

Your Project #: B849593  
Your C.O.C. #: B849593-ONTV-01-01

**Attention: BC Env Customer Service**

Maxxam Analytics  
4606 Canada Way  
Burnaby, BC  
CANADA V5G 1K5

**Report Date: 2018/07/03**  
Report #: R5278921  
Version: 1 - Final

**CERTIFICATE OF ANALYSIS**

**MAXXAM JOB #: B8F3707**

**Received: 2018/06/22, 10:18**

Sample Matrix: Water  
# Samples Received: 1

Analyses	Quantity	Date		Laboratory Method	Reference
		Extracted	Analyzed		
Glyphosate	1	2018/06/26	2018/06/27	CAM SOP-00305	HPLC in-house method
OC Pesticides (Selected) & PCB (1)	1	2018/06/29	2018/07/01	CAM SOP-00307	EPA 8081A/ 8082B m
OC Pesticides Summed Parameters	1	N/A	2018/06/27	CAM SOP-00307	EPA 8081A/8082B m

**Remarks:**

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected.

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

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.

(1) Chlordane ( Total) = Alpha Chlordane + Gamma Chlordane

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Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.  
Nazeema Rahaman, English, Project Manager  
Email: NRahaman@maxxam.ca  
Phone# (905)817-5700 Ext:5806

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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.

**PESTICIDES & HERBICIDES BY HPLC (WATER)**

<b>Maxxam ID</b>		HAL136			
<b>Sampling Date</b>		2018/06/20 08:00			
<b>COC Number</b>		B849593-ONTV-01-01			
	<b>UNITS</b>	<b>TR7084-COMMUNITY WELL #1</b>	<b>RDL</b>	<b>MDL</b>	<b>QC Batch</b>
Glyphosate	ug/L	ND	10	0.65	5599908
RDL = Reportable Detection Limit QC Batch = Quality Control Batch ND = Not detected					

**ORGANOCHLORINATED PESTICIDES BY GC-ECD (WATER)**

Maxxam ID		HAL136			
Sampling Date		2018/06/20 08:00			
COC Number		B849593-ONTV-01-01			
	UNITS	TR7084-COMMUNITY WELL #1	RDL	MDL	QC Batch
Aldrin + Dieldrin	ug/L	ND	0.006	N/A	5599329
Chlordane (Total)	ug/L	ND	0.006	N/A	5599329
DDT+ Metabolites	ug/L	ND	0.006	N/A	5599329
Heptachlor + Heptachlor epoxide	ug/L	ND	0.006	N/A	5599329
o,p-DDD + p,p-DDD	ug/L	ND	0.006	N/A	5599329
o,p-DDE + p,p-DDE	ug/L	ND	0.006	N/A	5599329
o,p-DDT + p,p-DDT	ug/L	ND	0.006	N/A	5599329
Total Endosulfan	ug/L	ND	0.005	N/A	5599329
Total PCB	ug/L	ND	0.05	N/A	5599329
Lindane	ug/L	ND	0.0060	N/A	5605837
Heptachlor	ug/L	ND	0.0060	N/A	5605837
Aldrin	ug/L	ND	0.0060	N/A	5605837
Heptachlor epoxide	ug/L	ND	0.0060	N/A	5605837
Oxychlordane	ug/L	ND	0.0060	N/A	5605837
g-Chlordane	ug/L	ND	0.0060	N/A	5605837
a-Chlordane	ug/L	ND	0.0060	N/A	5605837
Dieldrin	ug/L	ND	0.0060	N/A	5605837
o,p-DDE	ug/L	ND	0.0060	N/A	5605837
p,p-DDE	ug/L	ND	0.0060	N/A	5605837
o,p-DDD	ug/L	ND	0.0060	N/A	5605837
p,p-DDD	ug/L	ND	0.0060	N/A	5605837
o,p-DDT	ug/L	ND	0.0060	N/A	5605837
p,p-DDT	ug/L	ND	0.0060	N/A	5605837
Methoxychlor	ug/L	ND	0.024	N/A	5605837
Aroclor 1016	ug/L	ND	0.050	N/A	5605837
Aroclor 1221	ug/L	ND	0.050	N/A	5605837
Aroclor 1232	ug/L	ND	0.050	N/A	5605837
Aroclor 1242	ug/L	ND	0.050	N/A	5605837
Aroclor 1248	ug/L	ND	0.050	N/A	5605837
Aroclor 1254	ug/L	ND	0.050	N/A	5605837
Aroclor 1260	ug/L	ND	0.050	N/A	5605837
<b>Surrogate Recovery (%)</b>					
2,4,5,6-Tetrachloro-m-xylene	%	51	N/A	N/A	5605837
Decachlorobiphenyl	%	70	N/A	N/A	5605837
RDL = Reportable Detection Limit QC Batch = Quality Control Batch ND = Not detected N/A = Not Applicable					

**TEST SUMMARY**

**Maxxam ID:** HAL136  
**Sample ID:** TR7084-COMMUNITY WELL #1  
**Matrix:** Water

**Collected:** 2018/06/20  
**Shipped:**  
**Received:** 2018/06/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Glyphosate	LC/FLU	5599908	2018/06/26	2018/06/27	Hanna Kloc
OC Pesticides (Selected) & PCB	GC/ECD	5605837	2018/06/29	2018/07/01	Li Peng
OC Pesticides Summed Parameters	CALC	5599329	N/A	2018/06/27	Automated Statchk

**GENERAL COMMENTS**

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

Package 1	5.7°C
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**Results relate only to the items tested.**

**QUALITY ASSURANCE REPORT**

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
5605837	2,4,5,6-Tetrachloro-m-xylene	2018/07/01	51	30 - 130	57	30 - 130	57	%		
5605837	Decachlorobiphenyl	2018/07/01	79	30 - 130	98	30 - 130	96	%		
5599908	Glyphosate	2018/06/27	77	50 - 130	109	50 - 130	ND, RDL=10	ug/L	NC	40
5605837	a-Chlordane	2018/07/01	83	30 - 130	87	30 - 130	ND, RDL=0.0060	ug/L	4.0	40
5605837	Aldrin	2018/07/01	63	30 - 130	72	30 - 130	ND, RDL=0.0060	ug/L	4.2	40
5605837	Aroclor 1016	2018/07/01					ND, RDL=0.050	ug/L		
5605837	Aroclor 1221	2018/07/01					ND, RDL=0.050	ug/L		
5605837	Aroclor 1232	2018/07/01					ND, RDL=0.050	ug/L		
5605837	Aroclor 1242	2018/07/01					ND, RDL=0.050	ug/L		
5605837	Aroclor 1248	2018/07/01					ND, RDL=0.050	ug/L		
5605837	Aroclor 1254	2018/07/01					ND, RDL=0.050	ug/L		
5605837	Aroclor 1260	2018/07/01					ND, RDL=0.050	ug/L		
5605837	Dieldrin	2018/07/01	94	30 - 130	99	30 - 130	ND, RDL=0.0060	ug/L	4.4	40
5605837	g-Chlordane	2018/07/01	82	30 - 130	85	30 - 130	ND, RDL=0.0060	ug/L	3.5	40
5605837	Heptachlor epoxide	2018/07/01	82	30 - 130	86	30 - 130	ND, RDL=0.0060	ug/L	5.9	40
5605837	Heptachlor	2018/07/01	62	30 - 130	57	30 - 130	ND, RDL=0.0060	ug/L	14	40
5605837	Lindane	2018/07/01	68	30 - 130	76	30 - 130	ND, RDL=0.0060	ug/L	2.2	40
5605837	Methoxychlor	2018/07/01	96	30 - 130	92	30 - 130	ND, RDL=0.024	ug/L	6.2	40
5605837	o,p-DDD	2018/07/01	94	30 - 130	99	30 - 130	ND, RDL=0.0060	ug/L	3.8	40
5605837	o,p-DDE	2018/07/01	74	30 - 130	84	30 - 130	ND, RDL=0.0060	ug/L	6.2	40
5605837	o,p-DDT	2018/07/01	88	30 - 130	85	30 - 130	ND, RDL=0.0060	ug/L	5.6	40
5605837	Oxychlordane	2018/07/01	81	30 - 130	84	30 - 130	ND, RDL=0.0060	ug/L	3.0	40
5605837	p,p-DDD	2018/07/01	89	30 - 130	94	30 - 130	ND, RDL=0.0060	ug/L	3.9	40
5605837	p,p-DDE	2018/07/01	85	30 - 130	86	30 - 130	ND, RDL=0.0060	ug/L	7.7	40
5605837	p,p-DDT	2018/07/01	89	30 - 130	79	30 - 130	ND, RDL=0.0060	ug/L	5.8	40

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 (absolute difference <= 2x RDL).





### VALIDATION SIGNATURE PAGE

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

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Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist

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