

August 2018

## HYDROLOGICAL REVIEW SUMMARY

The form is to be completed by the Professional that prepared the Hydrological Review.  
 Use of the form by the City of Toronto is not to be construed as verification of engineering/hydrological content.

Refer to the Terms of Reference, Hydrological Review:

[Link to Terms of Reference Hydrological Review](#)

For City Staff Use Only:	
Name of ECS Case Manager (Please print)	
Date Review Summary provided to to TW, EM&P	

**IF ANY OF THE REQUIREMENTS LISTED BELOW HAVE NOT BEEN INCLUDED IN THE HYDROLOGICAL REVIEW, THE REVIEW WILL BE CONSIDERED INCOMPLETE.  
 THE GREY SHADED BOXES WILL REQUIRE A CONSISTANCY CHECK BY THE ECS CASE MANAGER.**

**Summary of Key Information:**

SITE INFORMATION		Page # & Section # of Review	Review Includes this Information City Staff (Check)
Site Address	506 - 516 Church St, Toronto ON	Cover Page	
Postal Code	M4Y 2C8		
Property Owner (on request for comments memo)	Graywood Developments	Cover Page	
Proposed description of the project (if applicable) (point towers, number of podiums)	High-rise residential tower (approx. 16 storeys). Zero podiums.	Sec 1.1, Pg. 4	
Land Use (ex. commercial, residential, mixed, institutional, industrial)	Residential tower, commercial units near ground level	Sec 1.1, Pg. 4	
Number of below grade levels for the proposed structure	Two and a half (2.5) levels of underground parking	Sec 1.1, Pg. 4	
HYDROLOGICAL REVIEW INFORMATION			
Date Hydrological Review was prepared:	March 31, 2021	Cover Page	
Who Performed the Hydrological Review (Consulting Firm)	EXP Services Inc.	Sec 1.1, Pg. 4	
Name of Author of Hydrological Review	Francois Chartier, M.Sc., P.Geo.; Tomson Hecky, M.Sc., .Geo.; Peyman Sayyah, M.Sc., P.Geo.	Sec 1.1, Pg.4	

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SITE INFORMATION		Page # & Section # of Review	Review Includes this Information City Staff (Check)
<p>Check the directories on the website for Professional Geoscientists and/or Professional Engineers of Ontario been checked to ensure that the Hydrological Report has been prepared by a qualified person who is a licensed Professional Geoscientist as set out in the Professional Geoscientist Act of Ontario or a Professional Engineer?</p> <p>PEO: <a href="#">Professional Engineers of Ontario</a>            APGO: <a href="#">Association of Professional Geoscientists of Ontario</a></p>	<p>Hydrogeological Report prepared by qualified Professional Geoscientists</p>	<p>N/A</p>	
<p>Has the Hydrological Review been prepared in accordance with all the following:</p> <ul style="list-style-type: none"> <li>• Ontario Water Resources Act</li> <li>• Ontario Regulation 387/04</li> <li>• Toronto Municipal Code Chapter 681-Sewers</li> </ul>	<p>Yes</p>	<p>Sec 1.3, Pg. 5</p>	
		<p>Page # &amp; Section # of every occurrence in the Review</p>	<p>Review Includes this Information City Staff (Check)</p>

## HYDROLOGICAL REVIEW SUMMARY

SITE INFORMATION		Page # & Section # of Review	Review Includes this Information City Staff (Check)
<p>Total Volume (L/day) Short Term Discharge of groundwater (construction dewatering) <b>with safety factor included</b></p>	<p>364,600 L/day</p> <p>What safety factor was used?</p> <p>2</p>	<p>Sec 4.4, Pg. 18</p>	
<p>Total Volume (L/day) Short Term Discharge of groundwater (construction dewatering) <b>without safety factor included</b></p>	<p>194,300 L/day</p>	<p>Sec 4.4, Pg. 18</p>	
<p>Total Volume (L/day) Long Term drainage of groundwater (from foundation drainage, weeping tiles, sub slab drainage) <b>with safety factor included</b></p> <p>If the development is part of a multiple tower complex, include total volume for each separate tower</p>	<p>55,000 L/day</p> <p>What safety factor was used?</p> <p>1.5</p> <p>N/A</p>	<p>Sec 5.2, Pg. 21</p>	
<p>List the nearest surface water (river, creek, lake)</p>	<p>The nearest surface water feature is the Don River, approximately 1.8 km east-northeast of the Site boundary. Lake Ontario is approximately located 2.6 km southeast of the Site.</p>	<p>Sec 2.2.2, Pg. 8</p>	

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Lowest basement elevation	96.7 masl	Sec 5.2, Pg. 21	
Foundation elevation	95.2 masl	Sec 4.4, Pg. 18	
Ground elevation	105.5 masl	Sec 4.4, Pg. 18	
STUDY AREA MAP		Page # & Section # of every occurrence in the Review	Review Includes this Information City Staff (Check)
Study area map(s) have been included in the report.	Yes	Figures 1-4	
Study area map(s) been prepared according to the Hydrological Review Terms of Reference.	<input checked="" type="checkbox"/> Yes		N/A
	<input checked="" type="checkbox"/> Yes		N/A
WATER LEVEL AND WELLS		Page # & Section # of every occurrence	Review Includes this Information (City Staff Initial)

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SITE INFORMATION		Page # & Section # of Review	Review Includes this Information City Staff (Check)
		in the Review	
The groundwater level has been monitored using all wells located on site (within property boundary).	Yes	Sec 3.2, Pg. 9	
The static water level measurements have been monitored at all monitoring wells for a minimum of 3 months with samples taken every 2 weeks for a minimum of 6 samples.  The intent is for the qualified professional to use professional judgement to estimate the seasonally high groundwater level.	Yes	Sec 3.2, Pg. 9 ; Appendix C	
All water levels in the wells have been measured with respect to masl.	Yes	Sec 3.2, Pg. 9 ; Appendix C	
A table of geology/soil stratigraphy for the property has been included.	Yes	Sec 2.1.2, Pg. 6; Sec 2.2.3, Pg. 8	
GEOLOGY AND PHYSICAL HYDROLOGY		Page # & Section # of every occurrence in the Review	Review Includes this Information (City Staff Initial)
The review has made reference to the soil materials including thickness, composition and texture, and bedrock environments.	Yes	Sec 2.2.3, Pg. 8	
Key aquifers and the site's proximity to nearby surface water has been identified.	<input checked="" type="checkbox"/> Yes	Sec 2.1.2, Pg. 6; Sec 2.2.2, Pg. 8	N/A

## HYDROLOGICAL REVIEW SUMMARY

SITE INFORMATION		Page # & Section # of Review	Review Includes this Information City Staff (Check)
<b>PUMP TEST/SLUG TEST/DRAWDOWN ANALYSIS</b>		Page # & Section # of every occurrence in the Review	Review Includes this Information City Staff (Check)
A summary of the pumping test data and analysis is included in the review.	No pumping test conducted. Slug test results and analysis included in report	Sec 2.2.3, Pg. 8	
The pump test been carried out for at least 24 hours if possible. If not, has a slug test been conducted?	N/A. Slug test results and analysis included in report.	Sec 3.3, Pg. 12	
Have the monitoring well(s) have been monitored using digital devices? If yes how frequently?	Yes, MWs were instrumented with dataloggers at 1 second intervals during slug tests	Sec 3.3, Pg.12; Appendix D	
If a slug or pump test has been conducted has the static groundwater level been monitored at all monitoring well(s) multiple times to measure recovery? -prior to the slug or pumping test(s)? -post slug or pumping test(s)?	<input checked="" type="checkbox"/> <b>Yes</b>  Yes, static WLs measured before and after slug tests were conducted		N/A
The above noted slug or pump tests have been included in the report.	<input checked="" type="checkbox"/> <b>Yes</b>	Appendix D	
<b>WATER QUALITY</b>		Page # & Section # of every occurrence in the Review	Review Includes this Information City Staff (Check)

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<p>The report includes baseline water quality samples from a laboratory. The water quality must be analyzed for all parameters listed in Tables 1 and 2 of Chapter 681 Sewers of the Toronto Municipal Code (found in Appendix A) and the samples must have to be taken unfiltered within 9 months of the date of submission.</p>	<p>Water quality has been analyzed for all parameters listed in Table 1 &amp; 2 of Chapter 681 Sewers of the Toronto Municipal Code (found in Appendix A) and the samples have been taken unfiltered within 9 months of the date of submission.</p>	<p>Sec 3.4, Pg. 14; Appendix E</p>	
<p>The water quality data templates in Appendix A have been completed for each sample taken for both sanitary/combined and storm sewer limits.</p>	<p>For sanitary discharge- See the sanitary/combined sewer parameter limit template Water quality templates completed for the 2019 and 2021 sanitary and storm sewer bylaw samples For storm discharge- See the storm sewer parameter limit template</p>	<p>HRS Form - Appendix A</p>	
<p>Qualified professional to list all sample parameters that have violated the Bylaw limits for each sample taken for the sanitary/combined Bylaw limits <b>If there are any sample parameter Exceedances the groundwater can't be discharged as is.</b></p>	<p>No parameters reported an exceedance of City of Toronto Sanitary and Combined Sewer discharge criteria (Table 1)</p>	<p>Sec 3.4, Pg. 14</p>	
<p>Qualified professional to list all sample parameters that have violated the Bylaw limits for each sample taken for the storm Bylaw limits. <b>If there are any sample parameter exceedances the groundwater can't be discharged as is.</b></p>	<p>When compared to City of Toronto Storm Sewer discharge criteria (Table 2), the following parameters reported an exceedance: Total Manganese (Mn) Total Suspended Solids</p>	<p>Sec 3.4, Pg. 14</p>	
<p>The water quality samples have been analyzed by a Canadian laboratory accredited and licensed by Standards Council of Canada and/or Canadian Association for Laboratory Accreditation.</p>	<p><input checked="" type="checkbox"/> <b>Yes</b></p> <p>Toronto bylaw samples were submitted to Bureau Veritas, an accredited CALA lab in Mississauga, ON.</p>	<p>Sec 3.4, Pg. 14</p>	<p>N/A</p>

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List of Canadian accredited laboratories: <a href="#">Standards Council of Canada</a>	Bureau Veritas Labs AGAT Labs	Sec 3.4, Pg. 14	
A chain of custody record for the samples is included with the report.	Yes	Appendix E	
Has the chain of custody reference any filtered sample? If yes, the report has to be amended and re-submitted to include only non-filtered samples.	No	Appendix E	
List any of the sample parameters that exceed the Bylaw limits with the reporting detection limit (RDL) included.	Toronto Storm Sewer bylaw exceedances: Total Manganese (Mn) Total Suspended Solids	Sec 3.4, Pg. 14; Appendix E	
A true copy of the Certificate of Analysis report, is included with the report.	Yes  <i>Analytical results from the Environmental Site Assessment (ESA), submitted to AGAT Labs, were also compared to Toronto bylaw criteria. No exceedances were observed. This Certificate of Analysis is also enclosed in Appendix E.</i>	Appendix E	
EVALUATION OF IMPACT		Page # & Section # of every occurrence in the Review	Review Includes this Information City Staff (Check)
Does the report recommend a back-up system or relief safety valve(s)?  Does the associated Geotechnical report recommend a back-up system or relief safety valve(s)?	<input type="radio"/> Yes <input checked="" type="radio"/> No  <input type="radio"/> Yes <input checked="" type="radio"/> No	Sec 3.4, Pg. 15	
The taking and discharging of groundwater on site has been analyzed to ensure that no negative	<input checked="" type="radio"/> Yes	Sec 3.4, Pg. 15	N/A



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SITE INFORMATION	Page # & Section # of Review	Review Includes this Information City Staff (Check)
impacts will occur to: the City sewage works in terms of quality and quantity (including existing infrastructure), the natural environment, and settlement issues.		
Has it been determined that there will be a negative impact to the natural environment, City sewage works, or surrounding properties has the study identified the following: the extent of the negative impact, the detail of the precondition state of all the infrastructure, City sewage works, and natural environment within the effected zone and the proposed remediation and monitoring plan?	<input type="radio"/> Yes <b>If yes, identify impact:</b>  <input checked="" type="radio"/> No	N/A

Summary of Additional Information and Key Items (if applicable):

## HYDROLOGICAL REVIEW SUMMARY

### Appendix A:

**SANITARY/COMBINED**

**Sample Location: BH/MW 1-D**

Inorganics (Parameters)		Sample Result	Sample Result with upper RDL included	
<u>Parameter</u>	<u>mg/L</u>			<u>ug/L</u>
Total BOD	300	3	2	300,000
Fluoride (F-)	10	0.15	0.10	10,000
Total Kjeldahl Nitrogen (TKN)	100	0.67	0.10	100,000
pH	6.0 - 11.5	7.88	-	6.0 - 11.5
Phenols-4AAP	1	ND	0.0010	1,000
Total Suspended Solids	350	27	10	350,000
Total Cyanide (CN)	2	ND	0.0050	2,000
Metals		(ug/L)		
Chromium (VI)	2	ND	0.50	2,000
Mercury (Hg)	0.01	ND	0.00010	10
Total Aluminum (Al)	50	130	4.9	50,000
Total Antimony (Sb)	5	0.71	0.50	5,000
Total Arsenic (As)	1	1.4	1.0	1,000
Total Cadmium (Cd)	0.7	ND	0.090	700
Total Chromium (Cr)	4	ND	5.0	4,000
Total Cobalt (Co)	5	ND	0.50	5,000
Total Copper (Cu)	2	1.3	0.90	2,000
Total Lead (Pb)	1	0.60	0.50	1,000
Total Manganese (Mn)	5	200	2.0	5,000
Total Molybdenum (Mo)	5	23	0.50	5,000
Total Nickel (Ni)	2	2.8	1.0	2,000
Total Phosphorus (P)	10	130	100	10,000
Total Selenium (Se)	1	ND	2.0	1,000
Total Silver (Ag)	5	ND	0.090	5,000
Total Tin (Sn)	5	1.9	1.0	5,000
Total Titanium (Ti)	5	9.3	5.0	5,000
Total Zinc (Zn)	2	5.6	5.0	2,000
Petroleum Hydrocarbons		(mg/L)		
Total Oil & Grease	150	0.80	0.50	150,000
Total Oil & Grease Mineral/Synthetic	15	0.50	0.50	15,000

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Volatile Organics		Sample Result	Sample Result with upper RDL included	
<u>Parameter</u>	<u>mg/L</u>			<u>ug/L</u>
Benzene	0.01	ND	0.40	10
Chloroform	0.04	ND	0.40	40
1,2-Dichlorobenzene	0.05	ND	0.80	50
1,4-Dichlorobenzene	0.08	ND	0.80	80
cis-1,2-Dichloroethylene	4	ND	1.0	4,000
trans-1,3-Dichloropropene	0.14	ND	0.80	1,400
Ethylbenzene	0.16	ND	0.40	160
Methylene Chloride(Dichloromethane)	2	ND	4.0	2,000
1,1,2,2-Tetrachloroethane	1.4	ND	0.80	1,400
Tetrachloroethylene	1	ND	0.40	1,000
Toluene	0.016	ND	0.40	16
Trichloroethylene	0.4	ND	0.40	400
Total Xylenes	1.4	ND	0.40	1,400
<b>Semi-Volatile Organics</b>				
Di-N-butyl phthalate	0.08	ND	2	80
Bis(2-ethylhexyl)phthalate	0.012	ND	2	12
3,3'-Dichlorobenzidine	0.002	ND	0.8	2
Pentachlorophenol	0.005	ND	1	5
Total PAHs (18 PAHs)	0.005	ND	1	5
Total PCB	0.0001	ND	0.05	6
<b>Misc Parameters</b>				
Nonylphenol Ethoxylate (Total)	0.2	ND	0.005	200
Nonylphenol (Total)	0.02	ND	0.001	20

Sample Collected: 2021/03/18 17:40

Temperature: 6 °C

## HYDROLOGICAL REVIEW SUMMARY

**STORM**

Sample Location: BH/MW 1-D

Inorganics (Parameters)		Sample Result	Sample Result with upper RDL included	
<u>Parameter</u>	<u>mg/L</u>			<u>ug/L</u>
pH	6.0:9.5	7.88	-	6.0:9.5
Total BOD	15	3	2	15,000
Phenols-4AAP	0.008	ND	0.0010	8
Total Suspended Solids	15	27	10	15,000
Total Cyanide (CN)	0.02	ND	0.0050	20
<b>Metals</b>		<b>(ug/L)</b>		
Total Arsenic (As)	0.02	1.4	1.0	20
Total Cadmium (Cd)	0.008	ND	0.090	8
Total Chromium (Cr)	0.08	ND	5.0	80
Chromium (VI)	0.04	ND	0.50	40
Total Copper (Cu)	0.04	1.3	0.90	40
Total Lead (Pb)	0.12	0.60	0.50	120
Total Manganese (Mn)	0.05	200	2.0	50
Mercury (Hg)	0.0004	ND	0.00010	0.4
Total Nickel (Ni)	0.08	2.8	1.0	80
Total Phosphorus (P)	0.4	130	100	400
Total Selenium (Se)	0.02	ND	2.0	20
Total Silver (Ag)	0.12	ND	0.090	120
Total Zinc (Zn)	0.04	5.6	5.0	40
<b>Microbiology</b>		<b>CFU/100mL</b>		
Escherichia coli	200	<10	10	200,000
<b>Volatile Organics</b>		<b>(ug/L)</b>		
<u>Parameter</u>	<u>mg/L</u>			<u>ug/L</u>
Benzene	0.002	ND	0.40	2
Chloroform	0.002	ND	0.40	2
1,2-Dichlorobenzene	0.0056	ND	0.80	5.6
1,4-Dichlorobenzene	0.0068	ND	0.80	6.8
cis-1,2-Dichloroethylene	0.0056	ND	1.0	5.6
trans-1,3-Dichloropropene	0.0056	ND	0.80	5.6
Ethylbenzene	0.002	ND	0.40	2
Methylene Chloride(Dichloromethane)	0.0052	ND	4.0	5.2
1,1,2,2-Tetrachloroethane	0.017	ND	0.80	17
Tetrachloroethylene	0.0044	ND	0.40	4.4
Toluene	0.002	ND	0.40	2
Trichloroethylene	0.0076	ND	0.40	7.6
Total Xylenes	0.0044	ND	0.40	4.4

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Semi-Volatile Organics		Sample Result (ug/L)	Sample Result with Upper RDL Included	
Di-N-butyl phthalate	0.015	ND	2	15
Bis(2-ethylhexyl)phthalate	0.0088	ND	2	8.8
3,3'-Dichlorobenzidine	0.0008	ND	0.8	0.8
Pentachlorophenol	0.002	ND	1	2
Total PAHs (18 PAHs)	0.002	ND	1	2
Total PCB	0.004	ND	0.05	4
Misc Parameters		(mg/L)		
Nonylphenol (Total)	0.001	ND	0.001	1
Nonylphenol Ethoxylate (Total)	0.01	ND	0.005	10

Sample Collected: 2021/03/18 17:40

Temperature: 6 °C

EXP Services Inc.

Consulting Firm that prepared Hydrological Report: \_\_\_\_\_

Qualified Professional who completed the report summary: \_\_\_\_\_

Francois Chartier, M.Sc., P.Geo.

Print Name



Qualified Professional who completed the report summary: \_\_\_\_\_



April 9, 2021

Signature

Date & Stamp

## HYDROLOGICAL REVIEW SUMMARY

### Appendix A:

**SANITARY/COMBINED**

**Sample Location:**

**BH-5**

Inorganics		Sample Result	Sample Result with upper RDL included	
Parameter	mg/L			ug/L
Total BOD	300	ND	2	300,000
Fluoride (F-)	10	ND	0.10	10,000
Total Kjeldahl Nitrogen (TKN)	100	3.4	0.10	100,000
pH	6.0 - 11.5	7.73	-	6.0 - 11.5
Phenols-4AAP	1	ND	0.0010	1,000
Total Suspended Solids	350	62	10	350,000
Total Cyanide (CN)	2	0.0079	0.0050	2,000
<b>Metals</b>				
Chromium (VI)	2	ND	0.50	2,000
Mercury (Hg)	0.01	ND	0.0001	10
Total Aluminum (Al)	50	950	5.0	50,000
Total Antimony (Sb)	5	ND	0.50	5,000
Total Arsenic (As)	1	ND	1.0	1,000
Total Cadmium (Cd)	0.7	ND	0.10	700
Total Chromium (Cr)	4	ND	5.0	4,000
Total Cobalt (Co)	5	1.2	0.50	5,000
Total Copper (Cu)	2	5.1	1.0	2,000
Total Lead (Pb)	1	0.92	0.50	1,000
Total Manganese (Mn)	5	350	2.0	5,000
Total Molybdenum (Mo)	5	0.58	0.50	5,000
Total Nickel (Ni)	2	9.8	1.0	2,000
Total Phosphorus (P)	10	260	100	10,000
Total Selenium (Se)	1	ND	2.0	1,000
Total Silver (Ag)	5	ND	0.10	5,000
Total Tin (Sn)	5	1.2	1.0	5,000
Total Titanium (Ti)	5	57	5.0	5,000
Total Zinc (Zn)	2	14	5.0	2,000
<b>Petroleum Hydrocarbons</b>				
Total Oil & Grease	150	ND	0.50	150,000
Total Oil & Grease Mineral/Synthetic	15	ND	0.50	15,000

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Volatile Organics		Sample Result	Sample Result with upper RDL included	
Parameter	mg/L			ug/L
Benzene	0.01	ND	0.40	10
Chloroform	0.04	ND	0.40	40
1,2-Dichlorobenzene	0.05	ND	1.0	50
1,4-Dichlorobenzene	0.08	ND	1.0	80
cis-1,2-Dichloroethylene	4	ND	1.0	4,000
trans-1,3-Dichloropropene	0.14	ND	0.80	140
Ethylbenzene	0.16	ND	0.40	160
Methylene Chloride(Dichloromethane)	2	ND	4.0	2,000
1,1,2,2-Tetrachloroethane	1.4	ND	1.0	1,400
Tetrachloroethylene	1	ND	0.40	1,000
Toluene	0.016	ND	0.40	16
Trichloroethylene	0.4	ND	0.40	400
Total Xylenes	1.4	ND	0.40	1,400
<b>Semi-Volatile Organics</b>				
Di-N-butyl phthalate	0.08	ND	2	80
Bis(2-ethylhexyl)phthalate	0.012	ND	2	12
3,3'-Dichlorobenzidine	0.002	ND	0.8	2
Pentachlorophenol	0.005	ND	1	5
Total PAHs (18 PAHs)	0.005	ND	1	5
<b>Misc Parameters</b>				
Nonylphenol Ethoxylate (Total)	0.02	ND	0.005	20
Nonylphenol (Total)	0.2	ND	0.001	200

Sample Collected: 10/23/19 16:00

Temperature: 6.0°C

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<b>STORM</b>		<b>Sample Location:</b>	<b>BH-5</b>	
<b>Inorganics</b>		<b>Sample Result</b>	<b>Sample Result with upper RDL included</b>	
<b>Parameter</b>	<b>mg/L</b>			<b>ug/L</b>
pH	6.0 - 9.5	7.73	0	
Total BOD	15	ND	2	15,000
Phenols-4AAP	0.008	ND	0.0010	8
Total Suspended Solids	15	<b>62</b>	10	15,000
Total Cyanide (CN)	0.02	0.0079	0.0050	20
<b>Metals</b>				
Total Arsenic (As)	0.02	ND	1.0	20
Total Cadmium (Cd)	0.008	ND	0.10	8
Total Chromium (Cr)	0.08	ND	5.0	80
Chromium (VI)	0.04	ND	0.50	40
Total Copper (Cu)	0.04	5.1	1.0	40
Total Lead (Pb)	0.12	0.92	0.50	120
Total Manganese (Mn)	0.05	<b>350</b>	2.0	50
Mercury (Hg)	0.0004	ND	0.0001	0.4
Total Nickel (Ni)	0.08	9.8	1.0	80
Total Phosphorus (P)	0.4	260	100	400
Total Selenium (Se)	0.02	ND	2.0	20
Total Silver (Ag)	0.12	ND	0.10	120
Total Zinc (Zn)	0.04	14	5.0	40
<b>Microbiology</b>				
Escherichia coli	200	10	10	200,000
<b>Volatile Organics</b>				
<b>Parameter</b>	<b>mg/L</b>			<b>ug/L</b>
Benzene	0.002	ND	0.40	2
Chloroform	0.002	ND	0.40	2
1,2-Dichlorobenzene	0.0056	ND	1.0	6
1,4-Dichlorobenzene	0.0068	ND	1.0	7
cis-1,2-Dichloroethylene	0.0056	ND	1.0	6
trans-1,3-Dichloropropene	0.0056	ND	0.80	6
Ethylbenzene	0.002	ND	0.40	2
Methylene Chloride(Dichloromethane)	0.0052	ND	4.0	5
1,1,2,2-Tetrachloroethane	0.017	ND	1.0	17
Tetrachloroethylene	0.0044	ND	0.40	4
Toluene	0.002	ND	0.40	2
Trichloroethylene	0.0076	ND	0.40	8
Total Xylenes	0.0044	ND	0.40	4



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Semi-Volatile Organics		Sample Result	Sample Result with upper RDL included	
Di-N-butyl phthalate	0.015	ND	2	5
Bis(2-ethylhexyl)phthalate	0.0088	ND	2	8.8
3,3'-Dichlorobenzidine	0.0008	ND	0.8	0.8
Pentachlorophenol	0.002	ND	1	2
Total PAHs (18 PAHs)	0.002	ND	1	2
Total PCB	0.0004	ND	0.05	0.4
Misc Parameters				
Nonylphenol (Total)	0.001	ND	0.001	1
Nonylphenol Ethoxylate (Total)	0.01	ND	0.005	10

Sample Collected: 10/23/2019 16:00

Temperature: 6.0°C