

**Albion Park Quarry Dust - July 13 to Dec 13**

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-13	2.4	2.7	0.7	0.9	0.4	0.5	0.5	0.7
Aug-13	3	3.1	1.5	1.8	0.3	0.3	0.9	1
Sep-13	1.6	1.7	0.4	0.5	0.3	0.4	0.6	0.6
Oct-13	4	4.8	1.9	2.8	0.8	1.1	1.4	1.8
Nov-13	3	3.7	0.8	1.3	0.4	0.5	0.6	0.8
Dec-13	4.2	4.8	4.7	6.4	0.8	1.4	2.1	2.8

### Albion Park Quarry - Groundwater Dec 13

Borehole	Depth	Conductivity	pH	Temp	TDS	TSS
	m	µS/cm	Units	deg C	mg/L	mg/L
MW1D	12.95	173	6.6	18.1	94	39
MW1S	1.25	433	6.6	18.5	238	5
MW2D	9.02	643	7.1	18.1	370	60
MW2S	8.94	915	7	18.4	625	920

\*

Borehole	Sodium	Potassium	Calcium	Sulphate	Chloride	Nitrate
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW1D	13	4	14	8	21	0.09
MW1S	44	<1	24	46	55	0.22
MW2D	51	5	51	125	35	2.39
MW2S	115	<1	70	149	57	1.09

Borehole	Nitrite	Alkalinity	Nitrogen	Bicarbonate	Oil & Grease	BOD
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW1D	0.02	51	0.6	51	<5	<2
MW1S	<0.01	76	0.7	76	<5	<2
MW2D	0.04	128	0.7	128	<5	<2
MW2S	<0.01	295	0.4	295	<5	<2

Borehole	Carbon	Ammonia	Phosphorus
	mg/L	mg/L	mg/L
MW1D	5	0.22	0.16
MW1S	10	0.01	0.05
MW2D	14	0.05	0.12
MW2S	3	0.01	0.21

### Albion Park Quarry - Groundwater Dec 13

Borehole	MW1D	MW1S	MW2D	MW2S
Copper	0.006	0.032	0.024	0.005
Iron	1.14	<0.05	<0.05	<0.05
Nickel	0.005	0.001	0.008	0.001
Zinc	0.024	0.013	0.128	0.01

### Albion Park Quarry HVAS - July 13 to Dec 13

Date	TSP
2/07/2013	2
8/07/2013	1.9
14/07/2013	3.4
20/07/2013	1.8
26/07/2013	2.7
1/08/2013	1.9
7/08/2013	1.8
13/08/2013	2.6
19/08/2013	5.9
25/08/2013	<0.1
31/08/2013	1.1
6/09/2013	4.5
12/09/2013	5.5
18/09/2013	4.2
24/09/2013	6.8
30/09/2013	7.4
6/10/2013	15.4
12/10/2013	44.2
18/10/2013	18.8
24/10/2013	27.2
30/10/2013	14.8
5/11/2013	10.8
11/11/2013	7.9
17/11/2013	4.8
23/11/2013	10.6
29/11/2013	9.5
5/12/2013	20.9
11/12/2013	24.8
17/12/2013	11.1
23/12/2013	24.5
29/12/2013	*

power failure

**Albion Park Quarry Supertreat - July 13 to Dec 13**

<b>Date</b>	<b>Oil and Grease</b>	<b>TSS</b>	<b>BOD5</b>
<b>24/09/2013</b>	<b>&lt;5</b>	<b>31</b>	<b>33</b>
<b>18/12/2013</b>	<b>&lt;5</b>	<b>26</b>	<b>28</b>

**Albion Park Quarry Watercourse 1 & 2 - July 13 to Dec 13**

Analyte		5/09/2013	5/12/2013
<b>Conductivity</b> ( $\mu$ S/cm)	WC 1	416	407
	WC 2	dry	1130
<b>pH</b>	WC 1	7.6	7.4
	WC 2	dry	8
<b>Temperature</b> ( $^{\circ}$ C)	WC 1	13.3	18.6
	WC 2	dry	20.9
<b>Turbidity</b> (NTU)	WC 1	15.9	30.1
	WC 2	dry	2.4

## Albion Park Quarry Watercourse 1 & 2 - July 13 to Dec 13

### Oil & Grease

Location	5/09/2013	5/12/2013
WC 1	<5	<5
WC 2	dry	<5

### Total Suspended Solids

Location	5/09/2013	5/12/2013
WC 1	8	5
WC 2	dry	<5

### Total Dissolved Solids

Location	5/09/2013	5/12/2013
WC 1	220	251
WC 2	dry	711

### Sodium

Location	5/09/2013	5/12/2013
WC 1	48	49
WC 2	dry	159

### Potassium

Location	5/09/2013	5/12/2013
WC 1	1	<1
WC 2	dry	1

### Calcium

Location	5/09/2013	5/12/2013
WC 1	16	22
WC 2	dry	66

### Sulphate

Location	5/09/2013	5/12/2013
WC 1	2	40
WC 2	dry	316

### Chloride

Location	5/09/2013	5/12/2013
WC 1	36	39
WC 2	dry	35

### Alkalinity

Location	5/09/2013	5/12/2013
WC 1	138	101
WC 2	dry	199

**Metals**

Location	Watercourse 1		Watercourse 2	
	5/09/2013	5/12/2013	5/09/2013	5/12/2013
Copper	0.006	0.016	dry	0.004
Iron	0.21	0.16	dry	<0.05



**Albion Park Quarry West of Quarry Managers Office - July 13 to Dec 13**

<b>Date</b>	<b>pH</b>	<b>Oil and Grease</b>	<b>TSS</b>
5/07/2013	8.3	<5	14
5/08/2013	8	<5	8
5/09/2013	8	<5	5
4/10/2013	8	<5	<5
5/11/2013	7.9	<5	24
5/12/2013	8	<5	14