



WINSTONE
AGGREGATES

Three Kings Quarry – Permit No 12977

Groundwater Take To Dewater Three Kings Quarry

Quarterly Report

June 2008

QUARTERLY REPORT

Three Kings Quarry – Permit No 12977

The following report is made with regard to Condition 7 of Permit No 12977.

This report contains the groundwater levels within boreholes surrounding the take point

A plan showing the location of boreholes in which groundwater levels were measured is attached.

This report contains records for the period of the 1st March to 31st May 2008.

THREE KINGS GROUNDWATER LEVEL RECORD SHEET

Date	BH 1B	BH 2B	BH 5B	BH 6A	BH 6B	BH 6C	BH 7	BH 10a
19-Mar-08	11.21	35.01	34.36	33.92	38.94	43.31	35.48	29.83
16-Apr-08	11.23	34.99	34.34	34.18	39.00	43.45	28.87	29.83
21-May-08	11.02	35.20	34.56	34.10	38.77	43.13	28.49	29.83

Date	BH 10b	BH 11b	BH 12a	BH 12b	BH 13a	BH 13c	BH 16	BH 17
19-Mar-08	8.07	72.69	72.40	50.43	16.74	7.08	66.33	43.56
16-Apr-08	8.07	72.69	72.49	50.33	16.96	7.08	66.33	43.58
21-May-08	8.08	72.68	72.45	50.60	17.20	7.06	66.35	43.38

Date	BH 18A	BH 18B	BH 19A	BH 19B	BH 20	BH 20a	BH 21	BH 22
19-Mar-08	48.66	35.84	45.68	41.49	2.22	6.55	35.77	33.94
16-Apr-08	48.63	35.87	45.63	41.47	2.30	6.75	35.74	33.95
21-May-08	48.47	36.03	45.66	41.50	1.98	6.14	35.54	33.95

Date	BH 22a	BH 23	BH 23a	BH 24	BH 24a	BH 25	BH 25a	BH 25b1
19-Mar-08	11.10	5.81	6.26	7.07	0.88	61.88	12.95	7.64
16-Apr-08	11.25	5.91	6.28	7.19	0.94	61.82	11.69	8.74
21-May-08	10.88	5.75	6.30	7.11	1.02	61.74	10.84	9.28

Date	BH 25b2	BH 26	BH 26a	BH 27	BH 28a	BH 28b	BH 29	BH 30
19-Mar-08	7.28	50.67	59.04	0.04	6.17	50.82	8.90	16.46
16-Apr-08	7.46	50.85	58.97	0.01	6.28	50.93	8.89	16.58
21-May-08	7.78	51.17	58.98	0.05	6.24	50.89	8.82	16.75

Date	BH 31a	BH 31b	BH 32	BH 33	BH 34	BH 35a	BH 35b	BH 36a
19-Mar-08	12.96	46.55	49.91	1.8	58.47	17.13	11.39	8.13
16-Apr-08	15.04	48.63	50.01	1.94	58.33	17.19	11.41	8.19
21-May-08	15.09	48.68	50.00	1.9	58.37	17.20	11.39	7.75

Date	BH 36b	BH 37a	BH 37b	BH 38a	BH 38b	BH 39a	BH 39b	BH 40a
19-Mar-08	7.81	58.72	3.67	53.67	4.96	7.11	5.11	10.61
16-Apr-08	7.80	58.73	3.91	53.62	5.02	7.10	5.12	10.87
21-May-08	7.69	58.84	3.85	53.67	4.92	7.06	5.06	10.86

Date	BH 40b							
19-Mar-08	8.40	62.96						
16-Apr-08	8.69	62.67						
21-May-08	8.64	62.72						

Locations of boreholes are marked on the attached plan

Waterlevels within standpipe piezometers are expressed as depth below surface levels (first column) and as elevations above seallevel (second column).

Waterlevels within pneumatic piezometers are expressed as head of water above piezometer tip (first column) and as elevations above seallevel (second column).



Note:
 Origin of Levels
 RL 5.3049530
 RL 5.304977m
 in
 MDS SCS4417
 RL 5.305m
 ● SCS316 = Precise
 Level Survey
 Benchmarks
 ● BH16 = Borehole
 Location



PROJECT NO:	133000451
DRAWING NO:	6451-100
SCALE:	A1:1:5000 A3:1:10000
REV:	B

TITLE:
BOREHOLE LOCATION PLAN
 AS AT 10-3-05

PROJECT:
WINSTONE AGGREGATES LTD
 THREE KINGS QUARRY

HARRISON
GRIERSON
 CONSULTING ENGINEERS SURVEYORS PLANNERS
 Level 5, Copley House, 20 Aramanga Way, Newmarket, City of Auckland, New Zealand. Tel: 09 964 3300

ASSOCIATION OF
 CONSULTING ENGINEERS
 NEW ZEALAND
 ISO 9001
 QUALITY ASSURED

NO.	DATE	BY	APP'D	DATE
1	10/03/05	SM	SM	10/03/05
2	10/03/05	SM	SM	10/03/05
3	10/03/05	SM	SM	10/03/05
4	10/03/05	SM	SM	10/03/05
5	10/03/05	SM	SM	10/03/05
6	10/03/05	SM	SM	10/03/05
7	10/03/05	SM	SM	10/03/05
8	10/03/05	SM	SM	10/03/05
9	10/03/05	SM	SM	10/03/05
10	10/03/05	SM	SM	10/03/05
11	10/03/05	SM	SM	10/03/05
12	10/03/05	SM	SM	10/03/05
13	10/03/05	SM	SM	10/03/05
14	10/03/05	SM	SM	10/03/05
15	10/03/05	SM	SM	10/03/05
16	10/03/05	SM	SM	10/03/05
17	10/03/05	SM	SM	10/03/05
18	10/03/05	SM	SM	10/03/05
19	10/03/05	SM	SM	10/03/05
20	10/03/05	SM	SM	10/03/05
21	10/03/05	SM	SM	10/03/05
22	10/03/05	SM	SM	10/03/05
23	10/03/05	SM	SM	10/03/05
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25	10/03/05	SM	SM	10/03/05
26	10/03/05	SM	SM	10/03/05
27	10/03/05	SM	SM	10/03/05
28	10/03/05	SM	SM	10/03/05
29	10/03/05	SM	SM	10/03/05
30	10/03/05	SM	SM	10/03/05
31	10/03/05	SM	SM	10/03/05
32	10/03/05	SM	SM	10/03/05
33	10/03/05	SM	SM	10/03/05
34	10/03/05	SM	SM	10/03/05
35	10/03/05	SM	SM	10/03/05
36	10/03/05	SM	SM	10/03/05
37	10/03/05	SM	SM	10/03/05
38	10/03/05	SM	SM	10/03/05
39	10/03/05	SM	SM	10/03/05
40	10/03/05	SM	SM	10/03/05
41	10/03/05	SM	SM	10/03/05
42	10/03/05	SM	SM	10/03/05
43	10/03/05	SM	SM	10/03/05
44	10/03/05	SM	SM	10/03/05
45	10/03/05	SM	SM	10/03/05
46	10/03/05	SM	SM	10/03/05
47	10/03/05	SM	SM	10/03/05
48	10/03/05	SM	SM	10/03/05
49	10/03/05	SM	SM	10/03/05
50	10/03/05	SM	SM	10/03/05