

CLIENT NAME: MUNICIPALITY OF ANNAPOLIS COUNTY

PO Box 100

Annapolis Royal, NS B0S1A0

(902) 532-3141

**ATTENTION TO: James Jenner** 

PROJECT:

AGAT WORK ORDER: 22X916054

TRACE ORGANICS REVIEWED BY: Wendy Rose, Trace Organics Lab Technician

WATER ANALYSIS REVIEWED BY: Sara Knox, Data Reviewer

**DATE REPORTED: Jul 15, 2022** 

PAGES (INCLUDING COVER): 15 VERSION\*: 1

Should you require any information regarding this analysis please contact your client services representative at (902) 468-8718

*Notes	

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  incorporate modifications from the specified reference methods to improve performance.
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- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other
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- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

AGAT Laboratories (V1)

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**AGAT WORK ORDER: 22X916054** 

PROJECT:

11 Morris Drive, Unit 122 Dartmouth, Nova Scotia CANADA B3B 1M2 TEL (902)468-8718 FAX (902)468-8924 http://www.aqatlabs.com

**CLIENT NAME: MUNICIPALITY OF ANNAPOLIS COUNTY** 

**SAMPLING SITE:** 

**ATTENTION TO: James Jenner** 

**SAMPLED BY:** 

	4 .			
Halaac	Otic	V CIGE	/watorl	
Haivac	CIIC	ALIUS	(water)	

						• •		
DATE RECEIVED: 2022-07-05								DATE REPORTED: 2022-07-15
		SAMPLE DES	CRIPTION:	Metering	Gordon Road	Seaman St	Hwy 362	
		SAM	PLE TYPE:	Water	Water	Water	Water	
		DATES	SAMPLED:	2022-07-04 08:00	2022-07-04 08:00	2022-07-04 08:00	2022-07-04 08:00	
Parameter	Unit	G/S	RDL	4050929	4050944	4050945	4050946	
Chloroacetic Acid	ug/L		0.5	1.3	1.5	1.1	1.4	
Bromoacetic Acid	ug/L		0.5	<0.5	<0.5	<0.5	<0.5	
Dichloroacetic Acid	ug/L		0.5	20.5	27.2	26.6	28.8	
Trichloroacetic Acid	ug/L		0.5	24.7	28.5	26.4	28.1	
Bromochloroacetic Acid	ug/L		0.5	7.6	8.9	8.6	9.0	
Dibromoacetic Acid	ug/L		0.5	1.7	1.9	1.9	1.9	
Total Haloacetic Acids	ug/L	80	4.0	55.8	68.0	64.6	69.2	
HAA5	ug/L	80	4.0	48.2	59.1	56.0	60.2	
Surrogate	Unit	Acceptab	le Limits					
2-Bromobutanoic acid	%	70-1	130	107	108	107	112	

Comments:

RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Canadian Drinking Water Quality - updated 2021-03

Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

4050929-4050946 HAA5 is a calculated parameter. The calculated parameter is non-accredited. The component parameters of the calculation are accredited.

Analysis performed at AGAT Halifax (unless marked by \*)





**AGAT WORK ORDER: 22X916054** 

PROJECT:

11 Morris Drive, Unit 122 Dartmouth, Nova Scotia CANADA B3B 1M2 TEL (902)468-8718 FAX (902)468-8924 http://www.agatlabs.com

CLIENT NAME: MUNICIPALITY OF ANNAPOLIS COUNTY

**SAMPLING SITE:** 

**ATTENTION TO: James Jenner** 

**SAMPLED BY:** 

				Tril	halomethane	es in Water		
DATE RECEIVED: 2022-07-05								DATE REPORTED: 2022-07-15
		SAMPLE DESC	CRIPTION:	Metering	Gordon Road	Seaman St	Hwy 362	
		SAME	PLE TYPE:	Water	Water	Water	Water	
		DATE S	SAMPLED:	2022-07-04 08:00	2022-07-04 08:00	2022-07-04 08:00	2022-07-04 08:00	
Parameter	Unit	G/S	RDL	4050929	4050944	4050945	4050946	
Chloroform	ug/L		1	30	38	47	49	
Bromodichloromethane	ug/L		1	15	16	19	18	
Dibromochloromethane	ug/L		1	<1	<1	<1	<1	
Bromoform	ug/L		1	<1	<1	<1	<1	
Total Trihalomethanes	ug/L	100	1	45	54	66	67	
Surrogate	Unit	Acceptab	le Limits					
Toluene-d8	%	60-1	40	93	94	94	92	
4-Bromofluorobenzene	%	60-1	40	96	94	91	93	

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Canadian Drinking Water Quality - updated 2021-03

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Analysis performed at AGAT Halifax (unless marked by \*)





**CLIENT NAME: MUNICIPALITY OF ANNAPOLIS COUNTY** 

**SAMPLING SITE:** 

# **Certificate of Analysis**

AGAT WORK ORDER: 22X916054

PROJECT:

**ATTENTION TO: James Jenner** 

SAMPLED BY:

11 Morris Drive, Unit 122 Dartmouth, Nova Scotia CANADA B3B 1M2 TEL (902)468-8718 FAX (902)468-8924 http://www.agatlabs.com

#### Halifax - Metals - Total (ug/L)

				паша	ix - Metais - I	otai (µg/L)
DATE RECEIVED: 2022-07-0	5					DATE REPORTED: 2022-07-15
		DATE S	LE TYPE: AMPLED:	Treated Water 2022-07-04 08:00	Raw Water 2022-07-04 08:00	
Parameter	Unit	G/S	RDL	4050949	4050950	
Total Aluminum	ug/L	2900, 100	4	14	32	
Total Antimony	ug/L	6	2	<2	<2	
Total Arsenic	ug/L	10	2	<2	<2	
Total Barium	ug/L	2000	5	<5	<5	
Total Beryllium	ug/L		2	<2	<2	
Total Bismuth	ug/L		2	<2	<2	
Total Boron	ug/L	5000	5	11	10	
Total Cadmium	ug/L	7	0.09	< 0.09	<0.09	
Total Chromium	ug/L	50	1	<1	<1	
Total Cobalt	ug/L		1	<1	<1	
Total Copper	ug/L	2000, 1000	1	2	<1	
Total Iron	ug/L	300 AO	50	<50	<50	
Total Lead	ug/L	5	0.5	<0.5	<0.5	
Total Manganese	ug/L	120, 20 AO	3	<3	<3	
Total Molybdenum	ug/L		2	<2	<2	
Total Nickel	ug/L		2	<2	<2	
Total Selenium	ug/L	50	1.0	<1.0	<1.0	
Total Silver	ug/L		0.1	<0.1	<0.1	
Total Strontium	ug/L	7000	5	35	37	
Total Thallium	ug/L		0.2	<0.2	<0.2	
Total Tin	ug/L		3	<3	<3	
Total Titanium	ug/L		3	5	7	
Total Uranium	ug/L	20	0.2	<0.2	<0.2	
Total Vanadium	ug/L		2	4	3	
Total Zinc	ug/L	5000 AO	5	<5	<5	
Total Phosphorus	ug/L		50	<50	<50	





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**CLIENT NAME: MUNICIPALITY OF ANNAPOLIS COUNTY** 

**SAMPLING SITE:** 

**ATTENTION TO: James Jenner** 

SAMPLED BY:

Halifax - Metals - Total (µg/L)

DATE RECEIVED: 2022-07-05 DATE REPORTED: 2022-07-15

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Canadian Drinking Water Quality - updated 2021-03

Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

4050949-4050950 < - Values refer to Report Detection Limits.

Analysis performed at AGAT Edmonton (unless marked by \*)





**CLIENT NAME: MUNICIPALITY OF ANNAPOLIS COUNTY** 

**SAMPLING SITE:** 

# **Certificate of Analysis**

**AGAT WORK ORDER: 22X916054** 

PROJECT:

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**SAMPLED BY:** 

11 Morris Drive, Unit 122 Dartmouth, Nova Scotia CANADA B3B 1M2 TEL (902)468-8718 FAX (902)468-8924 http://www.agatlabs.com

#### **Standard Water Analysis + Total Metals**

				Standard v	water Analysis	5 + 1 Otal Metals
DATE RECEIVED: 2022-07-05						DATE REPORTED: 2022-07-15
	S		CRIPTION: PLE TYPE: SAMPLED:	Treated Water 2022-07-04 08:00	Raw Water 2022-07-04 08:00	
Parameter	Unit	G/S	RDL	4050949	4050950	
рН		7.0-10.5		6.94	6.93	
Reactive Silica as SiO2	mg/L		0.5	13.8	15.2	
Chloride	mg/L	250 AO	1	19	15	
Fluoride	mg/L	1.5	0.12	<0.12	<0.12	
Sulphate	mg/L	500 AO	2	5	6	
Alkalinity	mg/L		5	58	60	
True Color	TCU	15 AO	5.00	<5.00	<5.00	
Turbidity	NTU	1.0	0.5	<0.5	0.8	
Electrical Conductivity	umho/cm		1	197	208	
Nitrate + Nitrite as N	mg/L		0.05	1.67	4.06	
Nitrate as N	mg/L	10	0.05	1.67	4.06	
Nitrite as N	mg/L	1.0	0.05	< 0.05	< 0.05	
Ammonia as N	mg/L		0.03	0.03	< 0.03	
Total Organic Carbon	mg/L		0.5	1.8	1.5	
Ortho-Phosphate as P	mg/L		0.01	0.01	0.02	
Total Sodium	mg/L	200 AO	0.1	14	12	
Total Potassium	mg/L		0.1	0.8	1.6	
Total Calcium	mg/L		0.1	14	18	
Total Magnesium	mg/L		0.1	6.5	7.6	
Bicarb. Alkalinity (as CaCO3)	mg/L		5	58	60	
Carb. Alkalinity (as CaCO3)	mg/L		10	<10	<10	
Hydroxide	mg/L		5	<5	<5	
Calculated TDS	mg/L	500 AO	1	102	114	
Hardness	mg/L			61.7	76.2	
Langelier Index (@20C)	NA			-1.74	-1.63	
Langelier Index (@ 4C)	NA			-2.06	-1.95	
Saturation pH (@ 20C)	NA			8.68	8.56	
Saturation pH (@ 4C)	NA			9.00	8.88	
Anion Sum	me/L			1.92	2.04	

Certified By:

Sara Knox



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**CLIENT NAME: MUNICIPALITY OF ANNAPOLIS COUNTY** 

SAMPLING SITE: SAMPLED BY:

	Standard Water Analysis + Total Metals													
DATE RECEIVED: 2022-07-05 DATE REPORTED: 2022-07-15														
		SAMPLE DES	CRIPTION:	Treated	Raw									
		SAM	PLE TYPE:	Water	Water									
		DATE SAMPLED:		2022-07-04 08:00	2022-07-04 08:00									
Parameter	Unit	G/S	RDL	4050949	4050950									
Cation sum	me/L			1.87	2.09									
% Difference/ Ion Balance	%			1.4	1.2									

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Canadian Drinking Water Quality - updated 2021-03

Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

**4050949-4050950** % Difference / Ion Balance, Hardness, Langelier Index, Nitrate + Nitrite, Hydroxide and Saturation pH are calculated parameters. The calculated parameters are non-accredited. The component parameters of the calculations are accredited.

Analysis performed at AGAT Halifax (unless marked by \*)





### **Exceedance Summary**

AGAT WORK ORDER: 22X916054

PROJECT:

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**CLIENT NAME: MUNICIPALITY OF ANNAPOLIS COUNTY** 

**ATTENTION TO: James Jenner** 

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT GUIDEVALUE	RESULT
4050949	Treated	NS-CDWQ incl [AO]	Standard Water Analysis + Total Metals	рН	7.0-10.5 OG	6.94
4050950	Raw	NS-CDWQ incl [AO]	Standard Water Analysis + Total Metals	pН	7.0-10.5 OG	6.93



## **Quality Assurance**

CLIENT NAME: MUNICIPALITY OF ANNAPOLIS COUNTY

AGAT WORK ORDER: 22X916054

PROJECT:

ATTENTION TO: James Jenner

SAMPLING SITE: SAMPLED BY:

	Trace Organics Analysis															
RPT Date: Jul 15, 2022			С	UPLICAT	E		REFEREN	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	MATRIX SPIKE		
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Lie	ptable nits	
		Id		·			Value	Lower	Upper	,	Lower	Upper		Lower	Upper	
Haloacetic Acids (water)																
Chloroacetic Acid	1	4033558	0.9	0.9	NA	< 0.5	93%	70%	130%	81%	60%	130%	67%	60%	130%	
Bromoacetic Acid	1	4033558	< 0.5	< 0.5	NA	< 0.5	101%	70%	130%	89%	60%	130%	85%	60%	130%	
Dichloroacetic Acid	1	4033558	35.1	35.3	0.6%	< 0.5	100%	70%	130%	111%	60%	130%	123%	60%	130%	
Trichloroacetic Acid	1	4033558	22.1	22.2	0.5%	< 0.5	89%	70%	130%	106%	60%	130%	123%	60%	130%	
Bromochloroacetic Acid	1	4033558	3.1	3.2	3.2%	< 0.5	87%	70%	130%	107%	60%	130%	116%	60%	130%	
Dibromoacetic Acid	1	4033558	< 0.5	< 0.5	NA	< 0.5	88%	70%	130%	120%	60%	130%	127%	60%	130%	

Comments: If Matrix spike value is NA, the spiked analyte concentration was lower than that of the matrix contribution. If RPD value is NA, the results of the duplicates are less than 5x the RDL and the RPD will not be calculated.

Trihalomethanes	in	Water
-----------------	----	-------

Chloroform	1	4050903	< 1	< 1	NA	< 1	94%	50%	140%	99%	60%	130%	87%	50%	140%
Bromodichloromethane	1	4050903	< 1	< 1	NA	< 1	90%	50%	140%	94%	60%	130%	85%	50%	140%
Dibromochloromethane	1	4050903	< 1	< 1	NA	< 1	98%	50%	140%	102%	60%	130%	85%	50%	140%
Bromoform	1	4050903	< 1	< 1	NA	< 1	84%	50%	140%	88%	60%	130%	82%	50%	140%

Comments: If Matrix spike value is NA, the spiked analyte concentration was lower than that of the matrix contribution. Matrix spike performed on a different sample than the

If RPD value is NA, the results of the duplicates are less than 5x the RDL and the RPD will not be calculated.





# **Quality Assurance**

CLIENT NAME: MUNICIPALITY OF ANNAPOLIS COUNTY

AGAT WORK ORDER: 22X916054

PROJECT:

ATTENTION TO: James Jenner

SAMPLING SITE: SAMPLED BY:

				Wate	er Ar	nalys	is								
RPT Date: Jul 15, 2022				DUPLICAT	E		REFEREN	NCE MA	TERIAL	METHOD	BLAN	SPIKE	MAT	RIX SPI	IKE
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Lin	eptable mits
FANAMETER	Daten	ld	Dup #1	Dup #2	KFD		Value	Lower	Upper	Recovery	Lower	Upper	Recovery	Lower	Upper
Standard Water Analysis + Tota	al Metals														
pH	4056809		6.5	6.57	1.1%	<	100%	80%	120%						
Reactive Silica as SiO2	4049305		9.0	9.6	7.1%	< 0.5	103%	80%	120%	105%	80%	120%	110%	80%	120%
Chloride	4067444	4067444	26	27	4.0%	< 1	111%	80%	120%	NA	80%	120%	NA	70%	130%
Fluoride	4048539		<0.12	< 0.12	NA	< 0.12	111%	80%	120%	NA	80%	120%	113%	70%	130%
Sulphate	4048539		44	42	3.1%	< 2	102%	80%	120%	NA	80%	120%	NA	70%	130%
Alkalinity	4056809	4056809	10	11	NA	< 5	97%	80%	120%						
True Color	4050893		10.0	9.93	NA	5.00	80%	80%	120%	101%	80%	120%	NA		
Turbidity	3961019		<0.5	<0.5	NA	< 0.5	99%	80%	120%	NA			NA		
Electrical Conductivity	4056809	4056809	2090	2100	0.5%	< 1	102%	90%	110%						
Nitrate as N	4048539		<0.05	<0.05	NA	< 0.05	107%	80%	120%	NA	80%	120%	102%	70%	130%
Nitrite as N	4048539		<0.05	<0.05	NA	< 0.05	92%	80%	120%	NA	80%	120%	103%	70%	130%
Ammonia as N	4050949		NA	NA	NA	< 0.03	110%	80%	120%	84%	80%	120%	NA	70%	130%
Total Organic Carbon	4051110		4.7	4.8	2.1%	< 0.5	93%	80%	120%	NA	80%	120%	90%	80%	120%
Ortho-Phosphate as P			0.02	0.02	NA	< 0.01	83%	80%	120%		80%	120%		80%	120%
Total Sodium	4053046	4053046	22	18	20.0%	< 0.1	93%	80%	120%	90%	80%	120%	82%	70%	130%
Total Potassium	4053046	4053046	11.9	9.8	19.4%	< 0.1	92%	80%	120%	90%	80%	120%	82%	70%	130%
Total Calcium	4053046	4053046	37	29	NA	< 0.1	95%	80%	120%	94%	80%	120%	88%	70%	130%
Total Magnesium	4053046	4053046	4.0	3.4	16.2%	< 0.1	107%	80%	120%	102%	80%	120%	96%	70%	130%
Bicarb. Alkalinity (as CaCO3)		4056809	10	11	NA	< 5	NA	80%	120%						
Carb. Alkalinity (as CaCO3)	4056809	4056809	< 10	< 10	0.0%	< 10	NA	80%	120%						
Hydroxide	4056809	4056809	< 5	< 5	0.0%	< 5	NA	80%	120%						
Comments: If RPD value is NA, the	e results of th	e duplicates	s are less t	than 5x the	RDL and	the RPD v	will not be	calcula	ted.						
Halifax - Metals - Total (µg/L)															
Total Aluminum	194	4038861	25	23	8.3%	< 4	121%	70%	130%	94%	80%	120%	110%	70%	130%
Total Antimony	194	4038861	<2	<2	NA	< 2	103%	70%	130%	103%	80%	120%	99%	70%	130%
Total Arsenic	194	4038861	<2	<2	NA	< 2	99%	70%	130%	101%	80%	120%	102%	70%	130%
Total Barium	194	4038861	<5	<5	NA	< 5	102%	70%	130%	105%	80%	120%	100%	70%	130%
Total Beryllium	194	4038861	<2	<2	NA	< 2	108%	70%	130%	105%	80%	120%	106%	70%	130%
Total Bismuth	194	4038861	<2	<2	NA	< 2	99%	70%	130%	96%	80%	120%	93%	70%	130%
Total Boron	194	4038861	10	10	NA	< 5	112%	70%	130%	113%	80%	120%	105%	70%	130%
Total Cadmium	194	4038861	< 0.09	< 0.09	NA	< 0.09	103%		130%	103%	80%	120%	102%	70%	130%
Total Chromium	194	4038861	<1	<1	NA	< 1	104%		130%	102%		120%	101%		130%
Total Cobalt	194	4038861	<1	<1	NA	< 1	104%	70%	130%	105%	80%	120%	98%	70%	130%
Total Copper	194	4038861	77	73	5.3%	< 1	102%	70%	130%	105%	80%	120%	100%	70%	130%
Total Iron	194	4059059	<50	<50	NA	< 50	112%	70%	130%	113%		120%	104%		130%
Total Lead	194	4038861	<0.5	<0.5	NA	< 0.5	98%		130%	93%		120%	93%		130%
Total Manganese	194	4059059	169	159	6.1%	< 3	116%	70%	130%	112%	80%	120%	103%	70%	130%

#### AGAT QUALITY ASSURANCE REPORT (V1)

Page 10 of 15

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## **Quality Assurance**

CLIENT NAME: MUNICIPALITY OF ANNAPOLIS COUNTY

AGAT WORK ORDER: 22X916054

PROJECT:

ATTENTION TO: James Jenner

SAMPLING SITE: SAMPLED BY:

Water Analysis (Continued)																	
RPT Date: Jul 15, 2022				UPLICAT	E		REFERENCE MATERIAL METHOD BLANK SPIKE MATRI							RIX SP	RIX SPIKE		
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured	Acceptable Limits		Recovery	Lie	ptable nits	Recovery	1 1:	eptable mits		
		Id		·			Value	Lower	Upper		Lower Upper			Lower	Upper		
Total Nickel	194	4038861	<2	<2	NA	< 2	103%	70%	130%	105%	80%	120%	98%	70%	130%		
Total Selenium	194	4038861	<1.0	<1.0	NA	< 1.0	99%	70%	130%	100%	80%	120%	99%	70%	130%		
Total Silver	194	4038861	<0.1	<0.1	NA	< 0.1	98%	70%	130%	97%	80%	120%	96%	70%	130%		
Total Strontium	194	4059059	242	228	6.0%	< 5	115%	70%	130%	110%	80%	120%	104%	70%	130%		
Total Thallium	194	4038861	<0.2	<0.2	NA	< 0.1	97%	70% 130%		70% 130%		98%	80%	120%	93%	70%	130%
Total Tin	194	4038861	<3	<3	NA	< 2	103%	70%	130%	108%	80%	120%	99%	70%	130%		
Total Titanium	194	4038861	12	11	8.7%	< 2	116%	70%	130%	107%	80%	120%	114%	70%	130%		
Total Uranium	194	4038861	<0.2	<0.2	NA	< 0.2	99%	70%	130%	97%	80%	120%	93%	70%	130%		
Total Vanadium	194	4038861	<2	<2	NA	< 2	103%	70%	130%	104%	80%	120%	99%	70%	130%		
Total Zinc	194	4038861	150	132	12.8%	< 5	104%	70%	130%	112%	80%	120%	89%	70%	130%		
Total Phosphorus	194	4059059	94	<50	NA	< 50	91%	70%	130%	98%	80%	120%	83%	70%	130%		

Comments: If the RPD value is NA, the results of the duplicates are under 5X the RDL and will not be calculated. If Matrix spike value is NA, the spiked analyte concentration was lower than that of the matrix contribution.

Certified By:

Sara Knox

# **Method Summary**

CLIENT NAME: MUNICIPALITY OF ANNAPOLIS COUNTY

AGAT WORK ORDER: 22X916054

PROJECT:

ATTENTION TO: James Jenner

SAMPLING SITE: SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis	,	-	
Chloroacetic Acid	ORG-120-5110	EPA 552.3	GC/ECD
Bromoacetic Acid	ORG-120-5110	EPA 552.3	GC/ECD
Dichloroacetic Acid	ORG-120-5110	EPA 552.3	GC/ECD
Trichloroacetic Acid	ORG-120-5110	EPA 552.3	GC/ECD
Bromochloroacetic Acid	ORG-120-5110	EPA 552.3	GC/ECD
Dibromoacetic Acid	ORG-120-5110	EPA 552.3	GC/ECD
2-Bromobutanoic acid	ORG-120-5110	EPA 552.3	GC/ECD
Total Haloacetic Acids	ORG-120-5110	EPA 552.3	GC/ECD
HAA5	ORG-120-5110	EPA 552.3	GC/ECD
Chloroform	VOL-120-5001	EPA SW-846 5030B/8260B	GC/MS
Bromodichloromethane	VOL-120-5001	EPA SW-846 5030B/8260B	GC/MS
Dibromochloromethane	VOL-120-5001	EPA SW-846 5030B/8260B	GC/MS
Bromoform	VOL-120-5001	EPA SW-846 5030B/8260B	GC/MS
Total Trihalomethanes	VOL-120-5001	EPA SW-846 5030B/8260B	GC/MS
Toluene-d8	VOL-120-5001	EPA SW846 5030B/8260B	GC/MS
4-Bromofluorobenzene	VOL-120-5001	EPA SW846 5030B/8260B	GC/MS

# **Method Summary**

CLIENT NAME: MUNICIPALITY OF ANNAPOLIS COUNTY

AGAT WORK ORDER: 22X916054

PROJECT:

ATTENTION TO: James Jenner

SAMPLING SITE: SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE						
Water Analysis	AGAT G.G.I	EITERATORE REFERENCE	ANALI HOAL ILOHNIQUE						
Water Analysis	INOR-171-6201,								
Total Aluminum	INOR-171-6100	SM 3030 E; SM 3125 B	ICP-MS						
Total Antimony	INOR-171-6201, INOR-171-6100	SM 3030 E; SM 3125 B	ICP-MS						
Total Arsenic	INOR-171-6201	SM 3030 E; SM 3125 B	ICP-MS						
Total Barium	INOR-171-6201	SM 3030 E; SM 3125 B	ICP-MS						
Total Beryllium	INOR-171-6100, -6202	SM 3030 E; SM 3125 B	ICP-MS						
Total Bismuth	INOR-171-6201	SM 3030 E; SM 3125 B	ICP/MS						
Total Boron	INOR-171-6201	SM 3030 E; SM 3125 B	ICP-MS						
Total Cadmium	INOR-171-6201	SM 3030 E; SM 3125 B	ICP/MS						
Total Chromium	INOR-171-6202	SM 3030 E; SM 3125 B	ICP-MS						
Total Cobalt	INOR-171-6100, -6202	SM 3030 E; SM 3125 B	ICP-MS						
Total Copper	INOR-171-6100, -6202	SM 3030 E; SM 3125 B	ICP-MS						
Total Iron	INOR-171-6100, 171-6201	SM 3030 E; SM 3120 B	ICP/OES						
Total Lead	INOR-171-6202	SM 3030 E; SM 3125 B	ICP-MS						
Total Manganese	INOR-171-6201	SM 3030 E; SM 3120 B	ICP/OES						
Total Molybdenum	INOR-171-6202	SM 3030 E; SM 3125 B	ICP/MS						
Total Nickel	INOR-171-6202	SM 3030 E; SM 3125 B	ICP-MS						
Total Selenium	INOR-171-6202	SM 3030 E; SM 3125 B	ICP-MS						
Total Silver	INO-171-6202	SM 3030 E; SM 3125 B	ICP-MS						
Total Strontium	INOR-171-6201	SM 3030 E; SM 3120 B	ICP/OES						
Total Thallium	INOR-171-6202	SM 3030 E; SM 3125 B	ICP-MS						
Total Tin	INOR-171-6202	SM 3030 E; SM 3125 B	ICP-MS						
Total Titanium	INOR-171-6100, -6202	SM 3030 E; SM 3125 B	ICP/MS						
Total Uranium	INOR-171-6202	SM 3030 E; SM 3125 B	ICP-MS						
Total Vanadium	INORG-171-6202	SM 3030 E; SM 3125 B	ICP-MS						
Total Zinc	INORG-171-6202	SM 3030 E; SM 3125 B	ICP-MS						
Total Phosphorus	INOR-171-6100, 171-6201	SM 3030 E; SM 3120 B	ICP/OES						
pH	INOR-121-6001	SM 4500 H+B	PC TITRATE						
Reactive Silica as SiO2	INOR-121-6027	SM 4500-SiO2 F	COLORIMETER						
Chloride	INORG-121-6005	SM 4110 B	ION CHROMATOGRAPH						
Fluoride	INORG-121-6005	SM 4110 B	ION CHROMATOGRAPH						
Sulphate	INORG-121-6005	SM 4110 B	ION CHROMATOGRAPH						
Alkalinity	INOR-121-6001	SM 2320 B							
True Color	INOR-121-6008	SM 2120 B	LACHAT FIA						
Turbidity	INOR-121-6022	SM 2130 B	NEPHELOMETER						
Electrical Conductivity	INOR-121-6001	SM 2510 B	PC TITRATE						
Nitrate + Nitrite as N	INORG-121-6005	SM 4110 B	CALCULATION						
Nitrate as N	INORG-121-6005	SM 4110 B	ION CHROMATOGRAPH						
Nitrite as N	INORG-121-6005	SM 4110 B	ION CHROMATOGRAPH						
Ammonia as N	INOR-121-6047	SM 4500-NH3 H	COLORIMETER						
Total Organic Carbon	INOR-121-6026	SM 5310 B	TOC ANALYZER						
Ortho-Phosphate as P	INOR-121-6012	SM 4500-P G	COLORIMETER						
Total Sodium	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS						
Total Potassium	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS						
Total Calcium	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS						

# **Method Summary**

CLIENT NAME: MUNICIPALITY OF ANNAPOLIS COUNTY

AGAT WORK ORDER: 22X916054

PROJECT:

ATTENTION TO: James Jenner

SAMPLING SITE: SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Total Magnesium	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Bicarb. Alkalinity (as CaCO3)	INORG-121-6001	SM 2320 B	PC TITRATE
Carb. Alkalinity (as CaCO3)	INORG-121-6001	SM 2320 B	PC TITRATE
Hydroxide	INORG-121-6001	SM 2320 B	PC-TITRATE
Calculated TDS	CALCULATION	SM 1030E	CALCULATION
Hardness	CALCULATION	SM 2340B	CALCULATION
Langelier Index (@20C)	CALCULATION	CALCULATION	CALCULATION
Langelier Index (@ 4C)	CALCULATION	CALCULATION	CALCULATION
Saturation pH (@ 20C)	CALCULATION	CALCULATION	CALCULATION
Saturation pH (@ 4C)	CALCULATION	CALCULATION	CALCULATION
Anion Sum	CALCULATION	SM 1030E	CALCULATION
Cation sum	CALCULATION	SM 1030E	CALCULATION
% Difference/ Ion Balance	CALCULATION	SM 1030E	CALCULATION

# AGAT Laboratories

Unit 122 • 11 Morris Drive Dartmouth, NS

B3B 1M2 webearth.agatlabs.com • www.agatlabs.com

Arrival Condition:	□ Good	☐ Poor	(see note
Arrival Condition: Arrival Temperature:	168,1	72,	17.8

n	Hold	Time:
	i ioiu	THITC.

Laboratory Use Only

22VB1/ 05//

Chain of Custody Record					P	: 90	2.46	8.8	718	8 = F:	90:	2.46	8.8	924	AGAT Job Number: AAX916034													
Report Inf	formation			11	Report Information (Please print):  1. Name: JAMES JENNER							port Format Notes: COLEC, i CE Pack 5																
	Annapolis Cou	irity		—   I. Name	1. Name: Single Sample per page Turnaround Time Required (TAT)											_												
Contact: James Jenner				11	John Webber					11		ultiple		nples	11						_			-	,_	n.	A4	
Address:		Annapolis Royal		2. Name	jwebber@annapoliscounty.ca							er pag			Re	egula	ar T	AT		5 to	7 w	orkir	ng d	ays.	j	94	<i>o</i> lan	
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Phone: 902-526-0566 Fax: 902-532-2096			Regulat											□3	]3 days													
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Please Note: If	quotation number is i	not provided client will be billed fu	all price for analy	sis Tier	1 ☐ Res ☐ Pot 2 ☐ Com ☐ N/Po	t	□ F	Coars	е	Dr	nki	ng W	ater	Sam	ple:	■ Ye	s [	ПΝο	,	Sal	t Wa	ter S	Samı	ole	— П Y	es 🗆	 1 No	
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	Card#:				annent Louier	ered/Preserved	Water	Total		CB C		TDS		sphorus	H/BTEX	H/BTEX	S TPH/						P/A	l. Psei	iform		(N/N) sr	
Sample I	dentification	Date/Time Sampled	Sample Matrix	# Containers	Comments - Site/Sample Info. Sample Containment	Field Filte	Standard Water Analysis	Metals: 지 Total	Mercury	B0D	핊	TSS	N K	Total Phosphorus	Phenois Tier 1: TPH/BTEX (PIRI)	Ter 2: TP	CCME-CWS TPH/BTEX	VOC	THM	HAA	РАН	PCB	TC + EC	HPC -	Fecal Coliform	Other:	Hazardous (Y/N)	
Me	etering	July 4 2022 8am	water	6															1	1							n	
Gord	lon Road	July 4 2022 8am	water	6															1	1							n	
Sea	aman St	July 4 2022 8am	water	6		L													1	1							n	
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