

Your C.O.C. #: 483862-02-01

Attention:Mike Squire

City of Parksville Engineering and Operations Dpt PO Box 1390 Parksville, BC Canada V9P 2H3

> Report Date: 2015/12/17 Report #: R2099231 Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B5B1103 Received: 2015/12/15, 11:10

Sample Matrix: Water # Samples Received: 4

	Date	Date		
Analyses	Quantity Extracted	Analyzed	Laboratory Method	Analytical Method
VOCs, VH, F1, LH in Water by HS GC/MS	4 2015/12/	16 2015/12/1	6 BBY8SOP-00009	EPA 8260c R3 m

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager. Shanaz Akbar, Project Manager Email: SAkbar@maxxam.ca Phone# (604)639-2618

This report has been generated and distributed using a secure automated process.

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.





City of Parksville

TRIHALOMETHANES (THM) IN WATER

Maxxam ID		NV5355	NV5356	NV5357	NV5358		
Sampling Date		2015/12/14 11:30	2015/12/14 11:50	2015/12/14 01:15	2015/12/14 01:00		
COC Number		483862-02-01	483862-02-01	483862-02-01	483862-02-01		
	UNITS	851 TEMPLE	450 WISTERIA	1116 HERRING GULL	CORFIELD	RDL	QC Batch
Volatiles							
Chloroform	ug/L	1.1	1.1	3.1	<1.0	1.0	8145765
Chlorodibromomethane	ug/L	3.2	3.2	4.9	3.3	1.0	8145765
Bromodichloromethane	ug/L	1.9	1.9	3.9	1.9	1.0	8145765
Bromoform	ug/L	1.7	1.6	1.8	1.6	1.0	8145765
Surrogate Recovery (%)							
1,4-Difluorobenzene (sur.)	%	100	105	103	103		8145765
4-Bromofluorobenzene (sur.)	%	92	97	94	94		8145765
D4-1,2-Dichloroethane (sur.)	%	99	105	103	102		8145765
RDL = Reportable Detection Lir	nit						



Maxxam Job #: B5B1103 Report Date: 2015/12/17 City of Parksville

Success Through Science®

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1 9.3°C

Results relate only to the items tested.



Maxxam Job #: B5B1103

Report Date: 2015/12/17

QUALITY ASSURANCE REPORT

City of Parksville

			Matrix	Spike	Spiked	Blank	Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8145765	1,4-Difluorobenzene (sur.)	2015/12/16	102	70 - 130	102	70 - 130	102	%		
8145765	4-Bromofluorobenzene (sur.)	2015/12/16	104	70 - 130	103	70 - 130	96	%		
8145765	D4-1,2-Dichloroethane (sur.)	2015/12/16	102	70 - 130	100	70 - 130	97	%		
8145765	Bromodichloromethane	2015/12/16	110	70 - 130	105	70 - 130	<1.0	ug/L	NC	30
8145765	Bromoform	2015/12/16	104	70 - 130	107	70 - 130	<1.0	ug/L	NC	30
8145765	Chlorodibromomethane	2015/12/16	108	70 - 130	105	70 - 130	<1.0	ug/L	NC	30
8145765	Chloroform	2015/12/16	112	70 - 130	106	70 - 130	<1.0	ug/L	NC	30
Duplicate: Pa	aired analysis of a separate portion of the same sample.	Used to evaluate t	he variance in t	he measurem	ent.					

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).



Maxxam Job #: B5B1103 Report Date: 2015/12/17 Success Through Science®

City of Parksville

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Brieffter

Andy Lu, Data Validation Coordinator

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

		INVOICE TO:		Report Information					1.0	Project Infor	mation		Page Laboratory Use Only		
ompany Name #7634 City of Parksville		Company Nam	Company Name City of Parksville				Quotation# B30230 %					. Maxxam Job #	Bottle Order		
act Name	Barbara Silen		Contact Name	Barbara Sile	enieks	201	QUE SEL S	P.O.#	100	27 C - C		S	B5Bllo3		
dress Engineering and Operations Dpt PO Box 1390		Address	Address					-	£			Chain Of Custody Record	483862		
	(250) 248-541	Parksville BC V9P 2H3 250) 248-5412 Fax (250) 248-6140		No.	Fex		N. S. W. S. W.	Project Name Site #	1004			111111	The second s	Project Manag	
18	bsilenieks@pa		Email	Phone Email bsilenieks@parksville.ca			Pax		246				C#483862-02-01	Shanaz Akba	
gulatory Cr	Iteria:		Special	Instructions			ANALYSIS F	EQUESTED (PI	LEASE BE	SPECIFIC)			Turnaround Time (TA	T) Required:	
CSR CCME BC Wate	er Quality				d Filtered ? (Y/N)	Trihalomethanes (THM) in Water						(will be Standa Please days - c	Plate provide editance note w (Standard) TAT: appled If Push TAT is not specified) rd TAT = 6-7 Working days for most tests note: Standard TAT for certain tests such carifact your Project Manager for defails. pecific Rush TAT (If applies to entire s 2 Day 3 Day Dat	as BOD and Diowins/Furans	
SA	MPLES MUST BE KI	EPT COOL (< 10°C) FROM TIME OF SAMPLIN	G UNTIL DELIVERY TO	MAXXAM	etals Fie	halome						Rush (Confirmation Number	(cell lab far #) ments	
1110	Barcode Label	Sample (Location) Identification		Time Sampled	Matrix S	F V			-			2			
NVS	355	851 Temple	15/12/14	11:30	6						_	2			
N	535%	450 Wisteria_ 1116 Herring Gull	15/12/14	11:,50								2	-		
100 million 100	5357	1116 Herring Gull	15/12/14	1:15		V						2			
W	5358	Corfield	15/12/14	1:00		~						2			
	B5B1103	COC													
		1	~												
	NQUISHED BY: (Sig	and a second state of the		Male		Y: (Signature/Print)		Date: (YY/MM	VDD)		# jars used and not submitted	Time Sensitive	Lab Use Only	In	
in-h-	ra Sile	nieks 15/12	-114 1:25	MULLA	MIND	HULK		2015/12	115 6	20 ransial le		Contraction of the second second	Temperature (*C) on Receipt	Custody Statingtot on	

.

Maxxam Analytics International Corporation o/a Maxxam Analytics