

**C.O.C.: G27861**

**REPORT No. B12-23825**

**Report To:**

**Resolute Bay**

Government Office,  
NU X0A 0V0 Canada

**Attention:** Bhabesh Roy

**Caduceon Environmental Laboratories**

2378 Holly Lane  
Ottawa Ontario K1V 7P1  
Tel: 613-526-0123  
Fax: 613-526-1244

DATE RECEIVED: 18-Sep-12

JOB/PROJECT NO.:

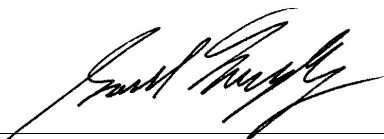
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SAMPLE MATRIX: Waste Water

WATERWORKS NO.

|                                    |          |         | Client I.D.      |                    | Utilidor N 74'<br>41 77 W94' 50<br>45 | Wetland N 74'<br>44 32 W95' 00<br>69 | Leachate N<br>74' 45 W994'<br>55 | Resolute Pipe<br>N74' 41 57<br>W94' 50 47 |
|------------------------------------|----------|---------|------------------|--------------------|---------------------------------------|--------------------------------------|----------------------------------|-------------------------------------------|
|                                    |          |         | Sample I.D.      |                    | B12-23825-1                           | B12-23825-2                          | B12-23825-3                      | B12-23825-4                               |
|                                    |          |         | Date Collected   |                    | 13-Sep-12                             | 13-Sep-12                            | 13-Sep-12                        | 13-Sep-12                                 |
| Parameter                          | Units    | M.D.L.  | Reference Method | Date/Site Analyzed |                                       |                                      |                                  |                                           |
| Alkalinity (as CaCO <sub>3</sub> ) | mg/L     | 5       | SM 2320B         | 19-Sep-12/O        |                                       | 215                                  | 194                              |                                           |
| Conductivity                       | µmho/cm  | 1       | SM 2510B         | 19-Sep-12/O        |                                       | 717                                  | 1450                             |                                           |
| pH                                 | pH Units |         | SM 4500H         | 19-Sep-12/O        | 7.86                                  | 8.03                                 | 7.62                             |                                           |
| BOD                                | mg/L     | 3       | SM 5210B         | 21-Sep-12/O        |                                       | < 3                                  | 216                              |                                           |
| Total Suspended Solids             | mg/L     | 3       | SM 2540D         | 19-Sep-12/O        | 10                                    | < 3                                  | 14                               |                                           |
| Nitrite (N)                        | mg/L     | 0.1     | SM4110C          | 19-Sep-12/O        |                                       | < 0.1                                | 0.9                              |                                           |
| Nitrate (N)                        | mg/L     | 0.1     | SM4110C          | 19-Sep-12/O        |                                       | 1.3                                  | < 0.1                            |                                           |
| Sulphate                           | mg/L     | 1       | SM4110C          | 19-Sep-12/O        |                                       | 23                                   |                                  |                                           |
| Sulphate                           | mg/L     | 1       | SM4110C          | 20-Sep-12/O        |                                       |                                      | 439                              |                                           |
| Arsenic                            | mg/L     | 0.0005  | EPA 200.8        | 19-Sep-12/O        |                                       | 0.0010                               | 0.0028                           |                                           |
| Calcium                            | mg/L     | 0.02    | SM 3120          | 21-Sep-12/O        |                                       | 79.7                                 |                                  |                                           |
| Calcium                            | mg/L     | 0.02    | SM 3120          | 24-Sep-12/O        |                                       |                                      | 213                              |                                           |
| Cadmium                            | mg/L     | 0.005   | SM 3120          | 21-Sep-12/O        |                                       | < 0.005                              | < 0.005                          |                                           |
| Copper                             | mg/L     | 0.002   | SM 3120          | 21-Sep-12/O        |                                       | 0.004                                | 0.021                            |                                           |
| Chromium                           | mg/L     | 0.002   | SM 3120          | 21-Sep-12/O        |                                       | 0.129                                | 0.003                            |                                           |
| Iron (Total)                       | mg/L     | 0.005   | SM 3120          | 21-Sep-12/O        |                                       | 0.464                                | 0.236                            |                                           |
| Lead                               | mg/L     | 0.02    | SM 3120          | 21-Sep-12/O        |                                       | < 0.02                               | < 0.02                           |                                           |
| Magnesium                          | mg/L     | 0.01    | SM 3120          | 21-Sep-12/O        |                                       | 22.9                                 | 43.5                             |                                           |
| Mercury                            | mg/L     | 0.00002 | SM 3112 B        | 21-Sep-12/O        |                                       | < 0.00002                            | < 0.00002                        |                                           |
| Nickel                             | mg/L     | 0.01    | SM 3120          | 21-Sep-12/O        |                                       | 0.05                                 | < 0.01                           |                                           |
| Phosphorus                         | mg/L     | 0.1     | SM 3120          | 21-Sep-12/O        |                                       | < 0.1                                | < 0.1                            |                                           |
| Potassium                          | mg/L     | 0.1     | SM 3120          | 21-Sep-12/O        |                                       | 2.0                                  | 14.8                             |                                           |
| Sodium                             | mg/L     | 0.2     | SM 3120          | 21-Sep-12/O        |                                       | 55.7                                 | 82.1                             |                                           |
| Zinc                               | mg/L     | 0.005   | SM 3120          | 21-Sep-12/O        |                                       | < 0.005                              | 0.284                            |                                           |
| Oil and Grease-Anim/Veg.           | mg/L     | 1.0     | SM 5520          | 21-Sep-12/K        |                                       |                                      | < 1.0                            | 3.4                                       |
| Oil and Grease-Mineral             | mg/L     | 1.0     | SM 5520          | 21-Sep-12/K        |                                       |                                      | < 1.0                            | 4.5                                       |



Gord Murphy  
Lab Supervisor

M.D.L. = Method Detection Limit

Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill

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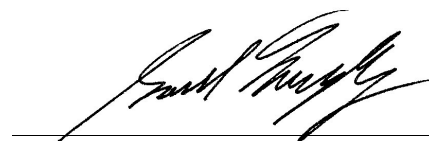
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SAMPLE MATRIX: Waste Water

WATERWORKS NO.

|                    |           |        | Client I.D.      | Utilidor N 74'<br>41 77 W94' 50<br>45 | Wetland N 74'<br>44 32 W95' 00<br>69 | Leachate N<br>74' 45 W994'<br>55 | Resolute Pipe<br>N74' 41 57<br>W94' 50 47 |
|--------------------|-----------|--------|------------------|---------------------------------------|--------------------------------------|----------------------------------|-------------------------------------------|
|                    |           |        | Sample I.D.      | B12-23825-1                           | B12-23825-2                          | B12-23825-3                      | B12-23825-4                               |
|                    |           |        | Date Collected   | 13-Sep-12                             | 13-Sep-12                            | 13-Sep-12                        | 13-Sep-12                                 |
| Parameter          | Units     | M.D.L. | Reference Method | Date/Site Analyzed                    |                                      |                                  |                                           |
| Oil & Grease-Total | mg/L      | 1.0    | SM 5520          | 21-Sep-12/K                           |                                      | < 1.0                            | 7.9                                       |
| Fecal Coliform     | cfu/100mL | 1      | MOE E3371        | 19-Sep-12/O                           | 9600                                 | < 20                             |                                           |



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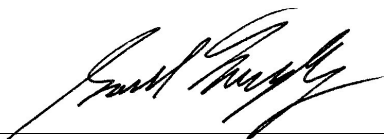
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SAMPLE MATRIX: Waste Water

WATERWORKS NO.

|                                    |          |         | Client I.D.      |                    | Loaggon N' 74' |  |  |  |
|------------------------------------|----------|---------|------------------|--------------------|----------------|--|--|--|
|                                    |          |         | Sample I.D.      |                    | B12-23825-5    |  |  |  |
|                                    |          |         | Date Collected   |                    | 13-Sep-12      |  |  |  |
| Parameter                          | Units    | M.D.L.  | Reference Method | Date/Site Analyzed |                |  |  |  |
| Alkalinity (as CaCO <sub>3</sub> ) | mg/L     | 5       | SM 2320B         | 19-Sep-12/O        | 484            |  |  |  |
| Conductivity                       | µmho/cm  | 1       | SM 2510B         | 19-Sep-12/O        | 1560           |  |  |  |
| pH                                 | pH Units |         | SM 4500H         | 19-Sep-12/O        | 7.56           |  |  |  |
| BOD                                | mg/L     | 3       | SM 5210B         | 21-Sep-12/O        | 620            |  |  |  |
| Total Suspended Solids             | mg/L     | 3       | SM 2540D         | 19-Sep-12/O        | 128            |  |  |  |
| Nitrite (N)                        | mg/L     | 0.1     | SM4110C          | 19-Sep-12/O        | < 0.1          |  |  |  |
| Nitrate (N)                        | mg/L     | 0.1     | SM4110C          | 19-Sep-12/O        | 0.1            |  |  |  |
| Sulphate                           | mg/L     | 1       | SM4110C          | 19-Sep-12/O        | 38             |  |  |  |
| Sulphate                           | mg/L     | 1       | SM4110C          | 20-Sep-12/O        |                |  |  |  |
| Arsenic                            | mg/L     | 0.0005  | EPA 200.8        | 19-Sep-12/O        | 0.0015         |  |  |  |
| Calcium                            | mg/L     | 0.02    | SM 3120          | 21-Sep-12/O        | 51.0           |  |  |  |
| Calcium                            | mg/L     | 0.02    | SM 3120          | 24-Sep-12/O        |                |  |  |  |
| Cadmium                            | mg/L     | 0.005   | SM 3120          | 21-Sep-12/O        | < 0.005        |  |  |  |
| Copper                             | mg/L     | 0.002   | SM 3120          | 21-Sep-12/O        | 0.204          |  |  |  |
| Chromium                           | mg/L     | 0.002   | SM 3120          | 21-Sep-12/O        | 0.116          |  |  |  |
| Iron (Total)                       | mg/L     | 0.005   | SM 3120          | 21-Sep-12/O        | 1.13           |  |  |  |
| Lead                               | mg/L     | 0.02    | SM 3120          | 21-Sep-12/O        | < 0.02         |  |  |  |
| Magnesium                          | mg/L     | 0.01    | SM 3120          | 21-Sep-12/O        | 12.5           |  |  |  |
| Mercury                            | mg/L     | 0.00002 | SM 3112 B        | 21-Sep-12/O        | 0.00003        |  |  |  |
| Nickel                             | mg/L     | 0.01    | SM 3120          | 21-Sep-12/O        | 0.10           |  |  |  |
| Phosphorus                         | mg/L     | 0.1     | SM 3120          | 21-Sep-12/O        | 12.7           |  |  |  |
| Potassium                          | mg/L     | 0.1     | SM 3120          | 21-Sep-12/O        | 29.4           |  |  |  |
| Sodium                             | mg/L     | 0.2     | SM 3120          | 21-Sep-12/O        | 84.9           |  |  |  |
| Zinc                               | mg/L     | 0.005   | SM 3120          | 21-Sep-12/O        | 0.265          |  |  |  |
| Oil and Grease-Anim/Veg.           | mg/L     | 1.0     | SM 5520          | 21-Sep-12/K        |                |  |  |  |
| Oil and Grease-Mineral             | mg/L     | 1.0     | SM 5520          | 21-Sep-12/K        |                |  |  |  |
| Oil & Grease-Total                 | mg/L     | 1.0     | SM 5520          | 21-Sep-12/K        |                |  |  |  |



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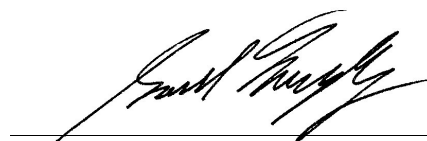
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SAMPLE MATRIX: Waste Water

WATERWORKS NO.

|                  |              |               |                         |                             |      |  |  |
|------------------|--------------|---------------|-------------------------|-----------------------------|------|--|--|
|                  |              |               | <b>Client I.D.</b>      | Loaggon N' 74'<br>44 W95' 0 |      |  |  |
|                  |              |               | <b>Sample I.D.</b>      | B12-23825-5                 |      |  |  |
|                  |              |               | <b>Date Collected</b>   | 13-Sep-12                   |      |  |  |
| <b>Parameter</b> | <b>Units</b> | <b>M.D.L.</b> | <b>Reference Method</b> | <b>Date/Site Analyzed</b>   |      |  |  |
| Fecal Coliform   | cfu/100mL    | 1             | MOE E3371               | 19-Sep-12/O                 | < 20 |  |  |



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