APPENDIX G

Section 8

Outfall 004, BMP Effectiveness, February 16, 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: 02/16/09-02/17/09

Received: 02/17/09 Issued: 03/02/09 14:01

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.

 ${\it This\ entire\ report\ was\ reviewed\ and\ approved\ for\ release}.$

SAMPLE CROSS REFERENCE

LABORATORY ID	CLIENT ID	MATRIX
ISB1944-01	004 EFF-1	Water
ISB1944-02	004 EFF-2	Water
ISB1944-03	004 EFF-3	Water
ISB1944-04	004 EFF-4	Water
ISB1944-05	004 EFF-5	Water
ISB1944-06	004 EFF-6	Water
ISB1944-07	004 EFF-7	Water
ISB1944-08	004 EFF-8	Water
ISB1944-09	004 EFF-9	Water
ISB1944-10	004 EFF-10	Water
ISB1944-11	004 EFF-11	Water
ISB1944-12	004 EFF-12	Water
ISB1944-13	004 EFF-13	Water
ISB1944-14	004 EFF-14	Water
ISB1944-15	004 EFF-15	Water
ISB1944-16	004 EFF-16	Water
ISB1944-17	004 EFF-17	Water
ISB1944-18	004 EFF-18	Water
ISB1944-19	004 EFF-19	Water
ISB1944-20	004 EFF-20	Water
ISB1944-21	004 EFF-21	Water
ISB1944-22	004 EFF-22	Water
ISB1944-23	004 EFF-23	Water



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Project ID: BMP Effectiveness

Monitoring Program Sampled: 02/16/09-02/17/09

Report Number: ISB1944 Received: 02/17/09

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

MWH-Pasadena/Boeing

Arcadia, CA 91007

LABORATORY ID
ISB1944-24

CLIENT ID

004 EFF-24

MATRIX Water

Reviewed By:

TestAmerica Irvine

Joseph Dock

Joseph Doak Project Manager



MWH-Pasadena/Boeing

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618 Michillinda Avenue, Suite 200

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Received: 02/17/09

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB1944-01 (004 EFF-1 - Wa	nter)				Sample	ed: 02/16/0	09		
Reporting Units: g/cc Density	Displacement	9B25052	N/A	NA	1.0	1	02/25/09	02/25/09	
Sample ID: ISB1944-02 (004 EFF-2 - Wa Reporting Units: g/cc	nter)				Sample	ed: 02/16/0	09		
Density	Displacement	9B25052	N/A	NA	1.0	1	02/25/09	02/25/09	
Sample ID: ISB1944-03 (004 EFF-3 - Wa Reporting Units: g/cc	nter)				Sample	ed: 02/16/0	09		
Density	Displacement	9B25052	N/A	NA	1.0	1	02/25/09	02/25/09	
Sample ID: ISB1944-04 (004 EFF-4 - Wa Reporting Units: g/cc	nter)				Sample	ed: 02/16/0	09		
Density	Displacement	9B25052	N/A	NA	0.99	1	02/25/09	02/25/09	
Sample ID: ISB1944-05 (004 EFF-5 - Wa Reporting Units: g/cc	nter)				Sample	ed: 02/16/0	09		
Density	Displacement	9B25052	N/A	NA	1.0	1	02/25/09	02/25/09	
Sample ID: ISB1944-06 (004 EFF-6 - Wa Reporting Units: g/cc	nter)				Sample	ed: 02/16/0	09		
Density	Displacement	9B25052	N/A	NA	0.99	1	02/25/09	02/25/09	
Sample ID: ISB1944-07 (004 EFF-7 - Wa Reporting Units: g/cc	nter)				Sample	ed: 02/16/0	09		
Density	Displacement	9B25052	N/A	NA	1.0	1	02/25/09	02/25/09	
Sample ID: ISB1944-08 (004 EFF-8 - Wa Reporting Units: g/cc	nter)				Sample	ed: 02/16/	09		
Density	Displacement	9B25052	N/A	NA	1.0	1	02/25/09	02/25/09	
Sample ID: ISB1944-09 (004 EFF-9 - Wa Reporting Units: g/cc	nter)				Sample	ed: 02/16/0	09		
Density	Displacement	9B25052	N/A	NA	1.0	1	02/25/09	02/25/09	
Sample ID: ISB1944-10 (004 EFF-10 - W	ater)				Sample	ed: 02/16/	09		
Reporting Units: g/cc Density	Displacement	9B25052	N/A	NA	1.0	1	02/25/09	02/25/09	



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Arcadia, CA 91007 Attention: Bronwyn Kelly

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB1944-11 (004 EFF-11 - W	ater)				Sample	ed: 02/16/0	09		
Reporting Units: g/cc Density	Displacement	9B25052	N/A	NA	0.99	1	02/25/09	02/25/09	
Sample ID: ISB1944-12 (004 EFF-12 - W Reporting Units: g/cc	ater)				Sample	ed: 02/16/0	09		
Density	Displacement	9B25052	N/A	NA	1.0	1	02/25/09	02/25/09	
Sample ID: ISB1944-13 (004 EFF-13 - W Reporting Units: g/cc	ater)				Sample	ed: 02/16/0)9		
Density	Displacement	9B25052	N/A	NA	1.0	1	02/25/09	02/25/09	
Sample ID: ISB1944-14 (004 EFF-14 - W Reporting Units: g/cc	ater)				Sample	ed: 02/16/0	09		
Density	Displacement	9B25052	N/A	NA	1.0	1	02/25/09	02/25/09	
Sample ID: ISB1944-15 (004 EFF-15 - W Reporting Units: g/cc	ater)				Sample	ed: 02/16/0)9		
Density	Displacement	9B25052	N/A	NA	0.99	1	02/25/09	02/25/09	
Sample ID: ISB1944-16 (004 EFF-16 - W	ater)				Sample	ed: 02/16/0	09		
Reporting Units: g/cc Density	Displacement	9B25052	N/A	NA	1.0	1	02/25/09	02/25/09	
Sample ID: ISB1944-17 (004 EFF-17 - W Reporting Units: g/cc	ater)				Sample	ed: 02/16/0)9		
Density	Displacement	9B25052	N/A	NA	1.0	1	02/25/09	02/25/09	
Sample ID: ISB1944-18 (004 EFF-18 - W Reporting Units: g/cc	ater)				Sample	ed: 02/16/0)9		
Density	Displacement	9B25052	N/A	NA	1.0	1	02/25/09	02/25/09	
Sample ID: ISB1944-19 (004 EFF-19 - W Reporting Units: g/cc	ater)				Sample	ed: 02/16/0)9		
Density	Displacement	9B25052	N/A	NA	1.0	1	02/25/09	02/25/09	
Sample ID: ISB1944-20 (004 EFF-20 - W	ater)				Sample	ed: 02/16/0	09		
Reporting Units: g/cc Density	Displacement	9B25052	N/A	NA	1.0	1	02/25/09	02/25/09	



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INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB1944-21 (004 EFF-21 - W	Vater)				Sample	ed: 02/17/0	09		
Reporting Units: g/cc Density	Displacement	9B25053	N/A	NA	1.0	1	02/25/09	02/25/09	
Sample ID: ISB1944-22 (004 EFF-22 - W Reporting Units: g/cc	Vater)				Sample	ed: 02/17/0	09		
Density	Displacement	9B25053	N/A	NA	1.0	1	02/25/09	02/25/09	
Sample ID: ISB1944-23 (004 EFF-23 - W Reporting Units: g/cc	Vater)				Sample	ed: 02/17/0	09		
Density	Displacement	9B25053	N/A	NA	1.0	1	02/25/09	02/25/09	
Sample ID: ISB1944-24 (004 EFF-24 - W Reporting Units: g/cc	Vater)				Sample	ed: 02/17/0)9		
Density	Displacement	9B25053	N/A	NA	1.0	1	02/25/09	02/25/09	
Sample ID: ISB1944-01 (004 EFF-1 - Wa Reporting Units: mg/l	ater)				Sample	ed: 02/16/0)9		
Sediment	ASTM D3977	9B25055	10	10	10	1	02/25/09	02/25/09	
Sample ID: ISB1944-02 (004 EFF-2 - Wa Reporting Units: mg/l	ater)				Sample	ed: 02/16/0)9		
Sediment	ASTM D3977	9B25055	10	10	41	1	02/25/09	02/25/09	
Sample ID: ISB1944-03 (004 EFF-3 - Wa Reporting Units: mg/l	ater)				Sample	ed: 02/16/0)9		
Sediment	ASTM D3977	9B25055	10	10	39	1	02/25/09	02/25/09	
Sample ID: ISB1944-04 (004 EFF-4 - Wa Reporting Units: mg/l	ater)				Sample	ed: 02/16/0)9		
Sediment Sediment	ASTM D3977	9B25055	10	10	31	1	02/25/09	02/25/09	
Sample ID: ISB1944-05 (004 EFF-5 - Wa Reporting Units: mg/l	ater)				Sample	ed: 02/16/0)9		
Sediment	ASTM D3977	9B25055	10	10	33	1	02/25/09	02/25/09	
Sample ID: ISB1944-06 (004 EFF-6 - Wa	ater)				Sample	ed: 02/16/0	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B25055	10	10	16	1	02/25/09	02/25/09	



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INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB1944-07 (004 EFF-7 - Wa	ater)				Sample	ed: 02/16/0	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B25055	10	10	32	1	02/25/09	02/25/09	
Sample ID: ISB1944-08 (004 EFF-8 - Wa Reporting Units: mg/l	ater)				Sample	ed: 02/16/0)9		
Sediment	ASTM D3977	9B25055	10	10	26	1	02/25/09	02/25/09	
Sample ID: ISB1944-09 (004 EFF-9 - Wa Reporting Units: mg/l	ater)				Sample	ed: 02/16/0)9		
Sediment	ASTM D3977	9B25055	10	10	26	1	02/25/09	02/25/09	
Sample ID: ISB1944-10 (004 EFF-10 - W	/ater)				Sample	ed: 02/16/0	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B25055	10	10	88	1	02/25/09	02/25/09	
Sample ID: ISB1944-11 (004 EFF-11 - W	/ater)				Sample	ed: 02/16/0	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B25055	10	10	28	1	02/25/09	02/25/09	
Sample ID: ISB1944-12 (004 EFF-12 - W	/ater)				Sample	ed: 02/16/0	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B25055	10	10	24	1	02/25/09	02/25/09	
Sample ID: ISB1944-13 (004 EFF-13 - W	/ater)				Sample	ed: 02/16/0	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B25055	10	10	19	1	02/25/09	02/25/09	
Sample ID: ISB1944-14 (004 EFF-14 - W Reporting Units: mg/l	/ater)				Sample	ed: 02/16/0)9		
Sediment	ASTM D3977	9B25055	10	10	31	1	02/25/09	02/25/09	
Sample ID: ISB1944-15 (004 EFF-15 - W	/ater)				Sample	ed: 02/16/)9		
Reporting Units: mg/l Sediment	ASTM D3977	9B25055	10	10	23	1	02/25/09	02/25/09	
Sample ID: ISB1944-16 (004 EFF-16 - W	/ater)				Sample	ed: 02/16/0	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B25055	10	10	17	1	02/25/09	02/25/09	



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INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB1944-17 (004 EFF-17 - V	Vater)				Sample	ed: 02/16/0	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B25055	10	10	28	1	02/25/09	02/25/09	
Sample ID: ISB1944-18 (004 EFF-18 - V Reporting Units: mg/l	Vater)				Sample	ed: 02/16/0	09		
Sediment	ASTM D3977	9B25055	10	10	26	1	02/25/09	02/25/09	
Sample ID: ISB1944-19 (004 EFF-19 - V Reporting Units: mg/l	Vater)				Sample	ed: 02/16/0	09		
Sediment	ASTM D3977	9B25055	10	10	13	1	02/25/09	02/25/09	
Sample ID: ISB1944-20 (004 EFF-20 - V	Vater)				Sample	ed: 02/16/	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B25055	10	10	32	1	02/25/09	02/25/09	
Sample ID: ISB1944-21 (004 EFF-21 - V	Vater)				Sample	ed: 02/17/	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B25056	10	10	35	1	02/25/09	02/25/09	
Sample ID: ISB1944-22 (004 EFF-22 - V	Vater)				Sample	ed: 02/17/0	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B25056	10	10	26	1	02/25/09	02/25/09	
Sample ID: ISB1944-23 (004 EFF-23 - V	Vater)				Sample	ed: 02/17/0	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B25056	10	10	29	1	02/25/09	02/25/09	
Sample ID: ISB1944-24 (004 EFF-24 - V	Vater)				Sample	ed: 02/17/0	09		
Reporting Units: mg/l Sediment	ASTM D3977	9B25056	10	10	29	1	02/25/09	02/25/09	



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METHOD BLANK/QC DATA

INORGANICS

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 9B25052 Extracted: 02/25/09	_										
					~						
Duplicate Analyzed: 02/25/2009 (9B2505	2-DUP1)				Sou	rce: ISB1	944-01				
Density	1.00	NA	N/A	g/cc		1.00			0	20	
Batch: 9B25053 Extracted: 02/25/09	-										
Duplicate Analyzed: 02/25/2009 (9B2505	3-DUP1)				Sou	rce: ISB1	946-01				
Density	1.00	NA	N/A	g/cc		1.00			0	20	



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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

California Method Matrix Nelac **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

Pnn

Test America version 12/20/07	rica	/ersion 12/20/0 [·]	_	CHAIN	CHAIN OF CUSTODY FORM	TOD	Y FOR	Σ		ISBIGHY Page 1 of 1
Client Name/Address:	ddress:			Project: Boeing BMP	ng BMP				ANALYSIS REQU	REQUIRED
MWH-Arcadia	<u>lä</u>	:		Effectiveness Monitoring	s Monitoring					
618 Michilinda Avenue, Suite 200 Arcadia, CA 91007	Avenue, 307	Surre 200					-MT8			Temp = NA
Test America Contact: Joseph Doak	ontact: Jo	oseph Doak				,	C' ∀3			
Project Manager: Bronwyn Kelly	Jer: Bro	nwyn Kelly		Phone Number: (626) 568-6691	er:		SS) (- HA
Sampler: Mariscal	scal			(626) 568-6515 (626) 568-6515	. [5		S bende oentration (7991)			Time of readings = NA Comments
Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #	Conc			
004 EFF-1	W	500 mL Poly	1	2/16/09-0450	None	1	×			
004 EFF-2	W	500 mL Poly	~	2/16/09-0550	None	2	×			
004 EFF-3	M	500 mL Poly	-	2/16/09-0650	None	3	×			
004 EFF-4	>	500 mL Poly	-	2/16/09-0750	None	4	×			
004 EFF-5	M S	500 mL Poly	_	2/16/09-0850	None	5	× ×			
004 EFF-6	^	500 mL Poly		2/16/09-0950	None	0 1	< >			
004 EFF-8	3 3	500 mL Poly		2/16/09-1150	None	- 8	< ×			
004 EFF-9	M	500 mL Poly	-	2/16/09-1250	None	6	×			
004 EFF-10	×	500 mL Poly	_	2/16/09-1350	None	10	×			
004 EFF-11	>	500 mL Poly	-	2/16/09-1450	None	7	×			
004 EFF-12	> .	500 mL Poly	-	2/16/09-1550	None	12	× ;			
004 EFF-13	≥ }	500 mL Poly	- ,	2/16/09-1650	None	33	×			
004 EFF-14	> >	500 mL Poly		2/16/09-1/50	None	4 t	× ×			5
004 EFF-15	A	500 ml Poly	-	2/16/09-1950	N O O	5 4	< ×			191
004 EFF-17	* *	500 mL Poly		2/16/09-1999	None	17	< ×			0,4,0
004 EFF-18	W	500 mL Poly	-	2/16/09-2150	None	18	×			
004 EFF-19	Μ	500 mL Poly	-	2/16/09-2250	None	19	×			.6/4.
004 EFF-20 004 EFF-21	> >	500 mL Poly 500 ml Poly	· ·	2/16/09-2350	None	20	××			
004 EFF-22	× ×	500 mL Poly	-	2/17/09-0150	None	22	×			
004 EFF-23	8	500 mL Poly	-	2/17/09-0250	None	23	×			
004 EFF-24	8	500 mL Poly		2/17/09-0350		24	×			
_	e		Date/Time:	me:	Received By			Date/Time:		Turn around Time: (check)
A Merch	7(2		2-1705	7761	24 Hours 5 Days
Relinquished By			Date/Time:	me:	Received By	\ \ \ \		Date/Time:		48 Hours 10 Days
Chr)		602/2	7	912)		·>				72 Hours Normal _X
Relinquished			Date/Time	me:	Received By			Date/Time:		Sample Integrity: (check) Intact On Ice:
•					2	No.	,	Mand (7	(ZIC)	473.8°C
) 1 3) 1		,