



Environmental Division

Certificate of Analysis

HYDROQUAL LABS

ATTN: CHARLIE EHMAN

3 6125-12TH STREET S.E.

CALGARY AB T2H 2K1

Reported On: 20-FEB-09 04:19 PM

Lab Work Order #: L733631

Date Received: 13-FEB-09

Project P.O. #: 2009-048

Job Reference: HYDROQUAL LABS

Legal Site Desc:

CofC Numbers:

Other Information:

Comments:

GERRY VERA
Account Manager

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY.
ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU
REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

[illegible]

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
* Refer to Referenced Information for Qualifiers (if any) and Methodology.								

Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
MICROCYSTIN-WP	Water	Microcystin		ENVIROLOGIX QUANTIPLATE KIT CAT. EP022

The Envirologix Microcystin Plate Kit, Which is a Competitive Enzyme-Linked Immunosorbent Assay (ELISA), is used, in which Microcystin Toxin in the sample competes with the enzyme for a limited number of antibody binding sites on the inside surface of the test wells the outcome of the competition is visualized with a color development step. The test wells are measured spectrophotometrically using a microtiter plate reader.

** Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

Chain of Custody numbers:

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
WP	ALS LABORATORY GROUP - WINNIPEG, MANITOBA, CANADA		

GLOSSARY OF REPORT TERMS

Surr - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in environmental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds.

The reported surrogate recovery value provides a measure of method efficiency. The Laboratory control limits are determined under column heading D.L.

mg/kg (units) - unit of concentration based on mass, parts per million.

mg/L (units) - 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.

UNLESS OTHERWISE STATED, SAMPLES ARE NOT CORRECTED FOR CLIENT FIELD BLANKS.

Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.

ALS Laboratory Group has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, ALS Laboratory Group assumes no liability for the use or interpretation of the results.



REPORT TO: HydroQual Laboratories		REPORT FORMAT / DISTRIBUTION		SERVICE REQUESTED	
COMPANY:		STANDARD <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		<input checked="" type="checkbox"/> REGULAR SERVICE (DEFAULT)	
CONTACT: Charlie Fhman		PDF <input checked="" type="checkbox"/> EXCEL <input type="checkbox"/> CUSTOM <input type="checkbox"/> FAX <input type="checkbox"/>		<input type="checkbox"/> RUSH SERVICE (2-3 DAYS)	
ADDRESS: #4 6125 - 12 th SE		EMAIL 1: cehman@golder.com		<input type="checkbox"/> PRIORITY SERVICE (1 DAY or ASAP)	
Cagary, AB T2H 2K1		EMAIL 2:		<input type="checkbox"/> EMERGENCY SERVICE (<1 DAY / WEEKEND) - CONTACT ALS	
PHONE: 403-253-7121 FAX: 403-252-9363					
INVOICE TO: SAME AS REPORT? (YES/NO)		INDICATE BOTTLES: FILTERED / PRESERVED (F/P)		ANALYSIS REQUEST	
COMPANY:		CLIENT / PROJECT INFORMATION:			
CONTACT:		JOB #:			
ADDRESS:		PO / AFE: 2009-048			
PHONE:		Legal Site Description:			
FAX:		QUOTE #:			
Lab Work Order # (lab use only)		SAMPLER (Initials):			
Sample #	SAMPLE IDENTIFICATION (This description will appear on the report)	DATE	TIME	SAMPLE TYPE	
1	09-0160-01	2009/02/11		Water	
2	09-0160-02				
3	09-0160-03				
4	09-0160-04				
5	09-0160-05				
6	09-0160-06				
7	09-0160-07				
8	09-0160-08				
9	09-0160-09				
10	09-0160-10				
GUIDELINES / REGULATIONS					
SPECIAL INSTRUCTIONS / HAZARDOUS DETAILS					

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the reverse page of the white report copy.

RELINQUISHED BY:	DATE & TIME:	RECEIVED BY:	DATE & TIME:
			Feb 13/09
RELINQUISHED BY:	DATE & TIME:	RECEIVED BY:	DATE & TIME:
			9:00

TEMPERATURE	SAMPLE CONDITION (lab use only)
3.8°	SAMPLES RECEIVED IN GOOD CONDITION? YES / NO (if no provide details)