

Food & Water Testing

ANALYTICAL REPORT

| REPORT CODE |                                                                                                                                   | AR-24-NC-029731-01 | REPORT DATE                                                                                                            | 28/09/2024 |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------------------------------------------------------------------------------------------------------------|------------|
| Attention   | Veolia Water Services (ANZ) Pty Ltd<br>NZ Queenstown Lab Results<br>74 Glenda Drive<br>Frankton<br>9300 Queenstown<br>NEW ZEALAND |                    |                                                                                                                        |            |
| Phone       | 03 450 9240                                                                                                                       |                    | Copy to: QLDC Lab Results (lab.results@qldc.govt.nz), Soria (francisco.soria@veolia.com), Lado (maria.lado@veolia.com) |            |
| Email       | nz.queenstown.lab-results.all.groups@veolia.com                                                                                   |                    |                                                                                                                        |            |

|                          |                                          |                        |                 |
|--------------------------|------------------------------------------|------------------------|-----------------|
| Contact for your orders: | James Thornton                           | Order code:            | EUNZCH-00191603 |
| Contract:                | Shotover WWTP                            |                        |                 |
| Submission Reference:    | Round 2 Biosolids analysis- Project Pure | Purchase Order Number: | 7300390040      |

|                        |                          |                       |                  |
|------------------------|--------------------------|-----------------------|------------------|
| SAMPLE CODE            | 817-2024-00110305        |                       |                  |
| Sample Name            | Project Pure WWTP Sludge |                       |                  |
| Reception Date & Time: | 18/09/2024 15:11         |                       |                  |
| Analysis Started on:   | 18/09/2024               | Analysis Ending Date: | 28/09/2024       |
| Product Type           | Sludge                   | Sampled Date & Time   | 18/09/2024 08:00 |
| Sampler(s)             | Janie                    | Sampling Purpose      | Monitoring       |
| Sampled By Eurofins    | No                       |                       |                  |

| RESULTS |                                       |       | LOQ   |
|---------|---------------------------------------|-------|-------|
| ②NW499  | Arsenic - Total                       |       |       |
|         | Arsenic (As)                          | 3.15  | mg/kg |
|         |                                       |       | 0.05  |
| ②NW504  | Cadmium - Total                       |       |       |
|         | Cadmium (Cd)                          | 0.55  | mg/kg |
|         |                                       |       | 0.01  |
| ②NW507  | Chromium - Total                      |       |       |
|         | Chromium (Cr)                         | 14.7  | mg/kg |
|         |                                       |       | 0.2   |
| ②NW509  | Copper - Total                        |       |       |
|         | Copper (Cu)                           | 138   | mg/kg |
|         |                                       |       | 0.3   |
| ③NU122  | Dry Matter (DM)                       |       |       |
|         | Dry matter                            | 19.4  | %     |
|         |                                       |       | 0.1   |
| ③ZM0VI  | Enumeration (MPN) of Escherichia coli |       |       |
|         | Escherichia coli                      | >1100 | MPN/g |
|         |                                       |       | 3     |
| ②NW510  | Iron - Total                          |       |       |
|         | Iron (Fe)                             | 2620  | mg/kg |
|         |                                       |       | 3     |
| ②NW511  | Lead - Total                          |       |       |
|         | Lead (Pb)                             | 6.0   | mg/kg |
|         |                                       |       | 0.1   |
| ②NW515  | Mercury - Total                       |       |       |
|         | Mercury (Hg)                          | 0.4   | mg/kg |
|         |                                       |       | 0.1   |
| ②NW517  | Nickel - Total                        |       |       |
|         | Nickel (Ni)                           | 8.4   | mg/kg |
|         |                                       |       | 0.2   |
| ③NU012  | pH                                    |       |       |
|         | pH                                    | 6.3   |       |
|         |                                       |       | 1     |
| ②NU266  | Phosphorus                            |       |       |
|         | Phosphorus                            | 0.4   | %     |
|         |                                       |       | 0.1   |
| ②NU278  | Potassium                             |       |       |
|         | Potassium                             | 0.2   | %     |
|         |                                       |       | 0.1   |

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|                                 | RESULTS | LOQ      |
|---------------------------------|---------|----------|
| ②NW519 <b>Potassium - Total</b> |         |          |
| Potassium (K)                   | 8050    | mg/kg 10 |
| ②NU361 <b>Total Nitrogen</b>    |         |          |
| Total nitrogen                  | 1.7     | % 0.1    |
| ②NW330 <b>Volatile Solids</b>   |         |          |
| Volatile Solids                 | 16      | % 1      |
| ②NW528 <b>Zinc - Total</b>      |         |          |
| Zinc (Zn)                       | 285     | mg/kg 1  |

### LIST OF METHODS

|                                                                                                                          |                                                                            |
|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| NU012 <b>pH:</b> Internal Method, Electrometry [pH Electrode]                                                            | NU122 <b>Dry Matter (DM):</b> Internal Method, Gravimetry [Dried at 105°C] |
| NU266 <b>Phosphorus:</b> Internal Method, ICP-OES [Microwave digestion]                                                  | NU278 <b>Potassium:</b> Internal Method, ICP-OES [Microwave digestion]     |
| NU361 <b>Total Nitrogen:</b> Internal Method, Combustion [Combustion elemental analyser: Thermal conductivity detection] | NW330 <b>Volatile Solids:</b> APHA Online Edition 2540 G                   |
| NW499 <b>Arsenic - Total:</b> APHA Online Edition 3125 B mod.                                                            | NW504 <b>Cadmium - Total:</b> APHA Online Edition 3125 B mod.              |
| NW507 <b>Chromium - Total:</b> APHA Online Edition 3125 B mod.                                                           | NW509 <b>Copper - Total:</b> APHA Online Edition 3125 B mod.               |
| NW510 <b>Iron - Total:</b> APHA Online Edition 3125 B mod.                                                               | NW511 <b>Lead - Total:</b> APHA Online Edition 3125 B mod.                 |
| NW515 <b>Mercury - Total:</b> APHA Online Edition 3125 B mod.                                                            | NW517 <b>Nickel - Total:</b> APHA Online Edition 3125 B mod.               |
| NW519 <b>Potassium - Total:</b> APHA Online Edition 3125 B mod.                                                          | NW528 <b>Zinc - Total:</b> APHA Online Edition 3125 B mod.                 |
| ZM0VI <b>Escherichia coli E (Sludge) [NZ] &lt;3 &gt;1 100 /MPN/g (1-3)</b><br><b>LTB Broth-M:</b> US-EPA 1680 mod.       |                                                                            |

Signature



David Hoekendijk Team Lead KTP

### EXPLANATORY NOTE

- ① Test is not accredited
- ② Test is subcontracted within Eurofins group and is accredited
- ③ Test is subcontracted within Eurofins group and is not accredited
- ④ Test is subcontracted outside Eurofins group and is accredited
- ⑤ Test is subcontracted outside Eurofins group and is not accredited
- ⑥ Test result is provided by the customer and is not accredited
- ⑦ Tested at the sampling point by Eurofins and is not accredited
- ⑧ Tested at the sampling point by Eurofins and is accredited
- ⑨ Test is RLP accredited
- ⑩ Test is subcontracted within Eurofins group and is RLP accredited

N/A means Not Applicable

**Not Detected** means not detected at or above the Limit of Quantification (LOQ)

**LOQ** means Limit of Quantification and the unit of LOQ is the same as the result unit

✗ (Unsatisfactory) means does not meet the specification

✓ (Satisfactory) means meets the specification

## Food & Water Testing

The Customer acknowledges and accepts that: (a) where Eurofins is not responsible for sampling, the test result(s) in this report apply only to the sample as received. Customer is solely responsible for the sampling process and warrants that the sample provided to Eurofins is representative of the lot / batch from which the samples were drawn; and (b) Eurofins expresses no opinion and accepts no liability in respect of the Customer's production process or homogeneity of the product.

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The tests are identified by a five-digit code, their description is available on request.

Accreditation does not apply to comments or graphical representations.

Unless otherwise stated, all tests in this analytical report (except for subcontracted tests) are performed at 43 Detroit Drive, Rolleston, Christchurch, NEW ZEALAND.

The laboratory is not responsible for the information provided by the customer which can affect the validity of the results, for example: sampling information such as date/time, field data etc.

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### END OF REPORT