

Your C.O.C. #: 483862-04-01

Attention:Barbara Silenieks

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

Report Date: 2016/02/05
Report #: R2127073
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B607694

Received: 2016/02/02, 10:45

Sample Matrix: Water
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
VOCs, VH, F1, LH in Water by HS GC/MS	2	2016/02/04	2016/02/04	BBY8SOP-00009	EPA 8260c R3 m
VOCs, VH, F1, LH in Water by HS GC/MS	2	2016/02/04	2016/02/05	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

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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.

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TRIHALOMETHANES (THM) IN WATER

Maxxam ID		OB0612		OB0613		OB0614	OB0615		
Sampling Date		2016/02/01 09:30		2016/02/01 09:35		2016/02/01 09:45	2016/02/01 09:55		
COC Number		483862-04-01		483862-04-01		483862-04-01	483862-04-01		
	UNITS	851 TEMPLE	RDL	450 WILLOW	RDL	CORFIELD	1116 HERRING GULL	RDL	QC Batch

Volatiles									
Chloroform	ug/L	1.0	1.0	<1.0	1.0	1.6	1.8	1.0	8183079
Chlorodibromomethane	ug/L	3.1	1.0	2.6	1.0	4.5	4.4	1.0	8183079
Bromodichloromethane	ug/L	<1.6 (1)	1.6	<1.4 (1)	1.4	2.8	3.1	1.0	8183079
Bromoform	ug/L	1.8	1.0	1.7	1.0	2.4	1.9	1.0	8183079

Surrogate Recovery (%)									
1,4-Difluorobenzene (sur.)	%	103		104		104	105		8183079
4-Bromofluorobenzene (sur.)	%	97		96		94	95		8183079
D4-1,2-Dichloroethane (sur.)	%	100		99		98	99		8183079

RDL = Reportable Detection Limit
(1) Detection limits raised due to matrix interference.

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GENERAL COMMENTS

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

Package 1	2.7°C
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Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

City of Parksville

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8183079	1,4-Difluorobenzene (sur.)	2016/02/04	103	70 - 130	101	70 - 130	104	%		
8183079	4-Bromofluorobenzene (sur.)	2016/02/04	105	70 - 130	100	70 - 130	97	%		
8183079	D4-1,2-Dichloroethane (sur.)	2016/02/04	103	70 - 130	98	70 - 130	99	%		
8183079	Bromodichloromethane	2016/02/04	100	70 - 130	93	70 - 130	<1.0	ug/L	NC	30
8183079	Bromoform	2016/02/04	98	70 - 130	98	70 - 130	<1.0	ug/L	NC	30
8183079	Chlorodibromomethane	2016/02/04	104	70 - 130	96	70 - 130	<1.0	ug/L	NC	30
8183079	Chloroform	2016/02/04	102	70 - 130	94	70 - 130	<1.0	ug/L	NC	30

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

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).

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VALIDATION SIGNATURE PAGE

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



Rob Reinert, 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.



Maxxam Analytica International Corporation o/a Maxxam Analytica
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Chain Of Custody Record

Page of

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name #7634 City of Parksville	Company Name Barbara Silenieks	Quotation # 200280 B50097-MM	Maxxam Job #	Bottle Order #:	483862		
Contact Name Barbara Silenieks	Contact Name Barbara Silenieks	P.O. #	Chain Of Custody Record	Project Manager	Shanaz Akbar		
Address Engineering and Operations Dpt PO Box 1390 Parksville BC V9P 2H3	Address	Project #	Site #	CIN483862-04-01			
Phone (250) 248-5412 Fax: (250) 248-6140	Phone	Project Name	Sampled By				
Email bsilenieks@parksville.ca	Email bsilenieks@parksville.ca						

Regulatory Criteria: <input type="checkbox"/> CBR <input type="checkbox"/> CCME <input type="checkbox"/> BC Water Quality <input type="checkbox"/> Other _____	Special Instructions	ANALYSIS REQUESTED (PLEASE BE SPECIFIC)	Turnaround Time (TAT) Required: Please provide advance notice for rush projects Regular (Standard) TAT: (will be applied if Rush TAT is not specified) Standard TAT = 5-7 Working days for most tests. Please note: Standard TAT for certain tests such as POC and Oioxins/Furans are > 5 days - contact your Project Manager for details. Job Specific Rush TAT (if applies to entire submission) 1 DAY <input type="checkbox"/> 2 Day <input type="checkbox"/> 3 Day <input type="checkbox"/> Date Required: _____ Rush Confirmation Number: _____ (call lab for #)
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SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered? (Y/N)	Trihalomethanes (THM) in Water	ANALYSIS REQUESTED (PLEASE BE SPECIFIC)										# of Bottles	Comments							
1	851 Temple	16/02/01	9:30			✓															2				
2	450 Willow	16/02/01	9:35			✓																2			
3	Corfield	18/02/01	9:45			✓																2			
4	1116 Herring Gull	9:55	16/02/01			✓																2			
5																									
6																									
7																									
8																									
9																									
10																									

02-Feb-16 10:45
 Shanaz Akbar

 B607694
 AN0 SO131



** RELINQUISHED BY: (Signature/Print) Barb Silenieks	Date: (YY/MM/DD) 16/02/01	Time 10:55	RECEIVED BY: (Signature/Print) Laurel Butcher	Date: (YY/MM/DD) 2016/02/02	Time 10:45	# jars used and not submitted	Time Sensitive <input type="checkbox"/>	Temperature (°C) on Receipt 23.3	Custody Seal on Cooler? <input type="checkbox"/> Yes <input type="checkbox"/> No
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* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.
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