

CLIENT NAME: QUALICUM BAY HORNE LAKE WATER DISTRICT 234 LIONS WAY QUALICUM BEACH, BC V9K 2E2 250-757-8507

ATTENTION TO: Leigh Campbell

PROJECT: QBHL

AGAT WORK ORDER: 19V550073

MICROBIOLOGY ANALYSIS REVIEWED BY: Clarissa Muljono, Report Writer

WATER ANALYSIS REVIEWED BY: Dana Solari, Lab Reporter

DATE REPORTED: Dec 17, 2019

PAGES (INCLUDING COVER): 16

VERSION*: 2

Should you require any information regarding this analysis please contact your client services representative at (778) 452-4000

*NOTES
VERSION 2: Sample receipt temperature: 0°C
Version 2 issued December 17, 2019 is completed report. Version 2 is an amendment of Version 1.

All samples will be disposed of within 30 days following analysis. Please contact the lab if you require additional sample storage time.

Member of: Association of Professional Engineers and Geoscientists of Alberta

AGAT Laboratories (V2)

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scope of accreditation. AGAT Laboratories (Mississauga) is also accredited by the Canadian

Association for Laboratory Accreditation Inc. (CALA) for specific drinking water tests. Accreditations are location and parameter specific. A complete listing of parameters for each location is available from www.cala.ca and/or www.scc.ca. The tests in this report may not necessarily be included in the scope of accreditation. Measurement Uncertainty is not taken into consideration when stating

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(APEGA)

Western Enviro-Agricultural Laboratory Association (WEALA)

Western Enviro-Agricultural Laboratory Association (WEALA) Environmental Services Association of Alberta (ESAA)



Certificate of Analysis

AGAT WORK ORDER: 19V550073

PROJECT: QBHL

Unit 120, 8600 Glenlyon Parkway Burnaby, British Columbia CANADA V5J 0B6 TEL (778)452-4000 FAX (778)452-4074 http://www.agatlabs.com

CLIENT NAME: QUALICUM BAY HORNE LAKE WATER DISTRICT

SAMPLING SITE:

ATTENTION TO: Leigh Campbell SAMPLED BY:

Heterotrophic Plate Count												
DATE RECEIVED: 2019-11-29							DATE REPORTED: 2019-12-17					
		SAMPLE DESCRIPTION:			Well 2	Well 3						
		SAMPLE TYPE: DATE SAMPLED:		Water 2019-11-28	Water 2019-11-28	Water 2019-11-28						
Parameter	Unit	G/S	RDL	757392	757432	757433						
Heterotrophic Plate Count (HPC)	MPN/mL		2	<2	<2	35						

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Canadian Drinking Water Quality (mg/L)- Maximum Acceptable Concentrations

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.

Analysis performed at AGAT Vancouver (unless marked by *)





Certificate of Analysis

AGAT WORK ORDER: 19V550073

PROJECT: QBHL

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CLIENT NAME: QUALICUM BAY HORNE LAKE WATER DISTRICT

SAMPLING SITE: SAMPLED BY:

lotai	Coliforms	and E.Coli I	by Membrar	e Filtration
				DATE REPORTED: 2019-12-17
SAMPLE DESCRIPTION:	Well 1	Well 2	Well 3	
SAMPLE TYPE:	Water	Water	Water	
DATE SAMPLED:	2019-11-28	2019-11-28	2019-11-28	

ATTENTION TO: Leigh Campbell

		SAM	PLE TYPE:	Water	Water	Water	
		DATE SAMPLED:		2019-11-28	2019-11-28	2019-11-28	
Parameter	Unit	G/S	RDL	757392	757432	757433	
Total Coliforms	CFU/100mL		1	<1	<1	<1	
Escherichia Coli (E.coli)	CFU/100mL		1	<1	<1	<1	
Non-Coliform Bacteria	CFU/100mL			<1	<1	<1	

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Canadian Drinking Water Quality (mg/L)- Maximum Acceptable Concentrations

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Analysis performed at AGAT Vancouver (unless marked by *)

DATE RECEIVED: 2019-11-29





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Unit 120, 8600 Glenlyon Parkway Burnaby, British Columbia CANADA V5J 0B6 TEL (778)452-4000 FAX (778)452-4074 http://www.agatlabs.com

ATTENTION TO: Leigh Campbell

SAMPLED BY:

Anions and Nutrients

DATE RECEIVED: 2019-11-29							DATE REPORTED: 2019-12-17
		SAMPLE DES	CRIPTION:	Well 1	Well 2	Well 3	
		SAM	PLE TYPE:	Water	Water	Water	
		DATE	SAMPLED:	2019-11-28	2019-11-28	2019-11-28	
Parameter	Unit	G/S	RDL	757392	757432	757433	
Chloride	mg/L		0.05	2.55	2.86	4.07	
Nitrate-N	mg/L	10	0.005	< 0.005	< 0.005	< 0.005	
Nitrite-N	mg/L	1	0.005	< 0.005	< 0.005	<0.005	
Sulphate	mg/L		0.5	3.0	3.0	2.9	
Fluoride	mg/L	1.5	0.02	0.03	0.03	0.02	
Bromide	mg/L		0.05	< 0.05	< 0.05	< 0.05	
Ammonia-N	mg/L		0.01	0.06	0.06	0.07	
Nitrogen - Total	mg/L		0.05	0.40	0.70	0.30	
Total Organic Carbon	mg/L		0.30	0.53*	0.66*	0.61*	
Nitrogen - Total Kjeldahl (TKN)(Calc)	mg/L		0.05	0.40	0.70	0.30	

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Canadian Drinking Water Quality (mg/L)- Maximum Acceptable Concentrations

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757392-757433 Total Nitrogen is a calculation based on the sum of TKN, Nitrite-N, and Nitrate-N.

*TKN and Total Organic Carbon were perfomed at AGAT Montreal.

Analysis performed at AGAT Vancouver (unless marked by *)





SAMPLING SITE:

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ATTENTION TO: Leigh Campbell

SAMPLED BY:

BC CSR Omnibus Total Metals (mg/L)												
DATE RECEIVED: 2019-11-29							DATE REPORTED: 2019-12-17					
		SAMPLE DESCRIPTION: SAMPLE TYPE: DATE SAMPLED:		Well 1 Water 2019-11-28	Well 2 Water 2019-11-28	Well 3 Water 2019-11-28						
Parameter	Unit	G/S	RDL	757392	757432	757433						
Aluminum Total	mg/L		0.005	<0.005	< 0.005	< 0.005						
Antimony Total	mg/L	0.006	0.0005	<0.0005	< 0.0005	<0.0005						
Arsenic Total	mg/L	0.010	0.0001	0.0018	0.0019	0.0016						
Barium Total	mg/L	1.0	0.0005	0.0037	0.0038	0.0026						
Beryllium Total	mg/L		0.00005	< 0.00005	< 0.00005	< 0.00005						
Boron Total	mg/L	5	0.005	0.013	0.014	0.013						
Cadmium Total	mg/L	0.005	0.00001	< 0.00001	< 0.00001	0.00001						
Calcium Total	mg/L		0.05	19.9	20.5	20.0						
Chromium Total	mg/L	0.05	0.0005	< 0.0005	< 0.0005	< 0.0005						
Cobalt Total	mg/L		0.00005	< 0.00005	< 0.00005	< 0.00005						
Copper Total	mg/L	2	0.0005	0.0023	0.0009	0.0015						
Iron Total	mg/L		0.01	0.02	0.02	0.02						
Lead Total	mg/L	0.005	0.00005	0.00033	0.00009	< 0.00005						
Lithium Total	mg/L		0.0005	< 0.0005	< 0.0005	< 0.0005						
Magnesium Total	mg/L		0.05	5.32	5.42	4.94						
Manganese Total	mg/L	0.12	0.001	0.143	0.135	0.102						
Mercury Total	μg/L		0.01	<0.01	<0.01	<0.01						
Molybdenum Total	mg/L		0.0001	0.0003	0.0002	0.0002						
Nickel Total	mg/L		0.0005	< 0.0005	< 0.0005	< 0.0005						
Potassium Total	mg/L		0.1	1.3	1.3	1.3						
Selenium Total	mg/L	0.05	0.0005	< 0.0005	<0.0005	< 0.0005						
Silver Total	mg/L		0.0001	<0.0001	<0.0001	<0.0001						
Sodium Total	mg/L		0.1	4.3	4.1	4.1						
Strontium Total	mg/L	7.0	0.0001	0.0449	0.0435	0.0430						
Thallium Total	mg/L		0.00002	<0.00002	<0.00002	<0.00002						
Tin Total	mg/L		0.00005	< 0.00005	< 0.00005	0.00010						
Titanium Total	mg/L		0.001	0.002	0.002	0.002						
Tungsten Total	mg/L		0.0001	<0.0001	<0.0001	< 0.0001						
Uranium Total	mg/L	0.02	0.00001	0.00003	0.00003	0.00002						
Vanadium Total	mg/L		0.001	0.004	0.004	0.004						





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Unit 120, 8600 Glenlyon Parkway

Burnaby, British Columbia

ATTENTION TO: Leigh Campbell

SAMPLED BY:

BC CSR Omnibus Total Metals (mg/L)

DATE RECEIVED: 2019-11-29							DATE REPORTED: 2019-12-17				
	SA	SAMPLE DESCRIPTION:			Well 2	Well 3					
		SAMPLE TYPE: DATE SAMPLED:		Water	Water	Water					
				2019-11-28	2019-11-28	2019-11-28					
Parameter	Unit	G/S	RDL	757392	757432	757433					
Zinc Total	mg/L		0.005	0.007	0.006	0.007					
Total Hardness (calc)	mg CaCO3/L		1	72	74	70					

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Canadian Drinking Water Quality (mg/L)- Maximum Acceptable Concentrations

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757392 Sample improperly preserved as per analysis requirements for Total Mercury.

Sample container inappropriate as per analysis requirements for Total Mercury.

Analysis performed at AGAT Vancouver (unless marked by *)

SAMPLING SITE:

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Certificate of Analysis

AGAT WORK ORDER: 19V550073

PROJECT: QBHL

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Unit 120, 8600 Glenlyon Parkway Burnaby, British Columbia CANADA V5J 0B6 TEL (778)452-4000 FAX (778)452-4074 http://www.agatlabs.com

Microbial Analysis - SRB/IRB

DATE RECEIVED: 2019-11-29							DATE REPORTED: 2019-12-17
	s	SAMPLE DESCRIPTION:			Well 2	Well 3	
	SAMPLE TYPE:		Water	Water	Water		
		DATE SAMPLED:		2019-11-28	2019-11-28	2019-11-28	
Parameter	Unit	G/S	RDL	757392	757432	757433	
Iron Related Bacteria**				Present	Present	Present	
IRB Approximate Population Count**	CFU/mL		1	8	500	8	
Sulfate Reducing Bacteria**				Absent	Absent	Absent	
SRB Approximate Population Count**	CFU/mL		1	<1	<1	<1	

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Canadian Drinking Water Quality (mg/L)- Maximum Acceptable Concentrations

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Analysis performed at AGAT Calgary (unless marked by *)

SAMPLING SITE:





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AGAT WORK ORDER: 19V550073

PROJECT: QBHL

Unit 120, 8600 Glenlyon Parkway Burnaby, British Columbia CANADA V5J 0B6 TEL (778)452-4000 FAX (778)452-4074 http://www.agatlabs.com

CLIENT NAME: QUALICUM BAY HORNE LAKE WATER DISTRICT

mg CaCO3/L

Colour units

SAMPLING SITE:

ATTENTION TO: Leigh Campbell SAMPLED BY:

Physical	Tests	Package
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DATE RECEIVED: 2019-11-29							DATE REPORTED: 2019-12-17
		SAMPLE DES	CRIPTION:	Well 1	Well 2	Well 3	
			Water	Water	Water		
			2019-11-28	2019-11-28	2019-11-28		
Parameter	Unit	G/S	RDL	757392	757432	757433	
рН	pH units		0.01	7.92	8.01	7.97	
Total Dissolved Solids	mg/L		5	128	120	102	
Turbidity	NTU		0.1	0.3	0.3	0.4	
Electrical Conductivity	μS/cm		1	154	158	155	

76

<5

-0.12

Comments:

True Colour Langlier Index

Alkalinity (pH 4.5)

RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Canadian Drinking Water Quality (mg/L)- Maximum Acceptable Concentrations

74

<5

-0.23

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.

70

<5

-0.19

757392-757433 Literature holding time exceeded for pH analysis.

Analysis performed at AGAT Vancouver (unless marked by *)





Certificate of Analysis

Wall 3

AGAT WORK ORDER: 19V550073

PROJECT: QBHL

Unit 120, 8600 Glenlyon Parkway Burnaby, British Columbia CANADA V5J 0B6 TEL (778)452-4000 FAX (778)452-4074 http://www.agatlabs.com

ATTENTION TO: Leigh Campbell

SAMPLED BY:

Sulphide in Water

DATE RECEIVED: 2019-11-29 DATE REPORTED: 2019-12-17

Wall 2

			SAMI LE DES	CIXII TIOI4.	WCIII	WGII Z	Well 5
			SAM	PLE TYPE:	Water	Water	Water
Parameter			DATE	SAMPLED:	2019-11-28	2019-11-28	2019-11-28
		Unit	G/S	RDL	757392	757432	757433
	Sulphide	mg/L		0.01	<0.01	<0.01	<0.01

SAMPLE DESCRIPTION:

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Canadian Drinking Water Quality (mg/L)- Maximum Acceptable Concentrations

Wall 1

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757392 Sample improperly preserved as per analysis requirements.

Analysis performed at AGAT Vancouver (unless marked by *)

SAMPLING SITE:



Quality Assurance

CLIENT NAME: QUALICUM BAY HORNE LAKE WATER DISTRICT AGAT WORK ORDER: 19V550073

PROJECT: QBHL ATTENTION TO: Leigh Campbell

SAMPLING SITE: SAMPLED BY:

			_												
RPT Date: Dec 17, 2019			DUPLICATE			l	REFERENCE MATERIAL			METHOD	D BLANK SPIKE		MAT	TRIX SPIKE	
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured	Acceptable Limits		Recovery	Acceptable Limits		Recovery	1 1 1	eptable mits
TANAMETER	Batch	ld	Bup#1	Dup #2	KFD		Value	Lower	Upper	Recovery	Lower	Upper	Recovery	Lower	Uppe
BC CSR Omnibus Total Metal	s (mg/L)									•		•	•		•
Aluminum Total	757310		0.006	0.007	NA	< 0.005	87%	85%	115%	108%	90%	110%			
Antimony Total	757310		<0.0005	< 0.0005	NA	< 0.0005	109%	85%	115%	104%	90%	110%			
Arsenic Total	757310		<0.0001	< 0.0001	NA	< 0.0001	110%	85%	115%	103%	90%	110%			
Barium Total	757310		0.0023	0.0022	NA	< 0.0005	105%	85%	115%	103%	90%	110%			
Beryllium Total	757310		<0.00005	<0.00005	NA	< 0.00005	5 103%	85%	115%	100%	90%	110%			
Boron Total	757310		<0.005	<0.005	NA	< 0.005	103%	85%	115%	105%	90%	110%			
Cadmium Total	757310		0.00001	0.00001	NA	< 0.00001	100%	85%	115%	99%	90%	110%			
Calcium Total	757310		8.52	8.77	2.9%	< 0.05	100%	85%	115%	102%	90%	110%			
Chromium Total	757310		<0.0005	<0.0005	NA	< 0.0005	110%	85%	115%	103%	90%	110%			
Cobalt Total	757310		<0.00005	<0.00005	NA	< 0.00005	5 110%	85%	115%	102%	90%	110%			
Copper Total	757310		0.0028	0.0034	17.9%	< 0.0005	110%	85%	115%	101%	90%	110%			
Iron Total	757310		0.01	< 0.01	NA	< 0.01	109%	85%	115%	100%	90%	110%			
Lead Total	757310		0.00021	0.00021	NA	< 0.00005	5 93%	85%	115%	108%	90%	110%			
Lithium Total	757310		<0.0005	<0.0005	NA	< 0.0005				99%	90%	110%			
Magnesium Total	757310		1.48	1.52	2.6%	< 0.05	100%	85%	115%	101%	90%	110%			
Manganese Total	757310		<0.001	<0.001	NA	< 0.001	105%	85%	115%	103%	90%	110%			
Mercury Total	757322		<0.01	<0.01	NA	< 0.01	99%	85%	115%	94%	90%	110%			
Molybdenum Total	757310		0.0002	0.0002	NA	< 0.0001	103%	85%	115%	108%	90%	110%			
Nickel Total	757310		<0.0005	<0.0005	NA	< 0.0005	111%	85%	115%	104%	90%	110%			
Potassium Total	757310		0.2	0.2	NA	< 0.1	94%	85%	115%	98%	90%	110%			
Selenium Total	757310		<0.0005	<0.0005	NA	< 0.0005	99%	85%	115%	100%	90%	110%			
Silver Total	757310		<0.0001	< 0.0001	NA	< 0.0001				102%	90%	110%			
Sodium Total	757310		1.8	1.8	2.3%	< 0.1	99%	85%	115%	102%	90%	110%			
Strontium Total	757310		0.0225	0.0231	2.7%	< 0.0001	99%	85%	115%	110%	90%	110%			
Thallium Total	757310		<0.00002	<0.00002	NA	< 0.00002	98%	85%	115%	102%	90%	110%			
Tin Total	757310		<0.00005	<0.00005	NA	< 0.00005	5			105%	90%	110%			
Titanium Total	757310		0.001	0.001	NA	< 0.001				102%	90%	110%			
Tungsten Total	757310		<0.0001	<0.0001	NA	< 0.0001				105%	90%	110%			
Uranium Total	757310		<0.00001	<0.00001	NA	< 0.00001	1 99%	85%	115%	100%	90%	110%			
Vanadium Total	757310		<0.001	<0.001	NA	< 0.001	108%	85%	115%	101%	90%	110%			
Zinc Total	757310		0.033	0.033	2.0%	< 0.005	110%	85%	115%	103%	90%	110%			
Comments: RPDs are calculated	using raw analy	tical data	and not the	e rounded d	uplicate	values repo	orted.								
Physical Tests Package															
pH	757392		7.92	7.93	0.1%		100%	95%	105%						
Total Dissolved Solids	758431		518	542	4.7%	< 5				103%	85%	115%			
Turbidity	756933		14.2	14.6	2.8%	< 0.1	102%	85%	115%	101%	85%	115%			
Electrical Conductivity	757392		154	156	1.2%	< 1	104%	90%	110%						
Alkalinity (pH 4.5)	757392		74	74	0.2%	< 1	99%	90%	110%						

AGAT QUALITY ASSURANCE REPORT (V2)

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AGAT WORK ORDER: 19V550073

Quality Assurance

CLIENT NAME: QUALICUM BAY HORNE LAKE WATER DISTRICT

PROJECT: QBHL ATTENTION TO: Leigh Campbell

SAMPLING SITE: SAMPLED BY:

		V	Nate	r Ana	lysis	(Co	ntinu	ed)							
RPT Date: Dec 17, 2019		DUPLICAT	E		REFEREN	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MATRIX SPIKE				
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured		ptable nits	Recovery	Acceptable Limits		Recovery	Lir	ptable nits
		ld					Value	Lower	Upper		Lower	Upper]	Lower	Upper
True Colour	757310		-5	-5	NΔ	- 5	99%	90%	110%	98%	80%	120%			

Comments: RPDs are calculated using raw analytical data and not the rounded duplicate values reported.

Anions and Nutrients

Chloride	757433	4.07	3.91	4.2%	< 0.05	106%	90%	110%	96%	90%	110%
Nitrate-N	757433	< 0.005	< 0.005	NA	< 0.005	102%	90%	110%	102%	90%	110%
Nitrite-N	757433	< 0.005	< 0.005	NA	< 0.005				103%	90%	110%
Sulphate	757433	2.9	2.8	4.0%	< 0.5	101%	90%	110%	103%	90%	110%
Fluoride	757433	0.02	0.02	NA	< 0.02	101%	85%	115%	101%	90%	110%
Bromide	757433	< 0.05	<0.05	NA	< 0.05	103%	85%	115%	102%	90%	110%
Diomide	131433	<0.05	<0.05	INA	< 0.05	103%	0370	115%	10276	90%	11076
Ammonia-N	757392	0.06	0.06	1.2%	< 0.01	95%	85%	115%	96%	90%	110%

Comments: RPDs are calculated using raw analytical data and not the rounded duplicate values reported.

Sulphide in Water

Sulphide 757310 <0.01 <0.01 NA <0.01 98% 85% 115% 109% 85% 115%

Comments: RPDs are calculated using raw analytical data and not the rounded duplicate values reported.

Microbial Analysis - SRB/IRB

Iron Related Bacteria** IRB Approximate Population Count**	1117 1117	675 675	Present 9000	Present 9000	NA 0.0%	< 1
Sulfate Reducing Bacteria**	1117	675	Absent	Absent	NA	
SRB Approximate Population Count**	1117	675	500000	500000	0.0%	< 1

Comments: If the RPD value is NA, the results of the duplicates are under 5X the RDL and will not be calculated.

Certified By:

D. Soloni

AGAT QUALITY ASSURANCE REPORT (V2)

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Method Summary

CLIENT NAME: QUALICUM BAY HORNE LAKE WATER DISTRICT

AGAT WORK ORDER: 19V550073

PROJECT: QBHL

ATTENTION TO: Leigh Campbell

SAMPLING SITE: SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Microbiology Analysis			·
Heterotrophic Plate Count (HPC)	MIC-181-7002	SM 9125 E (IDEXX SimPlate®)	INCUBATOR
Total Coliforms	MIC-181-7003	SM 9222B & 9222G	MF/INCUBATOR
Escherichia Coli (E.coli)	MIC-181-7003	SM 9222B & 9222G	MF/INCUBATOR
Non-Coliform Bacteria	MIC-181-7003	SM 9222 B & 9222 G	MF/INCUBATOR

Method Summary

CLIENT NAME: QUALICUM BAY HORNE LAKE WATER DISTRICT

AGAT WORK ORDER: 19V550073

PROJECT: QBHL

ATTENTION TO: Leigh Campbell

SAMPLING SITE: SAMPLED BY:

SAMPLING SITE:		1						
PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE					
Water Analysis								
Chloride	INOR-181-6002	Modified from SM 4110 B	ION CHROMATOGRAPH					
Nitrate-N	INOR-181-6002	Modified from SM 4110 B	ION CHROMATOGRAPH					
Nitrite-N	INOR-181-6002	Modified from SM 4110 B	ION CHROMATOGRAPH					
Sulphate	INOR-181-6002	Modified from SM 4110 B	ION CHROMATOGRAPH					
Fluoride	INOR-181-6002	Modified from SM 4110 B	ION CHROMATOGRAPH					
Bromide	INOR-181-6002	Modified from SM 4110 B	ION CHROMATOGRAPH					
Ammonia-N	INOR-181-6001	Modified from SM 4500-NH3 G	CONTINUOUS FLOW ANALYZER					
Nitrogen - Total	INOR-181-6006	Modified from SM 4500-N	COMBUSTION					
Total Organic Carbon Aluminum Total	INOR-181-6003 MET-181-6102, LAB-181-4009	Modified from SM 5310 B Modified from SM 3125 B	COMBUSTION ICP-MS					
Antimony Total	MET-181-6102, LAB-181-4009	Modified from SM 3125 B	ICP-MS					
Arsenic Total	MET-181-6102, LAB-181-4009	Modified from SM 3125 B	ICP-MS					
Barium Total	MET-181-6102, LAB-181-4009	Modified from SM 3125 B	ICP-MS					
Beryllium Total	MET-181-6102, LAB-181-4009	Modified from SM 3125 B	ICP-MS					
Boron Total	MET-181-6102, LAB-181-4009	Modified from SM 3125 B	ICP-MS					
Cadmium Total	MET-181-6102, LAB-181-4009	Modified from SM 3125 B	ICP-MS					
Calcium Total	MET-181-6101, LAB-181-4009	Modified from SM 3120 B	ICP/OES					
Chromium Total	MET-181-6102, LAB-181-4009	Modified from SM 3125 B	ICP-MS					
Cobalt Total	MET-181-6102, LAB-181-4009	Modified from SM 3125 B	ICP-MS					
Copper Total	MET-181-6102, LAB-181-4009 MET-181-6101,	Modified from SM 3125 B	ICP-MS					
Iron Total	LAB-181-4009 MET-181-6102,	Modified from SM 3120 B	ICP/OES					
Lead Total	LAB-181-4009 MET-181-6102,	Modified from SM 3125 B	ICP-MS					
Lithium Total	LAB-181-4009 MET-181-6101,	Modified from SM 3125 B	ICP-MS					
Magnesium Total	LAB-181-4009 MET-181-6101,	Modified from SM 3120 B	ICP/OES					
Manganese Total Mercury Total	LAB-181-4009 MET-181-6103	Modified from SM 3120 B Modified from EPA 245.7	ICP-OES CV/AA					
Molybdenum Total	MET-181-6102, LAB-181-4009	Modified from SM 3125 B	ICP-MS					
Nickel Total	MET-181-6102, LAB-181-4009	Modified from SM 3125 B	ICP-MS					
Potassium Total	MET-181-6101, LAB-181-4009	Modified from SM 3120 B	ICP/OES					
Selenium Total	MET-181-6102, LAB-181-4009	Modified from SM 3125 B	ICP-MS					
Silver Total	MET-181-6102, LAB-181-4009	Modified from SM 3125 B	ICP-MS					
Sodium Total	MET-181-6101, LAB-181-4009	Modified from SM 3120 B	ICP/OES					



Method Summary

CLIENT NAME: QUALICUM BAY HORNE LAKE WATER DISTRICT

AGAT WORK ORDER: 19V550073

PROJECT: QBHL

ATTENTION TO: Leigh Campbell

SAMPLING SITE: SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE			
Strontium Total	MET-181-6102, LAB-181-4009	Modified from SM 3125 B	ICP-MS			
Thallium Total	MET-181-6102, LAB-181-4009	Modified from SM 3125 B	ICP-MS			
Tin Total	MET-181-6102, LAB-181-4009	Modified from SM 3125 B	ICP-MS			
Titanium Total	MET-181-6102, LAB-181-4009	Modified from SM 3125 B	ICP-MS			
Tungsten Total	MET-181-6102, LAB-181-4009	Modified from SM 3125 B	ICP-MS			
Uranium Total	MET-181-6102, LAB-181-4009	Modified from SM 3125 B	ICP-MS			
Vanadium Total	MET-181-6102, LAB-181-4009	Modified from SM 3125 B	ICP-MS			
Zinc Total	MET-181-6102, LAB-181-4009	Modified from SM 3125 B	ICP-MS			
Iron Related Bacteria**	MIC 0510	IRB-BART	INCUBATOR			
IRB Approximate Population Count**	MIC 0510	FLS-011	INCUBATOR			
Sulfate Reducing Bacteria**	MIC 0500	SRB-BART	INCUBATOR			
SRB Approximate Population Count**		FLS-009				
pH	INOR-181-6000	Modified from SM 4500-H+	PH METER			
Total Dissolved Solids	INOR-181-6007	SM 2540 C, D & E	GRAVIMETRIC			
Turbidity	INOR-181-6008	SM 2130 B	PC TITRATE			
Electrical Conductivity	INOR-181-6000	Modified from SM 2510 B	PC TITRATE			
Alkalinity (pH 4.5)	INOR-181-6000	Modified from SM 2320 B	PC TITRATE			
True Colour	INOR-181-6033	Modified from BC MOE Lab Manual Section B (Colour,	SPECTROPHOTOMETER			
Langlier Index		Calculation				
Sulphide	INOR-181-6035	modified from SM 4500S-D	SPECTROPHOTOMETER			

Burnaby, BC Arrival Temperature: V5J 086 AGAT Job Number: (4 157 84.452.4074 Notes:

AGAT Job Number:	MOUZ		<u>-</u>	□□	Kush IAT \Box Same Business Day - 200% \Box 1 Business Day - 100%	☐ 2 Business Days - 50%	☐ 3 Business Days - 25%	Date Required: PLEASE CONTACT LABORATORY IF RUSH RECUIRED SAMPLE	SUBMISSION CUT OFF FOR EFFECTIVE DATE BY 3 PM		sino:	s S	A mo siria sa Ba	tiloC oralila	Cod In Control (N/)	Ton Sint Sint Ton Ton Ton Ton Ton Ton Ton Ton Ton Ton	E.Coli/ HPC/N Iron Re Sulphan NUMBER OPPERENTE							Page	.,477753	V 144.
Burnaby, BC V5J 086 PF: 778,452,4000 • E: 778,452,4000		Report Format			Multiple	Samples per		Excel Format Included		xəp	r Ind	əilə 38 ı	anga	ly, L S Ca	ibio	url Org nia	Alkalin TDS, T Total C Ammo Sulphio Sulphio							Date/Time	Date/Time	Date/Time
Laboratories P: 778,452,4000		Report Information	Name: Leigh Campbell	qbhlwate	Name: Jon Suchner	Email: apris home a shaw co	Requirements (Please Check)	□ BC CSR Soil	□ AL ☑VDW			□ RL-LD □ RL-HD	□ WĿN □ WĿR	Schedule 3.3 (Please Speaffy)		Merals in my /	E/TIME SAI	51/88	NOV28/19 8:20. WILLINGO	28/19 6: 4 m WILLINE DO				AM Bampines rescured by Pring Name and Sign)	יישון ולאימוס בעומילים לא ל נוחד (נותנים פונים פ	Samples Received By (Print Name and Sign):
AGAT Labo	ody Record	Report Information Rep	forne Lake Waterworks 1.	Leigh Campbell	ıy Qualicum Beach,	BC V9K 2E2	0-/5/-850/ Fax:	303249BP	Client Project #: QBALL	Invoice To Same as above Yes ☑ / No □	Company:	Contact:	Address:	Phone: Fax.	#		#) SAMPLE IDENTIFICATION SAMPLE DAT	Well I World Nov	Well 2	WHELL MAY			Samples Reinquighed By (gint Name and Sigh):	FY ON Sull Mov 28/19	Sorth	Complete a retine special color of y front, reserve and Segrif.





SAMPLE INTEGRITY RECEIPT FORM - BURNABY

Work Order # QV 571073

RECEIVING BASICS: Received From:	Waybill #:
SAMPLE QUANTITIES: Coolers: Containers:	24
TIME SENSITIVE ISSUES: Earliest Date Sampled:	No ALREADY EXCEEDED? Yes No
Non-Conformances:	
	ge of each cooler: (record differing temperatures on the CoC next to
(1) O+O+O=O °C (2) + Was ice or ice pack present: Yes Integrity Issues:	_+=°C (3)++=°C (4)++_=°C
total knowny	Sample provid incorrectly preserved and incorrectly preserved and incorrectly preserved and incorrectly preserved.
Account Project Manager: Whom spoken to:	have they been notified of the above issues: Yes No Date and Time:
Additional Notes:	
	hot proton

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