

AuS-10 Rhyolite - Licence number 12323

Dam 1 - SB1 - EPL Point 1
Licence Discharge Point 1

Guidance range		Range - 6.5 - 8.5	<1500us/cm			Limit <30 mg/l		Limit - 10 mg/l		
Month	Number of Samples	pH	Electrical Conductivity	Turbidity	Total Dissolved Solids	Total Suspend Solids	Oxygen demand	Oil/Grease	Volume Discharged - KL	Comment
Jul-2019	0								Nil Discharge	
Aug-2019	0								Nil Discharge	
Sep-2019	0								Nil Discharge	
Oct-2019	0								Nil Discharge	
Nov-2019	0								Nil Discharge	
Dec-2019	0								Nil Discharge	
Jan-2020	0								Nil Discharge	
10.02.2020	1	6.8		950		462		<5	50,000Lt	400mm+ 5 day event
Mar-2020	0								Nil Discharge	
Apr-2020	0								Nil Discharge	
May-2020	0								Nil Discharge	
Jun-2020	0								Nil Discharge	
Total		6.8	0	950	0	462	0	0		
Mean		6.80	#DIV/0!	950.00	#DIV/0!	462.00	#DIV/0!	#DIV/0!		
Lowest		6.80	0.00	950.00	0.00	462.00	0.00	0.00		
Highest		6.80	0.00	950.00	0.00	462.00	0.00	0.00		

EPL POINT 2 Range - 6.5 - 8.5

Upstream Location AQW-1

Month	Number of Samples	pH	Electrical Conductivity	Turbidity	Total Dissolved Solids	Total Suspend Solids	Oxygen demand	Oil/Grease	Volume Discharged - KL	Comment
Jul-2019	1	7.1	681	1.1	409	<5	2	<5	Nil Discharge	
Aug-2019	1	8.4	753	1	426	<5	<2	<5	Nil Discharge	
Sep-2019	1	7.8	631	5.1	347	<5	<2	<5	Nil Discharge	
Oct-2019	1	6.9	687	1.7	385	<5	<2	<5	Nil Discharge	
Nov-2019	1	8.1	804	1.8	456	<5	3	<5	Nil Discharge	
Dec-2019	1	8.5	843	3.1	539	<5	6	5	Nil Discharge	Oil and Grease to be checked
Jan-2020	1	8.1	847	1.9	466	<5	<2	<5	Nil Discharge	
Feb-2020	1	7.7	619	25	341	23	<2	<5	Nil Discharge	
Mar-2020	1	7.7	434	4.2	256	<5	3	<5	Nil Discharge	
Apr-2020	1	7.1	467	5.2	262	<5	<2	<5	Nil Discharge	
May-2020	1	7.5	428	2.5	238	<5	<2	<5	Nil Discharge	
Jun-2020	1	8.3	463	2.3	260	<5	2	<5	Nil Discharge	
Total	93.2	7.77	638.08	4.58	365.42	1.92	1.33	5		
Mean		7.77	638.08	4.58	365.42	23.00	3.20	5.00		
Lowest		6.90	428.00	1.00	238.00	23.00	2.00	5.00		
Highest		8.50	847.00	25.00	539.00	23.00	6.00	5.00		

EPL Point 3
COXS RIVER LOWER CROSSING 6/7/2011 - AQW3

Month	Number of Samples	pH	Electrical Conductivity	Turbidity	Total Dissolved Solids	Total Suspend Solids	Oxygen demand	Oil/Grease	Volume Discharged - KL	Comment
Jul-2019	1	6.5	679	1	444	<5	4	<5	Nil Discharge	
Aug-2019	1	8.7	720	1.6	416	<5	<2	<5	Nil Discharge	
Sep-2019	1	8.2	721	3.8	379	<5	3	<5	Nil Discharge	
Oct-2019	1	8.1	709	1.3	407	<5	2	<5	Nil Discharge	
Nov-2019	1	8.3	811	1.2	466	<5	<2	<5	Nil Discharge	
Dec-2019	1	8.3	829	1.9	477	<5	2	<5	Nil Discharge	
Jan-2020	1	8.3	846	1.8	458	<5	4	<5	Nil Discharge	
Feb-2020	1	8.00	651	13	363	15	<2	<5	Nil Discharge	
05.03.2020	1	6.8				<5		<5	EPL 9 Discharge	
Mar-2020	1	8.2	441	3.8	260	<5	3	<5	Nil Discharge	
Apr-2020	1	7.6	476	5.2	284	<5	<2	<5	Nil Discharge	
May-2020	1	8.1	418	2.6	226	<5	<2	<5	Nil Discharge	
Jun-2020	1	8.3	433	2.2	232	<5	2	<5	Nil Discharge	
25.06.2020	1	8.1		4.2		<5		<5	EPL 9 Discharge	
Total	96.9	8.08	7055	38.4	3968	15	16	0		
Mean		7.95	644.50	3.28	367.67	15.00	2.86	#DIV/0!	#DIV/0!	#DIV/0!
Lowest		6.50	418.00	1.00	226.00	15.00	2.00	0.00		0.00
Highest		8.70	846.00	13.00	477.00	15.00	4.00	0.00		0.00

Dust Monitoring EPL Point 4

Month	Number of Samples	Sawmill	Insoluble Solids	Combustible Matter	Ash
Jul-2019	continuous	Sawmill	1.1	0.4	0.7
Aug-2019	continuous	Sawmill	<0.1	<0.1	<0.1
Sep-2019	continuous	Sawmill	1.00	0.2	0.8
Sep - Oct 2019	continuous	Sawmill	3.20	1.5	1.7
Oct - Nov 2019	continuous	Sawmill	0.70	0.1	0.6
Nov - Dec 2019	continuous	Sawmill	1.90	0.6	1.3
Dec 19 - Jan 2020	continuous	Sawmill	1.60	0.9	0.7
Jan - Feb 2020	continuous	Sawmill	7.20	1.3	5.9
Feb - March 2020	continuous	Sawmill	1.70	0.7	1.0
March - April 2020	continuous	Sawmill	0.60	0.3	0.3
April - May 2020	continuous	Sawmill	0.40	0.2	0.2
May - June 2020	continuous	Sawmill	0.5	0.2	0.3
Jun-2020	continuous	Sawmill	0.5	0.4	0.1
Total			20.4	6.8	13.6
Mean			1.70	0.57	1.13
Lowest			0.4	0.1	0.1
Highest			7.2	1.5	5.9

Dust Monitoring EPL Point 5

Month	Number of Samples	Baners Lane	Insoluble Solids	Combustible Matter	Ash
Jul-2019	continuous	Baners Lane	0.6	0.2	0.4
Aug-2019	continuous	Baners Lane	0.5	<0.1	0.5
Sep-2019	continuous	Baners Lane	1.2	0.3	0.9
Sep - Oct 2019	continuous	Baners Lane	1.1	<0.1	1.1
Oct - Nov 2019	continuous	Baners Lane	1.70	0.3	1.4
Nov - Dec 2019	continuous	Baners Lane	2.90	0.7	2.2
Dec 19 - Jan 2020	continuous	Baners Lane	2.20	0.7	1.5
Jan - Feb 2020	continuous	Baners Lane	8.40	1.5	6.9
Feb - March 2020	continuous	Baners Lane	1.10	0.5	0.6
March - April 2020	continuous	Baners Lane	0.70	0.5	0.2
April - May 2020	continuous	Baners Lane	0.50	0.3	0.2
May - June 2020	continuous	Baners Lane	0.4	0.2	0.2
Jun-2020	continuous	Baners Lane	0.4	0.4	0
Total			21.7	5.6	16.1
Mean			1.67	0.51	1.24
Lowest			0.4	0.2	0
Highest			8.4	1.5	6.9

Dust Monitoring EPL Point 6

Month	Number of Samples	Bald Hill	Insoluble Solids	Combustible Matter	Ash
Jul-2019	continuous	Bald Hill	0.2	0.2	<0.1
Aug-2019	continuous	Bald Hill	<0.1	<0.1	<0.1

Sep-2019	continuous	Bald Hill	0.8	0.2	0.6
Sep - Oct 2019	continuous	Bald Hill	0.6	0.1	0.5
Oct - Nov 2019	continuous	Bald Hill	0.9	<0.1	0.9
Nov - Dec 2019	continuous	Bald Hill	1.3	0.3	1.0
Dec 19 - Jan 2020	continuous	Bald Hill	1.3	0.4	0.9
Jan - Feb 2020	continuous	Bald Hill	3.9	0.6	3.3
Feb - March 2020	continuous	Bald Hill	1.1	0.4	0.7
March - April 2020	continuous	Bald Hill	0.3	0.2	0.1
April - May 2020	continuous	Bald Hill	0.5	0.3	0.2
May - June 2020	continuous	Bald Hill	0.5	0.3	0.2
Jun-2020	continuous	Bald Hill	0.5	0.4	0.1
			11.9	3.4	8.5
	Mean		0.99	0.31	0.77
	Lowest		0.2	0.1	0.1
	Highest		3.9	0.6	3.3

ND - Not Detected

Requirement to Monitor
Volume or Mass - Points
1, 8, 9, 10, 11

Kilolitres per day	Daily during any discharge	Estimate						
--------------------	----------------------------	----------	--	--	--	--	--	--

EPL POINT 8

Dam 2 - SB2b Range - 6.5 - 8.5

Month	Number of Samples	pH	Electrical Conductivity	Turbidity	Total Dissolved Solids	Total Suspend Solids	Oxygen demand	Oil/Grease	Volume Discharged - KL	Comment
Jul-2019	0								Nil Discharge	
Aug-2019	0								Nil Discharge	
Sep-2019	0								Nil Discharge	
Oct-2019	0								Nil Discharge	
Nov-2019	0								Nil Discharge	
Dec-2019	0								Nil Discharge	
Jan-2020	0								Nil Discharge	
Feb-2020	0								Nil Discharge	
Mar-2020	0								Nil Discharge	
Apr-2020	0								Nil Discharge	
May-2020	0								Nil Discharge	
Jun-2020	0								Nil Discharge	
	0	0	0	0	0	0	0	0	0	
Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Lowest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Highest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

EPL POINT 9

South of O/Burden dump
Dam 3 - SB3a Range - 6.5 - 8.5

Month	Number of Samples	pH	Electrical Conductivity	Turbidity	Total Dissolved Solids	Total Suspend Solids	Oxygen demand	Oil/Grease	Volume Discharged - KL	Comment
Jul-2019	0								Nil Discharge	
Aug-2019	0								Nil Discharge	
Sep-2019	0								Nil Discharge	
16.10.2019	1	8.4				9			Nil Discharge	Sample only
Nov-2019	0								Nil Discharge	
Dec-2019	0								Nil Discharge	
Jan-2020	0								Nil Discharge	
10.02.2020	1	6.7		140		22		<5	Nil Discharge	
25.02.2020	1	6.3				9		<5	Nil Discharge	
04.03.2020	1	7.0				12		<5	Nil Discharge	
05.03.2020	1	7.1				14		<5	1MI	
Mar-2020	0								Nil Discharge	
Apr-2020	0								Nil Discharge	
May-2020	0								Nil Discharge	
23.06.2020	1	6.9		16.3		9		<5	Nil Discharge	
25.06.2020	1	7.5		14		8		<5	1MI	
	49.9	0	0	170.3	0	83	0	0	0	
Mean	7.13	#DIV/0!	56.77	#DIV/0!	11.86	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
Lowest	6.30	0.00	14.00	0.00	8.00	0.00	0.00	0.00	0.00	
Highest	8.40	0.00	140.00	0.00	22.00	0.00	0.00	0.00	0.00	

EPL POINT 10

Storage Dam 4
Dam 4 - SD2 Range - 6.5 - 8.5

Month	Number of Samples	pH	Electrical Conductivity	Turbidity	Total Dissolved Solids	Total Suspend Solids	Oxygen demand	Oil/Grease	Volume Discharged - KL	Comment
Jul-2019	0								Nil Discharge	
Aug-2019	0								Nil Discharge	
Sep-2019	0								Nil Discharge	
Oct-2019	0								Nil Discharge	
Nov-2019	0								Nil Discharge	
Dec-2019	0								Nil Discharge	
Jan-2020	0								Nil Discharge	
Feb-2020	0								Nil Discharge	
Mar-2020	0								Nil Discharge	
Apr-2020	0								Nil Discharge	
May-2020	0								Nil Discharge	
Jun-2020	0								Nil Discharge	
	0	0	0	0	0	0	0	0	0	
Mean	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
Lowest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Highest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

EPL POINT 11

Dam 5 - SD6 - AQW-8 Range - 6.5 - 8.5

Month	Number of Samples	pH	Electrical Conductivity	Turbidity	Total Dissolved Solids	Total Suspend Solids	Oxygen demand	Oil/Grease	Volume Discharged - KL	Comment
Jul-2019	0								Nil Discharge	
Aug-2019	0								Nil Discharge	
Sep-2019	0								Nil Discharge	
Oct-2019	0								Nil Discharge	
Nov-2019	0								Nil Discharge	
Dec-2019	0								Nil Discharge	
Jan-2020	0								Nil Discharge	
Feb-2020	0								Nil Discharge	
Mar-2020	0								Nil Discharge	
Apr-2020	0								Nil Discharge	
May-2020	0								Nil Discharge	
Jun-2020	0								Nil Discharge	
	0	0	0	0	0	0	0	0	0	
Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Lowest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Highest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Weather station results available upon request

AuS-10 Rhyolite - Licence number 12323

Blasting	Frequency	Date	Blast Number	Limits	Units of measure	Results - Hartley Village	Monitor Location - Hartley Village	2nd Monitor 781 Jenolan Caves Rd
Ground Vibration	Per Blast	30.01.2019	168	5 - trigger point >0.51	mm/s	Nil Trigger	✓	Nil Trigger
Overpressure	Per Blast	30.01.2019	168	115 - Trigger point <100	dB	Nil Trigger	✓	Nil Trigger
Ground Vibration	Per Blast	13.02.2019	169	5 - trigger point >0.51	mm/s	Nil Trigger	✓	Nil Trigger
Overpressure	Per Blast	13.02.2019	169	115 - Trigger point <100	dB	Nil Trigger	✓	Nil Trigger
Ground Vibration	Per Blast	27.02.2019	170	5 - trigger point >0.51	mm/s	Nil Trigger	✓	Nil Trigger
Overpressure	Per Blast	27.02.2019	170	115 - Trigger point <100	dB	Nil Trigger	✓	Nil Trigger
Ground Vibration	Per Blast	13.03.2019	171	5 - trigger point >0.51	mm/s	Nil Trigger	0.08	0.07
Overpressure	Per Blast	13.03.2019	171	115 - Trigger point <100	dB	Nil Trigger	101	106.2
Ground Vibration	Per Blast	10.04.2019	172	5 - trigger point >0.51	mm/s	Nil Trigger	✓	Nil Trigger
Overpressure	Per Blast	10.04.2019	172	115 - Trigger point <100	dB	Nil Trigger	✓	Nil Trigger
Ground Vibration	Per Blast	01.05.2019	173	5 - trigger point >0.51	mm/s	Nil Trigger	✓	Nil Trigger
Overpressure	Per Blast	01.05.2019	173	115 - Trigger point <100	dB	Nil Trigger	✓	Nil Trigger
Ground Vibration	Per Blast	08.05.2019	174	5 - trigger point >0.51	mm/s	Nil Trigger	✓	Nil Trigger
Overpressure	Per Blast	08.05.2019	174	115 - Trigger point <100	dB	Nil Trigger	✓	Nil Trigger
Ground Vibration	Per Blast	22.05.2019	175	5 - trigger point >0.51	mm/s	Nil Trigger	✓	Nil Trigger
Overpressure	Per Blast	22.05.2019	175	115 - Trigger point <100	dB	Nil Trigger	✓	Nil Trigger
Ground Vibration	Per Blast	03.07.2019	176	5 - trigger point >0.51	mm/s	Nil Trigger	✓	Nil Trigger
Overpressure	Per Blast	03.07.2019	176	115 - Trigger point <100	dB	Nil Trigger	✓	Nil Trigger
Ground Vibration	Per Blast	26.07.2019	177	5 - trigger point >0.51	mm/s	Nil Trigger	✓	Nil Trigger
Overpressure	Per Blast	26.07.2019	177	115 - Trigger point <100	dB	Nil Trigger	✓	Nil Trigger
Ground Vibration	Per Blast	14.08.2019	178	5 - trigger point >0.51	mm/s	Nil Trigger	✓	Nil Trigger
Overpressure	Per Blast	14.08.2019	178	115 - Trigger point <100	dB	Nil Trigger	✓	Nil Trigger
Ground Vibration	Per Blast	28.08.2019	179	5 - trigger point >0.51	mm/s	Nil Trigger	✓	Nil Trigger
Overpressure	Per Blast	28.08.2019	179	115 - Trigger point <100	dB	Nil Trigger	✓	Nil Trigger
Ground Vibration	Per Blast	10.09.2019	180	5 - trigger point >0.51	mm/s	Nil Trigger	✓	Nil Trigger
Overpressure	Per Blast	10.09.2019	180	115 - Trigger point <100	dB	Nil Trigger	✓	Nil Trigger
Ground Vibration	Per Blast	09.10.2019	181	5 - trigger point >0.51	mm/s	Nil Trigger	✓	Nil Trigger
Overpressure	Per Blast	09.10.2019	181	115 - Trigger point <100	dB	Nil Trigger	✓	Nil Trigger
Ground Vibration	Per Blast	23.10.2019	182 A & B	5 - trigger point >0.51	mm/s	Nil Trigger	✓	Nil Trigger
Overpressure	Per Blast	23.10.2019	182 A & B	115 - Trigger point <100	dB	Nil Trigger	✓	Nil Trigger
Ground Vibration	Per Blast	06.11.2019	183	5 - trigger point >0.51	mm/s	Nil Trigger	✓	0.08
Overpressure	Per Blast	06.11.2019	183	115 - Trigger point <100	dB	Nil Trigger	✓	101.0
Ground Vibration	Per Blast	04.12.2019	184	5 - trigger point >0.51	mm/s	Nil Trigger	✓	Nil Trigger
Overpressure	Per Blast	04.12.2019	184	115 - Trigger point <100	dB	Nil Trigger	✓	Nil Trigger
Ground Vibration	Per Blast	19.02.2020	185	5 - trigger point >0.51	mm/s	Nil Trigger	✓	Nil Trigger
Overpressure	Per Blast	19.02.2020	185	115 - Trigger point <100	dB	Nil Trigger	✓	Nil Trigger
Ground Vibration	Per Blast	26.02.2020	186 A + B	5 - trigger point >0.51	mm/s	Nil Trigger	✓	Nil Trigger
Overpressure	Per Blast	26.02.2020	187 A + B	115 - Trigger point <100	dB	Nil Trigger	✓	Nil Trigger
Ground Vibration	Per Blast	18.03.2020	187	5 - trigger point >0.51	mm/s	Nil Trigger	✓	Nil Trigger
Overpressure	Per Blast	18.03.2020	187	115 - Trigger point <100	dB	Nil Trigger	✓	Nil Trigger
Ground Vibration	Per Blast	08.04.2020	188	5 - trigger point >0.51	mm/s	Nil Trigger	✓	Nil Trigger
Overpressure	Per Blast	08.04.2020	188	115 - Trigger point <100	dB	Nil Trigger	✓	Nil Trigger
Ground Vibration	Per Blast	20.05.2020	189	5 - trigger point >0.51	mm/s	Nil Trigger	✓	Nil Trigger
Overpressure	Per Blast	20.05.2020	189	115 - Trigger point <100	dB	Nil Trigger	✓	Nil Trigger
Ground Vibration	Per Blast	18.06.2020	190	5 - trigger point >0.51	mm/s	Nil Trigger	✓	Nil Trigger
Overpressure	Per Blast	18.06.2020	190	115 - Trigger point <100	dB	Nil Trigger	✓	Nil Trigger

Grant's Head Quarry - Licence Number 4040

	Pollutant	Aluminium	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc	Comment
EPL Point 1 - sump	Units of Measure	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
	Number of Samples										
Month											
13.06.2019	1	0.07	<0.001	0.0006	<0.001	0.16	<0.0001	<0.0001	0.037	0.14	
26.08.2019	1	0.166	0.0003	0.0007	0.0002	0.172	0.0001	<0.00001	0.039	0.135	
30.09.2019	1	0.38	<0.001	0.001	<0.001	0.56	<0.001	<0.0001	0.032	0.11	
27.11.2019	1	0.167	0.0003	0.001	0.0002	0.402	0.0001	0.00002	0.0533	0.146	
10.01.2020	1	0.1	<0.001	0.0008	<0.001	0.3	<0.001	<0.0001	0.041	0.13	
12.02.2020	1	0.495	0.0003	0.0008	0.0009	0.331	0.0005	<0.00001	0.0291	0.093	
20.05.2020	1	0.325	0.0002	0.0006	0.0005	0.331	0.0004	<0.00001	0.0312	0.072	
	Mean	0.24	0.0003	0.0008	0.0005	0.32	0.0003	0.000020	0.04	0.12	
	Lowest	0.07	<0.001	0.0006	<0.001	0.16	<0.0001	<0.0001	0.03	0.07	
	Highest	0.50	0.0003	0.0010	0.0009	0.56	0.0005	0.000020	0.05	0.15	

	Pollutant	Aluminium	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc
Wetland site (new Oct 2018)	Units of Measure	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
	No. of samples									
Date										
17.10.2018	1	0.52	<0.001	<0.0002	0.001	<0.001	<0.001	<0.0001	<0.001	0.014
03.04.2019	1	0.24	<0.001	<0.0002	<0.001	0.003	<0.001	<0.0001	0.001	0.034
13.06.2019	1	2.7	<0.001	<0.002	<0.001	0.01	<0.001	<0.001	0.015	0.019
30.09.2019	0	Nil results due to wetland being dry		N/A	N/A	N/A	N/A	N/A	N/A	N/A
10.01.2020	0	Nil results due to wetland being dry		N/A	N/A	N/A	N/A	N/A	N/A	N/A
08.04.2020	1	.29	<0.001	<0.0002	<0.001	0.073	0.001	<0.0001	0.008	0.024
17.06.2020	1	.59	<0.001	<0.0002	<0.001	0.032	0.001	<0.0001	0.014	0.096

	Pollutant							
EPL Point 1 - sump	Units of Measure	pH (wet) Range 5.3 to 7.0	Electrical Conductivity	Turbidity	Total Suspended Solids Max 30 Milligrams per litre	Oil and Grease	Hours of pump operation	Requirement to Monitor Volume or Mass - KL
Month	Number of Samples	pH	µS/cm	NTU	mg/l	Visible	Hours	KL
13.06.2019	1	4.1	395.6	4.05			Sample Only	Sample only / Nil Discharge
17.06.2019	1	5.7	443	2.4	<3	<5	24	6,825.6
26.08.2019	1	6.0	433	1.9	<3	<5	24	6,825.6
30.09.2019	1	3.9	415					Sample only / Nil Discharge
01.10.2019	1	6.1	437	2.8	3	<5	21	5,972.4
11.11.2019	1	6.0	471	3.2	4	<5	24	6,825.6
27.11.2019	1	6.1	488	2	<3	<5	24	6,825.6
10.01.2020	1	4.16	543					Sample only / Nil Discharge
13.01.2020	1	5.8	453	1.8	3	<5	24	6,825.6
23.01.2020	1	5.8	327	6.2	5	<5	24	6,825.6
05.02.2020	1	6.10	434	2.6	<3	<5	24	6,825.6
06.02.2020	1	6.10	421	3.2	6	<5	24	6,825.6
10.02.2020	1	6.3	248	18.0	15	<5	24	6,825.6
12.02.2020	1	5.9	249	6.9	5	<5	24	6,825.6
19.02.2020	1	7.0	244	4.6	6	<5	24	6,825.6
20.02.2020	1	6.5	244	3.9	5	<5	24	6,825.6
24.02.2020	1	6.6	247	3.8	6	<5	24	6,825.6
05.03.2020	1	6.3	305	2.9	5	<5	24	6,825.6
16.03.2020	1	6.4	285	11	11	<5	24	6,825.6
17.03.2020	1	5.8	286	13	12	<5	24	6,825.6
18.03.2020	1	5.8	302	8	8	<5	24	6,825.6
07.04.2020	1	6.0	331	2.4	5	<5	24	6,825.6

Tumbulgm Point 1		Pollutant	OIL and Grease -10 Milligrams per lt.	Total Suspended Solids Max 50 Milligrams per litre	pH (wet) Range 6.5 to 8.5	Requirement to Monitor Volume or Mass	
Month	Number of Samples	Frequency	Less than 24 hours before Discharge	Less than 24 hours before Discharge	Less than 24 hours before Discharge	Daily when wastes (water) discharged Klittres per day	Why Sampled - Discharge or Random?
Jul-2019	0						Nil Discharge
Aug-2019	0						Nil Discharge
Sep-2019	0						Nil Discharge
Oct-2019	0						Nil Discharge
Nov-2019	0						Nil Discharge
Dec-2019	0						Nil Discharge
20.01.2020	1		<2	13	4.3		250mm rain event
Feb-2020							
Mar-2020							
Apr-2020							
May-2020							
Jun-2020							

Tumbulgm Point 2		Pollutant	OIL and Grease -10 Milligrams per lt.	Total Suspended Solids Max 50 Milligrams per litre	pH (wet) Range 6.5 to 8.5	Requirement to Monitor Volume or Mass	
Month	Number of Samples	Frequency		Monthly during discharge	<24hrs prior to discharge	Daily when wastes (water) discharged Klittres per day	Why Sampled - Discharge or Random?
Jul-2019	0						Nil Discharge
Aug-2019	0						Nil Discharge
Sep-2019	0						Nil Discharge
Oct-2019	0						Nil Discharge
Nov-2019	0						Nil Discharge
Dec-2019	0						Nil Discharge
20.01.2020	1		<2	13	4.3		250mm rain event
February	0						300+mm
Mar-2020							
Apr-2020							
May-2020							
Jun-2020							

Tumbulgm Additional to EPL requirements testing sites		Pollutant	OIL and Grease -10 Milligrams per lt.	Total Suspended Solids Max 50 Milligrams per litre	pH (wet) Range 6.5 to 8.5	Requirement to Monitor Volume or Mass	
Date	Sample location	Number of Samples		Monthly during discharge	<24hrs prior to discharge	Daily when wastes (water) discharged Klittres per day	Why Sampled - Discharge or Random?
11.02.2020	SB3	1	<2	4.8	3.9		300+mm Rainfall
13.03.2020	Pit	1	<2	2	3.3		

Tumbulgm EPL 3430

Tumbulgm Blast Monitoring results

Blasting	Frequency	Date	Limits	Units of measure	Loc # 1 - 43 Pollard Rd	Loc # 2 - 2 Pollard Rd	Loc # 3 - 729 - 731 Dulguigan Rd	Blast #
Ground Vibration	Per Blast	12.06.2018	5 - trigger point >0.26	mm/s	1.02	1.17	Not required	#39
Overpressure	Per Blast	12.06.2018	Max 115 - Trigger point >100	dB	107.5	104.2	Not required	#39
Ground Vibration	Per Blast	02.07.2018	5 - trigger point >0.26	mm/s	1.27	1.29	Not required	#40
Overpressure	Per Blast	02.07.2018	Max 115 - Trigger point >100	dB	101.9	107.0	Not required	#40
Ground Vibration	Per Blast	28.09.2018	5 - trigger point >0.26	mm/s	0.52	0.76	Not required	#41
Overpressure	Per Blast	28.09.2018	Max 115 - Trigger point >100	dB	106	106.0	Not required	#41
Ground Vibration	Per Blast	16.10.2018	5 - trigger point >0.26	mm/s	0.71	0.58	Not required	#42
Overpressure	Per Blast	16.10.2018	Max 115 - Trigger point >100	dB	106.0	108.0	Not required	#42
Ground Vibration	Per Blast	25.01.2019	5 - trigger point >0.26	mm/s	0.74	0.49	Not required	#43
Overpressure	Per Blast	25.01.2019	Max 115 - Trigger point >100	dB	103.5	106	Not required	#43
Ground Vibration	Per Blast	30.04.2019	5 - trigger point >0.26	mm/s	0.6	0.95	Not required	#44
Overpressure	Per Blast	30.04.2019	Max 115 - Trigger point >100	dB	104.9	102.8	Not required	#44
Ground Vibration	Per Blast	30.04.2019	5 - trigger point >0.26	mm/s	No Trigger	No Trigger	Not required	#45
Overpressure	Per Blast	30.04.2019	Max 115 - Trigger point >100	dB	No Trigger	No Trigger	Not required	#45
Ground Vibration	Per Blast	21.06.2019	5 - trigger point >0.26	mm/s	1.1	0.83	Not required	#46
Overpressure	Per Blast	21.06.2019	Max 115 - Trigger point >100	dB	104.2	108	Not required	#46
Ground Vibration	Per Blast	02.08.2019	5 - trigger point >0.26	mm/s	0.51	0.71	Not required	#47
Overpressure	Per Blast	02.08.2019	Max 115 - Trigger point >100	dB	106.0	107.0	Not required	#47
Ground Vibration	Per Blast	06.09.2019	5 - trigger point >0.26	mm/s	No Trigger	0.32	Not required	#48
Overpressure	Per Blast	06.09.2019	Max 115 - Trigger point >100	dB	No Trigger	104.9	Not required	#48
Ground Vibration	Per Blast	06.09.2019	5 - trigger point >0.26	mm/s	0.48	0.89	Not required	#49
Overpressure	Per Blast	06.09.2019	Max 115 - Trigger point >100	dB	104.2	103.5	Not required	#49
Ground Vibration	Per Blast	23.10.2019	5 - trigger point >0.26	mm/s	0.81	1.06	Not required	#50
Overpressure	Per Blast	23.10.2019	Max 115 - Trigger point >100	dB	107.5	104.2	Not required	#50
Ground Vibration	Per Blast	23.10.2019	5 - trigger point >0.26	mm/s	0.81	1.06	Not required	#51
Overpressure	Per Blast	23.10.2019	Max 115 - Trigger point >100	dB	107.5	104.2	Not required	#51
Ground Vibration	Per Blast	20.01.2020	5 - trigger point >0.26	mm/s	0.73	0.86	Not required	#52
Overpressure	Per Blast	20.01.2020	Max 115 - Trigger point >100	dB	105.5	104.2	Not required	#52
Ground Vibration	Per Blast	18.02.2020	5 - trigger point >0.26	mm/s	0.44	0.73	Not required	#53
Overpressure	Per Blast	18.02.2020	Max 115 - Trigger point >100	dB	105.5	102.8	Not required	#53
Ground Vibration	Per Blast	18.02.2020	5 - trigger point >0.26	mm/s	0.44	0.73	Not required	#54
Overpressure	Per Blast	18.02.2020	Max 115 - Trigger point >100	dB	105.5	102.8	Not required	#54
Ground Vibration	Per Blast	18.02.2020	5 - trigger point >0.26	mm/s	0.44	0.73	Not required	#55
Overpressure	Per Blast	18.02.2020	Max 115 - Trigger point >100	dB	105.5	102.8	Not required	#55
Ground Vibration	Per Blast	26.03.2020	5 - trigger point >0.26	mm/s	0.38	1.79	Not required	#56
Overpressure	Per Blast	26.03.2020	Max 115 - Trigger point >100	dB	106.5	109.5	Not required	#56
Ground Vibration	Per Blast	03.04.2020	5 - trigger point >0.26	mm/s	0.43	0.47	Not required	#57
Overpressure	Per Blast	03.04.2020	Max 115 - Trigger point >100	dB	103.5	98.8	Not required	#57
Ground Vibration	Per Blast	03.04.2020	5 - trigger point >0.26	mm/s	0.74	0.47	Not required	#58
Overpressure	Per Blast	03.04.2020	Max 115 - Trigger point >100	dB	101.4	95.9	Not required	#58
Ground Vibration	Per Blast	08.05.2020	5 - trigger point >0.26	mm/s	0.51	0.84	Not required	#59

