT <100db	111.9db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	0.13mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

B6 Rail	Per Blast	EPL	Granite	-	5	mm/s	Ground Vibration	DNT <0.5mm/s	0.69mm/s	DNT <0.5mm/s	0.72mm/s	0.59mm/s	1.10mm/s	0.77 mm/s	DNT <0.5mm/s	DNT <0.5mm/s	0.93mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground Vibration	DNT<0.5mm/s	0.69mm/s	DNT <0.5mm/s	0.72mm/s	0.59mm/s	1.10mm/s	0.77 mm/s	DNT <0.5mm/s	DNT <0.5mm/s	0.93mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Blast Monitoring Results at Granite Pit - April 2021

Location	Frequency	Source	Required For:	Lower Limit	Upper Limit	Unit	Description	08/06/2021	10/06/2021	15/06/2021	17/06/2021	22/06/2021	24/06/2021	29/06/2021	01/07/2021
B4 Resident	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure	DNT <100db	DNT <100db	DNT <100db	DNT<100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
B5 Resident	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
B6 Rail	Per Blast	EPL	Granite	-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	0.82mm/s	0.70mm/s	0.64mm/s	DNT <0.5mm/s	0.78mm/s	DNT <0.5mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	0.82mm/s	0.70mm/s	0.64mm/s	DNT <0.5mm/s	0.78mm/s	DNT <0.5mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Blast Monitoring Results at Granite Pit - May 2021

Location	Frequency	Source	Required For:	Lower Limit	Upper Limit	Unit	Description	01/07/2021	02/07/2021	06/07/2021	08/07/2021	13/07/2021	15/07/2021	21/07/2021	22/07/2021
B4 Resident	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
B5 Resident	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
B6 Rail	Per Blast	EPL	Granite	-	5	mm/s	Ground Vibration	DNT <0.5mm/s	0.81mm/s	DNT <0.5mm/s	0.99mm/s	1.28mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	0.81mm/s	DNT <0.5mm/s	0.99mm/s	1.28mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Blast Monitoring Results

Note(s)	DNT <(X)dB = Did Not Trigger with monitoring equipment set at a trigger point of "X"dB
	DNT <(X)mm/s = Did Not Trigger with monitoring equipment set at a trigger point of "X"mm/s

Blast Monitoring Results at Granite Pit - June 2021

Location	Frequency	Source	Required For:	Lower Limit	Upper Limit	Unit	Description	27/07/2021	29/07/2021	03/08/2021	06/08/2021	10/08/2021	12/08/2021	17/08/2021	19/08/2021	24/08/2021
B4 Resident	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
B5 Resident	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	80.9db
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	0.77mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
B6 Rail	Per Blast	EPL	Granite	-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	0.57mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	1.07mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	1.07mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Blast Monitoring Results at Granite Pit - July 2021

Location	Frequency	Source	Required For:	Lower Limit	Upper Limit	Unit	Description	26/08/2021	02/09/2021	03/09/2021	09/09/2021	14/09/2021	17/09/2021				
B4 Resident	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s

				-	5	mm/s	Vibration	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
B5 Resident	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure	DNT <100db	DNT <100db	84.9dbl	DNT <100db	91.8db	DNT <100db	DNT <100db	DNT <100db	86.9db	DNT <100db
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	0.52mm/s	DNT <0.5mm/s	0.66mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	0.71mm/s	DNT <0.5mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
B6 Rail	Per Blast	EPL	Granite	-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	0.84mm/s	0.62mm/s	0.84mm/s	DNT <0.5mm/s	0.98mm/s	0.85mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	0.84mm/s	0.62mm/s	0.84mm/s	DNT <0.5mm/s	0.98mm/s	0.85mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Blast Monitoring Results at Granite Pit - August 2021

Location	Frequency	Source	Required For:	Lower Limit	Upper Limit	Unit	Description	21/09/2021	28/09/2021	30/09/2021	07/10/2021	12/10/2021	14/10/2021	19/10/2021	21/10/2021	26/10/2021	28/10/2021	29/10/2021	02/11/2021
B4 Resident	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT<0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
B5 Resident	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure	DNT <100db	DNT <100db	86.9db	DNT <100db	DNT <100db	100db	DNT <100db	DNT <100db	DNT <100db	94.9db	DNT <100db	DNT <100db
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	0.71mm/s	DNT <0.5mm/s	DNT <0.5mm/s	0.62mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	0.91mm/s	DNT <0.5mm/s	DNT <0.5mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
B6 Rail	Per Blast	EPL	Granite	-	5	mm/s	Ground Vibration	0.84mm/s	DNT <0.5mm/s	0.98mm/s	0.85mm/s	0.86mm/s	0.76mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	1.07mm/s	1.46mm/s	0.90 mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
				-	5	mm/s	Ground Vibration	0.84mm/s	DNT <0.5mm/s	0.98mm/s	0.85mm/s	0.86mm/s	0.76mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	!.46mm/s	1.46mm/s	0.90mm/s
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Blast Monitoring Results

Note(s)	DNT <(X)dB = Did Not Trigger with monitoring equipment set at a trigger point of "X"dB
	DNT <(X)mm/s = Did Not Trigger with monitoring equipment set at a trigger point of "X"mm/s

Blast Monitoring Results at Granite Pit - September 2021

Location	Frequency	Source	Required For:	Lower Limit	Upper Limit	Unit	Description	12/10/2021	14/10/2021	19/10/2021								
B4 Resident	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT<0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	
B5 Resident	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure	DNT <100db	100db	DNT <100db	DNT <100db	DNT <100db	94.9db	DNT <100db	DNT <100db	DNT <100db	86.9 DBL	
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	0.62mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	0.91mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	0.51mm/s	
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	
B6 Rail	Per Blast	EPL	Granite	-	5	mm/s	Ground Vibration	0.86mm/s	0.76mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	1.07mm/s	1.46mm/s	0.90 mm/s	0.82mm/s	1.30mm/s	
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	
				-	5	mm/s	Ground Vibration	0.86mm/s	0.76mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	!.46mm/s	1.46mm/s	0.90mm/s	0.82mm/s	1.30mm/s	
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	

Blast Monitoring Results at Granite Pit - October 2021

Location	Frequency	Source	Required For:	Lower Limit	Upper Limit	Unit	Description	21/10/2021	26/10/2021	28/10/2021	29/10/2021	02/11/2021	09/11/2021	16/11/2021	18/11/2021	23/11/2021	25/11/2021	
B4 Resident	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	DNT <100db	
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	
B5 Resident	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure	DNT <100db	DNT <100db	94.9db	DNT <100db	DNT <100db	DNT <100db	86.9 DBL	DNT <100db	84.4 DB	DNT <100db	
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	0.91mm/s	DNT <0.5mm/s	DNT <0.5mm/s	DNT <0.5mm/s	0.51mm/s	DNT <0.5mm/s	0.52mm/s	DNT <0.5mm/s	
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	
B6 Rail	Per Blast	EPL	Granite	-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	1.07mm/s	1.46mm/s	0.90 mm/s	0.82mm/s	1.30mm/s	0.92mm/s	0.81mm/s	0.77mm/s	
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	
				-	5	mm/s	Ground Vibration	DNT <0.5mm/s	DNT <0.5mm/s	!.46mm/s	1.46mm/s	0.90mm/s	0.82mm/s	1.30mm/s	0.92mm/s	0.81mm/s	0.77mm/s	
								Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	

Blast Monitoring Results at Granite Pit - November 2021

Location	Frequency	Source	Required For:	Lower Limit	Upper Limit	Unit	Description											
B4 Resident	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure											
				-	5	mm/s	Ground Vibration											
B5 Resident	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure											
				-	5	mm/s	Ground Vibration											
B6 Rail	Per Blast	EPL	Granite	-	5	mm/s	Ground Vibration											
				-	5	mm/s	Ground Vibration											

Blast Monitoring Results

Note(s)	DNT <(X)dB = Did Not Trigger with monitoring equipment set at a trigger point of "X"dB
	DNT <(X)mm/s = Did Not Trigger with monitoring equipment set at a trigger point of "X"mm/s

Blast Monitoring Results at Granite Pit - December 2021

Location	Frequency	Source	Required For:	Lower Limit	Upper Limit	Unit	Description											
B4 Resident	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure											
				-	5	mm/s	Ground Vibration											
B5 Resident	Per Blast	EPL	Granite	-	115	dB (Lin Peak)	Over Pressure											
				-	5	mm/s	Ground Vibration											
B6 Rail	Per Blast	EPL	Granite	-	5	mm/s	Ground Vibration											
				-	5	mm/s	Ground Vibration											

Comments regarding blast monitoring outcomes	
Comment 1:	
Comment 2:	
Comment 3:	