

VANCOUVER SCHOOL BOARD Maintenance and Construction 1549 Clark Drive Vancouver BC V5L 3L4 **ATTN: Stephen Thomas**

Date: 10-OCT-19 **PO No.:** 1517879 **WO No.:** L2358678

LSD:

Project Ref: TYEE ELEMENTARY Sample ID: CORR 214 RM 202B SSFD

Sampled By: Robin Lemay Date Collected: 02-OCT-19 Lab Sample ID: L2358678-1 Matrix: Water

PAGE 1 of 3

- · · · · · · · · · · · · · · · · · · ·						
Test Description	Result	Qualifier	Units of Measure	CDWQG MAC	Aesthetic Objective	Date Analyzed
Total Metals Lead (Pb)-Total	0.000185		mg/L	0.005		08-OCT-19
CDWQG = Health Canada Guideline Limits updated	JUNE 2019					
* CDWQG for Nitrate+Nitrite-N is the limit for nitrate only * Turbidity guideline based on membrane filtration. For Summary Table of Guidelines for Canadian Drinking Wa	guidelines on con					ase see

- A blank entry designates no known limit.
- A shaded value in the Results column exceeds CDWQG MAC and/ or Aesthetic Objective.

Approved by

Edward Ngai

Account Manager

ADDRESS: 8081 Lougheed Hwy, Suite 100, Burnaby, BC V5A 1W9 Canada | Phone: +1 604 253 4188 | Fax: +1 604 253 6700 ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company





VANCOUVER SCHOOL BOARD Maintenance and Construction 1549 Clark Drive Vancouver BC V5L 3L4 ATTN: Stephen Thomas Date: 10-OCT-19 PO No.: 1517879 WO No.: L2358678

LSD:

Project Ref: TYEE ELEMENTARY
Sample ID: CORR 111 RM 106 SSDF

Sampled By: Robin Lemay
Date Collected: 02-OCT-19
Lab Sample ID: L2358678-2
Matrix: Water

PAGE 2 of 3

Test Description	Result	Qualifier	Units of Measure	CDWQG MAC	Aesthetic Objective	Date Analyzed
Total Metals Lead (Pb)-Total	0.000186		mg/L	0.005		08-OCT-19
CDWQG = Health Canada Guideline Limits updated	JUNE 2019					
* CDWQG for Nitrate+Nitrite-N is the limit for nitrate only * Turbidity guideline based on membrane filtration. For summary Table of Guidelines for Canadian Drinking Wa	guidelines on con					ase see

- A blank entry designates no known limit.
- A shaded value in the Results column exceeds CDWQG MAC and/ or Aesthetic Objective.

Approved by

Edward Ngai

Account Manager

ADDRESS: 8081 Lougheed Hwy, Suite 100, Burnaby, BC V5A 1W9 Canada | Phone: +1 604 253 4188 | Fax: +1 604 253 6700 ALS CANADA LTD | Part of the ALS Group | A Campbell Brothers Limited Company



Guidelines & Objectives

Health Canada MAC Health Related Criteria Limits

Nitrate/Nitrite-N* Criteria limit is 10 mg/L (1.0 mg/L if present as all Nitrite-N). High concentrations may contribute to blue baby syndrome in infants.

Lead* A cumulative body poison, uncommon in naturally occurring hard waters.

Fluoride* Present in fluoridated water supplies at 0.8 mg/L to reduce dental caries. Elevated levels causes fluorosis (mottling of teeth).

Total Coliforms* Criteria is 0 CFU/100mL. Adverse health effects.

E. Coli* Criteria is 0 CFU/100 mL. Certain E. Coli bacteria can be life threatening.

Manganese* Criteria limit is 0.12 mg/L. Possible neurological effects in infants.

*Health Canada Canadian Drinking Water Quality Guidelines (MAC limit)

Aesthetic Objective Concentration Levels

Alkalinity Acid neutralizing capacity. Usually a measure of carbonate and bicarbonates and calculated and reported as calcium carbonate.

Balance Quality control parameter ratioing cations to anions
Bicarbonate See Alkalinity. Report as the anion HCO3-1
Carbonate See Alkalinity. Reported at the anion CO3-2

Calcium See Hardness. Common major cation of water chemistry.

Chloride Common major anion of water chemistry.

Conductance Physical test measuring water salinity (dissolved ions or solids)

Hardness Classical measure or capacity of water to precipitate soap (chiefly calcium and magnesium ions). Causes scaling tendency in

water if carbonates/bicarbonates are present (if >200 mg/L). For drinking water purposes waters with results <200 mg/L are considered acceptable, results >200 mg/L are considered poor but can be tolerated. Results >500 mg/L are unacceptable.

Hydroxide See alkalinity

Magnesium See hardness. Common major cation of water chemistry. Elevated levels (>125 mg/L) may exert a cathartic or diuretic action.

pH Measure of water acidity/alkalinity. Normal range is 7.0-8.5.

Potassium Common major cation of water chemistry.

Sodium Common major cation of water chemistry. Measure of salinity (saltiness).

Sulphate Common major anion of water chemistry. Elevated levels may exert a cathartic or diuretic action.

Total Dissolved Solids A measure of water salinity.

Iron Causes staining to laundry and porcelain and astringent taste. Oxidizes to red-brown precipitate on exposure to air.

Heterotrophic

Plate Count Criteria is 500 cfu/mL Measure of heterotrophic bacteria present.

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory. UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Chain of Custody (COC) / Analytical Request Form

2358678 000

i

coc Number: 17 - 756180

Page of

Canada Toll Free: 1 800 668 9878

	<u>www.aisgiobai.com</u>									f:								
Report To	Contact and company name below will appe	ear on the final report	ne final report Report Format / Distribution							j - c	ontact	our AM	to confirm :	all E&P T/	ATs (sur	charges r	ay apply)	
Company:	Vascourer Schoo	Board	Select Report Format: PDF EXCEL EDD (DIGITAL)					Regular [R] Ständard TAT if received by 3 pm - business days - no surcharges apply										
Contact:	Stephen Thomas		7					4 day [i	4 day [P4-20%] 2 1 Business day [E - 100%]									
Phone:	604-213-5637		Compare Re	Compare Results to Criteria on Report - provide details below if box checked				3 day [8	² 3-25%]]	Same Day, Weekend or Statutory holiday [E2 -200%							
	Company address below will appear on the fina	l report	Select Distribut	Select Distribution: EMAIL MAIL FAX				2 day [P2-50%] (Laboratory opening fees may apply)								L		
Street:	15 49_ Clark_D	r:	Email 1 or Fax	Sothona	c@usb.	beca		Date and	Date and Time Required for all ESP TATs: dd-mmm-yy hh:mm									
City/Province:			Email 2	may@ US	b. bc.c.	લ	For test	ts that can e	that can not be performed according to the service level selected, you will be contacted.									
ostal Code:			Email 3	7					Analysis Request									
nvoice To	Same as Report To	NO		Invoice Di	istribution				Indicate Fi	tered (F), Pr	eserved (l) or Filtere	ed and Preser	ved (F/P) b	wols			T
	Copy of Invoice with Report YES	NO		Select Invoice Distribution:														S S
Company:			Email 1 or Fax	3 thoras	S & US6.	bc.ca	ONTAINERS					1					ō	gg
Contact:			Email 1/enay 3 USb bc. Ca] [Ĭ	1 5
	Project Information		I	Oil and Gas Required Fields (client use)			ןבּן		-			ľ			1		Z	<u></u>
ALS Account#	Quote #:		AFE/Cost Center:		PO#		78								1		ō	8
ob #:	Tyee Elementar	<i>J</i>	Major/Minor Code:		Routing Code:		7႘						1 1				1 25	8
PO/AFE:			Select Report Format: PDF EXCEL EDO (DIGITAL Quality Control (QC) Report with Report YES NO Compare Results to Criteria on Report - provide details below if box checker Select Distribution: EMAIL MAIL FAX Email 1 or Fax Schools C C Email 2 Email 3 Invoice Distribution Select Invoice Distribution Select Invoice Distribution: EMAIL MAIL FAX Email 1 or Fax March C C C Email 2 Oll and Gas Required Fields (client use) AFE/Cost Center: PO# Major/Minor Code: Routing Code: Requisitioner: Location: ALS Contact: Sample: C C C Emple				P										S	۱څ
.SD:			Location:					0				į		1 1	4			1 \$
ALC Lab Wa	rk Order # (lab use only):				To Rob	3 · 3.	NUMBER	6						1 1	1		豆	SUSPECTED HAZARD (see Special Instructions)
ALO LAD WO	rk Order # (lab use only):	•	ALS Contact:		Sampler: Ze	na		7									AMP	1 🗒
ALS Sample #	Sample Identification	and/or Coordinates		Date	Time	Samula Tuna	13					İ					4	Ä
(lab use only)	(This description will a	appear on the report)		(dd-mmm-yy)		Sample Type	ĮŻ.							\perp			ပ) is
	Corr 214 Rm. 20	25 151	DF .	02-10-19	1:37 An	water							T	\Box				T
	Cost 111 Rm.10	6 550	5	02-10-19		CATE	-											
			·		1	-0.0	1					\top		+	\neg		-	+
					-		-		+	+ +	-	+		++	+	+	<u> </u>	+-
		·		+	 	 	+		 	+-+	+	+		+-+	\rightarrow		 	+
		· .				<u> </u>			 		-			+			 -	┷
<u> </u>	<u> </u>	·				<u> </u>								\perp			<u> </u>	
												ŀ			ł			
														\top				T
						 				1 +		-		+	\neg			_
					1	 	+	 	++	+	+	 -	 	++	+			+-
				 		 	 -					+	\vdash	+-+			\vdash	+
				- 		ļ	+	 					 				 	╄
	<u> </u>			<u> </u>	<u> </u>			LL	1					$oldsymbol{ol}}}}}}}}}}}}}}}}}}$			L	
Drinking Water (DW) Samples¹ (client use) Special Instructions / Specify					king on the drop-d	own list below	SAMPLE CONDITION AS RECEIVED (lab use only) Frozen SIF Observations Yes No								_			
	n from a Regulated DW System?		161	actionic CCC only)	 -:		Froze								-	No		片
	ES NO			/			ice Pa	_	Ice Cube	s LJ C	ustody	seal inta	ct Yes	s 🗀	i	No	1	
	<u></u>	No Too	cerva	tives	Adda	1	Coom	ng Initiate		TAIDED AT LE			г		nou co	TELEGERAT	IOCO SO	
	_ · · · · · · · · · · · · · · · · · · ·			7				INIT	INITIAL COOLER TEMPERATURES °C				FINAL GOOLER TEMP			EMPERAT	TES TO	<u></u>
I	ES NO		,	1000000		,	┸	_					<u></u>			Щ.		<u> </u>
Released by:	SHIPMENT RELEASE (client use) Date:	Time:	Received by:	INITIAL SHIPMEN		ab use only)	Time:		sceived by:	F	INAL S		T RECEPT			nly)	Time	<u>-</u> _
	Date.	'''''.	nacented by.		Date.		Time.		ocived by.	(1/2	Date	· •	o h	/		3,30	oP .
REFER TO BACK	PAGE FOR ALS LOCATIONS AND SAMPLING INF	FORMATION	<u></u>	WHI	TE - LABORATORY	COPY YELLO	W - CLII	ENT COP	7	<u>`</u>							JUNE	E 2018 FRONT