

**AuS-10 Rhyolite - Licence number 12323**

Licence Discharge Point 1

The concentration limits stipulated by condition L2.1/2.4 for EPA Identification Points 1, 8, 9, 10 and 11 are deemed not to apply when the discharge from the stormwater control structures (sediment basins) occurs solely as a result of rainfall measured at the premises which exceeds: a) a total of 44 millimetres of rainfall over any consecutive 5 day period.

Dam 1 - SB1 - EPL Point 1

Month	Number of Samples	Range - 6.5 - 8.5		Electrical Conductivity	Turbidity	Total Dissolved Solids	Total Suspend Solids	Oxygen demand	Oil/Grease	Volume Discharged - KL - Estimated	Comment
		pH	<1500us/cm								
20/12/2023	1	7.4	308		834	N/S	812	N/S	<5	2000	N/S - Not Sampled
21/12/2023	1	7.7	228		1400	N/S	1070	N/S	<5	2000	
22/12/2023	1	7.8	291		770	N/S	424	N/S	<5	1000	
5/01/2024	1	7.3	225		1400	N/S	828	N/S	<5	2000	
6/01/2024	1	7.5	235		950	N/S	639	N/S	<5	2000	
7/01/2024	1	7.7	247		550	N/S	172	N/S	<5	2000	
18/01/2024	1	7.9	414		1350	N/S	655	N/S	<5	2000	
19/01/2024	1	6.8	236		2000	N/S	999	N/S	<5	3000	
6/04/2024	1	7.8	78		1500	N/S	1140	N/S	<5	3000	
7/04/2024	1	7.7	158		1100	N/S	976	N/S	<5	3000	
8/04/2024	1	6.7	243		550	N/S	272	N/S	<5	2000	
<b>Total</b>		<b>82.3</b>	<b>2663</b>		<b>12404</b>	<b>0</b>	<b>7987</b>	<b>0</b>	<b>0</b>		
	Mean	7.48	242.09		1127.64	#DIV/0!	726.09	#DIV/0!	#DIV/0!		
	Lowest	6.70	78.00		550.00	0.00	172.00	0.00	0.00		
	Highest	7.90	414.00		2000.00	0.00	1140.00	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 - Estimated	Comment
17/08/2023	1	7.9	280	2.5	125	<5	<2	<5	Nil Discharge - Monthly sample	
18/09/2023	1	7.7	287	1	172	<5	<2	<5	Nil Discharge - Monthly sample	
19/10/2023	1	7.1	276	4	132	<5	<2	<5	Nil Discharge - Monthly sample	
17/11/2023	1	8.4	349	1.6	177	<5	<2	<5	Nil Discharge - Monthly sample	
18/12/2023	1	7.5	335	2	192	<5	<2	<5	Nil Discharge - Monthly sample	
20/12/2023	1	6.2	243	130	N/S	364	N/S	<5	97mm of rain - 7am 19.12.2023 to 7am 20.12.2023	
21/12/2023	1	7.2	319	9.1	N/S	14	N/S	<5	Additional 78mm rain recorded 7am 20.12.2023 to 7am 21.12.2023 - total 175mm	
22/12/2023	1	7.8	317	5	N/S	11	N/S	<5	Total rainfall recorded of 175mm from 7am 19.12.23 to 21.12.2023	
5/01/2024	1	7.3	242	29	N/S	26	N/S	<5	95mm of rain recorded between 7.15am 02.01.2024 and 7.00am 05.01.2024	
6/01/2024	1	7.5	275	10	N/S	10	N/S	<5	95mm of rain recorded between 7.15am 02.01.2024 and 7.00am 05.01.2024	
7/01/2024	1	7.7	271	8	N/S	8	N/S	<5	95mm of rain recorded between 7.15am 02.01.2024 and 7.00am 05.01.2024	
18/01/2024	1	7.9	278	32	N/S	34	N/S	<5	58mm of rain recorded between 7.00am 17.01.2024 and 7.00am 19.01.2024	
19/01/2024	1	7.2	269	7	N/S	14	N/S	<5	58 mm of rain recorded between 7.00am 17.01.2024 and 7.00am 19.01.2024	
19/01/2024	1	7.9	278	7	148	<5	<2	<5	Nil Discharge - Monthly sample	
20/02/2024	1	6.7	266	2.8	179	5	<2	<5	Nil Discharge - Monthly sample	
22/03/2024	1	7.5	227	1.6	151	<5	5	<5	Nil Discharge - Monthly sample	
6/04/2024	1	7.5	147	90	N/S	159	N/S	<5	88 mm of rain recorded between 7.00am 4.04.2024 and 7.00 am 8.04.2024	
7/04/2024	1	7.7	128	40	N/S	35	N/S	<5	88 mm of rain recorded between 7.00am 4.04.2024 and 7.00 am 8.04.2024	
8/04/2024	1	7.9	2448	13	N/S	19	N/S	<5	88 mm of rain recorded between 7.00am 4.04.2024 and 7.00 am 8.04.2024	
22/04/2024	1	6.9	239	3.1	156	<5	<2	<5	Nil Discharge - Monthly sample	
23/05/2024	1	6.8	200	3.5	168	<5	4	<5	Nil Discharge - Monthly sample	
23/05/2024	1	7.2	240	5.5	150	10	2	<5	Nil Discharge - Monthly sample	
20/06/2024	1	7.2	240	5.5	150	10	2	<5	Nil Discharge - Monthly sample	
<b>Total</b>		<b>172.0</b>	<b>8091</b>	<b>408.9</b>	<b>1879</b>	<b>709</b>	<b>13</b>	<b>0</b>		
	Mean	7.48	351.78	17.78	156.58	54.54	3.25	#DIV/0!		
	Lowest	6.20	128.00	1.00	125.00	5.00	2.00	0.00		
	Highest	8.50	2448.00	130.00	192.00	364.00	5.00	0.00		

**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 - Estimated	Comment
18/07/2023	1	7.1	187	1.1	138	<5	<2	<5		Nil Discharge - Monthly sample
17/08/2023	1	7.7	235	2.0	131	<5	<2	<5		Nil Discharge - Monthly sample
18/09/2023	1	6.9	302	1.6	184	<5	2	<5		Nil Discharge - Monthly sample
19/10/2023	1	7.3	280	2	146	<5	<2	<5		Nil Discharge - Monthly sample
17/11/2023	1	7.7	338	1.3	475	<5	9	<5		Nil Discharge - Monthly sample
18/12/2023	1	7.7	322	1	190	5	<2	<5		Nil Discharge - Monthly sample
20/12/2023	1	7.0	204	138	N/S	378	N/S	<5		97mm of rain - 7am 19.12.2023 to 7am 20.12.2023 - Sampled at Alternative - AQW2
21/12/2023	1	7.5	316	8.5	N/S	15	N/S	<5		Additional 78mm rain recorded 7am 20.12.2023 to 7am 21.12.2023 - total 175mm
22/12/2023	1	7.9	318	8	N/S	10	N/S	<5		Sampled at Alternative - AQW2
5/01/2024	1	7.4	242	29	N/S	24	N/S	<5		95mm of rain recorded between 7.15am 02.01.2024 and 7.00am 05.01.2024 - sampled at AQW2
6/01/2024	1	7.6	272	13	N/S	16	N/S	<5		95mm of rain recorded between 7.15am 02.01.2024 and 7.00am 05.01.2024 - sampled at AQW2
7/01/2024	1	7.7	277	12	N/S	10	N/S	<5		95mm of rain recorded between 7.15am 02.01.2024 and 7.00am 05.01.2024 - sampled at AQW2
18/01/2024	1	7.8	270	22	N/S	34	N/S	<5		58mm of rain recorded between 7.00am 17.01.2024 and 7.00am 19.01.2024
19/01/2024	1	7.3	271	7	N/S	10	N/S	<5		58mm of rain recorded between 7.00am 17.01.2024 and 7.00am 19.01.2024

Date	Frequency	pH	Electrical Conductivity	Turbidity	Total Dissolved Solids	Total Suspended Solids	Oxygen Demand	Oil/Grease	Volume Discharged - KL - Estimated	Comment
19/01/2024	1	7.5	269	8.4	155	8	10	<5		Nil Discharge - Monthly sample
20/02/2024	1	7.0	263	2.9	144	6	<2	<5		Nil Discharge - Monthly sample
22/03/2024	1	6.5	241	3.7	156	<5	5	<5		88 mm of rain recorded between 7.00am 4.04.2024 and 7.00 am 8.04.2024
6/04/2024	1	7.7	147	140	N/S	176	N/S	<5		88 mm of rain recorded between 7.00am 4.04.2024 and 7.00 am 8.04.2024
7/04/2024	1	7.8	203	75	N/S	65	N/S	<5		88 mm of rain recorded between 7.00am 4.04.2024 and 7.00 am 8.04.2024
9/04/2024	1	7.5	247	12	N/S	6	N/S	<5		88 mm of rain recorded between 7.00am 4.04.2024 and 7.00 am 8.04.2024
22/04/2024	1	7.3	238	3.3	148	<5	<2	<5		Nil Discharge - Monthly sample
23/05/2024	1	7.6	184	4.5	160	<5	4	<5		Nil Discharge - Monthly sample
20/06/2024	1	7.2	240	5.5	150	10	2	<5		Nil Discharge - Monthly sample
<b>Total</b>		<b>170.7</b>	<b>1180</b>	<b>148.8</b>	<b>665</b>	<b>408</b>	<b>9</b>	<b>0</b>		
	Mean	7.39	271.00	15.38	191.00	46.91	6.50	#DIV/0!		0.00
	Lowest	6.50	187.00	1.00	131.00	5.00	2.00	0.00		0.00
	Highest	7.90	338.00	138.00	475.00	378.00	10.00	0.00		

Period	Month	EPL Point 4	Number of	Sawmill	Insoluble Solids	Combustible Matter	Ash
16/06/2023 - 18/07/2023	Jul-2023	continuous	Sawmill	<0.1	<0.1	<0.1	
18/07/2023 - 17/08/2023	Aug-2023	continuous	Sawmill	0.8	0.5	0.3	
17/08/2023 - 18/09/2023	Sep-2023	continuous	Sawmill	0.6	0.4	0.2	
18/09/2023 - 19/10/2023	Oct-2023	continuous	Sawmill	0.9	0.5	0.4	
19/10/2023 - 17/11/2023	Nov-2023	continuous	Sawmill	1.6	0.9	0.7	
17/11/2023 - 18/12/2023	Dec-2023	continuous	Sawmill	1.0	0.6	0.4	
18/12/2023 - 19/01/2024	Jan-2024	continuous	Sawmill	1.0	0.7	0.3	
19/01/2024 - 20/02/2024	Feb-2024	continuous	Sawmill	1.6	1.0	0.6	
20/02/2024 - 22/03/2024	Mar-2024	continuous	Sawmill	1.3	0.3	1.0	
22/03/2024 - 22/04/2024	Apr-2024	continuous	Sawmill	1.1	0.6	0.5	
22/04/2024 - 23/05/2024	May-2024	continuous	Sawmill	0.2	<0.1	0.2	
23/05/2024 - 20/06/2024	Jun-2024	continuous	Sawmill	0.3	0.3	<0.1	
				<b>10.4</b>	<b>5.8</b>	<b>4.6</b>	
	Mean			<b>0.95</b>	<b>0.58</b>	<b>0.46</b>	
	Lowest			<b>0.2</b>	<b>0.3</b>	<b>0.2</b>	
	Highest			<b>1.6</b>	<b>1</b>	<b>1</b>	

Month	Month	EPL Point 5	Number of	Baners Lane	Insoluble Solids	Combustible Matter	Ash
16/06/2023 - 18/07/2023	Jul-2023	continuous	Baners Lane	0.3	0.1	0.2	
18/07/2023 - 17/08/2023	Aug-2023	continuous	Baners Lane	0.7	0.5	0.2	
17/08/2023 - 18/09/2023	Sep-2023	continuous	Baners Lane	0.8	0.5	0.3	
18/09/2023 - 19/10/2023	Oct-2023	continuous	Baners Lane	0.2	0.1	0.1	
19/10/2023 - 17/11/2023	Nov-2023	continuous	Baners Lane	0.4	0.1	0.3	
17/11/2023 - 18/12/2023	Dec-2023	continuous	Baners Lane	0.8	0.6	0.2	
18/12/2023 - 19/01/2024	Jan-2024	continuous	Baners Lane	0.7	0.7	<0.1	
19/01/2024 - 20/02/2024	Feb-2024	continuous	Baners Lane	0.8	0.7	0.1	
20/02/2024 - 22/03/2024	Mar-2024	continuous	Baners Lane	0.7	0.4	0.3	
22/03/2024 - 22/04/2024	Apr-2024	continuous	Baners Lane	0.2	<0.1	0.2	
22/04/2024 - 23/05/2024	May-2024	continuous	Baners Lane	0.3	0.2	0.1	
23/05/2024 - 20/06/2024	Jun-2024	continuous	Baners Lane	0.1	0.1	<0.1	
				<b>6</b>	<b>4</b>	<b>2</b>	
	Mean			<b>0.50</b>	<b>0.36</b>	<b>0.20</b>	
	Lowest			<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	
	Highest			<b>0.8</b>	<b>0.7</b>	<b>0.3</b>	

Month	Month	EPL Point 6	Number of	Bald Hill	Insoluble Solids	Combustible Matter	Ash
16/06/2023 - 18/07/2023	Jul-2023	continuous	Bald Hill	0.4	0.3	0.1	
18/07/2023 - 17/08/2023	Aug-2023	continuous	Bald Hill	0.6	0.5	0.1	
17/08/2023 - 18/09/2023	Sep-2023	continuous	Bald Hill	0.5	0.3	0.2	
18/09/2023 - 19/10/2023	Oct-2023	continuous	Bald Hill	0.5	0.1	0.4	
19/10/2023 - 17/11/2023	Nov-2023	continuous	Bald Hill	0.7	0.2	0.5	
17/11/2023 - 18/12/2023	Dec-2023	continuous	Bald Hill	0.5	0.3	0.2	
18/12/2023 - 19/01/2024	Jan-2024	continuous	Bald Hill	0.6	0.5	0.1	
19/01/2024 - 20/02/2024	Feb-2024	continuous	Bald Hill	1.2	0.8	0.4	
20/02/2024 - 22/03/2024	Mar-2024	continuous	Bald Hill	0.8	0.5	0.3	
22/03/2024 - 22/04/2024	Apr-2024	continuous	Bald Hill	0.1	<0.1	0.1	
22/04/2024 - 23/05/2024	May-2024	continuous	Bald Hill	0.7	0.2	0.5	
23/05/2024 - 20/06/2024	Jun-2024	continuous	Bald Hill	0.3	0.3	<0.1	
				<b>6.9</b>	<b>4</b>	<b>2.9</b>	
	Mean			<b>0.58</b>	<b>0.36</b>	<b>0.26</b>	
	Lowest			<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	
	Highest			<b>1.2</b>	<b>0.8</b>	<b>0.5</b>	

ND - Not Detected

**EPL POINT 8**

Range - 6.5 - 8.5										Volume Discharged - KL - Estimated	Comment
Month	Number of Samples	pH	Electrical Conductivity	Turbidity	Total Dissolved Solids	Total Suspended Solids	Oxygen demand	Oil/Grease		2000	
31/07/2023	0										Nil Discharge - NO Sample
31/08/2023	0										Nil Discharge - NO Sample
30/09/2023	0										Nil Discharge - NO Sample
31/10/2023	0										Nil Discharge - NO Sample
30/11/2023	0										Nil Discharge - NO Sample
20/12/2023	1	7	207	1805	N/S	812	N/S	8	2000		97mm of rain - 7am 19.12.2023 to 7am 20.12.2023
31/01/2024	0										Nil Discharge - NO Sample
29/02/2024	0										Nil Discharge - NO Sample
31/03/2024	0										Nil Discharge - NO Sample
30/04/2024	0										Nil Discharge - NO Sample
31/05/2024	0										Nil Discharge - NO Sample
30/06/2024	0										Nil Discharge - NO Sample
	Mean	7.00	207.00	1805.00	#DIV/0!	812.00	#DIV/0!	8.00			
	Lowest	7.00	207.00	1805.00	0.00	812.00	0.00	8.00			
	Highest	7.00	207.00	1805.00	0.00	812.00	0.00	8.00			

N/S - Not Sampled

**EPL POINT 9**

South of O/Burden dump

Range - 6.5 - 8.5										Volume Discharged - KL - Estimated	Comment
Month	Number of Samples	pH	Electrical Conductivity	Turbidity	Total Dissolved Solids	Total Suspended Solids	Oxygen demand	Oil/Grease		2000	
31/07/2023	0										Nil Discharge - NO Sample
31/08/2023	0										Nil Discharge - NO Sample
30/09/2023	0										Nil Discharge - NO Sample
31/10/2023	0										Nil Discharge - NO Sample
30/11/2023	0										Nil Discharge - NO Sample
20/12/2023	0										97mm of rain - 7am 19.12.2023 to 7am 20.12.2023
21/12/2023	1	7.6	876	101	N/S	33	N/S	<5			Additional 78mm rain recorded 7am 20.12.2023 to 7am 21.12.2023 - total 175mm
18/01/2024	1	9.0	271	60	N/S	26	N/S	<5	2000		58mm of rain recorded between 7.00am 17.01.2024 and 7.00am 19.01.2024
19/01/2024	1	8.3	531	75	N/S	60	N/S	<5	2000		58mm of rain recorded between 7.00am 17.01.2024 and 7.00am 19.01.2024
29/02/2024	0										Nil Discharge - NO Sample
31/03/2024	0										Nil Discharge - NO Sample
7/04/2024	1	7.5	548	90	N/S	39	N/S	<5	2000		88 mm of rain recorded between 7.00am 4.04.2024 and 7.00 am 8.04.2024
8/04/2024	1	8.1	547	11	N/S	34	N/S	<5	2000		88 mm of rain recorded between 7.00am 4.04.2024 and 7.00 am 8.04.2024
31/05/2024	0										Nil Discharge - NO Sample
30/06/2024	0										Nil Discharge - NO Sample
	Mean	8.10	554.60	67.40	#DIV/0!	38.40	#DIV/0!	#DIV/0!			
	Lowest	7.50	271.00	11.00	0.00	26.00	0.00	0.00			
	Highest	9.00	876.00	101.00	0.00	60.00	0.00	0.00			

N/S - Not Sampled

**EPL POINT 10**

Storage Dam 4

Range - 6.5 - 8.5										Volume Discharged - KL - Estimated	Comment
Month	Number of Samples	pH	Electrical Conductivity	Turbidity	Total Dissolved Solids	Total Suspended Solids	Oxygen demand	Oil/Grease			
31/07/2023	0										Nil Discharge - NO Sample
31/08/2023	0										Nil Discharge - NO Sample



24/07/2023	1	6.1	380	5.3	7	< 5	24	6,825.6
29/08/2023	1	6.1	379	1.8	3	< 5	24	6,825.6
24/10/2023	1	6.4	409	1.8	3	< 5	24	6,825.6
27/10/2023	1	5.13	316.6					
14/11/2023	1	6.1	378	2.7	5	< 5	24	6,825.6
5/12/2023	1	5.9	380	4.0	6	< 5	24	6,825.6
18/12/2023	1	6.3	401	5.2	8	< 5	24	6,825.6
9/01/2024	1	6.5	415	2.5	7	< 5	24	6,825.6
22/01/2024	1	4.67	423.7					
14/02/2024	1	6.5	403	3.4	10	< 5	24	6,825.6
27/02/2024	1	6.2	394	5.5	10	< 5	24	6,825.6
19/03/2024	1	6.3	435	16	20	< 5	24	6,825.6
3/04/2024	1	5.9	429	5.5	8	< 5	24	6,825.6
9/04/2024	1	6.4	386	13	18			
11/04/2024	1	6.3	381	7.5	11	< 5	24	6,825.6
16/04/2024	1	6	397	4	11	< 5	24	6,825.6
17/04/2024	1	4.49	204.2					
23/04/2024	1	6.3	403	3.8	12	< 5	24	6,825.6
30/04/2024	1	6.1	384	3.3	11	< 5	24	6,825.6
7/05/2024	1	6.1	360	13	20	< 5	24	6,825.6
21/05/2024	1	5.9	356	3.6	12	< 5	24	6,825.6
3/06/2024	1	6.3	361	11	16	< 5	24	6,825.6
17/06/2024	1	5	368					
Mean		6.02	380.48	6.24	10.48	#DIV/0!		
Lowest		4.49	204.20	1.80	3.00	0.00		
Highest		6.50	435.00	16.00	20.00	0.00		
								136,512.0

Grant's Head Points 2 & 3	Standing Water Level Meters (mAHD)	Standing Water Level Metres (mAHD)
Position ID	Quarterly	Quarterly
03/06/2022	MW05	4.914
17/10/2022	MW05	4.885
7/12/2022	MW05	4.823
24/02/2023	MW05	4.659
6/06/2023	MW05	4.715
27/10/2023	MW05	4.814
22/01/2024	MW05	4.507
17/04/2024	MW05	4.912
17/06/2024	MW05	4.869
Mean		4.776
Lowest		4.507
Highest		4.912

Grant's Head Point 4	Position ID	Conductivity	pH	Standing Water Level	Aluminium	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc
24/02/2023	NW01D	254.7	5.74	-2.324	<0.05	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.003	<0.006
6/06/2023	NW01D	487.9	7.71	-1.596	<0.05	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	0.002	<0.005
27/10/2023	NW01D	345.7	5.42	-2.015	<0.05	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	0.003	0.012
22/01/2024	NW01D	423	6.16	-3.087	<0.05	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.003	<0.005
17/04/2024	NW01D	467.8	5.63	-1.886	<0.05	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	0.002	<0.005
17/06/2024	NW01D	472.9	5.31	-1.053	<0.05	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	0.002	0.012
Mean													
Lowest													
Highest													

Grant's Head Point 4	Position ID	Conductivity	pH	Standing Water Level	Aluminium	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc
24/02/2023	NW01S	421.9	5.5	-1.45	0.36	<0.001	<0.002	<0.001	0.003	<0.001	<0.001	0.002	0.008
6/06/2023	NW01S	521	8.41	-0.781	0.38	<0.001	<0.002	<0.001	0.003	<0.001	<0.001	0.001	<0.005
27/10/2023	NW01S	395.2	4.77	-2.25	0.39	<0.001	<0.002	<0.001	0.003	<0.001	<0.001	0.002	0.005
22/01/2024	NW01S	423.6	6.17	-3.089	0.41	<0.001	<0.002	<0.001	0.005	<0.001	<0.001	<0.003	<0.011
17/04/2024	NW01S	403.3	4.91	-4.892	0.49	<0.001	<0.002	<0.001	0.002	<0.001	<0.001	0.001	<0.005
17/06/2024	NW01S	424.5	4.61	-5.259	0.48	<0.001	<0.002	<0.001	0.004	<0.001	<0.001	0.001	0.012
Mean													
Lowest													
Highest													

Grant's Head Point 5	Position ID	Conductivity	pH	Standing Water Level	Aluminium	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc
24/02/2023	NW02D	782	6.3	0.804	<0.05	0.003	<0.002	<0.001	<0.001	<0.001	<0.001	0.009	<0.005
6/06/2023	NW02D	664.7	6.24	-0.865	<0.05	0.001	<0.002	<0.001	<0.001	<0.001	<0.001	0.001	<0.005
27/10/2023	NW02D	661	6.19	-2.015	<0.05	0.002	<0.002	<0.001	<0.001	<0.001	<0.001	0.003	0.008
22/01/2024	NW02D	808	6.81	0.757	<0.05	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005
17/04/2024	NW02D	810	6.21	1.033	<0.05	0.002	<0.002	<0.001	<0.001	<0.001	<0.001	0.004	<0.005
17/06/2024	NW02D	831	5.98	1.374	<0.05	0.002	<0.002	<0.001	<0.001	<0.001	<0.001	0.004	0.009
Mean													
Lowest													
Highest													

Grant's Head Point 5	Position ID	Conductivity	pH	Standing Water Level	Aluminium	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc
24/02/2023	NW02S	324.7	5.00	-9.013	0.53	<0.001	<0.002	0.001	0.002	<0.001	<0.001	<0.001	<0.005
6/06/2023	NW02S	311.7	5.04	-9.059	0.47	<0.001	<0.002	<0.001	0.003	<0.001	<0.001	0.001	<0.005
27/10/2023	NW02S	114	4.28	-5.618	0.17	<0.001	<0.002	<0.001	0.003	<0.001	<0.001	<0.001	0.006
22/01/2024	NW02S	262.6	5.96	-5.7	0.22	<0.001	<0.002	<0.001	0.002	<0.001	<0.001	<0.001	<0.005
17/04/2024	NW02S	275.4	4.66	-4.892	0.28	<0.001	<0.002	<0.001	0.001	<0.001	<0.001	<0.001	<0.005
17/06/2024	NW02S	277.1	4.23	-5.259	0.47	<0.001	<0.002	<0.001	0.001	<0.001	<0.001	0.002	0.015
Mean													
Lowest													
Highest													

Grant's Head Point 6	Position ID	Conductivity	pH	Standing Water Level	Aluminium	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc
24/02/2023	NW03D-A	970	6.67	-12.346	<0.05	0.001	<0.002	<0.001	<0.001	<0.001	<0.001	0.002	<0.005
6/06/2023	NW03D-A	321.8	7.24	-12.192	<0.05	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.014
27/10/2023	NW03D-A	500	6.42	-12.168	<0.05	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.006
22/01/2024	NW03D-A	911	7.52	-11.97	<0.05	0.003	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005
17/04/2024	NW03D-A	1036	6.76	-11.471	<0.05	0.004	<0.002	<0.001	<0.001	<0.001	<0.001	0.007	<0.005
17/06/2024	NW03D-A	1136	6.49	-11.634	<0.05	0.003	<0.002	<0.001	<0.001	<0.001	<0.001	0.005	0.011
Mean													
Lowest													
Highest													

Grant's Head Quarry - Licence Number 4040	Blasting	Frequency	Date	Limits	Units of measure	Results Bonny Hills 1st House	Results - Sherrod Park	Blast No #
	Ground Vibration	Per Blast	17/01/2022	5 - Trigger point >0.27	5 - Trigger point >0.10	1.41	0.25	#133
	Overpressure	Per Blast	17/01/2022	115 - Trigger point >100	115 - Trigger point >100	101.8	102.8	#133
	Ground Vibration	Per Blast	6/06/2022	5 - Trigger point >0.27	5 - Trigger point >0.10	2.16	0.13	#134
	Overpressure	Per Blast	6/06/2022	115 - Trigger point >100	115 - Trigger point >100	105.9	101.9	#134
	Ground Vibration	Per Blast	20/09/2022	5 - Trigger point >0.27	5 - Trigger point >0.10	3.18	0.21	#135
	Overpressure	Per Blast	20/09/2022	115 - Trigger point >100	115 - Trigger point >100	103.5	108.5	#135
	Ground Vibration	Per Blast	21/02/2023	5 - Trigger point >0.27	5 - Trigger point >0.10	1.44	0.25	#136
	Overpressure	Per Blast	21/02/2023	115 - Trigger point >100	115 - Trigger point >100	100.9	108.0	#136
	Ground Vibration	Per Blast	1/05/2023	5 - Trigger point >0.27	5 - Trigger point >0.10	2.17	0.13	#137
	Overpressure	Per Blast	1/05/2023	115 - Trigger point >100	115 - Trigger point >100	111.7	103.5	#137
	Ground Vibration	Per Blast	29/08/2023	5 - Trigger point >0.27	5 - Trigger point >0.10	2.4	0.13	#138
	Overpressure	Per Blast	29/08/2023	115 - Trigger point >100	115 - Trigger point >100	110.0	106.0	#138
	Ground Vibration	Per Blast	12/10/2023	5 - Trigger point >0.27	5 - Trigger point >0.10	0.57	No Trigger	#139
	Overpressure	Per Blast	12/10/2023	115 - Trigger point >100	115 - Trigger point >95	96.8	No Trigger	#139
	Ground Vibration	Per Blast	7/02/2024	5 - Trigger point >0.27	5 - Trigger point >0.10	0.64	No Trigger	#140
	Overpressure	Per Blast	7/02/2024	115 - Trigger point >100	115 - Trigger point >95	100.1	No Trigger	#140
	Ground Vibration	Per Blast	12/06/2024	5 - Trigger point >0.27	5 - Trigger point >0.10	0.84	No Trigger	#141
	Overpressure	Per Blast	12/06/2024	115 - Trigger point >100	115 - Trigger point >95	106.2	No Trigger	#141

Tumbulgum EPL 3430	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
	Frequency	Less than 24 hours before Discharge	Less than 24 hours before Discharge	Less than 24 hours before Discharge	Daily when wastes (water) discharged Klitres per day
	Why Sampled - Discharge or Random?				
Month	Number of Samples				
Jul-2023	0				Nil Controlled Discharge
Aug-2023	0				Nil Controlled Discharge
Sep-2023	0				Nil Controlled Discharge
Oct-2023	0				Nil Controlled Discharge
Nov-2023	0				Nil Controlled Discharge
Dec-2023	0				Nil Controlled Discharge
Jan-2024	0				Nil Controlled Discharge

Feb-2024	0						NII Controlled Discharge
Mar-2024	0						NII Controlled Discharge
Apr-2024	0						NII Controlled Discharge
May-2024	0						NII Controlled Discharge
Jun-2024	0						NII Controlled Discharge

Tumbulgun Point 2	WM 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
		Frequency		Monthly during discharge	<24hrs prior to discharge	Daily when wastes (water) discharged Kilolitres per day
Month	Number of Samples					Why Sampled - Discharge or Random?
Jul-2023	0					NII Controlled Discharge
Aug-2023	0					NII Controlled Discharge
Sep-2023	0					NII Controlled Discharge
Oct-2023	0					NII Controlled Discharge
Nov-2023	0					NII Controlled Discharge
Dec-2023	0					NII Controlled Discharge
Jan-2024	0					NII Controlled Discharge
Feb-2024	0					NII Controlled Discharge
Mar-2024	0					NII Controlled Discharge
Apr-2024	0					NII Controlled Discharge
May-2024	0					NII Controlled Discharge
Jun-2024	0					NII Controlled Discharge

Tumbulgun Additional to EPL requirements testing sites	Site Location	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
		Frequency		Monthly during discharge	<24hrs prior to discharge	Daily when
Date	location	Samples		Monthly during	<24hrs prior to discharge	Why Sampled - Discharge

EPL 3430 - Condition L2.5 The concentration limits in the above tables do not apply to any discharge from the final sediment basin arising from rainfall exceeding 82.5mm in total falling over any consecutive five day period

**Tumbulgun EPL 3430**  
Tumbulgun Blast Monitoring results

Blasting	Frequency	Date	Limits	Units of measure	Loc # 1 - 43 Pollard Rd	Loc # 2 - 23 Pollard Rd	Loc # 3 - 42 Pollard Rd	Blast #	
Ground Vibration	Per Blast	02/03/2023	5 - trigger point >0.26	mm/s	1.02	1.65	Not required	#103	12.31
Overpressure	Per Blast	02/03/2023	Max 115 - Trigger point >107	dB	111.20	112.80	Not required	#103	
Ground Vibration	Per Blast	02/03/2023	5 - trigger point >0.26	mm/s	1.02	1.65	Not required	#104	12.31
Overpressure	Per Blast	02/03/2023	Max 115 - Trigger point >108	dB	111.20	112.80	Not required	#104	
Ground Vibration	Per Blast	29/05/2023	5 - trigger point >0.26	mm/s	1.40	2.40	Not required	#105	2.00pm
Overpressure	Per Blast	29/05/2023	Max 115 - Trigger point >108	dB	114.40	113.20	Not required	#105	
Ground Vibration	Per Blast	29/05/2023	5 - trigger point >0.26	mm/s	1.40	2.40	Not required	#106	2.00pm
Overpressure	Per Blast	29/05/2023	Max 115 - Trigger point >108	dB	114.40	113.20	Not required	#106	
Ground Vibration	Per Blast	16/08/2023	5 - trigger point >0.26	mm/s	1.78	Not Required	Not required	#107	3.15pm
Overpressure	Per Blast	16/08/2023	Max 115 - Trigger point >109	dB	114.50	Not Required	Not required	#107	
Ground Vibration	Per Blast	16/08/2023	5 - trigger point >0.26	mm/s	1.78	Not Required	Not required	#108	3.15pm
Overpressure	Per Blast	16/08/2023	Max 115 - Trigger point >110	dB	114.50	Not Required	Not required	#108	
Ground Vibration	Per Blast	16/08/2023	5 - trigger point >0.26	mm/s	1.78	Not Required	Not required	#109	3.15pm
Overpressure	Per Blast	16/08/2023	Max 115 - Trigger point >110	dB	114.50	Not Required	Not required	#109	
Ground Vibration	Per Blast	13/10/2023	5 - trigger point >0.25	mm/s	0.82	Not Required	Not required	#110	1.49pm
Overpressure	Per Blast	13/10/2023	Max 115 - Trigger point >110	dB	111.60	Not Required	Not required	#110	
Ground Vibration	Per Blast	13/10/2023	5 - trigger point >0.25	mm/s	0.82	Not Required	Not required	#111	1.49pm
Overpressure	Per Blast	13/10/2023	Max 115 - Trigger point >110	dB	111.60	Not Required	Not required	#111	
Ground Vibration	Per Blast	20/02/2024	5 - trigger point >0.25	mm/s	1.64	Not Required	Not required	#112	2.37pm
Overpressure	Per Blast	20/02/2024	Max 115 - Trigger point >110	dB	109.10	Not Required	Not required	#112	
Ground Vibration	Per Blast	20/02/2024	5 - trigger point >0.25	mm/s	1.64	Not Required	Not required	#113	2.37pm
Overpressure	Per Blast	20/02/2024	Max 115 - Trigger point >110	dB	109.10	Not Required	Not required	#113	
Ground Vibration	Per Blast	20/04/2024	5 - trigger point >0.25	mm/s	1.40	Not Required	1.65	#114	1.34pm
Overpressure	Per Blast	20/04/2024	Max 115 - Trigger point >110	dB	114.60	Not Required	114.3	#114	
Ground Vibration	Per Blast	5/08/2024	5 - trigger point >0.25	mm/s	NII Trigger	Not Required	0.59	#116	11.37 pm
Overpressure	Per Blast	5/08/2024	Max 115 - Trigger point >110	dB	NII Trigger	Not Required	110.2	#116	

**Yarrabee Rd Quarry - Licence Number 11462**

M2.3 Note - Special Frequency 1 means sampling once during each discharge event arising from rainfall not exceeding the 90 percentile five day rainevent of 70 mm falling in total over a period of up to five days duration.

Yarrabee Rd Point 3	Pollutant	Total Suspended Solids Max 50 Milligrams per litre	pH (wet) Range 6.5 to 8.5	Requirement to Monitor Volume or Mass - Estimate	Rainfall recorded - mm	Comments
Month	Number of Samples					
06.06.2023	1	51	8.1	0	0	NII Discharge / Sample only
02.02.2024	1	4	7.8	0	0	NII Discharge / Sample only
24.04.2024	1	14	8	0	0	NII Discharge / Sample only
13.05.2024	1	7	7.5	0	0	NII Discharge / Sample only
Number of samples	4					
Mean		19.00	7.85	0.00		
Lowest		4.00	7.50	0.00		
Highest		51.00	8.10	0.00		

EPL 11462 - Condition L2.2 The concentration limits in the below table do not apply to any discharge from sediment pond (at Point 3) solely arising from rainfall exceeding 90th percentile (70 mm) 5 day rainevent in total falling over any consecutive five day period

**Yarrabee Rd Quarry - Licence Number 11462**

Blasting	Frequency	Date	Limits	Units of measure	Results	Blast #	Blast ID	
Ground Vibration	Per Blast	07/10/2022	5 mm/s - trigger point >0.30	mm/s	NII Trigger	#105	YRQ-2210	12.49pm
Overpressure	Per Blast	07/10/2022	Max 115 dB - Trigger point >100dB	dB	NII Trigger	#105	YRQ-2210	
Ground Vibration	Per Blast	07/11/2022	5 mm/s - trigger point >0.30	mm/s	0.78	#106	YRQ-2211	12.15pm
Overpressure	Per Blast	07/11/2022	Max 115 dB - Trigger point >100dB	dB	111.7	#106	YRQ-2211	
Ground Vibration	Per Blast	25/11/2022	5 mm/s - trigger point >0.30	mm/s	NII Trigger	#107	YRQ-2212	11.00AM
Overpressure	Per Blast	25/11/2022	Max 115 dB - Trigger point >100dB	dB	NII Trigger	#107	YRQ-2212	
Ground Vibration	Per Blast	12/01/2023	5 mm/s - trigger point >0.30	mm/s	0.79	#108	YRQ-2301	12.04pm
Overpressure	Per Blast	12/01/2023	Max 115 dB - Trigger point >100dB	dB	110.0	#108	YRQ-2301	
Ground Vibration	Per Blast	23/01/2023	5 mm/s - trigger point >0.30	mm/s	1.49	#109	YRQ-2302	12.29pm
Overpressure	Per Blast	23/01/2023	Max 115 dB - Trigger point >100dB	dB	103.6	#109	YRQ-2302	
Ground Vibration	Per Blast	15/02/2023	5 mm/s - trigger point >0.30	mm/s	NII Trigger	#110	YRQ-2303	1.56pm
Overpressure	Per Blast	15/02/2023	Max 115 dB - Trigger point >100dB	dB	NII Trigger	#110	YRQ-2303	
Ground Vibration	Per Blast	8/03/2023	5 mm/s - trigger point >0.30	mm/s	NII Trigger	#111	YRQ-2304	11.06am
Overpressure	Per Blast	8/03/2023	Max 115 dB - Trigger point >100dB	dB	NII Trigger	#111	YRQ-2304	
Ground Vibration	Per Blast	10/03/2023	5 mm/s - trigger point >0.30	mm/s	NII Trigger	#112	YRQ-2305	12.16pm
Overpressure	Per Blast	10/03/2023	Max 115 dB - Trigger point >100dB	dB	NII Trigger	#112	YRQ-2305	
Ground Vibration	Per Blast	9/05/2023	5 mm/s - trigger point >0.30	mm/s	1.14	#113	YRQ-2306	12.36pm
Overpressure	Per Blast	9/05/2023	Max 115 dB - Trigger point >100dB	dB	103.2	#113	YRQ-2306	
Ground Vibration	Per Blast	26/06/2023	5 mm/s - trigger point >0.30	mm/s	NII Trigger	#114	YRQ-2307	1.16pm
Overpressure	Per Blast	26/06/2023	Max 115 dB - Trigger point >100dB	dB	NII Trigger	#114	YRQ-2307	
Ground Vibration	Per Blast	9/08/2023	5 mm/s - trigger point >0.30	mm/s	0.88	#115	YRQ-2308	12.21pm
Overpressure	Per Blast	9/08/2023	Max 115 dB - Trigger point >100dB	dB	110.9	#115	YRQ-2308	
Ground Vibration	Per Blast	5/10/2023	5 mm/s - trigger point >0.30	mm/s	1.16	#116	YRQ-2309	12.34pm
Overpressure	Per Blast	5/10/2023	Max 115 dB - Trigger point >100dB	dB	100.9	#116	YRQ-2309	
Ground Vibration	Per Blast	11/12/2023	5 mm/s - trigger point >0.30	mm/s	0.76	#117	YRQ-2310	12.36pm
Overpressure	Per Blast	11/12/2023	Max 115 dB - Trigger point >100dB	dB	106.6	#117	YRQ-2310	
Ground Vibration	Per Blast	29/11/2023	5 mm/s - trigger point >0.30	mm/s	1.19	#118	YRQ-2311	1.02pm
Overpressure	Per Blast	29/11/2023	Max 115 dB - Trigger point >100dB	dB	113.5	#118	YRQ-2311	
Ground Vibration	Per Blast	19/12/2023	5 mm/s - trigger point >0.30	mm/s	0.80	#119	YRQ-2312	12.06pm
Overpressure	Per Blast	19/12/2023	Max 115 dB - Trigger point >100dB	dB	110.5	#119	YRQ-2312	
Ground Vibration	Per Blast	12/03/2024	5 mm/s - trigger point >0.30	mm/s	0.64	#120	YRQ-2401	12.30pm
Overpressure	Per Blast	12/03/2024	Max 115 dB - Trigger point >100dB	dB	112.8	#120	YRQ-2401	
Ground Vibration	Per Blast	23/04/2024	5 mm/s - trigger point >0.30	mm/s	0.87	#121	YRQ-2402	1.37pm
Overpressure	Per Blast	23/04/2024	Max 115 dB - Trigger point >100dB	dB	110.8	#121	YRQ-2402	
Ground Vibration	Per Blast	25/06/2024	5 mm/s - trigger point >0.30	mm/s	0.74	#122	YRQ-2403	12.33pm