

7 June 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 28/05/2019 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: Oliver Bone ([oliverb@4sight.co.nz](mailto:oliverb@4sight.co.nz))



Sample Date: 28/05/2019

Sampler: Dion Williams

DO Probe: 139

## Daily Summary Sheet

Weather Conditions: High cloud, fine

Tidal Flow: Incoming tide - high tide at 1:10pm

|                       | GW02                                 | New Monitoring Bore  |
|-----------------------|--------------------------------------|--|
| Bore Conditions:      | Good                                 | Good   |
| Surrounds Conditions: | Log, mud, drain dry                  | Grass  |
| Purging Results:      | Directly into samples, poor recovery | 10L before sampling . Rate flow 1L/min. Slowly pumped to minimise mud. |

Comments: New bore seems to be getting to clear water with a lot less mud/sediment in samples now.

## Analysis Report

|   |                                    |
|---|------------------------------------|
| Customer: Eastland Port                   | Date Received: 28/05/2019 11:10 AM |
| Address: PO Box 402 053<br>Tutukaka, 0153 | Date Completed: 6/06/2019 9:32 AM  |
| Attention: Oliver Bone                    | Purchase Order #:                  |

Sample Type: Water

|                               | Units            | 2019005144<br>Bore GW02 | 2019005145<br>New Monitoring<br>Bore |
|-------------------------------|------------------|-------------------------|--------------------------------------|
|                               |                  | 28/05/2019<br>10:00     | 28/05/2019<br>10:45                  |
| <b>Test</b>                   |                  |                         |                                      |
| Analytica Laboratories Report |                  | 19-18048                | 19-18048                             |
| Conductivity @25°C            | µS/cm            | 826                     | 973                                  |
| Dissolved Oxygen Field Test*  | g/m <sup>3</sup> | 5.4                     | 0.64                                 |
| pH - Water                    |                  | 7.1                     | 6.8                                  |
| Salinity                      | ppt              | 0.3                     | 0.4                                  |
| Static Water Level            | m                | 1.92                    | 2.27                                 |
| Temperature                   | °C               | 16.9                    | 16.6                                 |

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

Test Standards:

| Test                          | Methodology          |
|-------------------------------|----------------------|
| 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  |
| Conductivity @25°C            | APHA 23rd Ed 2510 B  |
| Analytica Laboratories Report |                      |

Authorised By:

Libby Dalcom  
Senior Technician  
KTP Microbiology

Certified By:

Brenda Overend  
Laboratory Technician  
KTP Chemistry and Microbiology



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: 19-18048  
 Submitted by: Linnaeus Laboratory Limited  
 Date Received: 29/05/2019  
 Date Completed: 31/05/2019  
 Order Number: 748  
 Reference: 748

Sampling Site: Matawhero Log Yard

### 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 |                  |                 | 2019005144 Bore GW02 | 2019005145 New Monitoring Bore |
|------------------|------------------|-----------------|----------------------|--------------------------------|
| Date Sampled     |                  |                 | 28/05/2019           | 28/05/2019                     |
| Analyte          | Unit             | Reporting Limit | 19-18048-1           | 19-18048-2                     |
| Copper           | g/m <sup>3</sup> | 0.0002          | 0.0020               | 0.0004                         |
| Lead             | g/m <sup>3</sup> | 0.00005         | <0.00005             | <0.00005                       |
| Zinc             | g/m <sup>3</sup> | 0.001           | 0.0063               | 0.0012                         |

### Total Petroleum Hydrocarbons - Water

| Client Sample ID |                  |                 | 2019005144 Bore GW02 | 2019005145 New Monitoring Bore |
|------------------|------------------|-----------------|----------------------|--------------------------------|
| Date Sampled     |                  |                 | 28/05/2019           | 28/05/2019                     |
| Analyte          | Unit             | Reporting Limit | 19-18048-1           | 19-18048-2                     |
| 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.



Sharelle Frank, B.Sc. (Tech)  
Technologist