

August 03, 2007

Leigh Ann Grabowsky
City of Santa Barbara
620 Laguna Street
Santa Barbara, CA 93101-1657

Subject: **Calscience Work Order No.: 07-07-1105**
Client Reference: **MC Quarterly**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 7/17/2007 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

A handwritten signature in black ink that reads 'Ranjit K. Clarke'.

Calscience Environmental
Laboratories, Inc.
Ranjit Clarke
Project Manager



TOXICITY TESTING • OCEANOGRAPHIC RESEARCH
July 31, 2007

Mr. Ranjit Clarke
Calscience Environmental
7440 Lincoln Way
Garden Grove, CA 92841-1432

Dear Mr. Clarke:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, EPA-821-R-02-012*. Results were as follows:

CLIENT:	City of Santa Barbara-Creeks Division
SAMPLE I.D.:	7-MC2800 (07-07-1105)
DATE RECEIVED:	17 July - 07
ABC LAB. NO.:	CSE0707.108

96 HOUR ACUTE FATHEAD MINNOW SURVIVAL BIOASSAY

LC50 =	90 % Survival in 100 % Sample
TU(a) =	0.59

Yours very truly,

A handwritten signature in black ink, appearing to read "Thomas Mikel", with a long horizontal flourish extending to the right.

Thomas (Tim) Mikel
Laboratory Director

Larval Fish Growth and Survival Test-96 Hr Survival

Start Date: 7/17/2007	Test ID: CSE0707108	Sample ID: CA0000000
End Date: 7/21/2007	Lab ID: CAABC	Sample Type: EFF1-POTW
Sample Date: 7/17/2007	Protocol: EPAA 85-EPA Acute	Test Species: PP-Pimephales promelas
Comments: 7-MC2800 (07-07-1105)		

Conc-%	1	2	3	4
N Control	1.0000	1.0000	1.0000	1.0000
100	1.0000	0.8000		

Conc-%	Mean	N-Mean	Transform: Arcsin Square Root				N	t-Stat	1-Tailed Critical	MSD	Isotonic	
			Mean	Min	Max	CV%					Mean	N-Mean
N Control	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	4				1.0000	1.0000
100	0.9000	0.9000	1.2596	1.1071	1.4120	17.115	2	1.633	2.132	0.1990	0.9000	0.9000

Auxiliary Tests

Shapiro-Wilk's Test indicates normal distribution ($p > 0.01$)

Equality of variance cannot be confirmed

Hypothesis Test (1-tail, 0.05)

Homoscedastic t Test indicates no significant differences

Treatments vs N Control

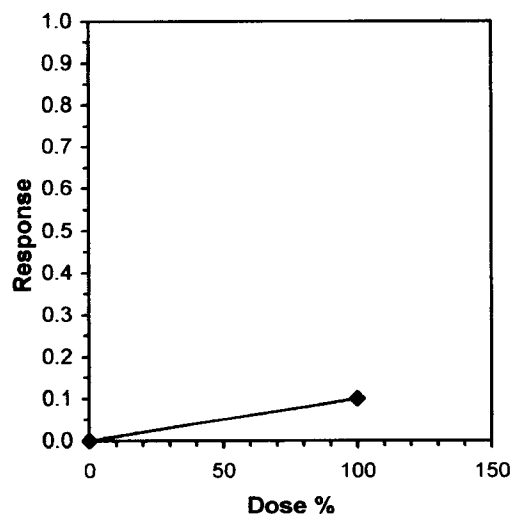
Statistic	Critical	Skew	Kurt
0.82716	0.713	3.9E-15	2.5

MSDu	MSDp	MSB	MSE	F-Prob	df
0.09764	0.10014	0.03098	0.01162	0.17781	1, 4

Linear Interpolation (200 Resamples)

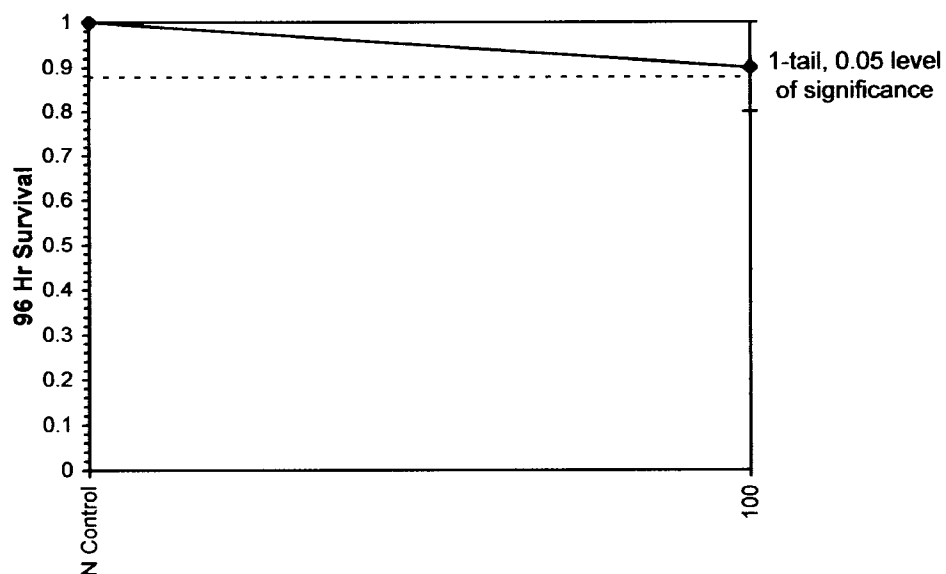
Point	%	SD	95% CL(Exp)	Skew
IC05*	50.000			
IC10	>100			
IC15	>100			
IC20	>100			
IC25	>100			
IC40	>100			
IC50	>100			

* indicates IC estimate less than the lowest concentration



Larval Fish Growth and Survival Test-96 Hr Survival

Start Date:	7/17/2007	Test ID:	CSE0707108	Sample ID:	CA0000000
End Date:	7/21/2007	Lab ID:	CAABC	Sample Type:	EFF1-POTW
Sample Date:	7/17/2007	Protocol:	EPAA 85-EPA Acute	Test Species:	PP-Pimephales promelas
Comments:	7-MC2800 (07-07-1105)				

Dose-Response Plot

Larval Fish Growth and Survival Test-96 Hr Survival

Start Date: 7/17/2007 Test ID: CSE0707108 Sample ID: CA0000000
 End Date: 7/21/2007 Lab ID: CAABC Sample Type: EFF1-POTW
 Sample Date: 7/17/2007 Protocol: EPAA 85-EPA Acute Test Species: PP-Pimephales promelas
 Comments: 7-MC2800 (07-07-1105)

Auxiliary Data Summary

Conc-%	Parameter	Mean	Min	Max	SD	CV%	N
N Control	Temp C	24.00	24.00	24.00	0.00	0.00	3
100		24.00	24.00	24.00	0.00	0.00	3
N Control	pH	8.17	8.10	8.30	0.12	4.16	3
100		8.13	8.00	8.30	0.15	4.81	3
N Control	DO mg/L	6.87	6.20	7.20	0.58	11.07	3
100		7.07	6.00	7.70	0.93	13.64	3
N Control	Hardness mg/L	86.00	84.00	90.00	3.46	2.16	3
100		250.00	250.00	250.00	0.00	0.00	3
N Control	Cond-umhos	339.67	333.00	345.00	6.11	0.73	3
100		1597.00	1593.00	1600.00	3.61	0.12	3
N Control	Alkalinity mg/L	60.00	60.00	60.00	0.00	0.00	3
100		250.00	250.00	250.00	0.00	0.00	3

**CALSCIENCE ENVIRONMENTAL
LABORATORIES, INC.**

7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 • FAX: (714) 894-7501

For ABC

CHAIN OF CUSTODY RECORD

Date 7/17/07
Page 1 of 1

LABORATORY CLIENT: City of Santa Barbara - Creeks Division ADDRESS: 620 Laguna St. CITY: Santa Barbara STATE: CA ZIP: 93101 TEL: (805) 897-2521 E-MAIL: Lgrabowsky@SantaBarbaraCA.gov TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input type="checkbox"/> 10 DAYS SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY) <input type="checkbox"/> RWQCB REPORTING FORMS <input type="checkbox"/> COELT EDF <input type="checkbox"/> _____ SPECIAL INSTRUCTIONS: project # 07-07-1105					CLIENT PROJECT NAME / NUMBER: MC Quarterly PROJECT CONTACT: Leigh Ann Grabowsky SAMPLER(S): (PRINT) LAG, JM, TM COELT LOG CODE <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		P.O. NO.: LAB USE ONLY <input checked="" type="checkbox"/> 1 - <input checked="" type="checkbox"/> 1 <input checked="" type="checkbox"/> 0 <input checked="" type="checkbox"/> 5 COOLER RECEIPT TEMP = _____ °C																	
REQUESTED ANALYSES																								
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (FOR COELT EDF)	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="2">SAMPLING</th> <th rowspan="2">MATRIX</th> <th rowspan="2">NO. OF CONT.</th> </tr> <tr> <th>DATE</th> <th>TIME</th> </tr> </table>	SAMPLING		MATRIX	NO. OF CONT.	DATE	TIME	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>TPH (G)</td> <td>TPH (D) or</td> <td>BTEX / MTBE (8260B) or</td> <td>OXYGENATES (8260B)</td> <td>VOCs (8260B)</td> <td>5035 ENCORE PREP</td> <td>SVOCs (8270C)</td> <td>PEST (8081A)</td> <td>PCBs (8082)</td> <td>CAC, T22 METALS (6010B) / 747</td> <td>PVAs (8310) or (8270C)</td> <td>VOCs (TO-14A) or (TO-15)</td> <td>TPH(G) (TO-3M)</td> <td>toxicity</td> </tr> </table>	TPH (G)	TPH (D) or	BTEX / MTBE (8260B) or	OXYGENATES (8260B)	VOCs (8260B)	5035 ENCORE PREP	SVOCs (8270C)	PEST (8081A)	PCBs (8082)	CAC, T22 METALS (6010B) / 747	PVAs (8310) or (8270C)	VOCs (TO-14A) or (TO-15)	TPH(G) (TO-3M)	toxicity
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