

**Albion Park Quarry Dust - July 12 to Dec 12**

Analyte	Location 1		Location 2		Location 3		Location 4	
	Ash	Total Insoluble Solids	Ash	Total Insoluble Solids	Ash	Total Insoluble Solids	Ash	Total Insoluble Solids
Jul-12	2	2.2	0.5	0.7	0.4	0.4	0.8	1.5
Aug-12	1.6	1.8	0.4	0.6	0.2	0.3	1	1.6
Sep-12	3.8	4.3	1.1	1.6	^sep3	^sep3	0.6	0.8
Oct-12	6.3	6.9	1.1	1.3	0.3	0.5	1.2	1.4
Nov-12	7.1	7.6	1.8	2.5	0.4	0.5	0.9	1.5
Dec-12	6	7.5	1.7	3.5	0.5	1.1	1.5	3.8

^sep3 dust gauge damaged by cows

Albion Park Quarry - Groundwater Dec 12

Borehole	Depth m	Conductivity µS/cm	pH Units	Temp deg C	TDS mg/L	TSS mg/L
MW1D	10.9	160	7	18.8	113	17
MW1S	4.24	659	6.9	18.4	436	60
MW2D	5.62	333	7.3	19.8	270	77
MW2S	10.3	1250	7.2	21.3	1230	9960

\*

Borehole	Sodium mg/L	Potassium mg/L	Calcium mg/L	Sulphate mg/L	Chloride mg/L	Nitrate mg/L
MW1D	12	5	15	8	12	0.1
MW1S	60	<1	48	61	83	0.12
MW2D	22	4	36	42	22	0.11
MW2S	152	<1	90	200	77	1.42

Borehole	Nitrite mg/L	Alkalinity mg/L	Nitrogen mg/L	Bicarbonate mg/L	Oil & Grease mg/L	BOD mg/L
MW1D	<0.01	52	0.3	0.3	<5	11
MW1S	<0.01	149	0.9	0.9	<5	4
MW2D	<0.01	103	0.3	0.3	<5	14
MW2S	<0.01	389	0.8	0.8	<5	<2

Borehole	Carbon mg/L	Ammonia mg/L	Phosphorus mg/L
MW1D	14	0.02	0.01
MW1S	8	0.06	0.39
MW2D	38	0.04	0.07
MW2S	4	0.04	2.09

Albion Park Quarry - Groundwater Dec 12

Borehole	MW1D	MW1S	MW2D	MW2S
Arsenic	<0.001	0.003	<0.001	<0.001
Cadmium	<0.0001	<0.0001	<0.0001	0.0001
Chromium	<0.001	<0.001	<0.001	<0.001
Copper	0.013	0.02	<0.001	0.004
Iron	0.05	<0.05	0.46	<0.05
Lead	<0.001	<0.001	<0.001	<0.001
Mercury	<0.0001	<0.0001	<0.0001	<0.0001
Nickel	0.005	0.003	0.002	0.002
Zinc	0.086	0.009	<0.005	0.013

**Albion Park Quarry HVAS - July 12 to Dec 12**

Date	TSP
1/07/2012	4.9
7/07/2012	2.6
13/07/2012	2.6
19/07/2012	3.7
25/07/2012	4.6
31/07/2012	2.6
6/08/2012	11.9
12/08/2012	4.9
18/08/2012	5.8
24/08/2012	24.5
30/08/2012	28.9
5/09/2012	4.7
11/09/2012	15.7
17/09/2012	8.1
23/09/2012	16.8
29/09/2012	10.4
5/10/2012	23.1
11/10/2012	4
17/10/2012	11.3
23/10/2012	7.2
29/10/2012	11.3
4/11/2012	6.7
10/11/2012	6.9
16/11/2012	4.1
22/11/2012	10.5
28/11/2012	2
4/12/2012	17.9
10/12/2012	9.3
16/12/2012	19.4
22/12/2012	13.6
28/12/2012	15.1

Albion Park Quarry Supertreat - July 12 to Dec 12

Date	Oil and Grease	TSS	BOD5	
5/09/2012	7	64	129	
18/09/2012	<5	56	38	re-test following service
4/10/2012	<5	13	25	re-test following service
5/12/2012	44	107	387	
17/12/2012	12	84	62	re-test following service
9/01/2013	5	18	26	re-test following service

**Albion Park Quarry Watercourse 1 & 2 - July 12 to Dec 12**

Analyte	Date													
	5/07/2012	18/07/2012	1/08/2012	15/08/2012	29/08/2012	12/09/2012	26/09/2012	10/10/2012	25/10/2012	6/11/2012	20/11/2012	4/12/2012	17/12/2013	
Conductivity (µS/cm)	WC 1	354	368	409	488	539	589	704	547	558	537	570	585	667
	WC 2	1060	1020	1030	1300	1230	1430	dry	1140	1230	1310	dry	dry	1890
pH	WC 1	7.6	7.5	7.5	7.4	7.7	7.8	7.6	7.5	7.6	7.6	7.7	7.9	8
	WC 2	8.4	7.9	7.8	7.7	7.9	7.8	dry	7.5	8	7.6	dry	dry	7.5
Temperature (°C)	WC 1	11.4	13	10.6	12.4	12.1	10.5	12.5	16.1	17.6	19.6	18.4	21.3	19.3
	WC 2	12.5	11.6	11.7	14.8	12.2	11	dry	24.9	20.1	21.3	dry	dry	19.3
Turbidity (NTU)	WC 1	7.7	3.6	4.8	18.2	5.2	6.4	8.4	8.4	5.7	13	12.3	15	14.5
	WC 2	3.9	0.5	0.7	157	2.3	2	dry	19.2	4.1	2.1	dry	dry	2.6

**Albion Park Quarry Watercourse 1 & 2 - July 12 to Dec 12**

**Oil & Grease**

Location	5/09/2012	5/12/2012
WC 1	<5	<5
WC 2	<5	dry

**Total Suspended Solids**

Location	5/09/2012	5/12/2013
WC 1	24	20
WC 2	20	dry

**Total Dissolved Solids**

Location	5/09/2012	5/12/2012
WC 1	304	380
WC 2	764	dry

**Sodium**

Location	5/09/2012	5/12/2012
WC 1	53	69
WC 2	206	dry

**Potassium**

Location	5/09/2012	5/12/2012
WC 1	2	5
WC 2	2	dry

**Calcium**

Location	5/09/2012	5/12/2012
WC 1	28	27
WC 2	59	dry

**Sulphate**

Location	5/09/2012	5/12/2012
WC 1	<1	26
WC 2	355	dry

**Chloride**

Location	5/09/2012	5/12/2012
WC 1	66	68
WC 2	116	dry

**Alkalinity**

Location	5/09/2012	5/12/2012
WC 1	182	174
WC 2	187	dry

**Bicarbonate**

Location	5/09/2012	5/12/2012
WC 1	182	174
WC 2	187	dry

**Metals**

Location	Watercourse 1		Watercourse 2	
	5/09/2012	5/12/2012	5/09/2012	5/12/2012
Arsenic	<0.001	0.001	<0.001	dry
Cadmium	<0.0001	<0.0001	<0.0001	dry
Chromium	<0.001	<0.001	<0.001	dry
Copper	0.004	0.002	0.002	dry
Iron	0.33	0.32	<0.05	dry
Lead	<0.001	<0.001	<0.001	dry
Mercury	<0.0001	<0.0001	<0.0001	dry
Nickel	<0.001	<0.001	<0.001	dry
Zinc	<0.005	<0.005	<0.005	dry

Albion Park Quarry West of Quarry Managers Office - July 12 to Dec 12

Date	pH	Oil and Grease	TSS
5/07/2012	8	<5	6
7/08/2012	7.9	<5	<5
5/09/2012	7.9	<5	<5
4/10/2012	7.7	<5	<5
6/11/2012	7.7	<5	<5
5/12/2012	7.7	<5	6