

Winstone Aggregates -  
 Otaki/Waikanae/Paraparamu  
 Main Road  
 Otaki  
 Attention: Josua Gobler

# Analytical Report

Report Number: 19/70098

Issue: 1  
 10 January 2020

Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
19/70098-01	Bore water		07/01/2020 10:55	07/01/2020 15:35	0
Notes: Winstone Bore					
Test	Result	Units	Test Date	Signatory	
0001 pH	7.0		07/01/2020	Jennifer Mont KTP	
0052 Alkalinity - Total	21	g CaCO3/m <sup>3</sup>	07/01/2020	Jennifer Mont KTP	
0055 Conductivity at 25°C	9.2	mS/m	07/01/2020	Jennifer Mont KTP	
0602 Chloride	8.89	g/m <sup>3</sup>	06/01/2020	Amit Kumar KTP	
0605 Nitrate - Nitrogen	0.35	g/m <sup>3</sup>	06/01/2020	Amit Kumar KTP	
1642 Total Hardness	26	g CaCO3/m <sup>3</sup>	08/01/2020	Shanel Kumar KTP	
1800 Aluminium - Dissolved	< 0.005	g/m <sup>3</sup>	08/01/2020	Shanel Kumar KTP	
1810 Calcium - Dissolved	7.77	g/m <sup>3</sup>	08/01/2020	Shanel Kumar KTP	
1819 Iron - Dissolved	< 0.005	g/m <sup>3</sup>	08/01/2020	Shanel Kumar KTP	
1822 Magnesium - Dissolved	1.58	g/m <sup>3</sup>	08/01/2020	Shanel Kumar KTP	
1823 Manganese - Dissolved	< 0.005	g/m <sup>3</sup>	08/01/2020	Shanel Kumar KTP	
5007 TPH C7 - C9	< 0.1	mg/L	07/01/2020	Dr Alan Stanley KTP	
5010 TPH C10 - C12	< 0.1	mg/L	07/01/2020	Dr Alan Stanley KTP	
5012 TPH C13 - C19	< 0.1	mg/L	07/01/2020	Dr Alan Stanley KTP	
5015 TPH C20 - C26	< 0.1	mg/L	07/01/2020	Dr Alan Stanley KTP	
5021 TPH C27 - C37	< 0.1	mg/L	07/01/2020	Dr Alan Stanley KTP	
5040 Maximum TPH Content	< 0.5	mg/L	07/01/2020	Dr Alan Stanley KTP	
M0102 Faecal Coliforms	< 1	cfu/100ml	07/01/2020	Juana Tamayo KTP	
M0104 E. coli	< 1	cfu/100mL	07/01/2020	Juana Tamayo KTP	
P1859 Sample Filtration	Completed		07/01/2020	Daniel Fitzpatrick	

Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
19/70098-02	Bore water		07/01/2020 11:05	07/01/2020 15:35	0
Notes: Winstone Pond					
Test	Result	Units	Test Date	Signatory	
0001 pH	7.5		07/01/2020	Jennifer Mont KTP	
0052 Alkalinity - Total	20	g CaCO3/m <sup>3</sup>	07/01/2020	Jennifer Mont KTP	
0055 Conductivity at 25°C	7.4	mS/m	07/01/2020	Jennifer Mont KTP	
0602 Chloride	7.79	g/m <sup>3</sup>	06/01/2020	Amit Kumar KTP	
0605 Nitrate - Nitrogen	0.03	g/m <sup>3</sup>	06/01/2020	Amit Kumar KTP	
1642 Total Hardness	19	g CaCO3/m <sup>3</sup>	08/01/2020	Shanel Kumar KTP	
1800 Aluminium - Dissolved	0.011	g/m <sup>3</sup>	08/01/2020	Shanel Kumar KTP	
1810 Calcium - Dissolved	5.77	g/m <sup>3</sup>	08/01/2020	Shanel Kumar KTP	
1819 Iron - Dissolved	< 0.005	g/m <sup>3</sup>	08/01/2020	Shanel Kumar KTP	
1822 Magnesium - Dissolved	1.20	g/m <sup>3</sup>	08/01/2020	Shanel Kumar KTP	
1823 Manganese - Dissolved	< 0.005	g/m <sup>3</sup>	08/01/2020	Shanel Kumar KTP	
5007 TPH C7 - C9	< 0.1	mg/L	07/01/2020	Dr Alan Stanley KTP	
5010 TPH C10 - C12	< 0.1	mg/L	07/01/2020	Dr Alan Stanley KTP	
5012 TPH C13 - C19	< 0.1	mg/L	07/01/2020	Dr Alan Stanley KTP	
5015 TPH C20 - C26	< 0.1	mg/L	07/01/2020	Dr Alan Stanley KTP	
5021 TPH C27 - C37	< 0.1	mg/L	07/01/2020	Dr Alan Stanley KTP	
5040 Maximum TPH Content	< 0.5	mg/L	07/01/2020	Dr Alan Stanley KTP	
M0102 Faecal Coliforms	11	cfu/100ml	07/01/2020	Juana Tamayo KTP	
M0104 E. coli	6	cfu/100mL	07/01/2020	Juana Tamayo KTP	
P1859 Sample Filtration	Completed		07/01/2020	Daniel Fitzpatrick	



Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
19/70098-03	Bore water		07/01/2020 11:30	07/01/2020 15:35	0
Notes: 72 Te Roto Bore					
Test	Result	Units	Test Date	Signatory	
0001 pH	6.7		08/01/2020	Jennifer Mont KTP	
0052 Alkalinity - Total	23	g CaCO <sub>3</sub> /m <sup>3</sup>	08/01/2020	Jennifer Mont KTP	
0055 Conductivity at 25°C	9.9	mS/m	08/01/2020	Jennifer Mont KTP	
0602 Chloride	9.32	g/m <sup>3</sup>	06/01/2020	Amit Kumar KTP	
0605 Nitrate - Nitrogen	0.44	g/m <sup>3</sup>	06/01/2020	Amit Kumar KTP	
1642 Total Hardness	28	g CaCO <sub>3</sub> /m <sup>3</sup>	08/01/2020	Shanel Kumar KTP	
1800 Aluminium - Dissolved	< 0.005	g/m <sup>3</sup>	08/01/2020	Shanel Kumar KTP	
1810 Calcium - Dissolved	8.30	g/m <sup>3</sup>	08/01/2020	Shanel Kumar KTP	
1819 Iron - Dissolved	0.064	g/m <sup>3</sup>	08/01/2020	Shanel Kumar KTP	
1822 Magnesium - Dissolved	1.72	g/m <sup>3</sup>	08/01/2020	Shanel Kumar KTP	
1823 Manganese - Dissolved	< 0.005	g/m <sup>3</sup>	08/01/2020	Shanel Kumar KTP	
5007 TPH C7 - C9	< 0.1	mg/L	07/01/2020	Dr Alan Stanley KTP	
5010 TPH C10 - C12	< 0.1	mg/L	07/01/2020	Dr Alan Stanley KTP	
5012 TPH C13 - C19	< 0.1	mg/L	07/01/2020	Dr Alan Stanley KTP	
5015 TPH C20 - C26	< 0.1	mg/L	07/01/2020	Dr Alan Stanley KTP	
5021 TPH C27 - C37	< 0.1	mg/L	07/01/2020	Dr Alan Stanley KTP	
5040 Maximum TPH Content	< 0.5	mg/L	07/01/2020	Dr Alan Stanley KTP	
M0102 Faecal Coliforms	< 1	cfu/100ml	07/01/2020	Juana Tamayo KTP	
M0104 E. coli	< 1	cfu/100mL	07/01/2020	Juana Tamayo KTP	
P1859 Sample Filtration	Completed		07/01/2020	Daniel Fitzpatrick	

#### Comments:

Sampled by customer using ELS approved containers.

#### Test Methodology:

Test	Methodology	Detection Limit
pH	Dedicated pH meter following APHA Online Edition Method 4500 H.	0.1
Alkalinity - Total	APHA Online Edition Method 2320 B	1 g CaCO <sub>3</sub> /m <sup>3</sup>
Conductivity at 25°C	APHA Online Edition Method 2510 B.	0.1 mS/m
Chloride	Ion Chromatography following APHA 4110B.	0.02 g/m <sup>3</sup>
Nitrate - Nitrogen	Ion Chromatography following APHA 4110B.	0.01 g/m <sup>3</sup>
Total Hardness	ICP-OES following APHA Online Edition Method 3120 B (modified).	1 g CaCO <sub>3</sub> /m <sup>3</sup>
Aluminium - Dissolved	ICP-OES following APHA Online Edition Method 3120 B (modified)	0.005 g/m <sup>3</sup>
Calcium - Dissolved	ICP-OES following APHA Online Edition Method 3120 B (modified).	0.01 g/m <sup>3</sup>
Iron - Dissolved	ICP-OES following APHA Online Edition Method 3120 B (modified).	0.005 g/m <sup>3</sup>
Magnesium - Dissolved	ICP-OES following APHA Online Edition Method 3120 B (modified).	0.01 g/m <sup>3</sup>
Manganese - Dissolved	ICP-OES following APHA Online Edition Method 3120 B (modified).	0.005 g/m <sup>3</sup>
TPH C7 - C9	Total Petroleum Hydrocarbon performed by GC-FID.	0.1 mg/L
TPH C10 - C12	Total Petroleum Hydrocarbon performed by GC-FID	0.1 mg/L
TPH C13 - C19	Total Petroleum Hydrocarbon performed by GC-FID	0.1 mg/L
TPH C20 - C26	Total Petroleum Hydrocarbon performed by GC-FID	0.1 mg/L
TPH C27 - C37	Total Petroleum Hydrocarbon performed by GC-FID	0.1 mg/L
Maximum TPH Content	Total Petroleum Hydrocarbon performed by GC-FID.	0.5 mg/L
Faecal Coliforms	APHA 9222D:Online Edition	1 cfu/100ml
E. coli	APHA 9222I:Online Edition	1 cfu/100mL
Sample Filtration	Sample filtered through 0.45 micron filter following APHA Online Edition Method 3030B.	n/a

Unless otherwise stated, all tests are performed in Wellington.

The laboratory is not responsible for the information provided by the customer which can affect the validity of the results.

"<" means that no analyte was found in the sample at the level of detection shown. Detection limits are based on a clean matrix and may vary according to individual sample.

g/m<sup>3</sup> is the equivalent to mg/L and ppm.

Samples will be retained for a period of time, in suitable conditions appropriate to the analyses requested.



Report Released By  
Rob Deacon

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Wellington  
85 Port Road, Seaview  
Lower Hutt 5045  
Phone: (04) 576-5016

Rolleston  
43 Detroit Drive  
Rolleston 7675  
Phone: (03) 343-5227

Dunedin  
16 Lorne Street  
South Dunedin 9012  
Phone: (03) 972-7963

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