

October 31, 2007

Michele Woods
ENSR International
5000 East Spring Street
Suite 250
Long Beach, CA 90815-5227

Subject: **Calscience Work Order No.: 07-09-1485**
Client Reference: **Sediment Sampling**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/20/2007 and analyzed in accordance with the attached chain-of-custody.

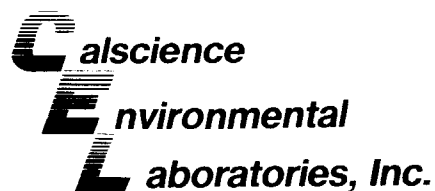
Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows 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, appearing to read 'V. Patel for', is written over a horizontal line.

Calscience Environmental
Laboratories, Inc.
Vikas Patel
Project Manager



CASE NARRATIVE

Calscience Work Order No.: 07-09-1485

Provided below is a narrative of our analytical effort, including any unique features or anomalies encountered as part of the preparation and analysis of the sediment and water samples.

Sample Condition on Receipt

Sediment and water samples were transferred to the laboratory on September 20, 2007, following strict chain-of-custody procedures. The water samples were contained in appropriate, pre-preserved bottles. Eight bottles were received though seven bottles were marked on the chain-of-custody. The sediment samples were contained in 16-oz. Jars. The temperature of the samples upon receipt at the laboratory was 3.5°C. The samples were logged into the Laboratory Information Management System (LIMS), given laboratory identification numbers, and stored in refrigeration units pending pore-water development.

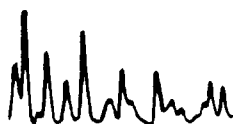
It was subsequently determined that insufficient sediment sample volume was collected in order to perform the full suite of testing requested. As a result, additional sediment was collected and received at the laboratory on October 3, 2007. There were no anomalies upon sample receipt. The temperature of the samples was noted at 3.9°C. However, additional sediment sample could not be collected for all sample points, thus insufficient sample was available for chronic toxicity testing for samples R4 and R3, and for grain size determination for sample R3.

Aquatic Bioassay Laboratories in Ventura, California performed chronic toxicity testing. Grain size determination was performed by PTS Laboratories in Santa Fe Springs, California. Reports for this testing follows the Calscience reporting.

Data Summary

Holding times

All holding time requirements were met.



Calibration

Frequency and control criteria for initial and continuing calibration verifications were met.

Blanks

Concentrations of target analytes in the method blanks were found to be below reporting limits for all testing.

Laboratory Control Samples

Laboratory Control Sample (LCS/LCSD) analyses were performed for each applicable method at the required frequencies. All parameters were within control limits for each method.

Matrix Spikes

Matrix spike (MS/MSD) analyses were performed for each applicable method at the required frequencies. All recoveries were in control, with the exception of the following.

For the sediment metals by EPA 6010B, the matrix spike recovery for lead fell above the established control limit. However, the corresponding LCS/LCSD recoveries and RPDs were in control, suggesting a matrix interference effect, and the data is released with no further qualification. Also, the matrix spike recoveries for copper and zinc did not apply since the concentrations of these metals in the spiked sample far exceeded the spike amount.

For the sediment TPH carbon range testing, the duplicate RPD for each batch fell outside of the established control limit. However, the LCS/LCSD recoveries and RPDs were in control, suggesting a matrix effect, and the data is released with no further action.

For the sediment SVOCs by EPA 8270C, the matrix spike recoveries for Phenol, 2-Chlorophenol, and Pyrene fell above the established control limits for each compound. However, the corresponding LCS/LCSD recoveries were in control, suggesting a matrix interference effect, and the data is released with no further action.

For the sediment pesticides by EPA 8081A, the MS/MSD recoveries and duplicate RPDs for 4,4'-DDT, 4,4'-DDE, 4,4'-DDD fell outside of established control limits. However, the corresponding LCS/LCSD recoveries were in control, suggesting a matrix interference effect, and the data is released with no further qualification.

Finally, for the sediment PCBs by EPA 8082, the matrix spike recoveries and RPD for Aroclor-1016 fell above the established control limits. However, as with the aforementioned parameters, the corresponding LCS/LCSD recoveries and RPD were in control, suggesting a matrix interference effect, and the data is released with no further action.

Surrogates

Surrogate recoveries for all applicable methods and all samples were within acceptable control limits, with the exception of the following. For the sediment TPH testing, the recoveries for the surrogate compound p-Terphenyl-d14 fell above the established control limit for each sample. However, the recovery of p-Terphenyl-d14 in the Method Blank was in control, and the data is released with no further qualification.

Acronyms

LCS/LCSD- Laboratory Control Sample/Laboratory Control Sample Duplicate
MS/MSD- Matrix Spike/Matrix Spike Duplicate
RPD- Relative Percent Difference

Analytical Report



ENSR International
 5000 East Spring Street
 Suite 250
 Long Beach, CA 90815-5227

Date Received: 09/20/07
 Work Order No: 07-09-1485
 Preparation: EPA 3050B
 Method: EPA 6010B
 Units: mg/kg

Project: Sediment Sampling

Page 1 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
R7-092007	07-09-1485-2	09/20/07	Solid	ICP 5300	09/28/07	09/28/07	070928L12

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	0.695	0.500	1		Lead	45.4	0.500	1	
Chromium	12.2	0.250	1		Nickel	8.03	0.250	1	
Copper	58.5	0.500	1		Zinc	263	1.00	1	

R8-092007	07-09-1485-3	09/20/07	Solid	ICP 5300	09/28/07	09/28/07	070928L12
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	0.692	0.500	1		Lead	41.8	0.500	1	
Chromium	14.0	0.250	1		Nickel	9.21	0.250	1	
Copper	71.9	0.500	1		Zinc	270	1.00	1	

R6-092007	07-09-1485-4	09/20/07	Solid	ICP 5300	09/28/07	09/28/07	070928L12
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.500	1		Lead	29.0	0.500	1	
Chromium	17.7	0.250	1		Nickel	4.42	0.250	1	
Copper	36.9	0.500	1		Zinc	223	1.00	1	

R5-092007	07-09-1485-5	09/20/07	Solid	ICP 5300	09/28/07	09/28/07	070928L12
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.500	1		Lead	52.8	0.500	1	
Chromium	34.2	0.250	1		Nickel	8.34	0.250	1	
Copper	55.8	0.500	1		Zinc	232	1.00	1	

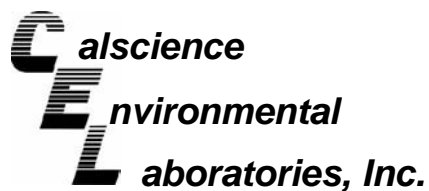
R4-092007	07-09-1485-6	09/20/07	Solid	ICP 5300	09/28/07	09/28/07	070928L12
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.500	1		Lead	45.1	0.500	1	
Chromium	34.4	0.250	1		Nickel	8.56	0.250	1	
Copper	53.3	0.500	1		Zinc	158	1.00	1	

R3-092007	07-09-1485-7	09/20/07	Solid	ICP 5300	09/28/07	09/28/07	070928L12
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.500	1		Lead	21.4	0.500	1	
Chromium	25.5	0.250	1		Nickel	14.2	0.250	1	
Copper	35.4	0.500	1		Zinc	92.5	1.00	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



ENSR International
5000 East Spring Street
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Date Received: 09/20/07
Work Order No: 07-09-1485
Preparation: EPA 3050B
Method: EPA 6010B
Units: mg/kg

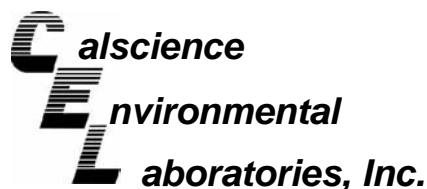
Project: Sediment Sampling

Page 2 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	097-01-002-9,879	N/A	Solid	ICP 5300	09/28/07	09/28/07	070928L12

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.500	1		Lead	ND	0.500	1	
Chromium	ND	0.250	1		Nickel	ND	0.250	1	
Copper	ND	0.500	1		Zinc	ND	1.00	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



The RETEC Group, Inc
5000 East Spring Street, Suite 250
Long Beach, CA 90815-5227

Date Received: 10/03/07
Work Order No: 07-10-0285
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: Sediment Sampling

Page 1 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
R7-100307	07-10-0285-1	10/03/07	Solid	GC 15	10/09/07	10/10/07	071009B03

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
C7	ND		4		C21-C22	21		4	
C8	ND		4		C23-C24	25		4	
C9-C10	ND		4		C25-C28	94		4	
C11-C12	ND		4		C29-C32	95		4	
C13-C14	2.4		4		C33-C36	70		4	
C15-C16	4.9		4		C37-C40	43		4	
C17-C18	7.8		4		C41-C44	33		4	
C19-C20	10		4		C7-C44 Total	410	20	4	

Surrogates: REC (%) Control Limits Qual

Decachlorobiphenyl 96 61-145

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
R8-100307	07-10-0285-2	10/03/07	Solid	GC 15	10/09/07	10/10/07	071009B03

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
C7	ND		2		C21-C22	11		2	
C8	ND		2		C23-C24	34		2	
C9-C10	ND		2		C25-C28	75		2	
C11-C12	0.71		2		C29-C32	88		2	
C13-C14	1.7		2		C33-C36	59		2	
C15-C16	2.9		2		C37-C40	43		2	
C17-C18	5.2		2		C41-C44	36		2	
C19-C20	11		2		C7-C44 Total	370	10	2	

Surrogates: REC (%) Control Limits Qual

Decachlorobiphenyl 92 61-145

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
R6-100307	07-10-0285-3	10/03/07	Solid	GC 15	10/09/07	10/10/07	071009B03

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
C7	ND		2		C21-C22	23		2	
C8	ND		2		C23-C24	26		2	
C9-C10	0.67		2		C25-C28	96		2	
C11-C12	4.0		2		C29-C32	110		2	
C13-C14	3.1		2		C33-C36	79		2	
C15-C16	6.2		2		C37-C40	49		2	
C17-C18	9.0		2		C41-C44	29		2	
C19-C20	16		2		C7-C44 Total	450	10	2	

Surrogates: REC (%) Control Limits Qual

Decachlorobiphenyl 101 61-145

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



The RETEC Group, Inc
 5000 East Spring Street, Suite 250
 Long Beach, CA 90815-5227

Date Received: 10/03/07
 Work Order No: 07-10-0285
 Preparation: EPA 3550B
 Method: EPA 8015B (M)
 Units: mg/kg

Project: Sediment Sampling

Page 2 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
R5-100307	07-10-0285-4	10/03/07	Solid	GC 15	10/09/07	10/10/07	071009B03

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
C7	ND		6		C21-C22	23		6	
C8	ND		6		C23-C24	41		6	
C9-C10	1.9		6		C25-C28	120		6	
C11-C12	12		6		C29-C32	130		6	
C13-C14	7.1		6		C33-C36	140		6	
C15-C16	9.8		6		C37-C40	96		6	
C17-C18	11		6		C41-C44	91		6	
C19-C20	18		6		C7-C44 Total	700	30	6	

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	104	61-145	

Method Blank	099-12-275-1,049	N/A	Solid	GC 15	10/09/07	10/09/07	071009B03
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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>
TPH as Diesel	ND	5.0	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
Decachlorobiphenyl	90	61-145		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



ENSR International
 5000 East Spring Street
 Suite 250
 Long Beach, CA 90815-5227

Date Received: 09/20/07
 Work Order No: 07-09-1485
 Preparation: EPA 3550B
 Method: EPA 8015B (M)
 Units: mg/kg

Project: Sediment Sampling

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
R4-092007	07-09-1485-6	09/20/07	Solid	GC 15	10/09/07	10/10/07	071009B03

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
C7	ND		1		C21-C22	7.1		1	
C8	ND		1		C23-C24	9.6		1	
C9-C10	ND		1		C25-C28	27		1	
C11-C12	3.0		1		C29-C32	36		1	
C13-C14	1.6		1		C33-C36	22		1	
C15-C16	3.1		1		C37-C40	24		1	
C17-C18	3.8		1		C41-C44	12		1	
C19-C20	5.4		1		C7-C44 Total	150	5.0	1	

Surrogates: REC (%) Control Limits Qual
 Decachlorobiphenyl 101 61-145

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
R3-092007	07-09-1485-7	09/20/07	Solid	GC 15	10/09/07	10/10/07	071009B03

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
C7	ND		1		C21-C22	1.6		1	
C8	ND		1		C23-C24	2.5		1	
C9-C10	ND		1		C25-C28	6.1		1	
C11-C12	0.22		1		C29-C32	6.9		1	
C13-C14	0.37		1		C33-C36	9.4		1	
C15-C16	0.62		1		C37-C40	7.3		1	
C17-C18	0.81		1		C41-C44	6.7		1	
C19-C20	1.2		1		C7-C44 Total	44	5.0	1	

Surrogates: REC (%) Control Limits Qual
 Decachlorobiphenyl 91 61-145

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-12-275-1,049	N/A	Solid	GC 15	10/09/07	10/09/07	071009B03

Parameter	Result	RL	DF	Qual
TPH as Diesel	ND	5.0	1	
Surrogates: REC (%) Control Limits Qual				
Decachlorobiphenyl	90	61-145		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



ENSR International
5000 East Spring Street
Suite 250
Long Beach, CA 90815-5227

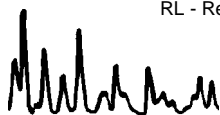
Date Received: 09/20/07
Work Order No: 07-09-1485
Preparation: EPA 3545
Method: Organotins by Krone et al.
Units: ug/kg

Project: Sediment Sampling

Page 1 of 2

Client Sample Number	Lab Sample Number				Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID	
R7-092007	07-09-1485-2				09/20/07	Solid	GC/MS Y	10/03/07	10/05/07	071003L20	
Parameter	Result	RL	DF	Qual	Parameter			Result	RL	DF	Qual
Dibutyltin	ND	3.0	1		Tetrabutyltin			ND	3.0	1	
Monobutyltin	ND	3.0	1		Tributyltin			5.1	3.0	1	
Surrogates:	REC (%)	Control Limits		Qual							
Tripentyltin	88	50-130									
R8-092007	07-09-1485-3				09/20/07	Solid	GC/MS Y	10/03/07	10/05/07	071003L20	
Parameter	Result	RL	DF	Qual	Parameter			Result	RL	DF	Qual
Dibutyltin	ND	3.0	1		Tetrabutyltin			ND	3.0	1	
Monobutyltin	ND	3.0	1		Tributyltin			6.3	3.0	1	
Surrogates:	REC (%)	Control Limits		Qual							
Tripentyltin	104	50-130									
R6-092007	07-09-1485-4				09/20/07	Solid	GC/MS Y	10/03/07	10/05/07	071003L20	
Parameter	Result	RL	DF	Qual	Parameter			Result	RL	DF	Qual
Dibutyltin	ND	3.0	1		Tetrabutyltin			ND	3.0	1	
Monobutyltin	ND	3.0	1		Tributyltin			ND	3.0	1	
Surrogates:	REC (%)	Control Limits		Qual							
Tripentyltin	88	50-130									
R5-092007	07-09-1485-5				09/20/07	Solid	GC/MS Y	10/03/07	10/05/07	071003L20	
Parameter	Result	RL	DF	Qual	Parameter			Result	RL	DF	Qual
Dibutyltin	ND	3.0	1		Tetrabutyltin			ND	3.0	1	
Monobutyltin	ND	3.0	1		Tributyltin			5.0	3.0	1	
Surrogates:	REC (%)	Control Limits		Qual							
Tripentyltin	90	50-130									
R4-092007	07-09-1485-6				09/20/07	Solid	GC/MS Y	10/03/07	10/05/07	071003L20	
Parameter	Result	RL	DF	Qual	Parameter			Result	RL	DF	Qual
Dibutyltin	ND	3.0	1		Tetrabutyltin			ND	3.0	1	
Monobutyltin	ND	3.0	1		Tributyltin			5.0	3.0	1	
Surrogates:	REC (%)	Control Limits		Qual							
Tripentyltin	82	50-130									

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



ENSR International
 5000 East Spring Street
 Suite 250
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Date Received: 09/20/07
 Work Order No: 07-09-1485
 Preparation: EPA 3545
 Method: Organotins by Krone et al.
 Units: ug/kg

Project: Sediment Sampling

Page 2 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
R3-092007	07-09-1485-7	09/20/07	Solid	GC/MS Y	10/03/07	10/05/07	071003L20

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Dibutyltin	ND	3.0	1		Tetrabutyltin	ND	3.0	1	
Monobutyltin	ND	3.0	1		Tributyltin	3.3	3.0	1	
Surrogates:	REC (%)	Control Limits		Qual					
Triphenyltin	95	50-130							

Method Blank	099-07-016-481	N/A	Solid	GC/MS Y	10/03/07	10/05/07	071003L20
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Dibutyltin	ND	3.0	1		Tetrabutyltin	ND	3.0	1	
Monobutyltin	ND	3.0	1		Tributyltin	ND	3.0	1	
Surrogates:	REC (%)	Control Limits		Qual					
Triphenyltin	100	50-130							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



ENSR International
 5000 East Spring Street
 Suite 250
 Long Beach, CA 90815-5227

Date Received: 09/20/07
 Work Order No: 07-09-1485
 Preparation: EPA 3545
 Method: EPA 8270C
 Units: mg/kg

Project: Sediment Sampling

Page 1 of 4

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
R7-092007	07-09-1485-2	09/20/07	Solid	GC/MS P	09/21/07	09/25/07	070921L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Naphthalene	ND	0.50	1		Benzo (a) Anthracene	ND	0.50	1	
Acenaphthylene	ND	0.50	1		Chrysene	ND	0.50	1	
Acenaphthene	ND	0.50	1		Benzo (k) Fluoranthene	ND	0.50	1	
Fluorene	ND	0.50	1		Benzo (b) Fluoranthene	ND	0.50	1	
Phenanthrene	ND	0.50	1		Benzo (a) Pyrene	ND	0.50	1	
Anthracene	ND	0.50	1		Indeno (1,2,3-c,d) Pyrene	ND	0.50	1	
Fluoranthene	ND	0.50	1		Dibenz (a,h) Anthracene	ND	0.50	1	
Pyrene	ND	0.50	1		Benzo (g,h,i) Perylene	ND	0.50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
2-Fluorophenol	87	42-120			Phenol-d6	79	46-118		
Nitrobenzene-d5	76	42-150			2-Fluorobiphenyl	80	38-134		
2,4,6-Tribromophenol	72	36-132			p-Terphenyl-d14	265	35-167		2

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Naphthalene	ND	0.50	1		Benzo (a) Anthracene	ND	0.50	1	
Acenaphthylene	ND	0.50	1		Chrysene	ND	0.50	1	
Acenaphthene	ND	0.50	1		Benzo (k) Fluoranthene	ND	0.50	1	
Fluorene	ND	0.50	1		Benzo (b) Fluoranthene	ND	0.50	1	
Phenanthrene	ND	0.50	1		Benzo (a) Pyrene	ND	0.50	1	
Anthracene	ND	0.50	1		Indeno (1,2,3-c,d) Pyrene	ND	0.50	1	
Fluoranthene	ND	0.50	1		Dibenz (a,h) Anthracene	ND	0.50	1	
Pyrene	ND	0.50	1		Benzo (g,h,i) Perylene	ND	0.50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
2-Fluorophenol	96	42-120			Phenol-d6	91	46-118		
Nitrobenzene-d5	80	42-150			2-Fluorobiphenyl	81	38-134		
2,4,6-Tribromophenol	80	36-132			p-Terphenyl-d14	252	35-167		2

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



ENSR International
 5000 East Spring Street
 Suite 250
 Long Beach, CA 90815-5227

Date Received: 09/20/07
 Work Order No: 07-09-1485
 Preparation: EPA 3545
 Method: EPA 8270C
 Units: mg/kg

Project: Sediment Sampling

Page 2 of 4

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
R6-092007	07-09-1485-4	09/20/07	Solid	GC/MS P	09/21/07	09/25/07	070921L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Naphthalene	ND	0.50	1		Benzo (a) Anthracene	ND	0.50	1	
Acenaphthylene	ND	0.50	1		Chrysene	ND	0.50	1	
Acenaphthene	ND	0.50	1		Benzo (k) Fluoranthene	ND	0.50	1	
Fluorene	ND	0.50	1		Benzo (b) Fluoranthene	ND	0.50	1	
Phenanthrene	ND	0.50	1		Benzo (a) Pyrene	ND	0.50	1	
Anthracene	ND	0.50	1		Indeno (1,2,3-c,d) Pyrene	ND	0.50	1	
Fluoranthene	ND	0.50	1		Dibenz (a,h) Anthracene	ND	0.50	1	
Pyrene	ND	0.50	1		Benzo (g,h,i) Perylene	ND	0.50	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
2-Fluorophenol	98	42-120			Phenol-d6	94	46-118		
Nitrobenzene-d5	84	42-150			2-Fluorobiphenyl	68	38-134		
2,4,6-Tribromophenol	79	36-132			p-Terphenyl-d14	265	35-167		2

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Naphthalene	ND	0.50	1		Benzo (a) Anthracene	ND	0.50	1	
Acenaphthylene	ND	0.50	1		Chrysene	ND	0.50	1	
Acenaphthene	ND	0.50	1		Benzo (k) Fluoranthene	ND	0.50	1	
Fluorene	ND	0.50	1		Benzo (b) Fluoranthene	ND	0.50	1	
Phenanthrene	ND	0.50	1		Benzo (a) Pyrene	ND	0.50	1	
Anthracene	ND	0.50	1		Indeno (1,2,3-c,d) Pyrene	ND	0.50	1	
Fluoranthene	ND	0.50	1		Dibenz (a,h) Anthracene	ND	0.50	1	
Pyrene	ND	0.50	1		Benzo (g,h,i) Perylene	ND	0.50	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
2-Fluorophenol	86	42-120			Phenol-d6	82	46-118		
Nitrobenzene-d5	74	42-150			2-Fluorobiphenyl	65	38-134		
2,4,6-Tribromophenol	77	36-132			p-Terphenyl-d14	290	35-167		2

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



ENSR International
 5000 East Spring Street
 Suite 250
 Long Beach, CA 90815-5227

Date Received: 09/20/07
 Work Order No: 07-09-1485
 Preparation: EPA 3545
 Method: EPA 8270C
 Units: mg/kg

Project: Sediment Sampling

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
R4-092007	07-09-1485-6	09/20/07	Solid	GC/MS P	09/21/07	09/25/07	070921L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Naphthalene	ND	0.50	1		Benzo (a) Anthracene	ND	0.50	1	
Acenaphthylene	ND	0.50	1		Chrysene	ND	0.50	1	
Acenaphthene	ND	0.50	1		Benzo (k) Fluoranthene	ND	0.50	1	
Fluorene	ND	0.50	1		Benzo (b) Fluoranthene	ND	0.50	1	
Phenanthrene	ND	0.50	1		Benzo (a) Pyrene	ND	0.50	1	
Anthracene	ND	0.50	1		Indeno (1,2,3-c,d) Pyrene	ND	0.50	1	
Fluoranthene	ND	0.50	1		Dibenz (a,h) Anthracene	ND	0.50	1	
Pyrene	ND	0.50	1		Benzo (g,h,i) Perylene	ND	0.50	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
2-Fluorophenol	100	42-120			Phenol-d6	96	46-118		
Nitrobenzene-d5	83	42-150			2-Fluorobiphenyl	74	38-134		
2,4,6-Tribromophenol	83	36-132			p-Terphenyl-d14	317	35-167		2

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Naphthalene	ND	0.50	1		Benzo (a) Anthracene	ND	0.50	1	
Acenaphthylene	ND	0.50	1		Chrysene	ND	0.50	1	
Acenaphthene	ND	0.50	1		Benzo (k) Fluoranthene	ND	0.50	1	
Fluorene	ND	0.50	1		Benzo (b) Fluoranthene	ND	0.50	1	
Phenanthrene	ND	0.50	1		Benzo (a) Pyrene	ND	0.50	1	
Anthracene	ND	0.50	1		Indeno (1,2,3-c,d) Pyrene	ND	0.50	1	
Fluoranthene	ND	0.50	1		Dibenz (a,h) Anthracene	ND	0.50	1	
Pyrene	ND	0.50	1		Benzo (g,h,i) Perylene	ND	0.50	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
2-Fluorophenol	103	42-120			Phenol-d6	105	46-118		
Nitrobenzene-d5	83	42-150			2-Fluorobiphenyl	72	38-134		
2,4,6-Tribromophenol	86	36-132			p-Terphenyl-d14	259	35-167		2

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



ENSR International
 5000 East Spring Street
 Suite 250
 Long Beach, CA 90815-5227

Date Received: 09/20/07
 Work Order No: 07-09-1485
 Preparation: EPA 3545
 Method: EPA 8270C
 Units: mg/kg

Project: Sediment Sampling

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-12-549-169	N/A	Solid	GC/MS P	09/21/07	09/21/07	070921L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Naphthalene	ND	0.50	1		Benzo (a) Anthracene	ND	0.50	1	
Acenaphthylene	ND	0.50	1		Chrysene	ND	0.50	1	
Acenaphthene	ND	0.50	1		Benzo (k) Fluoranthene	ND	0.50	1	
Fluorene	ND	0.50	1		Benzo (b) Fluoranthene	ND	0.50	1	
Phenanthrene	ND	0.50	1		Benzo (a) Pyrene	ND	0.50	1	
Anthracene	ND	0.50	1		Indeno (1,2,3-c,d) Pyrene	ND	0.50	1	
Fluoranthene	ND	0.50	1		Dibenz (a,h) Anthracene	ND	0.50	1	
Pyrene	ND	0.50	1		Benzo (g,h,i) Perylene	ND	0.50	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
2-Fluorophenol	117	42-120			Phenol-d6	115	46-118		
Nitrobenzene-d5	110	42-150			2-Fluorobiphenyl	119	38-134		
2,4,6-Tribromophenol	121	36-132			p-Terphenyl-d14	122	35-167		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



ENSR International
5000 East Spring Street
Suite 250
Long Beach, CA 90815-5227

Date Received: 09/20/07
Work Order No: 07-09-1485
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: Sediment Sampling

Page 1 of 2

Client Sample Number	Lab Sample Number				Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID	
R7-092007	07-09-1485-2				09/20/07	Solid	GC 41	10/04/07	10/10/07	071004L05	
Parameter	Result	RL	DF	Qual	Parameter			Result	RL	DF	Qual
2,4'-DDD	10	5.0	5		4,4'-DDD			18	5.0	5	
2,4'-DDE	ND	5.0	5		4,4'-DDE			20	5.0	5	
2,4'-DDT	ND	5.0	5		4,4'-DDT			ND	5.0	5	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:			REC (%)	Control Limits		Qual
2,4,5,6-Tetrachloro-m-Xylene	98	50-130			Decachlorobiphenyl			115	50-130		
R8-092007	07-09-1485-3				09/20/07	Solid	GC 41	10/04/07	10/05/07	071004L05	
Parameter	Result	RL	DF	Qual	Parameter			Result	RL	DF	Qual
2,4'-DDD	3.3	1.0	1		4,4'-DDD			11	5.0	5	
2,4'-DDE	ND	1.0	1		4,4'-DDE			23	5.0	5	
2,4'-DDT	ND	1.0	1		4,4'-DDT			ND	1.0	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:			REC (%)	Control Limits		Qual
2,4,5,6-Tetrachloro-m-Xylene	64	50-130			Decachlorobiphenyl			112	50-130		
R6-092007	07-09-1485-4				09/20/07	Solid	GC 41	10/04/07	10/05/07	071004L05	
Parameter	Result	RL	DF	Qual	Parameter			Result	RL	DF	Qual
2,4'-DDD	1.8	1.0	1		4,4'-DDD			5.8	1.0	1	
2,4'-DDE	ND	1.0	1		4,4'-DDE			29	5.0	5	
2,4'-DDT	ND	1.0	1		4,4'-DDT			ND	1.0	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:			REC (%)	Control Limits		Qual
2,4,5,6-Tetrachloro-m-Xylene	79	50-130			Decachlorobiphenyl			93	50-130		
R5-092007	07-09-1485-5				09/20/07	Solid	GC 41	10/04/07	10/05/07	071004L05	
Parameter	Result	RL	DF	Qual	Parameter			Result	RL	DF	Qual
2,4'-DDD	2.1	1.0	1		4,4'-DDD			16	10	10	
2,4'-DDE	ND	1.0	1		4,4'-DDE			40	10	10	
2,4'-DDT	ND	1.0	1		4,4'-DDT			ND	1.0	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:			REC (%)	Control Limits		Qual
2,4,5,6-Tetrachloro-m-Xylene	56	50-130			Decachlorobiphenyl			73	50-130		
R4-092007	07-09-1485-6				09/20/07	Solid	GC 41	10/04/07	10/05/07	071004L05	
Parameter	Result	RL	DF	Qual	Parameter			Result	RL	DF	Qual
2,4'-DDD	ND	1.0	1		4,4'-DDD			6.9	1.0	1	
2,4'-DDE	ND	1.0	1		4,4'-DDE			33	10	10	
2,4'-DDT	ND	1.0	1		4,4'-DDT			ND	1.0	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:			REC (%)	Control Limits		Qual
2,4,5,6-Tetrachloro-m-Xylene	73	50-130			Decachlorobiphenyl			80	50-130		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



ENSR International
 5000 East Spring Street
 Suite 250
 Long Beach, CA 90815-5227

Date Received: 09/20/07
 Work Order No: 07-09-1485
 Preparation: EPA 3545
 Method: EPA 8081A
 Units: ug/kg

Project: Sediment Sampling

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
R3-092007	07-09-1485-7	09/20/07	Solid	GC 41	10/04/07	10/05/07	071004L05

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
2,4'-DDD	ND	1.0	1		4,4'-DDD	3.0	1.0	1	
2,4'-DDE	ND	1.0	1		4,4'-DDE	18	5.0	5	
2,4'-DDT	ND	1.0	1		4,4'-DDT	ND	1.0	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
2,4,5,6-Tetrachloro-m-Xylene	75	50-130			Decachlorobiphenyl	84	50-130		

Method Blank	099-12-563-13	N/A	Solid	GC 41	10/04/07	10/09/07	071004L05
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
2,4'-DDD	ND	1.0	1		4,4'-DDD	ND	1.0	1	
2,4'-DDE	ND	1.0	1		4,4'-DDE	ND	1.0	1	
2,4'-DDT	ND	1.0	1		4,4'-DDT	ND	1.0	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
2,4,5,6-Tetrachloro-m-Xylene	105	50-130			Decachlorobiphenyl	95	50-130		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



ENSR International
 5000 East Spring Street
 Suite 250
 Long Beach, CA 90815-5227

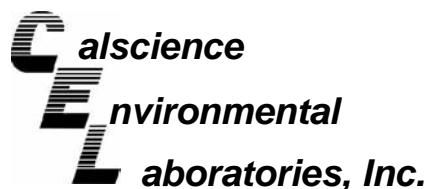
Date Received: 09/20/07
 Work Order No: 07-09-1485
 Preparation: EPA 3545
 Method: EPA 8082
 Units: ug/kg

Project: Sediment Sampling

Page 1 of 2

Client Sample Number		Lab Sample Number		Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID	
R7-092007		07-09-1485-2		09/20/07	Solid	GC 16	10/04/07	10/05/07	071004L06	
Parameter	Result	RL	DF	Qual	Parameter		Result	RL	DF	Qual
Aroclor-1016	ND	10	1		Aroclor-1248		ND	10	1	
Aroclor-1221	ND	10	1		Aroclor-1254		ND	10	1	
Aroclor-1232	ND	10	1		Aroclor-1260		ND	10	1	
Aroclor-1242	ND	10	1		Aroclor-1262		ND	10	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:		REC (%)	Control Limits		Qual
2,4,5,6-Tetrachloro-m-Xylene	117	50-130			Decachlorobiphenyl		58	50-130		
R8-092007		07-09-1485-3		09/20/07	Solid	GC 16	10/04/07	10/05/07	071004L06	
Parameter	Result	RL	DF	Qual	Parameter		Result	RL	DF	Qual
Aroclor-1016	ND	10	1		Aroclor-1248		ND	10	1	
Aroclor-1221	ND	10	1		Aroclor-1254		ND	10	1	
Aroclor-1232	ND	10	1		Aroclor-1260		ND	10	1	
Aroclor-1242	ND	10	1		Aroclor-1262		ND	10	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:		REC (%)	Control Limits		Qual
2,4,5,6-Tetrachloro-m-Xylene	119	50-130			Decachlorobiphenyl		93	50-130		
R6-092007		07-09-1485-4		09/20/07	Solid	GC 16	10/04/07	10/05/07	071004L06	
Parameter	Result	RL	DF	Qual	Parameter		Result	RL	DF	Qual
Aroclor-1016	ND	10	1		Aroclor-1248		ND	10	1	
Aroclor-1221	ND	10	1		Aroclor-1254		ND	10	1	
Aroclor-1232	ND	10	1		Aroclor-1260		ND	10	1	
Aroclor-1242	ND	10	1		Aroclor-1262		ND	10	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:		REC (%)	Control Limits		Qual
2,4,5,6-Tetrachloro-m-Xylene	105	50-130			Decachlorobiphenyl		104	50-130		
R5-092007		07-09-1485-5		09/20/07	Solid	GC 16	10/04/07	10/05/07	071004L06	
Parameter	Result	RL	DF	Qual	Parameter		Result	RL	DF	Qual
Aroclor-1016	ND	10	1		Aroclor-1248		ND	10	1	
Aroclor-1221	ND	10	1		Aroclor-1254		ND	10	1	
Aroclor-1232	ND	10	1		Aroclor-1260		ND	10	1	
Aroclor-1242	ND	10	1		Aroclor-1262		ND	10	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:		REC (%)	Control Limits		Qual
2,4,5,6-Tetrachloro-m-Xylene	122	50-130			Decachlorobiphenyl		76	50-130		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



ENSR International
5000 East Spring Street
Suite 250
Long Beach, CA 90815-5227

Date Received: 09/20/07
Work Order No: 07-09-1485
Preparation: EPA 3545
Method: EPA 8082
Units: ug/kg

Project: Sediment Sampling

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
R4-092007	07-09-1485-6	09/20/07	Solid	GC 16	10/04/07	10/05/07	071004L06

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aroclor-1016	ND	10	1		Aroclor-1248	ND	10	1	
Aroclor-1221	ND	10	1		Aroclor-1254	ND	10	1	
Aroclor-1232	ND	10	1		Aroclor-1260	ND	10	1	
Aroclor-1242	ND	10	1		Aroclor-1262	ND	10	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
2,4,5,6-Tetrachloro-m-Xylene	93	50-130			Decachlorobiphenyl	106	50-130		

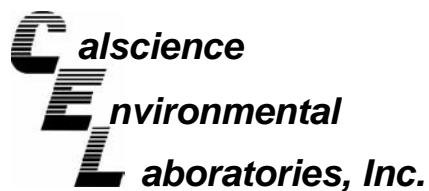
Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
R3-092007	07-09-1485-7	09/20/07	Solid	GC 16	10/04/07	10/05/07	071004L06

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aroclor-1016	ND	10	1		Aroclor-1248	ND	10	1	
Aroclor-1221	ND	10	1		Aroclor-1254	ND	10	1	
Aroclor-1232	ND	10	1		Aroclor-1260	ND	10	1	
Aroclor-1242	ND	10	1		Aroclor-1262	ND	10	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
2,4,5,6-Tetrachloro-m-Xylene	80	50-130			Decachlorobiphenyl	84	50-130		

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-12-565-25	N/A	Solid	GC 16	10/04/07	10/05/07	071004L06

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aroclor-1016	ND	10	1		Aroclor-1248	ND	10	1	
Aroclor-1221	ND	10	1		Aroclor-1254	ND	10	1	
Aroclor-1232	ND	10	1		Aroclor-1260	ND	10	1	
Aroclor-1242	ND	10	1		Aroclor-1262	ND	10	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
2,4,5,6-Tetrachloro-m-Xylene	101	50-130			Decachlorobiphenyl	103	50-130		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



ENSR International
5000 East Spring Street
Suite 250
Long Beach, CA 90815-5227

Date Received: 09/20/07
Work Order No: 07-09-1485

Project: Sediment Sampling

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Client Sample Number	Lab Sample Number	Date Collected	Matrix
R9-092007	07-09-1485-1	09/20/07	Aqueous

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Carbon, Total Organic	ND	0.50	1		mg/L	N/A	09/21/07	SM 5310 D

R7-092007	07-09-1485-2	09/20/07	Solid
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Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Carbon, Total Organic	19000	500	1		mg/kg	N/A	10/09/07	EPA 9060

R8-092007	07-09-1485-3	09/20/07	Solid
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Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Carbon, Total Organic	22000	500	1		mg/kg	N/A	10/09/07	EPA 9060

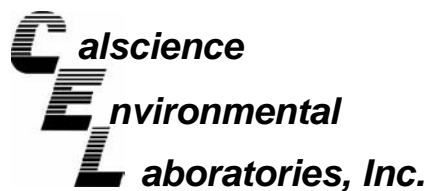
R6-092007	07-09-1485-4	09/20/07	Solid
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Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Carbon, Total Organic	35000	500	1		mg/kg	N/A	10/09/07	EPA 9060

R5-092007	07-09-1485-5	09/20/07	Solid
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Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Carbon, Total Organic	36000	500	1		mg/kg	N/A	10/09/07	EPA 9060

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



ENSR International
5000 East Spring Street
Suite 250
Long Beach, CA 90815-5227

Date Received: 09/20/07
Work Order No: 07-09-1485

Project: Sediment Sampling

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Client Sample Number	Lab Sample Number	Date Collected	Matrix
R4-092007	07-09-1485-6	09/20/07	Solid

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Carbon, Total Organic	26000	500	1		mg/kg	N/A	10/09/07	EPA 9060

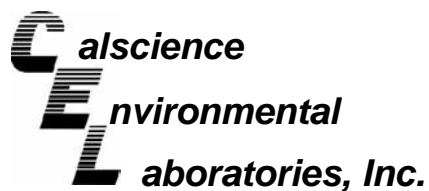
R3-092007	07-09-1485-7	09/20/07	Solid
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Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Carbon, Total Organic	16000	500	1		mg/kg	N/A	10/09/07	EPA 9060

Method Blank	N/A	Solid
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Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Carbon, Total Organic	ND	500	1		mg/kg	N/A	10/09/07	EPA 9060
Carbon, Total Organic	ND	0.50	1		mg/L	N/A	09/21/07	SM 5310 D

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



ENSR International
5000 East Spring Street
Suite 250
Long Beach, CA 90815-5227

Date Received: 09/20/07
Work Order No: 07-09-1485
Preparation: EPA 3010A Total
Method: EPA 6010B
Units: mg/L

Project: Sediment Sampling

Page 1 of 1

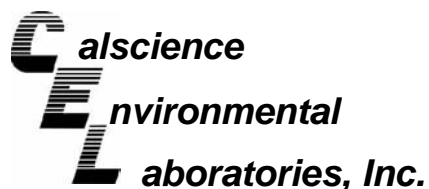
Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
R9-092007	07-09-1485-1	09/20/07	Aqueous	ICP 5300	09/28/07	09/28/07	070928L03

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00500	1		Lead	ND	0.0100	1	
Chromium	ND	0.00500	1		Nickel	ND	0.00500	1	
Copper	ND	0.00500	1		Zinc	ND	0.0100	1	

Method Blank	097-01-003-7,592	N/A	Aqueous	ICP 5300	09/28/07	09/28/07	070928L03
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00500	1		Lead	ND	0.0100	1	
Chromium	ND	0.00500	1		Nickel	ND	0.00500	1	
Copper	ND	0.00500	1		Zinc	ND	0.0100	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



ENSR International
5000 East Spring Street
Suite 250
Long Beach, CA 90815-5227

Date Received: 09/20/07
Work Order No: 07-09-1485
Preparation: EPA 3510C
Method: EPA 8015B (M)
Units: ug/L

Project: Sediment Sampling

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
R9-092007	07-09-1485-1	09/20/07	Aqueous	GC 6	09/24/07	09/25/07	070924B01

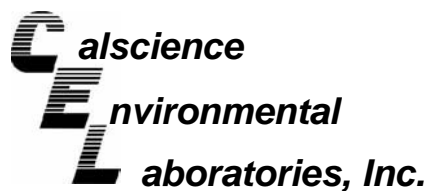
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
C7	ND		1		C21-C22	ND		1	
C8	ND		1		C23-C24	ND		1	
C9-C10	ND		1		C25-C28	ND		1	
C11-C12	ND		1		C29-C32	ND		1	
C13-C14	ND		1		C33-C36	ND		1	
C15-C16	ND		1		C37-C40	ND		1	
C17-C18	ND		1		C41-C44	ND		1	
C19-C20	ND		1		C7-C44 Total	ND	500	1	

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	96	68-140	

Method Blank	099-12-308-435	N/A	Aqueous	GC 6	09/24/07	09/24/07	070924B01
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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>
TPH as Diesel	ND	500	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
Decachlorobiphenyl	102	68-140		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



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5000 East Spring Street
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Date Received: 09/20/07
Work Order No: 07-09-1485
Preparation: EPA 3510B
Method: Organotins by Krone et al.
Units: ng/L

Project: Sediment Sampling

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
R9-092007	07-09-1485-1	09/20/07	Aqueous	GC/MS Y	09/27/07	10/02/07	070927L06

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Dibutyltin	ND	3.0	1		Tetrabutyltin	ND	3.0	1	
Monobutyltin	ND	3.0	1		Tributyltin	ND	3.0	1	
Surrogates:	REC (%)	Control Limits		Qual					
Triphenyltin	104	50-130							

Method Blank	099-07-035-60	N/A	Aqueous	GC/MS Y	09/27/07	10/02/07	070927L06
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Dibutyltin	ND	3.0	1		Tetrabutyltin	ND	3.0	1	
Monobutyltin	ND	3.0	1		Tributyltin	ND	3.0	1	
Surrogates:	REC (%)	Control Limits		Qual					
Triphenyltin	101	50-130							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



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Date Received: 09/20/07
 Work Order No: 07-09-1485
 Preparation: EPA 3510B
 Method: EPA 8270C
 Units: ug/L

Project: Sediment Sampling

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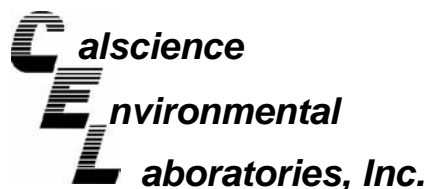
Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
R9-092007	07-09-1485-1	09/20/07	Aqueous	GC/MS MM	09/21/07	09/24/07	070921L05

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Naphthalene	ND	10	1		Benzo (a) Anthracene	ND	10	1	
Acenaphthylene	ND	10	1		Chrysene	ND	10	1	
Acenaphthene	ND	10	1		Benzo (k) Fluoranthene	ND	10	1	
Fluorene	ND	10	1		Benzo (b) Fluoranthene	ND	10	1	
Phenanthrene	ND	10	1		Benzo (a) Pyrene	ND	10	1	
Anthracene	ND	10	1		Benzo (g,h,i) Perylene	ND	10	1	
Fluoranthene	ND	10	1		Indeno (1,2,3-c,d) Pyrene	ND	10	1	
Pyrene	ND	10	1		Dibenz (a,h) Anthracene	ND	10	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
2-Fluorophenol	66	7-121			Phenol-d6	50	1-127		
Nitrobenzene-d5	104	50-146			2-Fluorobiphenyl	93	42-138		
2,4,6-Tribromophenol	108	41-137			p-Terphenyl-d14	96	47-173		

Method Blank	095-01-003-2,250	N/A	Aqueous	GC/MS MM	09/21/07	09/24/07	070921L05
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Naphthalene	ND	10	1		Benzo (a) Anthracene	ND	10	1	
Acenaphthylene	ND	10	1		Chrysene	ND	10	1	
Acenaphthene	ND	10	1		Benzo (k) Fluoranthene	ND	10	1	
Fluorene	ND	10	1		Benzo (b) Fluoranthene	ND	10	1	
Phenanthrene	ND	10	1		Benzo (a) Pyrene	ND	10	1	
Anthracene	ND	10	1		Benzo (g,h,i) Perylene	ND	10	1	
Fluoranthene	ND	10	1		Indeno (1,2,3-c,d) Pyrene	ND	10	1	
Pyrene	ND	10	1		Dibenz (a,h) Anthracene	ND	10	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
2-Fluorophenol	73	7-121			Phenol-d6	57	1-127		
Nitrobenzene-d5	107	50-146			2-Fluorobiphenyl	87	42-138		
2,4,6-Tribromophenol	127	41-137			p-Terphenyl-d14	96	47-173		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



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Date Received: 09/20/07
Work Order No: 07-09-1485
Preparation: EPA 3510B
Method: EPA 8081A
Units: ug/L

Project: Sediment Sampling

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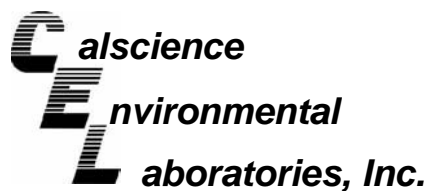
Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
R9-092007	07-09-1485-1	09/20/07	Aqueous	GC 41	09/25/07	09/28/07	070925L10

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
4,4'-DDE	ND	0.10	1		2,4'-DDE	ND	0.10	1	
4,4'-DDD	ND	0.10	1		2,4'-DDT	ND	0.10	1	
2,4'-DDD	ND	0.10	1		4,4'-DDT	ND	0.10	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Decachlorobiphenyl	70	50-135			2,4,5,6-Tetrachloro-m-Xylene	103	50-135		

Method Blank	099-12-567-2	N/A	Aqueous	GC 41	09/25/07	09/26/07	070925L10
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
4,4'-DDE	ND	0.10	1		2,4'-DDE	ND	0.10	1	
4,4'-DDD	ND	0.10	1		2,4'-DDT	ND	0.10	1	
2,4'-DDD	ND	0.10	1		4,4'-DDT	ND	0.10	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Decachlorobiphenyl	112	50-135			2,4,5,6-Tetrachloro-m-Xylene	88	50-135		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



ENSR International
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Date Received: 09/20/07
Work Order No: 07-09-1485
Preparation: EPA 3510B
Method: EPA 8082
Units: ug/L

Project: Sediment Sampling

Page 1 of 1

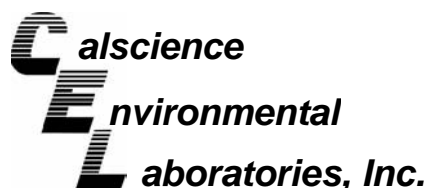
Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
R9-092007	07-09-1485-1	09/20/07	Aqueous	GC 16	09/25/07	09/27/07	070925L11M

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aroclor-1016	ND	0.50	1		Aroclor-1248	ND	0.50	1	
Aroclor-1221	ND	0.50	1		Aroclor-1254	ND	0.50	1	
Aroclor-1232	ND	0.50	1		Aroclor-1260	ND	0.50	1	
Aroclor-1242	ND	0.50	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Decachlorobiphenyl	88	50-135			2,4,5,6-Tetrachloro-m-Xylene	95	50-135		

Method Blank	099-12-527-15	N/A	Aqueous	GC 16	09/25/07	09/27/07	070925L11M
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aroclor-1016	ND	0.50	1		Aroclor-1248	ND	0.50	1	
Aroclor-1221	ND	0.50	1		Aroclor-1254	ND	0.50	1	
Aroclor-1232	ND	0.50	1		Aroclor-1260	ND	0.50	1	
Aroclor-1242	ND	0.50	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Decachlorobiphenyl	113	50-135			2,4,5,6-Tetrachloro-m-Xylene	71	50-135		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Quality Control - Spike/Spike Duplicate



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Suite 250
Long Beach, CA 90815-5227

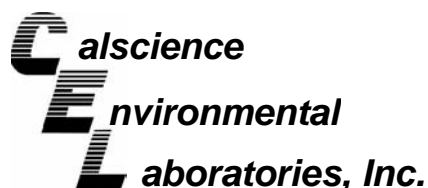
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Work Order No: 07-09-1485
Preparation: EPA 3050B
Method: EPA 6010B

Project Sediment Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
07-09-2107-2	Solid	ICP 5300	09/28/07	09/28/07	070928S12

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Cadmium	97	96	75-125	1	0-20	
Chromium	100	97	75-125	1	0-20	
Copper	4X	4X	75-125	4X	0-20	Q
Lead	133	103	75-125	8	0-20	3
Nickel	100	102	75-125	1	0-20	
Zinc	4X	4X	75-125	4X	0-20	Q

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



The RETEC Group, Inc
5000 East Spring Street, Suite 250
Long Beach, CA 90815-5227

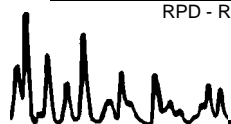
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Work Order No: 07-10-0285
Preparation: EPA 3550B
Method: EPA 8015B (M)

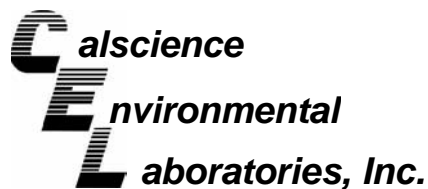
Project Sediment Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
07-09-1616-14	Solid	GC 15	10/09/07	10/09/07	071009S03

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Diesel	102	68	64-130	41	0-15	4

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Spike/Spike Duplicate



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Long Beach, CA 90815-5227

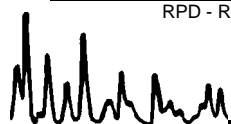
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Work Order No: 07-09-1485
Preparation: EPA 3550B
Method: EPA 8015B (M)

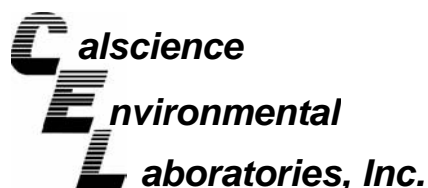
Project Sediment Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
07-09-1616-14	Solid	GC 15	10/09/07	10/09/07	071009S03

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Diesel	102	68	64-130	41	0-15	4

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Spike/Spike Duplicate



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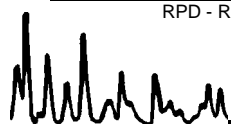
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Work Order No: 07-09-1485
Preparation: EPA 3545
Method: Organotins by Krone et al.

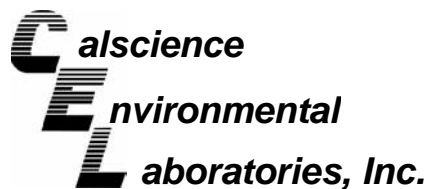
Project Sediment Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
R3-092007	Solid	GC/MS Y	10/03/07	10/05/07	071003S20

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Tetrabutyltin	95	96	50-130	1	0-20	
Tributyltin	123	129	50-130	5	0-20	

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Spike/Spike Duplicate



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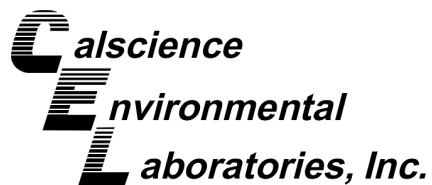
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Work Order No: 07-09-1485
Preparation: EPA 3545
Method: EPA 8270C

Project Sediment Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
07-09-1420-1	Solid	GC/MS P	09/21/07	09/21/07	070921S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	133	129	57-123	3	0-16	3
2-Chlorophenol	125	118	57-111	5	0-17	3
1,4-Dichlorobenzene	118	111	49-127	7	0-20	
N-Nitroso-di-n-propylamine	137	135	54-144	1	0-17	
1,2,4-Trichlorobenzene	111	110	42-132	1	0-20	
4-Chloro-3-Methylphenol	120	116	50-128	4	0-17	
Acenaphthene	114	114	49-133	0	0-18	
4-Nitrophenol	108	108	30-144	0	0-21	
2,4-Dinitrotoluene	60	60	50-128	1	0-18	
Pentachlorophenol	82	78	29-113	4	0-22	
Pyrene	310	321	47-149	3	0-20	3

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



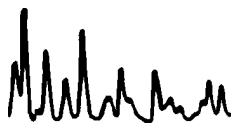
ENSR International
5000 East Spring Street, Suite 250
Long Beach, CA 90815-5227

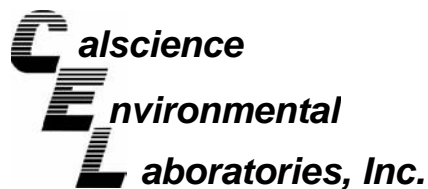
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Work Order No.: 07-09-1485
Preparation: EPA 3545
Method: EPA 8081A

Project: Sediment Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
R7-092007	Solid	GC 41	10/04/07	10/05/07	071004S05

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifier
4,4'-DDD	12	25	50-135	58	0-25	3,4
4,4'-DDE	195	249	50-135	9	0-25	3
4,4'-DDT	50	12	50-135	123	0-25	4,3





Quality Control - Spike/Spike Duplicate



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Long Beach, CA 90815-5227

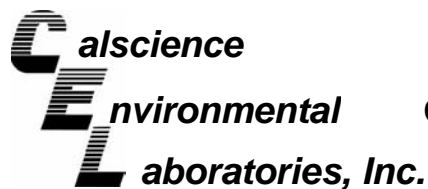
Date Received: 09/20/07
Work Order No: 07-09-1485
Preparation: EPA 3545
Method: EPA 8082

Project Sediment Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
R5-092007	Solid	GC 16	10/04/07	10/05/07	071004S06

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aroclor-1016	640	412	50-135	43	0-25	3,4
Aroclor-1260	117	111	50-135	6	0-25	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



ENSR International
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Long Beach, CA 90815-5227

Date Received: N/A
Work Order No: 07-09-1485

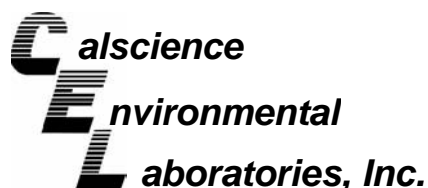
Project: Sediment Sampling

Matrix: Aqueous

<u>Parameter</u>	<u>Method</u>	<u>Quality Control Sample ID</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>MS% REC</u>	<u>MSD % REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Carbon, Total Organic	SM 5310 D	07-09-1469-2	09/21/07	N/A	100	95	70-130	3	0-25	
Carbon, Total Organic	EPA 9060	R7-092007	10/09/07	N/A	103	113	75-125	6	0-25	

RPD - Relative Percent Difference , CL - Control Limit

7440 Lincoln Way, Garden Grove, CA 92841-1427 . TEL:(714) 895-5494 . FAX: (714) 894-7501



Quality Control - Spike/Spike Duplicate



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Long Beach, CA 90815-5227

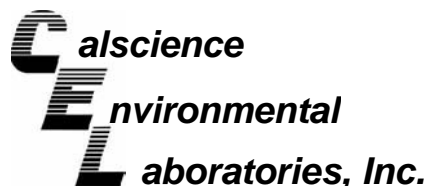
Date Received: 09/20/07
Work Order No: 07-09-1485
Preparation: EPA 3010A Total
Method: EPA 6010B

Project Sediment Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
07-09-2007-1	Aqueous	ICP 5300	09/28/07	09/28/07	070928S03

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Cadmium	107	108	82-124	1	0-7	
Chromium	103	103	86-122	0	0-8	
Copper	96	97	78-126	0	0-7	
Lead	104	107	84-120	4	0-7	
Nickel	110	111	84-120	1	0-7	
Zinc	115	116	89-131	1	0-8	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



ENSR International
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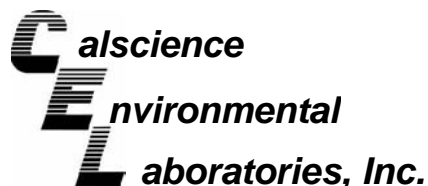
Date Received: N/A
Work Order No: 07-09-1485
Preparation: EPA 3050B
Method: EPA 6010B

Project: Sediment Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-002-9,879	Solid	ICP 5300	09/28/07	09/28/07	070928L12

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Cadmium	97	97	80-120	0	0-20	
Chromium	99	98	80-120	0	0-20	
Copper	91	91	80-120	0	0-20	
Lead	97	98	80-120	1	0-20	
Nickel	104	103	80-120	0	0-20	
Zinc	99	99	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



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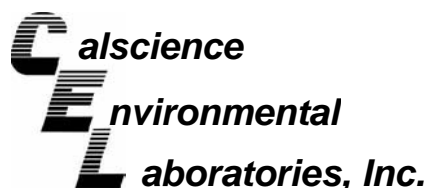
Date Received: N/A
Work Order No: 07-09-1485
Preparation: EPA 3010A Total
Method: EPA 6010B

Project: Sediment Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-003-7,592	Aqueous	ICP 5300	09/28/07	09/28/07	070928L03

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Cadmium	98	98	80-120	1	0-20	
Chromium	100	100	80-120	0	0-20	
Copper	92	93	80-120	1	0-20	
Lead	100	102	80-120	2	0-20	
Nickel	105	106	80-120	1	0-20	
Zinc	100	100	80-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



The RETEC Group, Inc
5000 East Spring Street, Suite 250
Long Beach, CA 90815-5227

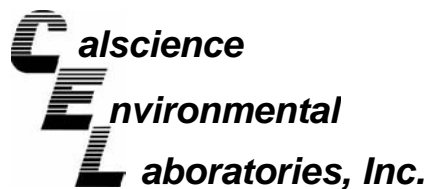
Date Received: N/A
Work Order No: 07-10-0285
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project: Sediment Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-275-1,049	Solid	GC 15	10/09/07	10/09/07	071009B03

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Diesel	100	96	75-123	4	0-12	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



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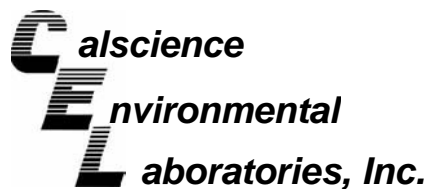
Date Received: N/A
Work Order No: 07-09-1485
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project: Sediment Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-275-1,049	Solid	GC 15	10/09/07	10/09/07	071009B03

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Diesel	100	96	75-123	4	0-12	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



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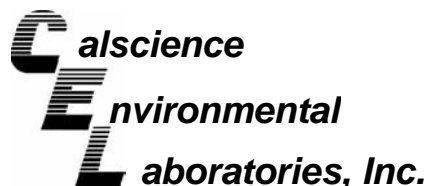
Date Received: N/A
Work Order No: 07-09-1485
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: Sediment Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-308-435	Aqueous	GC 6	09/24/07	09/24/07	070924B01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Diesel	97	101	75-117	4	0-13	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



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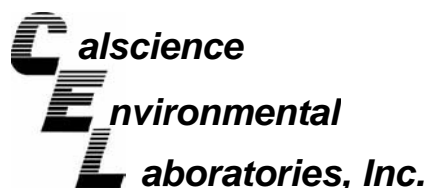
Date Received: N/A
Work Order No: 07-09-1485
Preparation: EPA 3510B
Method: EPA 8270C

Project: Sediment Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-003-2,250	Aqueous	GC/MS MM	09/21/07	09/24/07	070921L05

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	56	56	4-142	0	0-24	
2-Chlorophenol	97	97	53-113	0	0-17	
1,4-Dichlorobenzene	92	92	50-122	0	0-19	
N-Nitroso-di-n-propylamine	120	119	56-146	1	0-22	
4-Chloro-3-Methylphenol	95	95	55-121	0	0-18	
Acenaphthene	80	82	55-139	2	0-17	
4-Nitrophenol	51	51	1-145	1	0-29	
2,4-Dinitrotoluene	90	91	41-161	1	0-22	
Pentachlorophenol	95	94	34-130	1	0-23	
Pyrene	85	84	38-170	1	0-27	
1,2,4-Trichlorobenzene	94	93	49-121	0	0-19	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



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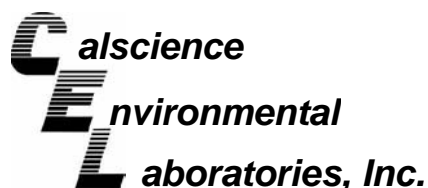
Date Received: N/A
Work Order No: 07-09-1485
Preparation: EPA 3510B
Method: Organotins by Krone et al.

Project: Sediment Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-035-60	Aqueous	GC/MS Y	09/27/07	10/02/07	070927L06

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Tetrabutyltin	76	80	50-130	5	0-20	
Tributyltin	95	99	50-130	4	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



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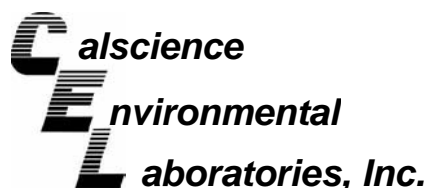
Date Received: N/A
Work Order No: 07-09-1485
Preparation: EPA 3545
Method: Organotins by Krone et al.

Project: Sediment Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-016-481	Solid	GC/MS Y	10/03/07	10/05/07	071003L20

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Tetrabutyltin	94	98	50-130	4	0-20	
Tributyltin	120	124	50-130	3	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



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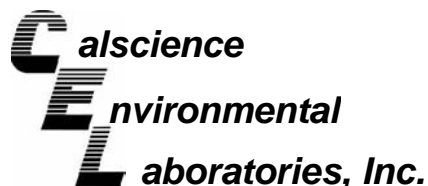
Date Received: N/A
Work Order No: 07-09-1485
Preparation: EPA 3510B
Method: EPA 8082

Project: Sediment Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-527-15	Aqueous	GC 16	09/25/07	09/28/07	070925L11M

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aroclor-1260	92	101	50-135	10	0-25	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



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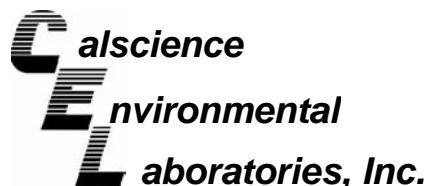
Date Received: N/A
Work Order No: 07-09-1485
Preparation: EPA 3545
Method: EPA 8270C

Project: Sediment Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-549-169	Solid	GC/MS P	09/21/07	09/21/07	070921L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	89	89	59-125	0	0-15	
2-Chlorophenol	94	94	60-114	0	0-15	
1,4-Dichlorobenzene	86	87	61-121	1	0-21	
N-Nitroso-di-n-propylamine	98	100	64-136	2	0-15	
1,2,4-Trichlorobenzene	92	91	58-118	1	0-18	
4-Chloro-3-Methylphenol	89	90	61-121	1	0-14	
Acenaphthene	87	90	59-125	3	0-15	
4-Nitrophenol	89	94	38-152	5	0-31	
2,4-Dinitrotoluene	81	83	51-141	3	0-16	
Pentachlorophenol	83	85	38-116	3	0-20	
Pyrene	88	89	51-141	2	0-14	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



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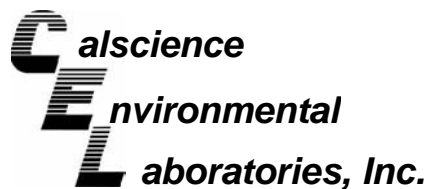
Date Received: N/A
Work Order No: 07-09-1485
Preparation: EPA 3545
Method: EPA 8081A

Project: Sediment Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-563-13	Solid	GC 41	10/04/07	10/05/07	071004L05

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aldrin	79	79	50-135	0	0-25	
Alpha-BHC	75	75	50-135	0	0-25	
Beta-BHC	77	77	50-135	0	0-25	
Delta-BHC	70	70	50-135	0	0-25	
Gamma-BHC	78	78	50-135	0	0-25	
Dieldrin	78	78	50-135	0	0-25	
4,4'-DDD	80	80	50-135	0	0-25	
4,4'-DDE	79	79	50-135	0	0-25	
4,4'-DDT	84	84	50-135	0	0-25	
Endosulfan I	77	77	50-135	0	0-25	
Endosulfan II	78	78	50-135	0	0-25	
Endosulfan Sulfate	76	76	50-135	0	0-25	
Endrin	75	75	50-135	0	0-25	
Endrin Aldehyde	87	87	50-135	0	0-25	
Endrin Ketone	81	81	50-135	0	0-25	
Heptachlor	79	79	50-135	0	0-25	
Heptachlor Epoxide	78	78	50-135	0	0-25	
Methoxychlor	81	81	50-135	0	0-25	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



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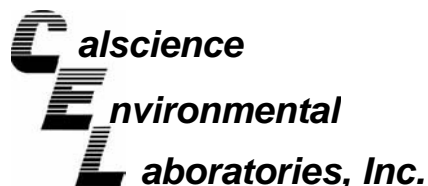
Date Received: N/A
Work Order No: 07-09-1485
Preparation: EPA 3545
Method: EPA 8082

Project: Sediment Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-565-25	Solid	GC 16	10/04/07	10/05/07	071004L06

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aroclor-1016	85	84	50-135	1	0-25	
Aroclor-1260	103	105	50-135	2	0-25	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



ENSR International
5000 East Spring Street
Suite 250
Long Beach, CA 90815-5227

Date Received: N/A
Work Order No: 07-09-1485
Preparation: EPA 3510B
Method: EPA 8081A

Project: Sediment Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-567-2	Aqueous	GC 41	09/25/07	09/26/07	070925L10

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gamma-BHC	105	102	50-135	3	0-25	
Heptachlor	97	91	50-135	6	0-25	
Endosulfan I	93	90	50-135	3	0-25	
Dieldrin	90	87	50-135	3	0-25	
Endrin	108	106	50-135	2	0-25	
4,4'-DDT	116	112	50-135	3	0-25	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Laboratory Control Sample



ENSR International
5000 East Spring Street
Suite 250
Long Beach, CA 90815-5227

Date Received:
Work Order No:

N/A
07-09-1485

Project: Sediment Sampling

Matrix : Aqueous

<u>Parameter</u>	<u>Method</u>	<u>Quality Control Sample ID</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Conc Added</u>	<u>Conc Recovered</u>	<u>LCS %Rec</u>	<u>%Rec CL</u>	<u>Qualifiers</u>
Carbon, Total Organic	SM 5310 D	099-05-097-2,735	09/21/07	N/A	5.00	5.02	100	80-120	
Carbon, Total Organic	EPA 9060	099-06-013-261	10/09/07	N/A	6000	6760	113	80-120	

RPD - Relative Percent Difference , CL - Control Limit

7440 Lincoln Way, Garden Grove, CA 92841-1427 . TEL:(714) 895-5494 . FAX: (714) 894-7501

Glossary of Terms and Qualifiers



Work Order Number: 07-09-1485

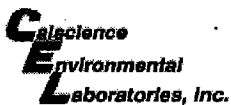
<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.





DATE: 3/2/2005 9/20/07
PAGE: 1 OF 23

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7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

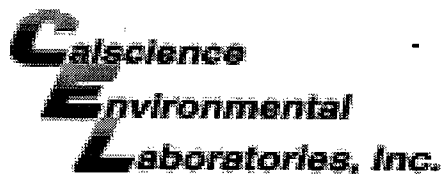
DATE: 3/21/2005 9/20/07
PAGE: 2 OF 43

LABORATORY CLIENT: The RETEC Group, Inc. ADDRESS: 5000 East Spring Street, Suite 250 CITY: Long Beach, CA 90815 TEL: 562/420-2933 FAX: 562/420-2915 E-MAIL:						CLIENT PROJECT NAME / NUMBER: Sediment Sampling PROJECT CONTACT: Michele Woods SAMPLER(S): (SIGNATURE)										P.O. NO.:		QUOTE NO.:					
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 checked="" type="checkbox"/> 10 DAYS SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY) <input type="checkbox"/> RWQCB REPORTING <input type="checkbox"/> ARCHIVE SAMPLES UNTIL ____ / ____ / ____ SPECIAL INSTRUCTIONS Sediment Grain Size to PTS Chronic Bioassay to ABC Laboratories DDT, DDD, and DDE Isomers (2,4' and 4,4') and PCBs to Lancaster Metals: 6010 (Cu,Cd,Cr,Pb,Ni,Zn)						REQUESTED ANALYSIS																	
						Chronic Bioassay (E. Estuarius)	Sediment Grain Size ASTM D464M	2,4'-DDT EPA 8081A	2,4'-DDD EPA 8081A	2,4'-DDE EPA 8081A	4,4'-DDT EPA 8081A	4,4'-DDD EPA 8081A	4,4'-DDE EPA 8081A	PCBs EPA 8082	TPH Carbon Chain (C7-C44)	Total Organic Carbon EPA 9060	Metals EPA 6010	PAHs EPA 8270					
LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING DATE TIME		MAT- RIX	NO. OF CONT.																	
2	R7-092007	Dominguez Ch	9/20/07	10:00	SO	1	X	X	X	X	X	X	X	X	X	X	X	X					
3	R8-092007	Dominguez Ch	9/20/07	10:30	SO	1	X	X	X	X	X	X	X	X	X	X	X	X					
4	R6-092007	Dominguez Ch	9/20/07	11:00	SO	1	X	X	X	X	X	X	X	X	X	X	X	X					
5	R5-092007	Dominguez Ch	9/20/07	12:00	SO	1	X	X	X	X	X	X	X	X	X	X	X	X					
6	R4-092007	Dominguez Ch	9/20/07	14:00	SO	1	X	X	X	X	X	X	X	X	X	X	X	X					
7	R3-092007	Dominguez Ch	9/20/07	15:15	SO	1	X	X	X	X	X	X	X	X	X	X	X	X		could only fill container 73 full			
Relinquished by: (Signature)						Received by: (Signature)														Date: 09/20/07		Time: 16:00	
Relinquished by: (Signature)						Received by: (Signature)														Date: 09/20/07		Time: 17:20	
Relinquished by: (Signature)						Received by: (Signature)														Date:		Time:	



DATE: ~~8/22/05~~ 9/20/07
PAGE: 33 OF 33

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WORK ORDER #: 07 - 09 - 1485

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: RETEC INC

DATE: 09/20/07

TEMPERATURE – SAMPLES RECEIVED BY:
CALSCIENCE COURIER:

- ☐ Chilled, cooler with temperature blank provided.
☐ Chilled, cooler without temperature blank.
☒ Chilled and placed in cooler with wet ice.
☐ Ambient and placed in cooler with wet ice.
☐ Ambient temperature.
☒ 3.5 °C Temperature blank.

LABORATORY (Other than Calscience Courier):

- ☐ °C Temperature blank.
☐ °C IR thermometer.
☐ Ambient temperature.

Initial: RB

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____

 Not Present: ☒
 Initial: RB

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sampler's name indicated on COC.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with custody papers.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Correct containers and volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper preservation noted on sample label(s).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VOA vial(s) free of headspace.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Initial: RB

COMMENTS:

Received 8 containers for (-1), (-2) - (-7) received 1 jar each. 09/20/07

PARTICLE SIZE SUMMARY

(METHODOLOGY: ASTM D422)

PROJECT NAME: N/A
PROJECT NO: 07-10-0285

Sample ID	Depth, ft.	Description USCS/ASTM (1)	Median Grain Size, mm	Particle Size Distribution, wt. percent				
				Gravel	Sand Size			Silt/Clay
					Coarse	Medium	Fine	
R7-100307	N/A	Fine sand	0.222	0.06	0.62	14.08	63.99	21.26
R8-100307	N/A	Fine sand	0.236	0.06	1.37	18.08	64.23	16.26
R6-100307	N/A	Fine sand	0.179	0.00	2.14	31.30	30.81	35.75
R5-100307	N/A	Fine sand	0.141	0.00	2.77	18.14	39.05	40.04
R4-092007	N/A	Fine sand	0.241	2.30	3.92	31.10	28.53	34.14



C.

Particle Size

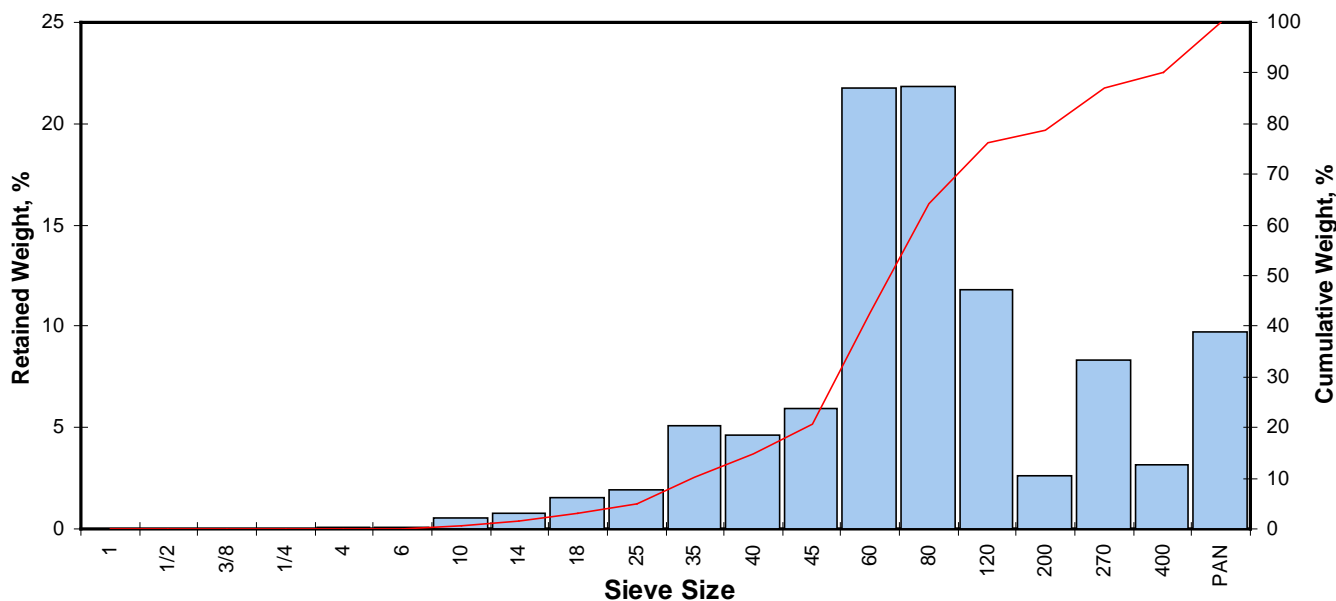
M

PTS F 40

Sample No. 07-10-0285

Depth, ft: N/A

Project No: 07-10-0285



Opening		Phi of Screen	U.S. Sieve No.	Sample Weight grams	Incremental Weight, percent	Cumulative Weight, percent
Inches	Millimeters					
0.9844	25.002	-4.64	1	0.00	0.00	0.00
0.4922	12.501	-3.64	1/2	0.00	0.00	0.00
0.3740	9.500	-3.25	3/8	0.00	0.00	0.00
0.2500	6.351	-2.67	1/4	0.00	0.00	0.00
0.1873	4.757	-2.25	4	0.01	0.06	0.06
0.1324	3.364	-1.75	6	0.01	0.06	0.11
0.0787	2.000	-1.00	10	0.10	0.56	0.67
0.0557	1.414	-0.50	14	0.14	0.79	1.46
0.0394	1.000	0.00	18	0.28	1.57	3.03
0.0278	0.707	0.50	25	0.35	1.96	4.99
0.0197	0.500	1.00	35	0.91	5.10	10.10
0.0166	0.420	1.25	40	0.83	4.66	14.75
0.0139	0.354	1.50	45	1.06	5.95	20.70
0.0098	0.250	2.00	60	3.88	21.76	42.46
0.0070	0.177	2.50	80	3.90	21.87	64.33
0.0049	0.125	3.00	120	2.10	11.78	76.11
0.0029	0.074	3.75	200	0.47	2.64	78.74
0.0021	0.053	4.25	270	1.48	8.30	87.04
0.0015	0.037	4.75	400	0.57	3.20	90.24
			PAN	1.74	9.76	100.00

Cumulative Weight Percent greater than			
Weight percent	Phi Value	Particle Size	
		Inches	Millimeters
5	0.50	0.0278	0.707
10	0.99	0.0198	0.503
16	1.30	0.0160	0.405
25	1.60	0.0130	0.330
40	1.94	0.0102	0.260
50	2.17	0.0087	0.222
60	2.40	0.0075	0.189
75	2.95	0.0051	0.129
84	4.07	0.0023	0.060
90	4.71	0.0015	0.038
95	2.43	0.0073	0.185

Measure	Trask	Inman	Folk-Ward
Median, phi	2.17	2.17	2.17
Median, in.	0.0087	0.0087	0.0087
Median, mm	0.222	0.222	0.222
Mean, phi	2.12	2.68	2.51
Mean, in.	0.0090	0.0061	0.0069
Mean, mm	0.230	0.156	0.175
Sorting	1.599	1.382	0.984
Skewness	0.931	0.371	-0.180
Kurtosis	0.216	-0.301	0.585

Grain Size Description Fine sand
 (ASTM-USCS Scale) (based on Mean from Trask)

Description	Retained on Sieve #	Weight Percent
Gravel	4	0.06
Coarse Sand	10	0.62
Medium Sand	40	14.08
Fine Sand	200	63.99
Silt/Clay	<200	21.26

C.

Particle Size

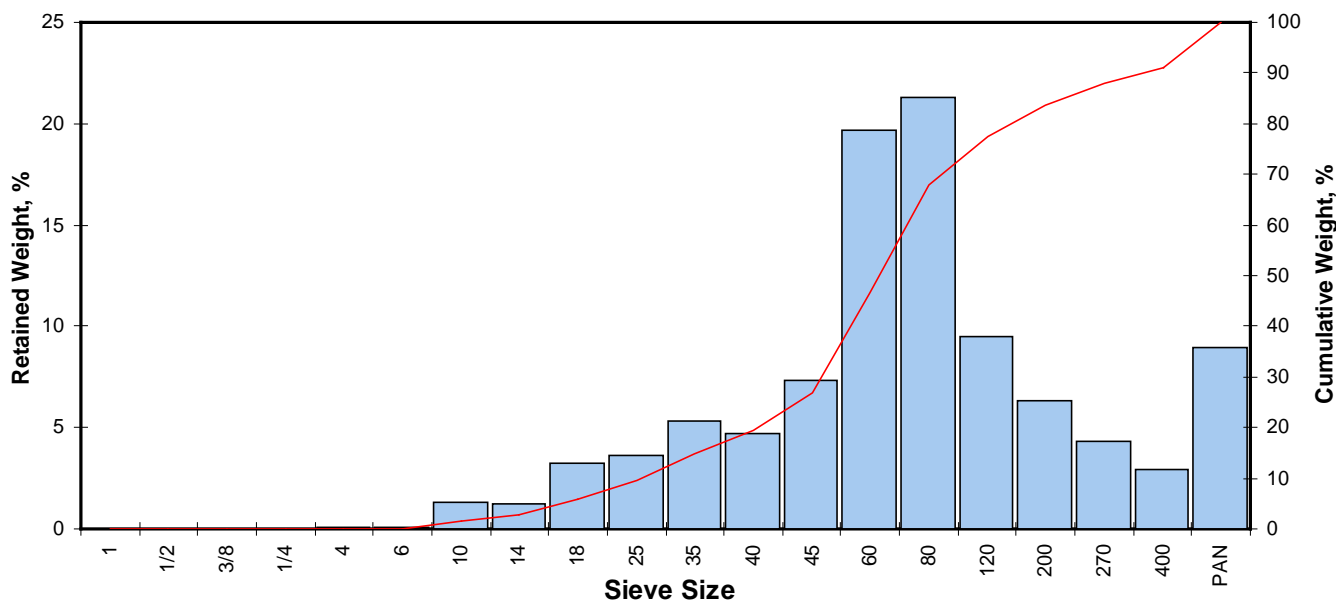
M

PTS F 40

Sample ID: 100007

Depth, ft: N/A

Project No: 07-10-0285



Opening		Phi of Screen	U.S. Sieve No.	Sample Weight grams	Incremental Weight, percent	Cumulative Weight, percent
Inches	Millimeters					
0.9844	25.002	-4.64	1	0.00	0.00	0.00
0.4922	12.501	-3.64	1/2	0.00	0.00	0.00
0.3740	9.500	-3.25	3/8	0.00	0.00	0.00
0.2500	6.351	-2.67	1/4	0.00	0.00	0.00
0.1873	4.757	-2.25	4	0.01	0.06	0.06
0.1324	3.364	-1.75	6	0.01	0.06	0.11
0.0787	2.000	-1.00	10	0.23	1.31	1.43
0.0557	1.414	-0.50	14	0.21	1.20	2.62
0.0394	1.000	0.00	18	0.57	3.25	5.88
0.0278	0.707	0.50	25	0.63	3.59	9.47
0.0197	0.500	1.00	35	0.93	5.31	14.77
0.0166	0.420	1.25	40	0.83	4.73	19.51
0.0139	0.354	1.50	45	1.29	7.36	26.87
0.0098	0.250	2.00	60	3.45	19.68	46.55
0.0070	0.177	2.50	80	3.74	21.33	67.88
0.0049	0.125	3.00	120	1.67	9.53	77.41
0.0029	0.074	3.75	200	1.11	6.33	83.74
0.0021	0.053	4.25	270	0.76	4.34	88.08
0.0015	0.037	4.75	400	0.52	2.97	91.04
			PAN	1.57	8.96	100.00

Cumulative Weight Percent greater than			
Weight percent	Phi Value	Particle Size	
		Inches	Millimeters
5	-0.13	0.0432	1.098
10	0.55	0.0269	0.683
16	1.06	0.0188	0.478
25	1.44	0.0145	0.369
40	1.83	0.0110	0.281
50	2.08	0.0093	0.236
60	2.32	0.0079	0.201
75	2.87	0.0054	0.136
84	3.78	0.0029	0.073
90	4.57	0.0017	0.042
95	2.65	0.0063	0.159

Measure	Trask	Inman	Folk-Ward
Median, phi	2.08	2.08	2.08
Median, in.	0.0093	0.0093	0.0093
Median, mm	0.236	0.236	0.236
Mean, phi	1.98	2.42	2.31
Mean, in.	0.0100	0.0073	0.0079
Mean, mm	0.253	0.187	0.202
Sorting	1.645	1.358	1.101
Skewness	0.950	0.251	-0.169
Kurtosis	0.182	0.026	0.795

Grain Size Description (ASTM-USCS Scale) Fine sand (based on Mean from Trask)

Description	Retained on Sieve #	Weight Percent
Gravel	4	0.06
Coarse Sand	10	1.37
Medium Sand	40	18.08
Fine Sand	200	64.23
Silt/Clay	<200	16.26

C.

Particle Size

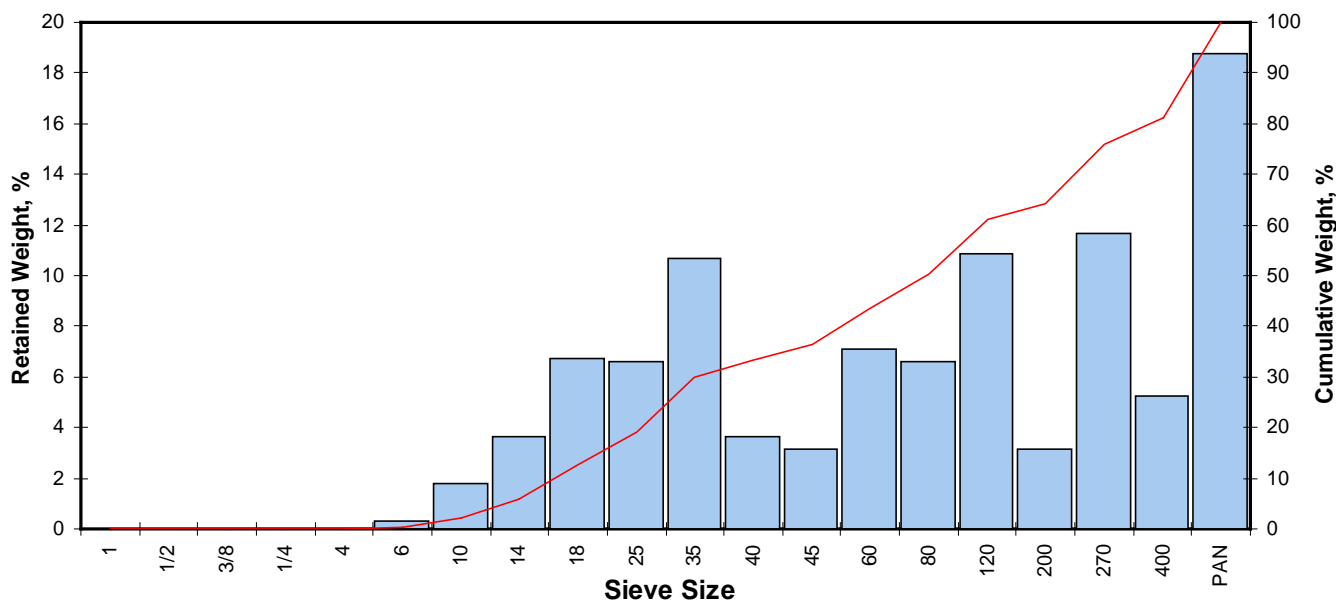
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PTS F 40

Sample ID: 100007

Depth, ft: N/A

Project No: 07-10-0285



Opening		Phi of Screen	U.S. Sieve No.	Sample Weight grams	Incremental Weight, percent	Cumulative Weight, percent
Inches	Millimeters					
0.9844	25.002	-4.64	1	0.00	0.00	0.00
0.4922	12.501	-3.64	1/2	0.00	0.00	0.00
0.3740	9.500	-3.25	3/8	0.00	0.00	0.00
0.2500	6.351	-2.67	1/4	0.00	0.00	0.00
0.1873	4.757	-2.25	4	0.00	0.00	0.00
0.1324	3.364	-1.75	6	0.02	0.33	0.33
0.0787	2.000	-1.00	10	0.11	1.81	2.14
0.0557	1.414	-0.50	14	0.22	3.62	5.77
0.0394	1.000	0.00	18	0.41	6.75	12.52
0.0278	0.707	0.50	25	0.40	6.59	19.11
0.0197	0.500	1.00	35	0.65	10.71	29.82
0.0166	0.420	1.25	40	0.22	3.62	33.44
0.0139	0.354	1.50	45	0.19	3.13	36.57
0.0098	0.250	2.00	60	0.43	7.08	43.66
0.0070	0.177	2.50	80	0.40	6.59	50.25
0.0049	0.125	3.00	120	0.66	10.87	61.12
0.0029	0.074	3.75	200	0.19	3.13	64.25
0.0021	0.053	4.25	270	0.71	11.70	75.95
0.0015	0.037	4.75	400	0.32	5.27	81.22
			PAN	1.14	18.78	100.00

Cumulative Weight Percent greater than			
Weight percent	Phi Value	Particle Size	
		Inches	Millimeters
5	-0.61	0.0599	1.522
10	-0.19	0.0448	1.138
16	0.26	0.0328	0.833
25	0.77	0.0230	0.584
40	1.74	0.0118	0.299
50	2.48	0.0071	0.179
60	2.95	0.0051	0.130
75	4.21	0.0021	0.054
84	4.05	0.0024	0.061
90	2.53	0.0068	0.173
95	1.26	0.0164	0.416

Measure	Trask	Inman	Folk-Ward
Median, phi	2.48	2.48	2.48
Median, in.	0.0071	0.0071	0.0071
Median, mm	0.179	0.179	0.179
Mean, phi	1.65	2.16	2.26
Mean, in.	0.0126	0.0088	0.0082
Mean, mm	0.319	0.224	0.208
Sorting	3.288	1.891	1.229
Skewness	0.992	-0.172	-1.237
Kurtosis	0.275	-0.506	0.223
Grain Size Description (ASTM-USCS Scale)		Fine sand (based on Mean from Trask)	

Description	Retained on Sieve #	Weight Percent
Gravel	4	0.00
Coarse Sand	10	2.14
Medium Sand	40	31.30
Fine Sand	200	30.81
Silt/Clay	<200	35.75

C.

Particle Size

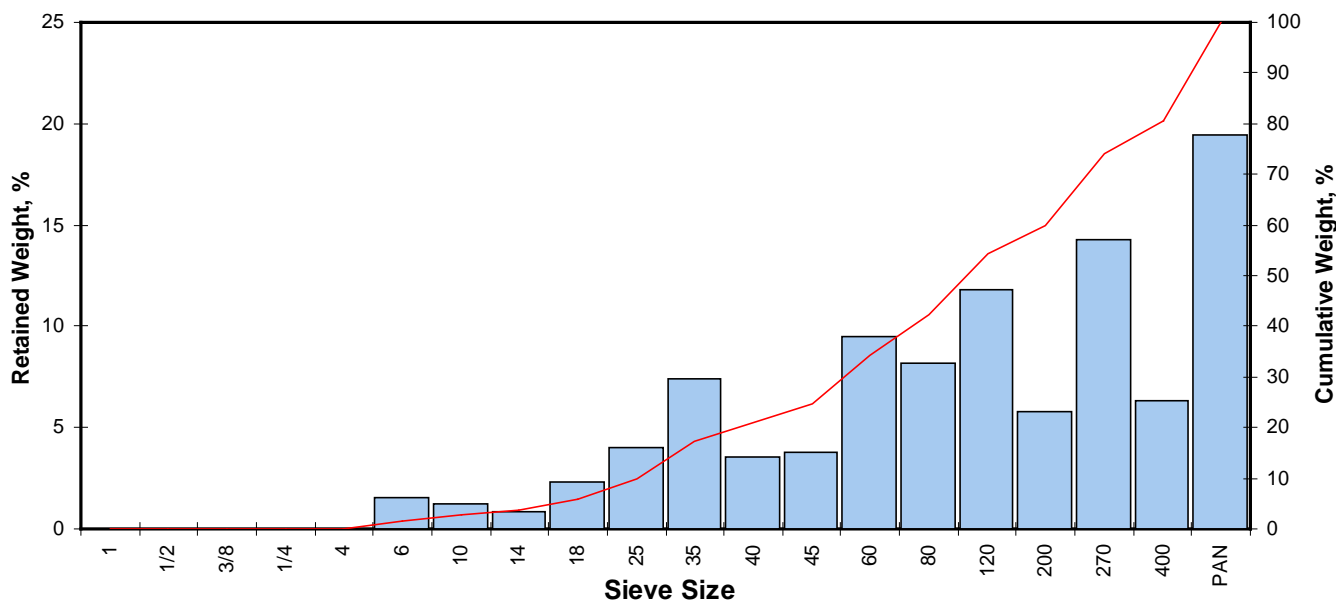
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PTS F 40

Sample No. 100007

Depth, ft: N/A

Project No: 07-10-0285



Opening		Phi of Screen	U.S. Sieve No.	Sample Weight grams	Incremental Weight, percent	Cumulative Weight, percent
Inches	Millimeters					
0.9844	25.002	-4.64	1	0.00	0.00	0.00
0.4922	12.501	-3.64	1/2	0.00	0.00	0.00
0.3740	9.500	-3.25	3/8	0.00	0.00	0.00
0.2500	6.351	-2.67	1/4	0.00	0.00	0.00
0.1873	4.757	-2.25	4	0.00	0.00	0.00
0.1324	3.364	-1.75	6	0.14	1.55	1.55
0.0787	2.000	-1.00	10	0.11	1.22	2.77
0.0557	1.414	-0.50	14	0.08	0.88	3.65
0.0394	1.000	0.00	18	0.21	2.32	5.97
0.0278	0.707	0.50	25	0.36	3.98	9.96
0.0197	0.500	1.00	35	0.67	7.41	17.37
0.0166	0.420	1.25	40	0.32	3.54	20.91
0.0139	0.354	1.50	45	0.34	3.76	24.67
0.0098	0.250	2.00	60	0.86	9.51	34.18
0.0070	0.177	2.50	80	0.74	8.19	42.37
0.0049	0.125	3.00	120	1.07	11.84	54.20
0.0029	0.074	3.75	200	0.52	5.75	59.96
0.0021	0.053	4.25	270	1.29	14.27	74.23
0.0015	0.037	4.75	400	0.57	6.31	80.53
			PAN	1.76	19.47	100.00

Cumulative Weight Percent greater than			
Weight percent	Phi Value	Particle Size	
		Inches	Millimeters
5	-0.21	0.0455	1.156
10	0.50	0.0278	0.706
16	0.91	0.0210	0.533
25	1.52	0.0138	0.349
40	2.36	0.0077	0.195
50	2.82	0.0056	0.141
60	3.75	0.0029	0.074
75	4.31	0.0020	0.050
84	3.90	0.0026	0.067
90	2.44	0.0073	0.184
95	1.22	0.0169	0.429

Measure	Trask	Inman	Folk-Ward
Median, phi	2.82	2.82	2.82
Median, in.	0.0056	0.0056	0.0056
Median, mm	0.141	0.141	0.141
Mean, phi	2.32	2.41	2.54
Mean, in.	0.0079	0.0074	0.0067
Mean, mm	0.200	0.189	0.171
Sorting	2.633	1.498	0.966
Skewness	0.938	-0.278	-1.760
Kurtosis	0.287	-0.523	0.210
Grain Size Description (ASTM-USCS Scale)		Fine sand (based on Mean from Trask)	

Description	Retained on Sieve #	Weight Percent
Gravel	4	0.00
Coarse Sand	10	2.77
Medium Sand	40	18.14
Fine Sand	200	39.05
Silt/Clay	<200	40.04

C.

Particle Size

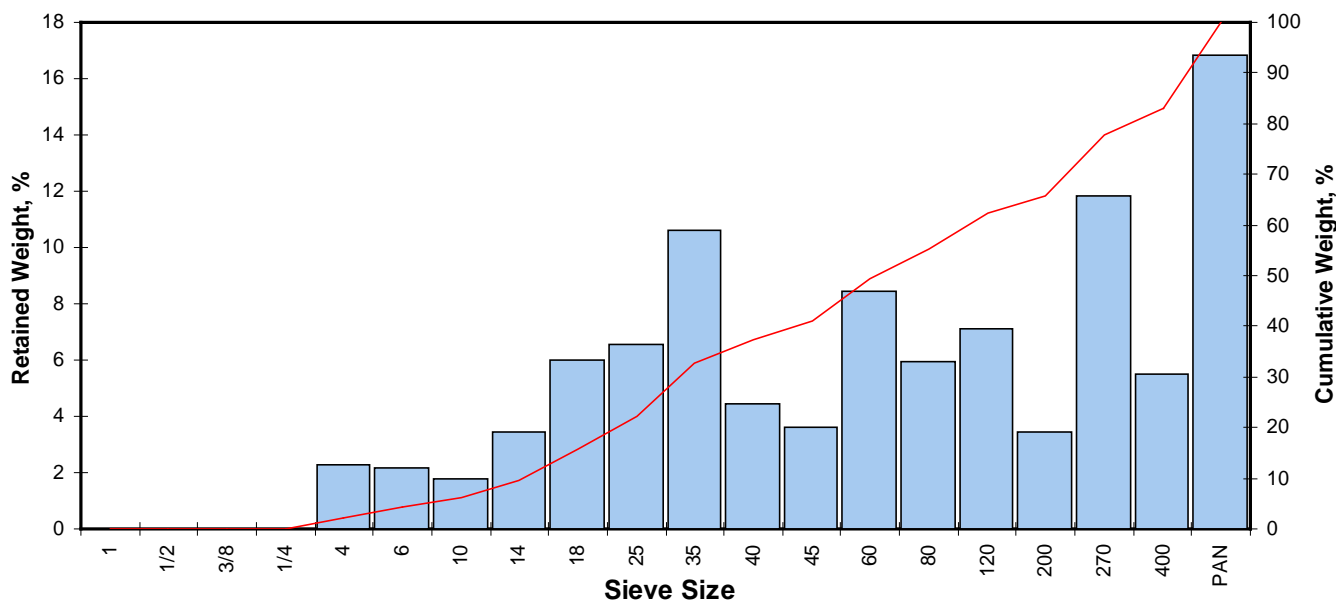
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PTS F 40

Sample ID: R1002307

Depth, ft: N/A

Project No: 07-10-0285



Opening		Phi of Screen	U.S. Sieve No.	Sample Weight grams	Incremental Weight, percent	Cumulative Weight, percent
Inches	Millimeters					
0.9844	25.002	-4.64	1	0.00	0.00	0.00
0.4922	12.501	-3.64	1/2	0.00	0.00	0.00
0.3740	9.500	-3.25	3/8	0.00	0.00	0.00
0.2500	6.351	-2.67	1/4	0.00	0.00	0.00
0.1873	4.757	-2.25	4	0.34	2.30	2.30
0.1324	3.364	-1.75	6	0.32	2.16	4.46
0.0787	2.000	-1.00	10	0.26	1.76	6.22
0.0557	1.414	-0.50	14	0.51	3.45	9.67
0.0394	1.000	0.00	18	0.89	6.02	15.69
0.0278	0.707	0.50	25	0.97	6.56	22.24
0.0197	0.500	1.00	35	1.57	10.62	32.86
0.0166	0.420	1.25	40	0.66	4.46	37.32
0.0139	0.354	1.50	45	0.53	3.58	40.91
0.0098	0.250	2.00	60	1.25	8.45	49.36
0.0070	0.177	2.50	80	0.88	5.95	55.31
0.0049	0.125	3.00	120	1.05	7.10	62.41
0.0029	0.074	3.75	200	0.51	3.45	65.86
0.0021	0.053	4.25	270	1.75	11.83	77.69
0.0015	0.037	4.75	400	0.81	5.48	83.16
			PAN	2.49	16.84	100.00

Cumulative Weight Percent greater than			
Weight percent	Phi Value	Particle Size	
		Inches	Millimeters
5	-1.52	0.1130	2.869
10	-0.47	0.0546	1.387
16	0.02	0.0387	0.984
25	0.63	0.0254	0.646
40	1.44	0.0145	0.369
50	2.05	0.0095	0.241
60	2.83	0.0055	0.141
75	4.14	0.0022	0.057
84	4.51	0.0017	0.044
90	2.82	0.0056	0.141
95	1.41	0.0148	0.376

Measure	Trask	Inman	Folk-Ward
Median, phi	2.05	2.05	2.05
Median, in.	0.0095	0.0095	0.0095
Median, mm	0.241	0.241	0.241
Mean, phi	1.51	2.27	2.20
Mean, in.	0.0138	0.0082	0.0086
Mean, mm	0.352	0.207	0.218
Sorting	3.371	2.245	1.567
Skewness	0.796	0.096	-0.672
Kurtosis	0.237	-0.347	0.343
Grain Size Description (ASTM-USCS Scale)		Fine sand (based on Mean from Trask)	

Description	Retained on Sieve #	Weight Percent
Gravel	4	2.30
Coarse Sand	10	3.92
Medium Sand	40	31.10
Fine Sand	200	28.53
Silt/Clay	<200	34.14



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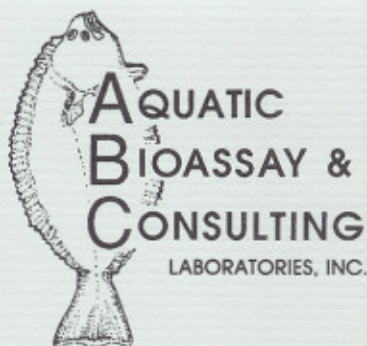
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CHAIN OF CUSTODY RECORD

Date 10-04-07
Page 1 of 1

LABORATORY CLIENT: ADDRESS: X CITY: _____ STATE: _____ ZIP: _____ TEL: _____ E-MAIL: _____						CLIENT PROJECT NAME / NUMBER: <div style="font-size: 1.5em; font-family: cursive;">07-10-0285</div> P.O. NO.: _____ PROJECT CONTACT: <div style="font-size: 1.5em; font-family: cursive;">Bob Stearns</div> LAB USE ONLY <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> SAMPLER(S): (PRINT) _____ COELT LOG CODE <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> COOLER RECEIPT TEMP= _____ °C																		
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input checked="" type="checkbox"/> <i>Normal</i> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" 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: _____						REQUESTED ANALYSES																		
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (FOR COELT EDF)	SAMPLING		MATRIX	NO. OF CONT.	TPH (g)	TPH (d) or (C7-C36) or (C7-C44)	TPH ()	BTEX / MTBE (8260B)	VOCs (8260B)	VOCs+Oxys (8260B)	Encore Prep (5035)	SVOCs (8270C)	Pesticides (8181A)	PCBs (8082)	PNAs (8310) or (8270C)	T22 Metals (6010B/747X)	Cr(VI) [7196A or 7199 or 218.6]	VOCs (TO-14A) or (TO-15)	TPH (g) [TO-3]+	Grain Size	ASTM D4464M	
	R7 - 100307		10/3/07	0915	sed	1																X		
	R8 - 100307		↓	1030	↓	↓																↓		
	R6 - 100307		↓	1145	↓	↓																↓		
	R5 - 100307		↓	1415	↓	↓																↓		
	R4 - 092007		9/20/07	1400	↓	↓																↓		
Relinquished by: (Signature) <i>[Signature]</i>						Received by: (Signature/Affiliation) <i>[Signature]</i>						Date: <u>10/05/07</u>		Time: <u>10:01</u>										
Relinquished by: (Signature)						Received by: (Signature/Affiliation)						Date:		Time:										
Relinquished by: (Signature)						Received by: (Signature/Affiliation)						Date:		Time:										

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the green and Yellow copies respectively.



TOXICITY TESTING • OCEANOGRAPHIC RESEARCH

October 30, 2007

Mr. Bob Stearns
Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, CA 92841-1432

Dear Mr. Stearns:

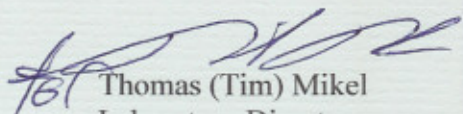
We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Methods for Assessing the Toxicity of Sediment-associated Contaminants with Estuarine and Marine Amphipods*, EPA/600/R-94/025. Results were as follows:

CLIENT:	Calscience Environmental Laboratories, Inc.
SAMPLE I.D.:	R6-100307
DATE RECEIVED:	5 October 2007
ABC LAB. NO.:	CSE1007.072

***Eohaustorius estuarius* 10 Day Survival Sediment Bioassay**

Percent Survival = 84.0% Survival

Yours very truly,


Thomas (Tim) Mikel
Laboratory Director

Amphipod Survival Test-10 Day

Start Date:	10/14/2007	Test ID:	CSE1007072	Sample ID:	CA0000000
End Date:	10/24/2007	Lab ID:	CAABC	Sample Type:	Sed-Sediment
Sample Date:	10/3/2007	Protocol:	EPA/600/R94/025	Test Species:	Ee-Eohaustorius estuarius
Comments:	R6-100307				

Conc-mg/L	1	2	3	4	5
N Control	1.0000	1.0000	0.9500	1.0000	0.9500
100	0.8500	0.6500	0.9000	0.9000	0.9000

Conc-mg/L	Mean	N-Mean	Transform: Arcsin Square Root					t-Stat	1-Tailed Critical	MSD	Isotonic	
			Mean	Min	Max	CV%	N				Mean	N-Mean
N Control	0.9800	1.0000	1.4134	1.3453	1.4588	4.398	5				0.9800	1.0000
*100	0.8400	0.8571	1.1716	0.9377	1.2490	11.506	5	3.642	1.860	0.1234	0.8400	0.8571

Auxiliary Tests

Shapiro-Wilk's Test indicates normal distribution ($p > 0.01$)	Statistic	Critical	Skew	Kurt
F-Test indicates equal variances ($p = 0.16$)	0.78529	0.781	-1.6833	2.83924
	4.70384	23.1545		

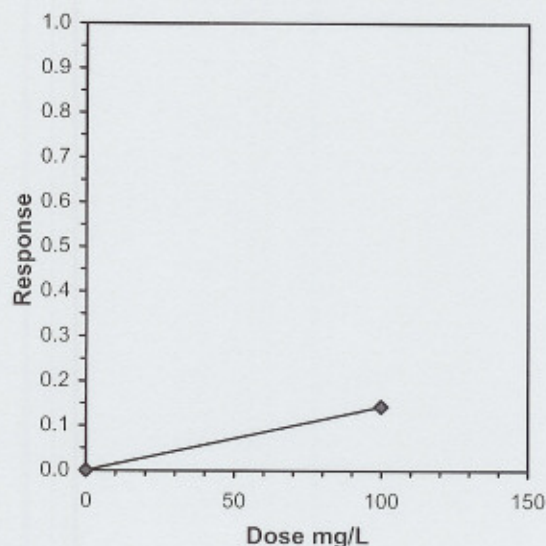
Hypothesis Test (1-tail, 0.05)

Homoscedastic t Test indicates significant differences	MSDu	MSDp	MSB	MSE	F-Prob	df
Treatments vs N Control	0.05226	0.05357	0.14614	0.01102	0.00657	1, 8

Linear Interpolation (200 Resamples)

Point	mg/L	SD	95% CL(Exp)		Skew
IC05*	35.000	12.980	13.078	89.857	0.8419
IC10*	70.000				
IC15	>100				
IC20	>100				
IC25	>100				
IC40	>100				
IC50	>100				

* indicates IC estimate less than the lowest concentration



Amphipod Survival Test-10 Day

Date: 10/14/2007	Test ID: CSE1007072	Sample ID: CA0000000
Date: 10/24/2007	Lab ID: CAABC	Sample Type: Sed-Sediment
Date: 10/3/2007	Protocol: EPA/600/R94/025	Test Species: Ee-Eohaustorius estuarius
its: R6-100307		

Dose-Response Plot

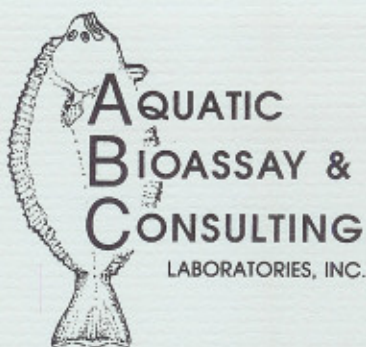


Amphipod Survival Test-10 Day

Start Date: 10/14/2007	Test ID: CSE1007072	Sample ID: CA0000000
End Date: 10/24/2007	Lab ID: CAABC	Sample Type: Sed-Sediment
Sample Date: 10/3/2007	Protocol: EPA/600/R94/025	Test Species: Ee-Eohaustorius estuarius
Comments: R6-100307		

Auxiliary Data Summary

Conc-mg/L	Parameter	Mean	Min	Max	SD	CV%	N
N Control	Temp C	15.00	15.00	15.00	0.00	0.00	2
100		15.00	15.00	15.00	0.00	0.00	2
N Control	pH	7.70	7.70	7.70	0.00	0.00	2
100		7.70	7.70	7.70	0.00	0.00	2
N Control	DO mg/L	9.80	9.50	10.10	0.42	6.65	2
100		9.15	9.10	9.20	0.07	2.91	2
N Control	Salinity ppt	20.00	20.00	20.00	0.00	0.00	2
100		20.00	20.00	20.00	0.00	0.00	2



TOXICITY TESTING • OCEANOGRAPHIC RESEARCH

October 30, 2007

Mr. Bob Stearns
 Calscience Environmental Laboratories, Inc.
 7440 Lincoln Way
 Garden Grove, CA 92841-1432

Dear Mr. Stearns:

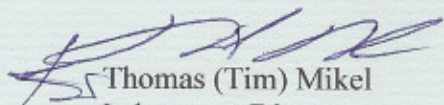
We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Methods for Assessing the Toxicity of Sediment-associated Contaminants with Estuarine and Marine Amphipods*, EPA/600/R-94/025. Results were as follows:

CLIENT:	Calscience Environmental Laboratories, Inc.
SAMPLE I.D.:	R7-100307
DATE RECEIVED:	5 October 2007
ABC LAB. NO.:	CSE1007.073

***Eohaustorius estuarius* 10 Day Survival Sediment Bioassay**

Percent Survival = 85.0% Survival

Yours very truly,


 Thomas (Tim) Mikel
 Laboratory Director

Amphipod Survival Test-10 Day

Start Date: 10/14/2007	Test ID: CSE1007073	Sample ID: CA0000000
End Date: 10/24/2007	Lab ID: CAABC	Sample Type: Sed-Sediment
Sample Date: 10/3/2007	Protocol: EPA/600/R94/025	Test Species: Ee-Eohaustorius estuarius
Comments: R7-100307		

Conc-mg/L	1	2	3	4	5
N Control	1.0000	1.0000	0.9500	1.0000	0.9500
100	0.8000	0.9000	0.8500	0.7500	0.9500

Conc-mg/L	Mean	N-Mean	Transform: Arcsin Square Root					t-Stat	1-Tailed Critical	MSD	Isotonic	
			Mean	Min	Max	CV%	N				Mean	N-Mean
N Control	0.9800	1.0000	1.4134	1.3453	1.4588	4.398	5				0.9800	1.0000
*100	0.8500	0.8673	1.1844	1.0472	1.3453	9.899	5	3.859	1.860	0.1104	0.8500	0.8673

Auxiliary Tests

Shapiro-Wilk's Test indicates normal distribution ($p > 0.01$)	Statistic	Critical	Skew	Kurt
F-Test indicates equal variances ($p = 0.25$)	0.94662	0.781	0.20983	-0.3005
	3.55825	23.1545		

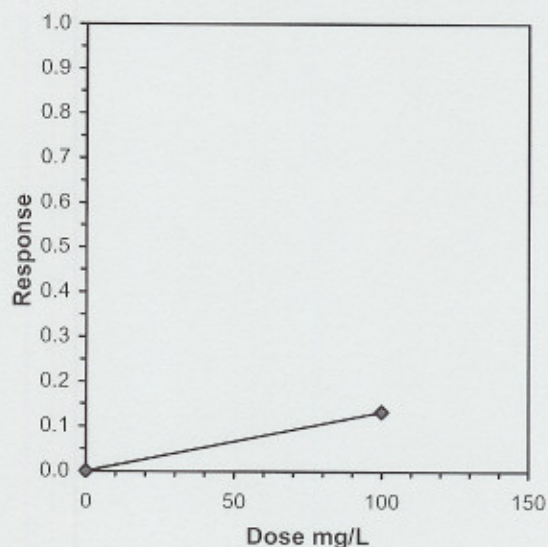
Hypothesis Test (1-tail, 0.05)

	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates significant differences	0.04543	0.04657	0.13112	0.0088	0.00482	1, 8
Treatments vs N Control						

Linear Interpolation (200 Resamples)

Point	mg/L	SD	95% CL(Exp)	Skew
IC05*	37.692			
IC10*	75.385			
IC15	>100			
IC20	>100			
IC25	>100			
IC40	>100			
IC50	>100			

* indicates IC estimate less than the lowest concentration



Amphipod Survival Test-10 Day

Start Date:	10/14/2007	Test ID:	CSE1007073	Sample ID:	CA0000000
End Date:	10/24/2007	Lab ID:	CAABC	Sample Type:	Sed-Sediment
Sample Date:	10/3/2007	Protocol:	EPA/600/R94/025	Test Species:	Ee-Eohaustorius estuarius
Comments:	R7-100307				

Dose-Response Plot



Amphipod Survival Test-10 Day

Start Date: 10/14/2007	Test ID: CSE1007073	Sample ID: CA0000000
End Date: 10/24/2007	Lab ID: CAABC	Sample Type: Sed-Sediment
Sample Date: 10/3/2007	Protocol: EPA/600/R94/025	Test Species: Ee-Eohaustorius estuarius
Comments: R7-100307		

Auxiliary Data Summary

Conc-mg/L	Parameter	Mean	Min	Max	SD	CV%	N
N Control	Temp C	15.00	15.00	15.00	0.00	0.00	2
100		15.00	15.00	15.00	0.00	0.00	2
N Control	pH	7.70	7.70	7.70	0.00	0.00	2
100		7.70	7.70	7.70	0.00	0.00	2
N Control	DO mg/L	9.80	9.50	10.10	0.42	6.65	2
100		9.10	9.00	9.20	0.14	4.13	2
N Control	Salinity ppt	20.00	20.00	20.00	0.00	0.00	2
100		20.00	20.00	20.00	0.00	0.00	2



TOXICITY TESTING • OCEANOGRAPHIC RESEARCH

October 30, 2007

Mr. Bob Stearns
Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, CA 92841-1432

Dear Mr. Stearns:

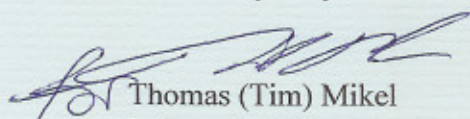
We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Methods for Assessing the Toxicity of Sediment-associated Contaminants with Estuarine and Marine Amphipods*, EPA/600/R-94/025. Results were as follows:

CLIENT:	Calscience Environmental Laboratories, Inc.
SAMPLE I.D.:	R5-100307
DATE RECEIVED:	5 October 2007
ABC LAB. NO.:	CSE1007.071

***Eohaustorius estuarius* 10 Day Survival Sediment Bioassay**

Percent Survival = 97.0% Survival

Yours very truly,


Thomas (Tim) Mikel
Laboratory Director

Amphipod Survival Test-10 Day

Start Date:	10/14/2007	Test ID:	CSE1007071	Sample ID:	CA0000000
End Date:	10/24/2007	Lab ID:	CAABC	Sample Type:	Sed-Sediment
Sample Date:	10/3/2007	Protocol:	EPA/600/R94/025	Test Species:	Ee-Eohaustorius estuarius
Comments:	R5-100307				

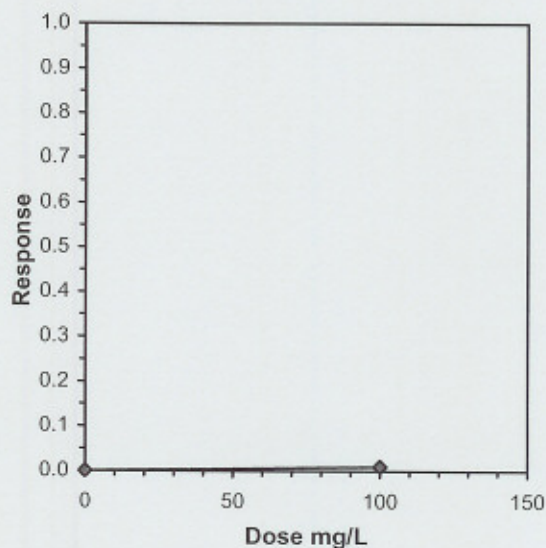
Conc-mg/L	1	2	3	4	5
N Control	1.0000	1.0000	0.9500	1.0000	0.9500
100	0.9500	1.0000	1.0000	0.9500	0.9500

Conc-mg/L	Mean	N-Mean	Transform: Arcsin Square Root					t-Stat	1-Tailed Critical	MSD	Isotonic	
			Mean	Min	Max	CV%	N				Mean	N-Mean
N Control	0.9800	1.0000	1.4134	1.3453	1.4588	4.398	5				0.9800	1.0000
100	0.9700	0.9898	1.3907	1.3453	1.4588	4.469	5	0.577	1.860	0.0731	0.9700	0.9898

Auxiliary Tests	Statistic		Critical	Skew	Kurt	
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.79894		0.781	0	-2.2768	
F-Test indicates equal variances (p = 1.00)	1		23.1545			
Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs N Control	0.02763	0.02832	0.00129	0.00386	0.57958	1, 8

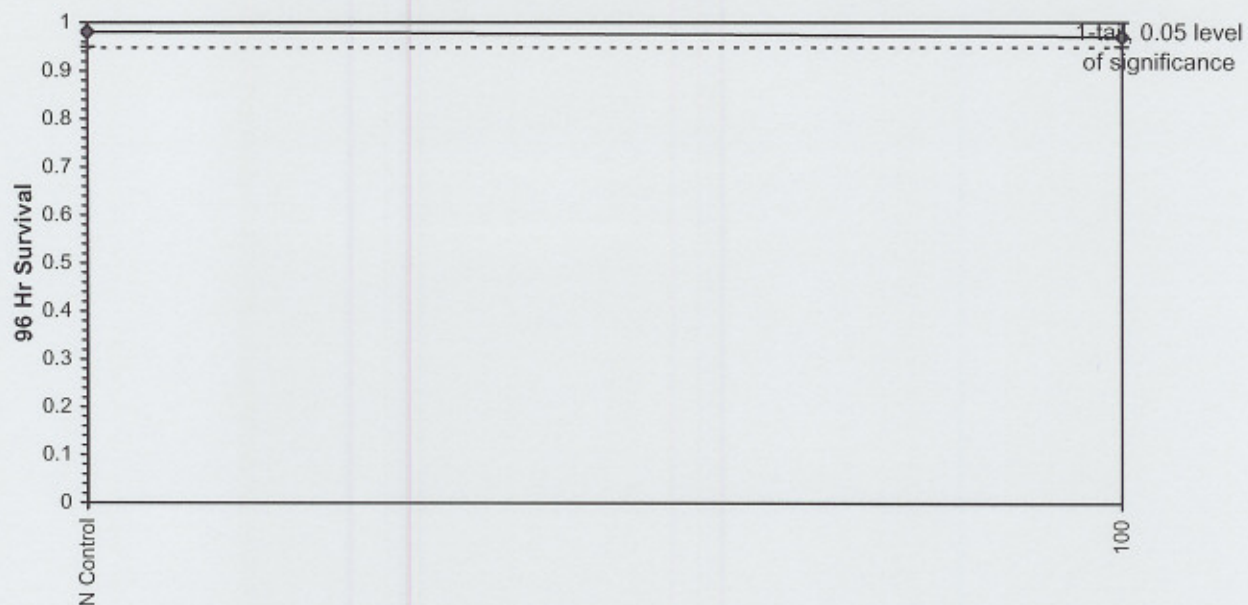
Linear Interpolation (200 Resamples)

Point	mg/L	SD	95% CL(Exp)	Skew
IC05	>100			
IC10	>100			
IC15	>100			
IC20	>100			
IC25	>100			
IC40	>100			
IC50	>100			



Amphipod Survival Test-10 Day

Start Date:	10/14/2007	Test ID:	CSE1007071	Sample ID:	CA0000000
End Date:	10/24/2007	Lab ID:	CAABC	Sample Type:	Sed-Sediment
Sample Date:	10/3/2007	Protocol:	EPA/600/R94/025	Test Species:	Ee-Eohaustorius estuarius
Comments:	R5-100307				

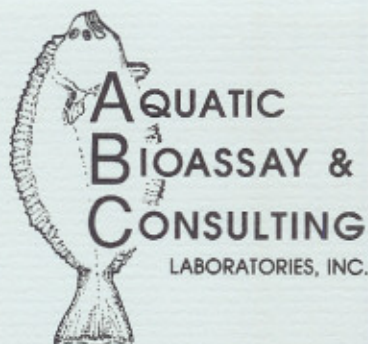
Dose-Response Plot

Amphipod Survival Test-10 Day

Start Date: 10/14/2007	Test ID: CSE1007071	Sample ID: CA0000000
End Date: 10/24/2007	Lab ID: CAABC	Sample Type: Sed-Sediment
Sample Date: 10/3/2007	Protocol: EPA/600/R94/025	Test Species: Ee-Eohaustorius estuarius
Comments: R5-100307		

Auxiliary Data Summary

Conc-mg/L	Parameter	Mean	Min	Max	SD	CV%	N
N Control	Temp C	15.00	15.00	15.00	0.00	0.00	2
100		15.00	15.00	15.00	0.00	0.00	2
N Control	pH	7.70	7.70	7.70	0.00	0.00	2
100		7.70	7.70	7.70	0.00	0.00	2
N Control	DO mg/L	9.80	9.50	10.10	0.42	6.65	2
100		9.00	8.90	9.10	0.14	4.18	2
N Control	Salinity ppt	20.00	20.00	20.00	0.00	0.00	2
100		20.00	20.00	20.00	0.00	0.00	2



TOXICITY TESTING • OCEANOGRAPHIC RESEARCH

October 30, 2007

Mr. Bob Stearns
Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, CA 92841-1432

Dear Mr. Stearns:

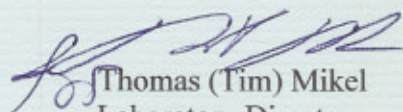
We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Methods for Assessing the Toxicity of Sediment-associated Contaminants with Estuarine and Marine Amphipods*, EPA/600/R-94/025. Results were as follows:

CLIENT:	Calscience Environmental Laboratories, Inc.
SAMPLE I.D.:	R8-100307
DATE RECEIVED:	5 October 2007
ABC LAB. NO.:	CSE1007.074

***Eohaustorius estuarius* 10 Day Survival Sediment Bioassay**

Percent Survival = 86.0% Survival

Yours very truly,


Thomas (Tim) Mikel
Laboratory Director

Amphipod Survival Test-10 Day

Start Date:	10/14/2007	Test ID:	CSE1007074	Sample ID:	CA0000000
End Date:	10/24/2007	Lab ID:	CAABC	Sample Type:	Sed-Sediment
Sample Date:	10/3/2007	Protocol:	EPA/600/R94/025	Test Species:	Ee-Eohaustorius estuarius
Comments:	R8-100307				

Conc-mg/L	1	2	3	4	5
N Control	1.0000	1.0000	0.9500	1.0000	0.9500
100	0.8500	0.8500	0.8000	0.8500	0.9500

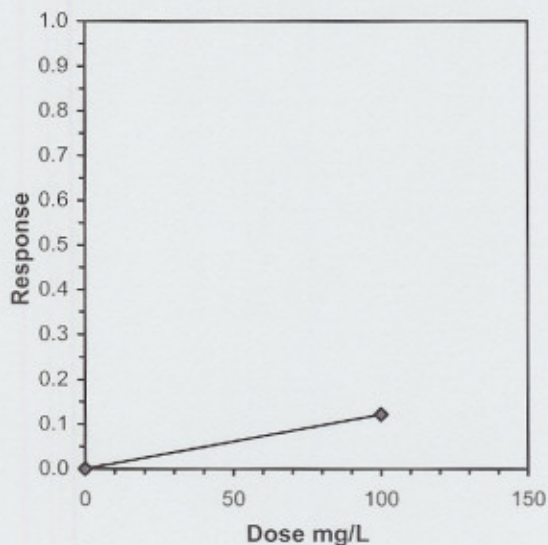
Conc-mg/L	Mean	N-Mean	Transform: Arcsin Square Root					t-Stat	1-Tailed Critical	MSD	Isotonic	
			Mean	Min	Max	CV%	N				Mean	N-Mean
N Control	0.9800	1.0000	1.4134	1.3453	1.4588	4.398	5				0.9800	1.0000
*100	0.8600	0.8776	1.1943	1.1071	1.3453	7.458	5	4.509	1.860	0.0903	0.8600	0.8776

Auxiliary Tests	Statistic		Critical		Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution ($p > 0.01$)	0.90326		0.781		0.87654	0.68681
F-Test indicates equal variances ($p = 0.50$)	2.05408		23.1545			
Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates significant differences Treatments vs N Control	0.03556	0.03645	0.11993	0.0059	0.00198	1, 8

Linear Interpolation (200 Resamples)

Point	mg/L	SD	95% CL(Exp)	Skew
IC05*	40.833			
IC10*	81.667			
IC15	>100			
IC20	>100			
IC25	>100			
IC40	>100			
IC50	>100			

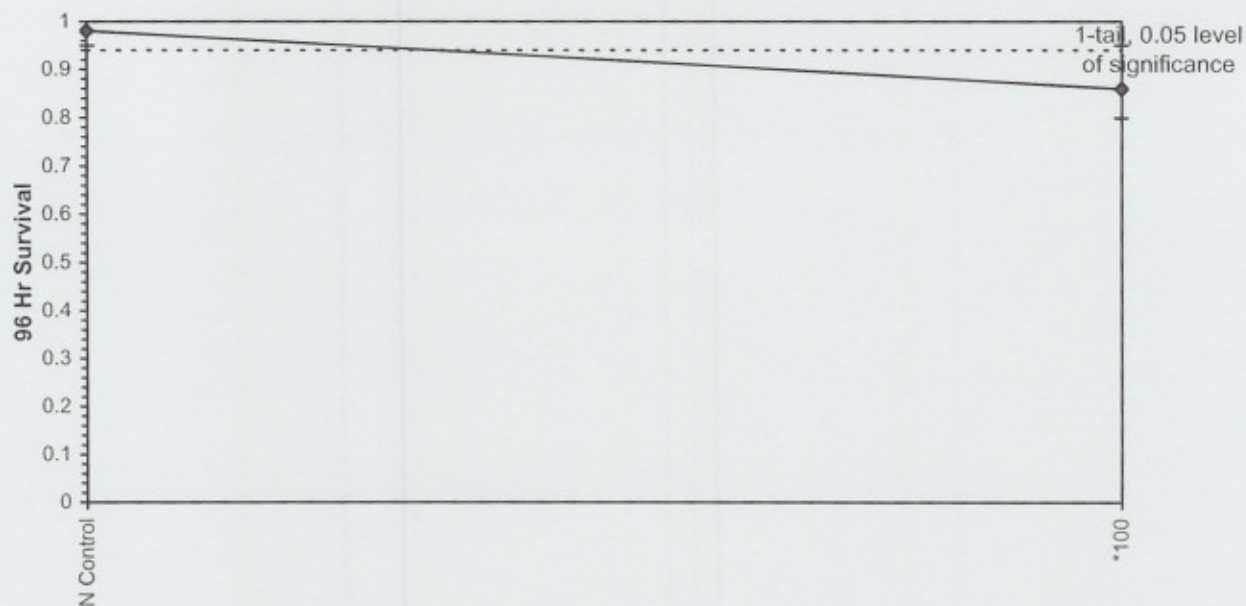
* indicates IC estimate less than the lowest concentration



Amphipod Survival Test-10 Day

Date: 10/14/2007	Test ID: CSE1007074	Sample ID: CA0000000
Date: 10/24/2007	Lab ID: CAABC	Sample Type: Sed-Sediment
Date: 10/3/2007	Protocol: EPA/600/R94/025	Test Species: Ee-Eohaustorius estuarius
Tests: R8-100307		

Dose-Response Plot



Amphipod Survival Test-10 Day

Start Date:	10/14/2007	Test ID:	CSE1007074	Sample ID:	CA0000000
End Date:	10/24/2007	Lab ID:	CAABC	Sample Type:	Sed-Sediment
Sample Date:	10/3/2007	Protocol:	EPA/600/R94/025	Test Species:	Ee-Eohaustorius estuarius
Comments:	R8-100307				

Auxiliary Data Summary

Conc-mg/L	Parameter	Mean	Min	Max	SD	CV%	N
N Control	Temp C	15.00	15.00	15.00	0.00	0.00	2
100		15.00	15.00	15.00	0.00	0.00	2
N Control	pH	7.70	7.70	7.70	0.00	0.00	2
100		7.70	7.70	7.70	0.00	0.00	2
N Control	DO mg/L	9.80	9.50	10.10	0.42	6.65	2
100		9.30	9.10	9.50	0.28	5.72	2
N Control	Salinity ppt	20.00	20.00	20.00	0.00	0.00	2
100		20.00	20.00	20.00	0.00	0.00	2



TOXICITY TESTING • OCEANOGRAPHIC RESEARCH

96 Hour *Eohaustorius estuarius* Survival Bioassay - Standard Toxicant

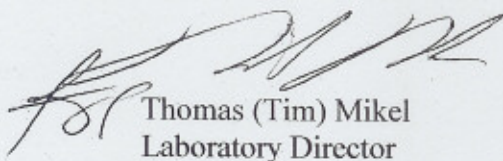
DATE: 19 October -07

STANDARD TOXICANT: Cadmium Chloride

ENDPOINT: SURVIVAL

IC25 =	0.83 mg/l
IC50 =	1.69 mg/l

Yours very truly,



Thomas (Tim) Mikel
Laboratory Director

Amphipod Survival Test-96 Hour

Start Date:	10/19/2007	Test ID:	EOH101907	Sample ID:	CA00000000
End Date:	10/23/2007	Lab ID:	CAABC	Sample Type:	CDCL-Cadmium chloride
Sample Date:	10/19/2007	Protocol:	epa/600/R-94/025	Test Species:	Ee-Eohaustorius estuarius
Comments:	Standard Toxicant				

Conc-mg/L	1	2	3
N Control	1.0000	1.0000	1.0000
0.32	1.0000	1.0000	1.0000
1	0.8000	0.6000	0.6000
3.2	0.3000	0.1000	0.0000
5.6	0.1000	0.1000	0.0000
10	0.0000	0.0000	0.0000

Conc-mg/L	Mean	N-Mean	Transform: Arcsin Square Root					Isotonic	
			Mean	Min	Max	CV%	N	Mean	N-Mean
N Control	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	3		
0.32	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	3		
1	0.6667	0.6667	0.9598	0.8861	1.1071	13.299	3		
3.2	0.1333	0.1333	0.3534	0.1588	0.5796	60.049	3		
5.6	0.0667	0.0667	0.2674	0.1588	0.3218	35.184	3		
10	0.0000	0.0000	0.1588	0.1588	0.1588	0.000	3		

Auxiliary Tests

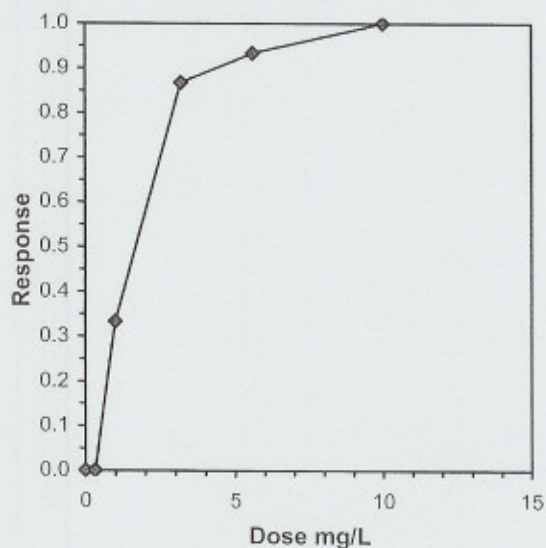
Shapiro-Wilk's Test indicates normal distribution ($p > 0.01$)

Equality of variance cannot be confirmed

Statistic	Critical	Skew	Kurt
0.88567	0.858	0.49564	2.22068

Linear Interpolation (200 Resamples)

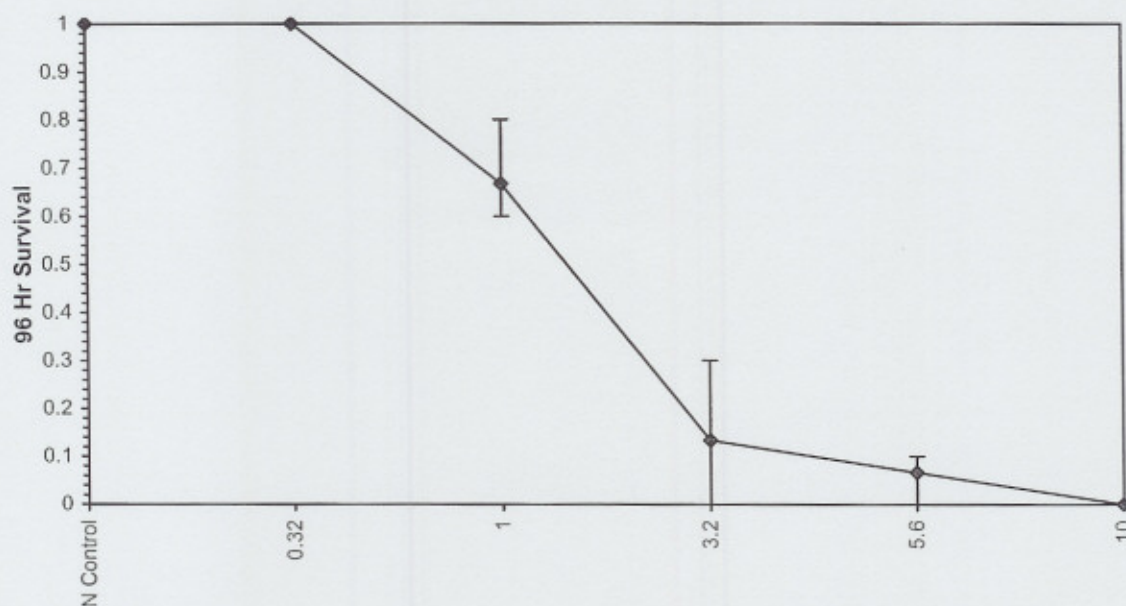
Point	mg/L	SD	95% CL(Exp)		Skew
IC05	0.4220	0.0191	0.3863	0.4778	1.0519
IC10	0.5240	0.0382	0.4526	0.6356	1.0519
IC15	0.6260	0.0573	0.5189	0.7933	1.0519
IC20	0.7280	0.0764	0.5852	0.9511	1.0519
IC25	0.8300	0.0944	0.6515	1.1077	0.9806
IC40	1.2750	0.2041	0.6975	2.0191	-0.0119
IC50	1.6875	0.1839	1.0838	2.3997	0.1707



Amphipod Survival Test-96 Hour

Start Date:	10/19/2007	Test ID:	EOH101907	Sample ID:	CA0000000
End Date:	10/23/2007	Lab ID:	CAABC	Sample Type:	CDCL-Cadmium chloride
Sample Date:	10/19/2007	Protocol:	epa/600/R-94/025	Test Species:	Ee-Eohaustorius estuarius
Comments:	Standard Toxicant				

Dose-Response Plot



Amphipod Survival Test-96 Hour

Start Date:	10/19/2007	Test ID:	EOH101907	Sample ID:	CA0000000
End Date:	10/23/2007	Lab ID:	CAABC	Sample Type:	CDCL-Cadmium chloride
Sample Date:	10/19/2007	Protocol:	epa/600/R-94/025	Test Species:	Ee-Eohaustorius estuarius
Comments:	Standard Toxicant				

Auxiliary Data Summary

Conc-mg/L	Parameter	Mean	Min	Max	SD	CV%	N
N Control	Temp C	15.00	15.00	15.00	0.00	0.00	2
0.32		15.00	15.00	15.00	0.00	0.00	2
1		15.00	15.00	15.00	0.00	0.00	2
3.2		15.00	15.00	15.00	0.00	0.00	2
5.6		15.00	15.00	15.00	0.00	0.00	2
10		15.00	15.00	15.00	0.00	0.00	2
N Control	pH	7.70	7.70	7.70	0.00	0.00	2
0.32		7.70	7.70	7.70	0.00	0.00	2
1		7.65	7.60	7.70	0.07	3.48	2
3.2		7.70	7.70	7.70	0.00	0.00	2
5.6		7.70	7.70	7.70	0.00	0.00	2
10		7.65	7.60	7.70	0.07	3.48	2
N Control	DO mg/L	5.55	5.10	6.00	0.64	14.37	2
0.32		5.40	4.90	5.90	0.71	15.57	2
1		5.35	4.80	5.90	0.78	16.48	2
3.2		5.35	4.70	6.00	0.92	17.92	2
5.6		5.25	4.70	5.80	0.78	16.80	2
10		5.15	4.60	5.70	0.78	17.13	2
N Control	Salinity ppt	20.00	20.00	20.00	0.00	0.00	2
0.32		20.00	20.00	20.00	0.00	0.00	2
1		20.00	20.00	20.00	0.00	0.00	2
3.2		20.00	20.00	20.00	0.00	0.00	2
5.6		20.00	20.00	20.00	0.00	0.00	2
10		20.00	20.00	20.00	0.00	0.00	2

Calscience Environmental Laboratories, Inc.

☒ SoCal Laboratory
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494

☐ NorCal Service Center
5063 Commercial Circle, Suite H
Concord, CA 94520-8577
(925) 689-9022

TO: ABC Labs

CHAIN OF CUSTODY RECORD

Date 10-04-07

Page 1 of 1

LABORATORY CLIENT:						CLIENT PROJECT NAME / NUMBER: #0-02 07-10-0285								P.O. NO.:								
ADDRESS:						PROJECT CONTACT: Bob Stearns								LAB USE ONLY <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>								
CITY:		STATE:				ZIP:		SAMPLER(S) (PRINT)				COELT LOG CODE <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		COOLER RECEIPT TEMP= _____ °C								
TEL:		E-MAIL:																				
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 Normal TAT <input checked="" type="checkbox"/> 10 DAYS						REQUESTED ANALYSES																
SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY) <input type="checkbox"/> RWQCB REPORTING FORMS <input type="checkbox"/> COELT EDF <input type="checkbox"/>																						
SPECIAL INSTRUCTIONS: * E. Estuarinus																						
LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (FOR COELT EDF)	SAMPLING		MATRIX	NO OF CONT.	TPH (g)	TPH (d) or (C7-C36) or (C7-C44)	TPH ()	BTEX / MTBE (8260B)	VOCs (8260B)	VOCs+Oxys (8260B)	Encore Prep (5035)	SVOCs (8270C)	Pesticides (8181A)	PCBs (8082)	PNAs (8310) or (8270C)	T22 Metals (6010B/747X)	Cr(VI)(7196A or 7199 or 218.6)	VOCs (TO-14A) or (TO-15)	TPH (g)[TO-3]+	Chronic Bioassay
			DATE	TIME																		
	R7-100307		10/3/07	0915	Sed	2																X
	R8-100307		↓	1030	↓	↓																↓
	R6-100307		↓	1145	↓	↓																↓
	R5-100307		↓	215	↓	↓																↓
Relinquished by: (Signature)						Received by: (Signature/Affiliation)						Date:		Time:								
Relinquished by: (Signature)						Received by: (Signature/Affiliation)						Date:		Time:								
Relinquished by: (Signature)						Received by: (Signature/Affiliation)						Date:		Time:								