

APPENDIX G

Section 53

Arroyo Simi Sediment, February 27, 2009
Test America Analytical Laboratory Report

LABORATORY REPORT

Prepared For: MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project: Annual Sediment Arroyo
Simi-Frontier Park
Boeing SSFL NPDES

Sampled: 02/27/09
Received: 02/27/09
Revised: 04/22/09 08:30

NELAP #01108CA California ELAP#2706 CSDLAC #10256 AZ #AZ0671 NV #CA01531

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.

This entire report was reviewed and approved for release.

SAMPLE CROSS REFERENCE

SUBCONTRACTED: Refer to the last page for specific subcontract laboratory information included in this report.

ADDITIONAL INFORMATION: This is a revised report to include the revised subcontract report from ABC Labs.

LABORATORY ID

ISB3201-01

CLIENT ID

Arroyo Simi-FP

MATRIX

Soil

Reviewed By:



TestAmerica Irvine

Joseph Doak
Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Annual Sediment Arroyo Simi-Frontier Park
 Boeing SSFL NPDES
 Report Number: ISB3201

Sampled: 02/27/09
 Received: 02/27/09

ORGANOCHLORINE PESTICIDES (EPA 8081A)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB3201-01 (Arroyo Simi-FP - Soil)									
Reporting Units: ug/kg									
4,4'-DDD	EPA 3545/8081A	9C05041	1.5	5.0	ND	1	03/05/09	03/07/09	C-1
4,4'-DDE	EPA 3545/8081A	9C05041	1.5	5.0	ND	1	03/05/09	03/07/09	
4,4'-DDT	EPA 3545/8081A	9C05041	1.5	5.0	ND	1	03/05/09	03/07/09	C-2
Dieldrin	EPA 3545/8081A	9C05041	1.5	5.0	ND	1	03/05/09	03/07/09	
Chlordane	EPA 3545/8081A	9C05041	10	50	ND	1	03/05/09	03/07/09	
Toxaphene	EPA 3545/8081A	9C05041	50	200	ND	1	03/05/09	03/07/09	
Surrogate: Decachlorobiphenyl (45-120%)					81 %				
Surrogate: Tetrachloro-m-xylene (35-115%)					91 %				

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 Report Number: ISB3201

Sampled: 02/27/09
 Received: 02/27/09

POLYCHLORINATED BIPHENYLS (EPA 3545/8082)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB3201-01 (Arroyo Simi-FP - Soil) - cont.									
Reporting Units: ug/kg									
Aroclor 1016	EPA 8082	9C03069	6.7	50	ND	1	03/03/09	03/03/09	
Aroclor 1221	EPA 8082	9C03069	6.7	50	ND	1	03/03/09	03/03/09	
Aroclor 1232	EPA 8082	9C03069	6.7	50	ND	1	03/03/09	03/03/09	
Aroclor 1242	EPA 8082	9C03069	6.7	50	ND	1	03/03/09	03/03/09	
Aroclor 1248	EPA 8082	9C03069	6.7	50	ND	1	03/03/09	03/03/09	
Aroclor 1254	EPA 8082	9C03069	6.7	50	ND	1	03/03/09	03/03/09	
Aroclor 1260	EPA 8082	9C03069	6.7	50	ND	1	03/03/09	03/03/09	
<i>Surrogate: Decachlorobiphenyl (45-120%)</i>					75 %				

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Received: 02/27/09

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB3201-01 (Arroyo Simi-FP - Soil) - cont.									
Reporting Units: %									
Percent Moisture	EPA 160.3	9C05161	0.10	0.10	19	1	03/05/09	03/05/09	
Sample ID: ISB3201-01 (Arroyo Simi-FP - Soil)									
Reporting Units: mg/kg									
Ammonia-N	SM4500NH3-D, MOD.9C06125		2.0	5.0	4.0	0.998	03/06/09	03/06/09	J

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NPDES - 3865

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Project ID: Annual Sediment Arroyo Simi-Frontier Park
Boeing SSFL NPDES
Report Number: ISB3201

Sampled: 02/27/09
Received: 02/27/09

TOTAL ORGANIC CARBON (EPA 9060A MOD.)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB3201-01 (Arroyo Simi-FP - Soil) - cont.									
Reporting Units: mg/kg									
Total Organic Carbon	EPA 9060A MOD.	9C09001	1000	5000	ND	0.995	03/06/09	03/09/09	

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Boeing SSFL NPDES
Report Number: ISB3201

Sampled: 02/27/09
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ASTM D422

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB3201-01 (Arroyo Simi-FP - Soil) - cont.									
Reporting Units: %									
Gravel	ASTM D422	'[none]'	N/A	NA	5.7		03/03/09	03/06/09	
Coarse Sand	ASTM D422	'[none]'	N/A	NA	9.5		03/03/09	03/06/09	
Medium Sand	ASTM D422	'[none]'	N/A	NA	68.3		03/03/09	03/06/09	
Fine Sand	ASTM D422	'[none]'	N/A	NA	13.3		03/03/09	03/06/09	
Silt	ASTM D422	'[none]'	N/A	NA	2.3		03/03/09	03/06/09	
Clay	ASTM D422	'[none]'	N/A	NA	1.0		03/03/09	03/06/09	

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Boeing SSFL NPDES
Report Number: ISB3201

Sampled: 02/27/09
Received: 02/27/09

METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 8081A)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
Batch: 9C05041 Extracted: 03/05/09											
Blank Analyzed: 03/05/2009 (9C05041-BLK1)											
4,4'-DDD	ND	5.0	1.5	ug/kg							
4,4'-DDE	ND	5.0	1.5	ug/kg							
4,4'-DDT	ND	5.0	1.5	ug/kg							
Aldrin	ND	5.0	1.5	ug/kg							
alpha-BHC	ND	5.0	1.5	ug/kg							
beta-BHC	ND	5.0	1.5	ug/kg							
delta-BHC	ND	10	1.5	ug/kg							
Dieldrin	ND	5.0	1.5	ug/kg							
Endosulfan I	ND	5.0	1.5	ug/kg							
Endosulfan II	ND	5.0	1.5	ug/kg							
Endosulfan sulfate	ND	10	2.0	ug/kg							
Endrin	ND	5.0	1.5	ug/kg							
Endrin aldehyde	ND	5.0	1.5	ug/kg							
Endrin ketone	ND	5.0	2.0	ug/kg							
gamma-BHC (Lindane)	ND	5.0	1.5	ug/kg							
Heptachlor	ND	5.0	2.0	ug/kg							
Heptachlor epoxide	ND	5.0	2.0	ug/kg							
Methoxychlor	ND	5.0	1.5	ug/kg							
Chlordane	ND	50	10	ug/kg							
Toxaphene	ND	200	50	ug/kg							
Surrogate: Decachlorobiphenyl	32.8			ug/kg	33.3		98	45-120			
Surrogate: Tetrachloro-m-xylene	28.9			ug/kg	33.3		87	35-115			

LCS Analyzed: 03/05/2009 (9C05041-BS1)

4,4'-DDD	29.3	5.0	1.5	ug/kg	33.3		88	60-120			
4,4'-DDE	28.5	5.0	1.5	ug/kg	33.3		85	60-120			
4,4'-DDT	31.3	5.0	1.5	ug/kg	33.3		94	65-120			
Aldrin	29.0	5.0	1.5	ug/kg	33.3		87	50-115			
alpha-BHC	31.4	5.0	1.5	ug/kg	33.3		94	60-115			
beta-BHC	31.6	5.0	1.5	ug/kg	33.3		95	60-115			
delta-BHC	31.2	10	1.5	ug/kg	33.3		94	60-115			
Dieldrin	31.1	5.0	1.5	ug/kg	33.3		93	65-115			
Endosulfan I	28.9	5.0	1.5	ug/kg	33.3		87	40-120			
Endosulfan II	28.9	5.0	1.5	ug/kg	33.3		87	55-120			
Endosulfan sulfate	32.9	10	2.0	ug/kg	33.3		99	65-115			
Endrin	29.7	5.0	1.5	ug/kg	33.3		89	55-120			

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METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 8081A)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 9C05041 Extracted: 03/05/09											
LCS Analyzed: 03/05/2009 (9C05041-BS1)											
Endrin aldehyde	28.6	5.0	1.5	ug/kg	33.3		86	55-115			
Endrin ketone	31.2	5.0	2.0	ug/kg	33.3		94	65-115			
gamma-BHC (Lindane)	29.0	5.0	1.5	ug/kg	33.3		87	55-115			
Heptachlor	30.0	5.0	2.0	ug/kg	33.3		90	55-115			
Heptachlor epoxide	30.3	5.0	2.0	ug/kg	33.3		91	55-115			
Methoxychlor	32.2	5.0	1.5	ug/kg	33.3		97	65-120			
Surrogate: Decachlorobiphenyl	30.3			ug/kg	33.3		91	45-120			
Surrogate: Tetrachloro-m-xylene	27.0			ug/kg	33.3		81	35-115			
Matrix Spike Analyzed: 03/05/2009 (9C05041-MS1)											
Source: ISC0306-01											
4,4'-DDD	36.6	25	7.5	ug/kg	33.2	12.5	72	40-130			
4,4'-DDE	31.1	25	7.5	ug/kg	33.2	6.30	75	35-130			
4,4'-DDT	37.0	25	7.5	ug/kg	33.2	4.78	97	35-130			
Aldrin	20.4	25	7.5	ug/kg	33.2	2.73	53	40-115			J
alpha-BHC	32.9	25	7.5	ug/kg	33.2	3.62	88	40-115			
beta-BHC	27.3	25	7.5	ug/kg	33.2	3.46	72	40-120			
delta-BHC	25.6	50	7.5	ug/kg	33.2	2.64	69	45-120			J
Dieldrin	25.7	25	7.5	ug/kg	33.2	1.97	71	40-125			
Endosulfan I	29.1	25	7.5	ug/kg	33.2	4.16	75	40-120			
Endosulfan II	25.9	25	7.5	ug/kg	33.2	ND	78	40-125			
Endosulfan sulfate	31.9	50	10	ug/kg	33.2	4.20	83	45-120			J
Endrin	31.2	25	7.5	ug/kg	33.2	ND	94	45-125			
Endrin aldehyde	15.0	25	7.5	ug/kg	33.2	1.52	40	30-120			J
Endrin ketone	26.0	25	10	ug/kg	33.2	ND	78	40-120			
gamma-BHC (Lindane)	32.6	25	7.5	ug/kg	33.2	ND	98	40-120			
Heptachlor	22.9	25	10	ug/kg	33.2	ND	69	40-115			J
Heptachlor epoxide	28.8	25	10	ug/kg	33.2	ND	87	45-115			
Methoxychlor	43.9	25	7.5	ug/kg	33.2	ND	132	40-135			
Surrogate: Decachlorobiphenyl	31.7			ug/kg	33.2		95	45-120			
Surrogate: Tetrachloro-m-xylene	19.2			ug/kg	33.2		58	35-115			

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Boeing SSFL NPDES
Report Number: ISB3201

Sampled: 02/27/09
Received: 02/27/09

METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 8081A)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 9C05041 Extracted: 03/05/09											
Matrix Spike Dup Analyzed: 03/05/2009 (9C05041-MSD1)						Source: ISC0306-01					
4,4'-DDD	36.6	25	7.5	ug/kg	33.3	12.5	72	40-130	0	30	
4,4'-DDE	31.3	25	7.5	ug/kg	33.3	6.30	75	35-130	1	30	
4,4'-DDT	38.9	25	7.5	ug/kg	33.3	4.78	103	35-130	5	30	
Aldrin	20.5	25	7.5	ug/kg	33.3	2.73	53	40-115	0	30	J
alpha-BHC	32.4	25	7.5	ug/kg	33.3	3.62	86	40-115	1	30	
beta-BHC	26.2	25	7.5	ug/kg	33.3	3.46	68	40-120	4	30	
delta-BHC	25.6	50	7.5	ug/kg	33.3	2.64	69	45-120	0	30	J
Dieldrin	25.9	25	7.5	ug/kg	33.3	1.97	72	40-125	1	30	
Endosulfan I	29.2	25	7.5	ug/kg	33.3	4.16	75	40-120	0	30	
Endosulfan II	25.2	25	7.5	ug/kg	33.3	ND	76	40-125	3	30	
Endosulfan sulfate	32.3	50	10	ug/kg	33.3	4.20	84	45-120	1	30	J
Endrin	32.7	25	7.5	ug/kg	33.3	ND	98	45-125	5	30	
Endrin aldehyde	15.1	25	7.5	ug/kg	33.3	1.52	41	30-120	1	30	J
Endrin ketone	26.0	25	10	ug/kg	33.3	ND	78	40-120	0	30	
gamma-BHC (Lindane)	30.9	25	7.5	ug/kg	33.3	ND	93	40-120	5	30	
Heptachlor	23.3	25	10	ug/kg	33.3	ND	70	40-115	2	30	J
Heptachlor epoxide	30.9	25	10	ug/kg	33.3	ND	93	45-115	7	30	
Methoxychlor	42.0	25	7.5	ug/kg	33.3	ND	126	40-135	4	30	
Surrogate: Decachlorobiphenyl	31.7			ug/kg	33.3		95	45-120			
Surrogate: Tetrachloro-m-xylene	21.4			ug/kg	33.3		64	35-115			

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 Boeing SSFL NPDES
 Report Number: ISB3201

Sampled: 02/27/09
 Received: 02/27/09

METHOD BLANK/QC DATA

POLYCHLORINATED BIPHENYLS (EPA 3545/8082)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 9C03069 Extracted: 03/03/09											
Blank Analyzed: 03/03/2009 (9C03069-BLK1)											
Aroclor 1016	ND	50	6.7	ug/kg							
Aroclor 1221	ND	50	6.7	ug/kg							
Aroclor 1232	ND	50	6.7	ug/kg							
Aroclor 1242	ND	50	6.7	ug/kg							
Aroclor 1248	ND	50	6.7	ug/kg							
Aroclor 1254	ND	50	6.7	ug/kg							
Aroclor 1260	ND	50	6.7	ug/kg							
Surrogate: Decachlorobiphenyl	26.9			ug/kg	33.3		81	45-120			
LCS Analyzed: 03/03/2009 (9C03069-BS2)											
Aroclor 1016	174	50	6.7	ug/kg	267		65	65-115			
Aroclor 1260	178	50	6.7	ug/kg	267		67	65-115			
Surrogate: Decachlorobiphenyl	23.4			ug/kg	33.3		70	45-120			
Matrix Spike Analyzed: 03/03/2009 (9C03069-MS2) Source: ISB2291-07											
Aroclor 1016	204	50	6.7	ug/kg	266	ND	77	50-120			
Aroclor 1260	213	50	6.7	ug/kg	266	ND	80	50-125			
Surrogate: Decachlorobiphenyl	28.0			ug/kg	33.3		84	45-120			
Matrix Spike Dup Analyzed: 03/03/2009 (9C03069-MSD2) Source: ISB2291-07											
Aroclor 1016	206	50	6.7	ug/kg	266	ND	77	50-120	1	30	
Aroclor 1260	216	50	6.7	ug/kg	266	ND	81	50-125	1	30	
Surrogate: Decachlorobiphenyl	28.7			ug/kg	33.3		86	45-120			

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 Report Number: ISB3201

Sampled: 02/27/09
 Received: 02/27/09

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 9C05161 Extracted: 03/05/09											
Duplicate Analyzed: 03/05/2009 (9C05161-DUP1)						Source: ISC0526-01					
Percent Moisture	55.5	0.10	0.10	%		55.5			0	20	
Batch: 9C06125 Extracted: 03/06/09											
Blank Analyzed: 03/06/2009 (9C06125-BLK1)											
Ammonia-N	0.253	0.50	0.20	mg/kg							J
LCS Analyzed: 03/06/2009 (9C06125-BS1)											
Ammonia-N	5.23	0.50	0.20	mg/kg	5.00		105	85-115			
Matrix Spike Analyzed: 03/06/2009 (9C06125-MS1)						Source: ISB3240-01					
Ammonia-N	2530	500	200	mg/kg	199	2340	98	75-125			MHA
Matrix Spike Dup Analyzed: 03/06/2009 (9C06125-MSD1)						Source: ISB3240-01					
Ammonia-N	2530	500	200	mg/kg	199	2340	96	75-125	0	15	MHA

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 Report Number: ISB3201

Sampled: 02/27/09
 Received: 02/27/09

METHOD BLANK/QC DATA

TOTAL ORGANIC CARBON (EPA 9060A MOD.)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 9C09001 Extracted: 03/06/09											
Blank Analyzed: 03/09/2009 (9C09001-BLK1)											
Total Organic Carbon	ND	5000	1000	mg/kg							
LCS Analyzed: 03/09/2009 (9C09001-BS1)											
Total Organic Carbon	9650	5000	1000	mg/kg	10000		96	90-110			
Matrix Spike Analyzed: 03/09/2009 (9C09001-MS1)											
						Source: ISC0142-01					
Total Organic Carbon	16000	5000	1000	mg/kg	25000	ND	64	70-130			M2
Matrix Spike Dup Analyzed: 03/09/2009 (9C09001-MSD1)											
						Source: ISC0142-01					
Total Organic Carbon	33800	5000	1000	mg/kg	25000	ND	135	70-130	72	30	MI, R-3

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Report Number: ISB3201

Sampled: 02/27/09
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GC CALIBRATION CHECK CRITERIA

Per Method 8000B of SW-846, the percent recovery of the calibration checks for GC analyses must be within $\pm 15\%$ from the true value for each individual compound or the average % recovery of all compounds in the calibration check solution must be within $\pm 15\%$ recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside the $\pm 15\%$ criteria, however the average % recovery of all compounds in the calibration check solution was within $\pm 15\%$, thus meeting the overall calibration check criteria.

<u>Compound</u>	<u>Footnote</u>	<u>Calibration Check</u> <u>% Recovery</u>	<u>Lab Number</u>	<u>Batch</u>
4,4'-DDD	1	117	ISB3201-01	9C05041
4,4'-DDT	2	84	ISB3201-01	9C05041

Footnotes:

- 1 The calibration demonstrated a high bias for this compound. Samples were flagged to indicate a possible high bias in the result for this compound.
- 2 The calibration demonstrated a low bias for this compound. Samples were flagged to indicate a possible low bias in the result for this compound.

TestAmerica Irvine

Joseph Doak
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

ISB3201 <Page 13 of 15>
NPDES - 3874

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Annual Sediment Arroyo Simi-Frontier Park
Boeing SSFL NPDES
Report Number: ISB3201

Sampled: 02/27/09
Received: 02/27/09

DATA QUALIFIERS AND DEFINITIONS

- C-1** Calibration Verification recovery was above the method control limit for this analyte, however the average % difference for all analytes met method criteria. See Calibration Summary form.
- C-2** Calibration Verification recovery was below the method control limit for this analyte, however the average % difference for all analytes met method criteria. See Calibration Summary form.
- J** Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). The user of this data should be aware that this data is of limited reliability.
- M1** The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
- M2** The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
- MHA** Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
- R-3** The RPD exceeded the acceptance limit due to sample matrix effects.
- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- RPD** Relative Percent Difference

TestAmerica Irvine

Joseph Doak
Project Manager

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MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Annual Sediment Arroyo Simi-Frontier Park
Boeing SSFL NPDES
Report Number: ISB3201

Sampled: 02/27/09
Received: 02/27/09

Certification Summary

TestAmerica Irvine

Method	Matrix	Nelac	California
EPA 160.3	Soil		
EPA 3545/8081A	Soil	X	X
EPA 8082	Soil	X	X
EPA 9060A MOD.	Soil	N/A	N/A
SM4500NH3-D, MOD.	Soil		

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at www.testamericainc.com

Subcontracted Laboratories

ABC Laboratories *California Cert #1907*

29 N. Olive Street - Ventura, CA 93001

Analysis Performed: Bioassay-Haz. Waste
Samples: ISB3201-01

Analysis Performed: Bioassay-Haz. Waste Def
Samples: ISB3201-01

TestAmerica Burlington

208 South Park Drive, Suite 1 - Colchester, VT 05446

Method Performed: ASTM D422
Samples: ISB3201-01

TestAmerica Irvine

Joseph Doak
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.



TOXICITY TESTING • OCEANOGRAPHIC RESEARCH

March 20, 2009

Mr. Joseph Doak
TestAmerica Irvine
17461 Derian Avenue, Suite 100
Irvine, CA 92614

Dear Mr. Doak:

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, Method EPA/600/R-94/025*. Results were as follows:

CLIENT:	TestAmerica Irvine
SAMPLE I.D.:	Arroyo Simi-FP
DATE RECEIVED:	27 Feb - 09
ABC LAB. NO.:	TAM0209.468

CHRONIC EOHAUSTORIUS SURVIVAL BIOASSAY

SURVIVAL = 97.00%

Yours very truly,

For: Thomas (Tim) Mikel
Laboratory Director

Eohaustorius 10 Day Sediment Survival Bioassay

Start Date: 3/10/2009	Test ID: TAM0209468	Sample ID: CA000000
End Date: 3/20/2009	Lab ID: CAABC	Sample Type: SEDIMENT
Sample Date: 2/27/2009	Protocol: EPA/600/R-94/025	Test Species: EE-Eohaustorius estuarius
Comments: Arroyo Simi-FP		

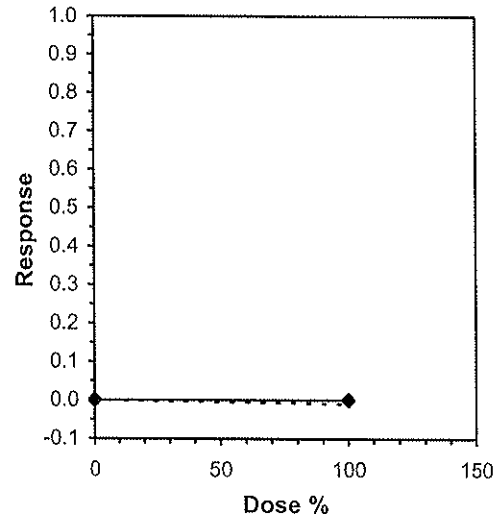
Conc-%	1	2	3	4	5
N Control	0.9500	0.9500	1.0000	0.9500	0.9500
100	0.9500	1.0000	1.0000	0.9500	0.9500

Conc-%	Mean	N-Mean	Transform: Arcsin Square Root					Rank Sum	1-Tailed Critical	Isotonic	
			Mean	Min	Max	CV%	N			Mean	N-Mean
N Control	0.9600	1.0000	1.3680	1.3453	1.4588	3.710	5			0.9650	1.0000
100	0.9700	1.0104	1.3907	1.3453	1.4588	4.469	5	30.00	19.00	0.9650	1.0000

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution ($p \leq 0.01$)	0.75876	0.781	0.95459	-1.0157
F-Test indicates equal variances ($p = 0.70$)	1.5	23.1545		

Hypothesis Test (1-tail, 0.05)
 Wilcoxon Two-Sample Test indicates no significant differences
 Treatments vs N Control

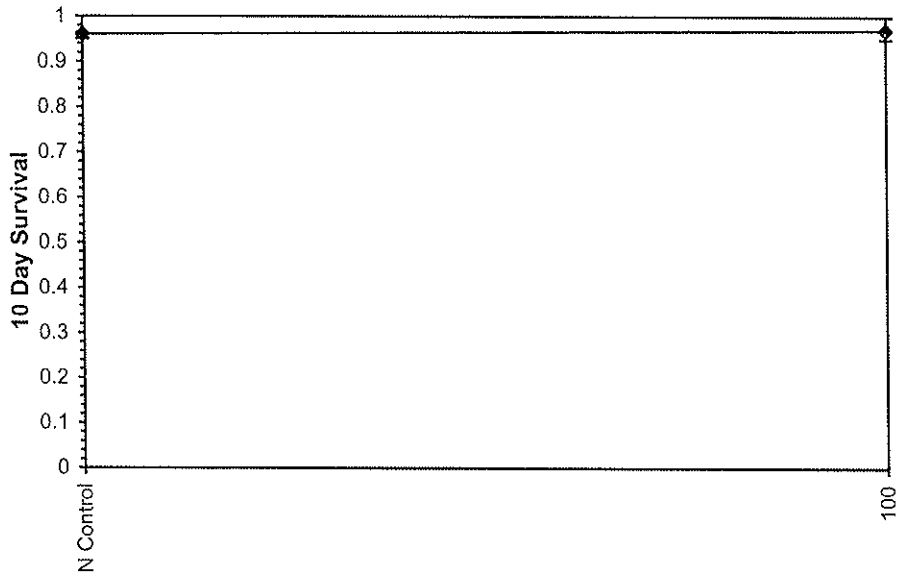
Point	%	SD	Linear Interpolation (200 Resamples)	
			95% CL(Exp)	Skew
IC05	>100			
IC10	>100			
IC15	>100			
IC20	>100			
IC25	>100			
IC40	>100			
IC50	>100			



Eohaustorius 10 Day Sediment Survival Bioassay

Start Date: 3/10/2009	Test ID: TAM0209468	Sample ID: CA000000
End Date: 3/20/2009	Lab ID: CAABC	Sample Type: SEDIMENT
Sample Date: 2/27/2009	Protocol: EPA/600/R-94/025	Test Species: EE-Eohaustorius estuarius
Comments: Arroyo Simi-FP		

Dose-Response Plot



Eohaustorius 10 Day Sediment Survival Bioassay

Start Date: 3/10/2009	Test ID: TAM0209468	Sample ID: CA000000
End Date: 3/20/2009	Lab ID: CAABC	Sample Type: SEDIMENT
Sample Date: 2/27/2009	Protocol: EPA/600/R-94/025	Test Species: EE-Eohaustorius estuarius
Comments: Arroyo Simi-FP		

Auxiliary Data Summary

Conc-%	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	7.90	7.90	7.90	0.00	0.00	2
100		7.95	7.90	8.00	0.07	3.34	2
N Control	DO mg/L	9.70	9.20	10.20	0.71	8.67	2
100		9.60	9.10	10.10	0.71	8.76	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
March 20, 2009

Mr. Joseph Doak
TestAmerica Irvine
17461 Derian Avenue, Suite 100
Irvine, CA 92614

Dear Mr. Doak:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms, EPA/R-95/136*. Results were as follows:

CLIENT: TestAmerica Irvine
SAMPLE I.D.: Simi Arroyo-FP
DATE RECEIVED: 27 Feb - 09
ABC LAB. NO.: TAM0209.468

CHRONIC MYTILUS SURVIVAL AND DEVELOPMENT BIOASSAY

SURVIVAL	NOEC =	100.00 %
	TU _c =	1.00
	IC25 =	>100.00 %
	IC50 =	>100.00 %

DEVELOPMENT	NOEC =	100.00 %
	TU _c =	1.00
	IC25 =	>100.00 %
	IC50 =	>100.00 %

Yours very truly,

Thomas (Tim) Mikel
Laboratory Director

For:

Mytilus 48 Hour Survival and Development Bioassay - Survival

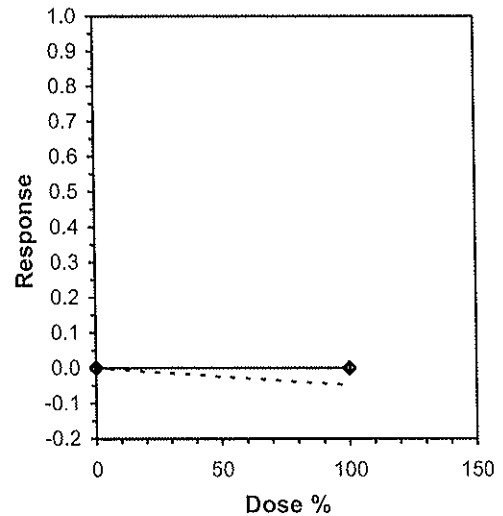
Start Date: 3/10/2009	Test ID: TAM0209468	Sample ID: CA000000000
End Date: 3/20/2009	Lab ID: CAABC	Sample Type: Sediment
Sample Date: 2/27/2009	Protocol: EPA/600/R-94/025	Test Species: ME-Mytilus edulis
Comments: Arroyo Simi-FP		

Conc-%	1	2	3	4	5
Control	0.8311	0.8489	0.8844	0.8756	0.8667
100	0.9156	0.8978	0.9378	0.8933	0.8756

Conc-%	Mean	N-Mean	Transform: Arcsin Square Root				N	t-Stat	1-Tailed Critical	MSD	Isotonic	
			Mean	Min	Max	CV%					Mean	N-Mean
Control	0.8613	1.0000	1.1900	1.1473	1.2239	2.582	5				0.8827	1.0000
100	0.9040	1.0495	1.2577	1.2103	1.3187	3.288	5	-2.937	1.860	0.0428	0.8827	1.0000

Auxiliary Tests	Statistic	Critical	Skew	Kurt		
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.9656	0.781	0.27722	-0.5533		
F-Test indicates equal variances (p = 0.58)	1.81056	23.1545				
Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences	0.03086	0.0358	0.01145	0.00133	0.0188	1, 8
Treatments vs Control						

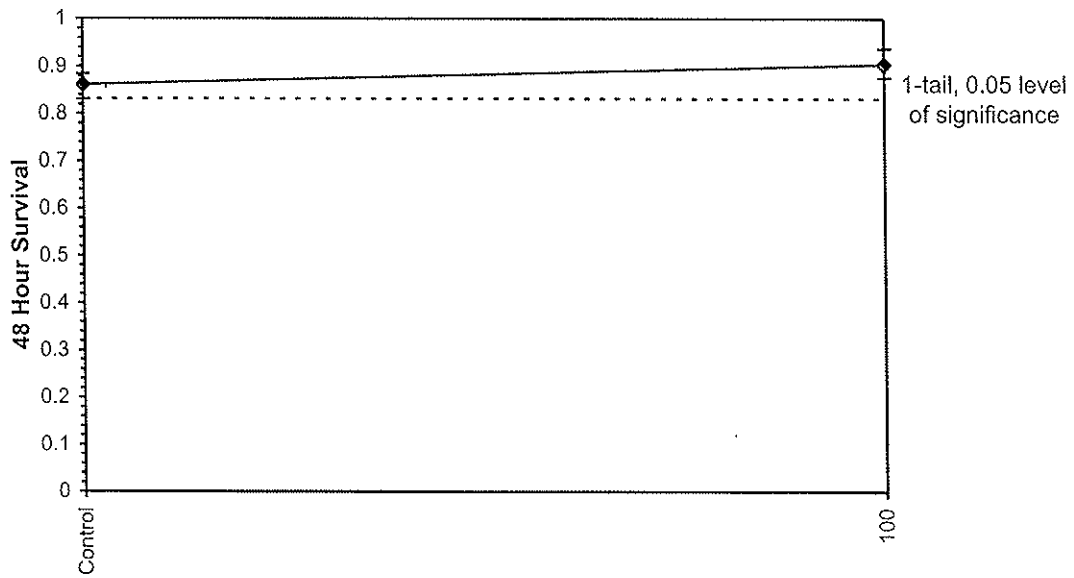
Linear Interpolation (200 Resamples)				
Point	%	SD	95% CL(Exp)	Skew
IC05	>100			
IC10	>100			
IC15	>100			
IC20	>100			
IC25	>100			
IC40	>100			
IC50	>100			



Mytilus 48 Hour Survival and Development Bioassay - Survival

Start Date: 3/10/2009	Test ID: TAM0209468	Sample ID: CA000000000
End Date: 3/20/2009	Lab ID: CAABC	Sample Type: Sediment
Sample Date: 2/27/2009	Protocol: EPA/600/R-94/025	Test Species: ME-Mytilus edulis
Comments: Arroyo Simi-FP		

Dose-Response Plot



Mytilus 48 Hour Survival and Development Bioassay - Development

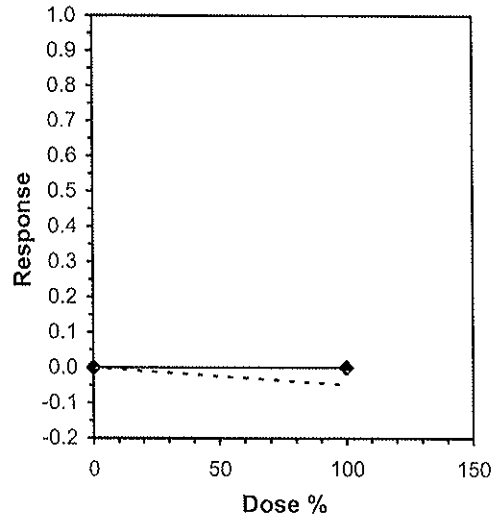
Start Date: 3/10/2009	Test ID: TAM0209468	Sample ID: CA000000000
End Date: 3/20/2009	Lab ID: CAABC	Sample Type: Sediment
Sample Date: 2/27/2009	Protocol: EPA/600/R-94/025	Test Species: ME-Mytilus edulis
Comments: Arroyo Simi-FP		

Conc-%	1	2	3	4	5
Control	0.8311	0.8489	0.8844	0.8756	0.8667
100	0.9156	0.8978	0.9378	0.8933	0.8756

Conc-%	Mean	N-Mean	Transform: Arcsin Square Root				t-Stat	1-Tailed Critical	MSD	Isotonic		
			Mean	Min	Max	CV%				Mean	N-Mean	
Control	0.8613	1.0000	1.1900	1.1473	1.2239	2.582	5			0.8827	1.0000	
100	0.9040	1.0495	1.2577	1.2103	1.3187	3.288	5	-2.937	1.860	0.0428	0.8827	1.0000

Auxiliary Tests	Statistic	Critical	Skew	Kurt		
Shapiro-Wilk's Test indicates normal distribution ($p > 0.01$)	0.9656	0.781	0.27722	-0.5533		
F-Test indicates equal variances ($p = 0.58$)	1.81056	23.1545				
Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs Control	0.03086	0.0358	0.01145	0.00133	0.0188	1, 8

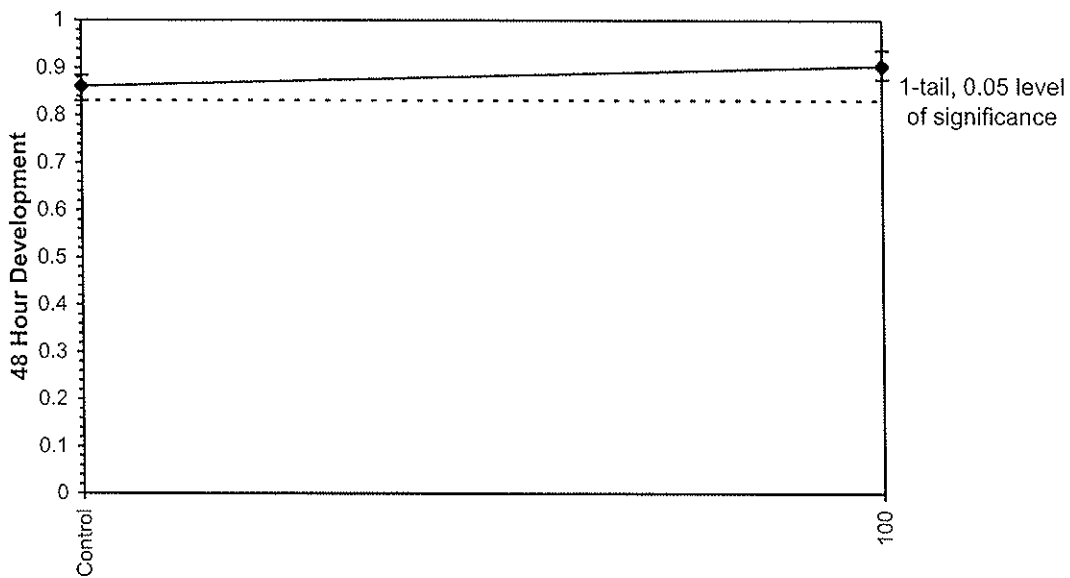
Point	%	SD	Linear Interpolation (200 Resamples)	
			95% CL(Exp)	Skew
IC05	>100			
IC10	>100			
IC15	>100			
IC20	>100			
IC25	>100			
IC40	>100			
IC50	>100			



Mytilus 48 Hour Survival and Development Bioassay - Development

Start Date: 3/10/2009	Test ID: TAM0209468	Sample ID: CA000000000
End Date: 3/20/2009	Lab ID: CAABC	Sample Type: Sediment
Sample Date: 2/27/2009	Protocol: EPA/600/R-94/025	Test Species: ME-Mytilus edulis
Comments: Arroyo Simi-FP		

Dose-Response Plot



Mytilus 48 Hour Survival and Development Bioassay - Development

Start Date: 3/10/2009	Test ID: TAM0209468	Sample ID: CA000000000
End Date: 3/20/2009	Lab ID: CAABC	Sample Type: Sediment
Sample Date: 2/27/2009	Protocol: EPA/600/R-94/025	Test Species: ME-Mytilus edulis
Comments: Arroyo Simi-FP		

Auxiliary Data Summary

Conc-%	Parameter	Mean	Min	Max	SD	CV%	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
Control	pH	7.90	7.90	7.90	0.00	0.00	2
100		7.95	7.90	8.00	0.07	3.34	2
Control	Diss Oxygen	6.35	6.20	6.50	0.21	7.25	2
100		6.40	6.00	6.80	0.57	11.75	2
Control	Salinity ppt	32.00	32.00	32.00	0.00	0.00	2
100		32.00	32.00	32.00	0.00	0.00	2

CHAIN OF CUSTODY FORM

ANALYSIS REQUIRED

TAM 0209.468

Client Name/Address:
MWH-Arcadia
678 Michilinda Avenue, Suite 200
Arcadia, CA 91007

Project:
Boeing-SSFL NPDES
Annual Sediment Arroyo Simi --
Frontier Park

Test America Contact: Joseph Doak
Project Manager: Bronwyn Kelly

Phone Number: (626) 568-6691
Fax Number: (626) 568-6515
Sampler: E WALKER

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #	Chronic 10-day eohaustorius estuarius Toxicity	48-hour Bivalve Embryo toxicity (Mytilus edulis or Crassostrea gigas)	Total Ammonia	% Moisture	Particle Size Distribution	Total Organic Carbon	PEBS (608)	Chlordane, Dieldrin, Toxaphene (608), 4,4-DDD, 4,4-DDE, 4,4-DDT	Field readings:	Comments
Arroyo Simi-FP	S	1L wide mouth Plastic	4	2-27-09 0930	4C in the Dark	1A, 1B, 1C, 1D	X	X	X		X				Temp = 13.9°C = 57.2°F pH = 7.6 DO = 10.9 mg/L Conductivity = 2.12 mS/cm Time of readings = 0930	Keep sample in cooler in the dark until delivered to ABC Labs
Arroyo Simi-FP	S	9 oz Jar	1		4 deg C	2A										
Arroyo Simi-FP	S	9 oz Jar	1		4 deg C	3A				X						
Arroyo Simi-FP	S	9 oz Jar	1		4 deg C	4A				X						
Arroyo Simi-FP	S	9 oz Jar	1		4 deg C	5A							X	X		

Relinquished By	Date/Time	Received By	Date/Time
<i>[Signature]</i>	2/22/09 1045	<i>[Signature]</i>	2-27-09/10:45
<i>[Signature]</i>	2-27-09/12:35	<i>[Signature]</i>	2-27-09 1235

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: _____

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: _____

NPDES Level IV On Ice: _____

Sample Integrity: (check)
Intact _____ On Ice: _____

Data Requirements: (check)
No Level IV _____ All Level IV _____

Turn around Time: (check)
24 Hours _____ 5 Days _____
48 Hours _____ 10 Days _____
72 Hours _____ Normal

TestAmerica
South Burlington, VT
Extended Data Package

ISB3201

TestAmerica Laboratories, Inc.

March 6, 2009

Mr. Joseph Doak
TestAmerica, Inc.
17461 Derian Avenue
Suite 100
Irvine, CA 92614

Re: Laboratory Project No. 28000
Case: BOEING; SDG: ISB3201

Dear Mr. Doak:

Enclosed are the analytical results for the samples that were received by TestAmerica Burlington on March 3rd, 2009. Laboratory identification numbers were assigned, and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
	Received: 03/03/09 ETR No: 130425		
786810	ISB3201-01	02/27/09	SOIL

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

Particle Size Analysis by ASTM D422:

During the analytical process, the laboratory discovered that two samples in this analytical sequence required processing under a hood. This changed the order of the samples listed on the bench sheet. The original bench sheet is included with the corrected sheet in the raw data section of this submittal.

Any reference within this report to Severn Trent Laboratories, Inc. or STL, should be understood to refer to TestAmerica Laboratories, Inc. (formerly known as Severn Trent Laboratories, Inc.) The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,

A handwritten signature in black ink that reads "Ron Pentkowski". The signature is written in a cursive style with a large, looping initial "R".

Ron Pentkowski
Project Manager

Enclosure

Chain of Custody	1
Particle Size Results	4
Sample Handling	10



Chain of Custody

SUBCONTRACT ORDER

TestAmerica Irvine

ISB3201


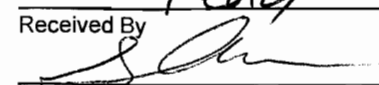
SENDING LABORATORY:

TestAmerica Irvine
17461 Derian Avenue. Suite 100
Irvine, CA 92614
Phone: (949) 261-1022
Fax: (949) 260-3297
Project Manager: Joseph Doak
Client: MWH-Pasadena/Boeing

RECEIVING LABORATORY:

TestAmerica Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446
Phone : (802) 655-1203
Fax: (802) 655-1248
Project Location: CA - CALIFORNIA
Receipt Temperature: 2.7 °C Ice: (Y) / N

Analysis	Units	Due	Expires	Interlab Price	Surch	Comments
Sample ID: ISB3201-01	Soil					
			Sampled: 02/27/09 09:30			
Particulatesize-out	N/A	03/10/09	03/27/09 09:30	\$108.00	0%	Boeing, J flags, OUT to TA- Burlington
<i>Containers Supplied:</i> 9 oz Jar (D)						

 03/02/09 17:00 FedEx 03/02/09 17:00
Released By _____ Date/Time _____ Received By _____ Date/Time _____
 3/3/09 1020
Released By _____ Date/Time _____ Received By _____ Date/Time _____

ISB3201

CHAIN OF CUSTODY FORM

Test America Version 12/20/07

Client Name/Address:		Project:		ANALYSIS REQUIRED		Field readings:	
MWH-Arcadia 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007		Boeing-SSFL NPDES Annual Sediment Arroyo Simi - Frontier Park		Chronic 10-day echaustorius estuarinus Toxicity		Temp = 13.9°C = 57.2°F	
Test America Contact: Joseph Doak Project Manager: Bronwyn Kelly		Phone Number: (626) 568-6691 Fax Number: (626) 568-6515		48-hour Bivalve Embryo toxicity (Mytilus edulis or Crassostrea gigas)		pH = 7.6	
Sampler: EWALKER				Total Ammonia		DO = 10.9 mg/L	
Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #	Comments
Arroyo Simi-FP	S	1L wide mouth Plastic	4	2-27-09 0930	4C in the Dark	1A, 1B, 1C, 1D	Keep sample in cooler in the dark until delivered to ABC Labs
Arroyo Simi-FP	S	9 oz Jar	1	↗	4 deg C	2A	
Arroyo Simi-FP	S	9 oz Jar	1		4 deg C	3A	
Arroyo Simi-FP	S	9 oz Jar	1		4 deg C	4A	
Arroyo Simi-FP	S	9 oz Jar	1		4 deg C	5A	
Relinquished By		Date/Time:		Received By		Date/Time:	
EWALKER		2/27/09 10:45		Matt Cunniff		2-27-09/10:45	
Relinquished By		Date/Time:		Received By		Date/Time:	
Matt Cunniff		2-27-09/18:00		Matt Cunniff		2-27-09/1800	
Relinquished By		Date/Time:		Received By		Date/Time:	
Turn around Time: (check)		5 Days		Sample Integrity: (check)		On Ice: <input checked="" type="checkbox"/> 3.8 C	
24 Hours				Infact			
48 Hours				Data Requirements: (check)		No Level IV <input type="checkbox"/> All Level IV <input type="checkbox"/>	
72 Hours				NPDES Level IV <input checked="" type="checkbox"/>		On Ice: <input type="checkbox"/>	



Particle Size Results

Particle Size of Soils by ASTM D422

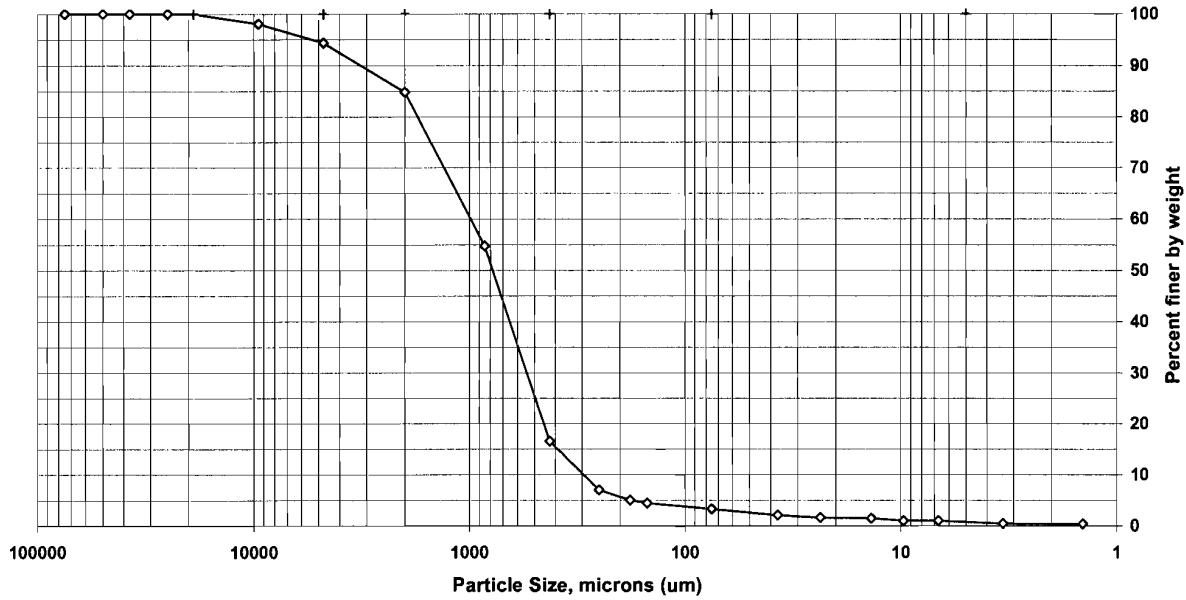
Client Code: TACAI
 Sample ID: ISB3201-01
 Lab ID: 786810

SDG: ISB3201
 ETR(s): 130425

Date Received: 3/3/2009
 Start Date: 3/3/2009
 End Date: 3/6/2009

Percent Solids: 81.2%
 Specific Gravity: 2.650 (assumed)
 Maximum Particle Size: 19 mm

Non-soil material: n/a
 Shape (> #10): subrounded
 Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	98.1	1.9
#4	4750	94.3	3.7
#10	2000	84.9	9.5
#20	850	54.7	30.1
#40	425	16.5	38.2
#60	250	7.0	9.6
#80	180	5.0	2.0
#100	150	4.4	0.6
#200	75	3.3	1.1
Hydrometer	37.1	2.1	1.1
	23.6	1.6	0.5
	13.7	1.5	0.1
	9.7	1.0	0.5
	6.7	1.0	0.0
	3.4	0.5	0.5
V	1.4	0.4	0.1

Soil Classification	Percent of Total Sample
Gravel	5.7
Sand	91.1
Coarse Sand	9.5
Medium Sand	68.3
Fine Sand	13.3
Silt	2.3
Clay	1.0

Preparation Method: **D2217**
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

Particle Size Analysis of Soils
By ASTM D422
Hydrometer Data

Set Number
ISB3201

Client Code: TACAI
SDG: ISB3201
ETR(s): 130425

Date Received: 3-Mar-09
Start Date: 3-Mar-09
End Date: 6-Mar-09

Date and Analyst

Percent Solids	Weighted	Mixed	Hydrometer	Large sieves	Small sieves
MAP 03/03/09	MAP 03/03/09	DPS 03/04/09	DPS 03/04/09	DPS 03/04/09	DPS 03/04/09
DPS 03/04/09			DPS 03/05/09	DPS 03/06/09	DPS 03/06/09

Test number	1	2	3	4	5	6	7	8	9	10	11	12
Lab number									786810			
Time, min. (2)	2	2	2	2	2	2	2	2	2	2	2	2
Reading									1.0050			
Temperature, C									20.5			
Time, min. (5)	5	5	5	5	5	5	5	5	5	5	5	5
Reading									1.0045			
Temperature, C									20.5			
Time, min. (15)	15	15	15	15	15	15	15	15	15	15	15	15
Reading									1.0045			
Temperature, C									20.0			
Time, min. (30)	30	30	29	29	31	31	31	32	30	30	30	31
Reading									1.0040			
Temperature, C									20.0			
Time, min. (60)	59	58	58	63	60	59	59	60	63	57	63	57
Reading									1.0040			
Temperature, C									20.0			
Time, min. (250)	256	256	250	250	240	234	265	259	253	247	241	235
Reading									1.0035			
Temperature, C									20.0			
Time, min. (1440)	1440	1440	1434	1434	1424	1418	1412	1406	1400	1394	1388	1382
Reading									1.0035			
Temperature, C									19.5			

Hydrometer used: 707530
Calibrations: L temp, C 17.0 L read 1.0035 H Temp, C 23.0 H read 1.0025

Manufacturer: CHASE
Cal. Date: 01/06/09

Hydrometer start time: 14:08
Hydrometer data entered: DPS 03/06/09

Particle Size Analysis of Soils
By ASTM D422
Hydrometer Data

Set Number
ISB3201

Client Code: TACAI
SDG: ISB3201
ETR(s): 130425

Date Received: 03-Mar-09
Start Date: 03-Mar-09
End Date: 06-Mar-09

Date and Analyst

Test number	Percent Solids			Weighed			Mixed			Hydrometer			Large sieves		Small sieves			
	Lab number	Time, min. (2)	Reading	Temperature, C	Time, min. (5)	Reading	Temperature, C	Time, min. (15)	Reading	Temperature, C	Time, min. (30)	Reading	Temperature, C	Time, min. (60)	Reading	Temperature, C	Time, min. (1440)	Reading
1	2	2	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
2	2	2	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
30	30	30	29	30	29	31	31	31	31	31	32	30	30	30	30	30	30	31
59	59	58	58	60	63	60	59	59	60	63	60	63	63	57	63	63	57	57
256	256	256	250	240	250	240	234	265	259	253	247	241	235	235	235	235	235	235
1440	1440	1440	1434	1434	1434	1424	1418	1412	1406	1400	1394	1388	1382	1382	1382	1382	1382	1382

Hydrometer used: 707530
Calibrations: L temp, C 17.0 L read 1.0035 H Temp, C 23.0 H read 1.0025

Model #: ASTM 151H
Manufacturer: CHASE
Cat. Date: 01/06/09

Hydrometer start time: 14:08
Hydrometer data entered: DPS 03/06/09

Hydrometer data entered: DPS 03/06/09

Hydrometer data entered: DPS 03/06/09

Hydrometer data entered: DPS 03/06/09

Hydrometer data entered: DPS 03/06/09

Hydrometer data entered: DPS 03/06/09

Hydrometer data entered: DPS 03/06/09

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Hydrometer data entered: DPS 03/06/09

Hydrometer data entered: DPS 03/06/09

Hydrometer data entered: DPS 03/06/09

Hydrometer data entered: DPS 03/06/09

Hydrometer data entered: DPS 03/06/09

Hydrometer data entered: DPS 03/06/09

Original signed
UPS included.
Paper mark for MAP.
position Ho.
5 25
2 5
5 25
5 25

FSL024:07:29:05:0

TestAmerica Burlington

ISB3201PS 03/06/2009

Particle Size Analysis of Soils
 By ASTM D422
 Hydrometer Data

Set Number
 ISB3201

Client Code: TACAI
 SDG: ISB3201
 ETR(s): 130425

Date Received: 03-Mar-09
 Start Date: 03-Mar-09
 End Date: 03/06/09

Date and Analyst

Percent Solids	Weighted	Mixed	Hydrometer	Large sieves	Small sieves
MAR 3.3.09	NUR 7.309	1358/09/08	DP5 03/01/09	DP5 03/01/09	03/05/09
DRS 03/09/08			DP5 03/05/08		

Test number	1	2	3	4	5	6	7	8	9	10	11	12
Lab number											786810	
Time, min. (2)	2	2	2	2	2	2	2	2	2	2	2	2
Reading											1.0050	20.5
Temperature, C											20.5	
Time, min. (5)	5	5	5	5	5	5	5	5	5	5	5	5
Reading											1.0045	20.5
Temperature, C											20.5	
Time, min. (15)	15	15	15	15	15	15	15	15	15	15	15	15
Reading											1.0040	20.0
Temperature, C											20.0	
Time, min. (30)	30	30	29	29	31	31	31	32	30	30	30	31
Reading											1.0035	20.0
Temperature, C											20.0	
Time, min. (60)	59	58	58	63	60	59	59	60	63	57	63	57
Reading											1.0035	20.0
Temperature, C											20.0	
Time, min. (250)	256	256	250	250	240	234	265	259	253	247	241	235
Reading											1.0035	20.0
Temperature, C											20.0	
Time, min. (1440)	1440	1440	1434	1434	1424	1418	1412	1406	1400	1394	1388	1382
Reading											1.0035	19.5
Temperature, C											19.5	

Hydrometer used: 207530
 Calibrations: L Temp, C 17.0
 Model #: ASTM 151H
 L read
 H Temp, C 23.0
 H read

Manufacturer:
 Cal. Date:

Hydrometer start time: 1400p
 Hydrometer data entered: DP5 03/06/09



Sample Handling

From: Origin ID: APVA (949) 261-1022
 Sample Control
 TESTAMERICA-IRVINE
 17461 DERIAN AVE
 SUITE
 IRVINE, CA 92614



Ship Date: 02MAR09
 ActWgt: 10.0 LB
 CAD: 1184121/NET9011
 Account#: S *****

Delivery Address Bar Code



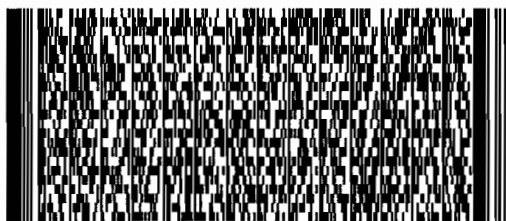
Ref #
 Invoice #
 PO #
 Dept #

RELEASE#: 3785346

SHIP TO: (802) 655-1203 BILL THIRD PARTY
Sample Receiving
Test America - Burlington
208 South Park Drive,
Suite 1
Colchester, VT 05446

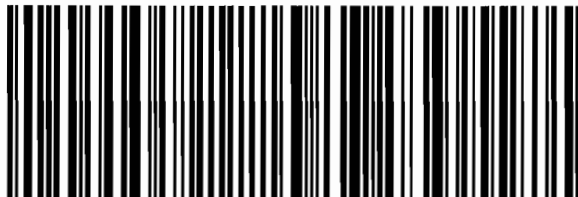
TUE - 03MAR AA
PRIORITY OVERNIGHT

TRK# 7963 9042 6698
 0201



XH BTVA

05446
 VT-US
 BTV



After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

TestAmerica Burlington
SAMPLE RECEIPT & LOG IN CHECKLIST

Client: TACA2	Date Received: 3/3/09	Log In Date: 03/03/09
EPR: 130425	Time Received: 1020	By: <i>[Signature]</i>
SDG: 15B3201	Received By: GTM	Signature: <i>[Signature]</i>
Project: 29000	# Coolers Received: 1	PM Signature: <i>[Signature]</i>
Samples Delivered By: <input checked="" type="checkbox"/> Shipping Service <input type="checkbox"/> Courier <input type="checkbox"/> Hand <input type="checkbox"/> Other (specify)		Date:
List Air Bill Number(s) or Attach a photocopy of the Air Bill:		

COOLER SCREEN	YES	NO	NA	COMMENTS
There is no evidence to indicate tampering	<input checked="" type="checkbox"/>			
Custody seals are present and intact	<input checked="" type="checkbox"/>			
Custody seal numbers are present		<input checked="" type="checkbox"/>		
If yes, list custody seal numbers:				

Thermal Preservation Type: Wet Ice Blue Ice None Other (specify)

IR Gun ID: **96** Correction Factor (CF) = **-2** °C

Cooler 1: 2.7 °C	Cooler 6 °C	Cooler 11 °C	Cooler 16 °C
Cooler 2: °C	Cooler 7 °C	Cooler 12 °C	Cooler 17 °C
Cooler 3: °C	Cooler 8 °C	Cooler 13 °C	Cooler 18 °C
Cooler 4: °C	Cooler 9 °C	Cooler 14 °C	Cooler 19 °C
Cooler 5: °C	Cooler 10 °C	Cooler 15 °C	Cooler 20 °C

Unless otherwise documented, the recorded temperature readings are adjusted readings to account for the CF of the IR Gun
 EPA Criteria: 0-6°C, except for air and geo samples which should be at ambient temperature and tissue samples, which may be frozen
 Some clients require thermal preservation criteria of 2-4°C or other such criteria. The FM must notify SM when alternate criteria is specified.

SAMPLE CONDITION	YES	NO	NA	COMMENTS
Sample containers were received intact	<input checked="" type="checkbox"/>			
Legible sample labels are affixed to each container	<input checked="" type="checkbox"/>			

CHAIN OF CUSTODY (COC)	YES	NO	NA	COMMENTS
COC is present and includes the following information for each container:				
• Sample ID / Sample Description	<input checked="" type="checkbox"/>			
• Date of Sample Collection	<input checked="" type="checkbox"/>			
• Time of Sample Collection	<input checked="" type="checkbox"/>			
• Identification of the Sampler		<input checked="" type="checkbox"/>		
• Preservation Type				
• Requested Tests Method(s)			<input checked="" type="checkbox"/>	
• Necessary Signatures	<input checked="" type="checkbox"/>			
Internal Chain of Custody (ICOC) Required		<input checked="" type="checkbox"/>		
If yes to above, ICOC Record initiated for every Worksheet			<input checked="" type="checkbox"/>	

SAMPLE INTEGRITY / USABILITY	YES	NO	NA	COMMENTS
The sample container matches the COC	<input checked="" type="checkbox"/>			
Appropriate sample containers were received for the tests requested	<input checked="" type="checkbox"/>			
Samples were received within holding time	<input checked="" type="checkbox"/>			
Sufficient amount of sample is provided for requested analyses	<input checked="" type="checkbox"/>			
VDA vials do not have headspace or a bubble >5mm (1/4" diameter)			<input checked="" type="checkbox"/>	
Appropriate preservatives were used for the tests requested			<input checked="" type="checkbox"/>	
pH of inorganic samples checked and is within method specification			<input checked="" type="checkbox"/>	
If no, attach Inorganic Sample pH Adjustment Form				

ANOMALY / NCR SUMMARY
