



**CLIENT NAME: DEEP BAY IMPROVEMENT DISTRICT
5031 MOUNTAIN VIEW ROAD
BOWSER, BC V0R1G0
(250) 757-9312**

ATTENTION TO: LESLIE CARTER

PROJECT: YEAR 1

AGAT WORK ORDER: 19V547297

WATER ANALYSIS REVIEWED BY: Clarissa Muljono, Report Writer

DATE REPORTED: Nov 28, 2019

PAGES (INCLUDING COVER): 8

VERSION*: 1

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

***NOTES**

VERSION 1: Sample receipt temperature 3°C.

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



Certificate of Analysis

AGAT WORK ORDER: 19V547297

PROJECT: YEAR 1

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: DEEP BAY IMPROVEMENT DISTRICT

ATTENTION TO: LESLIE CARTER

SAMPLING SITE:

SAMPLED BY:

Anions and Nutrients

DATE RECEIVED: 2019-11-22

DATE REPORTED: 2019-11-28

Parameter	Unit	SAMPLE DESCRIPTION:		Well#1	Well#2	Well#3	Well#4	Well#5	Well#6	Well#7	
		SAMPLE TYPE:		Water	Water	Water	Water	Water	Water	Water	
		DATE SAMPLED:		2019-11-21	2019-11-21	2019-11-21	2019-11-21	2019-11-21	2019-11-21	2019-11-21	2019-11-21
		G / S	RDL	737466	737468	737469	737470	737471	737472	737473	
Chloride	mg/L	250	0.05	1.32	1.85	1.23	1.41	2.54	1.30	5.32	
Nitrate-N	mg/L	10	0.005	0.028	0.051	0.026	0.030	0.133	0.053	0.077	
Nitrite-N	mg/L	1	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
Sulphate	mg/L	500	0.5	0.7	0.6	0.8	1.1	0.7	0.6	0.6	
Fluoride	mg/L	1.5	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	
Bromide	mg/L		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Ammonia-N	mg/L		0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to BC CSR Schedule 3.2 - Drinking Water in mg/L
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 *)

Certified By:



Certificate of Analysis

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PROJECT: YEAR 1

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CLIENT NAME: DEEP BAY IMPROVEMENT DISTRICT

ATTENTION TO: LESLIE CARTER

SAMPLING SITE:

SAMPLED BY:

BC CSR Omnibus Dissolved Metals (mg/L)

DATE RECEIVED: 2019-11-22

DATE REPORTED: 2019-11-28

Parameter	Unit	SAMPLE DESCRIPTION:		Well#1	Well#2	Well#3	Well#4	Well#5	Well#6	Well#7
		SAMPLE TYPE:		Water	Water	Water	Water	Water	Water	Water
		DATE SAMPLED:		2019-11-21	2019-11-21	2019-11-21	2019-11-21	2019-11-21	2019-11-21	2019-11-21
		G / S	RDL	737466	737468	737469	737470	737471	737472	737473
Calcium Dissolved	mg/L		0.05	8.49	13.2	11.0	10.3	10.7	12.2	11.2
Iron Dissolved	mg/L	6.5	0.01	0.02	0.02	0.01	<0.01	<0.01	0.03	<0.01
Lead Dissolved	mg/L	0.01	0.00005	0.00007	0.00009	0.00012	0.00024	0.00028	0.00012	0.00015
Magnesium Dissolved	mg/L		0.05	1.99	0.74	2.66	2.62	3.45	3.86	3.53
Potassium Dissolved	mg/L		0.05	0.25	0.34	0.27	0.30	0.39	0.40	0.40
Zinc Dissolved	mg/L	3	0.002	0.016	0.014	0.017	0.011	<0.002	<0.002	0.002
Hardness (calc)	mg CaCO3/L		0.5	29.4	36.0	38.4	36.5	40.9	46.4	42.5

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to BC CSR Schedule 3.2 - Drinking Water in mg/L
 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 *)

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 19V547297

PROJECT: YEAR 1

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CLIENT NAME: DEEP BAY IMPROVEMENT DISTRICT

ATTENTION TO: LESLIE CARTER

SAMPLING SITE:

SAMPLED BY:

Physical Tests Package

DATE RECEIVED: 2019-11-22

DATE REPORTED: 2019-11-28

Parameter	Unit	SAMPLE DESCRIPTION:		Well#1	Well#2	Well#3	Well#4	Well#5	Well#6	Well#7
		SAMPLE TYPE:		Water	Water	Water	Water	Water	Water	Water
		DATE SAMPLED:		2019-11-21	2019-11-21	2019-11-21	2019-11-21	2019-11-21	2019-11-21	2019-11-21
		G / S	RDL	737466	737468	737469	737470	737471	737472	737473
pH	pH units	0.01		7.34	7.44	7.75	7.16	7.40	7.47	7.48
Turbidity	NTU	0.1		0.7	1.9	0.2	<0.1	<0.1	1.0	0.2
True Colour	Colour units	5		<5	<5	<5	<5	<5	<5	<5

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to BC CSR Schedule 3.2 - Drinking Water in mg/L
 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.

737466-737473 Literature holding time exceeded for pH analysis.

Analysis performed at AGAT Vancouver (unless marked by *)

Certified By:

Quality Assurance

CLIENT NAME: DEEP BAY IMPROVEMENT DISTRICT
PROJECT: YEAR 1
SAMPLING SITE:

AGAT WORK ORDER: 19V547297
ATTENTION TO: LESLIE CARTER
SAMPLED BY:

Water Analysis															
RPT Date: Nov 28, 2019			DUPLICATE				Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE		MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Measured Value		Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper

Anions and Nutrients

Chloride	736564		6.25	6.22	0.6%	< 0.05	104%	90%	110%	104%	90%	110%		
Nitrate-N	736564		0.169	0.160	5.0%	< 0.005	101%	90%	110%	104%	90%	110%		
Nitrite-N	736564		<0.005	<0.005	NA	< 0.005				104%	90%	110%		
Sulphate	736564		81.3	81.1	0.2%	< 0.5	100%	90%	110%	102%	90%	110%		
Fluoride	736564		0.06	0.06	NA	< 0.02	98%	85%	115%	105%	90%	110%		
Bromide	736564		<0.05	<0.05	NA	< 0.05	101%	85%	115%	103%	90%	110%		
Ammonia-N	736560		0.09	0.09	2.9%	< 0.01	98%	85%	115%	96%	90%	110%		

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

Physical Tests Package

pH	737656		6.21	6.28	1.1%		100%	95%	105%					
Turbidity	737367		3.9	3.7	5.3%	< 0.1	103%	85%	115%	95%	85%	115%		
True Colour	737466		<5	<5	NA	< 5	99%	90%	110%	100%	80%	120%		

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

BC CSR Omnibus Dissolved Metals (mg/L)

Calcium Dissolved	737466		8.49	8.37	1.4%	< 0.05	102%	90%	110%	106%	90%	110%		
Iron Dissolved	737466		0.02	0.02	NA	< 0.01	99%	90%	110%	105%	90%	110%		
Lead Dissolved	737466		0.00007	0.00007	NA	< 0.00005	106%	90%	110%	104%	90%	110%		
Magnesium Dissolved	737466		1.99	1.96	1.5%	< 0.05	106%	90%	110%	106%	90%	110%		
Potassium Dissolved	737466		0.25	0.25	1.1%	< 0.05	96%	90%	110%	100%	90%	110%		
Zinc Dissolved	737466		0.016	0.016	1.1%	< 0.002	98%	90%	110%	104%	90%	110%		

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

Certified By: _____





Method Summary

CLIENT NAME: DEEP BAY IMPROVEMENT DISTRICT

AGAT WORK ORDER: 19V547297

PROJECT: YEAR 1

ATTENTION TO: LESLIE CARTER

SAMPLING SITE:

SAMPLED BY:

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
Calcium Dissolved	MET-181-6101, LAB-181-4015	Modified from SM 3120 B	ICP/OES
Iron Dissolved	MET-181-6101, LAB-181-4015	Modified from SM 3120 B	ICP/OES
Lead Dissolved	MET-181-6102, LAB-181-4015	Modified from SM 3125 B	ICP-MS
Magnesium Dissolved	MET-181-6101, LAB-181-4015	Modified from SM 3120 B	ICP/OES
Potassium Dissolved	MET-181-6101, LAB-181-4015	Modified from SM 3120 B	ICP/OES
Zinc Dissolved	MET-181-6102, LAB-181-4015	Modified from SM 3125 B	ICP-MS
pH	INOR-181-6000	Modified from SM 4500-H+	PH METER
Turbidity	INOR-181-6008	SM 2130 B	PC TITRATE
True Colour	INOR-181-6033	Modified from BC MOE Lab Manual Section B (Colour,	SPECTROPHOTOMETER



120 - 8600 Glenlyon Parkway
Burnaby, BC
V5J 0B6
P: 778.452.4000 • F: 778.452.4074

AGAT Laboratories

Laboratory Use Only

Arrival Temperature: 3°C

AGAT Job Number: 19V54747

Notes: NOV 22 09:10

Chain of Custody Record

Report Information

Company: Deep Bay Improvement District
 Contact: Leslie Carter
 Address: 5031 Mountainview Road,
Bowser, BC V0R 1G0
 Phone: 250.757.9312 Fax: _____
 AGAT Quote #: _____
 Client Project #: YEAR 1

Report Information

1. Name: Leslie Carter
 Email: admin@dbid.ca
 2. Name: Don Buchner
 Email: don@home.cshaw.ca

Requirements (Please Check)

BC CSR Soil
 AL
 IL
 PL
 CL
 RL-LD RL-HD
 WL-N WLR

Schedule 3.3 (Please Specify)
 CCME (Please Specify)
 Other (Please Specify) metals in mg/L

Report Format

Single Sample per page
 Multiple Samples per page
 Excel Format Included

Turnaround Time Required (TAT)

Regular TAT 5 to 7 working days
 Rush TAT Same Business Day - 200%
 1 Business Day - 100%
 2 Business Days - 50%
 3 Business Days - 25%

Date Required: _____

PLEASE CONTACT LABORATORY IF RUSH REQUIRED SAMPLE SUBMISSION CUT OFF FOR EFFECTIVE DATE BY 3 PM

Invoice To Same as above Yes No

Company: _____
 Contact: _____
 Address: _____
 Phone: _____ Fax: _____
 PO/AFE#: _____

Requirements (Please Check)

BC CSR - Water
 DW
 AW
 IW
 LW

LABORATORY USE (LAB ID #)	SAMPLE IDENTIFICATION	SAMPLE MATRIX	DATE/TIME SAMPLED	COMMENTS - SITE SAMPLE INFO. SAMPLE CONTAINMENT	Anions, Turbidity, Colour, pH	Ammonia	Dissolved Fe, Pb, Zn, K, Hardnes	NUMBER OF CONTAINERS	PREERVED (Y/N)	HAZARDOUS (Y/N)	Hold for: <input type="checkbox"/> 60 DAYS
737466	Well # 1	Water	NOV 21/19 12:05 PM	DEEP WELL WELLHEAD	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
68	Well # 2	Water	NOV 21/19 11:20 AM	DEEP WELL WELLHEAD	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
69	Well # 3	Water	NOV 21/19 11:45 AM	DEEP WELL WELLHEAD	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
70	Well # 4	Water	NOV 21/19 10:35 AM	DEEP WELL well head	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
71	Well # 5	Water	NOV 21/19 10:30 AM	Deep Well Wellhead	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
72	Well # 6	Water	NOV 21/19 10:35 AM	Deep Well Wellhead	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
73	Well # 7	Water	NOV 21/19 10 AM	Deer Well Wellhead	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				

Samples Requisitioned By (Print Name and Sign): Don Buchner *[Signature]* Date/Time: NOV 21/19 12:05 PM

Samples Received By (Print Name and Sign): _____ Date/Time: _____

Samples Requisitioned By (Print Name and Sign): _____ Date/Time: _____

Samples Received By (Print Name and Sign): _____ Date/Time: _____

Page _____ of _____

V122647



AGAT Laboratories

SAMPLE INTEGRITY RECEIPT FORM - BURNABY

Work Order # 19V547217

RECEIVING BASICS:

Received From: A.C.E.

Waybill #: _____

SAMPLE QUANTITIES:

Coolers: 1 Containers: 21

TIME SENSITIVE ISSUES:

Earliest Date Sampled: Nov 21, 2018

ALREADY EXCEEDED? Yes No

NON-CONFORMANCES:

3 temperatures of samples* and average of each cooler: (record differing temperatures on the CoC next to sample ID's) *use Jars when available

(1) 5 + 2 + 3 = 3 °C (2) ___ + ___ + ___ = ___ °C (3) ___ + ___ + ___ = ___ °C (4) ___ + ___ + ___ = ___ °C

Was ice or ice pack present: Yes No

Integrity Issues:

Account Project Manager: _____ have they been notified of the above issues: Yes No

Whom spoken to: _____ Date and Time: _____

ADDITIONAL NOTES:

