

Winstone Aggregates -
 Otaki/Waikanae/Paraparamu
 Main Road
 Otaki
 Attention: Wayne Read

Analytical Report

Report Number: 20/28425

Issue: 2
 30 June 2020

Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
20/28425-01	Bore water		12/06/2020 10:27	12/06/2020 15:40	0
Notes: 72 Te Roto site bore- Otaki					
Test	Result	Units	Test Date	Signatory	
0001 pH	6.6		12/06/2020	Jennifer Mont KTP	
0052 Alkalinity - Total	18	g CaCO3/m ³	12/06/2020	Jennifer Mont KTP	
0055 Conductivity at 25°C	9.1	mS/m	12/06/2020	Jennifer Mont KTP	
0602 Chloride	9.35	g/m ³	29/06/2020	Shanel Kumar KTP	
0605 Nitrate - Nitrogen	0.52	g/m ³	29/06/2020	Shanel Kumar KTP	
1642 Total Hardness	25	g CaCO3/m ³	13/06/2020	Amit Kumar KTP	
1800 Aluminium - Dissolved	< 0.005	g/m ³	13/06/2020	Amit Kumar KTP	
1810 Calcium - Dissolved	7.37	g/m ³	13/06/2020	Amit Kumar KTP	
1819 Iron - Dissolved	0.008	g/m ³	13/06/2020	Amit Kumar KTP	
1822 Magnesium - Dissolved	1.49	g/m ³	13/06/2020	Amit Kumar KTP	
1823 Manganese - Dissolved	< 0.005	g/m ³	13/06/2020	Amit Kumar KTP	
5007 TPH C7 - C9	< 0.1	mg/L	15/06/2020	Joanna Yang KTP	
5010 TPH C10 - C12	< 0.1	mg/L	15/06/2020	Joanna Yang KTP	
5012 TPH C13 - C19	< 0.1	mg/L	15/06/2020	Joanna Yang KTP	
5015 TPH C20 - C26	< 0.1	mg/L	15/06/2020	Joanna Yang KTP	
5021 TPH C27 - C37	< 0.1	mg/L	15/06/2020	Joanna Yang KTP	
5040 Maximum TPH Content	< 0.5 *	mg/L	15/06/2020	Joanna Yang KTP	
M0102 Faecal Coliforms	4	cfu/100ml	12/06/2020	Sunita Raju KTP	
M0104 E. coli	4	cfu/100mL	12/06/2020	Juana Tamayo KTP	
P1859 Sample Filtration	Completed		13/06/2020	Ruth Ashton .	

Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
20/28425-02	Bore water		12/06/2020 11:00	12/06/2020 15:40	0
Notes: Winstones site bore - Otaki					
Test	Result	Units	Test Date	Signatory	
0001 pH	6.3		12/06/2020	Jennifer Mont KTP	
0052 Alkalinity - Total	18	g CaCO3/m ³	12/06/2020	Jennifer Mont KTP	
0055 Conductivity at 25°C	9.2	mS/m	12/06/2020	Jennifer Mont KTP	
0602 Chloride	9.31	g/m ³	29/06/2020	Shanel Kumar KTP	
0605 Nitrate - Nitrogen	0.50	g/m ³	29/06/2020	Shanel Kumar KTP	
1642 Total Hardness	23	g CaCO3/m ³	13/06/2020	Amit Kumar KTP	
1800 Aluminium - Dissolved	< 0.005	g/m ³	13/06/2020	Amit Kumar KTP	
1810 Calcium - Dissolved	6.90	g/m ³	13/06/2020	Amit Kumar KTP	
1819 Iron - Dissolved	< 0.005	g/m ³	13/06/2020	Amit Kumar KTP	
1822 Magnesium - Dissolved	1.37	g/m ³	13/06/2020	Amit Kumar KTP	
1823 Manganese - Dissolved	< 0.005	g/m ³	13/06/2020	Amit Kumar KTP	
5007 TPH C7 - C9	< 0.1	mg/L	15/06/2020	Joanna Yang KTP	
5010 TPH C10 - C12	< 0.1	mg/L	15/06/2020	Joanna Yang KTP	
5012 TPH C13 - C19	< 0.1	mg/L	15/06/2020	Joanna Yang KTP	
5015 TPH C20 - C26	< 0.1	mg/L	15/06/2020	Joanna Yang KTP	
5021 TPH C27 - C37	< 0.1	mg/L	15/06/2020	Joanna Yang KTP	
5040 Maximum TPH Content	< 0.5 *	mg/L	15/06/2020	Joanna Yang KTP	
M0102 Faecal Coliforms	< 1	cfu/100ml	12/06/2020	Sunita Raju KTP	
M0104 E. coli	< 1	cfu/100mL	12/06/2020	Sunita Raju KTP	
P1859 Sample Filtration	Completed		13/06/2020	Ruth Ashton .	

Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
20/28425-03	Surface Water		12/06/2020 10:45	12/06/2020 15:40	0
Notes: Winstones site Pond - Otaki					
Test	Result	Units	Test Date	Signatory	
0001 pH	7.2		12/06/2020	Jennifer Mont KTP	
0052 Alkalinity - Total	15	g CaCO ₃ /m ³	12/06/2020	Jennifer Mont KTP	
0055 Conductivity at 25°C	7.3	mS/m	12/06/2020	Jennifer Mont KTP	
0602 Chloride	7.89	g/m ³	29/06/2020	Shanel Kumar KTP	
0605 Nitrate - Nitrogen	0.05	g/m ³	29/06/2020	Shanel Kumar KTP	
1642 Total Hardness	18	g CaCO ₃ /m ³	13/06/2020	Amit Kumar KTP	
1800 Aluminium - Dissolved	< 0.005	g/m ³	13/06/2020	Amit Kumar KTP	
1810 Calcium - Dissolved	5.27	g/m ³	13/06/2020	Amit Kumar KTP	
1819 Iron - Dissolved	< 0.005	g/m ³	13/06/2020	Amit Kumar KTP	
1822 Magnesium - Dissolved	1.12	g/m ³	13/06/2020	Amit Kumar KTP	
1823 Manganese - Dissolved	< 0.005	g/m ³	13/06/2020	Amit Kumar KTP	
5007 TPH C7 - C9	< 0.1	mg/L	15/06/2020	Joanna Yang KTP	
5010 TPH C10 - C12	< 0.1	mg/L	15/06/2020	Joanna Yang KTP	
5012 TPH C13 - C19	< 0.1	mg/L	15/06/2020	Joanna Yang KTP	
5015 TPH C20 - C26	< 0.1	mg/L	15/06/2020	Joanna Yang KTP	
5021 TPH C27 - C37	< 0.1	mg/L	15/06/2020	Joanna Yang KTP	
5040 Maximum TPH Content	< 0.5 *	mg/L	15/06/2020	Joanna Yang KTP	
M0102 Faecal Coliforms	8	cfu/100ml	12/06/2020	Sunita Raju KTP	
M0104 E. coli	8	cfu/100mL	12/06/2020	Juana Tamayo KTP	
P1859 Sample Filtration	Completed		13/06/2020	Ruth Ashton .	

Comments:

* Not an accredited test.

Sampled by customer using ELS approved containers.

This report cancels and replaces report 20/28425-1. Please dispose of all previous versions.

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 ₃ /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 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	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



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Page 2 of 3

Report Number: 20/28425-2 ELS

30 June 2020 16:04:30

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/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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Page 3 of 3
Report Number: 20/28425-2 ELS

30 June 2020 16:04:30