

Client: ROCKWOOD PUBLIC SCHOOL
11588 Round Lake Rd.
Pembroke, ON
K8A 6W8
Attention: Ms. Paula Vanhoof
PO#: 6071346759
Invoice to: Renfrew County District School Board

Report Number: 1602101
Date Submitted: 2016-02-10
Date Reported: 2016-03-01
Project: Rockwood PS
COC #: 805411
Waterworks/Facility: 260013858

Page 1 of 9

Dear Paula Vanhoof:

Please find attached the analytical results for your samples. If you have any questions regarding this report, please do not hesitate to call (613-727-5692).


Report Comments:



Shyla Monette
2016.03.01
12:42:15 -05'00'

APPROVAL: _____

Shyla Monette
Team Leader, Inorganics



Charlie
(Long) Qu
2016.03.0
1 11:15:36
-05'00'

APPROVAL: _____

Charlie (Long) Qu
Laboratory Supervisor, Organics

All analysis is completed in Ottawa, Ontario (unless otherwise indicated).

Exova Ottawa is accredited by CALA, Canadian Association for Laboratory Accreditation to ISO/IEC 17025 for tests which appear on our CALA scope of accreditation. It can be found at <http://www.cala.ca/scopes/2602.pdf>.

Exova (Ottawa) is certified and accredited for specific parameters by OMAFRA, Ontario Ministry of Agriculture, Food and Rural Affairs (for farm soils). Licensed by Ontario MOE for specific tests in drinking water.

Exova (Mississauga) is accredited for specific parameters by SCC, Standards Council of Canada (to ISO 17025)

Please note: Field data, where presented on the report, has been provided by the client and is presented for informational purposes only. Guideline values listed on this report are provided for ease of use (informational purposes) only. Exova recommends consulting the official provincial or federal guideline as required.

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| Group | Analyte | MRL | Units | Guideline | Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D. |
|---------------------|--|-------|----------|-----------|--|
| Herbicide/Pesticide | 2,3,4,6-tetrachlorophenol | 0.5 | ug/L | MAC-100 | 1226471 Supply Water TREATEDWATER 2016-02-09 Rockwood PS |
| | 2,4,6-trichlorophenol | 0.5 | ug/L | MAC-5 | <0.5 |
| | 2,4-dichlorophenol | 0.5 | ug/L | MAC-900 | <0.5 |
| | 2,4-dichlorophenoxyacetic acid (2,4-D) | 1.0 | ug/L | IMAC-100 | <1.0 |
| | a-chlordane | 0.006 | ug/L | | <0.006 |
| | Alachlor | 0.5 | ug/L | IMAC-5 | <0.5 |
| | Aldrin | 0.006 | ug/L | | <0.006 |
| | Atrazine | 1.0 | ug/L | | <1.0 |
| | Atrazine + N-dealkylated metabolites | 0.2 | ug/L | IMAC-5 | <0.2 |
| | Azinphos-methyl | 2.0 | ug/L | MAC-20 | <2.0 |
| | Bendiocarb | 2.0 | ug/L | MAC-40 | <2.0 |
| | Benzo(a)pyrene | 0.01 | ug/L | MAC-0.01 | <0.01 |
| | Bromoxynil | 0.5 | ug/L | IMAC-5 | <0.5 |
| | Carbaryl | 5.0 | ug/L | MAC-90 | <5.0 |
| | Carbofuran | 5.0 | ug/L | MAC-90 | <5.0 |
| | Chlorpyrifos | 1.0 | ug/L | MAC-90 | <1.0 |
| | De-ethylated atrazine | 1.0 | ug/L | | <1.0 |
| | Diazinon | 1.0 | ug/L | MAC-20 | <1.0 |
| | Dicamba | 1.0 | ug/L | MAC-120 | <1.0 |
| | Diclofop-methyl | 0.9 | ug/L | MAC-9 | <0.9 |
| | Dieldrin | 0.006 | ug/L | | <0.006 |
| | Dimethoate | 2.5 | ug/L | IMAC-20 | <2.5 |
| | Diquat | 5 | ug/L | MAC-70 | <5 |
| Diuron | 10 | ug/L | MAC-150 | <10 | |
| g-chlordane | 0.006 | ug/L | | <0.006 | |
| Glyphosate | 10 | ug/L | IMAC-280 | <10 | |

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 COC #: 805411
 Waterworks/Facility: 260013858

Lab I.D. 1226471
 Sample Matrix Supply Water
 Sample Type TREATEDWATER
 Sampling Date 2016-02-09
 Sample I.D. Rockwood PS

| Group | Analyte | MRL | Units | Guideline | |
|---------------------|-------------------|--------|---------|------------|---------|
| Herbicide/Pesticide | Malathion | 5.0 | ug/L | MAC-190 | <5.0 |
| | MCPA | 10 | ug/L | | <10 |
| | Metolachlor | 1.0 | ug/L | IMAC-50 | <1.0 |
| | Metribuzin | 5.0 | ug/L | MAC-80 | <5.0 |
| | op-DDT | 0.006 | ug/L | | <0.006 |
| | Oxychlorthane | 0.006 | ug/L | | <0.006 |
| | Paraquat | 1 | ug/L | IMAC-10 | <1 |
| | Pentachlorophenol | 0.5 | ug/L | MAC-60 | <0.5 |
| | Phorate | 0.5 | ug/L | IMAC-2 | <0.5 |
| | Picloram | 5.0 | ug/L | IMAC-190 | <5.0 |
| | pp-DDD | 0.006 | ug/L | | <0.006 |
| | pp-DDE | 0.006 | ug/L | | <0.006 |
| | pp-DDT | 0.006 | ug/L | | <0.006 |
| | Prometryne | 0.25 | ug/L | IMAC-1 | <0.25 |
| | Simazine | 1.0 | ug/L | IMAC-10 | <1.0 |
| | Terbufos | 0.4 | ug/L | IMAC-1 | <0.4 |
| | Triallate | 1 | ug/L | MAC-230 | <1 |
| Trifluralin | 1.0 | ug/L | IMAC-45 | <1.0 | |
| Mercury | Mercury | 0.0001 | mg/L | MAC-0.001 | <0.0001 |
| Metals | Antimony | 0.0005 | mg/L | IMAC-0.006 | <0.0005 |
| | Arsenic | 0.001 | mg/L | IMAC-0.025 | <0.001 |
| | Barium | 0.01 | mg/L | MAC-1.0 | <0.01 |
| | Boron | 0.01 | mg/L | IMAC-5.0 | 0.59 |
| | Cadmium | 0.0001 | mg/L | MAC-0.005 | <0.0001 |
| | Chromium | 0.001 | mg/L | MAC-0.05 | <0.001 |
| | Selenium | 0.001 | mg/L | MAC-0.01 | <0.001 |

Guideline = MOE REG. 170/03 * = **Guideline Exceedence**

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Report Number: 1602101
 Date Submitted: 2016-02-10
 Date Reported: 2016-03-01
 Project: Rockwood PS
 COC #: 805411
 Waterworks/Facility: 260013858

| | |
|---------------|--------------|
| Lab I.D. | 1226471 |
| Sample Matrix | Supply Water |
| Sample Type | TREATEDWATER |
| Sampling Date | 2016-02-09 |
| Sample I.D. | Rockwood PS |

| Group | Analyte | MRL | Units | Guideline | |
|---------------------------|----------------------------------|-------|-------|-----------|-------|
| Metals | Uranium | 0.001 | mg/L | MAC-0.02 | 0.002 |
| PCBs | Polychlorinated Biphenyls (PCBs) | 0.1 | ug/L | IMAC-3 | <0.1 |
| VOCs | 1,1-dichloroethylene | 0.5 | ug/L | MAC-14 | <0.5 |
| | 1,2-dichlorobenzene | 0.4 | ug/L | MAC-200 | <0.4 |
| | 1,2-dichloroethane | 0.2 | ug/L | IMAC-5 | <0.2 |
| | 1,4-dichlorobenzene | 0.4 | ug/L | MAC-5 | <0.4 |
| | Benzene | 0.5 | ug/L | MAC-5 | <0.5 |
| | Carbon Tetrachloride | 0.2 | ug/L | MAC-5 | <0.2 |
| | Dichloromethane | 4.0 | ug/L | MAC-50 | <4.0 |
| | Monochlorobenzene | 0.2 | ug/L | MAC-80 | <0.2 |
| | Tetrachloroethylene | 0.3 | ug/L | MAC-30 | <0.3 |
| | Trichloroethylene | 0.3 | ug/L | MAC-5 | <0.3 |
| | Vinyl Chloride | 0.2 | ug/L | MAC-2 | <0.2 |
| VOCs Surrogates (%REC) | 1,2-dichloroethane-d4 | 0 | % | | 130 |
| | 4-bromofluorobenzene | 0 | % | | 124 |
| | Toluene-d8 | 0 | % | | 94 |

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QC Summary

| Analyte | Blank | QC % Rec | QC Limits |
|--|--------------|----------|-----------|
| Run No 303280 Analysis/Extraction Date 2016-02-11 Analyst K_A | | | |
| Method M SM3112B-3500B | | | |
| Mercury | <0.0001 mg/L | 95 | 76-123 |
| Run No 303303 Analysis/Extraction Date 2016-02-12 Analyst K_A | | | |
| Method EPA 200.8 | | | |
| Arsenic | <0.001 mg/L | 98 | 93-106 |
| Boron (total) | <0.01 mg/L | 111 | 88-112 |
| Barium | <0.01 mg/L | 93 | 91-109 |
| Cadmium | <0.0001 mg/L | 97 | 93-107 |
| Chromium Total | <0.001 mg/L | 97 | 94-106 |
| Antimony | <0.0005 mg/L | 96 | 80-120 |
| Selenium | <0.001 mg/L | 94 | 91-108 |
| Uranium | <0.001 mg/L | 101 | 94-106 |
| Run No 303376 Analysis/Extraction Date 2016-02-10 Analyst TJB | | | |
| Method V 8260B | | | |
| Dichloroethylene, 1,1- | <0.5 ug/L | 107 | 60-130 |
| Dichlorobenzene, 1,2- | <0.4 ug/L | 102 | 60-130 |
| Dichloroethane, 1,2- | <0.2 ug/L | 115 | 60-130 |

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QC Summary

| Analyte | Blank | QC % Rec | QC Limits |
|--|-------------|----------|-----------|
| Dichlorobenzene, 1,4- | <0.4 ug/L | 109 | 60-130 |
| Benzene | <0.5 ug/L | 111 | 60-130 |
| Carbon Tetrachloride | <0.2 ug/L | 110 | 60-130 |
| Methylene Chloride | <4.0 ug/L | 94 | 60-130 |
| Chlorobenzene | <0.2 ug/L | 104 | 60-130 |
| Tetrachloroethylene | <0.3 ug/L | 104 | 60-130 |
| Trichloroethylene | <0.3 ug/L | 113 | 60-130 |
| Vinyl Chloride | <0.2 ug/L | 85 | 60-130 |
| Run No 303441 Analysis/Extraction Date 2016-02-12 Analyst C M | | | |
| Method P 8081A | | | |
| a-chlordane | <0.006 ug/L | 82 | 50-140 |
| Aldrin | <0.006 ug/L | 67 | 50-140 |
| Dieldrin | <0.006 ug/L | 82 | 50-140 |
| g-chlordane | <0.006 ug/L | 80 | 50-140 |
| op-DDT | <0.006 ug/L | 115 | 50-140 |
| Oxychlordane | <0.006 ug/L | 86 | 50-140 |
| Polychlorinated Biphenyls | <0.1 ug/L | 80 | 60-140 |
| DDD | <0.006 ug/L | 73 | 50-140 |

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QC Summary

| Analyte | Blank | QC % Rec | QC Limits |
|---|-------------|----------|-----------|
| DDE | <0.006 ug/L | 80 | 50-140 |
| DDT | <0.006 ug/L | 120 | 50-140 |
| Run No 303995 Analysis/Extraction Date 2016-03-01 Analyst QL | | | |
| Method P 8000-Phenoxy | | | |
| 2,3,4,6-tetrachlorophenol | | | |
| Trichlorophenol, 2,4,6- | | | |
| Dichlorophenol, 2,4- | | | |
| 2,4-dichlorophenoxyacetic acid (2,4-D) | | | |
| Alachlor | | | |
| Atrazine | | | |
| Atrazine + N-dealkylated metabolites | | | |
| Azinphos-methyl | | | |
| Bendiocarb | | | |
| Benzo[a]pyrene | | | |
| Bromoxynil | | | |
| Carbaryl | | | |
| Carbofuran | | | |
| Chlorpyrifos | | | |

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QC Summary

| Analyte | Blank | QC % Rec | QC Limits |
|-----------------------|-------|----------|-----------|
| De-ethylated atrazine | | | |
| Diazinon | | | |
| Dicamba | | | |
| Diclofop-methyl | | | |
| Dimethoate | | | |
| Diquat | | | |
| Diuron | | | |
| Glyphosate | | | |
| Malathion | | | |
| Metolachlor | | | |
| Metribuzin | | | |
| Paraquat | | | |
| Pentachlorophenol | | | |
| Phorate | | | |
| Picloram | | | |
| Prometryne | | | |
| Simazine | | | |
| Terbufos | | | |

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QC Summary

| Analyte | Blank | QC % Rec | QC Limits |
|---|----------|----------|-----------|
| Triallate | | | |
| Trifluralin | | | |
| Run No 303998 Analysis/Extraction Date 2016-03-01 Analyst QL | | | |
| Method P 8000-Phenoxy | | | |
| MCPA | <10 ug/L | | |

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