**Analytical Report**

New Zealand Fish and Game Council

PO Box 13141

Johnsonville, Wellington 6440

**Date received:** 15/05/2018 **Time received:** 09:30 am

Site Test: culture Results Units

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ARS1-Water *Escherichia coli* 45 CFU/100ml

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ARS1-Sediment *Escherichia coli* 230 CFU/100ml

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ARS2-Water *Escherichia coli* 440 CFU/100ml

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ARS2-Sediment *Escherichia coli* 730 CFU/100ml

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RRS1-Water *Escherichia coli* 175 CFU/100ml

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RRS1-Sediment *Escherichia coli* 273,300 CFU/100ml

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RRS2-Water *Escherichia coli* 20 CFU/100ml

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RRS2-Sediment *Escherichia coli* 7,100 CFU/100ml

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SRS1-Water *Escherichia coli* 160 CFU/100ml

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SRS1-Sediment *Escherichia coli* 230 CFU/100ml

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SRS2-Water *Escherichia coli* 10 CFU/100ml

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Site Test: cultures Results Units

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SRS2-Sediment *Escherichia coli* 200 CFU/100ml

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| **Test: cultures** | **Methodology** |
| *Escherichia coli* | USEPA 1603 |

Results of PCR analysis:





Abbreviations: Neg.= Not present in sample

 Positive= present in sample

 UID-A= β-glucuronidase for identification of *Escherichia coli* (not present in most O157:H7 strains)

 STX1= Shiga toxin 1

 STX2= Shiga toxin 2

 eae= effacing and attachment gene necessary for intimate attachment to epithelial cells.

 O26= STEC serotype (second most prevalent)

 O157:H7 = STEC serotype (most prevalent)

 cTXM = cTX-M, extended-spectrum beta-lactamase associated with resistance to antibiotics.

 \*\*\* = sites with significant findings

**Analytical Report**

New Zealand Fish and Game Council

PO Box 13141

Johnsonville, Wellington 6440

**Date received:** 26/09/2018 **Time received:** 09:30 am

Site Test: cultures Results Units

ARS1-Water *Escherichia coli* 20 CFU/100ml

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ARS1-Sediment *Escherichia coli* 400 CFU/100ml

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ARS2-Water *Escherichia coli* 2,000 CFU/100ml

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ARS2-Sediment *Escherichia coli* 3,600 CFU/100ml

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RRS1-Water *Escherichia coli* 40 CFU/100ml

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RRS1-Sediment *Escherichia coli* 1,600 CFU/100ml

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RRS2-Water *Escherichia coli* 20 CFU/100ml

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RRS2-Sediment *Escherichia coli* 5,000 CFU/100ml

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SRS1-Water *Escherichia coli* 2,250 CFU/100ml

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SRS1-Sediment *Escherichia coli* 12,200 CFU/100ml

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SRS2-Water *Escherichia coli* 505 CFU/100ml

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SRS2-Sediment *Escherichia coli* 200 CFU/100ml

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| **Test: cultures** | **Methodology** |
| *Escherichia coli* | USEPA 1603 |

Results of PCR marker analysis:





Abbreviations: Neg.= Not present in sample

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 \*\*\* sites with significant finding

 \* sites with one or more Shiga toxins and effacing and attachment gene present. Further testing for other O serotypes would benefit these sites if wanting to rule out STEC.

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