



Analytical Report Number: 15-75496

Project / Site name: Moncton Phase I

|                                             |               |                       |                         |               |               |
|---------------------------------------------|---------------|-----------------------|-------------------------|---------------|---------------|
| Lab Sample Number                           | 466029        | 466030                | 466031                  | 466032        | 466033        |
| Sample Reference                            | TP101         | TP104                 | TP107                   | TP108         | TP109         |
| Sample Number                               | ES+D          | ES+D+B                | ES+D+B                  | ES+D+B        | ES+D          |
| Depth (m)                                   | 1.00          | 1.00                  | 0.50                    | 0.30          | 2.50          |
| Date Sampled                                | Deviating     | Deviating             | Deviating               | Deviating     | Deviating     |
| Time Taken                                  | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Leachate Analysis) | units         | Limit of<br>detection | Accreditation<br>Status |               |               |

#### Monoaromatics

|                                    |      |    |      |       |       |       |       |       |
|------------------------------------|------|----|------|-------|-------|-------|-------|-------|
| Benzene                            | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Toluene                            | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Ethylbenzene                       | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| p & m-xylene                       | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| o-xylene                           | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| MTBE (Methyl Tertiary Butyl Ether) | µg/l | 10 | NONE | < 10  | < 10  | < 10  | < 10  | < 10  |

#### Petroleum Hydrocarbons

|                                |      |    |      |      |      |      |      |      |
|--------------------------------|------|----|------|------|------|------|------|------|
| TPH-CWG - Aliphatic >C5 - C6   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C6 - C8   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C8 - C10  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C10 - C12 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C12 - C16 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C16 - C21 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C21 - C35 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic (C5 - C35) | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |

|                               |      |    |      |      |      |      |      |      |
|-------------------------------|------|----|------|------|------|------|------|------|
| TPH-CWG - Aromatic >C5 - C7   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C7 - C8   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C8 - C10  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C10 - C12 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C12 - C16 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C16 - C21 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C21 - C35 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic (C5 - C35) | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |



Analytical Report Number: 15-75496  
Project / Site name: Moncton Phase I

| Lab Sample Number                        |      |     |      | 466029        | 466030             | 466031               | 466032        | 466033        |
|------------------------------------------|------|-----|------|---------------|--------------------|----------------------|---------------|---------------|
| Sample Reference                         |      |     |      | TP101         | TP104              | TP107                | TP108         | TP109         |
| Sample Number                            |      |     |      | ES+D          | ES+D+B             | ES+D+B               | ES+D+B        | ES+D          |
| Depth (m)                                |      |     |      | 1.00          | 1.00               | 0.50                 | 0.30          | 2.50          |
| Date Sampled                             |      |     |      | Deviating     | Deviating          | Deviating            | Deviating     | Deviating     |
| Time Taken                               |      |     |      | None Supplied | None Supplied      | None Supplied        | None Supplied | None Supplied |
| Analytical Parameter (Leachate Analysis) |      |     |      | Units         | Limit of detection | Accreditation Status |               |               |
| VOCs                                     |      |     |      | µg/l          | 1                  | NONE                 | < 1.0         | < 1.0         |
| Chloromethane                            | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Chloroethane                             | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Bromomethane                             | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Vinyl Chloride                           | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| 1,1-dichloroethene                       | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| 1,1,2-Trichloro 1,2,2-Trifluoroethane    | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Cis-1,2-dichloroethene                   | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| MTBE (Methyl Tertiary Butyl Ether)       | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| 1,1-dichloroethane                       | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| 2,2-Dichloropropane                      | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Trichloromethane                         | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| 1,1,1-Trichloroethane                    | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| 1,2-dichloroethane                       | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| 1,1-Dichloropropene                      | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Trans-1,2-dichloroethene                 | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Benzene                                  | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Tetrachloromethane                       | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| 1,2-dichloropropane                      | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Trichloroethene                          | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Dibromomethane                           | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Bromodichloromethane                     | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Cis-1,3-dichloropropene                  | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Trans-1,3-dichloropropene                | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Toluene                                  | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| 1,1,2-Trichloroethane                    | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| 1,3-Dichloropropane                      | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Dibromochloromethane                     | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Tetrachloroethene                        | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| 1,2-Dibromoethane                        | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Chlorobenzene                            | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| 1,1,1,2-Tetrachloroethane                | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Ethylbenzene                             | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| p & m-xylene                             | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Styrene                                  | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Tribromomethane                          | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| o-xylene                                 | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| 1,1,2,2-Tetrachloroethane                | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Isopropylbenzene                         | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Bromobenzene                             | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| N-Propylbenzene                          | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| 2-Chlorotoluene                          | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| 4-Chlorotoluene                          | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| 1,3,5-Trimethylbenzene                   | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Tert-Butylbenzene                        | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| 1,2,4-Trimethylbenzene                   | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Sec-Butylbenzene                         | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| 1,3-dichlorobenzene                      | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| p-Isopropyltoluene                       | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| 1,2-dichlorobenzene                      | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| 1,4-dichlorobenzene                      | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Butylbenzene                             | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| 1,2-Dibromo-3-chloropropane              | µg/l | 1   | NONE | < 1.0         | < 0.1              | < 0.1                | < 0.1         | < 0.1         |
| 1,2,4-Trichlorobenzene                   | µg/l | 0.1 | NONE | < 0.1         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| Hexachlorobutadiene                      | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |
| 1,2,3-Trichlorobenzene                   | µg/l | 1   | NONE | < 1.0         | < 1.0              | < 1.0                | < 1.0         | < 1.0         |



Analytical Report Number: 15-75496

Project / Site name: Moncton Phase I

|                                             |               |                       |                         |               |               |
|---------------------------------------------|---------------|-----------------------|-------------------------|---------------|---------------|
| Lab Sample Number                           | 466029        | 466030                | 466031                  | 466032        | 466033        |
| Sample Reference                            | TP101         | TP104                 | TP107                   | TP108         | TP109         |
| Sample Number                               | ES+D          | ES+D+B                | ES+D+B                  | ES+D+B        | ES+D          |
| Depth (m)                                   | 1.00          | 1.00                  | 0.50                    | 0.30          | 2.50          |
| Date Sampled                                | Deviating     | Deviating             | Deviating               | Deviating     | Deviating     |
| Time Taken                                  | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Leachate Analysis) | Units         | Limit of<br>detection | Accreditation<br>Status |               |               |

#### SVOCs

|                             |      |      |      |        |        |        |        |        |
|-----------------------------|------|------|------|--------|--------|--------|--------|--------|
| Aniline                     | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Phenol                      | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2-Chlorophenol              | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Bis(2-chloroethyl)ether     | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 1,3-Dichlorobenzene         | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 1,2-Dichlorobenzene         | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 1,4-Dichlorobenzene         | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Bis(2-chloroisopropyl)ether | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2-Methylphenol              | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Hexachloroethane            | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Nitrobenzene                | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 4-Methylphenol              | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Isophorone                  | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2-Nitrophenol               | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2,4-Dimethylphenol          | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Bis(2-chloroethoxy)methane  | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 1,2,4-Trichlorobenzene      | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Naphthalene                 | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| 2,4-Dichlorophenol          | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 4-Chloroaniline             | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Hexachlorobutadiene         | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 4-Chloro-3-methylphenol     | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2,4,6-Trichlorophenol       | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2,4,5-Trichlorophenol       | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2-Methylnaphthalene         | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2-Chloronaphthalene         | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Dimethylphthalate           | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2,6-Dinitrotoluene          | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Acenaphthylene              | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Acenaphthene                | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| 2,4-Dinitrotoluene          | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Dibenzofuran                | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 4-Chlorophenyl phenyl ether | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Diethyl phthalate           | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 4-Nitroaniline              | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Fluorene                    | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Azobenzene                  | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Bromophenyl phenyl ether    | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Hexachlorobenzene           | µg/l | 0.02 | NONE | < 0.02 | < 0.02 | < 0.02 | < 0.02 | < 0.02 |
| Phenanthrene                | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Anthracene                  | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Carbazole                   | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Dibutyl phthalate           | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Anthraquinone               | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Fluoranthene                | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Pyrene                      | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Butyl benzyl phthalate      | µg/l | 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Benzo(a)anthracene          | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Chrysene                    | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(b)fluoranthene        | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(k)fluoranthene        | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(a)pyrene              | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Indeno(1,2,3-cd)pyrene      | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Dibenz(a,h)anthracene       | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(ghi)perylene          | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |

Analytical Report Number : 15-75496

Project / Site name: Moncton Phase I

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

| Lab Sample Number | Sample Reference | Sample Number | Depth (m) | Sample Description *                    |
|-------------------|------------------|---------------|-----------|-----------------------------------------|
| 466017            | TP101            | ES+D          | 1.00      | Brown loam and sand.                    |
| 466018            | TP103            | ES+D+B        | 1.00      | Black loam and sand with gravel.        |
| 466019            | TP104            | ES+D+B        | 1.00      | Black loam and sand with gravel.        |
| 466020            | TP105            | ES+D          | 1.50      | Grey clay and sand.                     |
| 466021            | TP106            | ES+D+B        | 1.00      | Brown clay and sand.                    |
| 466022            | TP106            | ES+D+B        | 1.50      | Light brown clay and sand.              |
| 466023            | TP107            | ES+D+B        | 0.50      | Brown sandy loam with gravel.           |
| 466024            | TP108            | ES+D+B        | 0.30      | Brown sandy loam with gravel and brick. |
| 466025            | TP109            | ES+D          | 2.50      | Grey gravelly clay.                     |
| 466026            | TP109            | ES+D          | 3.50      | Light brown clay and sand.              |
| 466027            | WS7              | D             | 2.00      | Light brown clay and sand.              |
| 466028            | WS9              | ES+D          | 3.00      | Light brown clay and sand.              |

Analytical Report Number : 15-75496

Project / Site name: Moncton Phase I

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

| Analytical Test Name                        | Analytical Method Description                                                                                           | Analytical Method Reference                                                                            | Method number | Wet / Dry Analysis | Accreditation Status |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------|--------------------|----------------------|
| Ammonium as NH <sub>4</sub> in soil         | Determination of Ammonium/Ammonia/Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method.              | In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton | L082-PL       | W                  | MCERTS               |
| Asbestos Identification in soil             | Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.   | In house method based on HSG 248                                                                       | A001-PL       | D                  | ISO 17025            |
| Boron in leachate                           | Determination of boron by acidification followed by ICP-OES.                                                            | In-house method based on MEWAM                                                                         | L039-PL       | W                  | ISO 17025            |
| Boron, water soluble, in soil               | Determination of water soluble boron in soil by hot water extract followed by ICP-OES.                                  | In-house method based on Second Site Properties version 3                                              | L038-PL       | D                  | MCERTS               |
| BTEX and MTBE in leachates                  | Determination of BTEX and MTBE in leachates by headspace GC-MS.                                                         | In-house method based on USEPA8260                                                                     | L073W-PL      | W                  | NONE                 |
| BTEX and MTBE in soil                       | Determination of BTEX in soil by headspace GC-MS.                                                                       | In-house method based on USEPA8260                                                                     | L073S-PL      | W                  | MCERTS               |
| Calorific Value of soil                     | Subcontracted.                                                                                                          | Subcontracted analysis                                                                                 |               | W                  | NONE                 |
| Chloride, water soluble, in soil            | Determination of Chloride colorimetrically by discrete analyser.                                                        | In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests. 2:1 extraction.      | L082-PL       | D                  | MCERTS               |
| Magnesium, water soluble, in soil           | Determination of water soluble magnesium by extraction with water followed by ICP-OES.                                  | In-house method based on TRL 447                                                                       | L038-PL       | D                  | NONE                 |
| Metals by ICP-OES in leachate               | Determination of metals in leachate by acidification followed by ICP-OES.                                               | In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.                   | L039-PL       | W                  | ISO 17025            |
| Metals in soil by ICP-OES                   | Determination of metals in soil by aqua-regia digestion followed by ICP-OES.                                            | In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.                   | L038-PL       | D                  | MCERTS               |
| Moisture Content                            | Moisture content, determined gravimetrically.                                                                           | In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests                       | L019-UK/PL    | W                  | NONE                 |
| pH in soil (automated)                      | Determination of pH in soil by addition of water followed by electrometric measurement.                                 | In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests                       | L099-PL       | D                  | MCERTS               |
| Phenols, speciated, in leachate, by GCMS    | Determination of speciated phenols in leachate by extraction in hexane followed by GC-MS.                               | In-house method based on USEPA 8270                                                                    | L070-PL       | W                  | NONE                 |
| Phenols, speciated, in soil, by GCMS        | Determination of speciated phenols in soil by extraction in dichloromethane and hexane followed by GC-MS.               | In-house method based on USEPA 8270                                                                    | L064-PL       | D                  | NONE                 |
| Semi-volatile organic compounds in leachate | Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.        | In-house method based on USEPA 8270                                                                    | L070-PL       | W                  | NONE                 |
| Semi-volatile organic compounds in soil     | Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS. | In-house method based on USEPA 8270                                                                    | L064-PL       | D                  | MCERTS               |

Analytical Report Number : 15-75496

Project / Site name: Moncton Phase I

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

| Analytical Test Name                        | Analytical Method Description                                                                                                                             | Analytical Method Reference                                                                                                       | Method number | Wet / Dry Analysis | Accreditation Status |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|---------------|--------------------|----------------------|
| Speciated EPA-16 PAHs in leachate           | Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.           | In-house method based on USEPA 8270                                                                                               | L070-PL       | W                  | NONE                 |
| Speciated EPA-16 PAHs in soil               | Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.    | In-house method based on USEPA 8270                                                                                               | L064-PL       | D                  | MCERTS               |
| Stones content of soil                      | Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.                               | In-house method based on British Standard Methods and MCERTS requirements.                                                        | L019-UK/PL    | D                  | NONE                 |
| Sulphate, water soluble, in soil            | Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent). | In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests, 2:1 water:soil extraction, analysis by ICP-OES. | L038-PL       | D                  | MCERTS               |
| Total sulphate (as SO <sub>4</sub> in soil) | Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.                                                                   | In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests                                                  | L038-PL       | D                  | MCERTS               |
| Total Sulphur in soil                       | Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.                                      | In-house method based on BS1377 Part 3, 1990, and MEWAM 2006 Methods for the Determination of Metals in Soil                      | L038-PL       | D                  | NONE                 |
| TPHCWG (Leachates)                          | Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.                                                                           | In-house method                                                                                                                   | L070-PL       | W                  | NONE                 |
| TPHCWG (Soil)                               | Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.                                                                                 | In-house method                                                                                                                   | L076-PL       | W                  | MCERTS               |
| Volatile organic compounds in leachate      |                                                                                                                                                           | In-house method based on USEPA8260                                                                                                | L036-UK       | W                  | NONE                 |
| Volatile organic compounds in soil          | Determination of volatile organic compounds in soil by headspace GC-MS.                                                                                   | In-house method based on USEPA8260                                                                                                | L073S-PL      | W                  | MCERTS               |
| Water Soluble Nitrate (2:1) as N in soil    | Determination of nitrate by reaction with sodium salicylate and colorimetry.                                                                              | In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08, 2:1 extraction.           | L078-PL       | D                  | NONE                 |

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30°C.



**Ian Calloway**  
Van Elle  
Kirgby Lane  
Pinxton  
Notts  
NG16 6JA

t: 01773 580 580

e: [ian.calloway@van-elle.co.uk](mailto:ian.calloway@van-elle.co.uk)



Environmental Science

i2 Analytical Ltd.  
7 Woodshots Meadow,  
Croxley Green  
Business Park,  
Watford,  
Herts,  
WD18 8YS

t: 01923 225404

f: 01923 237404

e: [reception@i2analytical.com](mailto:reception@i2analytical.com)

## **Analytical Report Number : 15-77254**

**Project / Site name:** Moncton

**Samples received on:** 17/08/2015

**Your job number:** G151311

**Samples instructed on:** 17/08/2015

**Your order number:**

**Analysis completed by:** 27/08/2015

**Report Issue Number:** 1

**Report issued on:** 27/08/2015

**Samples Analysed:** 10 water samples

**Signed:** \_\_\_\_\_

Rexona Rahman  
Reporting Manager  
**For & on behalf of i2 Analytical Ltd.**

**Signed:** \_\_\_\_\_

Emma Winter  
Assistant Reporting Manager  
**For & on behalf of i2 Analytical Ltd.**

Other office located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting  
leachates - 2 weeks from reporting  
waters - 2 weeks from reporting  
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.



Analytical Report Number: 15-77254

Project / Site name: Moncton

|                                          |               |                       |                         |               |               |
|------------------------------------------|---------------|-----------------------|-------------------------|---------------|---------------|
| Lab Sample Number                        | 476511        | 476512                | 476513                  | 476514        | 476515        |
| Sample Reference                         | RBH1D         | RBH2A                 | RBH3A                   | RBH4A         | RBH5          |
| Sample Number                            | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Depth (m)                                | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Date Sampled                             | 14/08/2015    | 14/08/2015            | 14/08/2015              | 14/08/2015    | 14/08/2015    |
| Time Taken                               | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Water Analysis) | Units         | Limit of<br>detection | Accreditation<br>Status |               |               |

#### General Inorganics

|                             |                        |     |           |         |        |        |        |        |
|-----------------------------|------------------------|-----|-----------|---------|--------|--------|--------|--------|
| pH                          | pH Units               | N/A | ISO 17025 | 6.9     | 6.7    | 6.9    | 7.6    | 6.6    |
| Electrical Conductivity     | µS/cm                  | 10  | NONE      | 4600    | 2200   | 2200   | 2700   | 2000   |
| Total Cyanide               | µg/l                   | 10  | ISO 17025 | 110     | < 10   | < 10   | 73     | 23     |
| Complex Cyanide             | µg/l                   | 10  | NONE      | 110     | < 10   | < 10   | 73     | 23     |
| Free Cyanide                | µg/l                   | 10  | ISO 17025 | < 10    | < 10   | < 10   | < 10   | < 10   |
| Sulphate as SO <sub>4</sub> | µg/l                   | 45  | ISO 17025 | 1190000 | 661000 | 392000 | 614000 | 555000 |
| Ammonia as NH <sub>3</sub>  | µg/l                   | 15  | ISO 17025 | 140000  | 5800   | 73     | 170000 | 14000  |
| Hardness - Total            | mgCaCO <sub>3</sub> /l | 1   | ISO 17025 | 1020    | 791    | 581    | 365    | 662    |

#### Total Phenols

|                            |      |    |           |      |      |      |     |      |
|----------------------------|------|----|-----------|------|------|------|-----|------|
| Total Phenols (monohydric) | µg/l | 10 | ISO 17025 | < 10 | < 10 | < 10 | 370 | < 10 |
|----------------------------|------|----|-----------|------|------|------|-----|------|

#### Speciated PAHs

|                        |      |      |           |        |        |        |        |        |
|------------------------|------|------|-----------|--------|--------|--------|--------|--------|
| Naphthalene            | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Acenaphthylene         | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | 1.2    | < 0.01 |
| Acenaphthene           | µg/l | 0.01 | ISO 17025 | 35     | < 0.01 | < 0.01 | 3.6    | < 0.01 |
| Fluorene               | µg/l | 0.01 | ISO 17025 | 5.3    | < 0.01 | < 0.01 | 0.68   | < 0.01 |
| Phenanthrene           | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Anthracene             | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Fluoranthene           | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Pyrene                 | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(a)anthracene     | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Chrysene               | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(b)fluoranthene   | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(k)fluoranthene   | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(a)pyrene         | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Indeno(1,2,3-cd)pyrene | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Dibenz(a,h)anthracene  | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(ghi)perylene     | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |

#### Total PAH

|                   |      |     |           |      |        |        |      |        |
|-------------------|------|-----|-----------|------|--------|--------|------|--------|
| Total EPA-16 PAHs | µg/l | 0.2 | ISO 17025 | 40.6 | < 0.20 | < 0.20 | 5.46 | < 0.20 |
|-------------------|------|-----|-----------|------|--------|--------|------|--------|



Environmental Science

Analytical Report Number: 15-77254

Project / Site name: Moncton

| Lab Sample Number                        | 476511        | 476512                | 476513                  | 476514        | 476515        |
|------------------------------------------|---------------|-----------------------|-------------------------|---------------|---------------|
| Sample Reference                         | RBH1D         | RBH2A                 | RBH3A                   | RBH4A         | RBH5          |
| Sample Number                            | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Depth (m)                                | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Date Sampled                             | 14/08/2015    | 14/08/2015            | 14/08/2015              | 14/08/2015    | 14/08/2015    |
| Time Taken                               | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Water Analysis) | Units         | Limit of<br>detection | Accreditation<br>Status |               |               |

**Heavy Metals / Metalloids**

|                      |      |      |           |        |        |        |        |        |
|----------------------|------|------|-----------|--------|--------|--------|--------|--------|
| Arsenic (dissolved)  | µg/l | 0.15 | ISO 17025 | 0.65   | 0.61   | 0.20   | 12.6   | 0.19   |
| Boron (dissolved)    | µg/l | 10   | ISO 17025 | 200    | 110    | 160    | 230    | 82     |
| Cadmium (dissolved)  | µg/l | 0.02 | ISO 17025 | 0.06   | 0.16   | 0.11   | < 0.02 | 0.15   |
| Chromium (dissolved) | µg/l | 0.2  | ISO 17025 | 0.9    | 0.6    | 0.7    | 1.0    | 0.6    |
| Copper (dissolved)   | µg/l | 0.5  | ISO 17025 | 4.0    | 4.8    | 5.7    | 3.5    | 2.1    |
| Lead (dissolved)     | µg/l | 0.2  | ISO 17025 | 0.3    | 0.3    | 0.3    | 0.2    | < 0.2  |
| Mercury (dissolved)  | µg/l | 0.05 | ISO 17025 | < 0.05 | < 0.05 | < 0.05 | 0.05   | < 0.05 |
| Nickel (dissolved)   | µg/l | 0.5  | ISO 17025 | 9.6    | 25     | 11     | 3.2    | 2.2    |
| Selenium (dissolved) | µg/l | 0.6  | ISO 17025 | 23     | 5.8    | 5.5    | 7.6    | 8.2    |
| Zinc (dissolved)     | µg/l | 0.5  | ISO 17025 | 16     | 37     | 36     | 3.9    | 13     |

|                       |      |       |           |     |     |     |    |     |
|-----------------------|------|-------|-----------|-----|-----|-----|----|-----|
| Calcium (dissolved)   | mg/l | 0.012 | ISO 17025 | 210 | 140 | 140 | 85 | 98  |
| Magnesium (dissolved) | mg/l | 0.005 | ISO 17025 | 120 | 110 | 53  | 37 | 100 |

**Monoaromatics**

|                                    |      |   |           |       |       |       |       |       |
|------------------------------------|------|---|-----------|-------|-------|-------|-------|-------|
| Benzene                            | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | 171   | < 1.0 |
| Toluene                            | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | 9.3   | < 1.0 |
| Ethylbenzene                       | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | 2.1   | < 1.0 |
| p & m-xylene                       | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | 4.2   | < 1.0 |
| o-xylene                           | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | 3.3   | < 1.0 |
| MTBE (Methyl Tertiary Butyl Ether) | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |

**Petroleum Hydrocarbons**

|                                |      |    |      |      |      |      |      |      |
|--------------------------------|------|----|------|------|------|------|------|------|
| TPH-CWG - Aliphatic >C5 - C6   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C6 - C8   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C8 - C10  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C10 - C12 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C12 - C16 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C16 - C21 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C21 - C35 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C35 - C44 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic (C5 - C35) | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic (C5 - C44) | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |

|                               |      |    |      |      |      |      |      |      |
|-------------------------------|------|----|------|------|------|------|------|------|
| TPH-CWG - Aromatic >C5 - C7   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | 170  | < 10 |
| TPH-CWG - Aromatic >C7 - C8   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C8 - C10  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C10 - C12 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C12 - C16 | µg/l | 10 | NONE | 41   | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C16 - C21 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C21 - C35 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C35 - C44 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic (C5 - C35) | µg/l | 10 | NONE | 41   | < 10 | < 10 | 170  | < 10 |
| TPH-CWG - Aromatic (C5 - C44) | µg/l | 10 | NONE | 41   | < 10 | < 10 | 170  | < 10 |

Iss No 15-77254-1



Environmental Science

Analytical Report Number: 15-77254

Project / Site name: Moncton

| Lab Sample Number                        |       |                       |                         | 476511        | 476512        | 476513        | 476514        | 476515        |
|------------------------------------------|-------|-----------------------|-------------------------|---------------|---------------|---------------|---------------|---------------|
| Sample Reference                         |       |                       |                         | RBH1D         | RBH2A         | RBH3A         | RBH4A         | RBH5          |
| Sample Number                            |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Depth (m)                                |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Date Sampled                             |       |                       |                         | 14/08/2015    | 14/08/2015    | 14/08/2015    | 14/08/2015    | 14/08/2015    |
| Time Taken                               |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Analytical Parameter<br>(Water Analysis) | Units | Limit of<br>detection | Accreditation<br>Status |               |               |               |               |               |
| <b>VOCs</b>                              |       |                       |                         |               |               |               |               |               |
| Chloromethane                            | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Chloroethane                             | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Bromomethane                             | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Vinyl Chloride                           | µg/l  | 1                     | NONE                    | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Trichlorofluoromethane                   | µg/l  | 1                     | NONE                    | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,1-Dichloroethene                       | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,1,2-Trichloro-1,2,2-trifluoroethane    | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Cis-1,2-dichloroethene                   | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| MTBE (Methyl Tertiary Butyl Ether)       | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,1-Dichloroethane                       | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 2,2-Dichloropropane                      | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Trichloromethane                         | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,1,1-Trichloroethane                    | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,2-Dichloroethane                       | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,1-Dichloropropene                      | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Trans-1,2-dichloroethene                 | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Benzene                                  | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | 171           | < 1.0         |
| Tetrachloromethane                       | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,2-Dichloropropane                      | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Trichloroethene                          | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Dibromomethane                           | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Bromodichloromethane                     | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Cis-1,3-dichloropropene                  | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Trans-1,3-dichloropropene                | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Toluene                                  | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | 9.3           | < 1.0         |
| 1,1,2-Trichloroethane                    | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,3-Dichloropropane                      | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Dibromochloromethane                     | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Tetrachloroethene                        | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,2-Dibromoethane                        | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Chlorobenzene                            | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,1,1,2-Tetrachloroethane                | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Ethylbenzene                             | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | 2.1           | < 1.0         |
| p & m-Xylene                             | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | 4.2           | < 1.0         |
| Styrene                                  | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Tribromomethane                          | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| o-Xylene                                 | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | 3.3           | < 1.0         |
| 1,1,2,2-Tetrachloroethane                | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Isopropylbenzene                         | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Bromobenzene                             | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| n-Propylbenzene                          | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 2-Chlorotoluene                          | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 4-Chlorotoluene                          | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,3,5-Trimethylbenzene                   | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| tert-Butylbenzene                        | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,2,4-Trimethylbenzene                   | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| sec-Butylbenzene                         | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,3-Dichlorobenzene                      | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| p-Isopropyltoluene                       | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,2-Dichlorobenzene                      | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,4-Dichlorobenzene                      | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Butylbenzene                             | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,2-Dibromo-3-chloropropane              | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,2,4-Trichlorobenzene                   | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Hexachlorobutadiene                      | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,2,3-Trichlorobenzene                   | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |



Environmental Science

Analytical Report Number: 15-77254

Project / Site name: Moncton

| Lab Sample Number                        |       |                       |                         | 476511        | 476512        | 476513        | 476514        | 476515        |
|------------------------------------------|-------|-----------------------|-------------------------|---------------|---------------|---------------|---------------|---------------|
| Sample Reference                         |       |                       |                         | RBH1D         | RBH2A         | RBH3A         | RBH4A         | RBH5          |
| Sample Number                            |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Depth (m)                                |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Date Sampled                             |       |                       |                         | 14/08/2015    | 14/08/2015    | 14/08/2015    | 14/08/2015    | 14/08/2015    |
| Time Taken                               |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Analytical Parameter<br>(Water Analysis) | Units | Limit of<br>detection | Accreditation<br>Status |               |               |               |               |               |

#### SVOCs

|                             |      |      |           |        |        |        |        |        |
|-----------------------------|------|------|-----------|--------|--------|--------|--------|--------|
| Aniline                     | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Phenol                      | µg/l | 0.05 | NONE      | 1.8    | < 0.05 | < 0.05 | 1.3    | < 0.05 |
| 2-Chlorophenol              | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Bis(2-chloroethyl)ether     | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 1,3-Dichlorobenzene         | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 1,2-Dichlorobenzene         | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 1,4-Dichlorobenzene         | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Bis(2-chloroisopropyl)ether | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2-Methylphenol              | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | 67     | < 0.05 |
| Hexachloroethane            | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Nitrobenzene                | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 4-Methylphenol              | µg/l | 0.05 | NONE      | 6.6    | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Isophorone                  | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2-Nitrophenol               | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2,4-Dimethylphenol          | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | 160    | < 0.05 |
| Bis(2-chloroethoxy)methane  | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 1,2,4-Trichlorobenzene      | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Naphthalene                 | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| 2,4-Dichlorophenol          | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 4-Chloroaniline             | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Hexachlorobutadiene         | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 4-Chloro-3-methylphenol     | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2,4,6-Trichlorophenol       | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2,4,5-Trichlorophenol       | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2-Methylnaphthalene         | µg/l | 0.05 | NONE      | 1.8    | < 0.05 | < 0.05 | 7.2    | < 0.05 |
| 2-Chloronaphthalene         | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Dimethylphthalate           | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2,6-Dinitrotoluene          | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Acenaphthylene              | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | 1.2    | < 0.01 |
| Acenaphthene                | µg/l | 0.01 | ISO 17025 | 35     | < 0.01 | < 0.01 | 3.6    | < 0.01 |
| 2,4-Dinitrotoluene          | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Dibenzofuran                | µg/l | 0.05 | NONE      | 2.5    | < 0.05 | < 0.05 | 1.0    | < 0.05 |
| 4-Chlorophenyl phenyl ether | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Diethyl phthalate           | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 4-Nitroaniline              | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Fluorene                    | µg/l | 0.01 | ISO 17025 | 5.3    | < 0.01 | < 0.01 | 0.68   | < 0.01 |
| Azobenzene                  | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Bromophenyl phenyl ether    | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Hexachlorobenzene           | µg/l | 0.02 | NONE      | < 0.02 | < 0.02 | < 0.02 | < 0.02 | < 0.02 |
| Phenanthrene                | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Anthracene                  | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Carbazole                   | µg/l | 0.05 | NONE      | 3.5    | < 0.05 | < 0.05 | 2.7    | < 0.05 |
| Dibutyl phthalate           | µg/l | 0.05 | NONE      | 0.24   | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Anthraquinone               | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Fluoranthene                | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Pyrene                      | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Butyl benzyl phthalate      | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Benzo(a)anthracene          | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Chrysene                    | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(b)fluoranthene        | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(k)fluoranthene        | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(a)pyrene              | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Indeno(1,2,3-cd)pyrene      | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Dibenz(a,h)anthracene       | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(ghi)perylene          | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |

U/S = Unsuitable Sample I/S = Insufficient Sample

Iss No 15-77254-1

This certificate should not be reproduced, except in full, without the express permission of the laboratory.  
The results included within the report are representative of the samples submitted for analysis.

Page 5 of 11



Environmental Science

Analytical Report Number: 15-77254

Project / Site name: Moncton

|                                          |               |                       |                         |               |               |
|------------------------------------------|---------------|-----------------------|-------------------------|---------------|---------------|
| Lab Sample Number                        | 476516        | 476517                | 476518                  | 476519        | 476520        |
| Sample Reference                         | BH301         | BH302                 | BH303                   | BH304         | BH305         |
| Sample Number                            | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Depth (m)                                | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Date Sampled                             | 14/08/2015    | 14/08/2015            | 14/08/2015              | 14/08/2015    | 14/08/2015    |
| Time Taken                               | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Water Analysis) | Units         | Limit of<br>detection | Accreditation<br>Status |               |               |

#### General Inorganics

|                             |                        |     |           |        |        |        |        |        |
|-----------------------------|------------------------|-----|-----------|--------|--------|--------|--------|--------|
| pH                          | pH Units               | N/A | ISO 17025 | 6.9    | 7.0    | 6.6    | 6.9    | 6.7    |
| Electrical Conductivity     | µS/cm                  | 10  | NONE      | 2400   | 1700   | 2700   | 2400   | 3000   |
| Total Cyanide               | µg/l                   | 10  | ISO 17025 | < 10   | < 10   | 42     | 490    | 13     |
| Complex Cyanide             | µg/l                   | 10  | NONE      | < 10   | < 10   | 42     | 460    | 13     |
| Free Cyanide                | µg/l                   | 10  | ISO 17025 | < 10   | < 10   | < 10   | 27     | < 10   |
| Sulphate as SO <sub>4</sub> | µg/l                   | 45  | ISO 17025 | 336000 | 431000 | 686000 | 701000 | 368000 |
| Ammonia as NH <sub>3</sub>  | µg/l                   | 15  | ISO 17025 | 210    | 1700   | 24000  | 17000  | 9100   |
| Hardness - Total            | mgCaCO <sub>3</sub> /l | 1   | ISO 17025 | 605    | 589    | 592    | 856    | 766    |

#### Total Phenols

|                            |      |    |           |      |      |      |      |      |
|----------------------------|------|----|-----------|------|------|------|------|------|
| Total Phenols (monohydric) | µg/l | 10 | ISO 17025 | < 10 | < 10 | < 10 | < 10 | < 10 |
|----------------------------|------|----|-----------|------|------|------|------|------|

#### Speciated PAHs

|                        |      |      |           |        |        |        |        |        |
|------------------------|------|------|-----------|--------|--------|--------|--------|--------|
| Naphthalene            | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | 41     |
| Acenaphthylene         | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | 1.6    |
| Acenaphthene           | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | 78     |
| Fluorene               | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | 20     |
| Phenanthrene           | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | 2.3    |
| Anthracene             | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | 0.59   |
| Fluoranthene           | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Pyrene                 | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(a)anthracene     | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Chrysene               | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(b)fluoranthene   | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(k)fluoranthene   | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(a)pyrene         | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Indeno(1,2,3-cd)pyrene | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Dibenz(a,h)anthracene  | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(ghi)perylene     | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |

#### Total PAH

|                   |      |     |           |        |        |        |        |     |
|-------------------|------|-----|-----------|--------|--------|--------|--------|-----|
| Total EPA-16 PAHs | µg/l | 0.2 | ISO 17025 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 144 |
|-------------------|------|-----|-----------|--------|--------|--------|--------|-----|



Environmental Science

Analytical Report Number: 15-77254

Project / Site name: Moncton

|                                          |               |                       |                         |               |               |
|------------------------------------------|---------------|-----------------------|-------------------------|---------------|---------------|
| Lab Sample Number                        | 476516        | 476517                | 476518                  | 476519        | 476520        |
| Sample Reference                         | BH301         | BH302                 | BH303                   | BH304         | BH305         |
| Sample Number                            | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Depth (m)                                | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Date Sampled                             | 14/08/2015    | 14/08/2015            | 14/08/2015              | 14/08/2015    | 14/08/2015    |
| Time Taken                               | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Water Analysis) | Units         | Limit of<br>detection | Accreditation<br>Status |               |               |

#### Heavy Metals / Metalloids

|                      |      |      |           |        |        |        |       |       |
|----------------------|------|------|-----------|--------|--------|--------|-------|-------|
| Arsenic (dissolved)  | µg/l | 0.15 | ISO 17025 | 0.81   | 0.52   | 0.28   | 0.77  | 0.30  |
| Boron (dissolved)    | µg/l | 1.0  | ISO 17025 | 100    | 92     | 260    | 310   | 74    |
| Cadmium (dissolved)  | µg/l | 0.02 | ISO 17025 | 0.14   | 0.35   | 0.06   | 0.42  | 0.03  |
| Chromium (dissolved) | µg/l | 0.2  | ISO 17025 | 0.3    | 0.6    | 0.8    | 0.7   | 0.7   |
| Copper (dissolved)   | µg/l | 0.5  | ISO 17025 | 2.1    | 4.3    | 5.1    | 4.0   | 2.7   |
| Lead (dissolved)     | µg/l | 0.2  | ISO 17025 | 0.2    | 0.3    | 0.3    | < 0.2 | < 0.2 |
| Mercury (dissolved)  | µg/l | 0.05 | ISO 17025 | < 0.05 | < 0.05 | < 0.05 | 0.08  | 0.08  |
| Nickel (dissolved)   | µg/l | 0.5  | ISO 17025 | 22     | 37     | 28     | 9.9   | 2.8   |
| Selenium (dissolved) | µg/l | 0.6  | ISO 17025 | 3.3    | 2.7    | 16     | 5.8   | 11    |
| Zinc (dissolved)     | µg/l | 0.5  | ISO 17025 | 6.0    | 8.5    | 36     | 13    | 15    |

|                       |      |       |           |     |     |     |     |     |
|-----------------------|------|-------|-----------|-----|-----|-----|-----|-----|
| Calcium (dissolved)   | mg/l | 0.012 | ISO 17025 | 140 | 120 | 140 | 270 | 150 |
| Magnesium (dissolved) | mg/l | 0.005 | ISO 17025 | 61  | 72  | 61  | 46  | 95  |

#### Monoaromatics

|                                    |      |   |           |       |       |       |       |       |
|------------------------------------|------|---|-----------|-------|-------|-------|-------|-------|
| Benzene                            | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Toluene                            | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Ethylbenzene                       | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| p & m-xylene                       | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| o-xylene                           | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| MTBE (Methyl Tertiary Butyl Ether) | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |

#### Petroleum Hydrocarbons

|                                |      |    |      |      |      |      |      |      |
|--------------------------------|------|----|------|------|------|------|------|------|
| TPH-CWG - Aliphatic >C5 - C6   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C6 - C8   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C8 - C10  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C10 - C12 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C12 - C16 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C16 - C21 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C21 - C35 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C35 - C44 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic (C5 - C35) | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic (C5 - C44) | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |

|                               |      |    |      |      |      |      |      |      |
|-------------------------------|------|----|------|------|------|------|------|------|
| TPH-CWG - Aromatic >C5 - C7   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C7 - C8   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C8 - C10  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C10 - C12 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | 110  |
| TPH-CWG - Aromatic >C12 - C16 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | 610  |
| TPH-CWG - Aromatic >C16 - C21 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | 740  |
| TPH-CWG - Aromatic >C21 - C35 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C35 - C44 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic (C5 - C35) | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | 1500 |
| TPH-CWG - Aromatic (C5 - C44) | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | 1500 |



Environmental Science

Analytical Report Number: 15-77254

Project / Site name: Moncton

| Lab Sample Number                        |       |                       |                         | 476516        | 476517        | 476518        | 476519        | 476520        |
|------------------------------------------|-------|-----------------------|-------------------------|---------------|---------------|---------------|---------------|---------------|
| Sample Reference                         |       |                       |                         | BH301         | BH302         | BH303         | BH304         | BH305         |
| Sample Number                            |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Depth (m)                                |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Date Sampled                             |       |                       |                         | 14/08/2015    | 14/08/2015    | 14/08/2015    | 14/08/2015    | 14/08/2015    |
| Time Taken                               |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Analytical Parameter<br>(Water Analysis) | Units | Limit of<br>detection | Accreditation<br>Status |               |               |               |               |               |
| <b>VOCs</b>                              |       |                       |                         |               |               |               |               |               |
| Chloromethane                            | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Chloroethane                             | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Bromomethane                             | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Vinyl Chloride                           | µg/l  | 1                     | NONE                    | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Trichlorofluoromethane                   | µg/l  | 1                     | NONE                    | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,1-Dichloroethene                       | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,1,2-Trichloro-1,2,2-trifluoroethane    | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Cis-1,2-dichloroethene                   | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| MTBE (Methyl Tertiary Butyl Ether)       | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,1-Dichloroethane                       | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 2,2-Dichloropropane                      | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Trichloromethane                         | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,1,1-Trichloroethane                    | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,2-Dichloroethane                       | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,1-Dichloropropene                      | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Trans-1,2-dichloroethene                 | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Benzene                                  | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Tetrachloromethane                       | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,2-Dichloropropane                      | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Trichloroethene                          | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Dibromomethane                           | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Bromodichloromethane                     | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Cis-1,3-dichloropropene                  | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Trans-1,3-dichloropropene                | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Toluene                                  | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,1,2-Trichloroethane                    | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,3-Dichloropropane                      | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Dibromochloromethane                     | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Tetrachloroethene                        | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,2-Dibromoethane                        | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Chlorobenzene                            | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,1,1,2-Tetrachloroethane                | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Ethylbenzene                             | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| p & m-Xylene                             | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Styrene                                  | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Tri bromomethane                         | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| o-Xylene                                 | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,1,2,2-Tetrachloroethane                | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Isopropylbenzene                         | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Bromobenzene                             | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| n-Propylbenzene                          | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 2-Chlorotoluene                          | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 4-Chlorotoluene                          | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,3,5-Trimethylbenzene                   | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| tert-Butylbenzene                        | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,2,4-Trimethylbenzene                   | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | 5.3           |
| sec-Butylbenzene                         | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,3-Dichlorobenzene                      | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| p-Isopropyltoluene                       | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,2-Dichlorobenzene                      | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,4-Dichlorobenzene                      | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Butylbenzene                             | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,2-Dibromo-3-chloropropane              | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,2,4-Trichlorobenzene                   | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| Hexachlorobutadiene                      | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |
| 1,2,3-Trichlorobenzene                   | µg/l  | 1                     | ISO 17025               | < 1.0         | < 1.0         | < 1.0         | < 1.0         | < 1.0         |

Iss No 15-77254-1

This certificate should not be reproduced, except in full, without the express permission of the laboratory.



Environmental Science

Analytical Report Number: 15-77254

Project / Site name: Moncton

| Lab Sample Number                        |       |                       |                         | 476516        | 476517        | 476518        | 476519        | 476520        |
|------------------------------------------|-------|-----------------------|-------------------------|---------------|---------------|---------------|---------------|---------------|
| Sample Reference                         |       |                       |                         | BH301         | BH302         | BH303         | BH304         | BH305         |
| Sample Number                            |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Depth (m)                                |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Date Sampled                             |       |                       |                         | 14/08/2015    | 14/08/2015    | 14/08/2015    | 14/08/2015    | 14/08/2015    |
| Time Taken                               |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Analytical Parameter<br>(Water Analysis) | Units | Limit of<br>detection | Accreditation<br>Status |               |               |               |               |               |

#### SVOCs

|                             |      |      |           |        |        |        |        |        |
|-----------------------------|------|------|-----------|--------|--------|--------|--------|--------|
| Aniline                     | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Phenol                      | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2-Chlorophenol              | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Bis(2-chloroethyl)ether     | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 1,3-Dichlorobenzene         | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 1,2-Dichlorobenzene         | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 1,4-Dichlorobenzene         | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Bis(2-chloroisopropyl)ether | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2-Methylphenol              | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Hexachloroethane            | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Nitrobenzene                | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 4-Methylphenol              | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Isophorone                  | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2-Nitrophenol               | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2,4-Dimethylphenol          | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Bis(2-chloroethoxy)methane  | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 1,2,4-Trichlorobenzene      | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Naphthalene                 | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | 41     |
| 2,4-Dichlorophenol          | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 4-Chloroaniline             | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Hexachlorobutadiene         | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 4-Chloro-3-methylphenol     | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2,4,6-Trichlorophenol       | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2,4,5-Trichlorophenol       | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2-Methylnaphthalene         | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | 34     |
| 2-Chloronaphthalene         | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Dimethylphthalate           | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2,6-Dinitrotoluene          | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Acenaphthylene              | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | 1.6    |
| Acenaphthene                | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | 78     |
| 2,4-Dinitrotoluene          | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Dibenzofuran                | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | 43     |
| 4-Chlorophenyl phenyl ether | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Diethyl phthalate           | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 4-Nitroaniline              | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Fluorene                    | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | 20     |
| Azobenzene                  | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Bromophenyl phenyl ether    | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Hexachlorobenzene           | µg/l | 0.02 | NONE      | < 0.02 | < 0.02 | < 0.02 | < 0.02 | < 0.02 |
| Phenanthrene                | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | 2.3    |
| Anthracene                  | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | 0.59   |
| Carbazole                   | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Dibutyl phthalate           | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Anthraquinone               | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Fluoranthene                | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Pyrene                      | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Butyl benzyl phthalate      | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Benzo(a)anthracene          | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Chrysene                    | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(b)fluoranthene        | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(k)fluoranthene        | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(a)pyrene              | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Indeno(1,2,3-cd)pyrene      | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Dibenz(a,h)anthracene       | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(ghi)perylene          | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |

U/S = Unsuitable Sample I/S = Insufficient Sample

Iss No 15-77254-1

This certificate should not be reproduced, except in full, without the express permission of the laboratory.  
The results included within the report are representative of the samples submitted for analysis.

Page 9 of 11



Environmental Science

Analytical Report Number : 15-77254

Project / Site name: Moncton

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

| Analytical Test Name                     | Analytical Method Description                                                                                                                                              | Analytical Method Reference                                                                                     | Method number | Wet / Dry Analysis | Accreditation Status |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|---------------|--------------------|----------------------|
| Ammonia as NH <sub>3</sub> in water      | Determination of Ammonium/Ammonia/Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method. Accredited matrices SW, GW, PW.                                 | In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton          | L082-PL       | W                  | ISO 17025            |
| Boron in water                           | Determination of boron by acidification followed by ICP-OES. Accredited matrices: SW PW GW                                                                                 | In-house method based on MEWAM                                                                                  | L039-PL       | W                  | ISO 17025            |
| BTEX and MTBE in water                   | Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW                                                                                  | In-house method based on USEPA8260                                                                              | L073W-PL      | W                  | ISO 17025            |
| Complex cyanide in water                 | Determination of complex cyanide by distillation followed by colorimetry.                                                                                                  | In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar) | L080-PL       | W                  | NONE                 |
| Electrical conductivity of water         | Determination of electrical conductivity in water by electrometric measurement.                                                                                            | In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton          | L031-PL       | W                  | NONE                 |
| Free cyanide in water                    | Determination of free cyanide by distillation followed by colorimetry.                                                                                                     | In-house method                                                                                                 | L080-PL       | W                  | ISO 17025            |
| Metals in water by ICP-MS (dissolved)    | Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.                                  | In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS. | L012-PL       | W                  | ISO 17025            |
| Metals in water by ICP-OES (dissolved)   | Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW.                                                                     | In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.                            | L039-PL       | W                  | ISO 17025            |
| Monohydric phenols in water              | Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW                                                                               | In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar) | L080-PL       | W                  | ISO 17025            |
| pH in water                              | Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW                                                                                   | In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests                                | L005-PL       | W                  | ISO 17025            |
| Semi-volatile organic compounds in water | Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.                                                           | In-house method based on USEPA 8270                                                                             | L070-UK       | W                  | NONE                 |
| Speciated EPA-16 PAHs in water           | Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards. Accredited matrices: SW PW GW | In-house method based on USEPA 8270                                                                             | L070-UK       | W                  | ISO 17025            |
| Sulphate in water                        | Determination of sulphate in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW                                                                     | In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.                            | L039-PL       | W                  | ISO 17025            |
| Total cyanide in water                   | Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW                                                                      | In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar) | L080-PL       | W                  | ISO 17025            |
| Total Hardness of water                  | Determination of hardness in waters by calculation from calcium and magnesium. Accredited Matrices SW, GW, PW.                                                             | In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton          | L045-PL       | W                  | ISO 17025            |
| TPH in (Water)                           | Determination of TPH bands by GC-MS/GC-FID                                                                                                                                 | In-house method, TPH with carbon banding.                                                                       | L070-UK       | W                  | NONE                 |
| TPHCWG (Waters)                          | Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.                                                                 | In-house method                                                                                                 | L070-UK       | W                  | NONE                 |

Iss No 15-77254-1

This certificate should not be reproduced, except in full, without the express permission of the laboratory.  
The results included within the report are representative of the sample(s) analysed.



Environmental Science

Analytical Report Number : 15-77254

Project / Site name: Moncton

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

| Analytical Test Name                | Analytical Method Description                                                                          | Analytical Method Reference        | Method number | Wet / Dry Analysis | Accreditation Status |
|-------------------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------|---------------|--------------------|----------------------|
| Volatile organic compounds in water | Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW | In-house method based on USEPA8260 | L073W-PL      | W                  | ISO 17025            |

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.



Environmental Science

**Ian Calloway**

Van Elle  
Kirgby Lane  
Pinxton  
Notts  
NG16 6JA

t: 01773 580 580

e: ian.calloway@van-elle.co.uk

i2 Analytical Ltd.  
7 Woodshots Meadow,  
Croxley Green  
Business Park,  
Watford,  
Herts,  
WD18 8YS

t: 01923 225404

f: 01923 237404

e: reception@i2analytical.com

## **Analytical Report Number : 15-77254**

**Project / Site name:** Moncton

**Samples received on:** 17/08/2015

**Your job number:** G151311

**Samples instructed on:** 17/08/2015

**Your order number:**

**Analysis completed by:** 27/08/2015

**Report Issue Number:** 1

**Report issued on:** 27/08/2015

**Samples Analysed:** 10 water samples

**Signed:**

Rexona Rahman  
Reporting Manager  
For & on behalf of i2 Analytical Ltd.

**Signed:**

Emma Winter  
Assistant Reporting Manager  
For & on behalf of i2 Analytical Ltd.

Other office located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting  
leachates - 2 weeks from reporting  
waters - 2 weeks from reporting  
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.



Environmental Science

Analytical Report Number: 15-77254

Project / Site name: Moncton

|                                       |               |                    |                      |               |               |
|---------------------------------------|---------------|--------------------|----------------------|---------------|---------------|
| Lab Sample Number                     | 476511        | 476512             | 476513               | 476514        | 476515        |
| Sample Reference                      | RBH1D         | RBH2A              | RBH3A                | RBH4A         | RBH5          |
| Sample Number                         | None Supplied | None Supplied      | None Supplied        | None Supplied | None Supplied |
| Depth (m)                             | None Supplied | None Supplied      | None Supplied        | None Supplied | None Supplied |
| Date Sampled                          | 14/08/2015    | 14/08/2015         | 14/08/2015           | 14/08/2015    | 14/08/2015    |
| Time Taken                            | None Supplied | None Supplied      | None Supplied        | None Supplied | None Supplied |
| Analytical Parameter (Water Analysis) | Units         | Limit of detection | Accreditation Status |               |               |

#### General Inorganics

|                             |                        |     |           |         |        |        |        |        |
|-----------------------------|------------------------|-----|-----------|---------|--------|--------|--------|--------|
| pH                          | pH Units               | N/A | ISO 17025 | 6.9     | 6.7    | 6.9    | 7.6    | 6.6    |
| Electrical Conductivity     | µS/cm                  | 10  | NONE      | 4600    | 2200   | 2200   | 2700   | 2000   |
| Total Cyanide               | µg/l                   | 10  | ISO 17025 | 110     | < 10   | < 10   | 73     | 23     |
| Complex Cyanide             | µg/l                   | 10  | NONE      | 110     | < 10   | < 10   | 73     | 23     |
| Free Cyanide                | µg/l                   | 10  | ISO 17025 | < 10    | < 10   | < 10   | < 10   | < 10   |
| Sulphate as SO <sub>4</sub> | µg/l                   | 45  | ISO 17025 | 1190000 | 661000 | 392000 | 614000 | 555000 |
| Ammonia as NH <sub>3</sub>  | µg/l                   | 15  | ISO 17025 | 140000  | 5800   | 73     | 170000 | 14000  |
| Hardness - Total            | mgCaCO <sub>3</sub> /l | 1   | ISO 17025 | 1020    | 791    | 581    | 365    | 662    |

#### Total Phenols

|                            |      |    |           |      |      |      |     |      |
|----------------------------|------|----|-----------|------|------|------|-----|------|
| Total Phenols (monohydric) | µg/l | 10 | ISO 17025 | < 10 | < 10 | < 10 | 370 | < 10 |
|----------------------------|------|----|-----------|------|------|------|-----|------|

#### Speciated PAHs

|                        |      |      |           |        |        |        |        |        |
|------------------------|------|------|-----------|--------|--------|--------|--------|--------|
| Naphthalene            | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Acenaphthylene         | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | 1.2    | < 0.01 |
| Acenaphthene           | µg/l | 0.01 | ISO 17025 | 35     | < 0.01 | < 0.01 | 3.6    | < 0.01 |
| Fluorene               | µg/l | 0.01 | ISO 17025 | 5.3    | < 0.01 | < 0.01 | 0.68   | < 0.01 |
| Phenanthrene           | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Anthracene             | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Fluoranthene           | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Pyrene                 | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(a)anthracene     | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Chrysene               | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(b)fluoranthene   | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(k)fluoranthene   | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(a)pyrene         | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Indeno(1,2,3-cd)pyrene | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Dibenz(a,h)anthracene  | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| benzo(ghi)perylene     | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |

#### Total PAH

|                   |      |     |           |      |        |        |      |        |
|-------------------|------|-----|-----------|------|--------|--------|------|--------|
| Total EPA-16 PAHs | µg/l | 0.2 | ISO 17025 | 40.6 | < 0.20 | < 0.20 | 5.46 | < 0.20 |
|-------------------|------|-----|-----------|------|--------|--------|------|--------|

Iss No 15-77254-1



Environmental Science

Analytical Report Number: 15-77254

Project / Site name: Moncton

|                                          |               |                       |                         |               |               |
|------------------------------------------|---------------|-----------------------|-------------------------|---------------|---------------|
| Lab Sample Number                        | 476511        | 476512                | 476513                  | 476514        | 476515        |
| Sample Reference                         | RBH1D         | RBH2A                 | RBH3A                   | RBH4A         | RBH5          |
| Sample Number                            | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Depth (m)                                | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Date Sampled                             | 14/08/2015    | 14/08/2015            | 14/08/2015              | 14/08/2015    | 14/08/2015    |
| Time Taken                               | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Water Analysis) | Units         | Limit of<br>detection | Accreditation<br>Status |               |               |

#### Heavy Metals / Metalloids

|                      |      |      |           |        |        |        |        |        |
|----------------------|------|------|-----------|--------|--------|--------|--------|--------|
| Arsenic (dissolved)  | µg/l | 0.15 | ISO 17025 | 0.65   | 0.61   | 0.20   | 12.6   | 0.19   |
| Boron (dissolved)    | µg/l | 10   | ISO 17025 | 200    | 110    | 160    | 230    | 82     |
| Cadmium (dissolved)  | µg/l | 0.02 | ISO 17025 | 0.06   | 0.16   | 0.11   | < 0.02 | 0.15   |
| Chromium (dissolved) | µg/l | 0.2  | ISO 17025 | 0.9    | 0.6    | 0.7    | 1.0    | 0.6    |
| Copper (dissolved)   | µg/l | 0.5  | ISO 17025 | 4.0    | 4.8    | 5.7    | 3.5    | 2.1    |
| Lead (dissolved)     | µg/l | 0.2  | ISO 17025 | 0.3    | 0.3    | 0.3    | 0.2    | < 0.2  |
| Mercury (dissolved)  | µg/l | 0.05 | ISO 17025 | < 0.05 | < 0.05 | < 0.05 | 0.05   | < 0.05 |
| Nickel (dissolved)   | µg/l | 0.5  | ISO 17025 | 9.6    | 25     | 11     | 3.2    | 2.2    |
| Selenium (dissolved) | µg/l | 0.6  | ISO 17025 | 23     | 5.8    | 5.5    | 7.6    | 8.2    |
| Zinc (dissolved)     | µg/l | 0.5  | ISO 17025 | 16     | 37     | 36     | 3.9    | 13     |

|                       |      |       |           |     |     |     |    |     |
|-----------------------|------|-------|-----------|-----|-----|-----|----|-----|
| Calcium (dissolved)   | mg/l | 0.012 | ISO 17025 | 210 | 140 | 140 | 85 | 98  |
| Magnesium (dissolved) | mg/l | 0.005 | ISO 17025 | 120 | 110 | 53  | 37 | 100 |

#### Monoaromatics

|                                    |      |   |           |       |       |       |       |       |
|------------------------------------|------|---|-----------|-------|-------|-------|-------|-------|
| Benzene                            | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | 171   | < 1.0 |
| Toluene                            | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | 9.3   | < 1.0 |
| Ethylbenzene                       | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | 2.1   | < 1.0 |
| p & m-xylene                       | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | 4.2   | < 1.0 |
| o-xylene                           | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | 3.3   | < 1.0 |
| MTBE (Methyl Tertiary Butyl Ether) | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |

#### Petroleum Hydrocarbons

|                                |      |    |      |      |      |      |      |      |
|--------------------------------|------|----|------|------|------|------|------|------|
| TPH-CWG - Aliphatic >C5 - C6   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C6 - C8   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C8 - C10  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C10 - C12 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C12 - C16 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C16 - C21 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C21 - C35 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C35 - C44 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic (C5 - C35) | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic (C5 - C44) | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |

|                               |      |    |      |      |      |      |      |      |
|-------------------------------|------|----|------|------|------|------|------|------|
| TPH-CWG - Aromatic >C5 - C7   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | 170  | < 10 |
| TPH-CWG - Aromatic >C7 - C8   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C8 - C10  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C10 - C12 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C12 - C16 | µg/l | 10 | NONE | 41   | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C16 - C21 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C21 - C35 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C35 - C44 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic (C5 - C35) | µg/l | 10 | NONE | 41   | < 10 | < 10 | 170  | < 10 |
| TPH-CWG - Aromatic (C5 - C44) | µg/l | 10 | NONE | 41   | < 10 | < 10 | 170  | < 10 |



Environmental Science

Analytical Report Number: 15-77254

Project / Site name: Moncton

| Lab Sample Number                        |       |                       |                         | 476511        | 476512        | 476513        | 476514        | 476515        |
|------------------------------------------|-------|-----------------------|-------------------------|---------------|---------------|---------------|---------------|---------------|
| Sample Reference                         |       |                       |                         | RBH1D         | RBH2A         | RBH3A         | RBH4A         | RBH5          |
| Sample Number                            |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Depth (m)                                |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Date Sampled                             |       |                       |                         | 14/08/2015    | 14/08/2015    | 14/08/2015    | 14/08/2015    | 14/08/2015    |
| Time Taken                               |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Analytical Parameter<br>(Water Analysis) | Units | Limit of<br>detection | Accreditation<br>Status |               |               |               |               |               |
|                                          |       |                       |                         |               |               |               |               |               |

#### VOCs

|                                       |      |   |           |       |       |       |       |       |
|---------------------------------------|------|---|-----------|-------|-------|-------|-------|-------|
| Chloromethane                         | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Chloroethane                          | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Bromomethane                          | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Vinyl Chloride                        | µg/l | 1 | NONE      | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Trichlorofluoromethane                | µg/l | 1 | NONE      | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,1-Dichloroethene                    | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Cis-1,2-dichloroethene                | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| MTBE (Methyl Tertiary Butyl Ether)    | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,1-Dichloroethane                    | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 2,2-Dichloropropane                   | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Trichloromethane                      | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,1,1-Trichloroethane                 | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2-Dichloroethane                    | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,1-Dichloropropene                   | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Trans-1,2-dichloroethene              | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Benzene                               | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | 171   | < 1.0 |
| Tetrachloromethane                    | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2-Dichloropropane                   | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Trichloroethene                       | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Dibromomethane                        | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Bromodichloromethane                  | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Cis-1,3-dichloropropene               | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Trans-1,3-dichloropropene             | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Toluene                               | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | 9.3   | < 1.0 |
| 1,1,2-Trichloroethane                 | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,3-Dichloropropane                   | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Dibromochloromethane                  | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Tetrachloroethene                     | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2-Dibromoethane                     | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Chlorobenzene                         | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,1,1,2-Tetrachloroethane             | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Ethylbenzene                          | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | 2.1   | < 1.0 |
| p & m-Xylene                          | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | 4.2   | < 1.0 |
| Styrene                               | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Tribromomethane                       | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| o-Xylene                              | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | 3.3   | < 1.0 |
| 1,1,2,2-Tetrachloroethane             | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Isopropylbenzene                      | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Bromobenzene                          | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| n-Propylbenzene                       | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 2-Chlorotoluene                       | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 4-Chlorotoluene                       | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,3,5-Trimethylbenzene                | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| tert-Butylbenzene                     | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2,4-Trimethylbenzene                | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| sec-Butylbenzene                      | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,3-Dichlorobenzene                   | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| p-Isopropyltoluene                    | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2-Dichlorobenzene                   | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,4-Dichlorobenzene                   | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Butylbenzene                          | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2-Dibromo-3-chloropropane           | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2,4-Trichlorobenzene                | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Hexachlorobutadiene                   | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2,3-Trichlorobenzene                | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |



Environmental Science

Analytical Report Number: 15-77254

Project / Site name: Moncton

| Lab Sample Number                        |       |                       |                         | 476511        | 476512        | 476513        | 476514        | 476515        |
|------------------------------------------|-------|-----------------------|-------------------------|---------------|---------------|---------------|---------------|---------------|
| Sample Reference                         |       |                       |                         | RBH1D         | RBH2A         | RBH3A         | RBH4A         | RBH5          |
| Sample Number                            |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Depth (m)                                |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Date Sampled                             |       |                       |                         | 14/08/2015    | 14/08/2015    | 14/08/2015    | 14/08/2015    | 14/08/2015    |
| Time Taken                               |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Analytical Parameter<br>(Water Analysis) | Units | Limit of<br>detection | Accreditation<br>Status |               |               |               |               |               |

#### SVOCs

|                             |      |      |           |        |        |        |        |        |
|-----------------------------|------|------|-----------|--------|--------|--------|--------|--------|
| Aniline                     | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Phenol                      | µg/l | 0.05 | NONE      | 1.8    | < 0.05 | < 0.05 | 1.3    | < 0.05 |
| 2-Chlorophenol              | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Bis(2-chloroethyl)ether     | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 1,3-Dichlorobenzene         | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 1,2-Dichlorobenzene         | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 1,4-Dichlorobenzene         | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Bis(2-chloroisopropyl)ether | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2-Methylphenol              | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | 67     | < 0.05 |
| Hexachloroethane            | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Nitrobenzene                | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 4-Methylphenol              | µg/l | 0.05 | NONE      | 6.6    | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Isophorone                  | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2-Nitrophenol               | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2,4-Dimethylphenol          | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | 160    | < 0.05 |
| Bis(2-chloroethoxy)methane  | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 1,2,4-Trichlorobenzene      | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Naphthalene                 | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| 2,4-Dichlorophenol          | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 4-Chloroaniline             | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Hexachlorobutadiene         | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 4-Chloro-3-methylphenol     | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2,4,6-Trichlorophenol       | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2,4,5-Trichlorophenol       | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2-Methylnaphthalene         | µg/l | 0.05 | NONE      | 1.8    | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2-Chloronaphthalene         | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Dimethylphthalate           | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 2,6-Dinitrotoluene          | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Acenaphthylene              | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | 1.2    | < 0.01 |
| Acenaphthene                | µg/l | 0.01 | ISO 17025 | 35     | < 0.01 | < 0.01 | 3.6    | < 0.01 |
| 2,4-Dinitrotoluene          | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Dibenzofuran                | µg/l | 0.05 | NONE      | 2.5    | < 0.05 | < 0.05 | 1.0    | < 0.05 |
| 4-Chlorophenyl phenyl ether | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Diethyl phthalate           | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| 4-Nitroaniline              | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Fluorene                    | µg/l | 0.01 | ISO 17025 | 5.3    | < 0.01 | < 0.01 | 0.68   | < 0.01 |
| Azobenzene                  | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Bromophenyl phenyl ether    | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Hexachlorobenzene           | µg/l | 0.02 | NONE      | < 0.02 | < 0.02 | < 0.02 | < 0.02 | < 0.02 |
| Phenanthrene                | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Anthracene                  | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Carbazole                   | µg/l | 0.05 | NONE      | 3.5    | < 0.05 | < 0.05 | 2.7    | < 0.05 |
| Dibutyl phthalate           | µg/l | 0.05 | NONE      | 0.24   | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Anthraquinone               | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Fluoranthene                | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Pyrene                      | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Butyl benzyl phthalate      | µg/l | 0.05 | NONE      | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Benzo(a)anthracene          | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Chrysene                    | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(b)fluoranthene        | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(k)fluoranthene        | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(a)pyrene              | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Indeno(1,2,3-cd)pyrene      | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Dibenz(a,h)anthracene       | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(ghi)perylene          | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |

U/S = Unsuitable Sample I/S = Insufficient Sample

Iss No 15-77254-1



Analytical Report Number: 15-77254

Project / Site name: Moncton

|                                          |               |                       |                         |               |               |
|------------------------------------------|---------------|-----------------------|-------------------------|---------------|---------------|
| Lab Sample Number                        | 476516        | 476517                | 476518                  | 476519        | 476520        |
| Sample Reference                         | BH301         | BH302                 | BH303                   | BH304         | BH305         |
| Sample Number                            | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Depth (m)                                | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Date Sampled                             | 14/08/2015    | 14/08/2015            | 14/08/2015              | 14/08/2015    | 14/08/2015    |
| Time Taken                               | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Water Analysis) | Units         | Limit of<br>detection | Accreditation<br>Status |               |               |

#### General Inorganics

|                             |                        |     |           |        |        |        |        |        |
|-----------------------------|------------------------|-----|-----------|--------|--------|--------|--------|--------|
| pH                          | pH Units               | N/A | ISO 17025 | 6.9    | 7.0    | 6.6    | 6.9    | 6.7    |
| Electrical Conductivity     | µS/cm                  | 10  | NONE      | 2400   | 1700   | 2700   | 2400   | 3000   |
| Total Cyanide               | µg/l                   | 10  | ISO 17025 | < 10   | < 10   | 42     | 490    | 13     |
| Complex Cyanide             | µg/l                   | 10  | NONE      | < 10   | < 10   | 42     | 460    | 13     |
| Free Cyanide                | µg/l                   | 10  | ISO 17025 | < 10   | < 10   | < 10   | 27     | < 10   |
| Sulphate as SO <sub>4</sub> | µg/l                   | 45  | ISO 17025 | 336000 | 431000 | 686000 | 701000 | 368000 |
| Ammonia as NH <sub>3</sub>  | µg/l                   | 15  | ISO 17025 | 210    | 1700   | 24000  | 17000  | 9100   |
| Hardness - Total            | mgCaCO <sub>3</sub> /l | 1   | ISO 17025 | 605    | 589    | 592    | 856    | 766    |

#### Total Phenols

|                            |      |    |           |      |      |      |      |      |
|----------------------------|------|----|-----------|------|------|------|------|------|
| Total Phenols (monohydric) | µg/l | 10 | ISO 17025 | < 10 | < 10 | < 10 | < 10 | < 10 |
|----------------------------|------|----|-----------|------|------|------|------|------|

#### Speciated PAHs

|                        |      |      |           |        |        |        |        |        |
|------------------------|------|------|-----------|--------|--------|--------|--------|--------|
| Naphthalene            | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | 41     |
| Acenaphthylene         | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | 1.6    |
| Acenaphthene           | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | 78     |
| Fluorene               | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | 20     |
| Phenanthrene           | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | 2.3    |
| Anthracene             | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | 0.59   |
| Fluoranthene           | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Pyrene                 | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(a)anthracene     | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Chrysene               | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(b)fluoranthene   | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(k)fluoranthene   | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(a)pyrene         | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Indeno(1,2,3-cd)pyrene | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Dibenz(a,h)anthracene  | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(ghi)perylene     | µg/l | 0.01 | ISO 17025 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |

#### Total PAH

|                   |      |     |           |        |        |        |        |     |
|-------------------|------|-----|-----------|--------|--------|--------|--------|-----|
| Total EPA-16 PAHs | µg/l | 0.2 | ISO 17025 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | 144 |
|-------------------|------|-----|-----------|--------|--------|--------|--------|-----|



Analytical Report Number: 15-77254

Project / Site name: Moncton

|                                          |               |                       |                         |               |               |
|------------------------------------------|---------------|-----------------------|-------------------------|---------------|---------------|
| Lab Sample Number                        | 476516        | 476517                | 476518                  | 476519        | 476520        |
| Sample Reference                         | BH301         | BH302                 | BH303                   | BH304         | BH305         |
| Sample Number                            | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Depth (m)                                | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Date Sampled                             | 14/08/2015    | 14/08/2015            | 14/08/2015              | 14/08/2015    | 14/08/2015    |
| Time Taken                               | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Water Analysis) | Units         | Limit of<br>detection | Accreditation<br>Status |               |               |

#### Heavy Metals / Metalloids

|                      |      |      |           |        |        |        |       |       |
|----------------------|------|------|-----------|--------|--------|--------|-------|-------|
| Arsenic (dissolved)  | µg/l | 0.15 | ISO 17025 | 0.81   | 0.52   | 0.28   | 0.77  | 0.30  |
| Boron (dissolved)    | µg/l | 10   | ISO 17025 | 100    | 92     | 260    | 310   | 74    |
| Cadmium (dissolved)  | µg/l | 0.02 | ISO 17025 | 0.14   | 0.35   | 0.06   | 0.42  | 0.03  |
| Chromium (dissolved) | µg/l | 0.2  | ISO 17025 | 0.3    | 0.6    | 0.8    | 0.7   | 0.7   |
| Copper (dissolved)   | µg/l | 0.5  | ISO 17025 | 2.1    | 4.3    | 5.1    | 4.0   | 2.7   |
| Lead (dissolved)     | µg/l | 0.2  | ISO 17025 | 0.2    | 0.3    | 0.3    | < 0.2 | < 0.2 |
| Mercury (dissolved)  | µg/l | 0.05 | ISO 17025 | < 0.05 | < 0.05 | < 0.05 | 0.08  | 0.08  |
| Nickel (dissolved)   | µg/l | 0.5  | ISO 17025 | 22     | 37     | 28     | 9.9   | 2.8   |
| Selenium (dissolved) | µg/l | 0.6  | ISO 17025 | 3.3    | 2.7    | 16     | 5.8   | 11    |
| Zinc (dissolved)     | µg/l | 0.5  | ISO 17025 | 6.0    | 8.5    | 36     | 13    | 15    |

|                       |      |       |           |     |     |     |     |     |
|-----------------------|------|-------|-----------|-----|-----|-----|-----|-----|
| Calcium (dissolved)   | mg/l | 0.012 | ISO 17025 | 140 | 120 | 140 | 270 | 150 |
| Magnesium (dissolved) | mg/l | 0.005 | ISO 17025 | 61  | 72  | 61  | 46  | 95  |

#### Monoaromatics

|                                    |      |   |           |       |       |       |       |       |
|------------------------------------|------|---|-----------|-------|-------|-------|-------|-------|
| Benzene                            | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Toluene                            | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Ethylbenzene                       | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| p & m-xylene                       | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| o-xylene                           | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| MTBE (Methyl Tertiary Butyl Ether) | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |

#### Petroleum Hydrocarbons

|                                |      |    |      |      |      |      |      |      |
|--------------------------------|------|----|------|------|------|------|------|------|
| TPH-CWG - Aliphatic >C5 - C6   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C6 - C8   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C8 - C10  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C10 - C12 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C12 - C16 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C16 - C21 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C21 - C35 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C35 - C44 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic (C5 - C35) | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic (C5 - C44) | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |

|                               |      |    |      |      |      |      |      |      |
|-------------------------------|------|----|------|------|------|------|------|------|
| TPH-CWG - Aromatic >C5 - C7   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C7 - C8   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C8 - C10  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C10 - C12 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | 110  |
| TPH-CWG - Aromatic >C12 - C16 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | 610  |
| TPH-CWG - Aromatic >C16 - C21 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | 740  |
| TPH-CWG - Aromatic >C21 - C35 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C35 - C44 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic (C5 - C35) | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | 1500 |
| TPH-CWG - Aromatic (C5 - C44) | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | 1500 |



Environmental Science

Analytical Report Number: 15-77254

Project / Site name: Moncton

| Lab Sample Number                        |  |  |  | 476516        | 476517                | 476518                  | 476519        | 476520        |
|------------------------------------------|--|--|--|---------------|-----------------------|-------------------------|---------------|---------------|
| Sample Reference                         |  |  |  | BH301         | BH302                 | BH303                   | BH304         | BH305         |
| Sample Number                            |  |  |  | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Depth (m)                                |  |  |  | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Date Sampled                             |  |  |  | 14/08/2015    | 14/08/2015            | 14/08/2015              | 14/08/2015    | 14/08/2015    |
| Time Taken                               |  |  |  | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Water Analysis) |  |  |  | Units         | Limit of<br>detection | Accreditation<br>Status |               |               |

#### VOCs

|                                       |      |   |           |       |       |       |       |       |
|---------------------------------------|------|---|-----------|-------|-------|-------|-------|-------|
| Chloromethane                         | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Chloroethane                          | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Bromomethane                          | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Vinyl Chloride                        | µg/l | 1 | NONE      | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Trichlorofluoromethane                | µg/l | 1 | NONE      | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,1-Dichloroethene                    | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Cis-1,2-dichloroethene                | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| MTBE (Methyl Tertiary Butyl Ether)    | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,1-Dichloroethane                    | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 2,2-Dichloropropane                   | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Trichloromethane                      | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,1,1-Trichloroethane                 | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2-Dichloroethane                    | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,1-Dichloropropene                   | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Trans-1,2-dichloroethene              | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Benzene                               | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Tetrachloromethane                    | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2-Dichloropropane                   | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Trichloroethene                       | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Dibromomethane                        | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Bromodichloromethane                  | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Cis-1,3-dichloropropene               | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Trans-1,3-dichloropropene             | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Toluene                               | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,1,2-Trichloroethane                 | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,3-Dichloropropane                   | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Dibromochloromethane                  | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Tetrachloroethene                     | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2-Dibromoethane                     | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Chlorobenzene                         | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,1,1,2-Tetrachloroethane             | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Ethylbenzene                          | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| p & m-Xylene                          | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Styrene                               | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Tribromomethane                       | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| o-Xylene                              | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,1,2,2-Tetrachloroethane             | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Isopropylbenzene                      | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Bromobenzene                          | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| n-Propylbenzene                       | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 2-Chlorotoluene                       | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 4-Chlorotoluene                       | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,3,5-Trimethylbenzene                | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| tert-Butylbenzene                     | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2,4-Trimethylbenzene                | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 5.3   |
| sec-Butylbenzene                      | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,3-Dichlorobenzene                   | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| p-Isopropyltoluene                    | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2-Dichlorobenzene                   | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,4-Dichlorobenzene                   | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Butylbenzene                          | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2-Dibromo-3-chloropropane           | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2,4-Trichlorobenzene                | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Hexachlorobutadiene                   | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2,3-Trichlorobenzene                | µg/l | 1 | ISO 17025 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |

Iss No 15-77254-1



Environmental Science

Analytical Report Number: 15-77254

Project / Site name: Moncton

| Lab Sample Number                        |       |                       |                         | 476516        | 476517        | 476518        | 476519        | 476520        |
|------------------------------------------|-------|-----------------------|-------------------------|---------------|---------------|---------------|---------------|---------------|
| Sample Reference                         |       |                       |                         | BH301         | BH302         | BH303         | BH304         | BH305         |
| Sample Number                            |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Depth (m)                                |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Date Sampled                             |       |                       |                         | 14/08/2015    | 14/08/2015    | 14/08/2015    | 14/08/2015    | 14/08/2015    |
| Time Taken                               |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Analytical Parameter<br>(Water Analysis) | Units | Limit of<br>detection | Accreditation<br>Status |               |               |               |               |               |
| <b>SVOCs</b>                             |       |                       |                         |               |               |               |               |               |
| Aniline                                  | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| Phenol                                   | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| 2-Chlorophenol                           | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| Bis(2-chloroethyl)ether                  | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| 1,3-Dichlorobenzene                      | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| 1,2-Dichlorobenzene                      | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| 1,4-Dichlorobenzene                      | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| Bis(2-chloroisopropyl)ether              | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| 2-Methylphenol                           | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| Hexachloroethane                         | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| Nitrobenzene                             | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| 4-Methylphenol                           | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| Isophorone                               | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| 2-Nitrophenol                            | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| 2,4-Dimethylphenol                       | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| Bis(2-chloroethoxy)methane               | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| 1,2,4-Trichlorobenzene                   | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| Naphthalene                              | µg/l  | 0.01                  | ISO 17025               | < 0.01        | < 0.01        | < 0.01        | < 0.01        | 41            |
| 2,4-Dichlorophenol                       | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| 4-Chloroaniline                          | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| Hexachlorobutadiene                      | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| 4-Chloro-3-methylphenol                  | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| 2,4,6-Trichlorophenol                    | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| 2,4,5-Trichlorophenol                    | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| 2-Methylnaphthalene                      | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | 34            |
| 2-Chloronaphthalene                      | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| Dimethylphthalate                        | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| 2,6-Dinitrotoluene                       | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| Acenaphthylene                           | µg/l  | 0.01                  | ISO 17025               | < 0.01        | < 0.01        | < 0.01        | < 0.01        | 1.6           |
| Acenaphthene                             | µg/l  | 0.01                  | ISO 17025               | < 0.01        | < 0.01        | < 0.01        | < 0.01        | 78            |
| 2,4-Dinitrotoluene                       | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| Dibenzofuran                             | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | 43            |
| 4-Chlorophenyl phenyl ether              | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| Diethyl phthalate                        | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| 4-Nitroaniline                           | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| Fluorene                                 | µg/l  | 0.01                  | ISO 17025               | < 0.01        | < 0.01        | < 0.01        | < 0.01        | 20            |
| Azobenzene                               | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| Bromophenyl phenyl ether                 | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| Hexachlorobenzene                        | µg/l  | 0.02                  | NONE                    | < 0.02        | < 0.02        | < 0.02        | < 0.02        | < 0.02        |
| Phenanthrene                             | µg/l  | 0.01                  | ISO 17025               | < 0.01        | < 0.01        | < 0.01        | < 0.01        | 2.3           |
| Anthracene                               | µg/l  | 0.01                  | ISO 17025               | < 0.01        | < 0.01        | < 0.01        | < 0.01        | 0.59          |
| Carbazole                                | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| Dibutyl phthalate                        | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| Anthraquinone                            | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| Fluoranthene                             | µg/l  | 0.01                  | ISO 17025               | < 0.01        | < 0.01        | < 0.01        | < 0.01        | < 0.01        |
| Pyrene                                   | µg/l  | 0.01                  | ISO 17025               | < 0.01        | < 0.01        | < 0.01        | < 0.01        | < 0.01        |
| Butyl benzyl phthalate                   | µg/l  | 0.05                  | NONE                    | < 0.05        | < 0.05        | < 0.05        | < 0.05        | < 0.05        |
| Benzo(a)anthracene                       | µg/l  | 0.01                  | ISO 17025               | < 0.01        | < 0.01        | < 0.01        | < 0.01        | < 0.01        |
| Chrysene                                 | µg/l  | 0.01                  | ISO 17025               | < 0.01        | < 0.01        | < 0.01        | < 0.01        | < 0.01        |
| Benzo(b)fluoranthene                     | µg/l  | 0.01                  | ISO 17025               | < 0.01        | < 0.01        | < 0.01        | < 0.01        | < 0.01        |
| Benzo(k)fluoranthene                     | µg/l  | 0.01                  | ISO 17025               | < 0.01        | < 0.01        | < 0.01        | < 0.01        | < 0.01        |
| Benzo(a)pyrene                           | µg/l  | 0.01                  | ISO 17025               | < 0.01        | < 0.01        | < 0.01        | < 0.01        | < 0.01        |
| Indeno(1,2,3-cd)pyrene                   | µg/l  | 0.01                  | ISO 17025               | < 0.01        | < 0.01        | < 0.01        | < 0.01        | < 0.01        |
| Dibenz(a,h)anthracene                    | µg/l  | 0.01                  | ISO 17025               | < 0.01        | < 0.01        | < 0.01        | < 0.01        | < 0.01        |
| Benzo(ghi)perylene                       | µg/l  | 0.01                  | ISO 17025               | < 0.01        | < 0.01        | < 0.01        | < 0.01        | < 0.01        |

U/S = Unsuitable Sample I/S = Insufficient Sample

Iss No 15-77254-1

This certificate should not be reproduced, except in full, without the express permission of the laboratory.

Page 2 of 11



Environmental Science

Analytical Report Number : 15-77254

Project / Site name: Moncton

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

| Analytical Test Name                     | Analytical Method Description                                                                                                                                              | Analytical Method Reference                                                                                     | Method number | Wet / Dry Analysis | Accreditation Status |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|---------------|--------------------|----------------------|
| Ammonia as NH <sub>3</sub> in water      | Determination of Ammonium/Ammonia/Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method. Accredited matrices SW, GW, PW.                                 | In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton          | L082-PL       | W                  | ISO 17025            |
| Boron in water                           | Determination of boron by acidification followed by ICP-OES. Accredited matrices: SW PW GW                                                                                 | In-house method based on MEWAM                                                                                  | L039-PL       | W                  | ISO 17025            |
| BTEX and MTBE in water                   | Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW                                                                                  | In-house method based on USEPA8260                                                                              | L073W-PL      | W                  | ISO 17025            |
| Complex cyanide in water                 | Determination of complex cyanide by distillation followed by colorimetry.                                                                                                  | In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar) | L080-PL       | W                  | NONE                 |
| Electrical conductivity of water         | Determination of electrical conductivity in water by electrometric measurement.                                                                                            | In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton          | L031-PL       | W                  | NONE                 |
| Free cyanide in water                    | Determination of free cyanide by distillation followed by colorimetry.                                                                                                     | In-house method                                                                                                 | L080-PL       | W                  | ISO 17025            |
| Metals in water by ICP-MS (dissolved)    | Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.                                  | In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS. | L012-PL       | W                  | ISO 17025            |
| Metals in water by ICP-OES (dissolved)   | Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW.                                                                     | In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.                            | L039-PL       | W                  | ISO 17025            |
| Monohydric phenols in water              | Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW                                                                               | In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar) | L080-PL       | W                  | ISO 17025            |
| pH in water                              | Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW                                                                                   | In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests                                | L005-PL       | W                  | ISO 17025            |
| Semi-volatile organic compounds in water | Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.                                                           | In-house method based on USEPA 8270                                                                             | L070-UK       | W                  | NONE                 |
| Speciated EPA-16 PAHs in water           | Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards. Accredited matrices: SW PW GW | In-house method based on USEPA 8270                                                                             | L070-UK       | W                  | ISO 17025            |
| Sulphate in water                        | Determination of sulphate in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW                                                                     | In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.                            | L039-PL       | W                  | ISO 17025            |
| Total cyanide in water                   | Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW                                                                      | In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar) | L080-PL       | W                  | ISO 17025            |
| Total Hardness of water                  | Determination of hardness in waters by calculation from calcium and magnesium. Accredited Matrices SW, GW, PW.                                                             | In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton          | L045-PL       | W                  | ISO 17025            |
| TPH in (Water)                           | Determination of TPH bands by GC-MS/GC-FID                                                                                                                                 | In-house method, TPH with carbon banding.                                                                       | L070-UK       | W                  | NONE                 |
| TPHCWG (Waters)                          | Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.                                                                 | In-house method                                                                                                 | L070-UK       | W                  | NONE                 |

Iss No 15-77254-1



Analytical Report Number : 15-77254

Project / Site name: Moncton

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

| Analytical Test Name                | Analytical Method Description                                                                          | Analytical Method Reference        | Method number | Wet / Dry Analysis | Accreditation Status |
|-------------------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------|---------------|--------------------|----------------------|
| Volatile organic compounds in water | Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW | In-house method based on USEPA8260 | L073W-PL      | W                  | ISO 17025            |

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.  
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

## Appendix D

### Geotechnical Test Results



# Alfred H Knight

MARION JONES  
I2 ANALYTICAL LTD  
7 WOODSHOTS MEADOW  
CROXLEY GREEN BUSINESS PARK  
CROXLEY GREEN  
HERTFORDSHIRE  
WD18 8YS

Date of Report: 23-Jul-2015

AHK Ref: B/330577/DD19344  
Client Ref: JOB 15-75496

Material Described As: SOILS

| Client Ref.          | Test           | Unit       | Result |
|----------------------|----------------|------------|--------|
| <u>Sample 466017</u> | CV as Received | MJ/Kg (AR) | 6.039  |
| <u>Sample 466018</u> | CV as Received | MJ/Kg (AR) | 15.851 |
| <u>Sample 466019</u> | CV as Received | MJ/Kg (AR) | 18.436 |
| <u>Sample 466020</u> | CV as Received | MJ/Kg (AR) | 6.892  |
| <u>Sample 466021</u> | CV as Received | MJ/Kg (AR) | 0.414  |
| <u>Sample 466023</u> | CV as Received | MJ/Kg (AR) | 2.629  |



Ken Hepburn  
Biomass Manager

For and on behalf of KNIGHT ENERGY SERVICES LIMITED

## KNIGHT ENERGY SERVICES LIMITED

Unit 1, Palmermount Industrial Estate, Dundonald, Ayrshire, KA2 9BL, Scotland  
Tel: (01563) 850375 Fax: (01563) 850830 Email: ahk.scotland@ahkgroup.com

ALL WORK IS UNDERTAKEN SUBJECT TO OUR STANDARD TRADING TERMS AND CONDITIONS OF BUSINESS  
This certificate shall not be reproduced except in full without written approval of KNIGHT ENERGY SERVICES LIMITED



Alfred H Knight

MARION JONES  
12 ANALYTICAL LTD  
7 WOODSHOTS MEADOW  
CROXLEY GREEN BUSINESS PARK  
CROXLEY GREEN  
HERTFORDSHIRE  
WD18 8YS

Date of Report: 23-Jul-2015

AHK Ref: B/330577/DD19344

Material Described As: SOILS

Client Ref: JOB 15-75496

| Client Ref.          | Test           | Unit       | Result |
|----------------------|----------------|------------|--------|
| <u>Sample 466024</u> | CV as Received | MJ/Kg (AR) | 6.578  |
| <u>Sample 466025</u> | CV as Received | MJ/Kg (AR) | 4.093  |



For and on behalf of KNIGHT ENERGY SERVICES LIMITED

KNIGHT ENERGY SERVICES LIMITED

Unit 1, Palmermount Industrial Estate, Dundonald, Ayrshire, KA2 9BL, Scotland

Tel: (01563) 850375 Fax: (01563) 850830 Email: ahk.scotland@ahkgroup.com

ALL WORK IS UNDERTAKEN SUBJECT TO OUR STANDARD TRADING TERMS AND CONDITIONS OF BUSINESS

This certificate shall not be reproduced except in full without written approval of KNIGHT ENERGY SERVICES LIMITED



2183



The right chemistry to deliver results

Chemtest Ltd.

Depot Road

Newmarket

CB8 0AL

Tel: 01638 606070

Email: info@chemtest.co.uk

## Final Report

---

Report No.: 16-24282-1

Initial Date of Issue: 14-Oct-2016

Client HBR

Client Address: Coggeshall Road  
Earls Colne  
Essex  
CO6 2JX

Contact(s): Suzanne Thorpe

Project HBRC060 Monckton

Quotation No.: Q16-07491

Date Received: 07-Oct-2016

Order No.:

Date Instructed: 07-Oct-2016

No. of Samples: 4

Turnaround (Wkdays): 5

Results Due: 13-Oct-2016

Date Approved: 14-Oct-2016

Approved By:

Details: Martin Dyer, Laboratory Manager

---



The right chemistry to deliver results

Project: HBR0060 Monckton

## Results - Leachate

| Client: HBR                  | Chemtest Job No.:    |      |       | 16-24282    |
|------------------------------|----------------------|------|-------|-------------|
| Quotation No.: Q16-07491     | Chemtest Sample ID.: |      |       | 362118      |
|                              | Client Sample ID.:   |      |       | CS2         |
|                              | Sample Type:         |      |       | SOIL        |
|                              | Date Sampled:        |      |       | 05-Oct-2016 |
| Parameter                    | Accred.              | SOP  | Units | LOD         |
| Cyanide (Total)              | U                    | 1300 | mg/l  | 0.050       |
| Cyanide (Free)               | U                    | 1300 | mg/l  | 0.050       |
| Cyanide (Complex)            | U                    | 1300 | mg/l  | 0.050       |
| Arsenic (Dissolved)          | U                    | 1450 | µg/l  | 1.0         |
| Cadmium (Dissolved)          | U                    | 1450 | µg/l  | 0.080       |
| Chromium (Dissolved)         | U                    | 1450 | µg/l  | 1.0         |
| Copper (Dissolved)           | U                    | 1450 | µg/l  | 1.0         |
| Mercury (Dissolved)          | U                    | 1450 | µg/l  | 0.50        |
| Nickel (Dissolved)           | U                    | 1450 | µg/l  | 1.0         |
| Lead (Dissolved)             | U                    | 1450 | µg/l  | 1.0         |
| Selenium (Dissolved)         | U                    | 1450 | µg/l  | 1.0         |
| Zinc (Dissolved)             | U                    | 1450 | µg/l  | 1.0         |
| Aliphatic TPH >C5-C6         | N                    | 1675 | µg/l  | 0.10        |
| Aliphatic TPH >C6-C8         | N                    | 1675 | µg/l  | 0.10        |
| Aliphatic TPH >C8-C10        | N                    | 1675 | µg/l  | 0.10        |
| Aliphatic TPH >C10-C12       | N                    | 1675 | µg/l  | 0.10        |
| Aliphatic TPH >C12-C16       | N                    | 1675 | µg/l  | 0.10        |
| Aliphatic TPH >C16-C21       | N                    | 1675 | µg/l  | 0.10        |
| Aliphatic TPH >C21-C35       | N                    | 1675 | µg/l  | 0.10        |
| Aliphatic TPH >C35-C44       | N                    | 1675 | µg/l  | 0.10        |
| Total Aliphatic Hydrocarbons | N                    | 1675 | µg/l  | 5.0         |
| Aromatic TPH >C5-C7          | N                    | 1675 | µg/l  | 0.10        |
| Aromatic TPH >C7-C8          | N                    | 1675 | µg/l  | 0.10        |
| Aromatic TPH >C8-C10         | N                    | 1675 | µg/l  | 0.10        |
| Aromatic TPH >C10-C12        | N                    | 1675 | µg/l  | 0.10        |
| Aromatic TPH >C12-C16        | N                    | 1675 | µg/l  | 0.10        |
| Aromatic TPH >C16-C21        | N                    | 1675 | µg/l  | 0.10        |
| Aromatic TPH >C21-C35        | N                    | 1675 | µg/l  | 0.10        |
| Total Aromatic Hydrocarbons  | N                    | 1675 | µg/l  | 5.0         |
| Total Petroleum Hydrocarbons | N                    | 1675 | µg/l  | 10          |
| Fluorene                     | U                    | 1700 | µg/l  | 0.10        |
| Fluoranthene                 | U                    | 1700 | µg/l  | 0.10        |
| Acenaphthene                 | U                    | 1700 | µg/l  | 0.10        |
| Fluorene                     | U                    | 1700 | µg/l  | 0.10        |
| Phenanthrene                 | U                    | 1700 | µg/l  | 0.10        |
| Anthracene                   | U                    | 1700 | µg/l  | 0.10        |
| Fluoranthene                 | U                    | 1700 | µg/l  | 0.10        |
| Pyrene                       | U                    | 1700 | µg/l  | 0.10        |
| Benzo[a]anthracene           | U                    | 1700 | µg/l  | 0.10        |
| Chrysene                     | U                    | 1700 | µg/l  | 0.10        |
| Benzo[b]fluoranthene         | U                    | 1700 | µg/l  | 0.10        |



The right chemistry to deliver results

Project: HBRC050 Monckton

### Results - Leachate

|                          |         |                      |       |             |         |
|--------------------------|---------|----------------------|-------|-------------|---------|
| Client: HBR              |         | Chemtest Job No.:    |       | 16-24282    |         |
| Quotation No.: Q16-07491 |         | Chemtest Sample ID.: |       | 362118      |         |
|                          |         | Client Sample ID.:   |       | CS2         |         |
|                          |         | Sample Type:         |       | SOIL        |         |
|                          |         | Date Sampled:        |       | 05-Oct-2016 |         |
| Parameter                | Accred. | SOP                  | Units | LOD         |         |
| Benzo[a]fluoranthene     | U       | 1700                 | µg/l  | 0.10        | < 0.10  |
| Benzo[a]pyrene           | U       | 1700                 | µg/l  | 0.10        | < 0.10  |
| Indeno(1,2,3-c,d)Pyrene  | U       | 1700                 | µg/l  | 0.10        | < 0.10  |
| Dibenz[a,h]Anthracene    | U       | 1700                 | µg/l  | 0.10        | < 0.10  |
| Benzo[g,h,i]perylene     | U       | 1700                 | µg/l  | 0.10        | < 0.10  |
| Total Of 16 PAH's        | U       | 1700                 | µg/l  | 2.0         | < 2.0   |
| Total Phenols            | U       | 1920                 | mg/l  | 0.030       | < 0.030 |



The right chemistry to deliver results

## Results - Soil

Project: HBRCC60 Monckton

|                              |                      |             |             |             |                      |
|------------------------------|----------------------|-------------|-------------|-------------|----------------------|
| Client: HBR                  | Chemtest Job No.:    | 16-24282    | 16-24282    | 16-24282    | 16-24282             |
| Quotation No.: Q16-07491     | Chemtest Sample ID.: | 362117      | 362118      | 362119      | 362120               |
|                              | Client Sample ID.:   | CS1         | CS2         | CS3         | CS4                  |
|                              | Sample Type:         | SOIL        | SOIL        | SOIL        | SOIL                 |
|                              | Date Sampled:        | 05-Oct-2016 | 05-Oct-2016 | 05-Oct-2016 | 05-Oct-2016          |
|                              | Asbestos Lab:        |             |             | COVENTRY    |                      |
| Parameter                    | Accred.              | SOP         | Units       | LOD         |                      |
| ACM Type                     | U                    | 2192        | N/A         | -           | -                    |
| Asbestos Identification      | U                    | 2192        | %           | 0.001       | No Asbestos Detected |
| Moisture                     | N                    | 2030        | %           | 0.020       | 11                   |
| Cyanide (Complex)            | U                    | 2300        | mg/kg       | 0.50        | 14                   |
| Cyanide (Free)               | U                    | 2300        | mg/kg       | 0.50        | 2.2                  |
| Cyanide (Total)              | U                    | 2300        | mg/kg       | 0.50        | 16                   |
| Arsenic                      | U                    | 2450        | mg/kg       | 1.0         | 10                   |
| Cadmium                      | U                    | 2450        | mg/kg       | 0.10        | 0.32                 |
| Chromium                     | U                    | 2450        | mg/kg       | 1.0         | 35                   |
| Copper                       | U                    | 2450        | mg/kg       | 0.50        | 34                   |
| Mercury                      | U                    | 2450        | mg/kg       | 0.10        | 0.62                 |
| Nickel                       | U                    | 2450        | mg/kg       | 0.50        | 75                   |
| Lead                         | U                    | 2450        | mg/kg       | 0.50        | 230                  |
| Selenium                     | U                    | 2450        | mg/kg       | 0.20        | < 0.20               |
| Zinc                         | U                    | 2450        | mg/kg       | 0.50        | 89                   |
| Aliphatic TPH >C5-C6         | N                    | 2680        | mg/kg       | 1.0         | < 1.0                |
| Aliphatic TPH >C6-C8         | N                    | 2680        | mg/kg       | 1.0         | < 1.0                |
| Aliphatic TPH >C8-C10        | U                    | 2680        | mg/kg       | 1.0         | < 1.0                |
| Aliphatic TPH >C10-C12       | U                    | 2680        | mg/kg       | 1.0         | < 1.0                |
| Aliphatic TPH >C12-C16       | U                    | 2680        | mg/kg       | 1.0         | < 1.0                |
| Aliphatic TPH >C16-C21       | U                    | 2680        | mg/kg       | 1.0         | < 1.0                |
| Aliphatic TPH >C21-C35       | U                    | 2680        | mg/kg       | 1.0         | < 1.0                |
| Aliphatic TPH >C35-C44       | N                    | 2680        | mg/kg       | 1.0         | < 1.0                |
| Total Aliphatic Hydrocarbons | N                    | 2680        | mg/kg       | 5.0         | < 5.0                |
| Aromatic TPH >C5-C7          | N                    | 2680        | mg/kg       | 1.0         | < 1.0                |
| Aromatic TPH >C7-C8          | N                    | 2680        | mg/kg       | 1.0         | < 1.0                |
| Aromatic TPH >C8-C10         | U                    | 2680        | mg/kg       | 1.0         | < 1.0                |
| Aromatic TPH >C10-C12        | U                    | 2680        | mg/kg       | 1.0         | 2.5                  |
| Aromatic TPH >C12-C16        | U                    | 2680        | mg/kg       | 1.0         | 45                   |
| Aromatic TPH >C16-C21        | U                    | 2680        | mg/kg       | 1.0         | 290                  |
| Aromatic TPH >C21-C35        | N                    | 2680        | mg/kg       | 1.0         | 270                  |
| Aromatic TPH >C35-C44        | N                    | 2680        | mg/kg       | 1.0         | 21                   |
| Total Aromatic Hydrocarbons  | N                    | 2680        | mg/kg       | 5.0         | 520                  |
| Total Petroleum Hydrocarbons | N                    | 2680        | mg/kg       | 10          | 620                  |
| Naphthalene                  | U                    | 2700        | mg/kg       | 0.10        | 10                   |
| Acenaphthylene               | U                    | 2700        | mg/kg       | 0.10        | 19                   |
| Acenaphthene                 | U                    | 2700        | mg/kg       | 0.10        | 5.8                  |
| Fluorene                     | U                    | 2700        | mg/kg       | 0.10        | 31                   |
| Phenanthrene                 | U                    | 2700        | mg/kg       | 0.10        | 110                  |

## Results - Soil

|                          |                      |      |       |      |             |             |             |             |
|--------------------------|----------------------|------|-------|------|-------------|-------------|-------------|-------------|
| Client: HBR              | Chemtest Job No.:    |      |       |      | 16-24282    | 16-24282    | 16-24282    | 16-24282    |
| Quotation No.: Q16-07491 | Chemtest Sample ID.: |      |       |      | 362117      | 362118      | 362119      | 362120      |
|                          | Client Sample ID.:   |      |       |      | CS1         | CS2         | CS3         | CS4         |
|                          | Sample Type:         |      |       |      | SOIL        | SOIL        | SOIL        | SOIL        |
|                          | Date Sampled:        |      |       |      | 05-Oct-2016 | 05-Oct-2016 | 05-Oct-2016 | 05-Oct-2016 |
|                          | Asbestos Lab:        |      |       |      |             |             | COVENTRY    |             |
| Parameter                | Accred.              | SOP  | Units | LOD  |             |             |             |             |
| Anthracene               | U                    | 2700 | mg/kg | 0.10 | 37          | 0.77        | 8.3         | < 0.10      |
| Fluoranthene             | U                    | 2700 | mg/kg | 0.10 | 86          | 2.9         | 34          | 0.34        |
| Pyrene                   | U                    | 2700 | mg/kg | 0.10 | 67          | 2.4         | 33          | 0.29        |
| Benzo[a]anthracene       | U                    | 2700 | mg/kg | 0.10 | 34          | 1.3         | 22          | 0.12        |
| Chrysene                 | U                    | 2700 | mg/kg | 0.10 | 35          | 1.6         | 24          | 0.15        |
| Benzo[b]fluoranthene     | U                    | 2700 | mg/kg | 0.10 | 32          | 1.4         | 26          | 0.26        |
| Benzo[k]fluoranthene     | U                    | 2700 | mg/kg | 0.10 | 13          | 0.44        | 10          | < 0.10      |
| Benzo[a]pyrene           | U                    | 2700 | mg/kg | 0.10 | 27          | 1.0         | 20          | 0.23        |
| Indeno[1,2,3-c,d]Pyrene  | U                    | 2700 | mg/kg | 0.10 | 14          | 0.54        | 13          | < 0.10      |
| Dibenzo[a,h]Anthracene   | U                    | 2700 | mg/kg | 0.10 | 3.8         | < 0.10      | 3.9         | < 0.10      |
| Benzo[g,h,i]perylene     | U                    | 2700 | mg/kg | 0.10 | 12          | 0.57        | 11          | < 0.10      |
| Total Of 16 PAH's        | U                    | 2700 | mg/kg | 2.0  | 540         | 18          | 250         | < 2.0       |
| Total Phenols            | U                    | 2820 | mg/kg | 0.30 | < 0.30      | < 0.30      | < 0.30      | < 0.30      |

## Appendix D

### Gas Data

# Summary of Ground Gas and Groundwater Monitoring

## JOB DETAILS:

Client: Hargreaves  
Site: Monckton Cokeworks  
Date: 42486

Job No: G15009

Project Manager: JH



|                  | GAS CONCENTRATIONS |        |                       |        |                        |        |                          |        |               |        | VOLATILES      |                        | FLOW DATA        |        | WELL AND WATER DATA                 |                             |                   |                      |                    | Comments |               |
|------------------|--------------------|--------|-----------------------|--------|------------------------|--------|--------------------------|--------|---------------|--------|----------------|------------------------|------------------|--------|-------------------------------------|-----------------------------|-------------------|----------------------|--------------------|----------|---------------|
| Monitoring Point | Methane (%v/v)     |        | Carbon dioxide (%v/v) |        | Carbon monoxide (%v/v) |        | Hydrogen sulphide (%v/v) |        | Oxygen (%v/v) |        | PID Peak (ppm) | Product thickness (mm) | Flow rate (l/hr) |        | Differential borehole Pressure (Pa) | Average Water level (m bgl) | Depth of well (m) | Reduced level (mAOD) | Water level (mAOD) |          | Response Zone |
|                  | Peak               | Steady | Peak                  | Steady | Peak                   | Steady | Peak                     | Steady | Peak          | Steady |                |                        | Peak             | Steady |                                     |                             |                   |                      |                    |          |               |
| BH305            | 0.00               | 0.00   | 4.50                  | 4.50   | 0.00                   | 0.00   | 0.00                     | 0.00   | 15.70         | 15.70  | 0.10           | 0.00                   | 0.00             | 0.00   | 0.00                                | 9.06                        | 0.00              | 0.00                 | -9.06              | 0        |               |
| BH301            | 0.00               | 0.00   | 2.10                  | 2.10   | 0.00                   | 0.00   | 0.00                     | 0.00   | 12.70         | 12.70  | 0.00           | 0.00                   | 0.00             | 0.00   | 0.00                                | 8.79                        | 0.00              | 0.00                 | -8.79              | 0        |               |
| RBH4             | 0.00               | 0.00   | 3.50                  | 3.50   | 0.00                   | 0.00   | 0.00                     | 0.00   | 3.50          | 3.50   | 1.50           | 0.00                   | 0.00             | 0.00   | 0.00                                | 8.01                        | 0.00              | 0.00                 | -8.01              | 0        |               |
| RBH4a            | 0.00               | 0.00   | 1.40                  | 1.40   | 0.00                   | 0.00   | 0.00                     | 0.00   | 11.80         | 11.80  | 0.00           | 0.00                   | 2.60             | 2.60   | 0.00                                | 7.01                        | 0.00              | 0.00                 | -7.01              | 0        |               |
| BH304            | 0.00               | 0.00   | 8.40                  | 8.40   | 0.00                   | 0.00   | 0.00                     | 0.00   | 6.20          | 6.20   | 8.40           | 0.00                   | 0.30             | 0.30   | 0.00                                | 6.18                        | 0.00              | 0.00                 | -6.18              | 0        |               |
| VSS              | 0.00               | 0.00   | 5.20                  | 5.20   | 1.00                   | 0.00   | 0.00                     | 0.00   | 10.80         | 11.70  | 0.00           | 0.00                   | 0.90             | 0.90   | 0.00                                | 7.05                        | 0.00              | 0.00                 | -7.05              | 0        |               |
| 0                | 0.10               | 0.10   | 2.20                  | 2.20   | 0.00                   | 0.00   | 0.00                     | 0.00   | 5.40          | 5.40   | 0.40           | 0.00                   | 0.90             | 0.90   | 0.00                                | 6.71                        | 0.00              | 0.00                 | -6.71              | 0        |               |
| 0                | 0.10               | 0.10   | 2.00                  | 2.00   | 0.00                   | 0.00   | 0.00                     | 0.00   | 0.70          | 0.70   | 3.20           | 0.00                   | 1.80             | 1.80   | 0.00                                | 4.41                        | 0.00              | 0.00                 | -4.41              | 0        |               |
| 0                | 0.00               | 0.00   | 4.70                  | 4.70   | 0.00                   | 0.00   | 0.00                     | 0.00   | 1.80          | 1.80   | 0.20           | 0.00                   | 1.40             | 1.40   | 0.00                                | 3.98                        | 0.00              | 0.00                 | -3.98              | 0        |               |
| 0                | 3.00               | 3.00   | 1.40                  | 1.40   | 0.00                   | 0.00   | 1.00                     | 0.00   | 15.10         | 15.10  | 0.00           | 0.00                   | 0.00             | 0.00   | 0.00                                | 5.83                        | 0.00              | 0.00                 | -5.83              | 0        |               |
|                  | 0.00               | 0.00   | 2.20                  | 0.40   | 0.00                   | 0.00   | 0.00                     | 0.00   | 18.80         | 18.80  | 0.00           | 0.00                   | 0.00             | 0.00   | 0.00                                | 5.09                        | 0.00              | 0.00                 | -5.09              | 0        |               |
|                  | 0.00               | 0.00   | 4.50                  | 4.50   | 0.00                   | 0.00   | 0.00                     | 0.00   | 2.00          | 2.00   | 0.80           | 0.00                   | 0.00             | 0.00   | 0.00                                | 4.03                        | 0.00              | 0.00                 | -4.03              | 0        |               |
|                  | 0.00               | 0.00   | 3.50                  | 3.50   | 0.00                   | 0.00   | 0.00                     | 0.00   | 15.60         | 16.70  | 0.70           | 0.00                   | 0.00             | 0.00   | 0.00                                | 5.90                        | 0.00              | 0.00                 | -5.90              | 0        |               |
| Max              | 3.00               | 3.00   | 8.40                  | 6.20   | 1.00                   | 0.00   | 1.00                     | 0.00   | 18.80         | 18.80  | 8.40           | 0.00                   | 2.60             | 2.60   | 0.00                                | 9.06                        | 0.00              | 0.00                 | -3.96              |          |               |
| Min              | 0.00               | 0.00   | 1.40                  | 0.40   | 0.00                   | 0.00   | 0.00                     | 0.00   | 0.70          | 0.70   | 0.00           | 0.00                   | 0.00             | 0.00   | 0.00                                | 3.96                        | 0.00              | 0.00                 | -9.06              |          |               |
| GSV (l/hr)       | 0.078              |        | 0.1612                |        |                        |        |                          |        |               |        |                |                        |                  |        |                                     |                             |                   |                      |                    |          |               |