



Eurofins Chemtest Ltd Depot Road Newmarket CB8 0AL

Tel: 01638 606070 Email: info@chemtest.com

# **Final Report**

**Report No.:** 22-08246-1

Initial Date of Issue: 09-Mar-2022

Client Mayer Environmental Ltd

Client Address: Transport Avenue

Brentford TW8 9HA

Contact(s):

rebecca.beddard@mayer-enviro.com;

landquality@mayer-enviro.com; Sam.Smith@mayer-enviro.com;

reshma.prajapati@mayer-enviro.com;

carl.frow@mayer-enviro.com

**Project** 129-001728 EMR Northampton

Discharge March 2022

Quotation No.: Date Received: 04-Mar-2022

**Order No.:** 129003057 **Date Instructed:** 04-Mar-2022

No. of Samples: 2

Turnaround (Wkdays): 5 Results Due: 10-Mar-2022

**Date Approved:** 09-Mar-2022

Approved By:

**Details:** Stuart Henderson, Technical

Manager

## **Results - Water**

Project: 129-001728 EMR Northampton Discharge March 2022

| Client: Mayer Environmental Ltd |                    | Chemtest Job No.:   |                   |                                  |                    | 22-08246    |
|---------------------------------|--------------------|---------------------|-------------------|----------------------------------|--------------------|-------------|
| Quotation No.:                  |                    | C                   |                   | Sample ID.:                      | 1384766            | 1384767     |
| Order No.: 129003057            |                    | Client Sample Ref.: |                   |                                  | 1                  | 2           |
|                                 | Client Sample ID.: |                     | DOWNSTREA<br>M DP | DP                               |                    |             |
|                                 | Sample Location:   |                     |                   | Downstream<br>Discharge<br>Point | Discharge<br>Point |             |
|                                 |                    | Sample Type:        |                   |                                  | WATER              | WATER       |
|                                 |                    |                     | Dat               | e Sampled:                       | 02-Mar-2022        | 02-Mar-2022 |
|                                 |                    | Time Sampled:       |                   | e Sampled:                       | 12:00              | 12:00       |
| Determinand                     | Accred.            | SOP                 | Units             | LOD                              |                    |             |
| рН                              | U                  | 1010                |                   | N/A                              | 7.5                | 7.5         |
| Electrical Conductivity         | U                  | 1020                | μS/cm             | 1.0                              | 710                | 750         |
| Suspended Solids At 105C        | U                  | 1030                | mg/l              | 5.0                              | 46                 | 45          |
| Biochemical Oxygen Demand       | N                  | 1090                | mg O2/I           | 4.0                              | < 4.0              | < 4.0       |
| Chemical Oxygen Demand          | U                  | 1100                | mg O2/I           | 10                               | < 10               | 15          |
| Alkalinity (Total)              | U                  | 1220                | mg/l              | 10                               | 180                | 190         |
| Chloride                        | U                  | 1220                | mg/l              | 1.0                              | 110                | 110         |
| Ammonia (Free)                  | N                  | 1220                | mg/l              | 0.050                            | < 0.050            | < 0.050     |
| Ammoniacal Nitrogen             | U                  | 1220                | mg/l              | 0.050                            | 0.68               | 0.68        |
| Nitrate                         | U                  | 1220                | mg/l              | 0.50                             | 7.6                | 7.8         |
| Phosphate                       | U                  | 1220                | mg/l              | 0.200                            | < 0.20             | < 0.20      |
| Sulphate                        | U                  | 1220                | mg/l              | 1.0                              | 60                 | 61          |
| Cyanide (Total) Low-Level       | N                  | 1300                | mg/l              | 0.0050                           | < 0.0050           | < 0.0050    |
| Sulphide                        | U                  | 1325                | mg/l              | 0.050                            | < 0.050            | < 0.050     |
| Arsenic (Dissolved)             | U                  | 1455                | μg/l              | 0.20                             | 0.57               | 0.55        |
| Boron (Dissolved)               | U                  | 1455                | μg/l              | 10.0                             | 140                | 150         |
| Cadmium (Dissolved)             | U                  | 1455                | μg/l              | 0.11                             | < 0.11             | < 0.11      |
| Chromium (Dissolved)            | U                  | 1455                | μg/l              | 0.50                             | 0.99               | 5.7         |
| Copper (Dissolved)              | U                  | 1455                | μg/l              | 0.50                             | 5.1                | 4.1         |
| Iron (Dissolved)                | N                  | 1455                | μg/l              | 5.0                              | 37                 | 47          |
| Manganese (Dissolved)           | U                  | 1455                | μg/l              | 0.50                             | 48                 | 45          |
| Nickel (Dissolved)              | U                  | 1455                | μg/l              | 0.50                             | 2.1                | 2.2         |
| Lead (Dissolved)                | U                  | 1455                | μg/l              | 0.50                             | 0.60               | < 0.50      |
| Selenium (Dissolved)            | U                  | 1455                | μg/l              | 0.50                             | < 0.50             | < 0.50      |
| Zinc (Dissolved)                | U                  | 1455                | μg/l              | 2.5                              | 43                 | 34          |
| Arsenic (Total)                 | N                  | 1455                | μg/l              | 0.20                             | 0.54               | 0.59        |
| Boron (Total)                   | N                  | 1455                | μg/l              | 10.0                             | 140                | 150         |
| Cadmium (Total)                 | N                  | 1455                | μg/l              | 0.11                             | < 0.11             | < 0.11      |
| Chromium (Total)                | N                  | 1455                | μg/l              | 0.50                             | 0.92               | 5.7         |
| Copper (Total)                  | N                  | 1455                | μg/l              | 0.50                             | 5.0                | 4.1         |
| Iron (Total)                    | N                  | 1455                | μg/l              | 5.0                              | 36                 | 47          |
| Mercury (Total)                 | N                  | 1455                | μg/l              | 0.05                             | < 0.05             | < 0.05      |
| Manganese (Total)               | N                  | 1455                | μg/l              | 0.50                             | 48                 | 45          |
| Nickel (Total)                  | N                  | 1455                | μg/l              | 0.50                             | 2.1                | 2.2         |

# **Results - Water**

### Project: 129-001728 EMR Northampton Discharge March 2022

| Client: Mayer Environmental Ltd | Chemtest Job No.:    |      |       | 22-08246                         | 22-08246           |         |
|---------------------------------|----------------------|------|-------|----------------------------------|--------------------|---------|
| Quotation No.:                  | Chemtest Sample ID.: |      |       | 1384766                          | 1384767            |         |
| Order No.: 129003057            | Client Sample Ref.:  |      |       | 1                                | 2                  |         |
|                                 | Client Sample ID.:   |      |       | DOWNSTREA<br>M DP                | DP                 |         |
|                                 | Sample Location:     |      |       | Downstream<br>Discharge<br>Point | Discharge<br>Point |         |
|                                 | Sample Type:         |      |       | WATER                            | WATER              |         |
|                                 | Date Sampled:        |      |       | 02-Mar-2022                      | 02-Mar-2022        |         |
|                                 | Time Sampled:        |      | 12:00 | 12:00                            |                    |         |
| Determinand                     | Accred.              | SOP  | Units | LOD                              |                    |         |
| Lead (Total)                    | N                    | 1455 | μg/l  | 0.50                             | 0.64               | < 0.50  |
| Selenium (Total)                | N                    | 1455 | μg/l  | 0.50                             | < 0.50             | < 0.50  |
| Zinc (Total)                    | N                    | 1455 | μg/l  | 2.5                              | 43                 | 34      |
| Mercury Low Level               | U                    | 1460 | mg/l  | 0.000010                         | 0.00005            | 0.00003 |
| Total TPH >C10-C40              | U                    | 1670 | μg/l  | 10                               | < 10               | < 10    |
| Total Phenols                   | N                    | 1900 | μg/l  | 5.00                             | < 5.0              | < 5.0   |

## **Test Methods**

| SOP  | Title  | Parameters included  | Method summary   |  |
|------|--|--|--|--|
| 1010 | pH Value of Waters   | рН   | pH Meter   |  |
| 1020 | Electrical Conductivity and<br>Total Dissolved Solids (TDS) in<br>Waters | Electrical Conductivity and Total Dissolved Solids (TDS) in Waters   | Conductivity Meter   |  |
| 1030 | Total Suspended Solids   | Total suspended solids   | Filtration of a mixed sample through a standard glass fibre filter and determination of the mass of residue retained dried at 105°C. |  |
| 1090 | Biochemical Oxygen Demand  | Biochemical Oxygen demand (BOD)  | Colorimetric determination of dissolved oxygen in seeded sample after 5 days incubation at 20°C.                                     |  |
| 1100 | Chemical Oxygen Demand   | Chemical Oxygen demand (COD)   | Dichromate oxidation of organic matter in sample followed by colorimetric determination of residual Cr[VI].                          |  |
| 1220 | Anions, Alkalinity & Ammonium in Waters                                  | Fluoride; Chloride; Nitrite; Nitrate; Total;<br>Oxidisable Nitrogen (TON); Sulfate; Phosphate;<br>Alkalinity; Ammonium   | Automated colorimetric analysis using<br>'Aquakem 600' Discrete Analyser.  |  |
| 1300 | Cyanides & Thiocyanate in Waters   | Free (or easy liberatable) Cyanide; total<br>Cyanide; complex Cyanide; Thiocyanate   | Continuous Flow Analysis.  |  |
| 1325 | Sulphide in Waters   | Sulphides  | Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using N,N–dimethyl-phenylenediamine.                              |  |
| 1455 | Metals in Waters by ICP-MS   | Metals, including: Antimony; Arsenic; Barium;<br>Beryllium; Boron; Cadmium; Chromium; Cobalt;<br>Copper; Lead; Manganese; Mercury;<br>Molybdenum; Nickel; Selenium; Tin; Vanadium;<br>Zinc | Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).                     |  |
| 1460 | Mercury low-level in Waters by AFS                                       | Mercury  | Atomic Fluorescence Spectrometry, with collimated UV source, wavelength 253.7 nm.  |  |
| 1670 | Total Petroleum Hydrocarbons<br>(TPH) in Waters by GC-FID                | TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO  | Pentane extraction / GC FID detection  |  |
| 1900 | Phenols in Waters by GC-MS   | Approximately 24 substituted Phenols, including Chlorophenols  | Solvent extraction / GCMS detection  |  |

### **Report Information**

#### Key **UKAS** accredited MCERTS and UKAS accredited M Unaccredited Ν This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for S this analysis This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited SN for this analysis Т This analysis has been subcontracted to an unaccredited laboratory I/S Insufficient Sample U/S Unsuitable Sample N/E not evaluated < "less than" "greater than" > SOP Standard operating procedure LOD Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

#### **Sample Deviation Codes**

- A Date of sampling not supplied
- B Sample age exceeds stability time (sampling to extraction)
- C Sample not received in appropriate containers
- D Broken Container
- E Insufficient Sample (Applies to LOI in Trommel Fines Only)

#### Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to: customerservices@chemtest.com