22 Dalmore Drive Scoresby 3179
Tel. 03 8756 8183 Fax. 03 9763 1862

# ALGAL REPORT

| | |
|---|---|
| **CLIENT :** | ALS |
| **LABORATORY NO./BATCH NO. :** | 6643339 20-35580 |
| **LOCALITY :** | EM2012826_013 |
| **SITE :** | Mark Point |
| **SAMPLE :** | Surface |
| **DATE SAMPLED :** | 22/07/2020 |
| **DATE ANALYSED :** | 27/07/2020 |
| **SAMPLED BY :** | Sample analysed as received |

**COMMENTS: +** A highly diverse algal community was observed. Current levels of BGA may mildly impact water quality.

| | | | | | |
|---|---|---|---|---|---|
| **Sedgewick-Rafter Vol.(ml)** | 1.0274 | **Toxigenic (T) or Potentially toxic (P)** | | | **Total Cell Count (cells/mL)** |
| **Concentration** | 1 : 1 | | | | |
| **Magnification** | | | - 200x | - 100x | |
| **Fields** | | * | 20 | 500 | |
| ***BACILLARIOPHYCEAE*** | | | | | |
| *Centrales* | | | 1 | 0 | 49 |
| *Chaetoceros* | | | 5 | 0 | 243 |
| *Nitzschia* | | | 1 | 0 | 49 |
| *Pennales* | | | 1 | 0 | 49 |
| ***CHLOROPHYCEAE*** | | | | | |
| *Ankistrodesmus* | | | 8 | 0 | 389 |
| *Chlamydomonads* | | | 40 | 0 | 1947 |
| *Chlorococcoids* | | | 54 | 0 | 2628 |
| *Closterium* | | | 0 | 3 | 6 |
| *Crucigenia* | | | 28 | 0 | 1363 |
| *Dictyosphaerium* | | | 16 | 0 | 779 |
| *Elakatothrix* | | | 1 | 0 | 49 |
| *Filamentous Green* | | | 67 | 0 | 3261 |
| *Hyaloraphidium* | | | 24 | 0 | 1168 |
| *Lagerheimia* | | | 3 | 0 | 146 |
| *Nephrocytium* | | | 1 | 0 | 49 |
| *Oocystis* | | | 30 | 0 | 1460 |
| *Scenedesmus* | | | 0 | 6 | 12 |
| *Selenastrum* | | | 6 | 0 | 292 |
| *Staurastrum* | | | 0 | 1 | 2 |
| ***CHRYSOPHYCEAE*** | | | | | |
| *Other Chrysophyceae* | | | 2 | 0 | 97 |
| ***CRYPTOPHYCEAE*** | | | | | |
| *Cryptomonads* | | | 26 | 0 | 1265 |

ANALYST: ***Kirsten Mudie (signatory)*** REVIEWED: ***Adam Deliyiannis*** DATE: **28/07/2020**

**Biologist** **Biologist**

METHOD NO.: MB010

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| ***CYANOPHYCEAE*** | | | | | |
| *Aphanizomenonaceae family - straight* | | P | 0 | 25 | 49 |
| *Leptolyngbya* | | | 8 | 0 | 389 |
| *Limnolyngbya (Planktolyngbya circumcreta)* | | | 126 | 0 | 6132 |
| *Planktolyngbya* | | | 328 | 0 | 15963 |
| *Pseudanabaena* | | | 3 | 0 | 146 |
| *Synechococcales small (iauv <20)* | | | 1092 | 0 | 53144 |
| ***EUGLENOPHYCEAE*** | | | | | |
| *Eutreptia* | | | 2 | 0 | 97 |
| | | | | **TOTAL BGA** | **75823** |
| | | | | **TOTAL TOXIGENIC BGA** | **0** |
| | | | | **TOTAL POTENTIALLY TOXIC BGA** | **49** |
| | | | | **TOTAL ALGAE** | **91223** |

***+ The comments are discretionary and are for the purpose of helping to understand WQ implications.The comments are not accredited by NATA.***

***A Certificate of analysis will follow, linked by the above batch number. Independent algal reports are forwarded to clients expeditiously to facilitate operational decision making.***

**** P's and T's denote those cyanobacteria/blue-green algae (BGA) associated with toxin production in Australian waters. Overseas studies have shown other cyanobacteria to produce toxins. All contain lipopolysaccharides (LPS) in their cell wall and many have been found to produce β-N-methylamino-L-alanine (BMAA) and its analogues. Therefore all cyanobacteria could be considered to pose a level of risk.***

ANALYST: ***Kirsten Mudie (signatory)*** REVIEWED: ***Adam Deliyiannis*** DATE: **28/07/2020**

**Biologist** **Biologist**

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