AuS-10 Rhyolite - Licence number 12323

Dam 1- EPL Point 1

Licence Discharge Point 1

Guidance range		**6.5 - 8.5**	**<1500us/cm**			**<30 mg/l**		**20 10 mg/l**	
Month	**Number of Samples**	**PH**	**electrical Cond**	**turbidity**	**total dissolved solids**	**total suspend**	**oxygen dem**	**oil/grease**	
Apr-2012	0								
May-2012	0								
Jun-2012	0								
Jul-2012	0								
Aug-2012	0								
Sep-2012	0								
Oct-2012	0								
Nov-2012	0								
Dec-2012	0								
29.01.2013	1	7.91	389	925	58	456	<2	<5	Discharge Sample
01.02.2013	1	7.43	316	587	262	512			Discharge Sample
18.02.13	0								
25.02.13	1	7.41	204	1244	368	520	<2	<5	Sample
26.02.13	1	6.56	176	966	338	384	3	<5	Discharge Sample
Mar-2013	0								
Apr-2013	0								
May-2013	0								
Jun-2013	0								
Total		**29.31**	**1085**	**3722**	**1026**	**1872**	**3**	**0**	
	Mean	**7.33**	**271.25**	**930.50**	**256.50**	**468.00**	**3.00**	**#DIV/0!**	
	Lowest	**6.56**	**176.00**	**587.00**	**58.00**	**384.00**	**3.00**	**0.00**	
	Highest	**7.91**	**389.00**	**1244.00**	**368.00**	**520.00**	**3.00**	**0.00**	

EPL POINT 2

Month	**Number of Samples**	**PH**	**electrical Cond**	**turbidity**	**total dissolved solids**	**total suspend**	**oxygen dem**	**oil/grease**
Apr-2012	1	7.04	237	4	176	3.2	<2	<5
May-2012	1	7.55	186	3	180	1.6	<2	<5
Jun-2012	1	7.29	300	6	211	4	<2	<5
Jul-2012	1	7.19	304	6	318	6	<2	<5
Aug-2012	1	7.56	321	3	250	5	3	<5
Sep-2012	1	8.17	300	5	192	5	<2	<5
Oct-2012	1	7.16	313	8	156	19	<2	<5
Nov-2012	1	7.53	334	6	182	2	<2	<5
Dec-2012	1	7.36	359	4	204	2	<2	<5
Jan-2013	1	7.53	414	3	248	2	<2	<5

18.02.2013	1	7.85	361	5	110	5	<2	<5
19.03.2013	1	6.92	269	5	224	2	<2	<5
17.04.13	1	7.66	280	4	160	2	<2	<5
20.05.13	1	7.83	337	13	186	26	<2	<5
19.06.13	1	7.39	337	2	252	1	<2	<5
Total		**90.15**	**3929**	**64**	**2482**	**77**	**3**	**0**
		7.51	**327.42**	**5.33**	**206.83**	**6.42**	**0.25**	**0.00**
	Mean	**7.51**	**327.42**	**5.33**	**206.83**	**6.42**	**3.00**	**#DIV/0!**
	Lowest	**6.92**	**269.00**	**2.00**	**110.00**	**1.00**	**3.00**	**0.00**
	Highest	**8.17**	**414.00**	**13.00**	**318.00**	**26.00**	**3.00**	**0.00**

EPL Point 3

Month	Number of Samples	PH	conductance	turbidity	total dissolved solids	total suspend	oxygen dem	oil/grease
Apr-2012	1	7.05	235	5	190	2.6	4	<5
May-2012	1	7.29	183	4	288	2.4	<2	<5
Jun-2012	1	7.26	284	7	192	12	<2	<5
Jul-2012	1	7.31	292	5	293	10	<2	<5
Aug-2012	1	7.87	321	7	230	13	<2	<5
Sep-2012	1	8	303	6	158	5	3	<5
Oct-2012	1	7.46	301	8	196	38	<2	<5
Nov-2012	1	7.64	335	6	100	2	<2	<5
Dec-2012	1	7.39	359	4	210	2	<2	<5
Jan-2013	1	7.57	405	2	284	3	<2	<5
18.02.2013	1	7.82	361	3	196	2	<2	<5
19.03.2013	1	6.86	259	5	226	2	<2	<5
17.04.13	1	7.8	285	3	88	2	<2	<5
20.05.13	1	7.87	338	3	182	3	<2	<5
19.06.13	1	7.12	344	2	324	1	<2	<5
Total		**90.71**	**3903**	**54**	**2487**	**83**	**3**	**0**
		7.56	**325.25**	**4.50**	**207.25**	**6.92**	**0.25**	**0.00**
	Mean	**7.56**	**325.25**	**4.50**	**207.25**	**6.92**	**3.00**	**#DIV/0!**
	Lowest	**6.86**	**259.00**	**2.00**	**88.00**	**1.00**	**3.00**	**0.00**
	Highest	**8.00**	**405.00**	**8.00**	**324.00**	**38.00**	**3.00**	**0.00**

Dust Monitoring

EPL Point 4

Month	Number of Samples	Sawmill	Insoluble Solids	Combustible Matter	Ash
Apr-2012	continuous	Sawmill	0.5	0.3	0.2
May-2012	continuous	Sawmill	0.2	ND	0.2
Jun-2012	continuous	Sawmill	0.8	0.3	0.5

Jul-2012	continuous	Sawmill	1.5	0.8	0.7
Aug-2012	continuous	Sawmill	1.8	1	0.8
Sep-2012	continuous	Sawmill	0.9	0.5	0.4
Oct-2012	continuous	Sawmill	0.5	0.3	0.2
Nov-2012	continuous	Sawmill	0.7	0.2	0.5
Dec-2012	continuous	Sawmill	0	0	0
Jan-2013	continuous	Sawmill	0.4	0.4	ND
18.02.13	continuous	Sawmill	2.6	2.1	0.5
19.03.2013	continuous	Sawmill	0.6	0.4	0.2
17.04.13	continuous	Sawmill	3.9	2.8	1.1
20.05.13	continuous	Sawmill	0.5	0.3	0.2
19.06.13	continuous	Sawmill	0.5	0.3	0.2
			13.9	**9.1**	**4.8**
		Mean	**1.16**	**0.76**	**0.44**
		Lowest	**0**	**0**	**0**
		Highest	**3.9**	**2.8**	**1.1**

ND - Not Detected

EPL Point 5

Month	**Number of Samples**	**Baners Lane**	**Insoluble Solids**	**Combustible Matter**	**Ash**
Apr-2012	continuous	Baners Lane	1.4	1.1	0.3
May-2012	continuous	Baners Lane	0.4	0.2	0.2
Jun-2012	continuous	Baners Lane	0	ND	ND
Jul-2012	continuous	Baners Lane	1.8	1	0.8
Aug-2012	continuous	Baners Lane	1.1	0.5	0.6
Sep-2012	continuous	Baners Lane	1.3	0.9	0.4
Oct-2012	continuous	Baners Lane	1.2	0.8	0.4
Nov-2012	continuous	Baners Lane	0.6	0.3	0.3
Dec-2012	continuous	Baners Lane	0.5	0.3	0.2
Jan-2013	continuous	Baners Lane	0.7	0.4	0.3
18.02.13	continuous	Baners Lane	0.3	0.3	ND
19.03.2013	continuous	Baners Lane	0.3	0.3	ND
17.04.13	continuous	Baners Lane	0.5	0.4	0.1
20.05.13	continuous	Baners Lane	0.6	0.2	0.4
19.06.13	continuous	Baners Lane	0.1	0.1	ND
			9	**5.5**	**3.5**
		Mean	**0.75**	**0.46**	**0.39**
		Lowest	**0.1**	**0.1**	**0.1**
		Highest	**1.8**	**1**	**0.8**

EPL Point 6

Month	Number of Samples	Bald Hill	Insoluble Solids	Combustible Matter	Ash
Apr-2012	continuous	Bald Hill	1.9	0.3	1.6
May-2012	continuous	Bald Hill	0.2	0.1	0.1
Jun-2012	continuous	Bald Hill	0.2	BD	0.2
Jul-2012	continuous	Bald Hill	0.1	BD	0.1
Aug-2012	continuous	Bald Hill	0	BD	BD
Sep-2012	continuous	Bald Hill	0.3	0.2	0.1
Oct-2012	continuous	Bald Hill	0.7	0.5	0.2
Nov-2012	continuous	Bald Hill	0.9	0.6	0.3
Dec-2012	continuous	Bald Hill	0.6	0.5	0.1
Jan-2013	continuous	Bald Hill	0.9	0.5	0.4
18.02.13	continuous	Bald Hill	1.2	0.7	0.5
19.03.2013	continuous	Bald Hill	0.3	0.2	0.1
17.04.13	continuous	Bald Hill	0.9	0.5	0.4
20.05.13	continuous	Bald Hill	1.7	1	0.7
19.06.13	continuous	Bald Hill	0.3	0.2	0.1
			7.9	**4.9**	**3**
		Mean	**0.66**	**0.49**	**0.27**
		Lowest	**0**	**0.2**	**0.1**
		Highest	**1.7**	**1**	**0.7**

EPL POINT 8

Month	Number of Samples	PH	conductance	turbidity	total dissolved solids	total suspend	oxygen dem	oil/grease		
Apr-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
May-2012	1	7.56	296	2	302	0.4	<2	<5	Sample Only	Nil Discharge
Jun-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
Jul-2012	1	7.83	278	1	222	1	<2	<5	Sample Only	Nil Discharge
Aug-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
Sep-2012	1	7.91	422	3	192	2	<2	<5	Sample Only	Nil Discharge
Oct-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
Nov-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
Dec-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
Jan-2013	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
Feb-2013	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		

Mar-2013	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample
17.04.13	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample
20.05.13	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample
19.06.13	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample
		15.74	**700**	**4**	**414**	**3**	**0**	**0**
		7.87	**350.00**	**2.00**	**207.00**	**1.50**	**0.00**	**0.00**
	Mean	**7.87**	**350.00**	**2.00**	**207.00**	**1.50**	**0.00**	**0.00**
	Lowest	**7.83**	**278.00**	**1.00**	**192.00**	**1.00**	**0.00**	**0.00**
	Highest	**7.91**	**422.00**	**3.00**	**222.00**	**2.00**	**0.00**	**0.00**

EPL POINT 9

Month	Number of Samples	PH	conductance	turbidity	total dissolved solids	total suspend	oxygen dem	oil/grease		
Apr-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
May-2012	1	7.61	294	2	254	0.4	<2	<5	Sample only	Nil Discharge
Jun-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
Jul-2012	1	7.57	280	1	234	<1	<2	<5	Sample only	Nil Discharge
Aug-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
Sep-2012	1	8.01	423	3	222	2	<2	<5	Sample only	Nil Discharge
Oct-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
Nov-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
Dec-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
Jan-2013	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
05.02.2013	1	6.93	416	416	372	212	<2	<5	Discharge	
26.02.2013	1	6.43	177	938	318	354	<2	<5	Discharge	
17.04.13	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
20.05.13	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
19.06.13	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
		13.36	**1296**	**1358**	**1146**	**568**	**0**	**0**		
		6.68	**324.00**	**339.50**	**286.50**	**142.00**	**0.00**	**0.00**		
	Mean	**6.68**	**648.00**	**679.00**	**573.00**	**284.00**	**0.00**	**0.00**		
	Lowest	**6.43**	**177.00**	**416.00**	**318.00**	**212.00**	**0.00**	**0.00**		
	Highest	**6.93**	**416.00**	**938.00**	**372.00**	**354.00**	**0.00**	**0.00**		

EPL POINT 10

Month	Number of Samples	PH	conductance	turbidity	total dissolved solids	total suspend	oxygen dem	oil/grease

Apr-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
May-2012	1	7.54	153	Nil Sample	324	6.4	3	<5	Sample Only	Nil Discharge
Jun-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
Jul-2012	1	7.91	241	Nil Sample	262	13	5	<5	Sample Only	Nil Discharge
Aug-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
Sep-2012	1	8.6	632	Nil Sample	481	16	3	<5	Sample Only	Nil Discharge
Oct-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
Nov-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
Dec-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
Jan-2013	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
26.02.2013	1	6.71	507	15	380	4	3	<5	Discharge	
Mar-2013	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
17.04.13	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
20.05.13	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
19.06.13	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
		6.71	**507**	**15**	**380**	**4**	**3**	**0**		
		6.71	**507.00**	**15.00**	**380.00**	**4.00**	**3.00**	**0.00**		
	Mean	**6.71**	**507.00**	**15.00**	**380.00**	**4.00**	**3.00**	**0.00**		
	Lowest	**6.71**	**507.00**	**15.00**	**380.00**	**4.00**	**3.00**	**0.00**		
	Highest	**6.71**	**507.00**	**15.00**	**380.00**	**4.00**	**3.00**	**0.00**		

EPL POINT 11

Month	**Number of Samples**	**PH**	**conductance**	**turbidity**	**total dissolved solids**	**total suspend**	**oxygen dem**	**oil/grease**		
Apr-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
May-2012	1	7.44	155	Nil Sample	306	7.2	3	<5	Sample Only	Nil Discharge
Jun-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
Jul-2012	1	7.83	232	Nil Sample	246	15	5	<5	Sample Only	Nil Discharge
Aug-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
Sep-2012	1	8.65	628	Nil Sample	436	17	3	<5	Sample Only	Nil Discharge
Oct-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
Nov-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
Dec-2012	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
Jan-2013	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
26.02.13	1	6.48	222	133	300	67	5	<5	Discharge	
Mar-2013	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
17.04.13	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
20.05.13	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
19.06.13	0	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample	Nil Sample		
		6.48	**222**	**133**	**300**	**67**	**5**	**0**		

	6.48	**222.00**	**133.00**	**300.00**	**67.00**	**5.00**	**0.00**
Mean	**6.48**	**222.00**	**133.00**	**300.00**	**67.00**	**5.00**	**0.00**
Lowest	**6.48**	**222.00**	**133.00**	**300.00**	**67.00**	**5.00**	**0.00**
Highest	**6.48**	**222.00**	**133.00**	**300.00**	**67.00**	**5.00**	**0.00**

Grant's Head Quarry - Licence Number 4040

Point 1 - Sump **Grant's Head Point 1 - Water and or land monitoring**	**Tested For**	Aluminium	Arsenic	Cadmium	Chromium	Conductivity µS/cm	Copper	Lead	Mercury	Nickel	Nitrate
	Units of Measure	Milligrams per Litre	Milligrams per Litre	Milligrams per Litre	Milligrams per Litre	Microsiemens per centimetre	Milligrams per Litre	Milligrams per Litre	Milligrams per Litre	Milligrams per Litre	Milligrams per Litre
Month	**Number of Samples**										
24.04.12	1	0.94	<0.001	<0.001	<0.001	304	0.117	<0.001	<0.00001	0.003	9.09
May-2012	0	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Jun-2012	0	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Jul-2012	0	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Aug-2012	0	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
20.09.12	1	0.46	<0.001	<0.001	<0.001	431	0.13	<0.001	<0.00001	0.003	7.93
Oct-2012	0	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
12.11.12	1	1.36	<0.001	<0.001	0.001	422	0.1	<0.001	<0.00001	0.003	3.84
13.12.2012	1	0.06	<0.001	<0.001	0.002	409	0.147	<0.001	<0.00001	0.004	2.93
21.01.2013	1	0.25	<0.001	<0.001	<0.001	355	0.185	<0.001	<0.0003	0.005	2.41
04.02.2013	1	0.64	<0.001	<0.001	0.001	182	0.106	<0.001	<0.0003	0.005	3.17
13.02.2013	1	0.21	<0.001	<0.001	<0.001	214	0.13	<0.001	<0.00001	0.005	3.48
21.02.2013	1	1.02	<0.001	<0.001	0.002	201	0.13	<0.001	<0.00001	0.004	3.15
04.03.2013	1	3.34	<0.001	<0.001	0.004	154	0.111	0.001	<0.00001	0.004	2.6
12.03.2013	1	0.51	<0.001	<0.001	<0.001	137	0.051	<0.001	<0.00001	0.002	1.91
21.03.2013	1	0.22	<0.001	<0.001	0.002	168	0.067	<0.001	<00001	0.003	1.85
27.03.2013	1	0.31	<0.001	<0.001	0.001	221	0.154	<0.001	<0.00001	0.002	2.12
03.04.13	1	0.1	<0.001	<0.001	<0.001	184	0.064	<0.001	<0.00001	0.002	1.81
18.04.13	1	0.08	<0.001	<0.001	<0.001	202	0.053	<0.001	<0.00001	0.002	1.75
24.04.13	1	0.11	<0.001	<0.001	<0.001	217	0.081	<0.01	<0.00001	0.003	1.8
30.05.13	1	0.3	<0.001	<0.001	<0.001	294	0.136	<0.001	<0.00001	0.003	2.23
25.06.13	1	0.13	<0.001	<0.001	<0.001	263	0.109	<0.001	<0.00001	0.003	2.18

	Tested For	Oil and Grease	**pH (wet)** Range 5.3 to 7.0	**Total Suspended Solids** Max 30 Milligrams per litre	Zinc	Hours of pump operation	**Requirement to Monitor Volume or Mass**
Grant's Head Point 1 - Water and or land monitoring	**Units of Measure**	Visible	pH	Milligrams per Litre	Milligrams per Litre		Daily when water discharged - Klitres per day
Month	**Number of Samples**						Pump volume 15L per second = 900L per minute = 54,000L an hour
24.04.12	1	<3	4.3	4	0.028		Nil Discharge / Sample only
May-2012	0	Nil	Nil	Nil	Nil		
Jun-2012	0	Nil	Nil	Nil	Nil		
Jul-2012	0	Nil	Nil	Nil	Nil		
Aug-2012	0	Nil	Nil	Nil	Nil		
20.09.12	1	<5	7.1	4	0.018		Nil Discharge / Sample only
Oct-2012	0	Nil	Nil	Nil	Nil		
12.11.12	1	<5	6.4	13	0.023	73	3,942,000.00
13.12.2012	1	<5	5.9	<3	0.026	65	3,510,000.00
21.01.2013	1	<5	6.2	4	0.035	110	5,940,000.00
04.02.2013	1	<5	5.8	8	0.027	110	5,940,000.00
13.02.2013	1	<5	6.1	3	0.02	100	5,400,000.00
21.02.2013	1	<5	5.9	12	0.019	120	6,480,000.00
04.03.2013	1	<5	6.8	60	0.011		Nil Discharge / Sample only
12.03.2013	1	<5	5.7	5	0.01		Nil Discharge / Sample only
21.03.2013	1	<5	6.8	8	0.017	120	6,480,000.00
27.03.2013	1	<5	6.6	14	0.013	24	1,296,000.00
03.04.13	1	<5	6.2	4	0.012	24	1,296,000.00
18.04.13	1	<5	6.5	3	0.017	24	1,296,000.00
24.04.13	1	<5	6.5	9	0.017	24	1,296,000.00
30.05.13	1	<5	6.8	18	0.022	24	1,296,000.00
25.06.13	1	<5	5.8	<3	0.016	24	1,296,000.00

Grant's Head EPL Point 4	Tested For	Aluminium	Arsenic	Cadmium	Chromium	Conductivity	Copper	Lead	Mercury	Nickel	Nitrate	pH
	Units of Measure	Milligrams per Litre	Milligrams per Litre	Milligrams per Litre	Milligrams per Litre	Microsiemens per centimetre µS/cm	Milligrams per Litre	Milligrams per Litre	Milligrams per Litre	Milligrams per Litre	Milligrams per Litre	pH
Month												
02.05.12	NW01S	0.02	<0.001	<0.0001	<0.001	589	<0.001	<0.001	<0.0001	0.002	0.03	5.5
	NW01D	0.09	<0.001	<0.0001	<0.001	601	0.004	0.007	<0.0001	0.003	0.03	4.72
18.07.12	NW01S	0.02	<0.001	<0.0001	<0.001	686	<0.001	<0.001	<0.0001	0.003	0.02	5.74
	NW01D	0.03	<0.001	<0.0001	<0.001	547	0.002	<0.001	<0.0001	0.002	0.01	5.5
17.10.12	NW01S	<0.01	<0.001	<0.0001	<0.001	631	<0.001	<0.001	<0.0001	0.003	0.04	5.7
	NW01D	0.18	<0.001	<0.0001	<0.001	500	0.004	<0.001	<0.0001	0.003	0.01	5

Grant's Head EPL Point 4		Standing Water Level	Zinc
		Metres	Milligrams per Litre
Month			
02.05.12	NW01S	2.101	0.006
	NW01D	0.147	0.019
18.07.12	NW01S	2.102	0.006
	NW01D	2.07	0.018
17.10.12	NW01S	0.755	0.01
	NW01D	0.565	0.01

Grant's Head EPL Point 5	Tested For	Aluminium	Arsenic	Cadmium	Chromium	Conductivity	Copper	Lead	Mercury	Nickel	Nitrate	pH
	Units of Measure	Milligrams per Litre	Milligrams per Litre	Milligrams per Litre	Milligrams per Litre	Microsiemens per centimetre µS/cm	Milligrams per Litre	Milligrams per Litre	Milligrams per Litre	Milligrams per Litre	Milligrams per Litre	pH
Month												
02.05.12	NW02S	0.42	<0.001	<0.0001	<0.001	328	0.006	<0.001	<0.0001	<0.001	<0.01	4.29
	NW02D	<0.01	0.005	<0.0001	<0.001	726	<0.001	<0.001	<0.0001	0.012	<0.01	5.7
18.07.12	NW02S	0.37	<0.001	<0.0001	<0.001	347	0.005	<0.001	<0.0001	0.004	<0.01	4.34
	NW02D	<0.01	0.006	<0.0001	<0.001	813	<0.001	<0.001	<0.0001	.013-0.014	<0.01	5.92

17.10.12	NW02S	0.21	<0.001	<0.0001	<0.001	260	0.003	<0.001	<0.0001	<0.001	<0.01	4.4
	NW02D	<0.01	0.005	<0.0001	<0.001	710	<0.001	<0.001	<0.0001	0.013-0.014	<0.2	5.9

Grant's Head EPL Point 5		Standing Water Level	Zinc
		Metres	Milligrams per Litre
Month			
02.05.12	NW02S	-5.163	0.013
	NW02D	2.192	0.007
18.07.12	NW02S	-5.315	0.017
	NW02D	2.269	0.007-0.013
17.10.12	NW02S	-5.551	0.022
	NW02D	1.885	<0.005

Grant's Head EPL Point 6	**Tested For**	Aluminium	Arsenic	Cadmium	Chromium	Conductivity	Copper	Lead	Mercury	Nickel	Nitrate	pH
	Units of Measure	Milligrams per Litre	Milligrams per Litre	Milligrams per Litre	Milligrams per Litre	Microsiemens per centimetre µS/cm	Milligrams per Litre	Milligrams per Litre	Milligrams per Litre	Milligrams per Litre	Milligrams per Litre	pH
Month												
02.05.12	NW03S	0.42	<0.001	<0.0001	<0.001	365	<0.001	<0.001	<0.0001	<0.001	<0.01	4.17
	NW03D	0.06	<0.001	0.0001	0.003	1696	0.004	<0.001	<0.0001	0.077	4.6	5.36
18.07.12	NW03S	0.41	<0.001	<0.0001	<0.001	414	0.006	<0.001	<0.0001	0.003	<0.01	4.32
	NW03D	0.06	<0.001	0.0002	<0.001	1877	0.003	<0.001	<0.0001	0.078	1.2	5.73
17.10.12	NW03S	0.32	<0.001	<0.0001	<0.001	370	0.002	<0.001	<0.0001	<0.001	<0.1	4.17
	NW03D	0.1	<0.001	0.0001	<0.001	1869	0.004	<0.001	<0.0001	0.079	1.1	5.62

Grant's Head EPL Point 6		Standing Water Level	Zinc
		Metres	Milligrams per Litre
Month			
02.05.12	NW03S	-4.887	0.01
	NW03D	-31.255	0.22

18.07.12	NW03S	-5.087	0.019
	NW03D	31.877	0.21
17.10.12	NW03S	-6.215	0.007
	NW03D	-31.796	0.17

Grant's Head

Blasting	Frequency	Date	Limits	Units of measure	Results Bonny Hills 1st House	Results - Sherwood House	Blast No #
Ground Vibration	Per Blast	23.05.12	5 - trigger point <0.27	mm/s	**1.7**	**<0.27**	# 97
Overpressure	Per Blast	23.05.12	115 - Trigger point 98	dB	**106.4**	**Nil Trigger**	# 97
Ground Vibration	Per Blast	27.06.12	5 - trigger point <0.27	mm/s	**2.96**	**1.87**	# 98
Overpressure	Per Blast	27.06.12	115 - Trigger point 100	dB	**113.6**	**101.7**	# 98
Ground Vibration	Per Blast	23.08.12	5 - trigger point <0.27	mm/s	**2.92**	**<0.27**	# 99
Overpressure	Per Blast	23.08.12	115 - Trigger point 85	dB	**102**	**88**	# 99

Yarrabee Rd Quarry - Licence Number 11462

Yarrabee Rd Point 3		**Pollutant**	**Total Suspended Solids** Max 50 Milligrams per litre	**pH (wet)** Range 6.5 to 8.5	**Oil & Grease - Visible**	**Requirement to Monitor Volume or Mass**	Why Sampled - Discharge or Random?
Month	**Number of Samples**	**Frequency**	<24hrs prior to discharge	<24hrs prior to discharge		Daily when wastes (water) discharged Klitres per day	
Sep-2012	Nil		Nil	Nil		Nil	
Oct-2012	Nil		Nil	Nil		Nil	
Nov-2012	Nil		Nil	Nil		Nil	
10.12.2012	1		8	8.2	<5	576000	Discharge
Jan-2013	NIL					nil	
Feb-2013	Nil					nil	
18.03.13	1		3	7.1	<5	576000	Discharge
15.04.13	1		5	7.6	<5	576000	Discharge
May-2013	Nil		Nil	Nil		Nil	
18.06.13	1		3	7.2	<5	984000	Discharge
Jul-2013	Nil					Nil	
Aug-2013	Nil					Nil	
Sep-2013	Nil					Nil	

Oct-2013	Nil					Nil	
Number of samples	4						

Mean	**4.75**	**7.53**	**#DIV/0!**	**678000.00**
Lowest	**3.00**	**7.10**	**0.00**	**576000.00**
Highest	**8.00**	**8.20**	**0.00**	**984000.00**

Yarrabee Rd

Blasting	**Frequency**	Date	Limits	Units of measure	Results	Blast #
Ground Vibration	Per Blast	04.05.12	5 - trigger point <0.27	mm/s	**Below trigger point**	# 5
Overpressure	Per Blast	04.05.12	115 - Trigger point 100	dB	**Below trigger point**	# 5
Ground Vibration	Per Blast	17.05.12	5 - trigger point <0.27	mm/s	**Below trigger point**	# 6
Overpressure	Per Blast	17.05.12	115 - Trigger point 101.6	dB	**Below trigger point**	# 6
Ground Vibration	Per Blast	07.06.12	5 - trigger point <0.27	mm/s	**Below trigger point**	# 7
Overpressure	Per Blast	07.06.12	115 - Trigger point 100	dB	**Below trigger point**	# 7
Ground Vibration	Per Blast	02.07.12	5 - trigger point <0.27	mm/s	**Below trigger point**	# 8
Overpressure	Per Blast	02.07.12	115 - Trigger point 100	dB	**Below trigger point**	# 8
Ground Vibration	Per Blast	16.08.12	5 - trigger point <0.27	mm/s	**Below trigger point**	# 9
Overpressure	Per Blast	16.08.12	115 - Trigger point 100	dB	**Below trigger point**	# 9
Ground Vibration	Per Blast	19.09.12	5 - trigger point <0.27	mm/s	**Below trigger point**	# 10
Overpressure	Per Blast	19.09.12	115 - Trigger point 100	dB	**Below trigger point**	# 10
Ground Vibration	Per Blast	19.10.12	5 - trigger point <0.15	mm/s	**0.18**	#11
Overpressure	Per Blast	19.10.12	115 - Trigger point 100	dB	**113.8**	#11
Ground Vibration	Per Blast	29.11.12	5 - trigger point <0.27	mm/s	**0.67**	# 12
Overpressure	Per Blast	29.11.12	115 - Trigger point 100	dB	**113.6**	# 12
Ground Vibration	Per Blast	14.03.13	5 - trigger point <0.27	mm/s	**0.51**	# 13
Overpressure	Per Blast	14.03.13	115 - Trigger point 100	dB	**108.4**	# 13
Ground Vibration	Per Blast	01.05.13	5 - trigger point <0.27	mm/s	**0.5**	# 14
Overpressure	Per Blast	01.05.13	115 - Trigger point 100	dB	**111.5**	# 14
Ground Vibration	Per Blast	21.05.13	5 - trigger point <0.27	mm/s	**Below trigger point**	# 15
Overpressure	Per Blast	21.05.13	115 - Trigger point 100	dB	**Below trigger point**	# 15
Ground Vibration	Per Blast	03.06.13	5 - trigger point <0.27	mm/s	**Below trigger point**	# 16
Overpressure	Per Blast	03.06.13	115 - Trigger point 100	dB	**Below trigger point**	# 16

Ground Vibration	Per Blast	14.06.13	5 - trigger point <0.27	mm/s	**Below trigger point**	# 17
Overpressure	Per Blast	14.06.13	115 - Trigger point 100	dB	**Below trigger point**	# 17
Ground Vibration	Per Blast	27.06.13	5 - trigger point <0.27	mm/s	**0.45**	# 18
Overpressure	Per Blast	27.06.13	115 - Trigger point 75	dB	**77.4**	# 18
Ground Vibration	Per Blast	16.07.13	5 - trigger point <0.27	mm/s	**0.7**	# 19
Overpressure	Per Blast	16.07.13	115 - Trigger point 100	dB	**106.9**	# 19
Ground Vibration	Per Blast	01.08.13	5 - trigger point <0.27	mm/s	**0.62**	# 20
Overpressure	Per Blast	01.08.13	115 - Trigger point 100	dB	**102.6**	# 20
Ground Vibration	Per Blast	29.08.13	5 - trigger point <0.27	mm/s	**Below trigger point**	# 21
Overpressure	Per Blast	29.08.13	115 - Trigger point 100	dB	**Below trigger point**	# 21