APPENDIX G

Section 31

Outfall 010, BMP Effectiveness, February 5, 2009 Test America Analytical Laboratory Report



LABORATORY REPORT

Prepared For: MWH-Pasadena/Boeing Project: BMP Effectiveness

618 Michillinda Avenue, Suite 200 Monitoring Program

Arcadia, CA 91007

Attention: Bronwyn Kelly Sampled: 02/05/09-02/06/09

Received: 02/09/09 Issued: 02/18/09 12:31

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

LABORATORY ID	CLIENT ID	MATRIX
ISB0937-01	010 EFF-1	Water
ISB0937-02	010 EFF-2	Water
ISB0937-03	010 EFF-3	Water
ISB0937-04	010 EFF-4	Water
ISB0937-05	010 EFF-5	Water
ISB0937-06	010 EFF-6	Water
ISB0937-07	010 EFF-7	Water
ISB0937-08	010 EFF-8	Water
ISB0937-09	010 EFF-9	Water
ISB0937-10	010 EFF-10	Water
ISB0937-11	010 EFF-11	Water
ISB0937-12	010 EFF-12	Water
ISB0937-13	010 EFF-13	Water
ISB0937-14	010 EFF-14	Water
ISB0937-15	010 EFF-15	Water
ISB0937-16	010 EFF-16	Water
ISB0937-17	010 EFF-17	Water
ISB0937-18	010 EFF-18	Water
ISB0937-19	010 EFF-19	Water
ISB0937-20	010 EFF-20	Water
ISB0937-21	010 EFF-21	Water
ISB0937-22	010 EFF-22	Water
ISB0937-23	010 EFF-23	Water



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MWH-Pasadena/Boeing Project ID: BMP Effectiveness

618 Michillinda Avenue, Suite 200 Monitoring Program Sampled: 02/05/09-02/06/09

Arcadia, CA 91007 Report Number: ISB0937 Received: 02/09/09

Attention: Bronwyn Kelly

LABORATORY ID CLIENT ID MATRIX
ISB0937-24 010 EFF-24 Water

Reviewed By:

TestAmerica Irvine

Joseph Dock

Joseph Doak Project Manager



618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: BMP Effectiveness

Monitoring Program

Report Number: ISB0937

Sampled: 02/05/09-02/06/09 Received: 02/09/09

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB0937-01 (010 EFF-1 - Wa	ater)				Sample	ed: 02/05/0	09		
Reporting Units: g/cc Density	Displacement	9B17118	N/A	NA	1.0	1	02/17/09	02/17/09	
Sample ID: ISB0937-02 (010 EFF-2 - Wa Reporting Units: g/cc	nter)				Sample	ed: 02/05/0	09		
Density	Displacement	9B17118	N/A	NA	1.0	1	02/17/09	02/17/09	
Sample ID: ISB0937-03 (010 EFF-3 - Wa Reporting Units: g/cc	nter)				Sample	ed: 02/05/0	09		
Density	Displacement	9B17118	N/A	NA	1.0	1	02/17/09	02/17/09	
Sample ID: ISB0937-04 (010 EFF-4 - Wa Reporting Units: g/cc	nter)				Sample	ed: 02/05/0	09		
Density	Displacement	9B17118	N/A	NA	1.0	1	02/17/09	02/17/09	
Sample ID: ISB0937-05 (010 EFF-5 - Wa Reporting Units: g/cc	nter)				Sample	ed: 02/05/0	09		
Density	Displacement	9B17118	N/A	NA	0.99	1	02/17/09	02/17/09	
Sample ID: ISB0937-06 (010 EFF-6 - Wa Reporting Units: g/cc	nter)				Sample	ed: 02/05/0	09		
Density	Displacement	9B17118	N/A	NA	1.0	1	02/17/09	02/17/09	
Sample ID: ISB0937-07 (010 EFF-7 - Wa Reporting Units: g/cc	nter)				Sample	ed: 02/05/0	09		
Density Charles get	Displacement	9B17118	N/A	NA	1.0	1	02/17/09	02/17/09	
Sample ID: ISB0937-08 (010 EFF-8 - Wa Reporting Units: g/cc	ater)				Sample	ed: 02/05/0	09		
Density	Displacement	9B17118	N/A	NA	1.0	1	02/17/09	02/17/09	
Sample ID: ISB0937-09 (010 EFF-9 - Wa Reporting Units: g/cc	nter)				Sample	ed: 02/05/0	09		
Density Charles get	Displacement	9B17118	N/A	NA	1.0	1	02/17/09	02/17/09	
Sample ID: ISB0937-10 (010 EFF-10 - W Reporting Units: g/cc	ater)				Sample	ed: 02/06/0	09		
Density	Displacement	9B17118	N/A	NA	1.0	1	02/17/09	02/17/09	

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Monitoring Program

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INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB0937-11 (010 EFF-11 - W	ater)				Sample	ed: 02/06/0	09		
Reporting Units: g/cc Density	Displacement	9B17118	N/A	NA	1.0	1	02/17/09	02/17/09	
Sample ID: ISB0937-12 (010 EFF-12 - W Reporting Units: g/cc	ater)				Sample	ed: 02/06/0	09		
Density	Displacement	9B17118	N/A	NA	1.0	1	02/17/09	02/17/09	
Sample ID: ISB0937-13 (010 EFF-13 - W Reporting Units: g/cc	ater)				Sample	ed: 02/06/0	09		
Density	Displacement	9B17118	N/A	NA	1.0	1	02/17/09	02/17/09	
Sample ID: ISB0937-14 (010 EFF-14 - W	ater)				Sample	ed: 02/06/	09		
Reporting Units: g/cc Density	Displacement	9B17118	N/A	NA	1.0	1	02/17/09	02/17/09	
Sample ID: ISB0937-15 (010 EFF-15 - W	ater)				Sample	ed: 02/06/0	09		
Reporting Units: g/cc Density	Displacement	9B17118	N/A	NA	1.0	1	02/17/09	02/17/09	
Sample ID: ISB0937-16 (010 EFF-16 - W	ater)				Sample	ed: 02/06/	09		
Reporting Units: g/cc Density	Displacement	9B17118	N/A	NA	1.0	1	02/17/09	02/17/09	
Sample ID: ISB0937-17 (010 EFF-17 - W	ater)				Sample	ed: 02/06/0	09		
Reporting Units: g/cc Density	Displacement	9B17118	N/A	NA	1.0	1	02/17/09	02/17/09	
Sample ID: ISB0937-18 (010 EFF-18 - W	ater)				Sample	ed: 02/06/0	09		
Reporting Units: g/cc Density	Displacement	9B17118	N/A	NA	1.0	1	02/17/09	02/17/09	
Sample ID: ISB0937-19 (010 EFF-19 - W	ater)				Sample	ed: 02/06/0	09		
Reporting Units: g/cc Density	Displacement	9B17118	N/A	NA	0.99	1	02/17/09	02/17/09	
Sample ID: ISB0937-20 (010 EFF-20 - W	ater)				Sample	ed: 02/06/	09		
Reporting Units: g/cc Density	Displacement	9B17118	N/A	NA	1.0	1	02/17/09	02/17/09	

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Joseph Doak Project Manager



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INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB0937-21 (010 EFF-21 - W	Vater)				Sample	ed: 02/06/	09		
Reporting Units: g/cc Density	Displacement	9B17119	N/A	NA	1.0	1	02/17/09	02/17/09	
Sample ID: ISB0937-22 (010 EFF-22 - W Reporting Units: g/cc	Vater)				Sample	ed: 02/06/0	09		
Density	Displacement	9B17119	N/A	NA	1.0	1	02/17/09	02/17/09	
Sample ID: ISB0937-23 (010 EFF-23 - W Reporting Units: g/cc	Vater)				Sample	ed: 02/06/0	09		
Density	Displacement	9B17119	N/A	NA	1.0	1	02/17/09	02/17/09	
Sample ID: ISB0937-24 (010 EFF-24 - W Reporting Units: g/cc	Vater)				Sample	ed: 02/06/0)9		
Density	Displacement	9B17119	N/A	NA	1.0	1	02/17/09	02/17/09	
Sample ID: ISB0937-01 (010 EFF-1 - Wa Reporting Units: mg/l	ater)				Sample	ed: 02/05/0)9		
Sediment	ASTM D3977	9B18055	10	10	96	1	02/18/09	02/18/09	
Sample ID: ISB0937-02 (010 EFF-2 - Wa Reporting Units: mg/l	ater)				Sample	ed: 02/05/0)9		
Sediment	ASTM D3977	9B18055	10	10	120	1	02/18/09	02/18/09	
Sample ID: ISB0937-03 (010 EFF-3 - Wa Reporting Units: mg/l	ater)				Sample	ed: 02/05/0)9		
Sediment Sediment	ASTM D3977	9B18055	10	10	75	1	02/18/09	02/18/09	
Sample ID: ISB0937-04 (010 EFF-4 - Wa Reporting Units: mg/l	ater)				Sample	ed: 02/05/0)9		
Sediment Sediment	ASTM D3977	9B18055	10	10	23	1	02/18/09	02/18/09	
Sample ID: ISB0937-05 (010 EFF-5 - Wa Reporting Units: mg/l	ater)				Sample	ed: 02/05/0	09		
Sediment	ASTM D3977	9B18055	10	10	15	1	02/18/09	02/18/09	
Sample ID: ISB0937-06 (010 EFF-6 - Wa	ater)				Sample	ed: 02/05/0	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B18055	10	10	13	1	02/18/09	02/18/09	

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INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB0937-07 (010 EFF-7 - Wa	nter)				Sample	ed: 02/05/	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B18055	10	10	12	1	02/18/09	02/18/09	
Sample ID: ISB0937-08 (010 EFF-8 - Wa	iter)				Sample	ed: 02/05/	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B18055	10	10	17	1	02/18/09	02/18/09	
Sample ID: ISB0937-09 (010 EFF-9 - Wa)B10033	10	10		ed: 02/05/		02/10/09	
Reporting Units: mg/l	iici)				Sample	eu: 02/05/	09		
Sediment	ASTM D3977	9B18055	10	10	36	1	02/18/09	02/18/09	
Sample ID: ISB0937-10 (010 EFF-10 - W	ater)				Sample	ed: 02/06/	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B18055	10	10	21	1	02/18/09	02/18/09	
Sample ID: ISB0937-11 (010 EFF-11 - W	ater)				Sample	ed: 02/06/	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B18055	10	10	ND	1	02/18/09	02/18/09	
Sample ID: ISB0937-12 (010 EFF-12 - W	ater)				Sample	ed: 02/06/	09		
Reporting Units: mg/l Sediment	A STM D2077	9B18055	10	10	ND	1	02/19/00	02/18/09	
	ASTM D3977	9B18033	10	10			02/18/09	02/18/09	
Sample ID: ISB0937-13 (010 EFF-13 - W Reporting Units: mg/l	ater)				Sample	ed: 02/06/	09		
Sediment	ASTM D3977	9B18055	10	10	ND	1	02/18/09	02/18/09	
Sample ID: ISB0937-14 (010 EFF-14 - W Reporting Units: mg/l	ater)				Sample	ed: 02/06/	09		
Sediment Sediment	ASTM D3977	9B18055	10	10	ND	1	02/18/09	02/18/09	
Sample ID: ISB0937-15 (010 EFF-15 - W	ater)				Sample	ed: 02/06/	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B18055	10	10	29	1	02/18/09	02/18/09	
Sample ID: ISB0937-16 (010 EFF-16 - W	ater)				Sample	ed: 02/06/	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B18055	10	10	ND	1	02/18/09	02/18/09	

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INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB0937-17 (010 EFF-17 - V	Vater)				Sample	ed: 02/06/0	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B18055	10	10	ND	1	02/18/09	02/18/09	
Sample ID: ISB0937-18 (010 EFF-18 - V Reporting Units: mg/l	Vater)				Sample	ed: 02/06/0	09		
Sediment Sediment	ASTM D3977	9B18055	10	10	ND	1	02/18/09	02/18/09	
Sample ID: ISB0937-19 (010 EFF-19 - V	Vater)				Sample	ed: 02/06/0	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B18055	10	10	ND	1	02/18/09	02/18/09	
Sample ID: ISB0937-20 (010 EFF-20 - V	Vater)				Sample	ed: 02/06/0	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B18055	10	10	ND	1	02/18/09	02/18/09	
Sample ID: ISB0937-21 (010 EFF-21 - V	Vater)				Sample	ed: 02/06/	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B18057	10	10	ND	1	02/18/09	02/18/09	
Sample ID: ISB0937-22 (010 EFF-22 - V	Vater)				Sample	ed: 02/06/0	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B18057	10	10	ND	1	02/18/09	02/18/09	
Sample ID: ISB0937-23 (010 EFF-23 - V	Vater)				Sample	ed: 02/06/0	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B18057	10	10	ND	1	02/18/09	02/18/09	
Sample ID: ISB0937-24 (010 EFF-24 - V	Vater)				Sample	ed: 02/06/0	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B18057	10	10	ND	1	02/18/09	02/18/09	



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Monitoring Program

Report Number: ISB0937

Sampled: 02/05/09-02/06/09 Received: 02/09/09

METHOD BLANK/QC DATA

INORGANICS

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 9B17118 Extracted: 02/17/09	_										
					_						
Duplicate Analyzed: 02/17/2009 (9B1711	8-DUP1)				Sou	rce: ISB0	937-01				
Density	0.999	NA	N/A	g/cc		0.999			0	20	
Batch: 9B17119 Extracted: 02/17/09	-										
Duplicate Analyzed: 02/17/2009 (9B1711	9-DUP1)				Sou	rce: ISB0	939-02				
Density	0.999	NA	N/A	g/cc		0.999			0	20	



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MWH-Pasadena/Boeing

DATA QUALIFIERS AND DEFINITIONS

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.

RPD Relative Percent Difference



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Certification Summary

TestAmerica Irvine

Method	Matrix	Nelac	California
ASTM D3977	Water		
Displacement	Water		

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

TestAmerica Irvine

Test America version 12/20/07	3 Version 12/20/0	2	CHAIN OF CUSTODY FORM	OF CUS	ТОБ	Y FORM	TSB093	137 Page 1 of 1
Client Name/Address:	ess:		Project: Boein	g BMP		-	ANALYSIS REQUIRED	
MWH-Arcadia 618 Michillinda Avenue, Suite 200	nue, Suite 200		Effectiveness Monitoring Program	Monitoring		-1/		Field readings:
Arcadia, CA 91007 Test America Contact: .losenh Doak	ctloseph Doak					tr ITSA ,		Temp = NA
Project Manager: Bronwyn Kelly	Bronwyn Kelly		Phone Number	<u>.</u>		OSS)		pH'= NA
Sampler: R Banaga	ga		(626) 568-6515 (626) 568-6515	- დ		ended Se		Time of readings = NA
Sample Sar Description Ma	Sample Container Matrix Type	Cont.	Sampling Date/Time	Preservative	Bottle #	Conc		
	500 mL Poly	-	1-1	None	-	X		
	500 mL Poly	-		None	2	×		
010 EFF-3 W	500 mL Poly		2/05/09 - 1745	None	6	× >		
Ī	500 ml Poly	-	+	None	r	< >		
	500 mL Poly	-	+-	None	٥	< ×		
010 EFF-7 W	500 mL Poly	-	 	None	7	*		
	500 mL Poly	-	 	None	ω	×		
	500 mL Poly	- -	2/05/09 - 2345	None	ာ (X		
010 EFF-10 W	500 mL Poly	-	2/06/09 - 0045 2/06/09 - 0145	None	5 2	× 3		
	500 ml Poly	- -	+-	None	- 5	\		
	500 mL Poly	- -		None	3 5	< >		
	500 mL Poly	-	2/06/09 - 0445	None	4	×		701 V
:	500 mL Poly	1		None	15	×		
010 EFF-16 W	500 mL Poly	-	2/06/09 - 0645	None	16	×		
	500 mL Poly	-	_	None	17	×		\\~\\C\\
-	500 mL Poly	- -		None	∞	×		:1
010 EFF-19 W	500 mL Poly	- -	2/06/09 - 0945	None	19	×		
	500 mL Poly	- -	2/06/09 - 1145	None	2 2	× >		í
	500 mL Poly	-	2/06/09 - 1245	None	22	4 ×		
	500 mL Poly	-	2/06/09 - 1345	None	23	×		
010 EFF-24 W	500 mL Poly	_	2/06/09 1445	None	24			
Relinquished By 2	60.6-	Date/Time:) S S	Received By Served By Serv	3	TA Date/Time.	217 96%	Turn around Time: (check) 24 Hours 5 Days
Relinquished By	7	Date/Time		Received By		Date/Time:		48 Hours 10 Days
Summer	199	01/02	1/63/1830					72 Hours Normal X
Relinquished By		Date/Time:	.ec	Received By		Date/Time:	ime:	Sample Integrity: (check) On ice:
)			.	7 4) 2 4