



13th March 2008

Auckland Regional Council
Private Bag 92 012
Auckland.

Attention: Naveen Kumar, Water Resources Section

Re: Three Kings Quarry De-watering Consent 12977

Dear Naveen


As required by Condition 7 of the above resource consent, please find enclosed records of groundwater level measurements for the period of 1 December 2007 to 29 February 2008.

Please note that the groundwater level within bores 40a and 40b have been below their respective trigger levels of RL61.23m and 63.31m since December 2007. This fall in groundwater levels below trigger levels has been analysed and at this stage is considered to be either a result of natural seasonal variation or as a result of works associated with SH20.

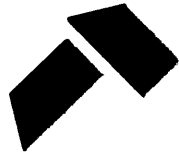
To further evaluate this fall in groundwater levels in bores 40a and 40b, could you please forward a copy of the groundwater monitoring record plus bore construction details for the Transit SH20 groundwater monitoring bores in the general vicinity of Hillsborough Road.

I trust all is in order. Please contact the undersigned if any further information or clarification is required.

Yours faithfully
for **Winstone Aggregates**



Michael Harris
Engineering Geologist.



WINSTONE
AGGREGATES

Three Kings Quarry – Permit No 12977

Groundwater Take To Dewater Three Kings Quarry

Quarterly Report

March 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 December 2007 to 29th February 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-Dec-07	11.48	34.74	1.15	34.10	44.19	33.05	34.07	38.83	39.96	43.52	35.27	28.69	39.92	29.81	50.95	
16-Jan-08	11.31	34.91	0.98	34.27	44.03	33.31	34.23	38.84	39.95	43.39	35.40	28.83	39.78	29.81	50.95	
20-Feb-08	11.42	34.80	1.10	34.15	44.14	33.67	34.12	39.01	39.78	43.52	35.27	28.93	39.68	29.82	50.94	
Date	BH 10b	BH 11b	BH 12a	BH 12b	BH 13a	BH 13c	BH 16	BH 17								
19-Dec-07	8.07	72.69	7.50	72.49	21.35	50.88	5.19	66.94	15.60	56.57	7.06	66.35	48.85	51.29	43.77	34.11
16-Jan-08	8.07	72.69	7.52	72.47	21.50	50.73	5.25	66.88	16.29	55.88	7.07	66.34	48.99	51.15	43.66	34.22
20-Feb-08	8.07	72.69	7.58	72.41	21.72	50.51	5.27	66.86	16.55	55.82	7.08	66.33	49.21	50.93	43.77	34.11
Date	BH 18A	BH 18B	BH 19A	BH 19B	BH 20	BH 20a	BH 21	BH 22								
19-Dec-07	48.72	35.78	38.42	46.08	45.90	34.15	41.51	38.54	1.54	55.12	5.68	51.06	36.27	36.04	33.93	41.31
16-Jan-08	48.67	35.83	38.69	45.81	45.75	34.30	41.38	38.67	1.73	54.93	5.99	50.75	35.90	36.41	33.93	41.31
20-Feb-08	48.77	35.73	38.78	45.72	45.85	34.20	41.50	38.55	2.22	54.44	6.45	50.29	35.93	36.38	33.94	41.30
Date	BH 22a	BH 23	BH 23a	BH 24	BH 24a	BH 25	BH 25a	BH25b1								
19-Dec-07	10.52	64.62	5.66	51.54	6.21	51.13	6.81	55.99	0.70	62.06	22.36	37.09	11.03	48.41	9.64	48.53
16-Jan-08	10.70	64.44	5.7	51.50	6.21	51.13	6.94	55.86	0.76	62.00	22.36	37.09	13.51	45.93	9.82	48.71
20-Feb-08	11.01	64.13	5.82	51.38	6.24	51.10	7.02	55.78	0.83	61.93	22.45	37.00	12.75	46.69	10.19	49.08
Date	BH25b2	BH 26	BH 26a	BH 27	BH28a	BH28b	BH29	BH30								
19-Dec-07	8.61	52.00	0.11	59.33	5.11	54.30	0.01	49.59	6.60	51.25	3.82	52.87	8.69	57.91	16.93	55.16
16-Jan-08	8.26	51.65	0.31	59.13	5.18	54.23	0.01	49.59	6.67	51.32	3.71	52.76	8.76	57.84	16.80	55.03
20-Feb-08	8.68	52.07	0.40	59.04	5.28	54.13	0.03	49.57	6.32	50.97	3.49	52.54	8.88	57.72	16.92	55.15
Date	BH31a	BH31b	BH32	BH33	BH34	BH35a	BH35b	BH36a								
19-Dec-07	15.48	49.07	13.03	50.32	4.30	54.36	1.78	58.49	9.52	49.23	16.90	49.36	11.01	55.25	7.96	58.57
16-Jan-08	15.45	49.04	13.12	50.41	4.48	54.18	1.76	58.51	10.64	48.11	16.98	49.28	11.15	55.11	8.02	58.51
20-Feb-08	15.25	48.84	12.96	50.25	4.48	54.18	1.95	58.32	10.67	48.08	17.09	49.17	11.33	54.93	8.18	58.35
Date	BH36b	BH37a	BH37b	BH38a	BH38b	BH39a	BH39b	BH40a								
19-Dec-07	7.59	58.94	3.56	53.98	3.71	53.89	4.05	54.43	4.07	54.40	6.96	55.03	4.95	57.18	10.23	61.09
16-Jan-08	7.67	58.86	3.58	53.96	3.73	53.87	4.11	54.37	4.84	53.63	6.95	55.04	5.00	57.13	10.30	61.02
20-Feb-08	7.80	58.73	3.63	53.91	3.85	53.75	4.11	54.37	4.83	53.64	6.97	55.02	5.10	57.03	10.53	60.79
Date	BH40b															
19-Dec-07	8.09	63.27														
16-Jan-08	8.16	63.20														
20-Feb-08	8.24	63.12														

Locations of boreholes are marked on the attached plan

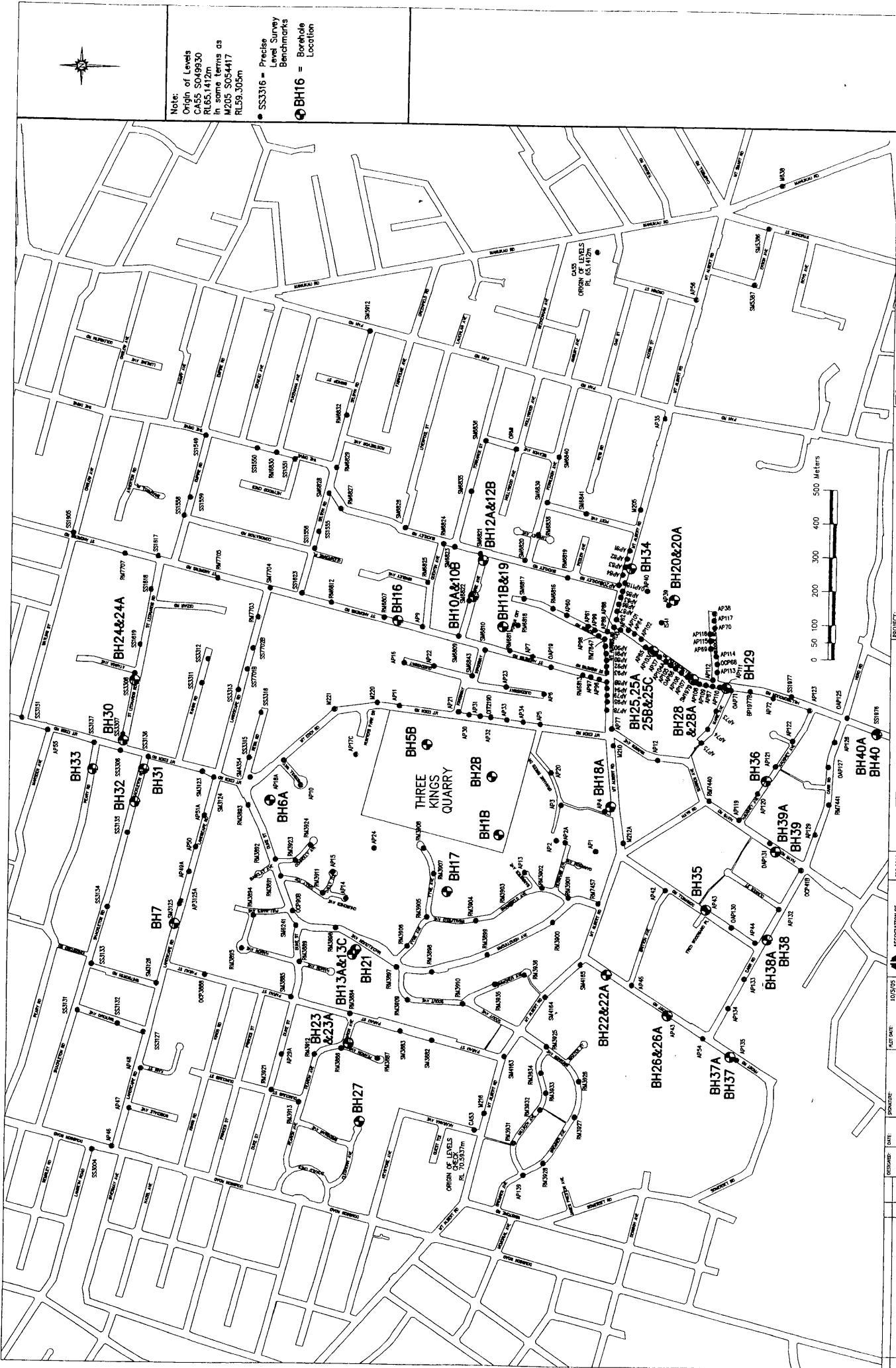
Waterlevels within standpipe piezometers are expressed as depth below surface levels (first column) and as elevations above sealevel (second column).

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



Note:
 Origin of Levels
 CA55 5049930
 RL65.1412m
 In same terms as
 M205 5054417
 RL59.305m


● SS3316 = Precise
 Level Survey
 Benchmarks
 ● BH16 = Borehole
 Location



PROJECT NO.	1137096451
DRAWING NO.	6451-100
SCALE	A1: 1:500 A2: 1:1000
REV	A1 A2 REV

TITLE
BOREHOLE LOCATION PLAN
 AS AT 10-3-05

PROJECT
WINSTONE AGGREGATES LTD
THREE KINGS QUARRY



**HARRISON
 GRIERSON**
 CONSULTING ENGINEERS SURVEYORS PLANNERS

ASSOCIATION OF
 CONSULTING ENGINEERS
 NEW ZEALAND
 QUALITY ASSURED

DESIGNED	DATE	SPONSOR	DATE	FOR THE QUANTITY ASSURED
DRAWN	DATE	DATE	DATE	DATE
CHECKED	DATE	DATE	DATE	DATE
APPROVED	DATE	DATE	DATE	DATE
BY	DATE	BY	DATE	BY