

Whitehorse YT Y1A 3T8

EDI ENVIRONMENTAL DYNAMICS INC. Date Received: 03-AUG-16

ATTN: Lyndsay Doetzel Report Date: 16-AUG-16 18:49 (MT)

2195 2nd Avenue Version: FINAL

Client Phone: 867-393-4882

Certificate of Analysis

Lab Work Order #: L1808095
Project P.O. #: NOT SUBMITTED

Job Reference: MOUNT NANSEN 16-Y-0089

C of C Numbers: 1

Legal Site Desc:

Can Dang Senior Account Manager

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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



L1808095 CONTD.... PAGE 2 of 3

ALS ENVIRONMENTAL ANALYTICAL REPORT

16-AUG-16 18:49 (MT) Version: FINAL

	Sample ID Description Sampled Date Sampled Time Client ID			
Grouping Analyte				

L1808095 CONTD.... PAGE 3 of 3 16-AUG-16 18:49 (MT)

Version:

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**								
** ALS test methods may incorporate modifications from specified reference methods to improve performance.											
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 Co	ode Labora	tory Location									

Chain of Custody Numbers:

1

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. 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 of sample.

mg/L - milligrams per litre.

< - Less than.

D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).

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.



ALS Environmental

V5A 1W9

ATTN: Can Dang Suite 100-8081 Lougheed Hwy. Burnaby, BC Report Date: August 12, 2016

Work Order: 16824

Data Report

Species: Rainbow trout (Oncorhynchus mykiss)

Protocol: EPS 1/RM/13 (Second Ed. 2000 with 2007 & 2016 amendments)

Table 1. Results for the 96-h rainbow trout acute LC50 toxicity test.

Sample ID	Collection Date and Time	96-h LC50 (%v/v)
L1808095-1 WQ-SEEP	August 2, 2016 @ N/A	>100

N/A = Not Available.

The test met performance criterion and there were no deviations from the test method. The results relate only to the sample tested.

Yvonne Lam, B.Sc. Laboratory Biologist Reviewed By: Julianna Kalocai, M.Sc., R.P.Bio QA Officer

Rainbow Trout Summary Sheet

Client:	ALS	Start Date/	Time: Aug 05/16/00/1615h
Work Order No.:	16824	Test Spe	ecies: Oncorhynchus mykiss
Sample Information: Sample ID:	4808095-1-WQ-SEEP	Test Validity ≥ 90% control s WQ Ranges	urvival
Sample Date:	Aug 02/16 Aug 05/16 2 XZVL	_	DO (mg/L) = 7.0 to 10.3; pH = 5.5 to 8.5
Dilution Water:			
Type: Hardness (mg/L CaC Alkalinity (mg/L CaCC		Tap Water	
Test Organism Infor	mation:	•	
Batch No.: Source: No. Fish/Volume (L): Loading Density (g/L) Mean Length ± SD (note that the second	nm): 3.0 ± 1		Range: 29 - 31 Range: 0.31 - 0.48
Zinc Reference Toxi	icant Results:		
Reference Toxicant II Stock Solution ID: Date Initiated: 96-h LC50 (95% CL):	15 Znos Aug 1 116) ug/LZn	•
Reference Toxicant N	Mean and Historical Range:	5 40%	8.0 (29.4-114.4) mg/LZn
Test Results:	The 96h LC50 is	estimated t	to be >100% (V/V).
Reviewed by:	JOL	Dat	te reviewed: Aug-10/16

Version 1.4; Issued May 29, 2015.

96-Hour Rainbow Trout Toxicity Test Data Sheet

-										Number Fish/Volume: 10//0 L 7-d % Mortality: 0-1														
W.O. #										Total Pre-aeration Time (mins):														
RBT Batch #:				····	0718		C ₄	· · · · · · · · · · · · · · · · · · ·			-	Aeration rate adjusted to 6.5 ± 1 mL/min/L? (Y/N):												
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Other Observat	ions:											·			·									
Reviewed by: JGL Date Reviewed: Arg. 10/16											Date l	wed:		10/1										



Subcontract Request Form

Subcontract To:

NOTES:

NAUTILUS ENVIRONMENTAL

Please reference on final report and invoice: PO#

ALS requires QC data to be provided with your final results.

8664 COMMERCE COURT BURNABY,BC V5A 4N7

Please see enclosed 1 sar	nple(s) in 2 Container(s)	
SAMPLE NUMBER ANALYT	ICAL REQUIRED	DATE SAMPLED Priority DUE DATE Flag
L1808095-1 WQ-SEEP Trout Bio LC50-968	assay LC50 (96 Hour) - Nautilus (TROUT- IR-NL 1)	8/ 2/ 2016 8/15/2016
Subcontract Info Contact: Analysis and reporting info contact:	Walter Lin (604) 253-4188 Can Dang 8081 LOUGHEED HWY SUITE 100 BURNABY,BC V5A 1W9	en e
Please email confirmation of rece	•	Email: can.dang@alsglobal.com
Shipped By:	Date Shipped:	Aug 05, 2011
Received By:	Date Received:	Avat
Verified By:	Date Verified:	<i>J</i>
	Temperature:	# 10°C

Received by Naulibus 2×20L Temp - 6.5°C. Aug 05/16 @ 15:45 NY-Nair Yamamob.

ALS Environment

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free; 1 800 668 9878

L1808095-COFC

COC Number: 14 -			
Page	1	of	

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Phone 087-939-4882	Address:	2195 - 2nd Avenue		Criteria on Report - provide details below if box checked						E , 🔲 Emergency (1-2 bus. days if received by 3pm) 100% surcharge - contact ALS to confirm TA													
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