

Winstone Aggregates - Otaki
 1 State Highway 1
 Otaki 5543
 Attention: Gary Edwards

Analytical Report

Report Number: 21/36357
 Issue: 1
 12 October 2021

Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
21/36357-01	Winstone Aggregates - Bore		30/09/2021 11:10	30/09/2021 15:22	14213308
Notes: 72 Te Roto Site					
Test	Result	Units	Comments	Test Date	Signatory
0001 pH	6.7			01/10/2021	Jennifer Mont KTP
0052 Alkalinity - Total	19	g CaCO3/m ³		01/10/2021	Jennifer Mont KTP
0055 Conductivity at 25°C	10.4	mS/m		01/10/2021	Jennifer Mont KTP
0084 Turbidity	7.32	NTU		01/10/2021	Jennifer Mont KTP
0602 Chloride	10.4	g/m ³		04/10/2021	Amit Kumar KTP
0605 Nitrate - Nitrogen	0.98	g/m ³		04/10/2021	Amit Kumar KTP
1004 Temperature on arrival	8.6	Deg C	Complies	30/09/2021	Luke Thorstensen
1642 Total Hardness	29	g CaCO3/m ³		01/10/2021	Amit Kumar KTP
1800 Aluminium - Dissolved	< 0.005	g/m ³		01/10/2021	Amit Kumar KTP
1810 Calcium - Dissolved	8.80	g/m ³		01/10/2021	Amit Kumar KTP
1819 Iron - Dissolved	0.012	g/m ³		01/10/2021	Amit Kumar KTP
1822 Magnesium - Dissolved	1.75	g/m ³		01/10/2021	Amit Kumar KTP
1823 Manganese - Dissolved	< 0.005	g/m ³		01/10/2021	Amit Kumar KTP
5007 TPH C7 - C9	< 0.1	mg/L		01/10/2021	Ganesh Ilancko KTP
5010 TPH C10 - C12	< 0.1	mg/L		01/10/2021	Ganesh Ilancko KTP
5012 TPH C13 - C19	< 0.1	mg/L		01/10/2021	Ganesh Ilancko KTP
5015 TPH C20 - C26	< 0.1	mg/L		01/10/2021	Ganesh Ilancko KTP
5021 TPH C27 - C37	< 0.1	mg/L		01/10/2021	Ganesh Ilancko KTP
5040 Maximum TPH Content	< 0.5 *	mg/L		01/10/2021	Ganesh Ilancko .
M0408 Faecal Coliforms	< 1	cfu/100mL		30/09/2021	Sunita Raju KTP
M0409 E. coli	< 1	cfu/100mL		30/09/2021	Sunita Raju KTP
P1859 Sample Filtration	Completed			01/10/2021	Emily Couper .

Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
21/36357-02	Winstone Aggregates - Bore		30/09/2021 11:20	30/09/2021 15:22	14213308
Notes: Winstone Site					
Test	Result	Units	Comments	Test Date	Signatory
0001 pH	6.6			01/10/2021	Jennifer Mont KTP
0052 Alkalinity - Total	18	g CaCO3/m ³		01/10/2021	Jennifer Mont KTP
0055 Conductivity at 25°C	9.8	mS/m		01/10/2021	Jennifer Mont KTP
0084 Turbidity	1.70	NTU		01/10/2021	Jennifer Mont KTP
0602 Chloride	9.60	g/m ³		04/10/2021	Amit Kumar KTP
0605 Nitrate - Nitrogen	0.83	g/m ³		04/10/2021	Amit Kumar KTP
1642 Total Hardness	26	g CaCO3/m ³		01/10/2021	Amit Kumar KTP
1800 Aluminium - Dissolved	< 0.005	g/m ³		01/10/2021	Amit Kumar KTP
1810 Calcium - Dissolved	7.99	g/m ³		01/10/2021	Amit Kumar KTP
1819 Iron - Dissolved	< 0.005	g/m ³		01/10/2021	Amit Kumar KTP
1822 Magnesium - Dissolved	1.57	g/m ³		01/10/2021	Amit Kumar KTP
1823 Manganese - Dissolved	< 0.005	g/m ³		01/10/2021	Amit Kumar KTP
5007 TPH C7 - C9	< 0.1	mg/L		01/10/2021	Ganesh Ilancko KTP
5010 TPH C10 - C12	< 0.1	mg/L		01/10/2021	Ganesh Ilancko KTP
5012 TPH C13 - C19	< 0.1	mg/L		01/10/2021	Ganesh Ilancko KTP
5015 TPH C20 - C26	< 0.1	mg/L		01/10/2021	Ganesh Ilancko KTP
5021 TPH C27 - C37	< 0.1	mg/L		01/10/2021	Ganesh Ilancko KTP
5040 Maximum TPH Content	< 0.5 *	mg/L		01/10/2021	Ganesh Ilancko .
M0408 Faecal Coliforms	< 1	cfu/100mL		30/09/2021	Sunita Raju KTP
M0409 E. coli	< 1	cfu/100mL		30/09/2021	Sunita Raju KTP
P1859 Sample Filtration	Completed			01/10/2021	Emily Couper .

Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
21/36357-03	Winstone Aggregates - Surface Water		30/09/2021 11:30	30/09/2021 15:22	14213308
Notes: Winstone Site Pond					
Test	Result	Units	Comments	Test Date	Signatory
0001 pH	7.2			01/10/2021	Jennifer Mont KTP



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Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
21/36357-03	Winstone Aggregates - Surface Water		30/09/2021 11:30	30/09/2021 15:22	14213308

Notes: Winstone Site Pond

Test	Result	Units	Comments	Test Date	Signatory
0052 Alkalinity - Total	15	g CaCO ₃ /m ³		01/10/2021	Jennifer Mont KTP
0055 Conductivity at 25°C	7.7	mS/m		01/10/2021	Jennifer Mont KTP
0084 Turbidity	6.72	NTU		01/10/2021	Jennifer Mont KTP
0602 Chloride	8.26	g/m ³		04/10/2021	Amit Kumar KTP
0605 Nitrate - Nitrogen	0.28	g/m ³		04/10/2021	Amit Kumar KTP
1642 Total Hardness	20	g CaCO ₃ /m ³		01/10/2021	Amit Kumar KTP
1800 Aluminium - Dissolved	0.011	g/m ³		01/10/2021	Amit Kumar KTP
1810 Calcium - Dissolved	5.88	g/m ³		01/10/2021	Amit Kumar KTP
1819 Iron - Dissolved	0.006	g/m ³		01/10/2021	Amit Kumar KTP
1822 Magnesium - Dissolved	1.21	g/m ³		01/10/2021	Amit Kumar KTP
1823 Manganese - Dissolved	< 0.005	g/m ³		01/10/2021	Amit Kumar KTP
5007 TPH C7 - C9	< 0.1	mg/L		01/10/2021	Ganesh Ilancko KTP
5010 TPH C10 - C12	< 0.1	mg/L		01/10/2021	Ganesh Ilancko KTP
5012 TPH C13 - C19	< 0.1	mg/L		01/10/2021	Ganesh Ilancko KTP
5015 TPH C20 - C26	< 0.1	mg/L		01/10/2021	Ganesh Ilancko KTP
5021 TPH C27 - C37	< 0.1	mg/L		01/10/2021	Ganesh Ilancko KTP
5040 Maximum TPH Content	< 0.5 *	mg/L		01/10/2021	Ganesh Ilancko .
M0102 Faecal Coliforms	16	cfu/100ml		01/10/2021	Sunita Raju KTP
M0104 E. coli	16	cfu/100mL		01/10/2021	Maria Norris KTP
P1859 Sample Filtration	Completed			01/10/2021	Emily Couper .

Comments:

* Not an accredited test.

Sampled by customer using ELS approved containers.

All samples analysed as we receive them. Delivery was within the correct time and temperature conditions.

Test Methodology:

Test	Methodology	Detection Limit
pH	Dedicated pH meter following APHA Online Edition Method 4500-H B.	0.1
Alkalinity - Total	APHA Online Edition Method 2320 B	1 g CaCO ₃ /m ³
Conductivity at 25°C	APHA Online Edition Method 2510 B.	0.1 mS/m
Turbidity	Turbidity Meter following APHA Online Edition Method 2130 B.	0.01 NTU
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 CaCO ₃ /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	Calculation - Sum of 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
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

Onsite Observation Methodology:

Test	Methodology	Detection Limit
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Page 2 of 3

Report Number: 21/36357-1 ELS

12 October 2021 16:00:40

Test	Methodology	Detection Limit
Temperature on arrival	Following DWSNZ criteria the temperature of microbiological samples, upon arrival at the laboratory must not be below 0°C or exceed 10°C. This criteria has been used for this batch of samples, with any single temperature applying to the full set of samples.	Deg C

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, for example: sampling information such as date/time, field data etc.

"<" 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.

For liquid samples g/m³ is the equivalent to mg/L and ppm, solid samples are reported as mg/kg which is equivalent to ppm.

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

This laboratory is accredited by International Accreditation New Zealand and its reports are recognised in all countries affiliated to the International Laboratory Accreditation Co-operation Mutual Recognition Arrangement (ILAC-MRA). The tests reported have been performed in accordance with our terms of accreditation, with the exception of tests marked "not an accredited test", which are outside the scope of this laboratory's accreditation.

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Page 3 of 3
Report Number: 21/36357-1 ELS

12 October 2021 16:00:40