

Phone: 705-652-2000 FAX: 705-652-6365

Veolia Water (Ripley)

Attn: Steve Walmsley

Box 185, Goderich, ON N7A 3Z2, Canada

Phone: 519-524-6583

Fax:pdf

Works #: 220002636

17-May-2024

Date Rec.: 07 May 2024 **LR Report: CA30150-MAY24**

Copy: #1

CERTIFICATE OF ANALYSIS

Final Report

Analysis	1:	2:	3:	4:	5:	6:	7:	8:	9:	10:	11:	12:	13:
	Analysis Start Date	Analysis Start Time	Analysis Completed Date	Analysis Completed Time	MAC	Half MAC	MDL	TW Ripley Elevated Tank - Treated	DW Public Works Garage	DW Arena	TW Riply Wellhouse	DW RLS	DW Firehall
Sample Date & Time								06-May-24 11:30	06-May-24 12:05	06-May-24 12:15	06-May-24 11:08	06-May-24 12:35	06-May-24 11:02
Temperature Upon Receipt [at London Lab °C]								12.8	12.8	12.8	12.8	12.8	12.8
Temperature Upon Receipt [at Lakefield Lab °C]								10.0	10.0	10.0	10.0	10.0	10.0
Field Free Chlorine [mg/L]								1.46	1.32	1.52	1.36	1.53	1.50
Arsenic [ug/L]	13-May-24	10:30	13-May-24	12:51	10	5	0.2	0.7			1.0		
Nitrite (as N) [mg/L]	10-May-24	02:46	10-May-24	15:42	1.0		0.003	0.003 <mdl< td=""><td></td><td></td><td>0.003 <mdl< td=""><td></td><td></td></mdl<></td></mdl<>			0.003 <mdl< td=""><td></td><td></td></mdl<>		
Nitrate (as N) [mg/L]	10-May-24	02:46	10-May-24	15:42	10		0.006	0.675			0.687		
Nitrate + Nitrite (as N) [mg/L]	10-May-24	02:46	10-May-24	15:42			0.006	0.675			0.687		
Trihalomethanes (total) [ug/L]	09-May-24	15:34	10-May-24	09:45	100 (RAA)		0.37		14			12	
Bromodichloromethane [ug/L]	09-May-24	15:34	10-May-24	09:45			0.26		4.4			4.0	
Bromoform [ug/L]	09-May-24	15:34	10-May-24	09:45			0.34		0.34 <mdl< td=""><td></td><td></td><td>0.34 <mdl< td=""><td></td></mdl<></td></mdl<>			0.34 <mdl< td=""><td></td></mdl<>	
Chloroform [ug/L]	09-May-24	15:34	10-May-24	09:45			0.29		7.5			6.2	
Dibromochloromethane [ug/L]	09-May-24	15:34	10-May-24	09:45			0.37		2.0			1.9	
Total Haloacetic Acids (HAA5) [ug/L]	15-May-24	08:17	16-May-24	17:25	80 (RAA)		5.3			5.3 <mdl< td=""><td></td><td></td><td>5.3 <mdl< td=""></mdl<></td></mdl<>			5.3 <mdl< td=""></mdl<>
Chloroacetic Acid [ug/L]	15-May-24	08:17	16-May-24	17:25			4.7			4.7 <mdl< td=""><td></td><td></td><td>4.7 <mdl< td=""></mdl<></td></mdl<>			4.7 <mdl< td=""></mdl<>
Bromoacetic Acid [ug/L]	15-May-24	08:17	16-May-24	17:25			2.9			2.9 <mdl< td=""><td></td><td></td><td>2.9 <mdl< td=""></mdl<></td></mdl<>			2.9 <mdl< td=""></mdl<>
Dichloroacetic Acid [ug/L]	15-May-24	08:17	16-May-24	17:25			2.6			2.6 <mdl< td=""><td></td><td></td><td>2.6 <mdl< td=""></mdl<></td></mdl<>			2.6 <mdl< td=""></mdl<>
Dibromoacetic Acid [ug/L]	15-May-24	08:17	16-May-24	17:25			2.0			2.0 <mdl< td=""><td></td><td></td><td>2.0 <mdl< td=""></mdl<></td></mdl<>			2.0 <mdl< td=""></mdl<>
Trichloroacetic Acid [ug/L]	15-May-24	08:17	16-May-24	17:25			5.3			5.3 <mdl< td=""><td></td><td></td><td>5.3 <mdl< td=""></mdl<></td></mdl<>			5.3 <mdl< td=""></mdl<>

 \mbox{MAC} - $\mbox{Maximum}$ Acceptable Concentration Half MAC - Half of the Maximum Acceptable Concentration MDL - SGS Method Detection Limit

Method Descriptions



Phone: 705-652-2000 FAX: 705-652-6365

Works #: 220002636

LR Report : CA30150-MAY24

Parameter	Description	SGS Method Code
Arsenic	Arsenic by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
Bromoacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Bromodichloromethane	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
Bromoform	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
Chloroacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Chloroform	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
Dibromoacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Dibromochloromethane	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004
Dichloroacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Nitrate (as N)	Nitrate by Ion Chromatography	ME-CA-[ENV]IC-LAK-AN-001
Nitrate + Nitrite (as N)	Total Nitrate/Nitrite by Ion Chromatograph	ME-CA-[ENV]IC-LAK-AN-001
Nitrite (as N)	Nitrite by Ion Chromatography	ME-CA-[ENV]IC-LAK-AN-001
Total Haloacetic Acids (HAA5)	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Trichloroacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013
Trihalomethanes (total)	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004

Hawley Anderson, Hon.B.Sc Project Specialist,

Environment, Health & Safety



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Veolia Water (Ripley)

Attn: Gary Nicholson

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Fax:pdf

Works #: 220002636

22-February-2024

Date Rec. : 13 February 2024 LR Report: CA30256-FEB24

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CERTIFICATE OF ANALYSIS Final Report

Analysis	1:	2:	3:	4:	5:	6:	8:	9:	10:
	Analysis Start A Date	nalysis Start Time	Analysis Completed Date	Analysis Completed Time	MAC	Half MAC	MDL	TW Ripley Elevated Tank - Treated	DW Fire Hall THM
Sample Date & Time								12-Feb-24 12:35	12-Feb-24 12:00
Temperature Upon Receipt [at London Lab °C]								5.0	5.0
Temperature Upon Receipt [at Lakefield Lab °C]								8.0	8.0
Arsenic [ug/L]	20-Feb-24	09:30	20-Feb-24	13:00	10	5	0.2		
Nitrite (as N) [mg/L]	17-Feb-24	06:54	22-Feb-24	11:39	1.0		0.003	0.003 <mdl< td=""><td></td></mdl<>	
Nitrate (as N) [mg/L]	17-Feb-24	06:54	22-Feb-24	11:39	10		0.006	0.891	
Nitrate + Nitrite (as N) [mg/L]	17-Feb-24	06:54	22-Feb-24	11:39			0.006	0.891	
Trihalomethanes (total) [ug/L]	16-Feb-24	13:26	20-Feb-24	11:08	100 (RAA)		0.37		9.3
Bromodichloromethane [ug/L]	16-Feb-24	13:26	20-Feb-24	11:08			0.26		3.2
Bromoform [ug/L]	16-Feb-24	13:26	20-Feb-24	11:08			0.34		0.34 <mdl< td=""></mdl<>
Chloroform [ug/L]	16-Feb-24	13:26	20-Feb-24	11:08			0.29		4.4
Dibromochloromethane [ug/L]	16-Feb-24	13:26	20-Feb-24	11:08			0.37		1.8
Total Haloacetic Acids (HAA5) [ug/L]	21-Feb-24	09:09	22-Feb-24	10:48	80 (RAA)		5.3		
Chloroacetic Acid [ug/L]	21-Feb-24	09:09	22-Feb-24	10:48			4.7		
Bromoacetic Acid [ug/L]	21-Feb-24	09:09	22-Feb-24	10:48			2.9		
Dichloroacetic Acid [ug/L]	21-Feb-24	09:09	22-Feb-24	10:48			2.6		
Dibromoacetic Acid [ug/L]	21-Feb-24	09:09	22-Feb-24	10:48			2.0		
Trichloroacetic Acid [ug/L]	21-Feb-24	09:09	22-Feb-24	10:48			5.3		



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LR Report :

CA30256-FEB24

Analysis	11: DW Fire Hall HAA	12: TW Ripley Wellhouse	13: DW Lift Stn THM	14: DW Lift Stn HAA
Sample Date & Time	12-Feb-24 12:00	12-Feb-24 11:50	12-Feb-24 11:30	12-Feb-24 11:30
Temperature Upon Receipt [at London Lab °C]	5.0	5.0	5.0	5.0
Temperature Upon Receipt [at Lakefield Lab °C]	8.0	8.0	8.0	8.0
Arsenic [ug/L]		0.9		
Nitrite (as N) [mg/L]		0.003 <mdl< td=""><td></td><td></td></mdl<>		
Nitrate (as N) [mg/L]		0.914		
Nitrate + Nitrite (as N) [mg/L]		0.914		
Trihalomethanes (total) [ug/L]			11	
Bromodichloromethane [ug/L]			3.8	
Bromoform [ug/L]			0.34 <mdl< td=""><td></td></mdl<>	
Chloroform [ug/L]			5.3	
Dibromochloromethane [ug/L]			2.0	
Total Haloacetic Acids (HAA5) [ug/L]	5.3 <mdl< td=""><td></td><td></td><td>5.3 <mdl< td=""></mdl<></td></mdl<>			5.3 <mdl< td=""></mdl<>
Chloroacetic Acid [ug/L]	4.7 <mdl< td=""><td></td><td></td><td>4.7 <mdl< td=""></mdl<></td></mdl<>			4.7 <mdl< td=""></mdl<>
Bromoacetic Acid [ug/L]	2.9 <mdl< td=""><td></td><td></td><td>2.9 <mdl< td=""></mdl<></td></mdl<>			2.9 <mdl< td=""></mdl<>
Dichloroacetic Acid [ug/L]	2.6 <mdl< td=""><td></td><td></td><td>2.6 <mdl< td=""></mdl<></td></mdl<>			2.6 <mdl< td=""></mdl<>
Dibromoacetic Acid [ug/L]	2.0 <mdl< td=""><td></td><td></td><td>2.0 <mdl< td=""></mdl<></td></mdl<>			2.0 <mdl< td=""></mdl<>
Trichloroacetic Acid [ug/L]	5.3 <mdl< td=""><td></td><td></td><td>5.3 <mdl< td=""></mdl<></td></mdl<>			5.3 <mdl< td=""></mdl<>

MAC - Maximum Acceptable Concentration Half MAC - Half of the Maximum Acceptable Concentration MDL - SGS Method Detection Limit

Method Descriptions

Parameter	Description	SGS Method Code			
Arsenic	Arsenic by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006			
Bromoacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013			
Bromodichloromethane	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004			
Bromoform	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004			
Chloroacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013			
Chloroform	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004			
Dibromoacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013			
Dibromochloromethane	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004			
Dichloroacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013			
Nitrate (as N)	Nitrate by Ion Chromatography	ME-CA-[ENV]IC-LAK-AN-001			



P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO Phone: 705-652-2000 FAX: 705-652-6365 Works #: 220002636

LR Report: CA30256-FEB24

Parameter	Description	SGS Method Code		
Nitrate + Nitrite (as N)	Total Nitrate/Nitrite by Ion Chromatograph	ME-CA-[ENV]IC-LAK-AN-001		
Nitrite (as N)	Nitrite by Ion Chromatography	ME-CA-[ENV]IC-LAK-AN-001		
Total Haloacetic Acids (HAA5)	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013		
Trichloroacetic Acid	HAA wtr - DW	ME-CA-[ENV]GC-LAK-AN-013		
Trihalomethanes (total)	VOC wtr - THM	ME-CA-[ENV]GC-LAK-AN-004		

Hawley Anderson, Hon.B.Sc

Project Specialist,

Environment, Health & Safety



SGS Canada Inc.

P.O. Box 4300 - 185 Concession St. Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

16-January-2024

Works #: 220002636

Date Rec.: 09 January 2024 LR Report: CA30210-JAN24

Copy: #1

Veolia Water (Ripley)

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CERTIFICATE OF ANALYSIS Final Report

Sample ID	Sample Date & Time	Temperature Upon Receipt at London Lab °C	Temperature Upon Receipt at Lakefield Lab °C	Free Chlorine mg/L	Field pH	Alkalinity mg/L as CaCO3	Lead ug/L	pH No unit
1: Analysis Start Date						11-Jan-24	15-Jan-24	11-Jan-24
2: Analysis Start Time						15:12	19:58	15:12
3: Analysis Completed Date						12-Jan-24	16-Jan-24	12-Jan-24
4: Analysis Completed Time						11:58	09:10	11:58
5: MAC							10	
6: AO/OG					6.5-8.5	30-500		6.5-8.5
7: MDL						2	0.01	
8: DW RLS	09-Jan-24 12:25	7.2	8.0	1.47	7.84	224	0.19	7.89
9: DW Work Shed	09-Jan-24 13:20	7.2	8.0	1.62	7.88	221	0.20	7.95

MAC - Maximum Acceptable Concentration AO/OG - Aesthetic Objective / Operational Guideline

MDL - SGS Method Detection Limit

Method Descriptions

Units	Description	SGS Method Code
mg/L as CaCO3	Alkalinity by Titration	ME-CA-[ENV]EWL-LAK-AN-006
ug/L	Lead by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
No unit	pH - solution	ME-CA-[ENV]EWL-LAK-AN-006

Carrie Greenlaw Project Specialist,

Environment, Health & Safety