

18 April 19

Sally McKinnon
Senior Contaminated Land and Ground Water Scientist
Gisborne District Council
15 Fitzherbert Street,
PO Box 747,
Gisborne 4010

By e-mail: Sally.McKinnon@gdc.govt.nz

Dear Sally,

Re: Matawhero Logyard Cell 3 bore monitoring: Consent - DL-2018-108538-00

Please see below the results of the monitoring undertaken on 29/03/2019 as required by conditions 10 – 28 of consent DL-2018-108538-00.

All recorded parameters were below consent trigger limits. As such, no further actions are required in terms of compliance.

Kind Regards,

Oliver Bone
Ecology Consultant
4Sight Consulting Ltd

Matawhero Log Yard (Eastland Port) - E004

Monthly Bore Monitoring



Attn: James Gallacher (James.Gallacher@eastland.nz)

PO:

Sample Date: 29/03/2019 Time: Bore GW02: 1120
New Bore: 1215 Sampler: DW DO Probe: 139

Daily Summary Sheet

Weather Conditions: Slightly raining.

Tidal Flow: Usual.

Bore Conditions: Bores had water. New bore very muddy, presumably from install.

Surronds Conditions: Very mucky and muddy, particularly Bore GW02.

Purging Results: Straight into bottles for Bore GW02, poor recovery. 50L purge for new bore before sampling.

Comments: Bore GW02: Static Water Level: 2.10m, Temperature: 20.1°C, DO: 3.58 mg/L

New Bore: Static Water Level: 2.55m, Temperature: 18.1°C, DO: 4.23 mg/L

Analysis Report

Customer: Eastland Port

Date Received: 29/03/2019 1:00 PM

Address: PO Box 1048

Date Completed: 8/04/2019 4:36 PM

Gisborne, 4040

Attention: James Gallacher

Purchase Order #:

Sample Type: Water

	Units	2019003231 Bore GW02	2019003232 New Monitoring Bore
		29/03/2019 11:20	29/03/2019 12:15
Test			
Analytica Laboratories Report		19-10423	19-10423
Conductivity @25°C	µS/cm	775	955
pH - Water		7.0	7.0
Salinity	ppt	0.3	0.4

Comments: These samples were also analysed by Analytica Laboratories. Please see attached report.
Noted: Extra long pumping time on 'New Monitoring Bore' site to get muddy water off. This may be due to it being a new bore.

Test Standards:

Test	Methodology
Analytica Laboratories Report	
Conductivity @25°C	APHA 23rd Ed 2510 B
pH - Water	APHA 23rd 4500-H+ B
Salinity	APHA 23rd Ed 2520 B

Authorised By:

Tom Needham
B.Sc Environmental Science and
Marine Biology
Masters of Marine Conservation

Certified By:

Verdette Vedders
Laboratory Technician
KTP Chemistry and Microbiology



Tests indicated as
not accredited are outside
the scope of the
laboratory's accreditation

Methods marked with a * are not IANZ accredited.

This report shall not be reproduced except in full, without written approval of the laboratory.
"Detailed activity" stating the start and completion dates and times of individual tests have not been recorded on this report. This information is available upon request.



Certificate of Analysis

Linnaeus
4 Banks Street
Gisborne 4010
Attention: Steve Donnelly
Phone: 06 867 8512
Email: Stephen.d@linnaeus.co.nz

Lab Reference: 19-10423
Submitted by: Dion Williams
Date Received: 30/03/2019
Date Completed: 4/04/2019
Order Number: 662
Reference: 662

Sampling Site: Matawhero Log Yard (Eastland Port)

Report Comments

Samples were collected by yourselves (or your agent) and analysed as received at Analytica Laboratories. Samples were in acceptable condition unless otherwise noted on this report.

Soluble Heavy Metals in Water

Client Sample ID			2019003231	2019003232
Date Sampled			29/03/2019	29/03/2019
Analyte	Unit	Reporting Limit	19-10423-1	19-10423-2
Arsenic	g/m ³	0.0005	0.0006	0.0009
Beryllium	g/m ³	0.00001	0.00001	<0.00001
Boron	g/m ³	0.005	0.087	0.114
Cadmium	g/m ³	0.00001	<0.00001	0.00004
Chromium	g/m ³	0.0002	<0.0002	<0.0002
Copper	g/m ³	0.0002	<0.0002	0.0013
Lead	g/m ³	0.00005	<0.00005	<0.00005
Mercury	g/m ³	0.0001	<0.0001	<0.0001
Nickel	g/m ³	0.0002	0.0006	0.0019
Zinc	g/m ³	0.001	0.0036	0.0014

Total Petroleum Hydrocarbons - Water

Client Sample ID			2019003231	2019003232
Date Sampled			29/03/2019	29/03/2019
Analyte	Unit	Reporting Limit	19-10423-1	19-10423-2
C7-C9	g/m ³	0.2	<0.2	<0.2
C10-C14	g/m ³	0.2	<0.2	<0.2
C15-C36	g/m ³	0.3	<0.3	<0.3
C7-C36 (Total)	g/m ³	0.5	<0.5	<0.5

Method Summary

Soluble Trace Elements

Samples were analysed as received by the laboratory using ICP-MS following a 0.45µm membrane filtration (except when field filtered). (In house procedure based on US EPA 200.8).

TPH in Water

Solvent extraction, silica cleanup, followed by GC-FID analysis (C7-C36). MFE Petroleum Industry Guidelines.



Sharelle Frank, B.Sc. (Tech)
Technologist



Tom Featonby, M.Sc.
Technologist