APPENDIX G

Section 37

Outfall 006 – BMP Effectiveness, January 23-24, 2008 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: 01/23/08-01/24/08

> Received: 01/26/08 Issued: 02/06/08 18:03

NELAP #01108CA California ELAP#1197 CSDLAC #10256

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
IRA2568-01	006 EFF-1	Water
IRA2568-02	006 EFF-2	Water
IRA2568-03	006 EFF-3	Water
IRA2568-04	006 EFF-4	Water
IRA2568-05	006 EFF-5	Water
IRA2568-06	006 EFF-6	Water
IRA2568-07	006 EFF-7	Water
IRA2568-08	006 EFF-8	Water
IRA2568-09	006 EFF-9	Water
IRA2568-10	006 EFF-10	Water
IRA2568-11	006 EFF-11	Water
IRA2568-12	006 EFF-12	Water
IRA2568-13	006 EFF-13	Water
IRA2568-14	006 EFF-14	Water
IRA2568-15	006 EFF-15	Water
IRA2568-16	006 EFF-16	Water
IRA2568-17	006 EFF-17	Water
IRA2568-18	006 EFF-18	Water
IRA2568-19	006 EFF-19	Water
IRA2568-20	006 EFF-20	Water
IRA2568-21	006 EFF-21	Water
IRA2568-22	006 EFF-22	Water
IRA2568-23	006 EFF-23	Water



17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

Project ID: BMP Effectiveness

Monitoring Program Sampled: 01/23/08-01/24/08

Report Number: IRA2568 Received: 01/26/08

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

MWH-Pasadena/Boeing

Arcadia, CA 91007

LABORATORY ID IRA2568-24 **CLIENT ID**

MATRIX Water

006 EFF-24

Reviewed By:

TestAmerica Irvine

Joseph Dock



618 Michillinda Avenue, Suite 200

Attention: Bronwyn Kelly

Arcadia, CA 91007

Project ID: BMP Effectiveness

Monitoring Program Sampled: 01/23/08-01/24/08

Report Number: IRA2568 Received: 01/26/08

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA2568-01 (006 EFF-1 - Wa	nter)				Sample	ed: 01/23/0	08		
Reporting Units: g/cc Density	Displacement	8B01114	N/A	NA	0.99	1	02/01/08	02/01/08	
Sample ID: IRA2568-02 (006 EFF-2 - Wa	nter)				Sample	ed: 01/23/	08		
Reporting Units: g/cc Density	Displacement	8B01114	N/A	NA	0.99	1	02/01/08	02/01/08	
Sample ID: IRA2568-03 (006 EFF-3 - Wa Reporting Units: g/cc	ater)				Sample	ed: 01/23/0	08		
Density	Displacement	8B01114	N/A	NA	1.0	1	02/01/08	02/01/08	
Sample ID: IRA2568-04 (006 EFF-4 - Wa Reporting Units: g/cc	ater)				Sample	ed: 01/23/0	08		
Density	Displacement	8B01114	N/A	NA	0.99	1	02/01/08	02/01/08	
Sample ID: IRA2568-05 (006 EFF-5 - Wa Reporting Units: g/cc	nter)				Sample	ed: 01/23/0	08		
Density	Displacement	8B01114	N/A	NA	0.99	1	02/01/08	02/01/08	
Sample ID: IRA2568-06 (006 EFF-6 - Wa Reporting Units: g/cc	nter)				Sample	ed: 01/23/	08		
Density	Displacement	8B01114	N/A	NA	0.99	1	02/01/08	02/01/08	
Sample ID: IRA2568-07 (006 EFF-7 - Wa Reporting Units: g/cc	nter)				Sample	ed: 01/23/	08		
Density Density	Displacement	8B01114	N/A	NA	0.99	1	02/01/08	02/01/08	
Sample ID: IRA2568-08 (006 EFF-8 - Wa Reporting Units: g/cc	nter)				Sample	ed: 01/23/0	08		
Density	Displacement	8B01114	N/A	NA	1.0	1	02/01/08	02/01/08	
Sample ID: IRA2568-09 (006 EFF-9 - Wa Reporting Units: g/cc	ater)				Sample	ed: 01/24/0	08		
Density	Displacement	8B01114	N/A	NA	0.99	1	02/01/08	02/01/08	
Sample ID: IRA2568-10 (006 EFF-10 - W Reporting Units: g/cc	ater)				Sample	ed: 01/24/0	08		
Density	Displacement	8B01115	N/A	NA	1.0	1	02/01/08	02/01/08	



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Report Number: IRA2568 Received: 01/26/08

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result		Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA2568-11 (006 EFF-11 - V	Vater)				Sample	ed: 01/24/	08		
Reporting Units: g/cc Density	Displacement	8B01115	N/A	NA	0.99	1	02/01/08	02/01/08	
Sample ID: IRA2568-12 (006 EFF-12 - V Reporting Units: g/cc	Vater)				Sample	ed: 01/24/0	08		
Density general green	Displacement	8B01115	N/A	NA	1.0	1	02/01/08	02/01/08	
Sample ID: IRA2568-13 (006 EFF-13 - V Reporting Units: g/cc	Vater)				Sample	ed: 01/24/0	08		
Density	Displacement	8B01115	N/A	NA	0.99	1	02/01/08	02/01/08	
Sample ID: IRA2568-14 (006 EFF-14 - V Reporting Units: g/cc	Vater)				Sample	ed: 01/24/0	08		
Density	Displacement	8B01115	N/A	NA	0.99	1	02/01/08	02/01/08	
Sample ID: IRA2568-15 (006 EFF-15 - V Reporting Units: g/cc	Vater)				Sample	ed: 01/24/0	08		
Density	Displacement	8B01115	N/A	NA	0.99	1	02/01/08	02/01/08	
Sample ID: IRA2568-16 (006 EFF-16 - V Reporting Units: g/cc	Vater)				Sample	ed: 01/24/0	08		
Density Density	Displacement	8B01115	N/A	NA	1.0	1	02/01/08	02/01/08	
Sample ID: IRA2568-17 (006 EFF-17 - V Reporting Units: g/cc	Vater)				Sample	ed: 01/24/0	08		
Density	Displacement	8B01115	N/A	NA	1.0	1	02/01/08	02/01/08	
Sample ID: IRA2568-18 (006 EFF-18 - V Reporting Units: g/cc	Vater)				Sample	ed: 01/24/0	08		
Density Density	Displacement	8B01115	N/A	NA	0.99	1	02/01/08	02/01/08	
Sample ID: IRA2568-19 (006 EFF-19 - V Reporting Units: g/cc	Vater)				Sample	ed: 01/24/0	08		
Density	Displacement	8B01115	N/A	NA	0.99	1	02/01/08	02/01/08	
Sample ID: IRA2568-20 (006 EFF-20 - V Reporting Units: g/cc	Vater)				Sample	ed: 01/24/0	08		
Density general green	Displacement	8B01115	N/A	NA	0.99	1	02/01/08	02/01/08	

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Attention: Bronwyn Kelly

Project ID: BMP Effectiveness

Monitoring Program Sampled: 01/23/08-01/24/08

Report Number: IRA2568

Received: 01/26/08

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA2568-21 (006 EFF-21 - V	Vater)				Sample	ed: 01/24/	08		
Reporting Units: g/cc Density	Displacement	8B01115	N/A	NA	0.98	1	02/01/08	02/01/08	
Sample ID: IRA2568-22 (006 EFF-22 - V Reporting Units: g/cc	Vater)				Sample	ed: 01/24/0	08		
Density	Displacement	8B01115	N/A	NA	0.99	1	02/01/08	02/01/08	
Sample ID: IRA2568-23 (006 EFF-23 - W Reporting Units: g/cc	Vater)				Sample	ed: 01/24/0	08		
Density	Displacement	8B01115	N/A	NA	0.99	1	02/01/08	02/01/08	
Sample ID: IRA2568-24 (006 EFF-24 - W	Vater)				Sample	ed: 01/24/0	08		
Reporting Units: g/cc Density	Displacement	8B01115	N/A	NA	1.0	1	02/01/08	02/01/08	
Sample ID: IRA2568-01 (006 EFF-1 - Water Reporting Units: mg/l	ater)				Sample	ed: 01/23/0	08		
Sediment Sediment	ASTM D3977	8B04103	10	10	180	1	02/04/08	02/04/08	
Sample ID: IRA2568-02 (006 EFF-2 - Wa	ater)				Sample	ed: 01/23/0	08		
Reporting Units: mg/l Sediment	ASTM D3977	8B04103	10	10	200	1	02/04/08	02/04/08	
Sample ID: IRA2568-03 (006 EFF-3 - Washing Units: mg/l	ater)				Sample	ed: 01/23/0	08		
Sediment Sediment	ASTM D3977	8B04103	10	10	150	1	02/04/08	02/04/08	
Sample ID: IRA2568-04 (006 EFF-4 - Water Reporting Units: mg/l	ater)				Sample	ed: 01/23/0	08		
Sediment	ASTM D3977	8B04103	10	10	110	1	02/04/08	02/04/08	
Sample ID: IRA2568-05 (006 EFF-5 - Washing Units: mg/l	ater)				Sample	ed: 01/23/0	08		
Sediment	ASTM D3977	8B04103	10	10	71	1	02/04/08	02/04/08	
Sample ID: IRA2568-06 (006 EFF-6 - Wa	ater)				Sample	ed: 01/23/	08		
Reporting Units: mg/l Sediment	ASTM D3977	8B04103	10	10	54	1	02/04/08	02/04/08	

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Project ID: BMP Effectiveness

Monitoring Program

Report Number: IRA2568

Sampled: 01/23/08-01/24/08

Received: 01/26/08

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA2568-07 (006 EFF-7 - W	ater)				Sample	ed: 01/23/	08		
Reporting Units: mg/l Sediment	ASTM D3977	8B04103	10	10	57	1	02/04/08	02/04/08	
Sample ID: IRA2568-08 (006 EFF-8 - W Reporting Units: mg/l	ater)				Sample	ed: 01/23/	08		
Sediment	ASTM D3977	8B04103	10	10	49	1	02/04/08	02/04/08	
Sample ID: IRA2568-09 (006 EFF-9 - W Reporting Units: mg/l	ater)				Sample	ed: 01/24/	08		
Sediment	ASTM D3977	8B04103	10	10	51	1	02/04/08	02/04/08	
Sample ID: IRA2568-10 (006 EFF-10 - V	Vater)				Sample	ed: 01/24/	08		
Reporting Units: mg/l Sediment	ASTM D3977	8B04104	10	10	44	1	02/04/08	02/04/08	
Sample ID: IRA2568-11 (006 EFF-11 - V Reporting Units: mg/l	Vater)				Sample	ed: 01/24/	08		
Sediment	ASTM D3977	8B04104	10	10	50	1	02/04/08	02/04/08	
Sample ID: IRA2568-12 (006 EFF-12 - V Reporting Units: mg/l	Vater)				Sample	ed: 01/24/	08		
Sediment Sediment	ASTM D3977	8B04104	10	10	56	1	02/04/08	02/04/08	
Sample ID: IRA2568-13 (006 EFF-13 - V Reporting Units: mg/l	Vater)				Sample	ed: 01/24/	08		
Sediment Sediment	ASTM D3977	8B04104	10	10	53	1	02/04/08	02/04/08	
Sample ID: IRA2568-14 (006 EFF-14 - V Reporting Units: mg/l	Vater)				Sample	ed: 01/24/	08		
Sediment	ASTM D3977	8B04104	10	10	58	1	02/04/08	02/04/08	
Sample ID: IRA2568-15 (006 EFF-15 - V Reporting Units: mg/l	Vater)				Sample	ed: 01/24/	08		
Sediment Sediment	ASTM D3977	8B04104	10	10	51	1	02/04/08	02/04/08	
Sample ID: IRA2568-16 (006 EFF-16 - V	Vater)				Sample	ed: 01/24/	08		
Reporting Units: mg/l Sediment	ASTM D3977	8B04104	10	10	48	1	02/04/08	02/04/08	

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Received: 01/26/08

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA2568-17 (006 EFF-17 - V Reporting Units: mg/l	Vater)				Sample	ed: 01/24/0	08		
Sediment	ASTM D3977	8B04104	10	10	36	1	02/04/08	02/04/08	
Sample ID: IRA2568-18 (006 EFF-18 - V Reporting Units: mg/l	Vater)				Sample	ed: 01/24/0	08		
Sediment	ASTM D3977	8B04104	10	10	29	1	02/04/08	02/04/08	
Sample ID: IRA2568-19 (006 EFF-19 - V Reporting Units: mg/l	Vater)				Sample	ed: 01/24/0	08		
Sediment	ASTM D3977	8B04104	10	10	26	1	02/04/08	02/04/08	
Sample ID: IRA2568-20 (006 EFF-20 - V Reporting Units: mg/l	Vater)				Sample	ed: 01/24/0	08		
Sediment	ASTM D3977	8B04104	10	10	29	1	02/04/08	02/04/08	
Sample ID: IRA2568-21 (006 EFF-21 - V Reporting Units: mg/l	Vater)				Sample	ed: 01/24/0	08		
Sediment	ASTM D3977	8B04104	10	10	25	1	02/04/08	02/04/08	
Sample ID: IRA2568-22 (006 EFF-22 - V Reporting Units: mg/l	Vater)				Sample	ed: 01/24/0	08		
Sediment	ASTM D3977	8B04104	10	10	10	1	02/04/08	02/04/08	
Sample ID: IRA2568-23 (006 EFF-23 - V Reporting Units: mg/l	Vater)				Sample	ed: 01/24/0	08		
Sediment	ASTM D3977	8B04104	10	10	11	1	02/04/08	02/04/08	
Sample ID: IRA2568-24 (006 EFF-24 - V Reporting Units: mg/l	Vater)				Sample	ed: 01/24/0	08		
Sediment	ASTM D3977	8B04104	10	10	17	1	02/04/08	02/04/08	



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Attention: Bronwyn Kelly

Project ID: BMP Effectiveness

Monitoring Program

Report Number: IRA2568

Sampled: 01/23/08-01/24/08

Received: 01/26/08

METHOD BLANK/QC DATA

INORGANICS

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 8B01114 Extracted: 02/01/08	<u>}</u>										
D 1' / A 1 1 02/01/2009 (OD011)	A DUDA)				G	ID A	1 570 01				
Duplicate Analyzed: 02/01/2008 (8B011)	(4-DUP1)				Sou	rce: IRA	2508-01				
Density	0.989	NA	N/A	g/cc		0.989			0	20	
Batch: 8B01115 Extracted: 02/01/08	<u> </u>										
Duplicate Analyzed: 02/01/2008 (8B011)	5-DUP1)				Sou	rce: IRA	2569-01				
Density	0.991	NA	N/A	g/cc		0.994			0	20	



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Arcadia, CA 91007 Attention: Bronwyn Kelly

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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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MWH-Pasadena/Boeing

TWII-I asadella/Boellig

618 Michillinda Avenue, Suite 200 Monitoring Pro Arcadia, CA 91007 Report Number: IRA2568

Attention: Bronwyn Kelly

Project ID: BMP Effectiveness

Monitoring Program Sampled: 01/23/08-01/24/08

Report Number: IRA2568 Received: 01/26/08

Certification Summary

TestAmerica Irvine

Displacement

Method	Matrix	Nelac	California
ASTM D3977	Water		

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

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est America Version 12/20/07	d Version 12/20/	.07					CHALLASIS BEOLIBER		
Client Name/Address	:SS:		Project: Boeing BMP	eing BMP					
MWH-Arcadia			Effectiven	Effectiveness Monitoring	ug			Field readings	
618 Michillinda Avenue, Suite 200	ue. Suite 200		Program			- <i>V</i>			
Arcadia, CA 91007						ITS.		Temp ≈	
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est America Conta	or. sosopri com		Dhono Number	obor.		os:		2	
Project Manager: Bronwyn Kelly	Bronwyn Kelly			HDEL.		ibe 2) i		Time of readings = N.A.	
J. M.D.	2.300		(979) 209-0031	1600		uoi			
Sampler / Sand 6N	2000		Fax Nuttibel. (626) 568-6515	ar. 3515		ıtrat			
2			(050)	2		-776 neor		Comments	
	Sample Container	# of Cont.	f Sampling It. Date/Time	Preservative	e Bottle#	suS noO			
Description 4	500	+	9	5 None	-	×			
	500 mL Poly	-	01/23/08-1735	S5 None	2	×			
	500 mL Poly	/>	01/23/08-1835	SS None	3	×			
	500 mL Poly	-	01/23/08-1935	S5 None	4	×			
	500 mL Poly	7	01/23/08-2035	35 None	2	×			
	500 mL Poly	7	01/23/08-2135	35 None	9	×			
	500 mL Poly	, >	01/23/08-2235	35 None	7	×			
	500 mL Poly	1	01/23/08-2335	35 None	8	×			
	500 mL Poly	7	01/24/08-0035	35 None	6	×			
	500 mL Poly	7	01/24/08-0135	35 None	9	×			
	500 mL Poly	7	01/24/08-0235	35 None	=	×			4
	500 mL Poly	ly 1			12	× ;			V)
	500 mL Poly	ly 1		\neg	13	× ;			/
006 FFF-14 W	500 mL Poly	<u>></u>	01/24/08-0535	\neg	14	× ;			
	500 mL Poly	احًا		$\neg \uparrow$	12	× ;			6
	500 mL Poly	÷	01/24/08-0735		16	× ;			ک
	500 mL Poly	ly 1			14	× ;			8
006 EFF-18 W	500 mL Poly	- J	01/24/08-0935	7	2 9	\ \ \ \ 			7
	500 mL Poly	, VI	1 01/24/08-1035	\neg	13	× >			/
006 EFF-20 W	500 mL Poly	, Alv	1 01/24/08-1135	T	2 2	× >			_
006 EFF-21 W		λly	1 01/24/08-1235		12 5	× >			
		. Alc	1 01/24/08-1335		7 6	< >			,
006 EFF-23 W		Ş	1 01/24/08-1435	_†	3 2	\ \ \ \			
	500 mL Poly	١٧	1 01/24/08-1535	\dashv	24	X			ı
d By	80-27-1	Date	Date/Time:	Received By	\` ~) date/ lillie.		Turn around Time: (check)	·
11/1	r		C 1 7 -	X C	ン		1-26-08 16-1	24 Hours	
Relinquished By		Patte	Pate/Time:	Received By	By	Date/Time	in	48 Hours 10 Days	
	_ (/		(7.)				72 Hours Normal	
X X	3		2	Received By	By	Date/Time	ö	Sample Integrity: (check)	
Relinquished By		Date	Date/ IIIIe.	0/	- ' ' ' ' ' '	Ć		70,01	
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APPENDIX G

Section 38

Outfall 006, February 3, 2008

MECX Data Validation Reports



DATA VALIDATION REPORT

Boeing SSFL NPDES

SAMPLE DELIVERY GROUP: IRB0150

Prepared by

MEC^x, LLC 12269 East Vassar Drive Aurora, CO 80014

I. INTRODUCTION

Task Order Title: Boeing SSFL NPDES

Contract Task Order: 1261.100D.00 Sample Delivery Group: IRB0150

Project Manager: B. Kelly

Matrix: Water QC Level: IV

No. of Samples: 1
No. of Reanalyses/Dilutions: 0

Laboratory: TestAmerica-Irvine

Table 1. Sample Identification

Client ID	Laboratory ID	Sub-Laboratory ID	Matrix	Collected	Method
Outfall 006	IRB0150-01	30228-001, 8020456-01, CRA0032-01, 8698-001	Water	02/03/08 1420	200.7, 200.8, 245.1, 525.2, 900.0, 901.1, 903.0, 904.0, 905.0, 906.0, 1613, ASTM D-5174

II. Sample Management

No anomalies were observed regarding sample management. The samples in this SDG were received at TestAmerica-Irvine above the temperature limits; however, the samples had insufficient time to cool. The samples were received at Eberline, TestAmerica-Colton, and Vista within the temperature limits of 4°C ±2°C. The samples were received marginally below the temperature limit at Weck; however, the samples were not noted to be damaged or frozen. According to the case narrative for this SDG, the sample was received intact at all laboratories. The FedEx courier did not relinquish the samples to Eberline. The remaining COCs were appropriately signed and dated by field and/or laboratory personnel. As the samples were couriered to TestAmerica-Irvine and Weck, custody seals were not required. Custody seals were intact upon arrival at Eberline and Vista. If necessary, the client ID was added to the sample result summary by the reviewer.

Data Qualifier Reference Table

Qualifie	r Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
Н	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
С	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
В	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
1	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
Α	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
Т	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
\$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
Р	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
DNQ	The reported result is above the method detection limit but is less than the reporting limit.	The reported result is above the method detection limit but is less than the reporting limit.
* , *	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD 1613—Dioxin/Furans

Reviewed By: K. Shadowlight Date Reviewed: March 22, 2008

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the MEC^{X} Data Validation Procedure for Dioxins and Furans (DVP-19, Rev. 0), USEPA Method 1613, and the National Functional Guidelines Chlorinated Dioxin/Furan Data Review (8/02).

- Holding Times: Extraction and analytical holding times were met. The water sample was extracted and analyzed within one year of collection.
- Instrument Performance: Instrument performance criteria were met. Following are findings associated with instrument performance.
 - o GC Column Performance: A Windows Defining Mix (WDM) containing the first and last eluting congeners of each descriptor and isomer specificity compounds was not analyzed prior to the initial calibration sequence or at the beginning of each analytical sequence; however, the first and last eluting congeners and isomer specificity compounds were added to the midpoint of the initial calibration and to the continuing calibration standards. The GC column performance in the calibrations was acceptable, with the height of the valley between the closely eluting isomers and 2,3,7,8-TCDD reported as less than 25%.
 - Mass Spectrometer Performance: The mass spectrometer performance was acceptable with the static resolving power greater than 10,000.
- Calibration: Calibration criteria were met.
 - o Initial Calibration: Initial calibration criteria were met. The initial calibration was acceptable with %RSDs ≤20% for the 16 native compounds (calibration by isotope dilution) and ≤35% for the one native and all labeled compounds (calibration by internal standard). The relative retention times and ion abundance ratios were within the Method 1613 QC limits for all standards.
 - Continuing Calibration: Calibration verification (VER) consisted of a mid-level standard (CS3) analyzed at the beginning of each analytical sequence. The VERs were acceptable with the concentrations within the acceptance criteria listed in Table 6 of EPA Method 1613. The ion abundance ratios and relative retention times were within the method QC limits.
- Blanks: OCDD was reported in the method blank at 0.00000899µ/L. The detect for OCDD in the sample was less than five times the concentration reported in the method blank; therefore, the OCDD detect was qualified as an estimated nondetect, "UJ," and raised to

the reporting limit in sample Outfall 006. The method blank had no other target compound detects above the EDL.

- Blank Spikes and Laboratory Control Samples: Recoveries were within the acceptance criteria listed in Table 6 of Method 1613.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.
- Internal Standards Performance: The labeled standard recoveries were within the acceptance criteria listed in Table 7 of Method 1613.
- Compound Identification: Compound identification was verified. The laboratory analyzed for polychlorinated dioxins/furans by EPA Method 1613.
- Compound Quantification and Reported Detection Limits: Compound quantitation was verified by recalculating any sample detects and a representative number of blank spike concentrations. The laboratory calculated and reported compound-specific detection limits. Any detects below the laboratory lower calibration level were qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES permit. Nondetects are valid to the estimated detection limit (EDL).

B. EPA METHODS 200.7, 200.8, 245.1—Metals and Mercury

Reviewed By: P. Meeks

Date Reviewed: March 26, 2008

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the MEC^{\times} Data Validation Procedure for Metals (DVP-5, Rev. 0 and DVP-21, Rev. 0), EPA Methods 200.7, 200.8, and 245.1, and the National Functional Guidelines for Inorganic Data Review (2/94).

- Holding Times: The analytical holding times, 6 months for metals and 28 days for mercury, were met.
- Tuning: The mass calibration and resolution checks criteria were met. All tuning solution %RSDs were ≤5%, and all masses of interest were calibrated to ≤0.1 amu and ≤0.9 amu at 10% peak height, except for cerium associated with the dissolved metals fraction. The cerium mass calibration marginally exceeded the control limit; therefore, antimony, lead,

and thallium were qualified as estimated in the dissolved metals fraction, "J," for detects and, "UJ," for nondetects.

- Calibration: Calibration criteria were met. Mercury initial calibration r² values were ≥0.995 and all initial and continuing calibration recoveries were within 90-110% for the ICP-MS metals and 85-115% for mercury. All CRI/CRA and check standard recoveries were within the control limits of 70-130%.
- Blanks: Selenium was reported in the method blank associated with the total metals fraction at -8.4 µg/L; therefore, nondetected selenium in the total metals fraction was qualified as an estimated nondetect, "UJ." There were no other applicable detects in the method blanks or CCBs.
- Interference Check Samples: ICSA/B analyses were performed in association with all analyses except total antimony. Recoveries were within the method-established control limits. Most analytes were reported in the ICSA solutions. No 6010 analytes required qualification as the concentrations of the interferents were not significant. For the 6020 analytes, the reviewer was not able to ascertain if the detections were indicative of matrix interference.
- Blank Spikes and Laboratory Control Samples: The recoveries were within laboratoryestablished QC limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were performed on the sample in this SDG for the total 6020 analytes. All recoveries and RPDs were within the laboratoryestablished control limits. Evaluation of mercury method accuracy was based on LCS results.
- Serial Dilution: No serial dilution analyses were performed.
- Internal Standards Performance: All sample internal standard intensities were within 30-120% of the internal standard intensities measured in the initial calibration. The bracketing CCV and CCB internal standard intensities were within 80-120% of the internal standard intensities measured in the initial calibration.
- Sample Result Verification: Calculations were verified and the sample results reported
 on the sample result summary were verified against the raw data. No transcription
 errors or calculation errors were noted. Detects reported below the reporting limit were
 qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES
 permit. Reported nondetects are valid to the MDL.

The reviewer noted that calcium and cadmium were detected at slightly higher concentrations in the dissolved metals sample fraction and that arsenic and lead were detected slightly above the MDL in the dissolved metals fraction but were not detected in

the total metals fraction. In all cases, the difference between the total and dissolved results was within the sensitivity limits of the analytical instrument and, therefore, the reviewer considered the total and dissolved results to be equivalent.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.

C. EPA METHOD 525.2 — Pesticides

Reviewed By: P. Meeks

Date Reviewed: March 27, 2008

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the MEC^{\times} Data Validation Procedure for Organochlorine Pesticides by GC (DVP-4, Rev. 0), EPA Method 525.2, and the National Functional Guidelines for Organic Data Review (02/94).

- Holding Times: Extraction and analytical holding times were met. The water sample pH
 was not adjusted within 24 hours; therefore, nondetected diazinon was qualified as an
 estimated nondetect, "UJ." The sample was analyzed within 30 days of extraction.
- GC/MS Tuning: The DFTPP tunes met the method abundance criteria. The sample was analyzed within 12 hours of the DFTPP injection time.
- Calibration: Calibration criteria were met. For both target compounds, initial calibration average RRFs were ≥0.05 and %RSDs ≤30%. Continuing calibration RRFs were ≥0.05 and applicable target compound responses were within the method QC limits of 70-130%.
- Blanks: The method blank had no target compound detects above the MDL.
- Blank Spikes and Laboratory Control Samples: Recoveries and RPDs were within laboratory-established QC limits.
- Surrogate Recovery: Recoveries were within laboratory-established QC limits.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on the sample from this SDG. Evaluation of method accuracy and precision was based on the LCS/LCSD results.

 Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

- Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
- Field Duplicates: There were no field duplicate samples identified for this SDG.
- Internal Standards Performance: The internal standard area counts and retention times were within the method control limits established by the continuing calibration standards of ±30%.
- Compound Identification: Compound identification was verified. The laboratory analyzed for chlorpyrifos and diazinon by Method 525.2. Review of the sample chromatogram, retention times, and spectra indicated no problems with target compound identification.
- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Reported nondetects are valid to the reporting limit.
- System Performance: Review of the raw data indicated no problems with system performance.

D. VARIOUS EPA METHODS — Radionuclides

Reviewed By: P. Meeks

Date Reviewed: March 28, 2008

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the EPA Methods 900.0, 901.1, 903.1, 904.0, 905.0, and 906.0, ASTM Method D-5174, and the National Functional Guidelines for Inorganic Data Review (2/94).

- Holding Times: The tritium sample was analyzed within 180 days of collection. Aliquots
 for gross alpha and gross beta, were prepared within the five-day analytical holding time
 for unpreserved samples. Aliquots for radium-226, radium-228, strontium-90, total
 uranium, and gamma spectroscopy were prepared beyond the five-day holding time for
 unpreserved samples; therefore, results for these analytes were qualified as estimated,
 "J," for detects and, "UJ," for nondetects.
- Calibration: The laboratory calibration information included the standard certificates and applicable preparation/dilutions logs for NIST-traceability.

The gross alpha detector efficiency was less than 20%; therefore, nondetected gross alpha in the sample was qualified as an estimated nondetect, "UJ." The gross beta detector efficiency was greater than 20%.

The tritium aliquot was spiked for efficiency determination; therefore, no calibration was necessary. The tritium detector efficiency for the sample was at least 20% and was considered acceptable. The strontium chemical yield was at least 70% and was considered acceptable. The strontium continuing calibration results were within the laboratory control limits. The radium-226 continuing calibration results were within the laboratory-established control limits. The radium-228 tracer, yttrium oxalate, yields were greater than 70%. The gamma spectroscopy analytes were determined at the maximum photopeak energy. The kinetic phosphorescence analyzer (KPA) was calibrated immediately prior to the sample analysis. All KPA calibration check standard recoveries were within 90-110% and were deemed acceptable.

- Blanks: There were no analytes detected in the method blanks.
- Blank Spikes and Laboratory Control Samples: The recoveries were within laboratoryestablished control limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed on the sample in this SDG.
- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed for the sample in this SDG. Method accuracy was evaluated based on the LCS results.
- Sample Result Verification: An EPA Level IV review was performed for the sample in this
 data package. The sample results and MDAs reported on the sample result form were
 verified against the raw data and no calculation or transcription errors were noted.
 Reported nondetects are valid to the MDA.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.

William J. Luksemburg 22-Feb-2008 15:49	
Approved By:	
Level IV	

Client Data			Sample Data		Laboratory Data			
Name: Project: Date Collected: Time Collected:	Test America-Irvine, CA IRB0150 3-Feb-08		Matrix: Sample Size:	Aqueous 1.00 L	Lab Sample: QC Batch No.: Date Analyzed DB-5:	30228-001 9953 19-Feb-08	Date Received: Date Extracted: Date Analyzed DB-225:	5-Feb-08 15-Feb-08 5: NA
Analyte	Conc. (ug/L)	DL a	EMPC ^b (Qualifiers	Labeled Standard	lard	%R LCL-UCL ^d	L ^d Oualifiers
2,3,7,8-TCDD	Q	0.000000535	5		13C-2,3,7,8-TCDD	DD	89.6 25 - 164	
1,2,3,7,8-PeCDD		0.000000680	0:		13C-1,2,3,7,8-PeCDD	есрр		
1,2,3,4,7,8-HxCDD	QN QO	0.00000126			13C-1,2,3,4,7,8-HxCDD	-HxCDD	79.0 32 - 141	
1,2,3,6,7,8-HxCDD	-	0.00000134			13C-1,2,3,6,7,8-HxCDI	-нхСDD		
1,2,3,7,8,9-HxCDD	ON OO	0.00000125			13C-1,2,3,4,6,7,8-HpCDD	,8-нрСDD	80.6 23 - 140	
丁[DAQ 1,2,3,4,6,7,8-HpCDD	CDD 0.00000262			1	13C-OCDD			
ОСОО	0.0000282			E.	13C-2,3,7,8-TCDF	DF	90.6 24 - 169	
2,3,7,8-TCDF	2	0.000000408	8		13C-1,2,3,7,8-PeCDF	eCDF		
1,2,3,7,8-PeCDF	2	0.0000000801	1	1.7°	13C-2,3,4,7,8-PeCDF	eCDF	76.1 21-178	
2,3,4,7,8-PeCDF	2	0.000000000	0		13C-1,2,3,4,7,8-HxCDF	-HxCDF		
1,2,3,4,7,8-HxCDF	SF NO	0.000000627	7		13C-1,2,3,6,7,8-HxCDF	-HxCDF	742 26-123	
1,2,3,6,7,8-HxCDF	No. of Section	0.000000682	2		13C-2,3,4,6,7,8-HxCDF	-HxCDF		
2,3,4,6,7,8-HxCDF	OF ND	0.000000749	6		13C-1,2,3,7,8,9-HxCDF	-HxCDF	77.9 29-,147	
1,2,3,7,8,9-HxCDF	A THE PERSON	0.000000943	9	The second secon	13C-1,2,3,4,6,7,8-HpCDF	,8-HpCDF	73.2 28 - 143	
1,2,3,4,6,7,8-HpCDF	CDF ND	0.00000188			13C-1,2,3,4,7,8,9-HpCDF	,9-нрсрғ	77.8 26-138	
1,2,3,4,7,8,9-HpCDF		0.00000102		The second second second	13C-0CDF		74.7 17-157	
OCDF	Ð	0.00000332			CRS 37CI-2,3,7,8-TCDD	യാ	91.2 35-197	
Totals					Footnotes			
Total TCDD	Ð	0.000000743	<i>5</i> 0		a. Sample specific estimated detection limit	ed detection limit.		
Total PeCDD	£	0.00000145			b. Estimated maximum possible concentration.	ssible concentration.		
Total HxCDD	Ð	0.00000163			c. Method detection limit.			The Prince of the Prince of the
Total HpCDD	0.00000599				d Lower control limit - upper control limit.	oper control limit		
Total TCDF	2	0.000000408	8			The state of the s		
Total PeCDF	2	0.000000796	9					
Total HxCDF	£	0.000000744	4					A Chief files her market her a
Total HoCDF	2	791000000			たいのである ののは というない			

Project 30228



17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

MWH-Pasadena/Boeing

Project ID: Annual Outfall 006

618 Michillinda Avenue, Suite 200

- ... IDD0150

Sampled: 02/03/08

Arcadia, CA 91007 Attention: Bronwyn Kelly Report Number: IRB0150

Received: 02/03/08

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0150-01 (Outfall 006	- Water) - cont.								
Reporting Units: mg/l									
Hardness (as CaCO3)	[CALC]	[CALC]	N/A	0.33	93	1	02/04/08	02/04/08	
Boron U	EPA 200.7	8B04079	0.020	0.050	ND	1	02/04/08	02/04/08	
Calcium	EPA 200.7	8B04079	0.050	0.10	29	1	02/04/08	02/04/08	
Iron	EPA 200.7	8B04079	0.015	0.040	0.66	1	02/04/08	02/04/08	
Magnesium	EPA 200.7	8B04079	0.012	0.020	5.2	1	02/04/08	02/04/08	



TestAmerica Irvine



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MWH-Pasadena/Boeing

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Project ID: Annual Outfall 006

Report Number: IRB0150

Sampled: 02/03/08

Received: 02/03/08

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0150-01 (Outfall 006	- Water) - cont.								
Reporting Units: ug/l									
Aluminum	EPA 200.7	8B04079	40	50	850	1	02/04/08	02/04/08	
Antimony JANG	EPA 200.8	8B04080	0.20	2.0	0.42	1	02/04/08	02/05/08	J
Arsenic U	EPA 200.7	8B04079	7.0	10	ND	1	02/04/08	02/04/08	
Beryllium \checkmark	EPA 200.7	8B04079	0.90	2.0	ND	1	02/04/08	02/04/08	
Cadmium J/DNQ	EPA 200.8	8B04080	0.11	1.0	0.21	1	02/04/08	02/04/08	J
Chromium ()	EPA 200.7	8B04079	2.0	5.0	ND	1	02/04/08	02/04/08	
Copper JONQ	EPA 200.8	8B04080	0.75	2.0	1.7	1	02/04/08	02/04/08	J
Lead V	EPA 200.8	8B04080	0.30	1.0	0.51	1	02/04/08	02/04/08	J
Nickel U	EPA 200.7	8B04079	2.0	10	ND	1	02/04/08	02/04/08	
Selenium UJ /R	EPA 200.7	8B04079	8.0	10	ND	1	02/04/08	02/04/08	
Silver	EPA 200.7	8B04079	6.0	10	ND	1	02/04/08	02/04/08	
Thallium	EPA 200.8	8B04080	0.20	1.0	ND	1	02/04/08	02/04/08	
Vanadium	EPA 200.7	8B04079	3.0	10	ND	1	02/04/08	02/04/08	
Zinc	EPA 200.7	8B04079	6.0	20	ND	1	02/04/08	02/04/08	

LEVEL IV

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618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Project ID: Annual Outfall 006

Sampled: 02/03/08

Attention: Bronwyn Kelly

Report Number: IRB0150

Received: 02/03/08

DISSOLVED METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0150-01 (Outfall 006	- Water) - cont.								
Reporting Units: mg/l	,								
Boron U	EPA 200.7-Diss	8B05111	0.020	0.050	ND	1	02/05/08	02/06/08	
Calcium	EPA 200.7-Diss	8B05111	0.050	0.10	30	1	02/05/08	02/06/08	
Iron	EPA 200.7-Diss	8B05111	0.015	0.040	0.046	1	02/05/08	02/06/08	
Magnesium	EPA 200.7-Diss	8B05111	0.012	0.020	5.2	1	02/05/08	02/06/08	
Hardness (as CaCO3)	SM2340B	8B05111	1.0	1.0	96	1	02/05/08	02/06/08	





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MWH-Pasadena/Boeing

Project ID: Annual Outfall 006

618 Michillinda Avenue, Suite 200

Attention: Bronwyn Kelly

Sampled: 02/03/08

Arcadia, CA 91007

Report Number: IRB0150

Received: 02/03/08

DISSOLVED METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0150-01 (Outfall 006 -	Water) - cont.								
Reporting Units: ug/l									
Aluminum	EPA 200.7-Diss	8B05111	40	50	69	1	02/05/08	02/06/08	
Antimony JONQ, KILL	EPA 200.8-Diss	8B04144	0.20	2.0	0.36	1	02/04/08	02/05/08	J
Arsenic JIDNR	EPA 200.7-Diss	8B05111	7.0	10	7.5	1	02/05/08	02/06/08	J
Beryllium U	EPA 200.7-Diss	8B05111	0.90	2.0	ND	1	02/05/08	02/06/08	
Cadmium J/DNG	EPA 200.8-Diss	8B04144	0.11	1.0	0.22	1	02/04/08	02/05/08	J
Chromium U	EPA 200.7-Diss	8B05111	2.0	5.0	ND	1	02/05/08	02/06/08	
Copper J/DNG	EPA 200.8-Diss	8B04144	0.75	2.0	1.3	1	02/04/08	02/05/08	J
Lead UJ /XIII	EPA 200.8-Diss	8B04144	0.30	1.0	ND	1	02/04/08	02/05/08	
Nickel U	EPA 200.7-Diss	8B05111	2.0	10	ND	1	02/05/08	02/06/08	
Selenium	EPA 200.7-Diss	8B05111	8.0	10	ND	1	02/05/08	02/06/08	
Silver √	EPA 200.7-Diss	8B05111	6.0	10	ND	1	02/05/08	02/06/08	
Thallium UJ/XIII	EPA 200.8-Diss	8B04144	0.20	1.0	ND	1	02/04/08	02/05/08	
Vanadium U	EPA 200.7-Diss	8B05111	3.0	10	ND	1	02/05/08	02/06/08	
Zinc √	EPA 200.7-Diss	8B05111	6.0	20	ND	1	02/05/08	02/06/08	

LEVEL IV

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MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IRB0150

Sampled: 02/03/08

Received: 02/03/08

Metals by EPA 200 Series Methods

Analyte		Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0150-0 Reporting Units: u		Water) - cont.								
Mercury, Dissolved Mercury, Total	√ √	EPA 245.1 EPA 245.1	W8B0171 W8B0171	0.050 0.050	0.20 0.20	ND ND	1 1	02/06/08 02/06/08	02/07/08 02/07/08	



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MWH-Pasadena/Boeing

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Project ID: Annual Outfall 006

Report Number: IRB0150

Sampled: 02/03/08

Received: 02/03/08

ORGANIC COMPOUNDS BY GC/MS (EPA 525.2)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result		Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0150-01 (Outfall 006	- Water) - cont.								P, pH
Reporting Units: ug/l									
Chlorpyrifos ()	EPA 525.2	C8B0516	0.10	1.0	ND	1.01	02/05/08	02/07/08	
Diazinon UJ/H	EPA 525.2	C8B0516	0.24	0.25	ND	1.01	02/05/08	02/07/08	
Surrogate: 1,3-Dimethyl-2-nitrobenze	ne (70-130%)				87 %				
Surrogate: Triphenylphosphate (70-13	30%)				111%				
Surrogate: Perylene-d12 (70-130%)					93 %				



Eberline Services

ANALYSIS RESULTS

		TA IRVINE	Client			8698	SDG	
	 RB0150	PROJECT#	Contract			 R802044-01	Order	Work
		WATER	Matrix			02/05/08	d Date	Received
		WATER	Matrix			02/05/08	d Date	Received

Client		Lab	٠.					
Sample ID		Sample ID	Collected	Analyzed	Nuclide	Results ± 2σ	Units	MDA
Outfall 0	06							
IRB0150-01		8698-001	02/03/08	02/27/08	GrossAlpha	0.696 ± 0.57	pCi/L	0.74 UJ/R
				02/27/08	Gross Beta	3.42 ± 0.66	pCi/L	0.92
				02/27/08	Ra-228	0.102 ± 0.18	pCi/L	0.48 UJ/H
				02/25/08	K-40 (G)	υ	pCi/L	22
				02/25/08	Cs-137 (G)	σ	pCi/L	0.90
				02/29/08	H-3	-9.49 ± 90	pCi/L	150 U
		*		03/03/08	Ra-226	0.039 ± 0.39	pCi/L	0.75 UJ/H
				02/18/08	Sr-90	-0.048 ± 0.32	pCi/L	0.78
				02/26/08	Total U	0.197 ± 0.023	pCi/L	0.022 J/H

LEVEL IV

Certified by 292

Report Date 03/11/08

Page 1

APPENDIX G

Section 39

Outfall 006, February 3, 2008 Test America Analytical Laboratory Report



LABORATORY REPORT

Prepared For: MWH-Pasadena/Boeing Project: Annual Outfall 006

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly
Sampled: 02/03/08
Received: 02/03/08

Issued: 03/03/08 13:20

NELAP #01108CA California ELAP#1197 CSDLAC #10256

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.

LABORATORY ID	CLIENT ID	MATRIX
IRB0150-01	Outfall 006	Water
IRB0150-02	Trip Blanks	Water

Reviewed By:

TestAmerica Irvine

Joseph Dock



17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

MWH-Pasadena/Boeing Project ID: Annual Outfall 006

618 Michillinda Avenue, Suite 200 Sampled: 02/03/08

Arcadia, CA 91007 Report Number: IRB0150 Received: 02/03/08
Attention: Bronwyn Kelly

PURGEABLES BY GC/MS (EPA 624)

			MDI	D .:		D.1 41	D 4	D. 4	D-4-
Analysta	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution	Date Extracted	Date Analyzed	Data Qualifiers
Analyte	Method	Dateii	Lillit	Lillit	Result	ractor	Extracted	Anaryzeu	Quanners
Sample ID: IRB0150-01 (Outfall 006 - Water)									
Reporting Units: ug/l									
1,1,1-Trichloroethane	EPA 624	8B04007	0.30	0.50	ND	1	02/04/08	02/04/08	
1,1,2,2-Tetrachloroethane	EPA 624	8B04007	0.24	0.50	ND	1	02/04/08	02/04/08	
1,1,2-Trichloroethane	EPA 624	8B04007	0.30	0.50	ND	1	02/04/08	02/04/08	
1,1-Dichloroethane	EPA 624	8B04007	0.27	0.50	ND	1	02/04/08	02/04/08	
1,1-Dichloroethene	EPA 624	8B04007	0.42	0.50	ND	1	02/04/08	02/04/08	
1,2-Dichloroethane	EPA 624	8B04007	0.28	0.50	ND	1	02/04/08	02/04/08	
1,2-Dichlorobenzene	EPA 624	8B04007	0.32	0.50	ND	1	02/04/08	02/04/08	
1,2-Dichloropropane	EPA 624	8B04007	0.35	0.50	ND	1	02/04/08	02/04/08	
1,3-Dichlorobenzene	EPA 624	8B04007	0.35	0.50	ND	1	02/04/08	02/04/08	
1,4-Dichlorobenzene	EPA 624	8B04007	0.37	0.50	ND	1	02/04/08	02/04/08	
Benzene	EPA 624	8B04007	0.28	0.50	ND	1	02/04/08	02/04/08	
Bromodichloromethane	EPA 624	8B04007	0.30	0.50	ND	1	02/04/08	02/04/08	
Bromoform	EPA 624	8B04007	0.40	0.50	ND	1	02/04/08	02/04/08	
Bromomethane	EPA 624	8B04007	0.42	1.0	ND	1	02/04/08	02/04/08	
Carbon tetrachloride	EPA 624	8B04007	0.28	0.50	ND	1	02/04/08	02/04/08	
Chlorobenzene	EPA 624	8B04007	0.36	0.50	ND	1	02/04/08	02/04/08	
Chloroethane	EPA 624	8B04007	0.40	1.0	ND	1	02/04/08	02/04/08	
Chloroform	EPA 624	8B04007	0.33	0.50	ND	1	02/04/08	02/04/08	
Chloromethane	EPA 624	8B04007	0.40	0.50	ND	1	02/04/08	02/04/08	
cis-1,3-Dichloropropene	EPA 624	8B04007	0.22	0.50	ND	1	02/04/08	02/04/08	
Dibromochloromethane	EPA 624	8B04007	0.28	0.50	ND	1	02/04/08	02/04/08	
Ethylbenzene	EPA 624	8B04007	0.25	0.50	ND	1	02/04/08	02/04/08	
Methylene chloride	EPA 624	8B04007	0.95	1.0	ND	1	02/04/08	02/04/08	
Tetrachloroethene	EPA 624	8B04007	0.32	0.50	ND	1	02/04/08	02/04/08	
Toluene	EPA 624	8B04007	0.36	0.50	ND	1	02/04/08	02/04/08	
trans-1,2-Dichloroethene	EPA 624	8B04007	0.27	0.50	ND	1	02/04/08	02/04/08	
trans-1,3-Dichloropropene	EPA 624	8B04007	0.32	0.50	ND	1	02/04/08	02/04/08	
Trichloroethene	EPA 624	8B04007	0.26	0.50	ND	1	02/04/08	02/04/08	
Trichlorofluoromethane	EPA 624	8B04007	0.34	0.50	ND	1	02/04/08	02/04/08	
Trichlorotrifluoroethane (Freon 113)	EPA 624	8B04007	0.50	5.0	ND	1	02/04/08	02/04/08	
Vinyl chloride	EPA 624	8B04007	0.30	0.50	ND	1	02/04/08	02/04/08	
Xylenes, Total	EPA 624	8B04007	0.90	1.5	ND	1	02/04/08	02/04/08	
Surrogate: Dibromofluoromethane (80-120%)	6)				113 %				
Surrogate: Toluene-d8 (80-120%)					103 %				
Surragata: A Bromoflyarahanzana (80 1200/	1				02 %				

Surrogate: 4-Bromofluorobenzene (80-120%)

92 %

TestAmerica Irvine



17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

MWH-Pasadena/Boeing Project ID: Annual Outfall 006

618 Michillinda Avenue, Suite 200 Sampled: 02/03/08

Arcadia, CA 91007 Report Number: IRB0150 Received: 02/03/08 Attention: Bronwyn Kelly

PURGEABLES BY GC/MS (EPA 624)

TORGEADLES DT GC/MS (ET A 024)										
			MDL	Reporting	Sample	Dilution	Date	Date	Data	
Analyte	Method	Batch	Limit	Limit	Result	Factor	Extracted	Analyzed	Qualifiers	
Sample ID: IRB0150-02 (Trip Blanks - Water)										
Reporting Units: ug/l	tery									
1,1,1-Trichloroethane	EPA 624	8B04007	0.30	0.50	ND	1	02/04/08	02/04/08		
1,1,2,2-Tetrachloroethane	EPA 624	8B04007	0.24	0.50	ND	1	02/04/08	02/04/08		
1,1,2-Trichloroethane	EPA 624	8B04007	0.30	0.50	ND	1	02/04/08	02/04/08		
1,1-Dichloroethane	EPA 624	8B04007	0.27	0.50	ND	1	02/04/08	02/04/08		
1,1-Dichloroethene	EPA 624	8B04007	0.42	0.50	ND	1	02/04/08	02/04/08		
1,2-Dichloroethane	EPA 624	8B04007	0.28	0.50	ND	1	02/04/08	02/04/08		
1,2-Dichlorobenzene	EPA 624	8B04007	0.32	0.50	ND	1	02/04/08	02/04/08		
1,2-Dichloropropane	EPA 624	8B04007	0.35	0.50	ND	1	02/04/08	02/04/08		
1,3-Dichlorobenzene	EPA 624	8B04007	0.35	0.50	ND	1	02/04/08	02/04/08		
1,4-Dichlorobenzene	EPA 624	8B04007	0.37	0.50	ND	1	02/04/08	02/04/08		
Benzene	EPA 624	8B04007	0.28	0.50	ND	1	02/04/08	02/04/08		
Bromodichloromethane	EPA 624	8B04007	0.30	0.50	ND	1	02/04/08	02/04/08		
Bromoform	EPA 624	8B04007	0.40	0.50	ND	1	02/04/08	02/04/08		
Bromomethane	EPA 624	8B04007	0.42	1.0	ND	1	02/04/08	02/04/08		
Carbon tetrachloride	EPA 624	8B04007	0.28	0.50	ND	1	02/04/08	02/04/08		
Chlorobenzene	EPA 624	8B04007	0.36	0.50	ND	1	02/04/08	02/04/08		
Chloroethane	EPA 624	8B04007	0.40	1.0	ND	1	02/04/08	02/04/08		
Chloroform	EPA 624	8B04007	0.33	0.50	ND	1	02/04/08	02/04/08		
Chloromethane	EPA 624	8B04007	0.40	0.50	ND	1	02/04/08	02/04/08		
cis-1,3-Dichloropropene	EPA 624	8B04007	0.22	0.50	ND	1	02/04/08	02/04/08		
Dibromochloromethane	EPA 624	8B04007	0.28	0.50	ND	1	02/04/08	02/04/08		
Ethylbenzene	EPA 624	8B04007	0.25	0.50	ND	1	02/04/08	02/04/08		
Methylene chloride	EPA 624	8B04007	0.95	1.0	ND	1	02/04/08	02/04/08		
Tetrachloroethene	EPA 624	8B04007	0.32	0.50	ND	1	02/04/08	02/04/08		
Toluene	EPA 624	8B04007	0.36	0.50	ND	1	02/04/08	02/04/08		
trans-1,2-Dichloroethene	EPA 624	8B04007	0.27	0.50	ND	1	02/04/08	02/04/08		
trans-1,3-Dichloropropene	EPA 624	8B04007	0.32	0.50	ND	1	02/04/08	02/04/08		
Trichloroethene	EPA 624	8B04007	0.26	0.50	ND	1	02/04/08	02/04/08		
Trichlorofluoromethane	EPA 624	8B04007	0.34	0.50	ND	1	02/04/08	02/04/08		
Trichlorotrifluoroethane (Freon 113)	EPA 624	8B04007	0.50	5.0	ND	1	02/04/08	02/04/08		
Vinyl chloride	EPA 624	8B04007	0.30	0.50	ND	1	02/04/08	02/04/08		
Xylenes, Total	EPA 624	8B04007	0.90	1.5	ND	1	02/04/08	02/04/08		
Surrogate: Dibromofluoromethane (80-120%)	<i>6)</i>				111 %					
Surrogate: Toluene-d8 (80-120%)					102 %					
Surrogate: 4-Bromofluorobenzene (80-120%))				92 %					

Surrogate: 4-Bromofluorobenzene (80-120%)

92 %

TestAmerica Irvine



17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

MWH-Pasadena/Boeing Project ID: Annual Outfall 006

618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Report Number: IRB0150
Sampled: 02/03/08
Received: 02/03/08

Attention: Bronwyn Kelly

PURGEABLES-- GC/MS (EPA 624)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0150-01 (Outfall 006 - Water	er)								
Reporting Units: ug/l									
Acrolein	EPA 624	8B04007	4.0	5.0	ND	1	02/04/08	02/04/08	
Acrylonitrile	EPA 624	8B04007	0.70	2.0	ND	1	02/04/08	02/04/08	
2-Chloroethyl vinyl ether	EPA 624	8B04007	1.8	5.0	ND	1	02/04/08	02/04/08	
Surrogate: Dibromofluoromethane (80-120%))				113 %				
Surrogate: Toluene-d8 (80-120%)					103 %				
Surrogate: 4-Bromofluorobenzene (80-120%))				92 %				
Sample ID: IRB0150-02 (Trip Blanks - Wat	er)								
Reporting Units: ug/l									
Acrolein	EPA 624	8B04007	4.0	5.0	ND	1	02/04/08	02/04/08	
Acrylonitrile	EPA 624	8B04007	0.70	2.0	ND	1	02/04/08	02/04/08	
2-Chloroethyl vinyl ether	EPA 624	8B04007	1.8	5.0	ND	1	02/04/08	02/04/08	
Surrogate: Dibromofluoromethane (80-120%))				111 %				
Surrogate: Toluene-d8 (80-120%)					102 %				
Surrogate: 4-Bromofluorobenzene (80-120%))				92 %				



MWH-Pasadena/Boeing Project ID: Annual Outfall 006

618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Report Number: IRB0150
Sampled: 02/03/08
Received: 02/03/08

Attention: Bronwyn Kelly

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0150-01 (Outfall 006 - Wa	ter)								
Reporting Units: ug/l	,								
Acenaphthene	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
Acenaphthylene	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
Aniline	EPA 625	8B04111	2.4	9.6	ND	0.957	02/04/08	02/07/08	
Anthracene	EPA 625	8B04111	1.9	9.6	ND	0.957	02/04/08	02/07/08	
Benzidine	EPA 625	8B04111	8.1	19	ND	0.957	02/04/08	02/07/08	L6
Benzoic acid	EPA 625	8B04111	9.6	19	ND	0.957	02/04/08	02/07/08	
Benzo(a)anthracene	EPA 625	8B04111	1.9	9.6	ND	0.957	02/04/08	02/07/08	
Benzo(b)fluoranthene	EPA 625	8B04111	1.9	9.6	ND	0.957	02/04/08	02/07/08	
Benzo(k)fluoranthene	EPA 625	8B04111	2.4	9.6	ND	0.957	02/04/08	02/07/08	
Benzo(g,h,i)perylene	EPA 625	8B04111	3.8	9.6	ND	0.957	02/04/08	02/07/08	
Benzo(a)pyrene	EPA 625	8B04111	1.9	9.6	ND	0.957	02/04/08	02/07/08	
Benzyl alcohol	EPA 625	8B04111	2.4	19	ND	0.957	02/04/08	02/07/08	
Bis(2-chloroethoxy)methane	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
Bis(2-chloroethyl)ether	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
Bis(2-chloroisopropyl)ether	EPA 625	8B04111	2.4	9.6	ND	0.957	02/04/08	02/07/08	
Bis(2-ethylhexyl)phthalate	EPA 625	8B04111	3.8	48	ND	0.957	02/04/08	02/07/08	
4-Bromophenyl phenyl ether	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
Butyl benzyl phthalate	EPA 625	8B04111	3.8	19	ND	0.957	02/04/08	02/07/08	
4-Chloroaniline	EPA 625	8B04111	1.9	9.6	ND	0.957	02/04/08	02/07/08	
2-Chloronaphthalene	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
4-Chloro-3-methylphenol	EPA 625	8B04111	2.4	19	ND	0.957	02/04/08	02/07/08	
2-Chlorophenol	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
4-Chlorophenyl phenyl ether	EPA 625	8B04111	2.4	9.6	ND	0.957	02/04/08	02/07/08	
Chrysene	EPA 625	8B04111	2.4	9.6	ND	0.957	02/04/08	02/07/08	
Dibenz(a,h)anthracene	EPA 625	8B04111	2.9	19	ND	0.957	02/04/08	02/07/08	
Dibenzofuran	EPA 625	8B04111	3.8	9.6	ND	0.957	02/04/08	02/07/08	
Di-n-butyl phthalate	EPA 625	8B04111	2.9	19	ND	0.957	02/04/08	02/07/08	
1,3-Dichlorobenzene	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
1,4-Dichlorobenzene	EPA 625	8B04111	2.4	9.6	ND	0.957	02/04/08	02/07/08	
1,2-Dichlorobenzene	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
3,3-Dichlorobenzidine	EPA 625	8B04111	2.9	19	ND	0.957	02/04/08	02/07/08	
2,4-Dichlorophenol	EPA 625	8B04111	3.3	9.6	ND	0.957	02/04/08	02/07/08	
Diethyl phthalate	EPA 625	8B04111	3.3	9.6	ND	0.957	02/04/08	02/07/08	
2,4-Dimethylphenol	EPA 625	8B04111	3.3	19	ND	0.957	02/04/08	02/07/08	
Dimethyl phthalate	EPA 625	8B04111	1.9	9.6	ND	0.957	02/04/08	02/07/08	
4,6-Dinitro-2-methylphenol	EPA 625	8B04111	3.8	19	ND	0.957	02/04/08	02/07/08	
2,4-Dinitrophenol	EPA 625	8B04111	7.7	19	ND	0.957	02/04/08	02/07/08	
2,4-Dinitrotoluene	EPA 625	8B04111	3.3	9.6	ND	0.957	02/04/08	02/07/08	
2,6-Dinitrotoluene	EPA 625	8B04111	1.9	9.6	ND	0.957	02/04/08	02/07/08	
Di-n-octyl phthalate	EPA 625	8B04111	3.3	19	ND	0.957	02/04/08	02/07/08	
Fluoranthene	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	

TestAmerica Irvine



MWH-Pasadena/Boeing Project ID: Annual Outfall 006

618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Report Number: IRB0150
Sampled: 02/03/08
Received: 02/03/08

Attention: Bronwyn Kelly

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution	Date Extracted	Date Analyzed	Data Qualifiers
-		Daten	Limit	Limit	resure	1 actor	Latracteu	Amaryzeu	V
Sample ID: IRB0150-01 (Outfall 006 - Water	er) - cont.								
Reporting Units: ug/l	TD 4 605	0001111	• •	0.6			00104100	0.0.0.	
Fluorene	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
Hexachlorobenzene	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
Hexachlorobutadiene	EPA 625	8B04111	3.8	9.6	ND	0.957	02/04/08	02/07/08	
Hexachlorocyclopentadiene	EPA 625	8B04111	4.8	19	ND	0.957	02/04/08	02/07/08	
Hexachloroethane	EPA 625	8B04111	3.3	9.6	ND	0.957	02/04/08	02/07/08	
Indeno(1,2,3-cd)pyrene	EPA 625	8B04111	3.3	19	ND	0.957	02/04/08	02/07/08	
Isophorone	EPA 625	8B04111	2.4	9.6	ND	0.957	02/04/08	02/07/08	
2-Methylnaphthalene	EPA 625	8B04111	1.9	9.6	ND	0.957	02/04/08	02/07/08	
2-Methylphenol	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
4-Methylphenol	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
Naphthalene	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
2-Nitroaniline	EPA 625	8B04111	1.9	19	ND	0.957	02/04/08	02/07/08	
3-Nitroaniline	EPA 625	8B04111	2.9	19	ND	0.957	02/04/08	02/07/08	
4-Nitroaniline	EPA 625	8B04111	3.8	19	ND	0.957	02/04/08	02/07/08	
Nitrobenzene	EPA 625	8B04111	2.4	19	ND	0.957	02/04/08	02/07/08	
2-Nitrophenol	EPA 625	8B04111	3.3	9.6	ND	0.957	02/04/08	02/07/08	
4-Nitrophenol	EPA 625	8B04111	5.3	19	ND	0.957	02/04/08	02/07/08	
N-Nitrosodiphenylamine	EPA 625	8B04111	1.9	9.6	ND	0.957	02/04/08	02/07/08	
N-Nitroso-di-n-propylamine	EPA 625	8B04111	3.3	9.6	ND	0.957	02/04/08	02/07/08	
Pentachlorophenol	EPA 625	8B04111	3.3	19	ND	0.957	02/04/08	02/07/08	
Phenanthrene	EPA 625	8B04111	3.3	9.6	ND	0.957	02/04/08	02/07/08	
Phenol	EPA 625	8B04111	1.9	9.6	ND	0.957	02/04/08	02/07/08	
Pyrene	EPA 625	8B04111	3.8	9.6	ND	0.957	02/04/08	02/07/08	
1,2,4-Trichlorobenzene	EPA 625	8B04111	2.4	9.6	ND	0.957	02/04/08	02/07/08	
2,4,5-Trichlorophenol	EPA 625	8B04111	2.9	19	ND	0.957	02/04/08	02/07/08	
2,4,6-Trichlorophenol	EPA 625	8B04111	4.3	19	ND	0.957	02/04/08	02/07/08	
1,2-Diphenylhydrazine/Azobenzene	EPA 625	8B04111	2.4	19	ND	0.957	02/04/08	02/07/08	
N-Nitrosodimethylamine	EPA 625	8B04111	2.4	19	ND	0.957	02/04/08	02/07/08	
Surrogate: 2-Fluorophenol (30-120%)					77 %				
Surrogate: Phenol-d6 (35-120%)					84 %				
Surrogate: 2,4,6-Tribromophenol (40-120%)					62 %				
Surrogate: Nitrobenzene-d5 (45-120%)					80 %				
Surrogate: 2-Fluorobiphenyl (50-120%)					81 %				
Surrogate: Terphenyl-d14 (50-125%)					92 %				
Suit oguic. 101 pilony 1-417 (30-123/0)					12 /0				

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17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

Project ID: Annual Outfall 006 MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200 Sampled: 02/03/08 Arcadia, CA 91007 Report Number: IRB0150 Received: 02/03/08

Attention: Bronwyn Kelly

ORGANOCHLORINE PESTICIDES (EPA 608)

			MDL	Reporting	-	Dilution	Date	Date	Data
Analyte	Method	Batch	Limit	Limit	Result	Factor	Extracted	Analyzed	Qualifiers
Sample ID: IRB0150-01 (Outfall 006 - Water	er) - cont.								
Reporting Units: ug/l									
Aldrin	EPA 608	8B05099	0.0014	0.0048	ND	0.952	02/05/08	02/06/08	
alpha-BHC	EPA 608	8B05099	0.0024	0.0048	ND	0.952	02/05/08	02/06/08	
beta-BHC	EPA 608	8B05099	0.0038	0.0095	ND	0.952	02/05/08	02/06/08	
delta-BHC	EPA 608	8B05099	0.0033	0.0048	ND	0.952	02/05/08	02/06/08	
gamma-BHC (Lindane)	EPA 608	8B05099	0.0029	0.0095	ND	0.952	02/05/08	02/06/08	
Chlordane	EPA 608	8B05099	0.029	0.095	ND	0.952	02/05/08	02/06/08	
4,4'-DDD	EPA 608	8B05099	0.0019	0.0048	ND	0.952	02/05/08	02/06/08	
4,4'-DDE	EPA 608	8B05099	0.0029	0.0048	ND	0.952	02/05/08	02/06/08	
4,4'-DDT	EPA 608	8B05099	0.0038	0.0095	ND	0.952	02/05/08	02/06/08	
Dieldrin	EPA 608	8B05099	0.0019	0.0048	ND	0.952	02/05/08	02/06/08	
Endosulfan I	EPA 608	8B05099	0.0019	0.0048	ND	0.952	02/05/08	02/06/08	
Endosulfan II	EPA 608	8B05099	0.0029	0.0048	ND	0.952	02/05/08	02/06/08	
Endosulfan sulfate	EPA 608	8B05099	0.0029	0.0095	ND	0.952	02/05/08	02/06/08	
Endrin	EPA 608	8B05099	0.0019	0.0048	ND	0.952	02/05/08	02/06/08	
Endrin aldehyde	EPA 608	8B05099	0.0019	0.0095	ND	0.952	02/05/08	02/06/08	
Endrin ketone	EPA 608	8B05099	0.0029	0.0095	ND	0.952	02/05/08	02/06/08	
Heptachlor	EPA 608	8B05099	0.0029	0.0095	ND	0.952	02/05/08	02/06/08	
Heptachlor epoxide	EPA 608	8B05099	0.0024	0.0048	ND	0.952	02/05/08	02/06/08	
Methoxychlor	EPA 608	8B05099	0.0033	0.0048	ND	0.952	02/05/08	02/06/08	
Toxaphene	EPA 608	8B05099	0.067	0.095	ND	0.952	02/05/08	02/06/08	
Surrogate: Decachlorobiphenyl (45-120%)					77 %				
Surrogate: Tetrachloro-m-xylene (35-115%)					69 %				



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MWH-Pasadena/Boeing Project ID: Annual Outfall 006

618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Report Number: IRB0150
Sampled: 02/03/08
Received: 02/03/08

Attention: Bronwyn Kelly

TOTAL PCBS (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0150-01 (Outfall 006 - Wat	er) - cont.								
Reporting Units: ug/l									
Aroclor 1016	EPA 608	8B05099	0.43	0.48	ND	0.952	02/05/08	02/06/08	
Aroclor 1221	EPA 608	8B05099	0.24	0.48	ND	0.952	02/05/08	02/06/08	
Aroclor 1232	EPA 608	8B05099	0.24	0.48	ND	0.952	02/05/08	02/06/08	
Aroclor 1242	EPA 608	8B05099	0.24	0.48	ND	0.952	02/05/08	02/06/08	
Aroclor 1248	EPA 608	8B05099	0.24	0.48	ND	0.952	02/05/08	02/06/08	
Aroclor 1254	EPA 608	8B05099	0.24	0.48	ND	0.952	02/05/08	02/06/08	
Aroclor 1260	EPA 608	8B05099	0.29	0.48	ND	0.952	02/05/08	02/06/08	
Surrogate: Decachlorobiphenyl (45-120%)					86 %				



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MWH-Pasadena/Boeing Project ID: Annual Outfall 006

618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Report Number: IRB0150
Sampled: 02/03/08
Received: 02/03/08

Attention: Bronwyn Kelly

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0150-01 (Outfall 006 - Wa	iter) - cont.								
Reporting Units: mg/l									
Hardness (as CaCO3)	[CALC]	[CALC]	N/A	0.33	93	1	02/04/08	02/04/08	
Boron	EPA 200.7	8B04079	0.020	0.050	ND	1	02/04/08	02/04/08	
Calcium	EPA 200.7	8B04079	0.050	0.10	29	1	02/04/08	02/04/08	
Iron	EPA 200.7	8B04079	0.015	0.040	0.66	1	02/04/08	02/04/08	
Magnesium	EPA 200.7	8B04079	0.012	0.020	5.2	1	02/04/08	02/04/08	



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MWH-Pasadena/Boeing

Project ID: Annual Outfall 006

618 Michillinda Avenue, Suite 200 Sampled: 02/03/08 Arcadia, CA 91007 Report Number: IRB0150 Received: 02/03/08

Attention: Bronwyn Kelly

METALS

		1	VIL I A	LO					
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0150-01 (Outfall 0	06 - Water) - cont.								
Reporting Units: ug/l									
Aluminum	EPA 200.7	8B04079	40	50	850	1	02/04/08	02/04/08	
Antimony	EPA 200.8	8B04080	0.20	2.0	0.42	1	02/04/08	02/05/08	J
Arsenic	EPA 200.7	8B04079	7.0	10	ND	1	02/04/08	02/04/08	
Beryllium	EPA 200.7	8B04079	0.90	2.0	ND	1	02/04/08	02/04/08	
Cadmium	EPA 200.8	8B04080	0.11	1.0	0.21	1	02/04/08	02/04/08	J
Chromium	EPA 200.7	8B04079	2.0	5.0	ND	1	02/04/08	02/04/08	
Copper	EPA 200.8	8B04080	0.75	2.0	1.7	1	02/04/08	02/04/08	J
Lead	EPA 200.8	8B04080	0.30	1.0	0.51	1	02/04/08	02/04/08	J
Nickel	EPA 200.7	8B04079	2.0	10	ND	1	02/04/08	02/04/08	
Selenium	EPA 200.7	8B04079	8.0	10	ND	1	02/04/08	02/04/08	
Silver	EPA 200.7	8B04079	6.0	10	ND	1	02/04/08	02/04/08	
Thallium	EPA 200.8	8B04080	0.20	1.0	ND	1	02/04/08	02/04/08	
Vanadium	EPA 200.7	8B04079	3.0	10	ND	1	02/04/08	02/04/08	
Zinc	EPA 200.7	8B04079	6.0	20	ND	1	02/04/08	02/04/08	



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MWH-Pasadena/Boeing Project ID: Annual Outfall 006

618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Report Number: IRB0150
Sampled: 02/03/08
Received: 02/03/08

Attention: Bronwyn Kelly

DISSOLVED METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0150-01 (Outfall 006 - W	ater) - cont.								
Reporting Units: mg/l									
Boron	EPA 200.7-Diss	8B05111	0.020	0.050	ND	1	02/05/08	02/06/08	
Calcium	EPA 200.7-Diss	8B05111	0.050	0.10	30	1	02/05/08	02/06/08	
Iron	EPA 200.7-Diss	8B05111	0.015	0.040	0.046	1	02/05/08	02/06/08	
Magnesium	EPA 200.7-Diss	8B05111	0.012	0.020	5.2	1	02/05/08	02/06/08	
Hardness (as CaCO3)	SM2340B	8B05111	1.0	1.0	96	1	02/05/08	02/06/08	



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MWH-Pasadena/Boeing Project ID: Annual Outfall 006

618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Report Number: IRB0150
Sampled: 02/03/08
Received: 02/03/08

Arcadia, CA 91007 Report Number: IRB0150
Attention: Bronwyn Kelly

DISSOLVED METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0150-01 (Outfall 00	06 - Water) - cont.								
Reporting Units: ug/l									
Aluminum	EPA 200.7-Diss	8B05111	40	50	69	1	02/05/08	02/06/08	
Antimony	EPA 200.8-Diss	8B04144	0.20	2.0	0.36	1	02/04/08	02/05/08	J
Arsenic	EPA 200.7-Diss	8B05111	7.0	10	7.5	1	02/05/08	02/06/08	J
Beryllium	EPA 200.7-Diss	8B05111	0.90	2.0	ND	1	02/05/08	02/06/08	
Cadmium	EPA 200.8-Diss	8B04144	0.11	1.0	0.22	1	02/04/08	02/05/08	J
Chromium	EPA 200.7-Diss	8B05111	2.0	5.0	ND	1	02/05/08	02/06/08	
Copper	EPA 200.8-Diss	8B04144	0.75	2.0	1.3	1	02/04/08	02/05/08	J
Lead	EPA 200.8-Diss	8B04144	0.30	1.0	ND	1	02/04/08	02/05/08	
Nickel	EPA 200.7-Diss	8B05111	2.0	10	ND	1	02/05/08	02/06/08	
Selenium	EPA 200.7-Diss	8B05111	8.0	10	ND	1	02/05/08	02/06/08	
Silver	EPA 200.7-Diss	8B05111	6.0	10	ND	1	02/05/08	02/06/08	
Thallium	EPA 200.8-Diss	8B04144	0.20	1.0	ND	1	02/04/08	02/05/08	
Vanadium	EPA 200.7-Diss	8B05111	3.0	10	ND	1	02/05/08	02/06/08	
Zinc	EPA 200.7-Diss	8B05111	6.0	20	ND	1	02/05/08	02/06/08	



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Sampled: 02/03/08

MWH-Pasadena/Boeing Project ID: Annual Outfall 006

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Report Number: IRB0150 Received: 02/03/08

Attention: Bronwyn Kelly

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0150-01 (Outfall 006 - V	Vater) - cont.								
Reporting Units: mg/l									
Hexane Extractable Material (Oil &	EPA 1664A	8B12074	1.3	4.8	ND	1	02/12/08	02/12/08	
Grease)									
Chloride	EPA 300.0	8B04043	0.25	0.50	21	1	02/04/08	02/04/08	
Fluoride	EPA 300.0	8B04043	0.15	0.50	0.31	1	02/04/08	02/04/08	J
Nitrate/Nitrite-N	EPA 300.0	8B04043	0.15	0.26	5.3	1	02/04/08	02/04/08	
Sulfate	EPA 300.0	8B04043	0.20	0.50	19	1	02/04/08	02/04/08	
Total Dissolved Solids	SM2540C	8B07122	10	10	220	1	02/07/08	02/07/08	
Total Suspended Solids	EPA 160.2	8B04128	10	10	ND	1	02/04/08	02/04/08	



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Sampled: 02/03/08

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Report Number: IRB0150 Received: 02/03/08

Attention: Bronwyn Kelly

INORGANICS

Project ID: Annual Outfall 006

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0150-01 (Outfall 006 - Wat	er) - cont.								
Reporting Units: ug/l									
Total Cyanide	EPA 335.2	8B04112	2.2	5.0	ND	1	02/04/08	02/04/08	
Perchlorate	EPA 314.0	8B12073	1.5	4.0	ND	1	02/12/08	02/12/08	



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MWH-Pasadena/Boeing Project ID: Annual Outfall 006

618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Report Number: IRB0150
Sampled: 02/03/08
Received: 02/03/08

Attention: Bronwyn Kelly

ORGANIC COMPOUNDS BY GC/MS (EPA 525.2)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Oualifiers
Analyte	Method	Datti	Lillit	Limit	Result	ractor	Extracteu	Anaryzeu	Quanners
Sample ID: IRB0150-01 (Outfall 006 - Wat	ter) - cont.								P, pH
Reporting Units: ug/l									
Chlorpyrifos	EPA 525.2	C8B0516	0.10	1.0	ND	1.01	02/05/08	02/07/08	
Diazinon	EPA 525.2	C8B0516	0.24	0.25	ND	1.01	02/05/08	02/07/08	
Surrogate: 1,3-Dimethyl-2-nitrobenzene (70-	-130%)				87 %				
Surrogate: Triphenylphosphate (70-130%)					111 %				
Surrogate: Perylene-d12 (70-130%)					93 %				



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MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 006

Sampled: 02/03/08

Report Number: IRB0150

Received: 02/03/08

Metals by EPA 200 Series Methods

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0150-01 (Outfall 006 - Wa	ter) - cont.								
Reporting Units: ug/l									
Mercury, Dissolved	EPA 245.1	W8B0171	0.050	0.20	ND	1	02/06/08	02/07/08	
Mercury, Total	EPA 245.1	W8B0171	0.050	0.20	ND	1	02/06/08	02/07/08	



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MWH-Pasadena/Boeing Project ID: Annual Outfall 006

618 Michillinda Avenue, Suite 200 Sampled: 02/03/08

Arcadia, CA 91007 Report Number: IRB0150 Received: 02/03/08
Attention: Bronwyn Kelly

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: Outfall 006 (IRB0150-01) - Water	•				
EPA 300.0	2	02/03/2008 14:20	02/03/2008 18:25	02/04/2008 05:00	02/04/2008 07:17
EPA 624	3	02/03/2008 14:20	02/03/2008 18:25	02/04/2008 00:00	02/04/2008 14:59
Sample ID: Trip Blanks (IRB0150-02) - Wate	r				
EPA 624	3	02/03/2008 14:20	02/03/2008 18:25	02/04/2008 00:00	02/04/2008 15:28

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MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Sampled: 02/03/08

Report Number: IRB0150

Received: 02/03/08

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Angleto	Result	Reporting Limit	MDL	Units	Spike Level	Source	%REC	%REC	RPD	RPD Limit	Data Qualifiers
Analyte		Limit	MDL	Units	Levei	Kesuit	70KEC	Limits	KPD	Lillit	Quanners
Batch: 8B04007 Extracted: 02/04/08	<u>8</u>										
Blank Analyzed: 02/04/2008 (8B04007-E	BLK1)										
1,1,1-Trichloroethane	ND	0.50	0.30	ug/l							
1,1,2,2-Tetrachloroethane	ND	0.50	0.24	ug/l							
1,1,2-Trichloroethane	ND	0.50	0.30	ug/l							
1,1-Dichloroethane	ND	0.50	0.27	ug/l							
1,1-Dichloroethene	ND	0.50	0.42	ug/l							
1,2-Dichloroethane	ND	0.50	0.28	ug/l							
1,2-Dichlorobenzene	ND	0.50	0.32	ug/l							
1,2-Dichloropropane	ND	0.50	0.35	ug/l							
1,3-Dichlorobenzene	ND	0.50	0.35	ug/l							
1,4-Dichlorobenzene	ND	0.50	0.37	ug/l							
Benzene	ND	0.50	0.28	ug/l							
Bromodichloromethane	ND	0.50	0.30	ug/l							
Bromoform	ND	0.50	0.40	ug/l							
Bromomethane	ND	1.0	0.42	ug/l							
Carbon tetrachloride	ND	0.50	0.28	ug/l							
Chlorobenzene	ND	0.50	0.36	ug/l							
Chloroethane	ND	1.0	0.40	ug/l							
Chloroform	ND	0.50	0.33	ug/l							
Chloromethane	ND	0.50	0.40	ug/l							
cis-1,3-Dichloropropene	ND	0.50	0.22	ug/l							
Dibromochloromethane	ND	0.50	0.28	ug/l							
Ethylbenzene	ND	0.50	0.25	ug/l							
Methylene chloride	ND	1.0	0.95	ug/l							
Tetrachloroethene	ND	0.50	0.32	ug/l							
Toluene	ND	0.50	0.36	ug/l							
trans-1,2-Dichloroethene	ND	0.50	0.27	ug/l							
trans-1,3-Dichloropropene	ND	0.50	0.32	ug/l							
Trichloroethene	ND	0.50	0.26	ug/l							
Trichlorofluoromethane	ND	0.50	0.34	ug/l							
Trichlorotrifluoroethane (Freon 113)	ND	5.0	0.50	ug/l							
Vinyl chloride	ND	0.50	0.30	ug/l							
Xylenes, Total	ND	1.5	0.90	ug/l							
Surrogate: Dibromofluoromethane	27.7			ug/l	25.0		111	80-120			
Surrogate: Toluene-d8	25.2			ug/l	25.0		101	80-120			
Surrogate: 4-Bromofluorobenzene	22.9			ug/l	25.0		91	80-120			

TestAmerica Irvine



MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IRB0150

Sampled: 02/03/08 Received: 02/03/08

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 8B04007 Extracted: 02/04/0	18										
-	_										
LCS Analyzed: 02/04/2008 (8B04007-B	S1)										
1,1,1-Trichloroethane	30.6	0.50	0.30	ug/l	25.0		122	65-135			
1,1,2,2-Tetrachloroethane	27.3	0.50	0.24	ug/l	25.0		109	55-130			
1,1,2-Trichloroethane	25.9	0.50	0.30	ug/l	25.0		103	70-125			
1,1-Dichloroethane	29.2	0.50	0.27	ug/l	25.0		117	70-125			
1,1-Dichloroethene	25.5	0.50	0.42	ug/l	25.0		102	70-125			
1,2-Dichloroethane	27.2	0.50	0.28	ug/l	25.0		109	60-140			
1,2-Dichlorobenzene	26.5	0.50	0.32	ug/l	25.0		106	75-120			
1,2-Dichloropropane	26.7	0.50	0.35	ug/l	25.0		107	70-125			
1,3-Dichlorobenzene	26.4	0.50	0.35	ug/l	25.0		106	75-120			
1,4-Dichlorobenzene	24.3	0.50	0.37	ug/l	25.0		97	75-120			
Benzene	25.9	0.50	0.28	ug/l	25.0		103	70-120			
Bromodichloromethane	29.9	0.50	0.30	ug/l	25.0		120	70-135			
Bromoform	22.2	0.50	0.40	ug/l	25.0		89	55-130			
Bromomethane	29.3	1.0	0.42	ug/l	25.0		117	65-140			
Carbon tetrachloride	29.8	0.50	0.28	ug/l	25.0		119	65-140			
Chlorobenzene	24.8	0.50	0.36	ug/l	25.0		99	75-120			
Chloroethane	30.1	1.0	0.40	ug/l	25.0		120	60-140			
Chloroform	30.2	0.50	0.33	ug/l	25.0		121	70-130			
Chloromethane	28.5	0.50	0.40	ug/l	25.0		114	50-140			
cis-1,3-Dichloropropene	24.0	0.50	0.22	ug/l	25.0		96	75-125			
Dibromochloromethane	25.6	0.50	0.28	ug/l	25.0		103	70-140			
Ethylbenzene	27.1	0.50	0.25	ug/l	25.0		108	75-125			
Methylene chloride	27.1	1.0	0.95	ug/l	25.0		108	55-130			
Tetrachloroethene	22.8	0.50	0.32	ug/l	25.0		91	70-125			
Toluene	26.1	0.50	0.36	ug/l	25.0		104	70-120			
trans-1,2-Dichloroethene	29.8	0.50	0.27	ug/l	25.0		119	70-125			
trans-1,3-Dichloropropene	24.1	0.50	0.32	ug/l	25.0		96	70-125			
Trichloroethene	24.6	0.50	0.26	ug/l	25.0		99	70-125			
Trichlorofluoromethane	34.8	0.50	0.34	ug/l	25.0		139	65-145			
Vinyl chloride	29.8	0.50	0.30	ug/l	25.0		119	55-135			
Xylenes, Total	78.7	1.5	0.90	ug/l	75.0		105	70-125			
Surrogate: Dibromofluoromethane	27.9			ug/l	25.0		112	80-120			
Surrogate: Toluene-d8	25.5			ug/l	25.0		102	80-120			
Surrogate: 4-Bromofluorobenzene	26.0			ug/l	25.0		104	80-120			

TestAmerica Irvine

%REC



THE LEADER IN ENVIRONMENTAL TESTING

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IRB0150

Reporting

Sampled: 02/03/08

Received: 02/03/08

RPD

Data

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Spike

Source

		Keporting			Spike	Source		OKEC		KI D	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 8B04007 Extracted: 02/04	4/08										
Matrix Spike Analyzed: 02/04/2008 ((8B04007-MS1)				Sou	rce: IRB	0146-01				
1,1,1-Trichloroethane	29.1	0.50	0.30	ug/l	25.0	ND	117	65-140			
1,1,2,2-Tetrachloroethane	27.0	0.50	0.24	ug/l	25.0	ND	108	55-135			
1,1,2-Trichloroethane	24.6	0.50	0.30	ug/l	25.0	ND	98	65-130			
1,1-Dichloroethane	27.8	0.50	0.27	ug/l	25.0	ND	111	65-130			
1,1-Dichloroethene	24.9	0.50	0.42	ug/l	25.0	ND	100	60-130			
1,2-Dichloroethane	26.1	0.50	0.28	ug/l	25.0	ND	104	60-140			
1,2-Dichlorobenzene	25.7	0.50	0.32	ug/l	25.0	ND	103	75-125			
1,2-Dichloropropane	25.3	0.50	0.35	ug/l	25.0	ND	101	65-130			
1,3-Dichlorobenzene	25.8	0.50	0.35	ug/l	25.0	ND	103	75-125			
1,4-Dichlorobenzene	23.6	0.50	0.37	ug/l	25.0	ND	94	75-125			
Benzene	25.1	0.50	0.28	ug/l	25.0	ND	101	65-125			
Bromodichloromethane	28.8	0.50	0.30	ug/l	25.0	ND	115	70-135			
Bromoform	21.5	0.50	0.40	ug/l	25.0	ND	86	55-135			
Bromomethane	28.6	1.0	0.42	ug/l	25.0	ND	114	55-145			
Carbon tetrachloride	28.4	0.50	0.28	ug/l	25.0	ND	113	65-140			
Chlorobenzene	23.9	0.50	0.36	ug/l	25.0	ND	96	75-125			
Chloroethane	28.9	1.0	0.40	ug/l	25.0	ND	115	55-140			
Chloroform	28.9	0.50	0.33	ug/l	25.0	ND	116	65-135			
Chloromethane	28.8	0.50	0.40	ug/l	25.0	ND	115	45-145			
cis-1,3-Dichloropropene	22.8	0.50	0.22	ug/l	25.0	ND	91	70-130			
Dibromochloromethane	24.4	0.50	0.28	ug/l	25.0	ND	98	65-140			
Ethylbenzene	26.4	0.50	0.25	ug/l	25.0	ND	106	65-130			
Methylene chloride	26.1	1.0	0.95	ug/l	25.0	ND	104	50-135			
Tetrachloroethene	22.0	0.50	0.32	ug/l	25.0	ND	88	65-130			
Toluene	25.3	0.50	0.36	ug/l	25.0	ND	101	70-125			
trans-1,2-Dichloroethene	28.4	0.50	0.27	ug/l	25.0	ND	114	65-130			
trans-1,3-Dichloropropene	22.5	0.50	0.32	ug/l	25.0	ND	90	65-135			
Trichloroethene	23.9	0.50	0.26	ug/l	25.0	ND	96	65-125			
Trichlorofluoromethane	34.2	0.50	0.34	ug/l	25.0	ND	137	60-145			
Vinyl chloride	29.4	0.50	0.30	ug/l	25.0	ND	118	45-140			
Xylenes, Total	76.3	1.5	0.90	ug/l	75.0	ND	102	60-130			
Surrogate: Dibromofluoromethane	27.8			ug/l	25.0		111	80-120			
Surrogate: Toluene-d8	25.7			ug/l	25.0		103	80-120			
Surrogate: 4-Bromofluorobenzene	25.7			ug/l	25.0		103	80-120			

TestAmerica Irvine



MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IRB0150

Sampled: 02/03/08 Received: 02/03/08

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source	%REC	%REC	RPD	RPD Limit	Data Qualifiers
v		Lillit	MIDL	Units	Levei	Result	70KEC	Limits	KFD	Lillit	Quanners
Batch: 8B04007 Extracted: 02/04/0	<u>8</u>										
Matrix Spike Dun Analyzadı 02/04/2001) (ODAAAA N	ICD1)			Com	rce: IRB	0146 01				
Matrix Spike Dup Analyzed: 02/04/2008	`		0.20	/1				65.140	2	20	
1,1,1-Trichloroethane	28.6 29.1	0.50	0.30	ug/l	25.0	ND	114	65-140	2 7	20 30	
1,1,2,2-Tetrachloroethane		0.50	0.24	ug/l	25.0	ND	116	55-135			
1,1,2-Trichloroethane	26.1	0.50	0.30	ug/l	25.0	ND	104	65-130	6	25	
1,1-Dichloroethane	28.1	0.50	0.27	ug/l	25.0	ND	112	65-130	1	20	
1,1-Dichloroethene	25.1	0.50	0.42	ug/l	25.0	ND	100	60-130	1	20	
1,2-Dichloroethane	26.8	0.50	0.28	ug/l	25.0	ND	107	60-140	2	20	
1,2-Dichlorobenzene	25.8	0.50	0.32	ug/l	25.0	ND	103	75-125	1	20	
1,2-Dichloropropane	25.8	0.50	0.35	ug/l	25.0	ND	103	65-130	2	20	
1,3-Dichlorobenzene	25.4	0.50	0.35	ug/l	25.0	ND	101	75-125	2	20	
1,4-Dichlorobenzene	23.4	0.50	0.37	ug/l	25.0	ND	94	75-125	1	20	
Benzene	25.4	0.50	0.28	ug/l	25.0	ND	102	65-125	1	20	
Bromodichloromethane	29.0	0.50	0.30	ug/l	25.0	ND	116	70-135	1	20	
Bromoform	22.6	0.50	0.40	ug/l	25.0	ND	91	55-135	5	25	
Bromomethane	29.3	1.0	0.42	ug/l	25.0	ND	117	55-145	2	25	
Carbon tetrachloride	27.6	0.50	0.28	ug/l	25.0	ND	110	65-140	3	25	
Chlorobenzene	23.7	0.50	0.36	ug/l	25.0	ND	95	75-125	1	20	
Chloroethane	30.2	1.0	0.40	ug/l	25.0	ND	121	55-140	4	25	
Chloroform	28.8	0.50	0.33	ug/l	25.0	ND	115	65-135	0	20	
Chloromethane	30.9	0.50	0.40	ug/l	25.0	ND	124	45-145	7	25	
cis-1,3-Dichloropropene	23.2	0.50	0.22	ug/l	25.0	ND	93	70-130	2	20	
Dibromochloromethane	24.9	0.50	0.28	ug/l	25.0	ND	100	65-140	2	25	
Ethylbenzene	26.2	0.50	0.25	ug/l	25.0	ND	105	65-130	1	20	
Methylene chloride	27.0	1.0	0.95	ug/l	25.0	ND	108	50-135	3	20	
Tetrachloroethene	21.9	0.50	0.32	ug/l	25.0	ND	88	65-130	1	20	
Toluene	25.2	0.50	0.36	ug/l	25.0	ND	101	70-125	0	20	
trans-1,2-Dichloroethene	28.5	0.50	0.27	ug/l	25.0	ND	114	65-130	1	20	
trans-1,3-Dichloropropene	23.4	0.50	0.32	ug/l	25.0	ND	94	65-135	4	25	
Trichloroethene	24.1	0.50	0.26	ug/l	25.0	ND	96	65-125	1	20	
Trichlorofluoromethane	33.1	0.50	0.34	ug/l	25.0	ND	132	60-145	3	25	
Vinyl chloride	30.5	0.50	0.30	ug/l	25.0	ND	122	45-140	3	30	
Xylenes, Total	74.9	1.5	0.90	ug/l	75.0	ND	100	60-130	2	20	
Surrogate: Dibromofluoromethane	27.6			ug/l	25.0		110	80-120			
Surrogate: Toluene-d8	25.7			ug/l	25.0		103	80-120			
Surrogate: 4-Bromofluorobenzene	25.5			ug/l	25.0		102	80-120			

TestAmerica Irvine



MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

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Report Number: IRB0150

Sampled: 02/03/08 Received: 02/03/08

METHOD BLANK/QC DATA

PURGEABLES-- GC/MS (EPA 624)

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 8B04007 Extracted: 02/04/08	_										
	_										
Blank Analyzed: 02/04/2008 (8B04007-B	LK1)										
Acrolein	ND	5.0	4.0	ug/l							
Acrylonitrile	ND	2.0	0.70	ug/l							
2-Chloroethyl vinyl ether	ND	5.0	1.8	ug/l							
Surrogate: Dibromofluoromethane	27.7			ug/l	25.0		111	80-120			
Surrogate: Toluene-d8	25.2			ug/l	25.0		101	80-120			
Surrogate: 4-Bromofluorobenzene	22.9			ug/l	25.0		91	80-120			
LCS Analyzed: 02/04/2008 (8B04007-BS)	1)										
2-Chloroethyl vinyl ether	29.5	5.0	1.8	ug/l	25.0		118	25-170			
Surrogate: Dibromofluoromethane	27.9			ug/l	25.0		112	80-120			
Surrogate: Toluene-d8	25.5			ug/l	25.0		102	80-120			
Surrogate: 4-Bromofluorobenzene	26.0			ug/l	25.0		104	80-120			
Matrix Spike Analyzed: 02/04/2008 (8B0	4007-MS1)				Sou	rce: IRB(0146-01				
2-Chloroethyl vinyl ether	27.8	5.0	1.8	ug/l	25.0	ND	111	25-170			
Surrogate: Dibromofluoromethane	27.8			ug/l	25.0		111	80-120			
Surrogate: Toluene-d8	25.7			ug/l	25.0		103	80-120			
Surrogate: 4-Bromofluorobenzene	25.7			ug/l	25.0		103	80-120			
Matrix Spike Dup Analyzed: 02/04/2008	(8B04007-M	SD1)			Sou	rce: IRB(0146-01				
2-Chloroethyl vinyl ether	31.1	5.0	1.8	ug/l	25.0	ND	124	25-170	11	25	
Surrogate: Dibromofluoromethane	27.6			ug/l	25.0		110	80-120			
Surrogate: Toluene-d8	25.7			ug/l	25.0		103	80-120			
Surrogate: 4-Bromofluorobenzene	25.5			ug/l	25.0		102	80-120			

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

%REC

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Sampled: 02/03/08

Report Number: IRB0150

Reporting

Received: 02/03/08

RPD

Limit

Data

Qualifiers

METHOD BLANK/QC DATA

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

Spike

Source

		Reporting			Spike	Source		%REC		
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	
Batch: 8B04111 Extracted: 02/0	04/08									
Blank Analyzed: 02/07/2008 (8B041	111-BLK1)									
Acenaphthene	ND	10	3.0	ug/l						
Acenaphthylene	ND	10	3.0	ug/l						
Aniline	ND	10	2.5	ug/l						
Anthracene	ND	10	2.0	ug/l						
Benzidine	ND	20	8.5	ug/l						
Benzoic acid	ND	20	10	ug/l						
Benzo(a)anthracene	ND	10	2.0	ug/l						
Benzo(b)fluoranthene	ND	10	2.0	ug/l						
Benzo(k)fluoranthene	ND	10	2.5	ug/l						
Benzo(g,h,i)perylene	ND	10	4.0	ug/l						
Benzo(a)pyrene	ND	10	2.0	ug/l						
Benzyl alcohol	ND	20	2.5	ug/l						
Bis(2-chloroethoxy)methane	ND	10	3.0	ug/l						
Bis(2-chloroethyl)ether	ND	10	3.0	ug/l						
Bis(2-chloroisopropyl)ether	ND	10	2.5	ug/l						
Bis(2-ethylhexyl)phthalate	ND	50	4.0	ug/l						
4-Bromophenyl phenyl ether	ND	10	3.0	ug/l						
Butyl benzyl phthalate	ND	20	4.0	ug/l						
4-Chloroaniline	ND	10	2.0	ug/l						
2-Chloronaphthalene	ND	10	3.0	ug/l						
4-Chloro-3-methylphenol	ND	20	2.5	ug/l						
2-Chlorophenol	ND	10	3.0	ug/l						
4-Chlorophenyl phenyl ether	ND	10	2.5	ug/l						
Chrysene	ND	10	2.5	ug/l						
Dibenz(a,h)anthracene	ND	20	3.0	ug/l						
Dibenzofuran	ND	10	4.0	ug/l						
Di-n-butyl phthalate	ND	20	3.0	ug/l						
1,3-Dichlorobenzene	ND	10	3.0	ug/l						
1,4-Dichlorobenzene	ND	10	2.5	ug/l						
1,2-Dichlorobenzene	ND	10	3.0	ug/l						
3,3-Dichlorobenzidine	ND	20	3.0	ug/l						
2,4-Dichlorophenol	ND	10	3.5	ug/l						
Diethyl phthalate	ND	10	3.5	ug/l						
2,4-Dimethylphenol	ND	20	3.5	ug/l						
Dimethyl phthalate	ND	10	2.0	ug/l						

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17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 006

Sampled: 02/03/08

Report Number: IRB0150

Received: 02/03/08

METHOD BLANK/QC DATA

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 8B04111 Extracted: 02/04/0	8										
Blank Analyzed: 02/07/2008 (8B04111-I	BLK1)										
4,6-Dinitro-2-methylphenol	ND	20	4.0	ug/l							
2,4-Dinitrophenol	ND	20	8.0	ug/l							
2,4-Dinitrotoluene	ND	10	3.5	ug/l							
2,6-Dinitrotoluene	ND	10	2.0	ug/l							
Di-n-octyl phthalate	ND	20	3.5	ug/l							
Fluoranthene	ND	10	3.0	ug/l							
Fluorene	ND	10	3.0	ug/l							
Hexachlorobenzene	ND	10	3.0	ug/l							
Hexachlorobutadiene	ND	10	4.0	ug/l							
Hexachlorocyclopentadiene	ND	20	5.0	ug/l							
Hexachloroethane	ND	10	3.5	ug/l							
Indeno(1,2,3-cd)pyrene	ND	20	3.5	ug/l							
Isophorone	ND	10	2.5	ug/l							
2-Methylnaphthalene	ND	10	2.0	ug/l							
2-Methylphenol	ND	10	3.0	ug/l							
4-Methylphenol	ND	10	3.0	ug/l							
Naphthalene	ND	10	3.0	ug/l							
2-Nitroaniline	ND	20	2.0	ug/l							
3-Nitroaniline	ND	20	3.0	ug/l							
4-Nitroaniline	ND	20	4.0	ug/l							
Nitrobenzene	ND	20	2.5	ug/l							
2-Nitrophenol	ND	10	3.5	ug/l							
4-Nitrophenol	ND	20	5.5	ug/l							
N-Nitrosodiphenylamine	ND	10	2.0	ug/l							
N-Nitroso-di-n-propylamine	ND	10	3.5	ug/l							
Pentachlorophenol	ND	20	3.5	ug/l							
Phenanthrene	ND	10	3.5	ug/l							
Phenol	ND	10	2.0	ug/l							
Pyrene	ND	10	4.0	ug/l							
1,2,4-Trichlorobenzene	ND	10	2.5	ug/l							
2,4,5-Trichlorophenol	ND	20	3.0	ug/l							
2,4,6-Trichlorophenol	ND	20	4.5	ug/l							
1,2-Diphenylhydrazine/Azobenzene	ND	20	2.5	ug/l							
N-Nitrosodimethylamine	ND	20	2.5	ug/l							
Surrogate: 2-Fluorophenol	159			ug/l	200		80	30-120			

TestAmerica Irvine

%REC

RPD

Data



THE LEADER IN ENVIRONMENTAL TESTING

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 006

Sampled: 02/03/08 50 Received: 02/03/08

Report Number: IRB0150

Reporting

METHOD BLANK/QC DATA

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

Spike

Source

		Reporting			Spike	Source		%REC		KPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 8B04111 Extracted: 02/04	1/08										
Blank Analyzed: 02/07/2008 (8B0411											
Surrogate: Phenol-d6	166			ug/l	200		83	35-120			
Surrogate: 2,4,6-Tribromophenol	129			ug/l	200		64	40-120			
Surrogate: Nitrobenzene-d5	83.8			ug/l	100		84	45-120			
Surrogate: 2-Fluorobiphenyl	82.4			ug/l	100		82	50-120			
Surrogate: Terphenyl-d14	82.8			ug/l	100		83	50-125			
LCS Analyzed: 02/07/2008 (8B04111-	-BS1)										
Acenaphthene	92.8	10	3.0	ug/l	100		93	60-120			
Acenaphthylene	97.0	10	3.0	ug/l	100		97	60-120			
Aniline	86.7	10	2.5	ug/l	100		87	35-120			
Anthracene	91.1	10	2.0	ug/l	100		91	65-120			
Benzidine	161	20	8.5	ug/l	100		161	30-160			L6
Benzoic acid	74.5	20	10	ug/l	100		74	25-120			
Benzo(a)anthracene	95.9	10	2.0	ug/l	100		96	65-120			
Benzo(b)fluoranthene	87.2	10	2.0	ug/l	100		87	55-125			
Benzo(k)fluoranthene	88.9	10	2.5	ug/l	100		89	50-125			
Benzo(g,h,i)perylene	83.0	10	4.0	ug/l	100		83	45-135			
Benzo(a)pyrene	91.9	10	2.0	ug/l	100		92	55-130			
Benzyl alcohol	99.9	20	2.5	ug/l	100		100	50-120			
Bis(2-chloroethoxy)methane	92.9	10	3.0	ug/l	100		93	55-120			
Bis(2-chloroethyl)ether	86.4	10	3.0	ug/l	100		86	50-120			
Bis(2-chloroisopropyl)ether	98.4	10	2.5	ug/l	100		98	45-120			
Bis(2-ethylhexyl)phthalate	99.9	50	4.0	ug/l	100		100	65-130			
4-Bromophenyl phenyl ether	86.0	10	3.0	ug/l	100		86	60-120			
Butyl benzyl phthalate	104	20	4.0	ug/l	100		104	55-130			
4-Chloroaniline	95.8	10	2.0	ug/l	100		96	55-120			
2-Chloronaphthalene	91.9	10	3.0	ug/l	100		92	60-120			
4-Chloro-3-methylphenol	97.9	20	2.5	ug/l	100		98	60-120			
2-Chlorophenol	86.3	10	3.0	ug/l	100		86	45-120			
4-Chlorophenyl phenyl ether	89.9	10	2.5	ug/l	100		90	65-120			
Chrysene	92.3	10	2.5	ug/l	100		92	65-120			
Dibenz(a,h)anthracene	84.8	20	3.0	ug/l	100		85	50-135			
Dibenzofuran	93.2	10	4.0	ug/l	100		93	65-120			
Di-n-butyl phthalate	85.8	20	3.0	ug/l	100		86	60-125			
1,3-Dichlorobenzene	74.9	10	3.0	ug/l	100		75	35-120			
1,4-Dichlorobenzene	79.8	10	2.5	ug/l	100		80	35-120			

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17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 006

Sampled: 02/03/08

Report Number: IRB0150

Received: 02/03/08

METHOD BLANK/QC DATA

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC	RPD	RPD Limit	Data Qualifiers
•		Limit	MIDL	Cints	Level	Result	/UKEC	Limits	KI D	Limit	Quanners
Batch: 8B04111 Extracted: 02/04/08	<u>s</u>										
LCS Analyzed: 02/07/2008 (8B04111-BS	1)										
1,2-Dichlorobenzene	80.6	10	3.0	ug/l	100		81	40-120			
3,3-Dichlorobenzidine	84.1	20	3.0	ug/l	100		84	45-135			
2,4-Dichlorophenol	91.0	10	3.5	ug/l	100		91	55-120			
Diethyl phthalate	92.2	10	3.5	ug/l	100		92	55-120			
2,4-Dimethylphenol	80.5	20	3.5	ug/l	100		81	40-120			
Dimethyl phthalate	89.5	10	2.0	ug/l	100		90	30-120			
4,6-Dinitro-2-methylphenol	85.8	20	4.0	ug/l	100		86	45-120			
2,4-Dinitrophenol	94.2	20	8.0	ug/l	100		94	40-120			
2,4-Dinitrotoluene	101	10	3.5	ug/l	100		101	65-120			
2,6-Dinitrotoluene	98.1	10	2.0	ug/l	100		98	65-120			
Di-n-octyl phthalate	89.3	20	3.5	ug/l	100		89	65-135			
Fluoranthene	82.3	10	3.0	ug/l	100		82	60-120			
Fluorene	95.6	10	3.0	ug/l	100		96	65-120			
Hexachlorobenzene	80.7	10	3.0	ug/l	100		81	60-120			
Hexachlorobutadiene	76.8	10	4.0	ug/l	100		77	40-120			
Hexachlorocyclopentadiene	105	20	5.0	ug/l	100		105	25-120			
Hexachloroethane	76.5	10	3.5	ug/l	100		77	35-120			
Indeno(1,2,3-cd)pyrene	85.2	20	3.5	ug/l	100		85	45-135			
Isophorone	93.8	10	2.5	ug/l	100		94	50-120			
2-Methylnaphthalene	91.2	10	2.0	ug/l	100		91	55-120			
2-Methylphenol	90.9	10	3.0	ug/l	100		91	50-120			
4-Methylphenol	90.3	10	3.0	ug/l	100		90	50-120			
Naphthalene	87.4	10	3.0	ug/l	100		87	55-120			
2-Nitroaniline	105	20	2.0	ug/l	100		105	65-120			
3-Nitroaniline	97.2	20	3.0	ug/l	100		97	60-120			
4-Nitroaniline	99.5	20	4.0	ug/l	100		99	55-125			
Nitrobenzene	93.5	20	2.5	ug/l	100		94	55-120			
2-Nitrophenol	90.9	10	3.5	ug/l	100		91	50-120			
4-Nitrophenol	90.3	20	5.5	ug/l	100		90	45-120			
N-Nitrosodiphenylamine	94.4	10	2.0	ug/l	100		94	60-120			
N-Nitroso-di-n-propylamine	94.6	10	3.5	ug/l	100		95	45-120			
Pentachlorophenol	76.0	20	3.5	ug/l	100		76	50-120			
Phenanthrene	87.8	10	3.5	ug/l	100		88	65-120			
Phenol	84.3	10	2.0	ug/l	100		84	40-120			
Pyrene	112	10	4.0	ug/l	100		112	55-125			

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MWH-Pasadena/Boeing

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Project ID: Annual Outfall 006

Sampled: 02/03/08

Report Number: IRB0150

Received: 02/03/08

METHOD BLANK/QC DATA

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 8B04111 Extracted: 02/04/0	<u> 18</u>										
LCS Analyzed: 02/07/2008 (8B04111-B	S1)										
1,2,4-Trichlorobenzene	82.1	10	2.5	ug/l	100		82	45-120			
2,4,5-Trichlorophenol	94.0	20	3.0	ug/l	100		94	55-120			
2,4,6-Trichlorophenol	91.5	20	4.5	ug/l	100		92	55-120			
1,2-Diphenylhydrazine/Azobenzene	97.8	20	2.5	ug/l	100		98	60-120			
N-Nitrosodimethylamine	98.9	20	2.5	ug/l	100		99	45-120			
Surrogate: 2-Fluorophenol	167			ug/l	200		83	30-120			
Surrogate: Phenol-d6	171			ug/l	200		86	35-120			
Surrogate: 2,4,6-Tribromophenol	153			ug/l	200		77	40-120			
Surrogate: Nitrobenzene-d5	89.0			ug/l	100		89	45-120			
Surrogate: 2-Fluorobiphenyl	87.6			ug/l	100		88	50-120			
Surrogate: Terphenyl-d14	100			ug/l	100		100	50-125			
Matrix Spike Analyzed: 02/07/2008 (8E	804111-MS1)				Sou	rce: IRA	3018-06				
Acenaphthene	93.7	48	14	ug/l	95.2	ND	98	60-120			
Acenaphthylene	40.8	48	14	ug/l	95.2	ND	43	60-120			M2, J
Aniline	53.5	48	12	ug/l	95.2	ND	56	35-120			
Anthracene	84.9	48	9.5	ug/l	95.2	ND	89	65-120			
Benzidine	ND	95	40	ug/l	95.2	ND		30-160			M2
Benzoic acid	107	95	48	ug/l	95.2	ND	112	25-125			
Benzo(a)anthracene	89.0	48	9.5	ug/l	95.2	ND	94	65-120			
Benzo(b)fluoranthene	83.0	48	9.5	ug/l	95.2	ND	87	55-125			
Benzo(k)fluoranthene	95.6	48	12	ug/l	95.2	ND	100	55-125			
Benzo(g,h,i)perylene	68.7	48	19	ug/l	95.2	ND	72	45-135			
Benzo(a)pyrene	90.1	48	9.5	ug/l	95.2	ND	95	55-130			
Benzyl alcohol	34.9	95	12	ug/l	95.2	ND	37	40-120			M2, J
Bis(2-chloroethoxy)methane	76.3	48	14	ug/l	95.2	ND	80	50-120			
Bis(2-chloroethyl)ether	106	48	14	ug/l	95.2	ND	112	50-120			
Bis(2-chloroisopropyl)ether	86.9	48	12	ug/l	95.2	ND	91	45-120			
Bis(2-ethylhexyl)phthalate	91.0	240	19	ug/l	95.2	ND	96	65-130			J
4-Bromophenyl phenyl ether	75.0	48	14	ug/l	95.2	ND	79	60-120			
Butyl benzyl phthalate	92.6	95	19	ug/l	95.2	ND	97	55-130			J
4-Chloroaniline	19.6	48	9.5	ug/l	95.2	ND	21	55-120			M2, J
2-Chloronaphthalene	83.3	48	14	ug/l	95.2	ND	87	60-120			
4-Chloro-3-methylphenol	84.0	95	12	ug/l	95.2	ND	88	60-120			J
2-Chlorophenol	77.2	48	14	ug/l	95.2	ND	81	45-120			
4-Chlorophenyl phenyl ether	92.5	48	12	ug/l	95.2	ND	97	65-120			

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MWH-Pasadena/Boeing

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Project ID: Annual Outfall 006

Sampled: 02/03/08

Report Number: IRB0150

Received: 02/03/08

METHOD BLANK/QC DATA

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC	RPD	RPD Limit	Data Qualifiers
U		Limit	MIDE	Cilits	Level	Result	70KEC	Limits	KI D	Limit	Quanners
Batch: 8B04111 Extracted: 02/04/0	<u> </u>										
Matrix Spike Analyzed: 02/07/2008 (8B	804111-MS1)				Sou	rce: IRA	3018-06				
Chrysene	85.3	48	12	ug/l	95.2	ND	90	65-120			
Dibenz(a,h)anthracene	71.9	95	14	ug/l	95.2	ND	76	45-135			J
Dibenzofuran	89.2	48	19	ug/l	95.2	ND	94	65-120			
Di-n-butyl phthalate	80.5	95	14	ug/l	95.2	ND	84	60-125			J
1,3-Dichlorobenzene	71.9	48	14	ug/l	95.2	ND	76	35-120			
1,4-Dichlorobenzene	181	48	12	ug/l	95.2	ND	190	35-120			M1
1,2-Dichlorobenzene	139	48	14	ug/l	95.2	65.3	78	40-120			
3,3-Dichlorobenzidine	ND	95	14	ug/l	95.2	ND		45-135			M2
2,4-Dichlorophenol	81.7	48	17	ug/l	95.2	ND	86	55-120			
Diethyl phthalate	89.8	48	17	ug/l	95.2	ND	94	55-120			
2,4-Dimethylphenol	83.3	95	17	ug/l	95.2	ND	87	40-120			J
Dimethyl phthalate	93.8	48	9.5	ug/l	95.2	ND	98	30-120			
4,6-Dinitro-2-methylphenol	121	95	19	ug/l	95.2	ND	128	45-120			M1
2,4-Dinitrophenol	112	95	38	ug/l	95.2	ND	118	40-120			
2,4-Dinitrotoluene	81.5	48	17	ug/l	95.2	ND	86	65-120			
2,6-Dinitrotoluene	81.5	48	9.5	ug/l	95.2	ND	86	65-120			
Di-n-octyl phthalate	87.2	95	17	ug/l	95.2	ND	92	65-135			J
Fluoranthene	82.8	48	14	ug/l	95.2	ND	87	60-120			
Fluorene	93.2	48	14	ug/l	95.2	ND	98	65-120			
Hexachlorobenzene	70.5	48	14	ug/l	95.2	ND	74	60-120			
Hexachlorobutadiene	73.3	48	19	ug/l	95.2	ND	77	40-120			
Hexachlorocyclopentadiene	67.8	95	24	ug/l	95.2	ND	71	25-120			J
Hexachloroethane	68.9	48	17	ug/l	95.2	ND	72	35-120			
Indeno(1,2,3-cd)pyrene	71.6	95	17	ug/l	95.2	ND	75	40-135			J
Isophorone	49.0	48	12	ug/l	95.2	ND	52	50-120			
2-Methylnaphthalene	86.2	48	9.5	ug/l	95.2	ND	90	55-120			
2-Methylphenol	84.3	48	14	ug/l	95.2	ND	88	50-120			
4-Methylphenol	75.9	48	14	ug/l	95.2	ND	80	50-120			
Naphthalene	82.8	48	14	ug/l	95.2	ND	87	55-120			
2-Nitroaniline	91.7	95	9.5	ug/l	95.2	ND	96	65-120			J
3-Nitroaniline	27.3	95	14	ug/l	95.2	ND	29	60-120			M2, J
4-Nitroaniline	51.6	95	19	ug/l	95.2	ND	54	55-125			M2, J
Nitrobenzene	80.4	95	12	ug/l	95.2	ND	84	55-120			J
2-Nitrophenol	75.0	48	17	ug/l	95.2	ND	79	50-120			
4-Nitrophenol	110	95	26	ug/l	95.2	ND	115	45-120			

TestAmerica Irvine

%REC



THE LEADER IN ENVIRONMENTAL TESTING

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 006

Report Number: IRB0150

Reporting

Sampled: 02/03/08

Received: 02/03/08

RPD

Data

METHOD BLANK/QC DATA

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

Spike

Source

		Keporting			Spike	Source		OKEC		KI D	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 8B04111 Extracted: 02/04	1/08										
Matrix Spike Analyzed: 02/07/2008 (8B04111-MS1)				Sou	rce: IRA	3018-06				
N-Nitrosodiphenylamine	78.2	48	9.5	ug/l	95.2	ND	82	60-120			
N-Nitroso-di-n-propylamine	ND	48	17	ug/l	95.2	ND		45-120			M2
Pentachlorophenol	81.0	95	17	ug/l	95.2	ND	85	50-120			J
Phenanthrene	84.2	48	17	ug/l	95.2	ND	88	65-120			
Phenol	79.1	48	9.5	ug/l	95.2	ND	83	40-120			
Pyrene	100	48	19	ug/l	95.2	ND	105	55-125			
1,2,4-Trichlorobenzene	197	48	12	ug/l	95.2	130	71	45-120			
2,4,5-Trichlorophenol	88.3	95	14	ug/l	95.2	ND	93	55-120			J
2,4,6-Trichlorophenol	88.8	95	21	ug/l	95.2	ND	93	55-120			J
1,2-Diphenylhydrazine/Azobenzene	ND	95	12	ug/l	95.2	ND		60-120			M2
N-Nitrosodimethylamine	ND	95	12	ug/l	95.2	ND		45-120			M2
Surrogate: 2-Fluorophenol	148			ug/l	190		77	30-120			
Surrogate: Phenol-d6	150			ug/l	190		78	35-120			
Surrogate: 2,4,6-Tribromophenol	147			ug/l	190		77	40-120			
Surrogate: Nitrobenzene-d5	74.0			ug/l	95.2		78	45-120			
Surrogate: 2-Fluorobiphenyl	80.5			ug/l	95.2		84	50-120			
Surrogate: Terphenyl-d14	92.3			ug/l	95.2		97	50-125			
Matrix Spike Dup Analyzed: 02/07/2	008 (8B04111-N	(ISD1)			Sou	rce: IRA	3018-06				
Acenaphthene	91.1	48	14	ug/l	95.2	ND	96	60-120	3	25	
Acenaphthylene	53.7	48	14	ug/l	95.2	ND	56	60-120	27	25	M2, R-3
Aniline	49.4	48	12	ug/l	95.2	ND	52	35-120	8	30	
Anthracene	82.0	48	9.5	ug/l	95.2	ND	86	65-120	3	25	
Benzidine	ND	95	40	ug/l	95.2	ND		30-160		35	M2
Benzoic acid	104	95	48	ug/l	95.2	ND	110	25-125	3	30	
Benzo(a)anthracene	83.4	48	9.5	ug/l	95.2	ND	88	65-120	7	20	
Benzo(b)fluoranthene	79.0	48	9.5	ug/l	95.2	ND	83	55-125	5	25	
Benzo(k)fluoranthene	87.0	48	12	ug/l	95.2	ND	91	55-125	9	30	
Benzo(g,h,i)perylene	65.9	48	19	ug/l	95.2	ND	69	45-135	4	30	
Benzo(a)pyrene	85.2	48	9.5	ug/l	95.2	ND	90	55-130	6	25	
Benzyl alcohol	36.6	95	12	ug/l	95.2	ND	38	40-120	5	30	M2, J
Bis(2-chloroethoxy)methane	70.4	48	14	ug/l	95.2	ND	74	50-120	8	25	
Bis(2-chloroethyl)ether	68.1	48	14	ug/l	95.2	ND	72	50-120	44	25	R
Bis(2-chloroisopropyl)ether	83.1	48	12	ug/l	95.2	ND	87	45-120	4	25	
Bis(2-ethylhexyl)phthalate	86.8	240	19	ug/l	95.2	ND	91	65-130	5	25	J
4-Bromophenyl phenyl ether	69.8	48	14	ug/l	95.2	ND	73	60-120	7	25	

TestAmerica Irvine

%REC

RPD

Data



THE LEADER IN ENVIRONMENTAL TESTING

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 006

Sampled: 02/03/08 Received: 02/03/08

Source

Report Number: IRB0150

Reporting

METHOD BLANK/QC DATA

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

Spike

		Keporting			Spike	Source		OKEC		KI D	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 8B04111 Extracted: 02/0	04/08										
Matrix Spike Dup Analyzed: 02/07/	/2008 (8B04111-M	SD1)			Sou	rce: IRA	3018-06				
Butyl benzyl phthalate	90.5	95	19	ug/l	95.2	ND	95	55-130	2	25	J
4-Chloroaniline	39.1	48	9.5	ug/l	95.2	ND	41	55-120	66	25	M2, R-3, J
2-Chloronaphthalene	78.2	48	14	ug/l	95.2	ND	82	60-120	6	20	
4-Chloro-3-methylphenol	82.4	95	12	ug/l	95.2	ND	86	60-120	2	25	J
2-Chlorophenol	69.2	48	14	ug/l	95.2	ND	73	45-120	11	25	
4-Chlorophenyl phenyl ether	84.3	48	12	ug/l	95.2	ND	88	65-120	9	25	
Chrysene	83.3	48	12	ug/l	95.2	ND	87	65-120	2	25	
Dibenz(a,h)anthracene	69.2	95	14	ug/l	95.2	ND	73	45-135	4	30	J
Dibenzofuran	82.9	48	19	ug/l	95.2	ND	87	65-120	7	25	
Di-n-butyl phthalate	77.4	95	14	ug/l	95.2	ND	81	60-125	4	25	J
1,3-Dichlorobenzene	64.5	48	14	ug/l	95.2	ND	68	35-120	11	25	
1,4-Dichlorobenzene	168	48	12	ug/l	95.2	ND	177	35-120	7	25	MI
1,2-Dichlorobenzene	123	48	14	ug/l	95.2	65.3	61	40-120	12	25	
3,3-Dichlorobenzidine	ND	95	14	ug/l	95.2	ND		45-135		25	M2
2,4-Dichlorophenol	76.4	48	17	ug/l	95.2	ND	80	55-120	7	25	
Diethyl phthalate	85.0	48	17	ug/l	95.2	ND	89	55-120	6	30	
2,4-Dimethylphenol	75.8	95	17	ug/l	95.2	ND	80	40-120	9	25	J
Dimethyl phthalate	87.5	48	9.5	ug/l	95.2	ND	92	30-120	7	30	
4,6-Dinitro-2-methylphenol	112	95	19	ug/l	95.2	ND	118	45-120	8	25	
2,4-Dinitrophenol	91.4	95	38	ug/l	95.2	ND	96	40-120	20	25	J
2,4-Dinitrotoluene	69.1	48	17	ug/l	95.2	ND	73	65-120	16	25	
2,6-Dinitrotoluene	77.2	48	9.5	ug/l	95.2	ND	81	65-120	5	20	
Di-n-octyl phthalate	81.3	95	17	ug/l	95.2	ND	85	65-135	7	20	J
Fluoranthene	79.0	48	14	ug/l	95.2	ND	83	60-120	5	25	
Fluorene	88.1	48	14	ug/l	95.2	ND	92	65-120	6	25	
Hexachlorobenzene	69.5	48	14	ug/l	95.2	ND	73	60-120	1	25	
Hexachlorobutadiene	66.5	48	19	ug/l	95.2	ND	70	40-120	10	25	
Hexachlorocyclopentadiene	41.9	95	24	ug/l	95.2	ND	44	25-120	47	30	R, J
Hexachloroethane	58.5	48	17	ug/l	95.2	ND	61	35-120	16	25	
Indeno(1,2,3-cd)pyrene	67.4	95	17	ug/l	95.2	ND	71	40-135	6	30	J
Isophorone	50.0	48	12	ug/l	95.2	ND	52	50-120	2	25	
2-Methylnaphthalene	79.4	48	9.5	ug/l	95.2	ND	83	55-120	8	20	
2-Methylphenol	73.3	48	14	ug/l	95.2	ND	77	50-120	14	25	
4-Methylphenol	70.0	48	14	ug/l	95.2	ND	74	50-120	8	25	
Naphthalene	82.0	48	14	ug/l	95.2	ND	86	55-120	1	25	

TestAmerica Irvine

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MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Sampled: 02/03/08

Report Number: IRB0150

Received: 02/03/08

METHOD BLANK/QC DATA

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 8B04111 Extracted: 02/04/0	08										
Matrix Spike Dup Analyzed: 02/07/200	08 (8B04111-M	(SD1)			Sou	rce: IRA	3018-06				
2-Nitroaniline	85.6	95	9.5	ug/l	95.2	ND	90	65-120	7	25	J
3-Nitroaniline	18.4	95	14	ug/l	95.2	ND	19	60-120	39	25	M2, R-3, J
4-Nitroaniline	31.6	95	19	ug/l	95.2	ND	33	55-125	48	25	M2, R-3, J
Nitrobenzene	80.5	95	12	ug/l	95.2	ND	84	55-120	0	25	J
2-Nitrophenol	72.8	48	17	ug/l	95.2	ND	76	50-120	3	25	
4-Nitrophenol	134	95	26	ug/l	95.2	ND	141	45-120	20	30	MI
N-Nitrosodiphenylamine	60.8	48	9.5	ug/l	95.2	ND	64	60-120	25	25	
N-Nitroso-di-n-propylamine	ND	48	17	ug/l	95.2	ND		45-120		25	M2
Pentachlorophenol	76.7	95	17	ug/l	95.2	ND	80	50-120	5	25	J
Phenanthrene	79.1	48	17	ug/l	95.2	ND	83	65-120	6	25	
Phenol	69.3	48	9.5	ug/l	95.2	ND	73	40-120	13	25	
Pyrene	96.9	48	19	ug/l	95.2	ND	102	55-125	3	25	
1,2,4-Trichlorobenzene	182	48	12	ug/l	95.2	130	55	45-120	8	20	
2,4,5-Trichlorophenol	75.5	95	14	ug/l	95.2	ND	79	55-120	16	30	J
2,4,6-Trichlorophenol	80.5	95	21	ug/l	95.2	ND	84	55-120	10	30	J
1,2-Diphenylhydrazine/Azobenzene	ND	95	12	ug/l	95.2	ND		60-120		25	M2
N-Nitrosodimethylamine	ND	95	12	ug/l	95.2	ND		45-120		25	M2
Surrogate: 2-Fluorophenol	138			ug/l	190		72	30-120			
Surrogate: Phenol-d6	132			ug/l	190		70	35-120			
Surrogate: 2,4,6-Tribromophenol	134			ug/l	190		70	40-120			
Surrogate: Nitrobenzene-d5	72.5			ug/l	95.2		76	45-120			
Surrogate: 2-Fluorobiphenyl	77.3			ug/l	95.2		81	50-120			
Surrogate: Terphenyl-d14	86.6			ug/l	95.2		91	50-125			

TestAmerica Irvine

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Project ID: Annual Outfall 006 MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200 Sampled: 02/03/08

Arcadia, CA 91007 Report Number: IRB0150 Received: 02/03/08 Attention: Bronwyn Kelly

METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source	%REC	%REC	RPD	RPD Limit	Data Qualifiers
•		Limit	MIDL	Units	Level	Result	/OKEC	Limits	KI D	Lillit	Qualifiers
Batch: 8B05099 Extracted: 02/05/08	<u>}</u>										
Blank Analyzed: 02/06/2008 (8B05099-B	SLK1)										
Aldrin	ND	0.0050	0.0015	ug/l							
alpha-BHC	ND	0.0050	0.0025	ug/l							
beta-BHC	ND	0.010	0.0040	ug/l							
delta-BHC	ND	0.0050	0.0035	ug/l							
gamma-BHC (Lindane)	ND	0.010	0.0030	ug/l							
Chlordane	ND	0.10	0.030	ug/l							
4,4'-DDD	ND	0.0050	0.0020	ug/l							
4,4'-DDE	ND	0.0050	0.0030	ug/l							
4,4'-DDT	ND	0.010	0.0040	ug/l							
Dieldrin	ND	0.0050	0.0020	ug/l							
Endosulfan I	ND	0.0050	0.0020	ug/l							
Endosulfan II	ND	0.0050	0.0030	ug/l							
Endosulfan sulfate	ND	0.010	0.0030	ug/l							
Endrin	ND	0.0050	0.0020	ug/l							
Endrin aldehyde	ND	0.010	0.0020	ug/l							
Endrin ketone	ND	0.010	0.0030	ug/l							
Heptachlor	ND	0.010	0.0030	ug/l							
Heptachlor epoxide	ND	0.0050	0.0025	ug/l							
Methoxychlor	ND	0.0050	0.0035	ug/l							
Toxaphene	ND	0.10	0.070	ug/l							
Surrogate: Decachlorobiphenyl	0.419			ug/l	0.500		84	45-120			
Surrogate: Tetrachloro-m-xylene	0.419			ug/l	0.500		84	35-115			
LCS Analyzed: 02/07/2008 (8B05099-BS	1)										MNR1
Aldrin	0.417	0.0050	0.0015	ug/l	0.500		83	40-115			
alpha-BHC	0.404	0.0050	0.0025	ug/l	0.500		81	45-115			
beta-BHC	0.419	0.010	0.0040	ug/l	0.500		84	55-115			
delta-BHC	0.453	0.0050	0.0035	ug/l	0.500		91	55-115			
gamma-BHC (Lindane)	0.433	0.010	0.0030	ug/l	0.500		87	45-115			
4,4'-DDD	0.496	0.0050	0.0020	ug/l	0.500		99	55-120			
4,4'-DDE	0.488	0.0050	0.0030	ug/l	0.500		98	50-120			
4,4'-DDT	0.491	0.010	0.0040	ug/l	0.500		98	55-120			
Dieldrin	0.455	0.0050	0.0020	ug/l	0.500		91	55-115			
Endosulfan I	0.464	0.0050	0.0020	ug/l	0.500		93	55-115			
Endosulfan II	0.439	0.0050	0.0030	ug/l	0.500		88	55-120			
Endosulfan sulfate	0.506	0.010	0.0030	ug/l	0.500		101	60-120			
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MWH-Pasadena/Boeing

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METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 608)

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 8B05099 Extracted: 02/05/08	3										
LCS Analyzed: 02/07/2008 (8B05099-BS	1)										MNR1
Endrin	0.511	0.0050	0.0020	ug/l	0.500		102	55-115			
Endrin aldehyde	0.483	0.010	0.0020	ug/l	0.500		97	50-120			
Endrin ketone	0.520	0.010	0.0030	ug/l	0.500		104	55-120			
Heptachlor	0.406	0.010	0.0030	ug/l	0.500		81	45-115			
Heptachlor epoxide	0.442	0.0050	0.0025	ug/l	0.500		88	55-115			
Methoxychlor	0.508	0.0050	0.0035	ug/l	0.500		102	60-120			
Surrogate: Decachlorobiphenyl	0.436			ug/l	0.500		87	45-120			
Surrogate: Tetrachloro-m-xylene	0.414			ug/l	0.500		83	35-115			
LCS Dup Analyzed: 02/07/2008 (8B0509	9-BSD1)										
Aldrin	0.381	0.0050	0.0015	ug/l	0.500		76	40-115	9	30	
alpha-BHC	0.386	0.0050	0.0025	ug/l	0.500		77	45-115	5	30	
beta-BHC	0.398	0.010	0.0040	ug/l	0.500		80	55-115	5	30	
delta-BHC	0.409	0.0050	0.0035	ug/l	0.500		82	55-115	10	30	
gamma-BHC (Lindane)	0.408	0.010	0.0030	ug/l	0.500		82	45-115	6	30	
4,4'-DDD	0.455	0.0050	0.0020	ug/l	0.500		91	55-120	9	30	
4,4'-DDE	0.444	0.0050	0.0030	ug/l	0.500		89	50-120	9	30	
4,4'-DDT	0.451	0.010	0.0040	ug/l	0.500		90	55-120	9	30	
Dieldrin	0.421	0.0050	0.0020	ug/l	0.500		84	55-115	8	30	
Endosulfan I	0.430	0.0050	0.0020	ug/l	0.500		86	55-115	8	30	
Endosulfan II	0.406	0.0050	0.0030	ug/l	0.500		81	55-120	8	30	
Endosulfan sulfate	0.463	0.010	0.0030	ug/l	0.500		93	60-120	9	30	
Endrin	0.471	0.0050	0.0020	ug/l	0.500		94	55-115	8	30	
Endrin aldehyde	0.442	0.010	0.0020	ug/l	0.500		88	50-120	9	30	
Endrin ketone	0.477	0.010	0.0030	ug/l	0.500		95	55-120	8	30	
Heptachlor	0.373	0.010	0.0030	ug/l	0.500		75	45-115	8	30	
Heptachlor epoxide	0.410	0.0050	0.0025	ug/l	0.500		82	55-115	8	30	
Methoxychlor	0.458	0.0050	0.0035	ug/l	0.500		92	60-120	11	30	
Surrogate: Decachlorobiphenyl	0.403			ug/l	0.500		81	45-120			
Surrogate: Tetrachloro-m-xylene	0.382			ug/l	0.500		76	35-115			

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MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

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Received: 02/03/08

METHOD BLANK/QC DATA

TOTAL PCBS (EPA 608)

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 8B05099 Extracted: 02/05/08	<u> </u>										
Blank Analyzed: 02/06/2008 (8B05099-B	SLK1)										
Aroclor 1016	ND	0.50	0.45	ug/l							
Aroclor 1221	ND	0.50	0.25	ug/l							
Aroclor 1232	ND	0.50	0.25	ug/l							
Aroclor 1242	ND	0.50	0.25	ug/l							
Aroclor 1248	ND	0.50	0.25	ug/l							
Aroclor 1254	ND	0.50	0.25	ug/l							
Aroclor 1260	ND	0.50	0.30	ug/l							
Surrogate: Decachlorobiphenyl	0.420			ug/l	0.500		84	45-120			
LCS Analyzed: 02/06/2008 (8B05099-BS	2)										MNR1
Aroclor 1016	3.28	0.50	0.45	ug/l	4.00		82	50-115			
Aroclor 1260	3.60	0.50	0.30	ug/l	4.00		90	60-120			
Surrogate: Decachlorobiphenyl	0.440			ug/l	0.500		88	45-120			
LCS Dup Analyzed: 02/06/2008 (8B0509	9-BSD2)										
Aroclor 1016	3.13	0.50	0.45	ug/l	4.00		78	50-115	5	30	
Aroclor 1260	3.56	0.50	0.30	ug/l	4.00		89	60-120	1	25	
Surrogate: Decachlorobiphenyl	0.435			ug/l	0.500		87	45-120			

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METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC	RPD	RPD Limit	Data Qualifiers
·		Limit	MIDL	Units	Level	Result	70KEC	Limits	KI D	Lillit	Quanners
Batch: 8B04079 Extracted: 02/04/08	_										
Blank Analyzed: 02/04/2008 (8B04079-B	LK1)										
Aluminum	ND	50	40	ug/l							
Arsenic	ND	10	7.0	ug/l							
Beryllium	ND	2.0	0.90	ug/l							
Boron	ND	0.050	0.020	mg/l							
Calcium	ND	0.10	0.050	mg/l							
Chromium	ND	5.0	2.0	ug/l							
Iron	ND	0.040	0.015	mg/l							
Magnesium	ND	0.020	0.012	mg/l							
Nickel	ND	10	2.0	ug/l							
Selenium	ND	10	8.0	ug/l							
Silver	ND	10	6.0	ug/l							
Vanadium	ND	10	3.0	ug/l							
Zinc	ND	20	6.0	ug/l							
LCS Analyzed: 02/04/2008 (8B04079-BS	1)										
Aluminum	524	50	40	ug/l	500		105	85-115			
Arsenic	504	10	7.0	ug/l	500		101	85-115			
Beryllium	510	2.0	0.90	ug/l	500		102	85-115			
Boron	0.514	0.050	0.020	mg/l	0.500		103	85-115			
Calcium	2.65	0.10	0.050	mg/l	2.50		106	85-115			
Chromium	517	5.0	2.0	ug/l	500		103	85-115			
Iron	0.529	0.040	0.015	mg/l	0.500		106	85-115			
Magnesium	2.63	0.020	0.012	mg/l	2.50		105	85-115			
Nickel	513	10	2.0	ug/l	500		103	85-115			
Selenium	492	10	8.0	ug/l	500		98	85-115			
Silver	262	10	6.0	ug/l	250		105	85-115			
Vanadium	503	10	3.0	ug/l	500		101	85-115			
Zinc	507	20	6.0	ug/l	500		101	85-115			

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Arcadia, CA 91007

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Received: 02/03/08

METHOD BLANK/QC DATA

METALS

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 8B04079 Extracted: 02/04/08	3										
	_										
Matrix Spike Analyzed: 02/04/2008 (8B0	(4079-MS1)				Sou	rce: IRB(153-01				
Aluminum	611	50	40	ug/l	500	94.8	103	70-130			
Arsenic	496	10	7.0	ug/l	500	ND	99	70-130			
Beryllium	503	2.0	0.90	ug/l	500	ND	101	70-130			
Boron	0.503	0.050	0.020	mg/l	0.500	ND	101	70-130			
Calcium	53.7	0.10	0.050	mg/l	2.50	52.8	38	70-130			MHA
Chromium	502	5.0	2.0	ug/l	500	2.15	100	70-130			
Iron	0.590	0.040	0.015	mg/l	0.500	0.0952	99	70-130			
Magnesium	9.71	0.020	0.012	mg/l	2.50	7.62	84	70-130			
Nickel	495	10	2.0	ug/l	500	ND	99	70-130			
Selenium	470	10	8.0	ug/l	500	ND	94	70-130			
Silver	256	10	6.0	ug/l	250	ND	103	70-130			
Vanadium	487	10	3.0	ug/l	500	ND	97	70-130			
Zinc	496	20	6.0	ug/l	500	9.15	97	70-130			
Matrix Spike Analyzed: 02/04/2008 (8B0)4079-MS2)				Sou	rce: IRB(155-01				
Aluminum	1190	50	40	ug/l	500	692	100	70-130			
Arsenic	509	10	7.0	ug/l	500	ND	102	70-130			
Beryllium	515	2.0	0.90	ug/l	500	ND	103	70-130			
Boron	0.503	0.050	0.020	mg/l	0.500	ND	101	70-130			
Calcium	8.02	0.10	0.050	mg/l	2.50	5.65	95	70-130			
Chromium	522	5.0	2.0	ug/l	500	ND	104	70-130			
Iron	0.872	0.040	0.015	mg/l	0.500	0.382	98	70-130			
Magnesium	3.33	0.020	0.012	mg/l	2.50	0.768	102	70-130			
Nickel	515	10	2.0	ug/l	500	ND	103	70-130			
Selenium	487	10	8.0	ug/l	500	ND	97	70-130			
Silver	260	10	6.0	ug/l	250	ND	104	70-130			
Vanadium	501	10	3.0	ug/l	500	ND	100	70-130			
Zinc	538	20	6.0	ug/l	500	32.2	101	70-130			

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%REC

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Sampled: 02/03/08

Report Number: IRB0150

Reporting

Received: 02/03/08

RPD

Data

METHOD BLANK/QC DATA

METALS

Snike

Source

		Reporting			Spike	Source		%REC		KPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 8B04079 Extracted: 02/04	1/08										
Matrix Spike Dup Analyzed: 02/04/2	008 (8B04079-M	ISD1)			Sou	rce: IRB	0153-01				
Aluminum	600	50	40	ug/l	500	94.8	101	70-130	2	20	
Arsenic	506	10	7.0	ug/l	500	ND	101	70-130	2	20	
Beryllium	516	2.0	0.90	ug/l	500	ND	103	70-130	3	20	
Boron	0.499	0.050	0.020	mg/l	0.500	ND	100	70-130	1	20	
Calcium	53.2	0.10	0.050	mg/l	2.50	52.8	19	70-130	1	20	MHA
Chromium	512	5.0	2.0	ug/l	500	2.15	102	70-130	2	20	
Iron	0.596	0.040	0.015	mg/l	0.500	0.0952	100	70-130	1	20	
Magnesium	9.64	0.020	0.012	mg/l	2.50	7.62	81	70-130	1	20	
Nickel	507	10	2.0	ug/l	500	ND	101	70-130	2	20	
Selenium	491	10	8.0	ug/l	500	ND	98	70-130	4	20	
Silver	256	10	6.0	ug/l	250	ND	102	70-130	0	20	
Vanadium	497	10	3.0	ug/l	500	ND	99	70-130	2	20	
Zinc	513	20	6.0	ug/l	500	9.15	101	70-130	3	20	
Batch: 8B04080 Extracted: 02/04	1/08										
Blank Analyzed: 02/04/2008-02/05/20	008 (8B04080-BI	LK1)									
Antimony	ND	2.0	0.20	ug/l							
Cadmium	ND	1.0	0.11	ug/l							
Copper	ND	2.0	0.75	ug/l							
Lead	ND	1.0	0.30	ug/l							
Thallium	ND	1.0	0.20	ug/l							
LCS Analyzed: 02/04/2008-02/05/200	8 (8B04080-BS1	a)									
Antimony	84.2	2.0	0.20	ug/l	80.0		105	85-115			
Cadmium	83.7	1.0	0.11	ug/l	80.0		105	85-115			
Copper	83.0	2.0	0.75	ug/l	80.0		104	85-115			
Lead	83.3	1.0	0.30	ug/l	80.0		104	85-115			
Thallium	83.4	1.0	0.20	ug/l	80.0		104	85-115			

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MWH-Pasadena/Boeing

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Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Sampled: 02/03/08

Report Number: IRB0150

Received: 02/03/08

METHOD BLANK/QC DATA

METALS

	Reporting				Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 8B04080 Extracted: 02/04/08	<u> </u>										
N	= /2000 (OD0 4)	000 MG(1)			C	IDD/	150.01				
Matrix Spike Analyzed: 02/04/2008-02/0	`	,			Sou	rce: IRB(
Antimony	82.0	2.0	0.20	ug/l	80.0	0.423	102	70-130			
Cadmium	80.7	1.0	0.11	ug/l	80.0	0.208	101	70-130			
Copper	78.5	2.0	0.75	ug/l	80.0	1.69	96	70-130			
Lead	76.9	1.0	0.30	ug/l	80.0	0.512	96	70-130			
Thallium	79.0	1.0	0.20	ug/l	80.0	ND	99	70-130			
Matrix Spike Analyzed: 02/04/2008-02/0	5/2008 (8B04	080-MS2)			Sou	rce: IRB(152-01				
Antimony	80.5	2.0	0.20	ug/l	80.0	1.58	99	70-130			
Cadmium	79.1	1.0	0.11	ug/l	80.0	0.164	99	70-130			
Copper	82.5	2.0	0.75	ug/l	80.0	4.75	97	70-130			
Lead	84.1	1.0	0.30	ug/l	80.0	6.01	98	70-130			
Thallium	80.7	1.0	0.20	ug/l	80.0	ND	101	70-130			
Matrix Spike Dup Analyzed: 02/04/2008	-02/05/2008 (8	8B04080-MS	D1)		Sou	rce: IRB(150-01				
Antimony	83.6	2.0	0.20	ug/l	80.0	0.423	104	70-130	2	20	
Cadmium	81.2	1.0	0.11	ug/l	80.0	0.208	101	70-130	1	20	
Copper	79.1	2.0	0.75	ug/l	80.0	1.69	97	70-130	1	20	
Lead	78.6	1.0	0.30	ug/l	80.0	0.512	98	70-130	2	20	
Thallium	80.1	1.0	0.20	ug/l	80.0	ND	100	70-130	1	20	

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Sampled: 02/03/08

Report Number: IRB0150 Received: 02/03/08

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC	RPD	RPD Limit	Data Qualifiers
•											
Batch: 8B04144 Extracted: 02/04/08	-										
Blank Analyzed: 02/05/2008 (8B04144-Bl	LK1)										
Antimony	ND	2.0	0.20	ug/l							
Cadmium	ND	1.0	0.11	ug/l							
Copper	ND	2.0	0.75	ug/l							
Lead	ND	1.0	0.30	ug/l							
Thallium	ND	1.0	0.20	ug/l							
LCS Analyzed: 02/05/2008 (8B04144-BS)	1)										
Antimony	84.8	2.0	0.20	ug/l	80.0		106	85-115			
Cadmium	82.9	1.0	0.11	ug/l	80.0		104	85-115			
Copper	80.0	2.0	0.75	ug/l	80.0		100	85-115			
Lead	80.0	1.0	0.30	ug/l	80.0		100	85-115			
Thallium	82.5	1.0	0.20	ug/l	80.0		103	85-115			
Matrix Spike Analyzed: 02/05/2008 (8B0-	4144-MS1)				Sou	rce: IRB(0073-01				
Antimony	84.0	2.0	0.20	ug/l	80.0	0.305	105	70-130			
Cadmium	84.5	1.0	0.11	ug/l	80.0	0.221	105	70-130			
Copper	77.7	2.0	0.75	ug/l	80.0	1.70	95	70-130			
Lead	74.3	1.0	0.30	ug/l	80.0	ND	93	70-130			
Thallium	76.6	1.0	0.20	ug/l	80.0	ND	96	70-130			
Matrix Spike Dup Analyzed: 02/05/2008	(8B04144-M	SD1)			Sou	rce: IRB(0073-01				
Antimony	83.1	2.0	0.20	ug/l	80.0	0.305	103	70-130	1	20	
Cadmium	84.2	1.0	0.11	ug/l	80.0	0.221	105	70-130	0	20	
Copper	79.5	2.0	0.75	ug/l	80.0	1.70	97	70-130	2	20	
Lead	74.4	1.0	0.30	ug/l	80.0	ND	93	70-130	0	20	
Thallium	76.2	1.0	0.20	ug/l	80.0	ND	95	70-130	0	20	

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MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 006

Sampled: 02/03/08

Report Number: IRB0150

Received: 02/03/08

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC	RPD	RPD Limit	Data Qualifiers
·		Limit	MDL	Cints	Level	Result	70REC	Limits	KI D	Limit	Quanners
Batch: 8B05111 Extracted: 02/05/08	<u>-</u>										
Blank Analyzed: 02/06/2008 (8B05111-B	LK1)										
Aluminum	ND	50	40	ug/l							
Arsenic	ND	10	7.0	ug/l							
Beryllium	ND	2.0	0.90	ug/l							
Boron	ND	0.050	0.020	mg/l							
Calcium	ND	0.10	0.050	mg/l							
Chromium	ND	5.0	2.0	ug/l							
Iron	ND	0.040	0.015	mg/l							
Magnesium	ND	0.020	0.012	mg/l							
Nickel	ND	10	2.0	ug/l							
Selenium	ND	10	8.0	ug/l							
Hardness (as CaCO3)	ND	1.0	1.0	mg/l							
Silver	ND	10	6.0	ug/l							
Vanadium	ND	10	3.0	ug/l							
Zinc	ND	20	6.0	ug/l							
LCS Analyzed: 02/06/2008 (8B05111-BS	1)										
Aluminum	563	50	40	ug/l	500		113	85-115			
Arsenic	525	10	7.0	ug/l	500		105	85-115			
Beryllium	519	2.0	0.90	ug/l	500		104	85-115			
Boron	0.520	0.050	0.020	mg/l	0.500		104	85-115			
Calcium	2.67	0.10	0.050	mg/l	2.50		107	85-115			
Chromium	512	5.0	2.0	ug/l	500		102	85-115			
Iron	0.526	0.040	0.015	mg/l	0.500		105	85-115			
Magnesium	2.60	0.020	0.012	mg/l	2.50		104	85-115			
Nickel	515	10	2.0	ug/l	500		103	85-115			
Selenium	491	10	8.0	ug/l	500		98	85-115			
Silver	256	10	6.0	ug/l	250		102	85-115			
Vanadium	509	10	3.0	ug/l	500		102	85-115			
Zinc	509	20	6.0	ug/l	500		102	85-115			

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Joseph Doak Project Manager



MWH-Pasadena/Boeing

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Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Sampled: 02/03/08

Report Number: IRB0150 Received: 02/03/08

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC	RPD	RPD Limit	Data Qualifiers
•		2		0 1110	20,01	1105411	,,,,,,	23111105			Quantities
Batch: 8B05111 Extracted: 02/05/0	<u> </u>										
Matrix Spike Analyzed: 02/06/2008 (8F	305111-MS1)				Sou	ırce: IRB	0073-01				
Aluminum	564	50	40	ug/l	500	62.5	100	70-130			
Arsenic	519	10	7.0	ug/l	500	ND	104	70-130			
Beryllium	513	2.0	0.90	ug/l	500	ND	103	70-130			
Boron	0.549	0.050	0.020	mg/l	0.500	0.0311	104	70-130			
Calcium	58.9	0.10	0.050	mg/l	2.50	55.2	147	70-130			MHA
Chromium	502	5.0	2.0	ug/l	500	ND	100	70-130			
Iron	0.554	0.040	0.015	mg/l	0.500	0.0302	105	70-130			
Magnesium	10.3	0.020	0.012	mg/l	2.50	7.52	112	70-130			
Nickel	514	10	2.0	ug/l	500	11.5	101	70-130			
Selenium	486	10	8.0	ug/l	500	ND	97	70-130			
Silver	257	10	6.0	ug/l	250	ND	103	70-130			
Vanadium	507	10	3.0	ug/l	500	ND	101	70-130			
Zinc	509	20	6.0	ug/l	500	11.6	99	70-130			
Matrix Spike Dup Analyzed: 02/06/200	8 (8B05111-M	SD1)			Sou	ırce: IRB	0073-01				
Aluminum	587	50	40	ug/l	500	62.5	105	70-130	4	20	
Arsenic	541	10	7.0	ug/l	500	ND	108	70-130	4	20	
Beryllium	518	2.0	0.90	ug/l	500	ND	104	70-130	1	20	
Boron	0.554	0.050	0.020	mg/l	0.500	0.0311	105	70-130	1	20	
Calcium	58.4	0.10	0.050	mg/l	2.50	55.2	125	70-130	1	20	MHA
Chromium	517	5.0	2.0	ug/l	500	ND	103	70-130	3	20	
Iron	0.565	0.040	0.015	mg/l	0.500	0.0302	107	70-130	2	20	
Magnesium	10.3	0.020	0.012	mg/l	2.50	7.52	112	70-130	0	20	
Nickel	530	10	2.0	ug/l	500	11.5	104	70-130	3	20	
Selenium	503	10	8.0	ug/l	500	ND	101	70-130	3	20	
Silver	262	10	6.0	ug/l	250	ND	105	70-130	2	20	
Vanadium	518	10	3.0	ug/l	500	ND	104	70-130	2	20	
Zinc	528	20	6.0	ug/l	500	11.6	103	70-130	4	20	

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Report Number: IRB0150

Received: 02/03/08

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting t Limit		Units	Spike Level	Source Result	%REC	%REC	RPD	RPD Limit	Data Oualifiers
•			MDL				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				(
Batch: 8B04043 Extracted: 02/04/08	-										
Blank Analyzed: 02/04/2008 (8B04043-Bl	LK1)										
Chloride	ND	0.50	0.25	mg/l							
Fluoride	ND	0.50	0.15	mg/l							
Nitrate/Nitrite-N	ND	0.26	0.15	mg/l							
Sulfate	ND	0.50	0.20	mg/l							
LCS Analyzed: 02/04/2008 (8B04043-BS1	1)										
Chloride	5.33	0.50	0.25	mg/l	5.00		107	90-110			
Fluoride	5.14	0.50	0.15	mg/l	5.00		103	90-110			
Sulfate	10.6	0.50	0.20	mg/l	10.0		106	90-110			M-3
Matrix Spike Analyzed: 02/04/2008 (8B0-	4043-MS1)				Sou	rce: IRB	0146-01				
Chloride	27.0	0.50	0.25	mg/l	5.00	21.6	109	80-120			
Fluoride	5.30	0.50	0.15	mg/l	5.00	0.288	100	80-120			
Matrix Spike Analyzed: 02/04/2008 (8B04	4043-MS2)				Sou	rce: IRB	0156-01				
Chloride	27.7	0.50	0.25	mg/l	5.00	22.9	96	80-120			
Fluoride	5.01	0.50	0.15	mg/l	5.00	0.306	94	80-120			
Matrix Spike Dup Analyzed: 02/04/2008	(8B04043-M	SD1)			Sou	rce: IRB	0146-01				
Chloride	27.2	0.50	0.25	mg/l	5.00	21.6	112	80-120	1	20	
Fluoride	5.46	0.50	0.15	mg/l	5.00	0.288	103	80-120	3	20	
Batch: 8B04112 Extracted: 02/04/08	_										
D											
Blank Analyzed: 02/04/2008 (8B04112-Bl	,										
Total Cyanide	ND	5.0	2.2	ug/l							

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METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source	%REC	%REC	RPD	RPD Limit	Data Qualifiers
•		Lillit	MDL	Units	Level	Result	70KEC	Lillits	KFD	Lillit	Quanners
Batch: 8B04112 Extracted: 02/04/08	-										
LCS Analyzed: 02/04/2008 (8B04112-BS)	1)										
Total Cyanide	184	5.0	2.2	ug/l	200		92	90-110			
Matrix Spike Analyzed: 02/04/2008 (8B0	4112-MS1)				Sou	rce: IRA	3072-06				
Total Cyanide	189	5.0	2.2	ug/l	200	ND	94	70-115			
Matrix Spike Dup Analyzed: 02/04/2008	(8B04112-MS	SD1)			Sou	rce: IRA	3072-06				
Total Cyanide	189	5.0	2.2	ug/l	200	ND	95	70-115	0	15	
Batch: 8B04128 Extracted: 02/04/08											
	_										
Blank Analyzed: 02/04/2008 (8B04128-B	LK1)										
Total Suspended Solids	ND	10	10	mg/l							
LCS Analyzed: 02/04/2008 (8B04128-BS)	l)										
Total Suspended Solids	971	10	10	mg/l	1000		97	85-115			
Duplicate Analyzed: 02/04/2008 (8B0412	8-DUP1)				Sou	rce: IRB(0070-02				
Total Suspended Solids	ND	10	10	mg/l		ND				10	
Batch: 8B07122 Extracted: 02/07/08	=										
Blank Analyzed: 02/07/2008 (8B07122-B)	*										
Total Dissolved Solids	ND	10	10	mg/l							
LCS Analyzed: 02/07/2008 (8B07122-BS	1)										
Total Dissolved Solids	990	10	10	mg/l	1000		99	90-110			

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Report Number: IRB0150

Received: 02/03/08

METHOD BLANK/QC DATA

INORGANICS

A Id	D14	Reporting Limit	MDI	T.T	Spike	Source	%REC	%REC	DDD	RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%KEC	Limits	RPD	Limit	Qualifiers
Batch: 8B07122 Extracted: 02/07/08	_										
Duplicate Analyzed: 02/07/2008 (8B0712: Total Dissolved Solids	2-DUP1) 296	10	10	mg/l	Sou	rce: IRB	0146-01		1	10	
		10	10	mg/i		292			1	10	
Batch: 8B12073 Extracted: 02/12/08	_										
Blank Analyzed: 02/12/2008 (8B12073-B	I K 1)										
Perchlorate	ND	4.0	1.5	ug/l							
LCS Analyzed: 02/12/2008 (8B12073-BS)	n										
Perchlorate	55.4	4.0	1.5	ug/l	50.0		111	85-115			
Matrix Spike Analyzed: 02/12/2008 (8B1	2073-MS1)				Sou	rce: IRB	0150-01				
Perchlorate	50.5	4.0	1.5	ug/l	50.0	ND	101	80-120			
Matrix Spike Dup Analyzed: 02/12/2008	(8B12073-MS	SD1)			Sou	rce: IRB	0150-01				
Perchlorate	50.8	4.0	1.5	ug/l	50.0	ND	102	80-120	1	20	
Batch: 8B12074 Extracted: 02/12/08											
	_										
Blank Analyzed: 02/12/2008 (8B12074-B	LK1)										
Hexane Extractable Material (Oil & Grease)	ND	5.0	1.4	mg/l							
LCS Analyzed: 02/12/2008 (8B12074-BS)	1)										MNR1
Hexane Extractable Material (Oil & Grease)	20.0	5.0	1.4	mg/l	20.2		99	78-114			
LCS Dup Analyzed: 02/12/2008 (8B12074	4-BSD1)										
Hexane Extractable Material (Oil & Grease)	18.5	5.0	1.4	mg/l	20.2		92	78-114	8	11	

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METHOD BLANK/QC DATA

ORGANIC COMPOUNDS BY GC/MS (EPA 525.2)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: C8B0516 Extracted: 02/05/0	8										
Blank Analyzed: 02/07/2008 (C8B0516-l	BLK1)										
Chlorpyrifos	ND	1.0	0.10	ug/l							
Diazinon	ND	0.25	0.24	ug/l							
Surrogate: 1,3-Dimethyl-2-nitrobenzene	4.76			ug/l	5.00		95	70-130			
Surrogate: Triphenylphosphate	5.79			ug/l	5.00		116	70-130			
Surrogate: Perylene-d12	5.00			ug/l	5.00		100	70-130			
LCS Analyzed: 02/07/2008 (C8B0516-B	S1)										
Chlorpyrifos	5.48	1.0	0.10	ug/l	5.00		110	70-130			
Diazinon	3.82	0.25	0.24	ug/l	5.00		76	70-130			
Surrogate: 1,3-Dimethyl-2-nitrobenzene	4.66			ug/l	5.00		93	70-130			
Surrogate: Triphenylphosphate	5.66			ug/l	5.00		113	70-130			
Surrogate: Perylene-d12	4.87			ug/l	5.00		97	70-130			
LCS Dup Analyzed: 02/07/2008 (C8B05	16-BSD1)										
Chlorpyrifos	4.90	1.0	0.10	ug/l	5.00		98	70-130	11	10	R-7
Diazinon	3.82	0.25	0.24	ug/l	5.00		76	70-130	0	50	
Surrogate: 1,3-Dimethyl-2-nitrobenzene	4.50			ug/l	5.00		90	70-130			
Surrogate: Triphenylphosphate	5.52			ug/l	5.00		110	70-130			
Surrogate: Perylene-d12	4.79			ug/l	5.00		96	70-130			

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METHOD BLANK/QC DATA

Metals by EPA 200 Series Methods

	Reporting Result Limit		MDI	T T •4	Spike	Source	A/DEC	%REC	DDD	RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: W8B0171 Extracted: 02/06/0	<u>8</u>										
Blank Analyzed: 02/07/2008 (W8B0171-	RLK1)										
Mercury, Dissolved	ND	0.20	0.050	ug/l							
Mercury, Total	ND	0.20	0.050	ug/l							
LCS Analyzed: 02/07/2008 (W8B0171-B	S1)										
Mercury, Dissolved	1.04	0.20	0.050	ug/l	1.00		104	85-115			
Mercury, Total	1.04	0.20	0.050	ug/l	1.00		104	85-115			
Matrix Spike Analyzed: 02/07/2008 (W8	B0171-MS1)				Sou	rce: 8020	543-01				
Mercury, Dissolved	1.02	0.20	0.050	ug/l	1.00	ND	102	70-130			
Mercury, Total	1.02	0.20	0.050	ug/l	1.00	ND	102	70-130			
Matrix Spike Analyzed: 02/07/2008 (W8	B0171-MS2)				Sou	rce: 8020	544-01				
Mercury, Dissolved	1.05	0.20	0.050	ug/l	1.00	ND	105	70-130			
Mercury, Total	1.05	0.20	0.050	ug/l	1.00	ND	105	70-130			
Matrix Spike Dup Analyzed: 02/07/2008	(W8B0171-M	SD1)			Sou	rce: 8020	543-01				
Mercury, Dissolved	1.04	0.20	0.050	ug/l	1.00	ND	104	70-130	2	20	
Mercury, Total	1.04	0.20	0.050	ug/l	1.00	ND	104	70-130	2	20	
Matrix Spike Dup Analyzed: 02/07/2008	(W8B0171-M	SD2)			Sou	rce: 8020	544-01				
Mercury, Dissolved	1.05	0.20	0.050	ug/l	1.00	ND	105	70-130	0	20	
Mercury, Total	1.05	0.20	0.050	ug/l	1.00	ND	105	70-130	0	20	



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Project ID: Annual Outfall 006

Report Number: IRB0150

Sampled: 02/03/08

Received: 02/03/08

Compliance Check

The results obtained from the analytical testing of this data set were checked against compliance limits received from the client. Any results at or above the compliance limits appear in bold on this page.

LabNumber	Analysis	Analyte	Units	Result	MRL	Compliance Limit
IRB0150-01	1664-HEM	Hexane Extractable Material (Oil & Greas	mg/l	0.95	4.8	15
IRB0150-01	Antimony-200.8	Antimony	ug/l	0.42	2.0	6
IRB0150-01	Boron-200.7	Boron	mg/l	0.010	0.050	1
IRB0150-01	Cadmium-200.8	Cadmium	ug/l	0.21	1.0	4
IRB0150-01	Chloride - 300.0	Chloride	mg/l	21	0.50	150
IRB0150-01	Copper-200.8	Copper	ug/l	1.69	2.0	14
IRB0150-01	Fluoride-300.0	Fluoride	mg/l	0.31	0.50	1.6
IRB0150-01	Hg_w 245.1	Mercury, Total	ug/l	0.012	0.20	0.2
IRB0150-01	Lead-200.8	Lead	ug/l	0.51	1.0	5.2
IRB0150-01	Nickel-200.7	Nickel	ug/l	1.39	10	100
IRB0150-01	Nitrogen, NO3+NO2 -N	Nitrate/Nitrite-N	mg/l	5.32	0.26	10
IRB0150-01	Perchlorate 314.0-DEFAULT	Perchlorate	ug/l	0	4.0	6
IRB0150-01	Sulfate-300.0	Sulfate	mg/l	19	0.50	250
IRB0150-01	TDS - SM 2540C	Total Dissolved Solids	mg/l	219	10	850
IRB0150-01	Thallium-200.8	Thallium	ug/l	0.13	1.0	2

Compliance Check

The results obtained from the analytical testing of this data set were checked against compliance limits received from the client. Any results at or above the compliance limits appear in bold on this page.

						Compliance
LabNumber	Analysis	Analyte	Units	Result	MRL	Limit



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MWH-Pasadena/Boeing Project ID: Annual Outfall 006

618 Michillinda Avenue, Suite 200 Sampled: 02/03/08

Arcadia, CA 91007 Report Number: IRB0150 Received: 02/03/08

Attention: Bronwyn Kelly

DATA QUALIFIERS AND DEFINITIONS

J	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.
T	6	Der the EDA methods benziding is known to be subject to avidetive losses during solvent concentration

L6 Per the EPA methods, benzidine is known to be subject to oxidative losses during solvent concentration.

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).
 M-3 Results exceeded the linear range in the MS/MSD and therefore are not available for reporting. The batch was

accepted based on acceptable recovery in the 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).

MNR1 There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike/Blank Spike

Duplicate.

P The sample, as received, was not preserved in accordance to the referenced analytical method.

pH = 7

R-3

R The RPD exceeded the method control limit due to sample matrix effects. The individual analyte QA/QC recoveries,

however, were within acceptance limits.

The RPD exceeded the acceptance limit due to sample matrix effects.

R-7 LFB/LFBD RPD exceeded the acceptance limit. Recovery met acceptance criteria.

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

RPD Relative Percent Difference

ADDITIONAL COMMENTS

For 1,2-Diphenylhydrazine:

The result for 1,2-Diphenylhydrazine is based upon the reading of its breakdown product, Azobenzene.



17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 006

Sampled: 02/03/08

Report Number: IRB0150

Received: 02/03/08

Certification Summary

TestAmerica Irvine

Method	Matrix	Nelac	California
[CALC]	Water		
EPA 160.2	Water	X	X
EPA 1664A	Water		
EPA 200.7-Diss	Water	X	X
EPA 200.7	Water	X	X
EPA 200.8-Diss	Water	X	X
EPA 200.8	Water	X	X
EPA 300.0	Water	X	X
EPA 314.0	Water	X	X
EPA 335.2	Water	X	X
EPA 608	Water	X	X
EPA 624	Water	X	X
EPA 625	Water	X	X
SM2340B	Water	X	X
SM2540C	Water	X	

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

Aquatic Testing Laboratories-SUB California Cert #1775

4350 Transport Street, Unit 107 - Ventura, CA 93003

Analysis Performed: Bioassay-Acute 96hr

Samples: IRB0150-01

TestAmerica Irvine



17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

MWH-Pasadena/Boeing Project ID: Annual Outfall 006

618 Michillinda Avenue, Suite 200 Sampled: 02/03/08

Arcadia, CA 91007 Report Number: IRB0150 Received: 02/03/08
Attention: Bronwyn Kelly

Eberline Services

2030 Wright Avenue - Richmond, CA 94804 Analysis Performed: Gamma Spec

Samples: IRB0150-01

Analysis Performed: Gross Alpha

Samples: IRB0150-01

Analysis Performed: Gross Beta

Samples: IRB0150-01

Analysis Performed: Radium, Combined

Samples: IRB0150-01

Analysis Performed: Strontium 90

Samples: IRB0150-01

Analysis Performed: Tritium Samples: IRB0150-01

Analysis Performed: Uranium, Combined

Samples: IRB0150-01

TestAmerica - Ontario, CA California Cert #1169, Arizona Cert #AZ0062, Nevada Cert #CA-242

1014 E. Cooley Drive, Suite AB - Colton, CA 92324

Method Performed: EPA 525.2 Samples: IRB0150-01

Vista Analytical NELAC Cert #02102CA, California Cert #1640, Nevada Cert #CA-413

1104 Windfield Way - El Dorado Hills, CA 95762

Analysis Performed: 1613-Dioxin-HR-Alta

Samples: IRB0150-01

Weck Laboratories, Inc

14859 E. Clark Avenue - City of Industry, CA 91745

Method Performed: EPA 245.1 Samples: IRB0150-01

TestAmerica Irvine

Joseph Doak Project Manager

Page 1 of 1	p Toxicity	or 0 or 901.1) or 0 or 901.1) or 0 or 901.1) ute anide tal Dissolved M tal Dissolved M tal Dissolved M tal Ciscolved	SV Ac Cy To Cd Cd Cd										Unfiltered and unpreserved analysis	: ×	×	×	X Fitter Win Z4fits of receipt at lab			Turn around Time: (check) 24 Hours 5 Days	48 Hours 10 Days	72 Hours Normal X	Sample Integrity: (check) (50)	
504	ANAL Y Since the second of the	aticides/PCBs, loca A+A+2CVI sticides/PCBs, lorpyrifos, Diaz pas Alpha(900.1, Tritiu pined Radiun pined Radiu	(90 (90 (90 (90 (90 (90 (90 (90 (90 (90								×	×	×						×	1605 1605		ai	5218)	
TRB0150 USTODY FORM	g, B, V, P,	al Recoverable Cd, Cu, Pb, H Fe, Al, Ni, + PF rdness as Ca C DD (and all cor & Grease (166 SO ₄ , NO ₃ +NO rchlorate S, TSS	SB, TC Oil CC, Pe	×	×	×	×	×	×	×								×		3y Date-Time		By Date/Time:	127 H	
CHAIN OF C	Project: Boeing-SSFL NPDES Annual Outfall 006 Stormwater at FSDF-2	mber: -6691 per: -6515	Preservative Bottle #	2HNO ₃ 1A	HNO ₃ 1B	None 2A, 2B	HCI 3A, 3B	None 4A, 4B	None 5A, 5B	HCI 6A, 6B,	None 7A, 7B, 7B, 7C	None 8A, 8B	None 9A None 9B	None 10A, 10B	None 11A, 11B	NaOH 12	None 13	HCI 14A, 14B,	None 15A, 15B, 15C	1605 B	Received E	Received		
20/07	¥		# of Sampling Cont. Date/Time	1 23-08 (4:20HNO3		2	2	2	2	3	8	2		2	2		-	3	3	Date/Time:	Date/Time:			
Ca Version 12/	Iress: enue, Suite 200 ct: Joseph Doa	Bronwyn Ke LOCU	Container	7	1L Poly	1L Amber	1L Amber	500 ml Poly	500 ml Polv	VOAs	VOAs	1L Amber	2.5 Gal Cube 500 mi Amber	1L Amber	1 Gal Poly	500ml Poly	1L Poly	VOAs	VOAs			200		
Test America version 12/20/07	Client Name/Address: MWH-Arcad ia 618 Michillinda Avenue. Suite 200 Arcadia, CA 91007 Test America Contact: Joseph Doak	Project Manager: Bronwyn Kelly Sampler: PLLOCU	Sample Sample Description Matrix	+-	Outfall 006- W	Outfall 006 W	Outfall 006 W	Outfall 006 W	Outfall 006 W	Outfall 006 W	Outfall 006 W	Outfall 006 W	Outfall 006 W	Outfall 006 W	Outfall 006 W	Outfall 006 W	Outfall 006 W	Trip Blanks W	Trip Blanks W	Relinquished By	Relinquished By	Relinquished By		The second secon

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LABORATORY REPORT

Date:

February 9, 2008

Client:

Test America - Irvine

17461 Derian Ave., Suite 100

Irvine, CA 92614 Attn: Joseph Doak Aquatic Testing Laboratories

"dedicated to providing quality aquatic toxicity testing"

4350 Transport Street, Unit 107 Ventura, CA 93003

(805) 650-0546 FAX (805) 650-0756

CA DOHS ELAP Cert. No.: 1775

Laboratory No.:

A-08020406-001

Sample ID.:

IRB0150-01 (Outfall 006)

Sample Control:

The sample was received by ATL in a chilled state, within the recommended hold

time and with the chain of custody record attached.

Date Sampled:

02/03/08

Date Received:

02/04/08

Temp. Received:

4°C

Chlorine (TRC):

 $0.0 \, \text{mg/l}$

Date Tested:

02/04/08 to 02/08/08

Sample Analysis:

The following analyses were performed on your sample:

Fathead Minnow 96hr Percent Survival Bioassay (EPA Method 2000.0).

Attached are the test data generated from the analysis of your sample.

Result Summary:

Sample ID.

Results

IRB0150-01

100% Survival (TUa = 0.0)

Quality Control:

Reviewed and approved by:

Joseph A. LeMay

Laboratory Director

FATHEAD MINNOW PERCENT SURVIVAL TEST EPA Method 2000.0



Lab No.: A-08020406-001

Client/ID: TestAmerica - IRB0150-01 (Outfall 006)

Start Date: 02/04/2008

TEST SUMMARY

Species: Pimephales promelas.

Age: 14 (1-14) days. Regulations: NPDES.

Test solution volume: 250 ml. Feeding: prior to renewal at 48 hrs.

Number of replicates: 2.

Dilution water: Moderately hard reconstituted water.

Photoperiod: 16/8 hrs light/dark.

Source: In-laboratory Culture. Test type: Static-Renewal.

Test Protocol: EPA-821-R-02-012. Endpoints: Percent Survival at 96 hrs.

Test chamber: 600 ml beakers. Temperature: 20 +/- 1°C.

Number of fish per chamber: 10. QA/QC Batch No.: RT-080204.

TEST DATA

		°C	DO	рН	# D	Pead B	Analyst & Time of Readings
DUTIAL	Control	20,1	8.6	7-8	0	0	2
INITIAL	100%	19.7	8.3	6.7	C	Ò	170
24 Hr	Control	19.3	7.8	7.5	0	0	2-
24111	100%	19.2	2.8	2.4	()	0	1330
48 Hr	Control	19.5	26	27	U	0	~~_
46 111	100%	19.4	7.6	7.7	13	0	1400
Renewal	Control	20.5	8.8	7.8	()	()	
Kellewai	100%	19.4	9.9	6.7		0	1400
72 Hr	Control	19.3	8.0	2.4	0	0	1200
/2 H	100%	19.5	8.1	7.3	0	0	1200
96 Hr	Control	19.5	8,2	7.3	0	0	2-
90 FI	100%	19.7	8.0	2.5	0	0	1300

Comments:

Sample as received: Chlorine: 0.0 mg/l; pH: 6.7; Conductivity: 276 umho; Temp: 4°C;

DO: <u>friends</u> mg/l; Alkalinity: <u>86 mg/l</u>; Hardness: <u>for mg/l</u>; NH₃-N: <u>0-7 mg/l</u>. Sample aerated moderately (approx. 500 ml/min) to raise or lower DO? Yes / No.

Control: Alkalinity: 64 mg/l; Hardness: 96 mg/l; Conductivity: 290 umho.

Test solution aerated (not to exceed 100 bubbles/min) to maintain DO >4.0 mg/l? Yes / No.

Sample used for renewal is the original sample kept at 0-6°C with minimal headspace.

Dissolved Oxygen (DO) readings in mg/l O₂.

RESULTS

SUBCONTRACT ORDER

TestAmerica Irvine IRB0150

SENDING LABORATORY:

TestAmerica Irvine

17461 Derian Avenue. Suite 100

Irvine, CA 92614

Phone: (949) 261-1022 Fax: (949) 260-3297

Project Manager: Joseph Doak

RECEIVING LABORATORY:

Aquatic Testing Laboratories-SUB 4350 Transport Street, Unit 107

Ventura, CA 93003 Phone :(805) 650-0546 Fax: (805) 650-0756

Project Location: California

Receipt Temperature: 0°C

Ice: (Y)/ N

Analysis	Units	Due	Expires	Comments
Sample ID: IRB0150-01	Water		Sampled: 02/03/08 14:20	
Bioassay-Acute 96hr	% Survival	02/13/08	02/05/08 02:20	FH minnow, EPA/821-R02-012, Sub to AqTox Labs
Level 4 Data Package - Out	t N/A	02/13/08	03/02/08 14:20	, 19,10% 2000
Containers Supplied: 1 gal Poly (W)	1 gal Poly (X)			

Released By

Released By

Date/Time

Received By

Received By

Pate/Time

Z-4~ 8 Date/Time

Time Page 1 of 1

NPDES - 1606



REFERENCE TOXICANT DATA

FATHEAD MINNOW ACUTE Method 2000.0 Reference Toxicant - SDS



QA/QC Batch No.: RT-080204

\TEST SUMMARY

Species: Pimephales promelas.

Age: 4 days old. Regulations: NPDES.

Test chamber volume: 250 ml. Feeding: Prior to renewal at 48 hrs.

Temperature: 20 +/- 1°C. Number of replicates: 2. Dilution water: MHSF. Source: In-lab culture. Test type: Static-Renewal.

Test Protocol: EPA-821-R-02-012.

Endpoints: LC50 at 96 hrs.

Test chamber: 600 ml glass beakers.

Aeration: None.

Number of organisms per chamber: 10.

Photoperiod: 16/8 hrs light/dark.

TEST DATA

		INITIAL	,			24 Hr					48 Hr			
Date/Time:	2-4	- B 1	430	2-5	-08		/33	0	2-6-6	2-6-08 1430				
Analyst:		2				R								
	°C	DO	pН	°C	DO	nU	# D	ead	°C	DO	nII	# D	ead	
		БО	pri	C	DO	pН	A	В		DO	рН	A	В	
Control	19.8	8-4	7-4	19.1	7.9	2.5		0	19,4	7.2	7.6	0	0	
1.0 mg/l	19.9	8.4	7.5	19.1	7.8	7.4	2)	0	19,4	69	7.6	0	0	
2.0 mg/l	19-9	8.5	7-5	19.0	2.6	2.4	Ü	0	19.4	6.6	7,5	/>	0	
4.0 mg/l	200	8.5	7-5	19.0	8.0	7.4	0	1	19.4	6.7	7.5	2	0	
8.0 mg/l	20.0	8.6	7-5	19.1	8.0	7.4	10	10	S Mada-Musikon k. i. r	WARRIER	destauroped, et a v	1974-jani vy	anest (equipment of the sec	

	F	RENEWA	L			72 Hr							
Date/Time:	2-6	08	1430	2-7-	08		15	Coro	2-8	-08		1300	
Analyst:		2	,		all the second	2_				La			
	°C	DO	рН	°C	DO	рН	# [ead	°C	DO	рН	# D	ead
		ВО	μπ		00	pm	А	В		ЪО	brr	A	В
Control	20.3	89	7.8	19.4	2.5	2.7	0	0	19.2	8:0	7.5	0	0
1.0 mg/l	20.3	89	7.8	19.3	7.5	7,6	0	0	19.2	8.0	7.5	0	0
2.0 mg/l	20.3	8.8	7.8	19.3	7.7	7.5	0	0	19.3	8.1	7.4	0	()
4.0 mg/l	20.3	8.8	7.8	19.3	7.6	7.5	0	()	19.3	8.2	7.4	0	1
8.0 mg/l	Season of the se	Alequate(4-4"	ngatibasis, garairi	Samon silver	**************************************	**************************************	Manager or c	Professor.	gaphenouse-e	Name of the last o	age agreement of the first of		Na Anna Anna

Comments: Control: Alkalinity: 44 mg/l; Hardness: 94 mg/l; Conductivity: 789 umho. SDS: Alkalinity: 44 mg/l; Hardness: 47 mg/l; Conductivity: 760 umho.

Concentration-response relationship acceptable? (see attached computer analysis):

(Yes (response curve normal)

No (dose interrupted indicated or non-normal)

ALLAN	******			Acute Fish Te	st-96 Hr Survival	
Start Date: End Date:	2/4/2008 2/8/2008			RT-080204 CAATL-Aquatic Testin	Sample ID: g Labs Sample Type	REF-Ref Toxicant e: SDS-Sodium dodecyl sulfate
Sample Date: Comments:				ACUTE-EPA-821-R-02	•	
Conc-mg/L	1	2	. ,	V		
D-Control	1.0000	1.0000				
1	1.0000	1.0000				
2	1.0000	1.0000				

			Tra	ansform:	Arcsin Sc	uare Root		Number	Total
Conc-mg/L	Mean	N-Mean	Mean	Min	Max	CV%	N	Resp	Number
D-Control	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2	0	20
1	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2	0	20
2	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2	0	20
4	0.8000	0.8000	1.1071	1.1071	1.1071	0.000	2	4	20
8	0.0000	0.0000	0.1588	0.1588	0.1588	0.000	2	20	20

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Normality of the data set cannot be confirmed				

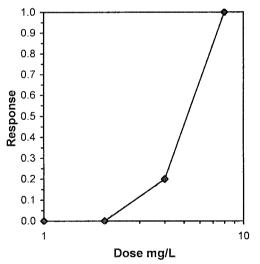
Equality of variance cannot be confirmed

0.8000 0.8000

0.0000

0.0000

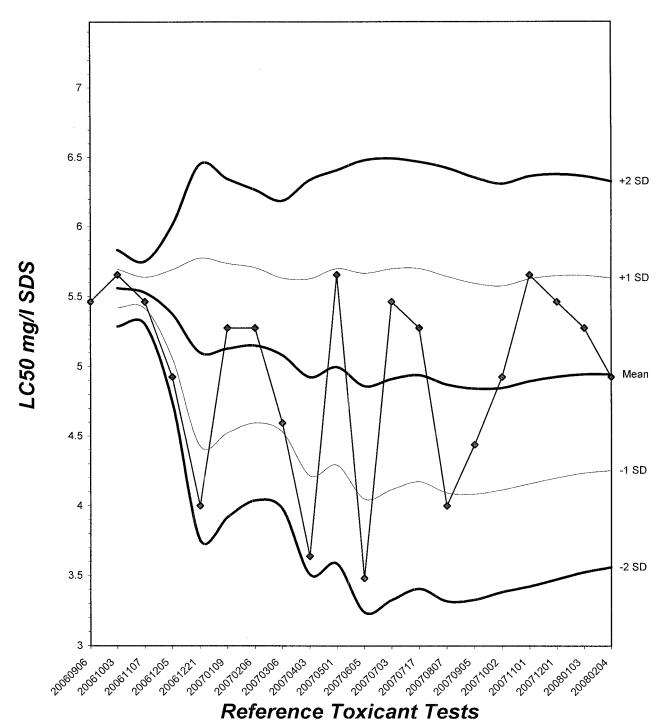
				Trimmed Spearman-Karber
Trim Level	EC50	95%	CL	Triminou opourman range.
0.0%	4.9246	4.3503	5.5747	
5.0%	5.0215	4.3576	5.7866	
10.0%	5.1038	4.2923	6.0686	1.0 —
20.0%	5.1874	4.7084	5.7150	2 1
Auto-0.0%	4.9246	4.3503	5.5747	0.9



Reviewed by: ______

Fathead Minnow Acute Laboratory Control Chart





TEST ORGANISM LOG



FATHEAD MINNOW - LARVAL (Pimephales promelas)

QA/QC BATCH NO.: RT-080204

SOURCE: In-Lab Culture	
DATE HATCHED: 01-21-08	
APPROXIMATE QUANTITY: 400	
GENERAL APPEARANCE:	
# MORTALITIES 48 HOURS PRIOR TO TO USE IN TESTING:	
DATE USED IN LAB: $\frac{214108}{}$	
AVERAGE FISH WEIGHT: 0 000 gm	
TEST LOADING LIMITS: 0.65 gm/liter 200 ml test solution volume = 0.013 gm mean fish weight limit 250 ml test solution volume = 0.016 gm mean fish weight limit ACCLIMATION WATER QUALITY:	
•	
Temp.: 198°C pH: 7-4 Ammonia: 201	
DO: 5. mg/l Alkalinity: 6 mg/l Hardness:	96 mg/l
READINGS RECORDED BY: DATE: 2	-4-8

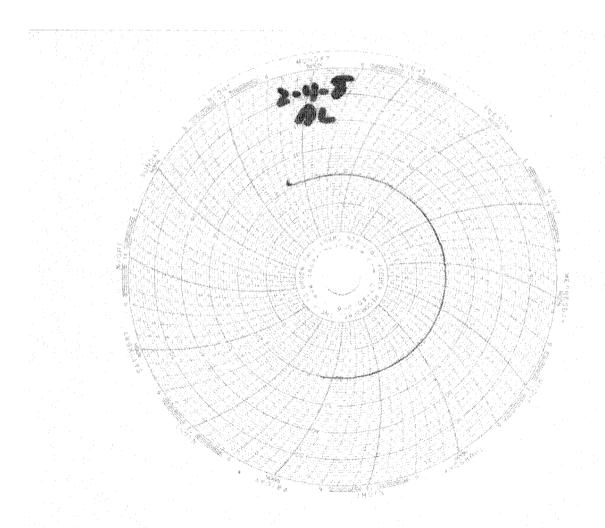


Laboratory Temperature Chart

QA/QC Batch No: RT-080202

Date Tested: 02/02/08 to 02/06/08

Acceptable Range: 20+/- 1°C





February 23, 2008

Vista Project I.D.: 30228

Mr. Joseph Doak Test America-Irvine, CA 17461 Derian Avenue Suite 100 Irvine, CA 92614

Dear Mr. Doak,

Enclosed are the results for the one aqueous sample received at Vista Analytical Laboratory on February 05, 2008 under your Project Name "IRB0150". This sample was extracted and analyzed using EPA Method 1613 for tetra-through-octa chlorinated dioxins and furans. A standard turnaround time was provided for this work.

The following report consists of a Sample Inventory (Section I), Analytical Results (Section II) and the Appendix, which contains the chain-of-custody, a list of data qualifiers and abbreviations, Vista's current certifications, and copies of the raw data (if requested).

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at mmaier@vista-analytical.com. Thank you for choosing Vista as part of your analytical support team.

Sincerely,

Martha M. Maier

Laboratory Director

Marthe More-



Vista Analytical Laboratory certifies that the report herein meets all the requirements set forth by NELAC for those applicable test methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Vista Analytical Laboratory.



Section I: Sample Inventory Report Date Received: 2/5/2008

<u>Vista Lab. ID</u> <u>Client Sample ID</u>

30228-001 IRB0150-01

NPDES - 1614 Page 2 of 276

SECTION II

Project 30228 NPDES - 1615
Page 3 of 276

Method Blan	k					Į.				EPA Method 1613
Matrix:	Aqueous		QC Batch No.:		9953	Lab	Sample:	0-MB001		
Sample Size:	1.00 L		Date Extracted	l:	15-Feb-08	Date	e Analyzed DB-5:	19-Feb-08	Date An	alyzed DB-225: NA
P								-, -, -, -, -, -, -, -, -, -, -, -, -, -		,
Analyte	Conc. (1	ug/L)	DL a	EMPC b	Qualifiers		Labeled Standa	rd	%R	LCL-UCL ^d Qualifiers
2,3,7,8-TCDD		ND	0.000000705			<u>IS</u>	13C-2,3,7,8-TCI)D	82.9	25 - 164
1,2,3,7,8-PeCD	D	ND	0.000000681				13C-1,2,3,7,8-Pe	:CDD	75.4	25 - 181
1,2,3,4,7,8-HxO	CDD	ND	0.00000165				13C-1,2,3,4,7,8-	HxCDD	81.7	32 - 141
1,2,3,6,7,8-HxO	CDD	ND	0.00000174				13C-1,2,3,6,7,8-	HxCDD	83.0	28 - 130
1,2,3,7,8,9-HxQ	CDD	ND	0.00000162				13C-1,2,3,4,6,7,8	3-HpCDD	85.6	23 - 140
1,2,3,4,6,7,8-H	pCDD	ND	0.00000511				13C-OCDD		73.4	17 - 157
OCDD		0.00000899			J		13C-2,3,7,8-TCI	DF	88.8	24 - 169
2,3,7,8-TCDF		ND	0.000000647				13C-1,2,3,7,8-Pe	CDF	74.4	24 - 185
1,2,3,7,8-PeCD	F	ND	0.000000731				13C-2,3,4,7,8-Pe	CDF	77.1	21 - 178
2,3,4,7,8-PeCD)F	ND	0.000000752				13C-1,2,3,4,7,8-	HxCDF	75.8	26 - 152
1,2,3,4,7,8-HxC	CDF	ND	0.000000943				13C-1,2,3,6,7,8-1	HxCDF	77.6	26 - 123
1,2,3,6,7,8-HxC	CDF	ND	0.000000974				13C-2,3,4,6,7,8-	HxCDF	78.0	28 - 136
2,3,4,6,7,8-HxQ	CDF	ND	0.00000105				13C-1,2,3,7,8,9-1	HxCDF	81.9	29 - 147
1,2,3,7,8,9-HxC	CDF	ND	0.00000136				13C-1,2,3,4,6,7,8	8-HpCDF	75.7	28 - 143
1,2,3,4,6,7,8-H	pCDF	ND	0.00000333				13C-1,2,3,4,7,8,9	9-HpCDF	82.1	26 - 138
1,2,3,4,7,8,9-H	pCDF	ND	0.00000202				13C-OCDF		76.2	17 - 157
OCDF		ND	0.00000591			CRS	S 37Cl-2,3,7,8-TC	DD	85.1	35 - 197
Totals						Foot	tnotes			
Total TCDD		ND	0.000000705			a. Sar	nple specific estimated of	detection limit.		
Total PeCDD		ND	0.00000122			b. Est	timated maximum possib	ole concentration.		
Total HxCDD		ND	0.00000167			c. Me	thod detection limit.			
Total HpCDD		ND	0.00000511			d. Lo	wer control limit - upper	control limit.		
Total TCDF		ND	0.000000647							
Total PeCDF		ND	0.000000742							
Total HxCDF		ND	0.00000107							
Total HpCDF		ND	0.00000335							

Analyst: MAS William J. Luksemburg 22-Feb-2008 15:49

OPR Results						EP.	A Method 1	1613
Matrix:	Aqueous		QC Batch No.:	9953	Lab Sample: 0-OPR001			
Sample Size:	1.00 L		Date Extracted:	15-Feb-08	Date Analyzed DB-5: 18-Feb-08	Date Analy	zed DB-225:	NA
Analyte		Spike Conc.	Conc. (ng/mL)	OPR Limits	Labeled Standard	%R	LCL-UCL	Qualifier
2,3,7,8-TCDI)	10.0	9.20	6.7 - 15.8	<u>IS</u> 13C-2,3,7,8-TCDD	85.8	25 - 164	
1,2,3,7,8-PeC	DD	50.0	46.7	35 - 71	13C-1,2,3,7,8-PeCDD	77.1	25 - 181	
1,2,3,4,7,8-Hz	xCDD	50.0	47.0	35 - 82	13C-1,2,3,4,7,8-HxCDD	82.8	32 - 141	
1,2,3,6,7,8-Hz	xCDD	50.0	47.2	38 - 67	13C-1,2,3,6,7,8-HxCDD	84.0	28 - 130	
1,2,3,7,8,9-Hz	xCDD	50.0	47.7	32 - 81	13C-1,2,3,4,6,7,8-HpCDD	88.0	23 - 140	
1,2,3,4,6,7,8-1	HpCDD	50.0	46.1	35 - 70	13C-OCDD	78.1	17 - 157	
OCDD		100	94.4	78 - 144	13C-2,3,7,8-TCDF	90.2	24 - 169	
2,3,7,8-TCDF	7	10.0	8.71	7.5 - 15.8	13C-1,2,3,7,8-PeCDF	76.3	24 - 185	
1,2,3,7,8-PeC	DF	50.0	45.3	40 - 67	13C-2,3,4,7,8-PeCDF	79.4	21 - 178	
2,3,4,7,8-PeC	DF	50.0	45.1	34 - 80	13C-1,2,3,4,7,8-HxCDF	78.9	26 - 152	
1,2,3,4,7,8-Hz	xCDF	50.0	46.8	36 - 67	13C-1,2,3,6,7,8-HxCDF	80.4	26 - 123	
1,2,3,6,7,8-Hz	xCDF	50.0	46.8	42 - 65	13C-2,3,4,6,7,8-HxCDF	79.1	28 - 136	
2,3,4,6,7,8-Hz	xCDF	50.0	47.3	35 - 78	13C-1,2,3,7,8,9-HxCDF	84.1	29 - 147	
1,2,3,7,8,9-H	xCDF	50.0	46.1	39 - 65	13C-1,2,3,4,6,7,8-HpCDF	78.2	28 - 143	
1,2,3,4,6,7,8-1	HpCDF	50.0	46.8	41 - 61	13C-1,2,3,4,7,8,9-HpCDF	85.9	26 - 138	
1,2,3,4,7,8,9-1	HpCDF	50.0	46.7	39 - 69	13C-OCDF	82.2	17 - 157	
OCDF		100	93.5	63 - 170	<u>CRS</u> 37Cl-2,3,7,8-TCDD	88.4	35 - 197	

Analyst: MAS William J. Luksemburg 22-Feb-2008 15:49

Sample ID: IRB	0150-01								EPA N	Method 1613
Client Data Name: Test	America-Irvine, CA		Sample Data Matrix:	Aqueous		oratory Data Sample:	30228-001	Date Re	ceived:	5-Feb-08
3	0150		Sample Size:	1.00 L		Batch No.:	9953	Date Ex		15-Feb-08
Date Collected: 3-Fe Time Collected: 1420			Sample Size.	1.00 L	_	Analyzed DB-5:	9933 19-Feb-08		alyzed DB-225:	NA
1120		DI a	h							
Analyte	Conc. (ug/L)	DL	EMPC ^b	Qualifiers		Labeled Standa				Qualifiers
2,3,7,8-TCDD	ND	0.000000			<u>IS</u>	13C-2,3,7,8-TCD		89.6	25 - 164	
1,2,3,7,8-PeCDD	ND	0.000000	680			13C-1,2,3,7,8-Pe	CDD	76.7	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.000001	26			13C-1,2,3,4,7,8-I	HxCDD	79.0	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.000001	34			13C-1,2,3,6,7,8-I	HxCDD	77.9	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.000001	25			13C-1,2,3,4,6,7,8	-HpCDD	80.6	23 - 140	
1,2,3,4,6,7,8-HpCDD	0.00000262			J		13C-OCDD		72.9	17 - 157	
OCDD	0.0000282			J,B		13C-2,3,7,8-TCD	F	90.6	24 - 169	
2,3,7,8-TCDF	ND	0.000000	408			13C-1,2,3,7,8-Pe	CDF	74.4	24 - 185	
1,2,3,7,8-PeCDF	ND	0.000000	801			13C-2,3,4,7,8-Pe	CDF	76.1	21 - 178	
2,3,4,7,8-PeCDF	ND	0.000000	790			13C-1,2,3,4,7,8-I	HxCDF	74.7	26 - 152	
1,2,3,4,7,8-HxCDF	ND	0.000000	627			13C-1,2,3,6,7,8-I	HxCDF	74.2	26 - 123	
1,2,3,6,7,8-HxCDF	ND	0.000000	682			13C-2,3,4,6,7,8-I	HxCDF	73.5	28 - 136	
2,3,4,6,7,8-HxCDF	ND	0.000000	749			13C-1,2,3,7,8,9-I	HxCDF	77.9	29 - 147	
1,2,3,7,8,9-HxCDF	ND	0.000000	943			13C-1,2,3,4,6,7,8	-HpCDF	73.2	28 - 143	
1,2,3,4,6,7,8-HpCDF	ND	0.000001	88			13C-1,2,3,4,7,8,9	-HpCDF	77.8	26 - 138	
1,2,3,4,7,8,9-HpCDF	ND	0.000001	02			13C-OCDF		74.7	17 - 157	
OCDF	ND	0.000003	32		CRS	37Cl-2,3,7,8-TCl	OD	91.2	35 - 197	
Totals					Foo	otnotes				
Total TCDD	ND	0.000000	743		a. Sa	mple specific estimated	detection limit.			
Total PeCDD	ND	0.000001	45		b. Es	stimated maximum poss	ible concentration.			
Total HxCDD	ND	0.000001	63		c. M	ethod detection limit.				
Total HpCDD	0.00000599				d. Lo	ower control limit - uppe	er control limit.			
Total TCDF	ND	0.000000	408							
Total PeCDF	ND	0.000000	796							
Total HxCDF	ND	0.000000	744							
Total HpCDF	ND	0.000001	97							

Analyst: MAS William J. Luksemburg 22-Feb-2008 15:49

Project 30228

Project 30228

NPDES - 1618
Page 6 of 276

APPENDIX

Project 30228 NPDES - 1619
Page 7 of 276

DATA QUALIFIERS & ABBREVIATIONS

B This compound was also detected in the method blank.

D Dilution

E The amount detected is above the High Calibration Limit.

P The amount reported is the maximum possible concentration due to possible

chlorinated diphenylether interference.

H The signal-to-noise ratio is greater than 10:1.

I Chemical Interference

J The amount detected is below the Low Calibration Limit.

* See Cover Letter

Conc. Concentration

DL Sample-specific estimated detection limit

MDL The minimum concentration of a substance that can be measured and

reported with 99% confidence that the analyte concentration is greater

than zero in the matrix tested.

EMPC Estimated Maximum Possible Concentration

NA Not applicable

RL Reporting Limit – concentrations that correspond to low calibration point

ND Not Detected

TEQ Toxic Equivalency

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

CERTIFICATIONS

Accrediting Authority	Certificate Number				
State of Alaska, DEC	CA413-02				
State of Arizona	AZ0639				
State of Arkansas, DEQ	05-013-0				
State of Arkansas, DOH	Reciprocity through CA				
State of California – NELAP Primary AA	02102CA				
State of Colorado					
State of Connecticut	PH-0182				
State of Florida, DEP	E87777				
Commonwealth of Kentucky	90063				
State of Louisiana, Health and Hospitals	LA050001				
State of Louisiana, DEQ	01977				
State of Maine	CA0413				
State of Michigan	81178087				
State of Mississippi	Reciprocity through CA				
Naval Facilities Engineering Service Center					
State of Nevada	CA413				
State of New Jersey	CA003				
State of New Mexico	Reciprocity through CA				
State of New York, DOH	11411				
State of North Carolina	06700				
State of North Dakota, DOH	R-078				
State of Oklahoma	D9919				
State of Oregon	CA200001-002				
State of Pennsylvania	68-00490				
State of South Carolina	87002001				
State of Tennessee	02996				
State of Texas	TX247-2005A				
U.S. Army Corps of Engineers					
State of Utah	9169330940				
Commonwealth of Virginia	00013				
State of Washington	C1285				
State of Wisconsin	998036160				
State of Wyoming	8TMS-Q				

SUBCONTRACT ORDER

TestAmerica Irvine IRB0150

30228

°C

SENDING LABORATORY:

TestAmerica Irvine

17461 Derian Avenue. Suite 100

Irvine, CA 92614

Phone: (949) 261-1022 Fax: (949) 260-3297

Project Manager: Joseph Doak

RECEIVING LABORATORY:

Vista Analytical Laboratory- SUB

1104 Windfield Way

El Dorado Hills, CA 95762

Phone :(916) 673-1520

Fax: (916) 673-0106

Project Location: California

Receipt Temperature:

Ice: Y / N

Analysis	Units	Due	Expires	Comments
Sample ID: IRB0150-01	Water	Sampled: 02/03/08 14:2		
1613-Dioxin-HR-Alta	ug/l	02/13/08	02/10/08 14:20	J flags,17 congeners,no
Level 4 + EDD-OUT	N/A	02/13/08	03/02/08 14:20	TEQ,ug/L,sub=Vista Excel EDD email to pm,Include Std logs for Lvl IV
Containers Supplied:				
1 L Amber (C)	1 L Amber (D)			

Released By

Received By

406 0429

Date/Time Page 1 of 1

NPDES - 1622 Page 10 of 276

Released By

Date/Time Rece

Project 30228

SAMPLE LOG-IN CHECKLIST



	D-t-/Time	1-:4:-1	1
Vista Project #: _	30228	Section and the state of the section	tatStandard

	Date/Time		Initials:	. 4	Loc	ation: W	C-2
Samples Arrival:	s Arrival: 2/5/08 0929 BSB		Shelf/Rack:				
	Date/Time		Initials:	Initials:		Location: WR-	
Logged In:	2/6/08	0842	. Pa	Jass		elf/Rack:	13-4
Delivered By:	FedEx	UPS	Cal	DHL	-	Hand Delivered	Other
Preservation:	(Ice	2 E	Blue Ice	ue Ice D			None
Temp °C /.	6°C	Time:	0956 Thermometer ID: IF			D : IR-1	

				YES	NO	NA	
Adequate Sample Volume Received?	V						
Holding Time Acceptable?	V						
Shipping Container(s) Intact?							
Shipping Custody Seals Intact?							
Shipping Documentation Present?	•.				/		
Airbill Trk# 799-	79	597311	3	V		-	
Sample Container Intact?	V						
Sample Custody Seals Intact?			V				
Chain of Custody / Sample Documenta	V						
COC Anomaly/Sample Acceptance For			V				
If Chlorinated or Drinking Water Samples, Acceptable Preservation?							
Na ₂ S ₂ O ₃ Preservation Documented?		Mone					
Shipping Container Vis	ainer Vista Client Return Dispose						

SUBCONTRACT ORDER

TestAmerica Irvine IRB0150

8020456

SENDING LABORATORY:

TestAmerica Irvine

17461 Derian Avenue. Suite 100

Irvine, CA 92614

Phone: (949) 261-1022 Fax: (949) 260-3297

Project Manager: Joseph Doak

RECEIVING LABORATORY:

Weck Laboratories, Inc.

14859 E. Clark Avenue

City of Industry, CA 91745

Phone:(626) 336-2139

Fax: (626) 336-2634

Project Location: California

Receipt Temperature:

°C Ice: Y / N

Analysis	Units	Due	Expires	Comments
Sample ID: IRB0150-01	Water		Sampled: 02/03/08	14:20
Level 4 Data Package - W	ec N/A	02/13/08	03/02/08 14:20	Provide Element transfer file
Mercury - 245.1, Diss -OU	T mg/l	02/13/08	03/02/08 14:20	Boeing, J flags, sub to Weck
Mercury - 245.1-OUT	mg/l	02/13/08	03/02/08 14:20	Boeing, J flags, sub to Weck
Containers Supplied:				
125 mL Poly (AA) HNO3	125 mL Po (AB)	ly w/HNO3		

Diss. Mercury is filtered and pres.

Released By

i/By Date/T

late/Time

Received By

Received By

0

Date/Time

7 04 68 13.4 NPDES -1624 1

Date/Time NPDES -P434 1 o



Weck Laboratories, Inc.

Analytical Laboratory Services - Since 1964

14859 E. Clark Ave., Industry, CA 91745 Phone 626.336.2139 Fax 626.336.2634 info@wecklabs.com www.wecklabs.com

CERTIFICATE OF ANALYSIS

TestAmerica, Inc. - Irvine **Client:**

Report Date:

02/11/08 16:23

17461 Derian Ave, Suite 100

Received Date:

02/04/08 13:45

Irvine, CA 92614

Turn Around:

Attention: Joseph Doak

Fax: (949) 260-3297

Work Order #:

8020456

Normal

Phone: (949) 261-1022

Client Project:

IRB0150

NELAP #04229CA ELAP#1132 NEVADA #CA211 HAWAII LACSD #10143

The results in this report apply to the samples analyzed in accordance with the Chain of Custody document. Weck Laboratories, Inc. certifies that the test results meet all NELAC requirements unless noted in the case narrative. This analytical report is confidential and is only intended for the use of Weck Laboratories, Inc. and its client. This report contains the Chain of Custody document, which is an integral part of it, and can only be reproduced in full with the authorization of Weck Laboratories, Inc.

Dear Joseph Doak:

Enclosed are the results of analyses for samples received 02/04/08 13:45 with the Chain of Custody document. The samples were received in good condition. The samples were received at 1.9 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Reviewed by:

Kim G Tu

Project Manager



Page 1 of 6



Weck Laboratories, Inc. 14859 E. Clark Ave. Industry, CA 91745

Phone 626.336.2139 Fax 626.336.2634

TestAmerica, Inc. - Irvine 17461 Derian Ave, Suite 100 Irvine CA, 92614 Report ID: 8020456 Project ID: IRB0150 Date Received: 02/04/08 13:45 Date Reported: 02/11/08 16:23

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Sampled by:	Sample Comments	Laboratory	Laboratory Matrix	
IRB0150-01	Client		8020456-01	Water	02/03/08 14:20



Weck Laboratories, Inc. 14859 E. Clark Ave. Industry, CA 91745

Phone 626.336.2139 Fax 626.336.2634

TestAmerica, Inc. - Irvine 17461 Derian Ave, Suite 100 Irvine CA, 92614 Report ID: 8020456 Project ID: IRB0150 Date Received: 02/04/08 13:45 Date Reported: 02/11/08 16:23

IRB0150-01 8020456-01 (Water)

Date Sampled: 02/03/08 14:20

Metals by EPA 200 Series Methods

Analyte	Result	MDL	Units	Reporting Limit	Dilution Factor	Method	Batch Number	Date Prepared	Date Analyzed		Data Qualifiers
Mercury, Dissolved	ND	0.050	ug/l	0.20	1	EPA 245.1	W8B0171	02/06/08	02/07/08	jlp	
Mercury, Total	ND	0.050	ug/l	0.20	1	EPA 245.1	W8B0171	02/06/08	02/07/08	jlp	



Week Laboratories, Inc. 14859 E. Clark Ave. Industry, CA 91745 Phone 626.336.2139 Fax 626.336.2634

TestAmerica, Inc. - Irvine 17461 Derian Ave, Suite 100 Irvine CA, 92614 Report ID: 8020456 Project ID: IRB0150 Date Received: 02/04/08 13:45 Date Reported: 02/11/08 16:23

QUALITY CONTROL SECTION



Weck Laboratories, Inc. 14859 E. Clark Ave. Industry, CA 91745

Phone 626.336.2139 Fax 626.336.2634

TestAmerica, Inc. - Irvine 17461 Derian Ave, Suite 100 Irvine CA, 92614 Report ID: 8020456 Project ID: IRB0150 Date Received: 02/04/08 13:45 Date Reported: 02/11/08 16:23

Metals by EPA 200 Series Methods - Quality Control

%REC

		Reporting		Spike Source	Source		%REC		RPD	Data
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch W8B0171 - EPA 245.1										
Blank (W8B0171-BLK1)				Analyzed:	02/07/08					
Mercury, Dissolved	ND	0.20	ug/l							
Mercury, Total	ND	0.20	ug/l							
LCS (W8B0171-BS1)				Analyzed:	02/07/08					
Mercury, Dissolved	1.04	0.20	ug/l	1.00		104	85-115			
Mercury, Total	1.04	0.20	ug/l	1.00		104	85-115			
Matrix Spike (W8B0171-MS1)	Se	ource: 8020543	-01	Analyzed:	02/07/08					
Mercury, Dissolved	1.02	0.20	ug/l	1.00	ND	102	70-130			
Mercury, Total	1.02	0.20	ug/l	1.00	ND	102	70-130			
Matrix Spike (W8B0171-MS2)	Se	ource: 8020544	-01	Analyzed: 02/07/08						
Mercury, Dissolved	1.05	0.20	ug/l	1.00	ND	105	70-130			
Mercury, Total	1.05	0.20	ug/l	1.00	ND	105	70-130			
Matrix Spike Dup (W8B0171-MSD1)	Se	ource: 8020543	-01	Analyzed:	02/07/08					
Mercury, Dissolved	1.04	0.20	ug/l	1.00	ND	104	70-130	2	20	
Mercury, Total	1.04	0.20	ug/l	1.00	ND	104	70-130	2	20	
Matrix Spike Dup (W8B0171-MSD2)	Se	ource: 8020544	-01	Analyzed:	02/07/08					
Mercury, Dissolved	1.05	0.20	ug/l	1.00	ND	105	70-130	0	20	
Mercury, Total	1.05	0.20	ug/l	1.00	ND	105	70-130	0	20	



Weck Laboratories, Inc. 14859 E. Clark Ave. Industry, CA 91745

Phone 626.336.2139 Fax 626.336.2634

TestAmerica, Inc. - Irvine 17461 Derian Ave, Suite 100

Irvine CA, 92614

Report ID: 8020456 Project ID: IRB0150

Date Received: 02/04/08 13:45 Date Reported: 02/11/08 16:23

Notes and Definitions

ND NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL)

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

% Rec Percent Recovery

Sub Subcontracted analysis, original report available upon request

MDL Method Detection Limit

MDA Minimum Detectable Activity

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

An Absence of Total Coliform meets the drinking water standards as established by the California Department of Health Services.

The Reporting Limit (RL) is referenced as the Laboratory's Practical Quantitation Limit (PQL) or the Detection Limit for Reporting Purposes (DLR).

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.



March 10, 2008

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

Reference: Test America Project Nos.

IRB0073, IRB0146, IRB0147, IRB0148, IRB0149,

IRB0150, IRB0151, IRB0152, IRB0153, IRB0154

IRB0156, IRB0480, IRB0751

Eberline Services NELAP Cert #01120CA

Eberline Services Reports R802024-8693, R802040-8694, R802041-8695,

R802042-8696, R802043-8697, R802044-8698 R802045-8699, R802046-8600, R802047-8601 R802048-8602, R802049-8603, R802054-8604

R802084-8608

Dear Mr. Doak:

Attached are data reports for thirteen water samples. Eleven of the samples were received at Eberline Services on February 5, one on February 7, and one on February 9, 2008. The samples were analyzed according to the accompanying Test America Subcontract Order Forms, the requested analyses were: gross alpha/gross beta (EPA 900.0), tritium (H-3, EPA906.0), Sr-90 (EPA905.0), Ra-226 (EPA903.1), Ra-228 (EPA 904.0), total uranium (ASTM D-5174), and gamma spectroscopy (EPA901.1, K-40 and Cs-137 only). The parenthetical G after a nuclide indicates that the result was obtained by gamma spectroscopy; a "U" in the results column indicates that the nuclide was not detected greater than the indicated minimum detectable activity (MDA). The samples were not filtered prior to analysis. The samples were analyzed in batches with common QC samples. Batch quality control samples consisted of LCS's, blank analyses, duplicate analyses, and matrix spike analyses (gross alpha/gross beta, H-3, Ra-226, Total-U only). All samples were batched with QC samples 8693-002, 003, 004, and 005 for all analyses. All QC sample results were within the limits defined in Eberline Services Quality Control Procedures Manual.

Please call me if you have any questions concerning this report.

Regards,

Melissa Mannion

Senior Program Manager

Melissa Mann

MCM/njv

Enclosure: Report on CD

ANALYSIS RESULTS

SDG <u>8698</u>

Client TA IRVINE

Work Order <u>R802044-01</u>
Received Date <u>02/05/08</u>

Contract PROJECT# IRB0150

Matrix WATER

Client Sample ID	Lab Sample ID	Collected Analyzed	Nuclide	Results ± 2σ	<u>Units</u>	MDA
IRB0150-01	8698-001	02/03/08 02/27/08	GrossAlpha	0.696 ± 0.57	pCi/L	0.74
		02/27/08	Gross Beta	3.42 ± 0.66	pCi/L	0.92
		02/27/08	Ra-228	0.102 ± 0.18	pCi/L	0.48
		02/25/08	K-40 (G)	U	pCi/L	22
		02/25/08	Cs-137 (G)	Ū	pCi/L	0.90
		02/29/08	H-3	-9.49 ± 90	pCi/L	150
		03/03/08	Ra-226	0.039 ± 0.39	pCi/L	0.75
		02/18/08	Sr-90	-0.048 ± 0.32	pCi/L	0.78
		02/26/08	Total U	0.197 ± 0.023	pCi/L	0.022

Certified by Neport Date 03/11/08
Page 1

QC RESULTS

SDG <u>8698</u>

Client TA IRVINE

Work Order <u>R802044-01</u>
Received Date <u>02/05/08</u>

Contract PROJECT# IRB0150

Matrix <u>WATER</u>

	Lab						
3	Sample ID	Nuclide	Results	<u>Units</u>	Amount Added	<u>MDA</u>	Evaluation
	LCS						
	8693-002	GrossAlpha	10.6 ± 0.82	pCi/Smpl	10.2	0.31	104% recovery
		Gross Beta	9.07 ± 0.36	pCi/Smpl	9.38	0.28	97% recovery
		Ra-228	8.40 ± 0.59	pCi/Smpl	8.66	0.88	97% recovery
		Co-60 (G)	214 ± 14	pCi/Smpl	224	9.1	96% recovery
		Cs-137 (G)	240 ± 12	pCi/Smpl	236	9.2	102% recovery
		Am-241 (G)	255 ± 26	pCi/Smpl	254	31	100% recovery
		H-3	222 ± 12	pCi/Smpl	239	13	93% recovery
		Ra-226	5.35 ± 0.24	pCi/Smpl	5.02	0.076	107% recovery
		Sr-90	10.7 ± 0.80	pCi/Smpl	9.39	0.37	114% recovery
		Total U	1.12 ± 0.13	pCi/Smpl	1.13	0.004	99% recovery
	BLANK						
	8693-003	GrossAlpha	-0.103 ± 0.17	pCi/Smpl	NA	0.34	<mda< td=""></mda<>
		Gross Beta	-0.111 ± 0.15	pCi/Smpl	NA	0.27	<mda< td=""></mda<>
		Ra-228	0.239 ± 0.48	pCi/Smpl	NA	0.68	<mda< td=""></mda<>
		K-40 (G)	U	pCi/Smpl	NA	110	<mda< td=""></mda<>
		Cs-137 (G)	U	pCi/Smpl	NA	5.4	<mda< td=""></mda<>
		H-3	-1.64 ± 8.3	pCi/Smpl	, NA	15	<mda< td=""></mda<>
		Ra-226	0.016 ± 0.034	pCi/Smpl	NA	0.062	<mda< td=""></mda<>
		Sr-90	0.099 ± 0.15	pCi/Smpl	NA	0.27	<mda< td=""></mda<>
		Total U	0.00E 00 ± 1.9E-04	pCi/Smpl	NA	4.5E-04	<mda< td=""></mda<>

DUPLI	CATES			ORIGINALS			
							3 σ
Sample ID Nuclide	Results ± 2σ	<u>MDA</u>	Sample ID	Results ± 20	MDA	RPD (T	ot) Eval
8693-004 GrossAl	pha 1.03 ± 1.0	1.5	8693-001	0.763 ± 0.99	1.3	-	0 satis.
Gross B	eta 15.0 <u>±</u> 1.2	1.6		14.2 ± 0.93	0.97	5	46 satis.
Ra-228	0.099 ± 0.18	0.48		0.295 ± 0.19	0.49	-	0 satis.
K-40	(G) 24.8 ± 7.8	4.9		24.0 ± 11	8.2	3	86 satis.
Cs-137	(G) U	0.53		U	0.86	-	0 satis.
H-3	-6.31 ± 84	150		7.12 ± 78	130	***	0 satis.
Ra-226	0.583 ± 0.52	0.81		0.426 ± 0.44	0.70	-	0 satis.
Sr-90	-0.021 ± 0.29	0.71		0.026 ± 0.31	0.72	-	0 satis.
Total U	0.611 + 0.06	7 0.022	1.	0.578 ± 0.064	0.022	6	30 satis.

Certified by____

Report Date <u>03/11/08</u>

Page 2

QC RESULTS

 SDG
 8698
 Client
 TA IRVINE

 Work Order
 R802044-01
 Contract
 PROJECT# IRB0150

 Received Date
 02/05/08
 Matrix
 WATER

	SPIKED SAMPLE			ORI	GINAL SAMPLE			
Sample ID	<u>Nuclide</u>	Results ± 2σ	MDA	Sample ID	Results ± 2σ	MDA	Added	%Recv
8693-005	GrossAlpha	95.8 ± 5.5	1.4	8693-001	0.763 ± 0.99	1.3	71.2	133
	Gross Beta	77.9 ± 2.0	1.5		14.2 ± 0.93	0.97	62.5	102
	H-3	15500 ± 300	150		7.12 ± 78	130	16000	97
	Ra-226	120 ± 4.8	0.69		0.426 ± 0.44	0.70	112	107
	Total U	109 ± 13	2.2		0.578 ± 0.064	0.022	113	96

Certified by Report Date 03/11/08
Page 3

SUBCONTRACT ORDER

TestAmerica Irvine IRB0150

SENDING LABORATORY:

TestAmerica Irvine

17461 Derian Avenue. Suite 100

Irvine, CA 92614

Phone: (949) 261-1022 Fax: (949) 260-3297

Project Manager: Joseph Doak

RECEIVING LABORATORY:

Eberline Services 2030 Wright Avenue Richmond, CA 94804 Phone:(510) 235-2633 Fax: (510) 235-0438

Project Location: California

Receipt Temperature:

N

Analysis	Units	Due	Expires	Comments
Sample ID: IRB0150-01	Water		Sampled: 02/03/08 14;20	
EDD + Level 4	N/A	02/13/08	03/02/08 14:20	
Gamma Spec-O	mg/kg	02/13/08	02/02/09 14:20	Out to Eberline, k-40 and cs-137 only
Gross Alpha-O	pCi/L	02/13/08	08/01/08 14:20	Out to Eberline, Boeing
Gross Beta-O	pCi/L	02/13/08	08/01/08 14:20	Out to Eberline, Boeing
Radium, Combined-O	pCi/L	02/13/08	02/02/09 14:20	Out to Eberline, Boeing
Strontium 90-O	pCi/L	02/13/08	02/02/09 14:20	Out to Eberline, Boeing
Tritium-O	pCi/L	02/13/08	02/02/09 14:20	Out to Eberline, Boeing
Uranium, Combined-O	pCi/L	02/13/08	02/02/09 14:20	Out to Eberline, Boeing
Containers Supplied:				
2.5 gal Poly (S)	500 mL Amb	er (T)		

Date/Time Released By Released By Date/Time

Received By

Received By

Date/Time

Page 1 of 1

NPDES - 1635



RICHMOND, CA LABORATORY

SAMPLE RECEIPT CHECKLIST

JK 1	Dollo
J\'])	

Slient: TEST AMETICA SITY	IPVINE State CA
Date: Time received 02/05/08/09:30 200 No	
Container I No 14 CHEST Requested TAT (Da	ivs F.C Received Yes[] N= C[]
INS	PECTION
Custoov seals or snipping container intact? Custoov seals or snipping container dated 2 signature of the container dated 3 signature dated 3 signatur	Sample Matri: Wer Dry X Cor see Doc Test
	Date No Date
ion Champer Ser Ivc	
Albha Meter Ser No. Beta/Gamma Meter Ser No/00482	Calibration date Calibration date Calibration date DS MAY 07
117 Farm SCP-61 07-36407	over 55 vears of quality nuclear services."

APPENDIX G

Section 40

Outfall 006 – BMP Effectiveness, February 5, 2008 Test America Analytical Laboratory Report





LABORATORY REPORT

Prepared For: MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project: Boeing BMP Effectiveness

Monitoring Program

Sampled: 02/05/08 Received: 02/05/08 Issued: 02/14/08 15:14

NELAP #01108CA California ELAP#1197 CSDLAC #10256

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
IRB0424-01 006-EFF-1 Water

Reviewed By:

TestAmerica Irvine

Joseph Dock



17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

Project ID: Boeing BMP Effectiveness Monitoring Program

618 Michillinda Avenue, Suite 200 Sampled: 02/05/08

Arcadia, CA 91007 Report Number: IRB0424 Received: 02/05/08

Attention: Bronwyn Kelly

MWH-Pasadena/Boeing

INORGANICS

		11.011	0121 (200					
Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0424-01 (006-EFF-1 - Water) Reporting Units: g/cc								
Density	Displacement	8B11085	NA	1.0	1	2/11/2008	2/11/2008	
Sample ID: IRB0424-01 (006-EFF-1 - Water) Reporting Units: mg/l)							
Sediment	ASTM D3977	8B14087	10	ND	1	2/14/2008	2/14/2008	



17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Boeing BMP Effectiveness Monitoring Program

Sampled: 02/05/08

Report Number: IRB0424

Received: 02/05/08

METHOD BLANK/QC DATA

INORGANICS

		Reporting		Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 8B11085 Extracted: 02/11/	08									
Duplicate Analyzed: 02/11/2008 (8)	B11085-DUP1)				Source: I	RA3091-0	1			
Density	0.999	NA	g/cc		1.00			0	20	



17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

Project ID: Boeing BMP Effectiveness Monitoring Program

618 Michillinda Avenue, Suite 200 Sampled: 02/05/08

Arcadia, CA 91007 Report Number: IRB0424 Received: 02/05/08
Attention: Bronwyn Kelly

DATA QUALIFIERS AND DEFINITIONS

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

RPD Relative Percent Difference

MWH-Pasadena/Boeing



17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

Project ID: Boeing BMP Effectiveness Monitoring Program

618 Michillinda Avenue, Suite 200 Sampled: 02/05/08

Arcadia, CA 91007 Report Number: IRB0424 Received: 02/05/08

Certification Summary

TestAmerica Irvine

Displacement

MWH-Pasadena/Boeing

Attention: Bronwyn Kelly

Method	Matrix	Nelac	California
ASTM D3977	Water		

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

Page 1 of 1 Comments 10 Days 5 Days Turn around Time: (check)
24 Hours 5 Da Time of readings GRAB Field readings. 48 Hours ANALYSIS REQUIRED Ē 7/10/17 Date **CHAIN OF CUSTODY FORM** IRBOYZY Suspended Sediment Concentration (SSC, ASTM-73977-1937) Bottle # 13 15 16 9 19 9 7 12 4 1 20 2 23 23 24 S 9 ω 6 Effectiveness Monitoring Program Preservative Received By None Rederved B Project: Boeing BMP None (626) 568-6515 Phone Number (626) 568-6691 Fax Number: Sampling Date/Time 25/08 11:15 Date/Time: 0, # of Cont. 2/2/2 Test America Version 12/20/07 500 mL Poly Test America Contact: Joseph Doak 500 mL Poly Project Manager: Bronwyn Kelly 500 mL Poly Container 618 Michillinda Avenue. Suite 200 Arcadia, CA 91007 Sampler: My/15 cat, 4 Earner Sample Client Name/Address: Matrix Derross, R. MWH-Arcadia ≥ ≥ ≥ ≥ ≥ ≥ ≥ ≥ |≥ ≥ ≥ ≥ ≥ ≥ ≥ ≥ ∣≥ ≥ ∣≥ ≥ ≥ ≥ ed By Relinquished By Sample Description 006 EFF-15 006 EFF-18 006 EFF-19 006 EFF-20 006 EFF-11 006 EFF-12 006 EFF-13 006 EFF-14 006 EFF-16 006 EFF-17 006 EFF-21 006 EFF-22 006 EFF-23 006 EFF-24 006 EFF-10 006 EFF-5 006 EFF-6 006 EFF-8 006 EFF-9 006 EFF-3 006 EFF-4 006 EFF-7 006 EFF-1 108 Ide 810

 $\overline{\mathcal{X}}$

15/08 1850

- Man

Received By

Date/Time:

Sample Integrity: (check)
Intact On Ice:

Normal

72 Hours

NPDES - 1643

Relinquished By

APPENDIX G

Section 41

Outfall 006, February 22, 2008

MECX Data Validation Reports



DATA VALIDATION REPORT

Boeing SSFL NPDES

SAMPLE DELIVERY GROUP: IRB2342

Prepared by

MEC^x, LLC 12269 East Vassar Drive Aurora, CO 80014 DATA VALIDATION REPORT Project: SSFL NPDES SDG: IRB2342

I. INTRODUCTION

Task Order Title: Boeing SSFL NPDES

Contract Task Order: 1261.100D.00

Sample Delivery Group: IRB2342 Project Manager: B. Kelly

Matrix: Water

QC Level: IV No. of Samples: 1

No. of Reanalyses/Dilutions: 0

Laboratory: TestAmerica-Irvine

Table 1. Sample Identification

Client ID	Laboratory ID	Sub-Laboratory ID	Matrix	Collected	Method
Outfall 006	IRB2342-01	30308-001, 8022513-01, 8612- 001	Water	02/22/08 1145	200.8, 245.1, 900.0, 901.1, 903.0, 904.0, 905.0, 906.0, 1613, ASTM D-5174, SM2340-B

II. Sample Management

No anomalies were observed regarding sample management. The samples were received at TestAmerica-Irvine and Weck within the temperature limits of 4°C ±2°C. The samples were received at Vista below the temperature limit; however, the samples were not noted to be damaged or frozen. Eberline did not provide temperature information; however, radiological samples are not required to be chilled. According to the case narrative for this SDG, the samples were received intact at all laboratories. The COCs were appropriately signed and dated by field and/or laboratory personnel. As the sample was couriered to TestAmerica-Irvine, Eberline, and Weck, custody seals were not required. Custody seals were intact upon arrival at Vista. If necessary, the client ID was added to the sample result summary by the reviewer.

1

DATA VALIDATION REPORT SPICE SSFL NPDES SDG: IRB2342

Data Qualifier Reference Table

Qualifie	organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

DATA VALIDATION REPORT Project: SSFL NPDES SDG: IRB2342

Qualification Code Reference Table

Qualifier	Organics	Inorganics
Н	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
С	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
В	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
1	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
Α	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
Т	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
\$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

DATA VALIDATION REPORT Project: SSFL NPDES SDG: IRB2342

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
Р	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
DNQ	The reported result is above the method detection limit but is less than the reporting limit.	The reported result is above the method detection limit but is less than the reporting limit.
*11, *111	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

DATA VALIDATION REPORT SSFL NPDES
SSFL NPDES
SDG: IRB2342

III. Method Analyses

A. EPA METHOD 1613—Dioxin/Furans

Reviewed By: K. Shadowlight Date Reviewed: April 7, 2008

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the MEC^{\times} Data Validation Procedure for Dioxins and Furans (DVP-19, Rev. 0), USEPA Method 1613, and the National Functional Guidelines Chlorinated Dioxin/Furan Data Review (8/02).

- Holding Times: Extraction and analytical holding times were met. The water sample was extracted and analyzed within one year of collection.
- Instrument Performance: Instrument performance criteria were met. Following are findings associated with instrument performance.
 - OC Column Performance: A Windows Defining Mix (WDM) containing the first and last eluting congeners of each descriptor and isomer specificity compounds was not analyzed prior to the initial calibration sequence or at the beginning of each analytical sequence; however, the first and last eluting congeners and isomer specificity compounds were added to the midpoint of the initial calibration and to the continuing calibration standards. The GC column performance in the calibrations was acceptable, with the height of the valley between the closely eluting isomers and 2,3,7,8-TCDD reported as less than 25%.
 - Mass Spectrometer Performance: The mass spectrometer performance was acceptable with the static resolving power greater than 10,000.
- Calibration: Calibration criteria were met.
 - o Initial Calibration: Initial calibration criteria were met. The initial calibration was acceptable with %RSDs ≤20% for the 16 native compounds (calibration by isotope dilution) and ≤35% for the one native and all labeled compounds (calibration by internal standard). The relative retention times and ion abundance ratios were within the Method 1613 QC limits for all standards.
 - Continuing Calibration: Calibration verification (VER) consisted of a mid-level standard (CS3) analyzed at the beginning of each analytical sequence. The VERs were acceptable with the concentrations within the acceptance criteria listed in Table 6 of EPA Method 1613. The ion abundance ratios and relative retention times were within the method QC limits.
- Blanks: The method blank had no target compound detects above the EDL.

DATA VALIDATION REPORT SSFL NPDES
SSFL NPDES
SDG: IRB2342

 Blank Spikes and Laboratory Control Samples: Recoveries were within the acceptance criteria listed in Table 6 of Method 1613.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.
- Internal Standards Performance: The labeled standard recoveries were within the acceptance criteria listed in Table 7 of Method 1613.
- Compound Identification: Compound identification was verified. The laboratory analyzed for polychlorinated dioxins/furans by EPA Method 1613.
- Compound Quantification and Reported Detection Limits: Compound quantitation was verified by recalculating any sample detects and a representative number of blank spike concentrations. The laboratory calculated and reported compound-specific detection limits. Any detects below the laboratory lower calibration level were qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES permit. Nondetects are valid to the estimated detection limit (EDL).

B. EPA METHODS 200.8, 245.1—Metals and Mercury

Reviewed By: P. Meeks Date Reviewed: April 1, 2008

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the MEC^{\times} Data Validation Procedure for Metals (DVP-5, Rev. 0 and DVP-21, Rev. 0), EPA Methods 200.8 and 245.1, and the National Functional Guidelines for Inorganic Data Review (2/94).

- Holding Times: The analytical holding times, 6 months for metals and 28 days for mercury, were met.
- Tuning: The mass calibration and resolution checks criteria were met. All tuning solution %RSDs were ≤5%, and all masses of interest were calibrated to ≤0.1 amu and ≤0.9 amu at 10% peak height.
- Calibration: Calibration criteria were met. Mercury initial calibration r² values were ≥0.995 and all initial and continuing calibration recoveries were within 90-110% for the ICP-MS

6 Revision 0

DATA VALIDATION REPORT Project: SSFL NPDES
SDG: IRB2342

metals and 85-115% for mercury. All CRI/CRA and check standard recoveries were within the control limits of 70-130%.

- Blanks: There were no applicable detects in the method blanks or CCBs.
- Interference Check Samples: No ICSA/B analyses were performed in association with the sample in this SDG.
- Blank Spikes and Laboratory Control Samples: The recoveries were within laboratoryestablished QC limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed.
- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on the sample in this SDG. Method accuracy was evaluated based on LCS results.
- Serial Dilution: No serial dilution analyses were performed.
- Internal Standards Performance: All sample internal standard intensities were within 30-120% of the internal standard intensities measured in the initial calibration. The bracketing CCV and CCB internal standard intensities were within 80-120% of the internal standard intensities measured in the initial calibration.
- Sample Result Verification: Calculations were verified and the sample results reported on the sample result summary were verified against the raw data. No transcription errors or calculation errors were noted. Detects reported below the reporting limit were qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES permit. Reported nondetects are valid to the MDL.

The reviewer noted that antimony was detected at a slightly higher concentration in the dissolved metals sample fraction than in the total metals fraction. The difference between the dissolved and total results was within the sensitivity limits of the analytical instruments and, therefore, the reviewer considered the total and dissolved results to be equivalent.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.

DATA VALIDATION REPORT Project: SSFL NPDES
SDG: IRB2342

C. VARIOUS EPA METHODS — Radionuclides

Reviewed By: P. Meeks Date Reviewed: April 2, 2008

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the EPA Methods 900.0, 901.1, 903.1, 904.0, 905.0, and 906.0, ASTM Method D-5174, and the National Functional Guidelines for Inorganic Data Review (2/94).

- Holding Times: The tritium sample was analyzed within 180 days of collection. Aliquots
 for gross alpha and gross beta were prepared within the five-day analytical holding time
 for unpreserved samples. Aliquots for radium-226, radium-228, strontium-90, total
 uranium, and gamma spectroscopy were prepared beyond the five-day holding time for
 unpreserved samples; therefore, results for these analytes were qualified as estimated,
 "J," for detects and, "UJ," for nondetects.
- Calibration: The laboratory calibration information included the standard certificates and applicable preparation/dilutions logs for NIST-traceability.

The gross alpha detector efficiency was less than 20%; therefore, nondetected gross alpha in the sample was qualified as an estimated nondetect, "UJ." The gross beta detector efficiency was greater than 20%.

The tritium aliquot was spiked for efficiency determination; therefore, no calibration was necessary. The tritium detector efficiency for the sample was at least 20% and was considered acceptable. The strontium chemical yield was at least 70% and was considered acceptable. The strontium and radium-226 continuing calibration results were within the laboratory control limits. The radium-228 tracer, yttrium oxalate, yields were greater than 70%. The gamma spectroscopy analytes were determined at the maximum photopeak energy. The kinetic phosphorescence analyzer (KPA) was calibrated immediately prior to the sample analysis. All KPA calibration check standard recoveries were within 90-110% and were deemed acceptable.

- Blanks: There were no analytes detected in the method blanks.
- Blank Spikes and Laboratory Control Samples: The recoveries were within laboratoryestablished control limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed on the sample in this SDG.
- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed for the sample in this SDG.
- Sample Result Verification: An EPA Level IV review was performed for the sample in this data package. The sample results and MDAs reported on the sample result form were

8 Revision 0

DATA VALIDATION REPORT SSFL NPDES
SDG: IRB2342

verified against the raw data and no calculation or transcription errors were noted. Reported nondetects are valid to the MDA.

 Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

- Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
- o Field Duplicates: There were no field duplicate samples identified for this SDG.

9 Revision 0

				THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.	SOLATING SECTION STATEMENT OF SECTION STATEMENT	THE RESERVE AND ASSESSED.			
Client Data			Sample Data		Laboratory Data				
	Test America-Irvine, CA		Matrix:	Aqueous	Lab Sample:	30308-001	Date Received:	sived:	26-Feb-08
Project: IRB2342 Date Collected: 22-Feb-08 Time Collected: 1145	342 :b-08		Sample Size:	1.03 L	QC Batch No.: Date Analyzed DB-5:	9997 10-Mar-08	Date Extracted: Date Analyzed]	Date Extracted: Date Analyzed DB-225:	9-Mar-08 NA
Analyte	Conc. (ug/L)	DL a	EMPCb	Qualifiers	Labeled Standard	ırd	%R	LCL-UCL ^d	Oualifiers
2,3,7,8-TCDD	2	0.000000579	62		IS 13C-23,7,8-TCDD	Q	71.8	25 - 164	
1,2,3,7,8-PeCDD	2	0.00000101	1		13C-1,2,3,7,8-PeCDD	СDD	71.5	25 - 181	
1,2,3,4,7,8-HxCDD	2	0,00000191		美国	13C-1,2,3,4,7,8-HxCDD	fxCDD	0.69	32 - 141	
1,2,3,6,7,8-HxCDD	2	0,00000194	4		13C-1,2,3,6,7,8-HxCDD	FXCDD	73.1	28 - 130	
1,2,3,7,8,9-HxCDD	2	0.00000185	*		13C-1,2,3,4,6,7,8-HpCDD	нрсор	72.0	23 - 140	
1,2,3,4,6,7,8-HpCDD	0,000000177	Who are live as a		ŗ	13C-0CDD		61.8	17-157	
OCDD	6,5000184			•	13C-23,7,8-TCDP	4	75.8	24 - 169	
2,3,7,8-TCDF	2	0.000000525	25	Provide all and a second	13C-1,2,3,7,8-PeCDF	CDF	63.8	24 - 185	
1,2,3,7,8-PeCDF	2	0.00000103	8		13C-23,4,7,8-PeCDF	COF	65.1	21-178	
2,3,4,7,8-PeCDF	2	0,00000105	Š	Office of the second	13C-1,2,3,4,7,8-HxCDF	ACDF	66.5	26 - 152	
1,2,3,4,7,8-HxCDF	£	0.0000000606	90		13C-12,3,6,7,8-HxCDF	ExCDF	73.0	26 - 123	
1,2,3,6,7,8-HxCDF	2	0.000000011	111		13C-2,3,4,6,7,8-HxCDF	HxCDF	71.5	28 - 136	
2,3,4,6,7,8-HxCDF	2	0.000000000	20		13C-1,2,3,7,8,9-HxCDF	EXCDF	70.9	29 - 147	
1,2,3,7,8,9-HxCDF	2	0.000000017	117	10 mm	13C-1,2,3,4,6,7,8-HpCDF	-HpCDF	66.2	28 - 143	
1,2,3,4,6,7,8-HpCDF	2	0,00000118	60		13C-1,2,3,4,7,8,9-HpCDF	-HpCDF	67.3	26 - 138	
1,2,3,4,7,8,9-HpCDF	20	0.000000685	585		13C-OCDF		62.8	17 - 157	
OCDF	ON	0.00000317	7		CRS 37CI-2,3,7,8-TCDD	OO	115	35 - 197	
Totals					Footnotes				
Total TCDD	£	0.00000171		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	a. Sample specific estimated detection limit	detection limit.		The state of the s	
Total PeCDD	2	6,00000228	8		b. Estimated maximum possible concentration.	ible concentration.			
Total HxCDD	2	0.00000190	0	The state of the s	c. Method detection limit		PERSON STREET	Not September of Party of September 1	
Total HpCDD	0,00000448	はない。			d. Lower control limit - upper control limit.	er control limit.			
Total TCDF	R	0.0000000525	:25	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Company of the Company	The same state of the same state of the	30000
Total PeCDF	2	0.00000104	4						
Total HxCDF	ON I	0.000000701	701			を主義が一として 2末極		The Part of the Pa	
Total HpCDF	N	0.00000124	4						是 · · · · · · · · · · · · · · · · · · ·
Analyst: MAS	Level IV				Approved By:	Martha M. Maier		14-Mar-2008 13:03	. 29



17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

MWH-Pasadena/Boeing

Attention: Bronwyn Kelly

Project ID: Routine Outfall 006

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Report Number: IRB2342

Sampled: 02/22/08 Received: 02/22/08

METALS

Analyte		Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID:	: IRB2342-01 (Outfall 00	6 - Water)								
Repor	rting Units: ug/l									
Antimony	JONG	EPA 200.8	8B23034	0.20	2.0	0.38	1	02/23/08	02/25/08	J
Cadmium	1	EPA 200.8	8B23034	0.11	1.0	0.13	1	02/23/08	02/25/08	J
Copper		EPA 200.8	8B23034	0.75	2.0	1.8	1	02/23/08	02/25/08	J
Lead	\downarrow	EPA 200.8	8B23034	0.30	1.0	0.33	1	02/23/08	02/25/08	J
Thallium	U	EPA 200.8	8B23034	0.20	1.0	ND	1	02/23/08	02/25/08	





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MWH-Pasadena/Boeing

Project ID: Routine Outfall 006

618 Michillinda Avenue, Suite 200 Arcadia, CA 91007

Report Number: IRB2342

Sampled: 02/22/08

Attention: Bronwyn Kelly

Received: 02/22/08

DISSOLVED METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers	
Sample ID: IRB2342-01 (Outfall 006 -	Water) - cont.									
Reporting Units: ug/l										
Antimony JDNQ	EPA 200.8-Diss	8B22128	0.20	2.0	0.39	1	02/22/08	02/23/08	J	
Cadmium U	EPA 200.8-Diss	8B22128	0.11	1.0	ND	1	02/22/08	02/23/08		
Copper J/DNQ	EPA 200.8-Diss	8B22128	0.75	2.0	1.0	1	02/22/08	02/23/08	J	
Lead U	EPA 200.8-Diss	8B22128	0.30	1.0	ND	1	02/22/08	02/23/08		
Thallium	EPA 200.8-Diss	8B22128	0.20	1.0	ND	1	02/22/08	02/23/08		

LEVEL IV

TestAmerica Irvine



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MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Routine Outfall 006

Report Number: IRB2342

Sampled: 02/22/08

Received: 02/22/08

Metals by EPA 200 Series Methods

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers		
Sample ID: IRB2342-01 (Outfall 006 - Water) - cont.											
Reporting Units: ug/I											
Mercury, Dissolved	EPA 245.1	W8B0982	0.050	0.20	ND	1	02/26/08	02/27/08			
Mercury, Total	EPA 245.1	W8B0982	0.050	0.20	ND	1	02/26/08	02/27/08			

LEVEL IV

TestAmerica Irvine

ANALYSIS RESULTS

SDG <u>8612</u>		Client TA	IRVINE
Work Order R802171	-01	Contract PRO	OJECT# IRB2342
Received Date 02/26/08	3	Matrix WAT	TER

Client	Lab						
Sample ID	Sample ID	Collected	Analyzed	Nuclide	Results ± 2σ	Units	MDA
Outfall 006							
IRB2342-01	8612-001	02/22/08	03/15/08	GrossAlpha	0.037 ± 1.6	pCi/L	2.8 UJ/R
			03/15/08	Gross Beta	5.00 ± 1.1	pCi/L	1.6
			03/10/08	Ra-228	-0.008 ± 0.24	pCi/L	0.57 UJ/H
			03/11/08	K-40 (G)	U	pCi/L	26
			03/11/08	Cs-137 (G)	U	pCi/L	1.0
			03/14/08	H-3	-73.1 ± 85	pCi/L	150
			03/14/08	Ra-226	0.041 ± 0.47	pCi/L	0.84 UJ/H
			03/10/08	Sr-90	0.159 ± 0.41	pCi/L	0.90
			03/05/08	Total U	0.264 ± 0.031	pCi/L	0.023 J/H

LEVEL IV

Certified by Report Date 03/20/08
Page 1

APPENDIX G

Section 42

Outfall 006, February 22, 2008 Test America Analytical Laboratory Report



LABORATORY REPORT

Prepared For: MWH-Pasadena/Boeing Project: Routine Outfall 006

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly

Sampled: 02/22/08 Received: 02/22/08

Issued: 03/14/08 15:39

NELAP #01108CA California ELAP#1197 CSDLAC #10256

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.

LABORATORY ID CLIENT ID MATRIX
IRB2342-01 Outfall 006 Water

Reviewed By:

TestAmerica Irvine

Joseph Dock



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MWH-Pasadena/Boeing Project ID: Routine Outfall 006

618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Report Number: IRB2342
Sampled: 02/22/08
Received: 02/22/08

Arcadia, CA 91007 Report Number: IRB2342 Attention: Bronwyn Kelly

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB2342-01 (Outfall 006 - W	ater)								
Reporting Units: ug/l									
Antimony	EPA 200.8	8B23034	0.20	2.0	0.38	1	02/23/08	02/25/08	J
Cadmium	EPA 200.8	8B23034	0.11	1.0	0.13	1	02/23/08	02/25/08	J
Copper	EPA 200.8	8B23034	0.75	2.0	1.8	1	02/23/08	02/25/08	J
Lead	EPA 200.8	8B23034	0.30	1.0	0.33	1	02/23/08	02/25/08	J
Thallium	EPA 200.8	8B23034	0.20	1.0	ND	1	02/23/08	02/25/08	



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MWH-Pasadena/Boeing Project ID: Routine Outfall 006

618 Michillinda Avenue, Suite 200 Sampled: 02/22/08

Arcadia, CA 91007 Report Number: IRB2342 Received: 02/22/08
Attention: Bronwyn Kelly

DISSOLVED METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB2342-01 (Outfall 006	- Water) - cont.								
Reporting Units: ug/l									
Antimony	EPA 200.8-Diss	8B22128	0.20	2.0	0.39	1	02/22/08	02/23/08	J
Cadmium	EPA 200.8-Diss	8B22128	0.11	1.0	ND	1	02/22/08	02/23/08	
Copper	EPA 200.8-Diss	8B22128	0.75	2.0	1.0	1	02/22/08	02/23/08	J
Lead	EPA 200.8-Diss	8B22128	0.30	1.0	ND	1	02/22/08	02/23/08	
Thallium	EPA 200.8-Diss	8B22128	0.20	1.0	ND	1	02/22/08	02/23/08	



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Sampled: 02/22/08

Report Number: IRB2342

Received: 02/22/08

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB2342-01 (Outfall 006 -	Water) - cont.								
Reporting Units: mg/l									
Hexane Extractable Material (Oil &	EPA 1664A	8C03074	1.3	4.7	1.4	1	03/03/08	03/03/08	J
Grease)									
Chloride	EPA 300.0	8B22037	2.5	5.0	31	10	02/22/08	02/22/08	M-3
Nitrate/Nitrite-N	EPA 300.0	8B22037	0.15	0.26	3.8	1	02/22/08	02/22/08	
Sulfate	EPA 300.0	8B22037	0.20	0.50	24	1	02/22/08	02/22/08	
Total Dissolved Solids	SM2540C	8B26076	10	10	280	1	02/26/08	02/26/08	



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Project ID: Routine Outfall 006 MWH-Pasadena/Boeing

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Sampled: 02/22/08 Arcadia, CA 91007 Report Number: IRB2342 Received: 02/22/08

Attention: Bronwyn Kelly

Metals by EPA 200 Series Methods

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers				
Sample ID: IRB2342-01 (Outfall 006 - Water) - cont.													
Reporting Units: ug/l													
Mercury, Dissolved	EPA 245.1	W8B0982	0.050	0.20	ND	1	02/26/08	02/27/08					
Mercury, Total	EPA 245.1	W8B0982	0.050	0.20	ND	1	02/26/08	02/27/08					



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Arcadia, CA 91007

Project ID: Routine Outfall 006

Sampled: 02/22/08

Report Number: IRB2342

Received: 02/22/08

SHORT HOLD TIME DETAIL REPORT

Sample ID: Outfall 006 (IRB2342-01) - Water	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
EPA 300.0	2	02/22/2008 11:45	02/22/2008 19:05	02/22/2008 21:00	02/22/2008 21:29
Filtration	1	02/22/2008 11:45	02/22/2008 19:05	02/22/2008 22:44	02/22/2008 22:44



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Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Routine Outfall 006

- .. . IDD2242

Report Number: IRB2342

Sampled: 02/22/08 Received: 02/22/08

METHOD BLANK/QC DATA

METALS

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 8B23034 Extracted: 02/23/08	3										
Blank Analyzed: 02/25/2008 (8B23034-B	SLK1)										
Antimony	ND	2.0	0.20	ug/l							
Cadmium	ND	1.0	0.11	ug/l							
Copper	ND	2.0	0.75	ug/l							
Lead	ND	1.0	0.30	ug/l							
Thallium	ND	1.0	0.20	ug/l							
LCS Analyzed: 02/25/2008 (8B23034-BS	1)										
Antimony	82.7	2.0	0.20	ug/l	80.0		103	85-115			
Cadmium	83.1	1.0	0.11	ug/l	80.0		104	85-115			
Copper	83.7	2.0	0.75	ug/l	80.0		105	85-115			
Lead	85.2	1.0	0.30	ug/l	80.0		106	85-115			
Thallium	84.2	1.0	0.20	ug/l	80.0		105	85-115			
Matrix Spike Analyzed: 02/25/2008 (8B2	23034-MS1)				Sou	rce: IRB	2213-01				
Antimony	90.8	2.0	0.20	ug/l	80.0	ND	113	70-130			
Cadmium	85.2	1.0	0.11	ug/l	80.0	ND	107	70-130			
Copper	78.1	2.0	0.75	ug/l	80.0	2.46	95	70-130			
Lead	76.1	1.0	0.30	ug/l	80.0	ND	95	70-130			
Thallium	76.2	1.0	0.20	ug/l	80.0	0.202	95	70-130			
Matrix Spike Analyzed: 02/25/2008 (8B2	23034-MS2)				Sou	rce: IRB	1758-01				
Antimony	88.8	2.0	0.20	ug/l	80.0	ND	111	70-130			
Cadmium	84.2	1.0	0.11	ug/l	80.0	ND	105	70-130			
Copper	78.2	2.0	0.75	ug/l	80.0	6.07	90	70-130			
Lead	79.0	1.0	0.30	ug/l	80.0	1.87	96	70-130			
Thallium	77.0	1.0	0.20	ug/l	80.0	ND	96	70-130			
Matrix Spike Dup Analyzed: 02/25/2008	(8B23034-M	SD1)			Sou	rce: IRB	2213-01				
Antimony	90.6	2.0	0.20	ug/l	80.0	ND	113	70-130	0	20	
Cadmium	85.1	1.0	0.11	ug/l	80.0	ND	106	70-130	0	20	
Copper	77.2	2.0	0.75	ug/l	80.0	2.46	93	70-130	1	20	
Lead	75.0	1.0	0.30	ug/l	80.0	ND	94	70-130	1	20	
Thallium	74.2	1.0	0.20	ug/l	80.0	0.202	93	70-130	3	20	

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Joseph Doak Project Manager

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Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Routine Outfall 006

Sampled: 02/22/08

Report Number: IRB2342

Received: 02/22/08

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC	RPD	RPD Limit	Data Qualifiers
Batch: 8B22128 Extracted: 02/22/08											
Daten. 6B22126 Extracted. 02/22/06	-										
Blank Analyzed: 02/23/2008 (8B22128-Bl	LK1)										
Antimony	ND	2.0	0.20	ug/l							
Cadmium	ND	1.0	0.11	ug/l							
Copper	ND	2.0	0.75	ug/l							
Lead	ND	1.0	0.30	ug/l							
Thallium	ND	1.0	0.20	ug/l							
LCS Analyzed: 02/23/2008 (8B22128-BS)	1)										
Antimony	83.9	2.0	0.20	ug/l	80.0		105	85-115			
Cadmium	84.0	1.0	0.11	ug/l	80.0		105	85-115			
Copper	83.0	2.0	0.75	ug/l	80.0		104	85-115			
Lead	82.4	1.0	0.30	ug/l	80.0		103	85-115			
Thallium	80.2	1.0	0.20	ug/l	80.0		100	85-115			
Matrix Spike Analyzed: 02/23/2008 (8B2)	2128-MS1)				Sou	rce: IRB2	2337-01				
Antimony	86.6	2.0	0.20	ug/l	80.0	0.439	108	70-130			
Cadmium	83.8	1.0	0.11	ug/l	80.0	ND	105	70-130			
Copper	78.5	2.0	0.75	ug/l	80.0	ND	98	70-130			
Lead	74.4	1.0	0.30	ug/l	80.0	ND	93	70-130			
Thallium	79.2	1.0	0.20	ug/l	80.0	ND	99	70-130			
Matrix Spike Dup Analyzed: 02/23/2008	(8B22128-M	SD1)			Sou	rce: IRB2	2337-01				
Antimony	88.3	2.0	0.20	ug/l	80.0	0.439	110	70-130	2	20	
Cadmium	85.8	1.0	0.11	ug/l	80.0	ND	107	70-130	2	20	
Copper	79.1	2.0	0.75	ug/l	80.0	ND	99	70-130	1	20	
Lead	76.2	1.0	0.30	ug/l	80.0	ND	95	70-130	2	20	
Thallium	80.7	1.0	0.20	ug/l	80.0	ND	101	70-130	2	20	

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Attention: Bronwyn Kelly

Project ID: Routine Outfall 006

Sampled: 02/22/08 Received: 02/22/08

Report Number: IRB2342

METHOD BLANK/QC DATA

INORGANICS

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 8B22037 Extracted: 02/22/08	_										
Blank Analyzed: 02/22/2008 (8B22037-Bl	LK1)										
Chloride	ND	0.50	0.25	mg/l							
Nitrate/Nitrite-N	ND	0.26	0.15	mg/l							
Sulfate	ND	0.50	0.20	mg/l							
LCS Analyzed: 02/22/2008 (8B22037-BS)	1)										
Chloride	5.08	0.50	0.25	mg/l	5.00		102	90-110			M-3
Sulfate	9.62	0.50	0.20	mg/l	10.0		96	90-110			M-3
Matrix Spike Analyzed: 02/22/2008 (8B2	2037-MS1)				Sou	rce: IRB	2342-01				
Sulfate	34.8	0.50	0.20	mg/l	10.0	23.9	109	80-120			
Matrix Spike Analyzed: 02/23/2008 (8B2	2037-MS2)				Sou	rce: IRB	2215-01				
Chloride	26.8	0.50	0.25	mg/l	5.00	22.2	92	80-120			
Matrix Spike Dup Analyzed: 02/22/2008	(8B22037-M	SD1)			Sou	rce: IRB	2342-01				
Sulfate	34.0	0.50	0.20	mg/l	10.0	23.9	101	80-120	2	20	
Batch: 8B26076 Extracted: 02/26/08											
	_										
Blank Analyzed: 02/26/2008 (8B26076-Bl	LK1)										
Total Dissolved Solids	ND	10	10	mg/l							
LCS Analyzed: 02/26/2008 (8B26076-BS)	1)										
Total Dissolved Solids	984	10	10	mg/l	1000		98	90-110			
Duplicate Analyzed: 02/26/2008 (8B26076	6-DUP1)				Sou	rce: IRB	2347-11				
Total Dissolved Solids	705	10	10	mg/l		699			1	10	

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Attention: Bronwyn Kelly

Project ID: Routine Outfall 006

Report Number: IRB2342

Sampled: 02/22/08 Received: 02/22/08

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8C03074 Extracted: 03/03/08	8_										
Blank Analyzed: 03/03/2008 (8C03074-I	BLK1)										
Hexane Extractable Material (Oil & Grease)	ND	5.0	1.4	mg/l							
LCS Analyzed: 03/03/2008 (8C03074-BS	S1)										MNR1
Hexane Extractable Material (Oil & Grease)	18.9	5.0	1.4	mg/l	20.2		94	78-114			
LCS Dup Analyzed: 03/03/2008 (8C030)	74-BSD1)										
Hexane Extractable Material (Oil & Grease)	19.3	5.0	1.4	mg/l	20.2		96	78-114	2	11	

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Attention: Bronwyn Kelly

Project ID: Routine Outfall 006

Sampled: 02/22/08

Report Number: IRB2342

Received: 02/22/08

METHOD BLANK/QC DATA

Metals by EPA 200 Series Methods

Analyta	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Oualifiers
Analyte	Result	Limit	MDL	Units	Levei	Resuit	70KEC	Limits	KPD	Limit	Quanners
Batch: W8B0982 Extracted: 02/26/0	<u> 18</u>										
Blank Analyzed: 02/27/2008 (W8B0982-	BLK1)										
Mercury, Dissolved	ND	0.20	0.050	ug/l							
Mercury, Total	ND	0.20	0.050	ug/l							
LCS Analyzed: 02/27/2008 (W8B0982-B	S1)										
Mercury, Dissolved	0.920	0.20	0.050	ug/l	1.00		92	85-115			
Mercury, Total	0.920	0.20	0.050	ug/l	1.00		92	85-115			
Matrix Spike Analyzed: 02/27/2008 (W8	B0982-MS1)				Sou	rce: 8022	631-01				
Mercury, Dissolved	1.95	0.40	0.10	ug/l	2.00	ND	98	70-130			
Mercury, Total	1.95	0.40	0.10	ug/l	2.00	0.0950	93	70-130			
Matrix Spike Analyzed: 02/27/2008 (W8	B0982-MS2)				Sou	rce: 8022	633-01				
Mercury, Dissolved	1.91	0.40	0.10	ug/l	2.00	ND	96	70-130			
Mercury, Total	1.91	0.40	0.10	ug/l	2.00	ND	96	70-130			
Matrix Spike Dup Analyzed: 02/27/2008	(W8B0982-M	SD1)			Sou	rce: 8022	631-01				
Mercury, Dissolved	2.00	0.40	0.10	ug/l	2.00	ND	100	70-130	2	20	
Mercury, Total	2.00	0.40	0.10	ug/l	2.00	0.0950	95	70-130	2	20	
Matrix Spike Dup Analyzed: 02/27/2008	(W8B0982-M	SD2)			Sou	rce: 8022	633-01				
Mercury, Dissolved	1.93	0.40	0.10	ug/l	2.00	ND	96	70-130	1	20	
Mercury, Total	1.93	0.40	0.10	ug/l	2.00	ND	96	70-130	1	20	

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Project ID: Routine Outfall 006

618 Michillinda Avenue, Suite 200

Sampled: 02/22/08 Arcadia, CA 91007 Report Number: IRB2342 Received: 02/22/08

Attention: Bronwyn Kelly

Compliance Check

The results obtained from the analytical testing of this data set were checked against compliance limits received from the client. Any results at or above the compliance limits appear in bold on this page.

LabNumber	Analysis	Analyte	Units	Result	MRL	Compliance Limit
IRB2342-01	1664-HEM	Hexane Extractable Material (Oil & Greas	mg/l	1.42	4.7	15
IRB2342-01	Antimony-200.8	Antimony	ug/l	0.38	2.0	6
IRB2342-01	Cadmium-200.8	Cadmium	ug/l	0.13	1.0	4
IRB2342-01	Chloride - 300.0	Chloride	mg/l	31	5.0	150
IRB2342-01	Copper-200.8	Copper	ug/l	1.82	2.0	14
IRB2342-01	Hg_w 245.1	Mercury, Total	ug/l	0.013	0.20	0.2
IRB2342-01	Lead-200.8	Lead	ug/l	0.33	1.0	5.2
IRB2342-01	Nitrogen, NO3+NO2 -N	Nitrate/Nitrite-N	mg/l	3.82	0.26	10
IRB2342-01	Sulfate-300.0	Sulfate	mg/l	24	0.50	250
IRB2342-01	TDS - SM 2540C	Total Dissolved Solids	mg/l	283	10	850
IRB2342-01	Thallium-200.8	Thallium	ug/l	0	1.0	2



17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

Project ID: Routine Outfall 006

618 Michillinda Avenue, Suite 200

Sampled: 02/22/08

Arcadia, CA 91007 Report Number: IRB2342 Received: 02/22/08

Attention: Bronwyn Kelly

MWH-Pasadena/Boeing

DATA QUALIFIERS AND DEFINITIONS

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.

M-3 Results exceeded the linear range in the MS/MSD and therefore are not available for reporting. The batch was

accepted based on acceptable recovery in the Blank Spike (LCS).

MNR1 There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike/Blank Spike

Duplicate.

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

RPD Relative Percent Difference



17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

MWH-Pasadena/Boeing

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Project ID: Routine Outfall 006

Sampled: 02/22/08

Report Number: IRB2342

Received: 02/22/08

Certification Summary

TestAmerica Irvine

Method	Matrix	Nelac	California
EPA 1664A	Water		
EPA 200.8-Diss	Water	X	X
EPA 200.8	Water	X	X
EPA 300.0	Water	X	X
Filtration	Water	N/A	N/A
SM2540C	Water	X	

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

Eberline Services

2030 Wright Avenue - Richmond, CA 94804 Analysis Performed: Gamma Spec

Samples: IRB2342-01

Analysis Performed: Gross Alpha

Samples: IRB2342-01

Analysis Performed: Gross Beta Samples: IRB2342-01

Analysis Performed: Radium, Combined

Samples: IRB2342-01

Analysis Performed: Strontium 90

Samples: IRB2342-01

Analysis Performed: Tritium Samples: IRB2342-01

Analysis Performed: Uranium, Combined

Samples: IRB2342-01

Vista Analytical NELAC Cert #02102CA, California Cert #1640, Nevada Cert #CA-413

1104 Windfield Way - El Dorado Hills, CA 95762

Analysis Performed: 1613-Dioxin-HR-Alta

Samples: IRB2342-01

TestAmerica Irvine

Joseph Doak Project Manager



17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

Project ID: Routine Outfall 006

618 Michillinda Avenue, Suite 200
Arcadia, CA 91007

Report Number: IRB2342

Sampled: 02/22/08
Received: 02/22/08

Attention: Bronwyn Kelly

Weck Laboratories, Inc

MWH-Pasadena/Boeing

14859 E. Clark Avenue - City of Industry, CA 91745

Method Performed: EPA 245.1 Samples: IRB2342-01 CHAIN OF CUSTODY FORM

Project: ANALYSIS RECLIRED	SSFL NPDES	Routine Outfall 006	Meta at 1507-2 Meta at 1507-2	Phone Number:	(626) 568-6691 erab, (100 orange) 3-1 orange (100 oran	ease (1000), NC (1000)	Cd, (2004)	Sampling Preservative Bottle # TCS TC TC TC C C C C C C	1 2-22-08 HNO ₃ 1A X		2 None 2A, 2B X	2 HCI 3A, 3B X	2 None 4A, 4B X	None 5	None 6A X Unfiltered and unpreserved analysis	Alone X - Only tast if escendrain event of the year - E	2-22-07 None 8 ×				Date/Time: Received By Date/Time: Turn around Time: (check) 2/22/8 //OC 24 Hours	ime: Received By Date/Time:	Doth Times	Sample Integrity: (che
	SFL NPDES	outfall 006	31 at 13D1-2	mber:	6691	er: 6515	6160									Vorte 7					Received	Received B		
Project	Boeing-SS	Routine C	Storingar	+		Fax Numb	-oac (aza)		2-22-08	-						1	<u> </u>				 	Date/Time:	100 /0/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/	
07/7		, 200	Doak	Kelly		;		er # of Cont.	-	~	2	2	2	-	e 1	+	-	\perp	-		J	\	4	į
ress		enue, Suite	ct: Joseph	Bronwy		PINX		Container Type	1L Poly	1L Poly	1L Amber	1L Amber	500 ml Poly	500 ml Poly	2.5 Gal Cube 500 ml Amber	4 Cal Paly	1L Poly				į,	0	2	5
ne/Add	cadia	nda Ave	a Conta	nager)))	MAR.	50, K	Sample Matrix	>	>	>	>	>	>	8	1	>						ड २	<u> </u>
Client Name/Address:	MWH-Arcadia	618 Michillinda Avenue, Suite 200	Test America Contact: Joseph Doak	Project Manager: Bronwyn Kelly		Sampler: MARIX ALI	Berrass, R.	Sample Description	Outfall 006	Outfall 006- Dup	Outfall 006	Outfall 006	Outfall 006	Outfall 006	Outfall 006	Outfall 006	Outfall 006				Relinquished By	Relinquished	Deling Boll Bridge	



SENDING LABORATORY:

8022513

SUBCONTRACT ORDER - PROJECT # IRB2342

TestAmerica Irvine 17461 Derian Avenue. Suite Irvine, CA 92614 Phone: (949) 261-1022 Fax: (949) 260-3297 Project Manager: Joseph Doa	k	Weck Laboratori 14859 E. Clark A City of Industry, Phone: (626) 336-2 Fax: (626) 336-2 Project Location:	Avenue CA 91745 i-2139 2634 California	ORY:
Analysis	l unless specific due date is requested Expiration	d. => Due Date:	Initials: Comments	
Sample ID: IRB2342-01 Water Level 4 Data Package - Weck Mercury - 245.1, Diss -OUT Mercury - 245.1-OUT	r Sampled: 02/22/08 11:45	ph=7.0. temp=54.1	Out to Weck Weck, Boeing, J flags Weck,Boeing, permit, J fla	ags, if result>ND,call T/
Containers Supplied: 125 mL Poly w/HNO3 (IRB234 125 mL Poly (IRB2342-01N)	22-01M)			
^	SAMPLE II	NTEGRITY:		
/		Yes No	Samples Received On Ice:: Samples Received at (temp):	Yes No
Released By	15408 1038	Sceived By Conference By	2/25/08 Date	Time b 1036 Time NPDES-1677 Page 7 of 1



Weck Laboratories, Inc.

Analytical Laboratory Services - Since 1964

14859 E. Clark Ave., Industry, CA 91745 Phone 626.336.2139 Fax 626.336.2634 info@wecklabs.com www.wecklabs.com

CERTIFICATE OF ANALYSIS

TestAmerica, Inc. - Irvine **Client:**

Report Date:

02/28/08 07:51

17461 Derian Ave, Suite 100

Received Date:

02/25/08 10:38

Irvine, CA 92614

Turn Around:

Normal

Attention: Joseph Doak

Work Order #:

8022513

Phone: (949) 261-1022

Fax: (949) 260-3297

Client Project:

IRB2342

NELAP #04229CA ELAP#1132 NEVADA #CA211 HAWAII LACSD #10143

The results in this report apply to the samples analyzed in accordance with the Chain of Custody document. Weck Laboratories, Inc. certifies that the test results meet all NELAC requirements unless noted in the case narrative. This analytical report is confidential and is only intended for the use of Weck Laboratories, Inc. and its client. This report contains the Chain of Custody document, which is an integral part of it, and can only be reproduced in full with the authorization of Weck Laboratories, Inc.

Dear Joseph Doak:

Enclosed are the results of analyses for samples received 02/25/08 10:38 with the Chain of Custody document. The samples were received in good condition. The samples were received at 3.7 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Reviewed by:

Kim G Tu

Project Manager



Page 1 of 6



Weck Laboratories, Inc. 14859 E. Clark Ave. Industry, CA 91745

Phone 626.336.2139 Fax 626.336.2634

TestAmerica, Inc. - Irvine 17461 Derian Ave, Suite 100 Irvine CA, 92614 Report ID: 8022513 Project ID: IRB2342 Date Received: 02/25/08 10:38 Date Reported: 02/28/08 07:51

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Sampled by:	Sample Comments	Laboratory	Matrix	Date Sampled
IRB2342-01	Client		8022513-01	Water	02/22/08 11:45



Weck Laboratories, Inc. 14859 E. Clark Ave. Industry, CA 91745

Phone 626.336.2139 Fax 626.336.2634

TestAmerica, Inc. - Irvine 17461 Derian Ave, Suite 100 Irvine CA, 92614 Report ID: 8022513 Project ID: IRB2342 Date Received: 02/25/08 10:38 Date Reported: 02/28/08 07:51

IRB2342-01 8022513-01 (Water)

Date Sampled: 02/22/08 11:45

Metals by EPA 200 Series Methods

Analyte	Result	MDL	Units	Reporting Limit	Dilution Factor	Method	Batch Number	Date Prepared	Date Analyzed	Analyst	Data Qualifiers
Mercury, Dissolved	ND	0.050	ug/l	0.20	1	EPA 245.1	W8B0982	02/26/08	02/27/08	jlp	
Mercury, Total	ND	0.050	ug/l	0.20	1	EPA 245.1	W8B0982	02/26/08	02/27/08	jlp	



Weck Laboratories, Inc. 14859 E. Clark Ave. Industry, CA 91745

Phone 626.336.2139 Fax 626.336.2634

TestAmerica, Inc. - Irvine 17461 Derian Ave, Suite 100 Irvine CA, 92614 Report ID: 8022513 Project ID: IRB2342 Date Received: 02/25/08 10:38 Date Reported: 02/28/08 07:51

QUALITY CONTROL SECTION



Weck Laboratories, Inc. 14859 E. Clark Ave. Industry, CA 91745

Phone 626.336.2139 Fax 626.336.2634

TestAmerica, Inc. - Irvine 17461 Derian Ave, Suite 100 Irvine CA, 92614 Report ID: 8022513 Project ID: IRB2342 Date Received: 02/25/08 10:38 Date Reported: 02/28/08 07:51

Metals by EPA 200 Series Methods - Quality Control

%REC

		Reporting		Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch W8B0982 - EPA 245.1										
Blank (W8B0982-BLK1)				Analyzed	02/27/08					
Mercury, Dissolved	ND	0.20	ug/l							
Mercury, Total	ND	0.20	ug/l							
LCS (W8B0982-BS1)				Analyzed	02/27/08					
Mercury, Dissolved	0.920	0.20	ug/l	1.00		92	85-115			
Mercury, Total	0.920	0.20	ug/l	1.00		92	85-115			
Matrix Spike (W8B0982-MS1)	So	ource: 8022631	-01	Analyzed	02/27/08					
Mercury, Dissolved	1.95	0.40	ug/l	2.00	ND	98	70-130			
Mercury, Total	1.95	0.40	ug/l	2.00	0.0950	93	70-130			
Matrix Spike (W8B0982-MS2)	So	ource: 8022633	-01	Analyzed	02/27/08					
Mercury, Dissolved	1.91	0.40	ug/l	2.00	ND	96	70-130			
Mercury, Total	1.91	0.40	ug/l	2.00	ND	96	70-130			
Matrix Spike Dup (W8B0982-MSD1)	So	ource: 8022631	-01	Analyzed	02/27/08					
Mercury, Dissolved	2.00	0.40	ug/l	2.00	ND	100	70-130	2	20	
Mercury, Total	2.00	0.40	ug/l	2.00	0.0950	95	70-130	2	20	
Matrix Spike Dup (W8B0982-MSD2)	So	ource: 8022633	-01	Analyzed	02/27/08					
Mercury, Dissolved	1.93	0.40	ug/l	2.00	ND	96	70-130	0.9	20	
Mercury, Total	1.93	0.40	ug/l	2.00	ND	96	70-130	0.9	20	



Weck Laboratories, Inc. 14859 E. Clark Ave. Industry, CA 91745

Phone 626.336.2139 Fax 626.336.2634

TestAmerica, Inc. - Irvine 17461 Derian Ave, Suite 100 Irvine CA, 92614 Report ID: 8022513 Project ID: IRB2342

Date Received: 02/25/08 10:38 Date Reported: 02/28/08 07:51

Notes and Definitions

ND NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL)

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

% Rec Percent Recovery

Sub Subcontracted analysis, original report available upon request

MDL Method Detection Limit

MDA Minimum Detectable Activity

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

An Absence of Total Coliform meets the drinking water standards as established by the California Department of Health Services.

The Reporting Limit (RL) is referenced as the Laboratory's Practical Quantitation Limit (PQL) or the Detection Limit for Reporting Purposes (DLR).

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.



March 20, 2008

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

Reference: Test America Project Nos. IRB1995, IRB2337, IRB2341, IRB2342, IRB2399

IRB2400, IRB2401, IRB2403

Eberline Services NELAP Cert #01120CA

Eberline Services Reports R802140-8609, R802169-8610, R802170-8611

R802171-8612, R802172-8613, R802173-8614

R802174-8615, R802175-8616

Dear Mr. Doak:

Attached are data reports for eight water samples. The samples were received at Eberline Services on February 22, 26, 2008 under eight separate Test America subcontract orders. The samples were analyzed according to the accompanying Test America Subcontract Order Forms, the requested analyses were: gross alpha/gross beta (EPA 900.0), tritium (H-3, EPA906.0), Sr-90 (EPA905.0), Ra-226 (EPA903.1), Ra-228 (EPA 904.0), total uranium (ASTM D-5174), and gamma spectroscopy (EPA901.1, K-40 and Cs-137 only). The parenthetical G after a nuclide indicates that the result was obtained by gamma spectroscopy; a "U" in the results column indicates that the nuclide was not detected greater than the indicated minimum detectable activity (MDA). The samples were not filtered prior to analysis. The samples were analyzed in batches with common QC samples. Batch quality control samples consisted of LCS's, blank analyses, duplicate analyses, and matrix spike analyses (gross alpha/gross beta, H-3, Ra-226, Total-U only). All samples were batched with QC samples 8609-002, 003, 004, and 005 for all analyses. All QC sample results were within the limits defined in Eberline Services Quality Control Procedures Manual.

Please call me if you have any questions concerning this report.

Regards,

Melissa Mannion

Senior Program Manager

melesso Mamm

MCM/njv

Enclosure: Reports

Analytical Services
2030 Wright Avenue
P.O. Box 4040
Richmond, California 94804-0040
(510) 235-2633 Fax (510) 235-0438
Toll Free (800) 841-5487
www.eberlineservices.com
NPDES - 1684

Eberline Services

ANALYSIS RESULTS

 SDG
 8612
 Client
 TA IRVINE

 Work Order
 R802171-01
 Contract
 PROJECT# IRB2342

 Received Date
 02/26/08
 Matrix
 WATER

Client	Lab					
Sample ID	Sample ID	Collected Analyzed	<u>Nuclide</u>	Results ± 20	<u>Units</u>	MDA
IRB2342-01	8612-001	02/22/08 03/15/08	GrossAlpha	0.037 ± 1.6	pCi/L	2.8
		03/15/08	Gross Beta	5.00 ± 1.1	pCi/L	1.6
		03/10/08	Ra-228	-0.008 ± 0.24	pCi/L	0.57
		03/11/08	K-40 (G)	U	pCi/L	26
		03/11/08	Cs-137 (G)	U	pCi/L	1.0
		03/14/08	H-3	-73.1 ± 85	pCi/L	150
		03/14/08	Ra-226	0.041 ± 0.47	pCi/L	0.84
		03/10/08	Sr-90	0.159 ± 0.41	pCi/L	0.90
		03/05/08	Total U	0.264 ± 0.031	pCi/L	0.023

Certified by West Page 1

Eberline Services

QC RESULTS

SDG <u>8612</u>
Work Order <u>R802171-01</u>

Received Date 02/26/08

Client TA IRVINE

Contract PROJECT# IRB2342

Matrix <u>WATER</u>

Lab						
Sample ID	Nuclide	Results	<u>Units</u>	Amount Added	MDA	<u>Evaluation</u>
LCS						
8609~002	GrossAlpha	12.8 ± 0.90	pCi/Smpl	10.2	0.25	125% recovery
	Gross Beta	8.65 ± 0.36	pCi/Smpl	9.37	0.27	92% recovery
	Ra-228	9.55 ± 0.58	pCi/Smpl	8.63	0.79	111% recovery
	Co-60 (G)	216 ± 6.8	pCi/Smpl	223	3.1	97% recovery
	Cs-137 (G)	247 ± 6.5	pCi/Smpl	235	4.3	105% recovery
	Am-241 (G)	208 ± 15	pCi/Smpl	254	17	82% recovery
	H-3	222 ± 14	pCi/Smpl	239	15	93% recovery
	Ra-226	4.52 ± 0.24	pCi/Smpl	4.46	0.081	101% recovery
	Sr-90	10.4 ± 0.75	pCi/Smpl	9.38	0.30	111% recovery
	Total U	1.10 ± 0.13	pCi/Smpl	1.13	0.005	97% recovery
BLANK						
8609-003	GrossAlpha	0 ± 0.15	pCi/Smpl	NA	0.28	<mda< td=""></mda<>
	Gross Beta	-0.185 ± 0.27	pCi/Smpl	NA	0.44	<mda< td=""></mda<>
	Ra-228	-0.178 ± 0.26	pCi/Smpl	NA	0.76	<mda< td=""></mda<>
	K-40 (G)	U	pCi/Smpl	NA	140	<mda< td=""></mda<>
	Cs-137 (G)	U	pCi/Smpl	NA	5.3	<mda< td=""></mda<>
	H-3	-3.37 ± 8.5	pCi/Smpl	NA	14	<mda< td=""></mda<>
	Ra-226	-0.003 ± 0.035	pCi/Smpl	NA	0.071	<mda< td=""></mda<>
	Sr-90	-0.157 ± 0.21	pCi/Smpl	NA	0.57	<mda< td=""></mda<>
	Total U	0.00E 00 ± 2.0E-04	pCi/Smpl	NA	4.6E-04	<mda< td=""></mda<>
			_			

	DUPLICATES				ORIGINALS			
								3σ
Sample ID	Nuclide	Results ± 20	MDA	Sample ID	Results ± 20	MDA	RPD (rot) Eval
8609-004	GrossAlpha	1.98 ± 1.7	2.4	8609-001	3.00 ± 2.0	2.8	41	164 satis.
	Gross Beta	4.45 ± 1.4	2.0		2.91 ± 2.0	3.3	42	108 satis.
	K-40 (G)	U	20		U	39	-	0 satis.
	Cs-137 (G)	U	1.1		U	1.7	-	0 satis.
	H-3	-43.9 ± 86	150		-40.9 ± 84	140		0 satis.
	Ra-226	0.125 ± 0.40	0.74		-0.003 ± 0.41	0.79	-	0 satis.
	Sr-90	0.093 ± 0.38	0.86		0.137 ± 0.49	1.1	~	0 satis.
	Total U	1.19 ± 0.13	0.023		1.30 ± 0.15	0.023	9	31 satis.

Certified by no

Report Date <u>03/20/08</u>

Page 2

Eberline Services

QC RESULTS

SDG <u>8612</u>
Work Order <u>R802171-01</u>

Received Date 02/26/08

Client TA IRVINE
Contract PROJECT# IRB2342

Matrix WATER

ORIGINAL SAMPLE SPIKED SAMPLE Added %Recv Sample ID Nuclide Results $\pm 2\sigma$ MDA Sample ID Results $\pm 2\sigma$ MDA 8609-001 3.00 ± 2.0 2.8 164 124 8609-005 GrossAlpha 207 ± 11 2.6 Gross Beta 148 ± 4.0 2.4 2.91 ± 2.0 3.3 144 101 -40.9 ± 84 140 16000 93 14800 ± 280 H-3 150 -0.003 ± 0.41 0.79 112 101 113 ± 4.4 0.81 Ra-226 1.30 ± 0.15 0.023 113 99 Total U 113 ± 14 2.3

SUBCONTRACT ORDER

TestAmerica Irvine IRB2342

8612

SENDING LABORATORY:

TestAmerica Irvine

17461 Derian Avenue. Suite 100

Irvine, CA 92614 Phone: (949) 261-1022 Fax: (949) 260-3297

Project Manager: Joseph Doak

RECEIVING LABORATORY:

Eberline Services
2030 Wright Avenue

Richmond, CA 94804 Phone :(510) 235-2633 Fax: (510) 235-0438

Project Location: Colifornia

Project Location: California

Receipt Temperature: °C Ice: Y / N

Analysis	Units	Due	Expires	Comments
Sample ID: IRB2342-01	Water		Sampled: 02/22/08 11:45	ph=7.0. temp=54.1
Gamma Spec-O	mg/kg	03/04/08	02/21/09 11:45	Out to Eberline, K-40 and CS-137 only
Gross Alpha-O	pCi/L	03/04/08	08/20/08 11:45	Out to Eberline
Gross Beta-O	pCi/L	03/04/08	08/20/08 11:45	Out to eberline
Level 4 Data Package - Out	N/A	03/04/08	03/21/08 11:45	
Radium, Combined-O	pCi/L	03/04/08	02/21/09 11:45	Out to Eberline
Strontium 90-O	pCi/L	03/04/08	02/21/09 11:45	Out to Eberline
Tritium-O	pCi/L	03/04/08	02/21/09 11:45	Out to Eberline
Uranium, Combined-O	pCi/L	03/04/08	02/21/09 11:45	Out to Eberline
Containers Supplied:	1 (500 4	(Amber)		

Released By

Released By

FED EX

Received By

keleuh

Date/Time

2/26/08

Page 1 of 1

NPDES - 1688



RICHMOND, CA LABORATORY

SAMPLE RECEIPT CHECKLIST

Client: <u>1</u>	TEST	AMERIC	74 8 10:00coc N	City <u> RV/A</u>	Æ	State	e CA	
Date/Tin	ne rece	ived <u>2/26/0</u>	8 10:0000 N	10. <u>IRB</u> 2	342			·
Contain	er I.D. I	NO. MWH	A Requested	d TAT (Days)	STANDP.O.R	eceived Yes	[] No[]	
				INSPEC	TION	,		
			ping container i			Yes [🗸]	, ,	
			ping container o	_	l?	Yes [🗸]	_	
			iple containers i iple containers c		10	Yes[]	No[] N/A No[] N/A	1.
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6.	Numbe	r of samples in	shipping contai	ner: l	Sample Mat	rix WATT	EX	4 0
7.	Numbe	r of containers	shipping contai	2	(Or see CoC)		
		es are in correc			Yes $[V]$			
9.	Paperw	ork agrees with	h samples?		Yes [🗸]	No []		
10.	Sample	es have: Tap	e [] Hazard	labels [] R	ad labels []	Appropriate sar	mple labels $[u]$	
							Missing []
			ved [] Not p	reserved [\checkmark]	pH Pr	eservative		
13.	Describ	e any anomali	es:					
-								NAM
-	,		*****					
14.	Mac D	M potified of	any anomalies?	Vasil	1 No.1	1 D-4-		
			any anomalies?		[] No[[26/08 =) Date)	
15.	mspeci	ed by	Tr.	Date: <u></u>	72-97-4 Time	e: <u>75 70</u>		
Custor Sample		Beta/Gamma cpm	Ion Chamber mR/hr	Wipe	Customer Sample No.	Beta/Gamma cpm	lon Chamber mR/hr	wipe
1RB23	342	460		and an area				
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				pp_00000000000000000000000000000000000	Calibration date			
lpha Mete	er Ser. 1	No	10010127		Calibration date			West recovery a series
Beta/Gamn	na Mete	er Ser. No	100482		Calibration date	9 ma	4 ZOO7	A CONTRACT OF A

Form SCP-02, 07-30-07

"over 55 years of quality nuclear services"



March 14, 2008

Vista Project I.D.: 30308

Mr. Joseph Doak Test America-Irvine, CA 17461 Derian Avenue Suite 100 Irvine, CA 92614

Dear Mr. Doak,

Enclosed are the results for the one aqueous sample received at Vista Analytical Laboratory on February 26, 2008 under your Project Name "IRB2342". This sample was extracted and analyzed using EPA Method 1613 for tetra-through-octa chlorinated dioxins and furans. A standard turnaround time was provided for this work.

The following report consists of a Sample Inventory (Section I), Analytical Results (Section II) and the Appendix, which contains the chain-of-custody, a list of data qualifiers and abbreviations, Vista's current certifications, and copies of the raw data (if requested).

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at mmaier@vista-analytical.com. Thank you for choosing Vista as part of your analytical support team.

Sincerely,

Martha M. Maier

Laboratory Director



Vista Analytical Laboratory certifies that the report herein meets all the requirements set forth by NELAC for those applicable test methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Vista Analytical Laboratory.



Section I: Sample Inventory Report Date Received: 2/26/2008

<u>Vista Lab. ID</u> <u>Client Sample ID</u>

30308-001 IRB2342-01

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SECTION II

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Method Blank	k					1				EPA Method 1613
Matrix:	Aqueous		QC Batch No.:		9997	Lab	Sample:	0-MB001		
Sample Size:	1.00 L		Date Extracted:		9-Mar-08	Date	Analyzed DB-5:	10-Mar-08	Date An	alyzed DB-225: NA
	1.00 2				, 1. 1	2	71111117200 22 01	10 1/141 00	2 400 1 111	,200 2 2 22 0. 14.1
Analyte	Conc.	(ug/L)	DL a	EMPC b	Qualifiers		Labeled Standa	rd	%R	LCL-UCL ^d Qualifiers
2,3,7,8-TCDD		ND	0.000000937			<u>IS</u>	13C-2,3,7,8-TCI)D	87.0	25 - 164
1,2,3,7,8-PeCD	D	ND	0.00000106				13C-1,2,3,7,8-Pe	CDD	77.8	25 - 181
1,2,3,4,7,8-HxC	CDD	ND	0.00000142				13C-1,2,3,4,7,8-1	HxCDD	82.4	32 - 141
1,2,3,6,7,8-HxC	CDD	ND	0.00000142				13C-1,2,3,6,7,8-1	HxCDD	88.5	28 - 130
1,2,3,7,8,9-HxC	CDD	ND	0.00000136				13C-1,2,3,4,6,7,8	3-HpCDD	81.0	23 - 140
1,2,3,4,6,7,8-H ₁	pCDD	ND	0.00000250				13C-OCDD		72.3	17 - 157
OCDD		ND	0.00000890				13C-2,3,7,8-TCI)F	85.2	24 - 169
2,3,7,8-TCDF		ND	0.000000547				13C-1,2,3,7,8-Pe	CDF	73.1	24 - 185
1,2,3,7,8-PeCD	F	ND	0.000000924				13C-2,3,4,7,8-Pe	CDF	73.2	21 - 178
2,3,4,7,8-PeCD	F	ND	0.000000985				13C-1,2,3,4,7,8-1	HxCDF	82.4	26 - 152
1,2,3,4,7,8-HxC	CDF	ND	0.000000699				13C-1,2,3,6,7,8-1	HxCDF	94.2	26 - 123
1,2,3,6,7,8-HxC	CDF	ND	0.000000669				13C-2,3,4,6,7,8-1	HxCDF	89.8	28 - 136
2,3,4,6,7,8-HxC	CDF	ND	0.000000795				13C-1,2,3,7,8,9-1	HxCDF	83.4	29 - 147
1,2,3,7,8,9-HxC	CDF	ND	0.00000107				13C-1,2,3,4,6,7,8	8-HpCDF	79.0	28 - 143
1,2,3,4,6,7,8-H	pCDF	ND	0.000000964				13C-1,2,3,4,7,8,9	-HpCDF	81.7	26 - 138
1,2,3,4,7,8,9-H	pCDF	ND	0.00000105				13C-OCDF		72.4	17 - 157
OCDF		ND	0.00000275			CRS	S 37Cl-2,3,7,8-TC	DD	113	35 - 197
Totals						Foot	tnotes			
Total TCDD		ND	0.000000937			a. Sar	mple specific estimated of	letection limit.		
Total PeCDD		ND	0.00000167			b. Est	imated maximum possib	ole concentration.		
Total HxCDD		ND	0.00000235			c. Me	thod detection limit.			
Total HpCDD		ND	0.00000320			d. Lo	wer control limit - upper	control limit.		
Total TCDF		ND	0.000000547							
Total PeCDF		ND	0.000000953							
Total HxCDF		ND	0.000000792							
Total HpCDF		ND	0.00000100							

Analyst: MAS Approved By: Martha M. Maier 14-Mar-2008 13:03

OPR Results						EP.	A Method 1	1613
Matrix: Sample Size:	Aqueous 1.00 L		QC Batch No.: Date Extracted:	9997 9-Mar-08	Lab Sample: 0-OPR001 Date Analyzed DB-5: 10-Mar-08	Date Analy	zed DB-225:	NA
Analyte		Spike Conc.	Conc. (ng/mL)	OPR Limits	Labeled Standard	%R	LCL-UCL	Qualifier
2,3,7,8-TCDE)	10.0	10.5	6.7 - 15.8	<u>IS</u> 13C-2,3,7,8-TCDD	84.4	25 - 164	
1,2,3,7,8-PeC	DD	50.0	50.9	35 - 71	13C-1,2,3,7,8-PeCDD	78.2	25 - 181	
1,2,3,4,7,8-Hx	xCDD	50.0	49.8	35 - 82	13C-1,2,3,4,7,8-HxCDD	77.7	32 - 141	
1,2,3,6,7,8-H2	xCDD	50.0	50.3	38 - 67	13C-1,2,3,6,7,8-HxCDD	80.5	28 - 130	
1,2,3,7,8,9-Hz	xCDD	50.0	50.3	32 - 81	13C-1,2,3,4,6,7,8-HpCDD	77.6	23 - 140	
1,2,3,4,6,7,8-1	HpCDD	50.0	51.0	35 - 70	13C-OCDD	67.4	17 - 157	
OCDD		100	102	78 - 144	13C-2,3,7,8-TCDF	82.6	24 - 169	
2,3,7,8-TCDF	7	10.0	9.70	7.5 - 15.8	13C-1,2,3,7,8-PeCDF	72.2	24 - 185	
1,2,3,7,8-PeC	DF	50.0	51.5	40 - 67	13C-2,3,4,7,8-PeCDF	73.8	21 - 178	
2,3,4,7,8-PeC	DF	50.0	51.5	34 - 80	13C-1,2,3,4,7,8-HxCDF	78.8	26 - 152	
1,2,3,4,7,8-Hz	xCDF	50.0	52.0	36 - 67	13C-1,2,3,6,7,8-HxCDF	82.8	26 - 123	
1,2,3,6,7,8-Hx	xCDF	50.0	52.6	42 - 65	13C-2,3,4,6,7,8-HxCDF	78.7	28 - 136	
2,3,4,6,7,8-Hx	xCDF	50.0	53.6	35 - 78	13C-1,2,3,7,8,9-HxCDF	78.2	29 - 147	
1,2,3,7,8,9-Hx	xCDF	50.0	51.9	39 - 65	13C-1,2,3,4,6,7,8-HpCDF	74.8	28 - 143	
1,2,3,4,6,7,8-1	HpCDF	50.0	52.4	41 - 61	13C-1,2,3,4,7,8,9-HpCDF	75.3	26 - 138	
1,2,3,4,7,8,9-1	HpCDF	50.0	52.1	39 - 69	13C-OCDF	67.4	17 - 157	
OCDF		100	103	63 - 170	<u>CRS</u> 37Cl-2,3,7,8-TCDD	107	35 - 197	

Analyst: MAS Approved By: Martha M. Maier 14-Mar-2008 13:03

Sample ID: IRB2	2342-01								EPA N	Method 1613
Client Data			Sample Data		Lab	oratory Data				
	America-Irvine, CA		Matrix:	Aqueous	Lab	Sample:	30308-001	Date Re	ceived:	26-Feb-08
	2342 Feb-08		Sample Size:	1.03 L	QC I	Batch No.:	9997	Date Ex	tracted:	9-Mar-08
Time Collected: 22-1					Date	Analyzed DB-5:	10-Mar-08	Date An	alyzed DB-225:	NA
Analyte	Conc. (ug/L)	DL a	EMPC ^b	Qualifiers		Labeled Standa	ırd	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	ND	0.000000	579		<u>IS</u>	13C-2,3,7,8-TCD)D	71.8	25 - 164	
1,2,3,7,8-PeCDD	ND	0.000001	01			13C-1,2,3,7,8-Pe	CDD	71.5	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.000001	91			13C-1,2,3,4,7,8-I	HxCDD	69.0	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.000001	94			13C-1,2,3,6,7,8-I	HxCDD	73.1	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.000001	85			13C-1,2,3,4,6,7,8	3-HpCDD	72.0	23 - 140	
1,2,3,4,6,7,8-HpCDD	0.00000177			J		13C-OCDD		61.8	17 - 157	
OCDD	0.0000184			J		13C-2,3,7,8-TCD)F	75.8	24 - 169	
2,3,7,8-TCDF	ND	0.000000	525			13C-1,2,3,7,8-Pe	CDF	63.8	24 - 185	
1,2,3,7,8-PeCDF	ND	0.000001	03			13C-2,3,4,7,8-Pe	CDF	65.1	21 - 178	
2,3,4,7,8-PeCDF	ND	0.000001	05			13C-1,2,3,4,7,8-I	HxCDF	66.5	26 - 152	
1,2,3,4,7,8-HxCDF	ND	0.000000	606			13C-1,2,3,6,7,8-I	HxCDF	73.0	26 - 123	
1,2,3,6,7,8-HxCDF	ND	0.000000	611			13C-2,3,4,6,7,8-I	HxCDF	71.5	28 - 136	
2,3,4,6,7,8-HxCDF	ND	0.000000	705			13C-1,2,3,7,8,9-I	HxCDF	70.9	29 - 147	
1,2,3,7,8,9-HxCDF	ND	0.000000	917			13C-1,2,3,4,6,7,8	3-HpCDF	66.2	28 - 143	
1,2,3,4,6,7,8-HpCDF	ND	0.000001	18			13C-1,2,3,4,7,8,9	-HpCDF	67.3	26 - 138	
1,2,3,4,7,8,9-HpCDF	ND	0.000000	685			13C-OCDF		62.8	17 - 157	
OCDF	ND	0.000003	17		CRS	37Cl-2,3,7,8-TCl	DD	115	35 - 197	
Totals					Foo	tnotes				
Total TCDD	ND	0.000001	71		a. Sa	mple specific estimated	detection limit.			
Total PeCDD	ND	0.000002	28		b. Es	timated maximum poss	ible concentration.			
Total HxCDD	ND	0.000001	90		c. M	ethod detection limit.				
Total HpCDD	0.00000448				d. Lo	ower control limit - upp	er control limit.			
Total TCDF	ND	0.000000	525							
Total PeCDF	ND	0.000001	04							
Total HxCDF	ND	0.000000	701							
Total HpCDF	ND	0.000001	24							

Analyst: MAS Approved By: Martha M. Maier 14-Mar-2008 13:03

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APPENDIX

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DATA QUALIFIERS & ABBREVIATIONS

B This compound was also detected in the method blank.

D Dilution

E The amount detected is above the High Calibration Limit.

P The amount reported is the maximum possible concentration due to possible

chlorinated diphenylether interference.

H The signal-to-noise ratio is greater than 10:1.

I Chemical Interference

J The amount detected is below the Low Calibration Limit.

* See Cover Letter

Conc. Concentration

DL Sample-specific estimated detection limit

MDL The minimum concentration of a substance that can be measured and

reported with 99% confidence that the analyte concentration is greater

than zero in the matrix tested.

EMPC Estimated Maximum Possible Concentration

NA Not applicable

RL Reporting Limit – concentrations that correspond to low calibration point

ND Not Detected

TEQ Toxic Equivalency

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

CERTIFICATIONS

Accrediting Authority	Certificate Number
State of Alaska, DEC	CA413-02
State of Arizona	AZ0639
State of Arkansas, DEQ	05-013-0
State of Arkansas, DOH	Reciprocity through CA
State of California – NELAP Primary AA	02102CA
State of Colorado	
State of Connecticut	PH-0182
State of Florida, DEP	E87777
Commonwealth of Kentucky	90063
State of Louisiana, Health and Hospitals	LA050001
State of Louisiana, DEQ	01977
State of Maine	CA0413
State of Michigan	81178087
State of Mississippi	Reciprocity through CA
Naval Facilities Engineering Service Center	
State of Nevada	CA413
State of New Jersey	CA003
State of New Mexico	Reciprocity through CA
State of New York, DOH	11411
State of North Carolina	06700
State of North Dakota, DOH	R-078
State of Oklahoma	D9919
State of Oregon	CA200001-002
State of Pennsylvania	68-00490
State of South Carolina	87002001
State of Tennessee	02996
State of Texas	TX247-2005A
U.S. Army Corps of Engineers	
State of Utah	9169330940
Commonwealth of Virginia	00013
State of Washington	C1285
State of Wisconsin	998036160
State of Wyoming	8TMS-Q

SUBCONTRACT ORDER

TestAmerica Irvine

IRB2342

30308 1.30

 $^{\circ}C$

SENDING LABORATORY:

TestAmerica Irvine

17461 Derian Avenue. Suite 100

Irvine, CA 92614 Phone: (949) 261-1022 Fax: (949) 260-3297

Project Manager: Joseph Doak

RECEIVING LABORATORY:

Vista Analytical Laboratory-SUB

1104 Windfield Way

El Dorado Hills, CA 95762

Phone :(916) 673-1520 Fax: (916) 673-0106

Project Location: California

Receipt Temperature:

Ice: Y / N

Analysis	Units	Due	Expires	Comments
Sample ID: IRB2342-01	Water		Sampled: 02/22/08	11:45 ph=7.0. temp=54.1
1613-Dioxin-HR-Alta	ug/l	03/04/08	02/29/08 11:45	J flags,17 congeners,no TEQ,ug/L,sub=Vista
EDD + Level 4	N/A	03/04/08	03/21/08 11:45	Excel EDD email to pm,Include Std logs for Lvl IV
Containers Supplied:				
1 L Amber (C)	1 L Amber (D)			

Released By Date/Time
Feclex 2/26/08

Date/Time

Min Bul

2/27/08 0929

Date/Time

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Released By Project 30308

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SAMPLE LOG-IN CHECKLIST



30308 Vista Project #: Location: WR-Date/Time Initials: Samples Arrival: 0910 2/26/08 Shelf/Rack: Date/Time Initials: Location: Logged In: 2/27/06 0908 Shelf/Rack: Hand Delivered By: FedEx **UPS** DHL Cal Other Delivered Preservation: Ice Blue Ice Dry Ice None Temp °C Time: Thermometer ID: IR-1

The second secon	YES	NO	NA					
Adequate Sample Volume Received?								
Holding Time Acceptable?								
Shipping Container(s) Intact?								
Shipping Custody Seals Intact?								
Shipping Documentation Present?								
Airbill Trk# 7	1							
Sample Container Intact?								• 1
Sample Custody Seals Intact?								
Chain of Custody / Sample Documentation Present?								*
COC Anomaly/Sample Acceptance Form completed?								
If Chlorinated or Drinking Water			\overline{V}					
Na ₂ S ₂ O ₃ Preservation Document	coc		Sample Container			None)	
Shipping Container	Vista	Client	R	etain	Re	turn	Disp	ose

Comments: