

12 November 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 30/10/2019 as required by conditions 10 – 28 of consent DL-2018-108538-00.

All recorded parameters were below consent trigger limits.

Kind Regards,



**Oliver Bone**  
Ecology Consultant  
**4Sight Consulting Ltd**



# Matawhero Log Yard (Eastland Port) - E004

Monthly Bore Monitoring



Attn: Oliver Bone ([oliverb@4sight.co.nz](mailto:oliverb@4sight.co.nz))

Sample Date: 30/10/2019

Sampler: Dion Williams

DO Probe: MER 138

## Daily Summary Sheet

Weather Conditions: Fine and dry

Tidal Flow: Going out - low tide at 2pm

	GW02	New Monitoring Bore
Bore Conditions:	Good	Good
Surrounds Conditions:	Dry dirt and grass	Dry grass
Purging Results:	7 litres before sampling. Purged dry 3 times to get 7 litres.	50 litres non stop before sampling.

Comments: Water recovery of GW02 not bad today.

## Analysis Report

Customer: Eastland Port

Date Received: 30/10/2019 1:10 PM

Address: PO Box 402 053  
Tutukaka, 0153

Date Completed: 7/11/2019 9:46 AM

Attention: Oliver Bone

Purchase Order #:

Sample Type: Water

	Units	2019008743 Bore GW02	2019008744 New Monitoring Bore
		30/10/2019 12:10	30/10/2019 12:45
<b>Test</b>			
Analytica Laboratories Report		19-37827	19-37827
Conductivity @25°C	µS/cm	945	1030
Dissolved Oxygen Field Test*	g/m <sup>3</sup>	1.2	0.85
pH - Water		7.0	7.0
Salinity	ppt	0.4	0.4
Static Water Level	m	1.64	1.76
Temperature	°C	15.0	15.0

Comments: These samples were also analysed by Analytica Laboratories. Please see attached report.

Test Standards:

Test	Methodology
Analytica Laboratories Report	
Conductivity @25°C	APHA 23rd Ed 2510 B
Dissolved Oxygen Field Test*	APHA 23rd Ed 4500 OG
pH - Water	APHA 23rd 4500-H+ B
Salinity	APHA 23rd Ed 2520 B
Static Water Level	*
Temperature	APHA 23rd ed 2550 B

Authorised By:

Karen Neumegen  
B.Sc Chemistry  
KTP Microbiology and Chemistry

Certified By:

Brenda Overend  
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.

Report ID: 2019110709465140

Date Issued: 7/11/2019

Linnaeus, PO Box 1199, 4 Banks St, Gisborne 4040, New Zealand GST No. 125-375-855  
Tel: +64 6 8678512 Freephone: 0800 254 662 Email: info@linnaeus.co.nz  
www.linnaeus.co.nz



## Certificate of Analysis

Linnaeus Laboratory Limited  
 4 Banks Street  
 Gisborne 4010  
 Attention: Shanna Hickling  
 Phone: 06 867 8512  
 Email: shanna@linnaeus.co.nz

Lab Reference: 19-37827  
 Submitted by: Linnaeus Laboratory Limited  
 Date Received: 31/10/2019  
 Date Completed: 4/11/2019  
 Order Number: 0010  
 Reference:

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.

### Elements in Water (Soluble)

Client Sample ID			2019008743 Bore GW02	2019008744 New Monitoring Bore
Date Sampled			30/10/2019	30/10/2019
Analyte	Unit	Reporting Limit	19-37827-1	19-37827-2
Copper	g/m <sup>3</sup>	0.0002	0.00037	0.00021
Lead	g/m <sup>3</sup>	0.00005	<0.000050	<0.000050
Zinc	g/m <sup>3</sup>	0.001	0.0086	<0.0010

### Total Petroleum Hydrocarbons - Water

Client Sample ID			2019008743 Bore GW02	2019008744 New Monitoring Bore
Date Sampled			30/10/2019	30/10/2019
Analyte	Unit	Reporting Limit	19-37827-1	19-37827-2
C7-C9	g/m <sup>3</sup>	0.2	<0.2	<0.2
C10-C14	g/m <sup>3</sup>	0.2	<0.2	<0.2
C15-C36	g/m <sup>3</sup>	0.3	<0.3	<0.3
C7-C36 (Total)	g/m <sup>3</sup>	0.5	<0.5	<0.5

### Method Summary

#### Soluble Trace Elements

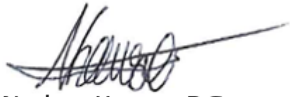
Samples were analysed as received by the laboratory using ICP-MS following a 0.45µm membrane filtration (except when field filtered). (In house procedure based on US EPA 200.8).

#### TPH in Water

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



Emily Hanna, B.Sc.  
Trace Elements Team Leader



Nathan Howse, B.Sc.  
Technologist

