

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

Analytical Report

Report Number: 19/57503

Issue: 1
 04 November 2019

Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
19/57503-01	Bore water		30/10/2019 13:05	30/10/2019 15:19	171413
Notes: Winstone Bore					
Test	Result	Units	Test Date	Signatory	
0001 pH	6.5		30/10/2019	Marylou Cabral KTP	
0052 Alkalinity - Total	21	g CaCO3/m ³	30/10/2019	Marylou Cabral KTP	
0055 Conductivity at 25°C	9.6	mS/m	30/10/2019	Marylou Cabral KTP	
0602 Chloride	8.88	g/m ³	01/11/2019	Amit Kumar KTP	
0605 Nitrate - Nitrogen	0.69	g/m ³	01/11/2019	Amit Kumar KTP	
1642 Total Hardness	27	g CaCO3/m ³	01/11/2019	Shanel Kumar KTP	
1800 Aluminium - Dissolved	< 0.005	g/m ³	01/11/2019	Shanel Kumar KTP	
1810 Calcium - Dissolved	8.27	g/m ³	01/11/2019	Shanel Kumar KTP	
1819 Iron - Dissolved	< 0.005	g/m ³	01/11/2019	Shanel Kumar KTP	
1822 Magnesium - Dissolved	1.54	g/m ³	01/11/2019	Shanel Kumar KTP	
1823 Manganese - Dissolved	< 0.005	g/m ³	01/11/2019	Shanel Kumar KTP	
5007 TPH C7 - C9	< 0.1	mg/L	31/10/2019	Ganesh Ilancko KTP	
5010 TPH C10 - C12	< 0.1	mg/L	31/10/2019	Ganesh Ilancko KTP	
5012 TPH C13 - C19	< 0.1	mg/L	31/10/2019	Ganesh Ilancko KTP	
5015 TPH C20 - C26	< 0.1	mg/L	31/10/2019	Ganesh Ilancko KTP	
5021 TPH C27 - C37	< 0.1	mg/L	31/10/2019	Ganesh Ilancko KTP	
5040 Maximum TPH Content	< 0.5	mg/L	31/10/2019	Ganesh Ilancko KTP	
M0102 Faecal Coliforms	< 1	cfu/100ml	30/10/2019	Sunita Raju KTP	
M0104 E. coli	< 1	cfu/100mL	30/10/2019	Sunita Raju KTP	
P1859 Sample Filtration	Completed		31/10/2019	Paige Falconer .	

Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
19/57503-02	Industrial Waters		30/10/2019 12:45	30/10/2019 15:19	171413
Notes: Winstone Pond					
Test	Result	Units	Test Date	Signatory	
0001 pH	7.4		30/10/2019	Marylou Cabral KTP	
0052 Alkalinity - Total	17	g CaCO3/m ³	30/10/2019	Marylou Cabral KTP	
0055 Conductivity at 25°C	6.9	mS/m	30/10/2019	Marylou Cabral KTP	
0602 Chloride	7.76	g/m ³	01/11/2019	Amit Kumar KTP	
0605 Nitrate - Nitrogen	< 0.01	g/m ³	01/11/2019	Amit Kumar KTP	
1642 Total Hardness	17	g CaCO3/m ³	01/11/2019	Shanel Kumar KTP	
1800 Aluminium - Dissolved	0.039	g/m ³	01/11/2019	Shanel Kumar KTP	
1810 Calcium - Dissolved	5.27	g/m ³	01/11/2019	Shanel Kumar KTP	
1819 Iron - Dissolved	0.026	g/m ³	01/11/2019	Shanel Kumar KTP	
1822 Magnesium - Dissolved	1.02	g/m ³	01/11/2019	Shanel Kumar KTP	
1823 Manganese - Dissolved	< 0.005	g/m ³	01/11/2019	Shanel Kumar KTP	
5007 TPH C7 - C9	< 0.1	mg/L	31/10/2019	Ganesh Ilancko KTP	
5010 TPH C10 - C12	< 0.1	mg/L	31/10/2019	Ganesh Ilancko KTP	
5012 TPH C13 - C19	< 0.1	mg/L	31/10/2019	Ganesh Ilancko KTP	
5015 TPH C20 - C26	< 0.1	mg/L	31/10/2019	Ganesh Ilancko KTP	
5021 TPH C27 - C37	< 0.1	mg/L	31/10/2019	Ganesh Ilancko KTP	
5040 Maximum TPH Content	< 0.5	mg/L	31/10/2019	Ganesh Ilancko KTP	
M0102 Faecal Coliforms	4	cfu/100ml	30/10/2019	Sunita Raju KTP	
M0104 E. coli	4	cfu/100mL	30/10/2019	Juana Tamayo KTP	
P1859 Sample Filtration	Completed		31/10/2019	Paige Falconer .	

Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
19/57503-03	Bore water		30/10/2019 13:20	30/10/2019 15:19	171413
Notes: 72 Te Roto Bore					
Test	Result	Units	Test Date	Signatory	
0001 pH	6.6		30/10/2019	Marylou Cabral KTP	
0052 Alkalinity - Total	20	g CaCO3/m ³	30/10/2019	Marylou Cabral KTP	
0055 Conductivity at 25°C	9.5	mS/m	30/10/2019	Marylou Cabral KTP	
0602 Chloride	8.80	g/m ³	01/11/2019	Amit Kumar KTP	
0605 Nitrate - Nitrogen	0.67	g/m ³	01/11/2019	Amit Kumar KTP	
1642 Total Hardness	24	g CaCO3/m ³	01/11/2019	Shanel Kumar KTP	
1800 Aluminium - Dissolved	< 0.005	g/m ³	01/11/2019	Shanel Kumar KTP	
1810 Calcium - Dissolved	7.38	g/m ³	01/11/2019	Shanel Kumar KTP	
1819 Iron - Dissolved	0.012	g/m ³	01/11/2019	Shanel Kumar KTP	
1822 Magnesium - Dissolved	1.40	g/m ³	01/11/2019	Shanel Kumar KTP	
1823 Manganese - Dissolved	< 0.005	g/m ³	01/11/2019	Shanel Kumar KTP	
5007 TPH C7 - C9	< 0.1	mg/L	31/10/2019	Ganesh Ilancko KTP	
5010 TPH C10 - C12	< 0.1	mg/L	31/10/2019	Ganesh Ilancko KTP	
5012 TPH C13 - C19	< 0.1	mg/L	31/10/2019	Ganesh Ilancko KTP	
5015 TPH C20 - C26	< 0.1	mg/L	31/10/2019	Ganesh Ilancko KTP	
5021 TPH C27 - C37	< 0.1	mg/L	31/10/2019	Ganesh Ilancko KTP	
5040 Maximum TPH Content	< 0.5	mg/L	31/10/2019	Ganesh Ilancko KTP	
M0102 Faecal Coliforms	< 1	cfu/100ml	30/10/2019	Sunita Raju KTP	
M0104 E. coli	< 1	cfu/100mL	30/10/2019	Sunita Raju KTP	
P1859 Sample Filtration	Completed		31/10/2019	Paige Falconer .	

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 CaCO3/m ³
Conductivity at 25°C	APHA Online Edition Method 2510 B.	0.1 mS/m
Chloride	Ion Chromatography following APHA 4110B.	0.02 g/m ³
Nitrate - Nitrogen	Ion Chromatography following APHA 4110B.	0.01 g/m ³
Total Hardness	ICP-OES following APHA Online Edition Method 3120 B (modified).	1 g CaCO3/m ³
Aluminium - Dissolved	ICP-OES following APHA Online Edition Method 3120 B (modified)	0.005 g/m ³
Calcium - Dissolved	ICP-OES following APHA Online Edition Method 3120 B (modified).	0.01 g/m ³
Iron - Dissolved	ICP-OES following APHA Online Edition Method 3120 B (modified).	0.005 g/m ³
Magnesium - Dissolved	ICP-OES following APHA Online Edition Method 3120 B (modified).	0.01 g/m ³
Manganese - Dissolved	ICP-OES following APHA Online Edition Method 3120 B (modified).	0.005 g/m ³
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 9222G: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.

"<" 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/m3 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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