APPENDIX G

Section 90

Outfall 013, February 24, 2008 Test America Analytical Laboratory Report

THE LEADER IN ENVIRONMENTAL TESTING

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

LABORATORY REPORT

Prepared For: MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project: Annual Outfall 013

Sampled: 02/24/08 Received: 02/25/08 Issued: 03/17/08 16:26

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(s) of Custody, 2 pages, are

included and are 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

IRB2402-01 IRB2402-02 **CLIENT ID** Outfall 013 Trip Blanks MATRIX Water Water

Reviewed By:

Joseph Dock

TestAmerica Irvine Joseph Doak Project Manager



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 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB2402-01 (Outfall 013 - Wa	iter)								
Reporting Units: mg/l DRO (C13-C22)	EPA 8015B	8B27068	0.026	0.096	ND	0.962	02/27/08	02/27/08	
Surrogate: n-Octacosane (40-125%)					74 %				

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

VOLATILE FUEL HYDROCARBONS (EPA 5030/8015M)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB2402-01 (Outfall 013 - W	ater) - cont.								
Reporting Units: mg/l GRO (C4 - C12) Surrogate: 4-BFB (FID) (65-140%)	EPA 8015B	8B28031	0.030	0.050	ND 72 %	1	02/28/08	02/28/08	

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

VOLATILE ORGANICS by GCMS SIM											
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers		
Sample ID: IRB2402-01 (Outfall 013 -	Water) - cont.										
Reporting Units: ug/l											
1,4-Dioxane	EPA 8260B-SIM	8B27016	1.0	2.0	ND	1	02/27/08	02/27/08			
Surrogate: Dibromofluoromethane (80-	120%)				89 %						

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Project ID: Annual Outfall 013

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

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

PURGEABLES BY GC/MS (EPA 624) MDL Reporting Sample Dilution Date Data Date Method Limit **Oualifiers** Analyte Batch Limit Result Factor Extracted Analyzed Sample ID: IRB2402-01 (Outfall 013 - Water) - cont. **Reporting Units: ug/l** 8B28024 0.30 0.50 ND 02/28/08 02/29/08 1,1,1-Trichloroethane EPA 624 1 8B28024 0.40 ND 02/28/08 02/29/08 1,2,3-Trichloropropane EPA 624 1.0 1 ND 02/28/08 02/29/08 1,1,2,2-Tetrachloroethane EPA 624 8B28024 0.24 0.50 1 ND 1,2-Dibromoethane (EDB) EPA 624 8B28024 0.40 0.50 1 02/28/08 02/29/08 ND 02/28/08 02/29/08 1,1,2-Trichloroethane EPA 624 8B28024 0.30 0.50 1 Di-isopropyl Ether (DIPE) EPA 624 8B28024 0.25 0.50 ND 1 02/28/08 02/29/08 1,1-Dichloroethane EPA 624 8B28024 0.27 0.50 ND 1 02/28/08 02/29/08 8B28024 0.32 0.50 ND 1 02/29/08 Methyl-tert-butyl Ether (MTBE) EPA 624 02/28/08 1,1-Dichloroethene EPA 624 8B28024 0.42 0.50 ND 1 02/28/08 02/29/08 tert-Butanol (TBA) EPA 624 8B28024 4.9 10 ND 1 02/28/08 02/29/08 1.2-Dichloroethane 8B28024 0.28 0.50 ND 1 02/28/08 02/29/08 EPA 624 8B28024 ND 02/28/08 02/29/08 1,2-Dichlorobenzene EPA 624 0.32 0.50 1 8B28024 0.35 ND 02/28/08 02/29/08 1,2-Dichloropropane EPA 624 0.50 1 ND 02/29/08 1,3-Dichlorobenzene EPA 624 8B28024 0.35 0.50 1 02/28/08 1,4-Dichlorobenzene EPA 624 8B28024 0.37 0.50 ND 1 02/28/08 02/29/08 0.28 ND 1 Benzene EPA 624 8B28024 0.50 02/28/08 02/29/08 Bromodichloromethane EPA 624 8B28024 0.30 0.50 ND 1 02/28/08 02/29/08 Bromoform EPA 624 8B28024 0.40 0.50 ND 1 02/28/08 02/29/08 8B28024 0.42 ND 02/28/08 02/29/08 Bromomethane EPA 624 1.0 1 Carbon tetrachloride EPA 624 8B28024 0.28 0.50 ND 1 02/28/08 02/29/08 0.36 ND 02/28/08 02/29/08 Chlorobenzene EPA 624 8B28024 0.50 1 Chloroethane 8B28024 0.40 ND 1 02/28/08 02/29/08 EPA 624 1.0 Chloroform 0.33 0.50 ND 1 EPA 624 8B28024 02/28/08 02/29/08 8B28024 0.40 ND 02/28/08 02/29/08 Chloromethane EPA 624 0.50 1 cis-1,3-Dichloropropene EPA 624 8B28024 0.22 0.50 ND 1 02/28/08 02/29/08 ND Dibromochloromethane EPA 624 8B28024 0.28 0.50 1 02/28/08 02/29/08 ND 1 02/28/08 Ethylbenzene EPA 624 8B28024 0.25 0.50 02/29/08 Methylene chloride EPA 624 8B28024 0.95 1.0 3.3 1 02/28/08 02/29/08 Tetrachloroethene EPA 624 8B28024 0.32 0.50 ND 1 02/28/08 02/29/08 Toluene EPA 624 8B28024 0.36 0.50 ND 1 02/28/08 02/29/08 trans-1,2-Dichloroethene EPA 624 8B28024 0.27 0.50 ND 1 02/28/08 02/29/08 02/28/08 0.32 ND trans-1,3-Dichloropropene EPA 624 8B28024 0.50 1 02/29/08 Trichloroethene 8B28024 0.26 ND 1 02/28/08 02/29/08 EPA 624 0.50 Trichlorofluoromethane EPA 624 8B28024 0.34 0.50 ND 1 02/28/08 02/29/08 Trichlorotrifluoroethane (Freon 113) EPA 624 8B28024 0.50 5.0 ND 1 02/28/08 02/29/08 ND 02/29/08 Vinyl chloride EPA 624 8B28024 0.30 0.50 1 02/28/08 Xylenes, Total EPA 624 8B28024 0.90 1.5 ND 1 02/28/08 02/29/08 Surrogate: Dibromofluoromethane (80-120%) 99% Surrogate: Toluene-d8 (80-120%) 101 % 88 %

Surrogate: 4-Bromofluorobenzene (80-120%)

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Project ID: Annual Outfall 013

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

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

PURGEABLES BY GC/MS (EPA 624)									
			MDL	Reporting	Sample	Dilution	Date	Date	Data
Analyte	Method	Batch	Limit	Limit	Result	Factor	Extracted	Analyzed	Qualifiers
Sample ID: IRB2402-02 (Trip Blanks - Wat	er)								
Reporting Units: ug/l									
1,1,1-Trichloroethane	EPA 624	8B28024	0.30	0.50	ND	1	02/28/08	02/29/08	
1,2,3-Trichloropropane	EPA 624	8B28024	0.40	1.0	ND	1	02/28/08	02/29/08	
1,1,2,2-Tetrachloroethane	EPA 624	8B28024	0.24	0.50	ND	1	02/28/08	02/29/08	
1,2-Dibromoethane (EDB)	EPA 624	8B28024	0.40	0.50	ND	1	02/28/08	02/29/08	
1,1,2-Trichloroethane	EPA 624	8B28024	0.30	0.50	ND	1	02/28/08	02/29/08	
Di-isopropyl Ether (DIPE)	EPA 624	8B28024	0.25	0.50	ND	1	02/28/08	02/29/08	
1,1-Dichloroethane	EPA 624	8B28024	0.27	0.50	ND	1	02/28/08	02/29/08	
Methyl-tert-butyl Ether (MTBE)	EPA 624	8B28024	0.32	0.50	ND	1	02/28/08	02/29/08	
1,1-Dichloroethene	EPA 624	8B28024	0.42	0.50	ND	1	02/28/08	02/29/08	
tert-Butanol (TBA)	EPA 624	8B28024	4.9	10	ND	1	02/28/08	02/29/08	
1,2-Dichloroethane	EPA 624	8B28024	0.28	0.50	ND	1	02/28/08	02/29/08	
1,2-Dichlorobenzene	EPA 624	8B28024	0.32	0.50	ND	1	02/28/08	02/29/08	
1,2-Dichloropropane	EPA 624	8B28024	0.35	0.50	ND	1	02/28/08	02/29/08	
1,3-Dichlorobenzene	EPA 624	8B28024	0.35	0.50	ND	1	02/28/08	02/29/08	
1,4-Dichlorobenzene	EPA 624	8B28024	0.37	0.50	ND	1	02/28/08	02/29/08	
Benzene	EPA 624	8B28024	0.28	0.50	ND	1	02/28/08	02/29/08	
Bromodichloromethane	EPA 624	8B28024	0.30	0.50	ND	1	02/28/08	02/29/08	
Bromoform	EPA 624	8B28024	0.40	0.50	ND	1	02/28/08	02/29/08	
Bromomethane	EPA 624	8B28024	0.42	1.0	ND	1	02/28/08	02/29/08	
Carbon tetrachloride	EPA 624	8B28024	0.28	0.50	ND	1	02/28/08	02/29/08	
Chlorobenzene	EPA 624	8B28024	0.36	0.50	ND	1	02/28/08	02/29/08	
Chloroethane	EPA 624	8B28024	0.40	1.0	ND	1	02/28/08	02/29/08	
Chloroform	EPA 624	8B28024	0.33	0.50	ND	1	02/28/08	02/29/08	
Chloromethane	EPA 624	8B28024	0.40	0.50	ND	1	02/28/08	02/29/08	
cis-1,3-Dichloropropene	EPA 624	8B28024	0.22	0.50	ND	1	02/28/08	02/29/08	
Dibromochloromethane	EPA 624	8B28024	0.28	0.50	ND	1	02/28/08	02/29/08	
Ethylbenzene	EPA 624	8B28024	0.25	0.50	ND	1	02/28/08	02/29/08	
Methylene chloride	EPA 624	8B28024	0.95	1.0	2.5	1	02/28/08	02/29/08	
Tetrachloroethene	EPA 624	8B28024	0.32	0.50	ND	1	02/28/08	02/29/08	
Toluene	EPA 624	8B28024	0.36	0.50	ND	1	02/28/08	02/29/08	
trans-1,2-Dichloroethene	EPA 624	8B28024	0.27	0.50	ND	1	02/28/08	02/29/08	
trans-1,3-Dichloropropene	EPA 624	8B28024	0.32	0.50	ND	1	02/28/08	02/29/08	
Trichloroethene	EPA 624	8B28024	0.26	0.50	ND	1	02/28/08	02/29/08	
Trichlorofluoromethane	EPA 624	8B28024	0.34	0.50	ND	1	02/28/08	02/29/08	
Trichlorotrifluoroethane (Freon 113)	EPA 624	8B28024	0.50	5.0	ND	1	02/28/08	02/29/08	
Vinyl chloride	EPA 624	8B28024	0.30	0.50	ND	1	02/28/08	02/29/08	
Xylenes, Total	EPA 624	8B28024	0.90	1.5	ND	1	02/28/08	02/29/08	
Surrogate: Dibromofluoromethane (80-120%)		0020024	0.70	1.5	97 %	1	02/20/00	52,27,00	
Surrogate: Toluene-d8 (80-120%)	/				89 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					88 %				
Surroguie. 7-Dromojiuorobenzene (00-12070)					00 /0				

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

PURGEABLES-- GC/MS (EPA 624) MDL Reporting Sample Dilution Date Date Data Qualifiers Method Batch Limit Limit Result Factor Extracted Analyte Analyzed Sample ID: IRB2402-01 (Outfall 013 - Water) Reporting Units: ug/l EPA 624 8B26001 4.0 5.0 ND 02/26/08 02/26/08 Acrolein 1 Acrylonitrile EPA 624 8B26001 0.70 2.0 ND 02/26/08 02/26/08 1 5.0 ND 02/26/08 02/26/08 2-Chloroethyl vinyl ether EPA 624 8B26001 1.8 1 Surrogate: Dibromofluoromethane (80-120%) 97% Surrogate: Toluene-d8 (80-120%) 101 % Surrogate: 4-Bromofluorobenzene (80-120%) 88 % Sample ID: IRB2402-02 (Trip Blanks - Water) Reporting Units: ug/l Acrolein EPA 624 8B26001 4.0 5.0 ND 1 02/26/08 02/26/08 Acrylonitrile EPA 624 8B26001 0.70 2.0 ND 02/26/08 02/26/08 1 2-Chloroethyl vinyl ether EPA 624 8B26001 1.8 5.0 ND 1 02/26/08 02/26/08 94 % Surrogate: Dibromofluoromethane (80-120%) Surrogate: Toluene-d8 (80-120%) 101 % Surrogate: 4-Bromofluorobenzene (80-120%) 89 %

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Project ID: Annual Outfall 013

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

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)									
			MDL	Reporting	Sample	Dilution	Date	Date	Data
Analyte	Method	Batch	Limit	Limit	Result	Factor	Extracted	Analyzed	Qualifiers
Sample ID: IRB2402-01 (Outfall 01.	3 - Water)								
Reporting Units: ug/l									
Acenaphthene	EPA 625	8B26045	2.9	9.5	ND	0.952	02/26/08	02/28/08	
Acenaphthylene	EPA 625	8B26045	2.9	9.5	ND	0.952	02/26/08	02/28/08	
Aniline	EPA 625	8B26045	2.4	9.5	ND	0.952	02/26/08	02/28/08	
Anthracene	EPA 625	8B26045	1.9	9.5	ND	0.952	02/26/08	02/28/08	
Benzidine	EPA 625	8B26045	8.1	19	ND	0.952	02/26/08	02/28/08	L6
Benzoic acid	EPA 625	8B26045	9.5	19	ND	0.952	02/26/08	02/28/08	
Benzo(a)anthracene	EPA 625	8B26045	1.9	9.5	ND	0.952	02/26/08	02/28/08	
Benzo(b)fluoranthene	EPA 625	8B26045	1.9	9.5	ND	0.952	02/26/08	02/28/08	
Benzo(k)fluoranthene	EPA 625	8B26045	2.4	9.5	ND	0.952	02/26/08	02/28/08	
Benzo(g,h,i)perylene	EPA 625	8B26045	3.8	9.5	ND	0.952	02/26/08	02/28/08	
Benzo(a)pyrene	EPA 625	8B26045	1.9	9.5	ND	0.952	02/26/08	02/28/08	
Benzyl alcohol	EPA 625	8B26045	2.4	19	ND	0.952	02/26/08	02/28/08	
Bis(2-chloroethoxy)methane	EPA 625	8B26045	2.9	9.5	ND	0.952	02/26/08	02/28/08	
Bis(2-chloroethyl)ether	EPA 625	8B26045	2.9	9.5	ND	0.952	02/26/08	02/28/08	
Bis(2-chloroisopropyl)ether	EPA 625	8B26045	2.4	9.5	ND	0.952	02/26/08	02/28/08	
Bis(2-ethylhexyl)phthalate	EPA 625	8B26045	3.8	48	ND	0.952	02/26/08	02/28/08	
4-Bromophenyl phenyl ether	EPA 625	8B26045	2.9	9.5	ND	0.952	02/26/08	02/28/08	
Butyl benzyl phthalate	EPA 625	8B26045	3.8	19	ND	0.952	02/26/08	02/28/08	
4-Chloroaniline	EPA 625	8B26045	1.9	9.5	ND	0.952	02/26/08	02/28/08	
2-Chloronaphthalene	EPA 625	8B26045	2.9	9.5	ND	0.952	02/26/08	02/28/08	
4-Chloro-3-methylphenol	EPA 625	8B26045	2.4	19	ND	0.952	02/26/08	02/28/08	
2-Chlorophenol	EPA 625	8B26045	2.9	9.5	ND	0.952	02/26/08	02/28/08	
4-Chlorophenyl phenyl ether	EPA 625	8B26045	2.4	9.5	ND	0.952	02/26/08	02/28/08	
Chrysene	EPA 625	8B26045	2.4	9.5	ND	0.952	02/26/08	02/28/08	
Dibenz(a,h)anthracene	EPA 625	8B26045	2.9	19	ND	0.952	02/26/08	02/28/08	
Dibenzofuran	EPA 625	8B26045	3.8	9.5	ND	0.952	02/26/08	02/28/08	
Di-n-butyl phthalate	EPA 625	8B26045	2.9	19	ND	0.952	02/26/08	02/28/08	
1,3-Dichlorobenzene	EPA 625	8B26045	2.9	9.5	ND	0.952	02/26/08	02/28/08	
1,4-Dichlorobenzene	EPA 625	8B26045	2.4	9.5	ND	0.952	02/26/08	02/28/08	
1,2-Dichlorobenzene	EPA 625	8B26045	2.9	9.5	ND	0.952	02/26/08	02/28/08	
3,3-Dichlorobenzidine	EPA 625	8B26045	2.9	19	ND	0.952	02/26/08	02/28/08	
2,4-Dichlorophenol	EPA 625	8B26045	3.3	9.5	ND	0.952	02/26/08	02/28/08	
Diethyl phthalate	EPA 625	8B26045	3.3	9.5	ND	0.952	02/26/08	02/28/08	
2,4-Dimethylphenol	EPA 625	8B26045	3.3	19	ND	0.952	02/26/08	02/28/08	
Dimethyl phthalate	EPA 625	8B26045	1.9	9.5	ND	0.952	02/26/08	02/28/08	
4,6-Dinitro-2-methylphenol	EPA 625	8B26045	3.8	19	ND	0.952	02/26/08	02/28/08	
2,4-Dinitrophenol	EPA 625	8B26045	7.6	19	ND	0.952	02/26/08	02/28/08	
2,4-Dinitrotoluene	EPA 625	8B26045	3.3	9.5	ND	0.952	02/26/08	02/28/08	
2,6-Dinitrotoluene	EPA 625	8B26045	1.9	9.5	ND	0.952	02/26/08	02/28/08	
Di-n-octyl phthalate	EPA 625	8B26045	3.3	19	ND	0.952	02/26/08	02/28/08	
Fluoranthene	EPA 625	8B26045 8B26045	2.9	9.5	ND	0.952	02/26/08	02/28/08	
FILLIAILUIGIIG	EFA 023	0020043	2.9	7.5	IND	0.932	02/20/08	02/20/00	

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Project ID: Annual Outfall 013

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

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

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: IRB2402-01 (Outfall 013 - Wat	er) - cont.								
Reporting Units: ug/l									
Fluorene	EPA 625	8B26045	2.9	9.5	ND	0.952	02/26/08	02/28/08	
Hexachlorobenzene	EPA 625	8B26045	2.9	9.5	ND	0.952	02/26/08	02/28/08	
Hexachlorobutadiene	EPA 625	8B26045	3.8	9.5	ND	0.952	02/26/08	02/28/08	
Hexachlorocyclopentadiene	EPA 625	8B26045	4.8	19	ND	0.952	02/26/08	02/28/08	
Hexachloroethane	EPA 625	8B26045	3.3	9.5	ND	0.952	02/26/08	02/28/08	
Indeno(1,2,3-cd)pyrene	EPA 625	8B26045	3.3	19	ND	0.952	02/26/08	02/28/08	
Isophorone	EPA 625	8B26045	2.4	9.5	ND	0.952	02/26/08	02/28/08	
2-Methylnaphthalene	EPA 625	8B26045	1.9	9.5	ND	0.952	02/26/08	02/28/08	
2-Methylphenol	EPA 625	8B26045	2.9	9.5	ND	0.952	02/26/08	02/28/08	
4-Methylphenol	EPA 625	8B26045	2.9	9.5	ND	0.952	02/26/08	02/28/08	
Naphthalene	EPA 625	8B26045	2.9	9.5	ND	0.952	02/26/08	02/28/08	
2-Nitroaniline	EPA 625	8B26045	1.9	19	ND	0.952	02/26/08	02/28/08	
3-Nitroaniline	EPA 625	8B26045	2.9	19	ND	0.952	02/26/08	02/28/08	
4-Nitroaniline	EPA 625	8B26045	3.8	19	ND	0.952	02/26/08	02/28/08	
Nitrobenzene	EPA 625	8B26045	2.4	19	ND	0.952	02/26/08	02/28/08	
2-Nitrophenol	EPA 625	8B26045	3.3	9.5	ND	0.952	02/26/08	02/28/08	
4-Nitrophenol	EPA 625	8B26045	5.2	19	ND	0.952	02/26/08	02/28/08	
N-Nitrosodiphenylamine	EPA 625	8B26045	1.9	9.5	ND	0.952	02/26/08	02/28/08	
N-Nitroso-di-n-propylamine	EPA 625	8B26045	3.3	9.5	ND	0.952	02/26/08	02/28/08	
Pentachlorophenol	EPA 625	8B26045	3.3	19	ND	0.952	02/26/08	02/28/08	
Phenanthrene	EPA 625	8B26045	3.3	9.5	ND	0.952	02/26/08	02/28/08	
Phenol	EPA 625	8B26045	1.9	9.5	ND	0.952	02/26/08	02/28/08	
Pyrene	EPA 625	8B26045	3.8	9.5	ND	0.952	02/26/08	02/28/08	
1,2,4-Trichlorobenzene	EPA 625	8B26045	2.4	9.5	ND	0.952	02/26/08	02/28/08	
2,4,5-Trichlorophenol	EPA 625	8B26045	2.9	19	ND	0.952	02/26/08	02/28/08	
2,4,6-Trichlorophenol	EPA 625	8B26045	4.3	19	ND	0.952	02/26/08	02/28/08	
1,2-Diphenylhydrazine/Azobenzene	EPA 625	8B26045	2.4	19	ND	0.952	02/26/08	02/28/08	
N-Nitrosodimethylamine	EPA 625	8B26045	2.4	19	ND	0.952	02/26/08	02/28/08	
Surrogate: 2-Fluorophenol (30-120%)					66 %				
Surrogate: Phenol-d6 (35-120%)					72 %				
Surrogate: 2,4,6-Tribromophenol (40-120%)					95 %				
Surrogate: Nitrobenzene-d5 (45-120%)					76 %				
Surrogate: 2-Fluorobiphenyl (50-120%)					74 %				
Surrogate: Terphenyl-d14 (50-125%)					80 %				

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THE LEADER IN ENVIRONMENTAL TESTING

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

Project ID: Annual Outfall 013

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

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB2402-01 (Outfall 013 - Wate	er) - cont.								
Reporting Units: ug/l									
Aldrin	EPA 608	8B25062	0.0014	0.0047	ND	0.943	02/25/08	02/25/08	
alpha-BHC	EPA 608	8B25062	0.0024	0.0047	ND	0.943	02/25/08	02/25/08	
beta-BHC	EPA 608	8B25062	0.0038	0.0094	ND	0.943	02/25/08	02/25/08	
delta-BHC	EPA 608	8B25062	0.0033	0.0047	ND	0.943	02/25/08	02/25/08	
gamma-BHC (Lindane)	EPA 608	8B25062	0.0028	0.0094	ND	0.943	02/25/08	02/25/08	
Chlordane	EPA 608	8B25062	0.028	0.094	ND	0.943	02/25/08	02/25/08	
4,4'-DDD	EPA 608	8B25062	0.0019	0.0047	ND	0.943	02/25/08	02/25/08	
4,4'-DDE	EPA 608	8B25062	0.0028	0.0047	ND	0.943	02/25/08	02/25/08	
4,4'-DDT	EPA 608	8B25062	0.0038	0.0094	ND	0.943	02/25/08	02/25/08	
Dieldrin	EPA 608	8B25062	0.0019	0.0047	ND	0.943	02/25/08	02/25/08	
Endosulfan I	EPA 608	8B25062	0.0019	0.0047	ND	0.943	02/25/08	02/25/08	
Endosulfan II	EPA 608	8B25062	0.0028	0.0047	ND	0.943	02/25/08	02/25/08	
Endosulfan sulfate	EPA 608	8B25062	0.0028	0.0094	ND	0.943	02/25/08	02/25/08	
Endrin	EPA 608	8B25062	0.0019	0.0047	ND	0.943	02/25/08	02/25/08	
Endrin aldehyde	EPA 608	8B25062	0.0019	0.0094	ND	0.943	02/25/08	02/25/08	
Endrin ketone	EPA 608	8B25062	0.0028	0.0094	ND	0.943	02/25/08	02/25/08	
Heptachlor	EPA 608	8B25062	0.0028	0.0094	ND	0.943	02/25/08	02/25/08	
Heptachlor epoxide	EPA 608	8B25062	0.0024	0.0047	ND	0.943	02/25/08	02/25/08	
Methoxychlor	EPA 608	8B25062	0.0033	0.0047	ND	0.943	02/25/08	02/25/08	
Toxaphene	EPA 608	8B25062	0.066	0.094	ND	0.943	02/25/08	02/25/08	
Surrogate: Decachlorobiphenyl (45-120%)					78 %				
Surrogate: Tetrachloro-m-xylene (35-115%)					60 %				

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THE LEADER IN ENVIRONMENTAL TESTING

Attention: Bronwyn Kelly

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 Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

TOTAL PCBS (EPA 608)										
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers	
Sample ID: IRB2402-01 (Outfall 013 - Wat	ter) - cont.									
Reporting Units: ug/l										
Aroclor 1016	EPA 608	8B25062	0.42	0.47	ND	0.943	02/25/08	02/26/08		
Aroclor 1221	EPA 608	8B25062	0.24	0.47	ND	0.943	02/25/08	02/26/08		
Aroclor 1232	EPA 608	8B25062	0.24	0.47	ND	0.943	02/25/08	02/26/08		
Aroclor 1242	EPA 608	8B25062	0.24	0.47	ND	0.943	02/25/08	02/26/08		
Aroclor 1248	EPA 608	8B25062	0.24	0.47	ND	0.943	02/25/08	02/26/08		
Aroclor 1254	EPA 608	8B25062	0.24	0.47	ND	0.943	02/25/08	02/26/08		
Aroclor 1260	EPA 608	8B25062	0.28	0.47	ND	0.943	02/25/08	02/26/08		
Surrogate: Decachlorobiphenyl (45-120%)					95 %					

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Joseph Doak Project Manager

IRB2402 <*Page 11 of 56*> NPDES - 3417

THE LEADER IN ENVIRONMENTAL TESTING

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 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

METALS										
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers	
Sample ID: IRB2402-01 (Outfall 013 - W	ater) - cont.									
Reporting Units: mg/l										
Hardness as CaCO3	SM2340B	[CALC]	N/A	0.33	23	1	02/27/08	02/29/08		
Boron	EPA 200.7	8B27069	0.020	0.050	ND	1	02/27/08	02/29/08		
Calcium	EPA 200.7	8B27069	0.050	0.10	7.7	1	02/27/08	02/29/08		
Magnesium	EPA 200.7	8B27069	0.012	0.020	0.85	1	02/27/08	02/29/08		

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THE LEADER IN ENVIRONMENTAL TESTING

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Project ID: Annual Outfall 013

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

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

METALS MDL Reporting Sample Dilution Date Date Data Qualifiers Method Batch Limit Result Factor Extracted Analyte Limit Analyzed Sample ID: IRB2402-01 (Outfall 013 - Water) - cont. Reporting Units: ug/l EPA 200.8 8B28067 0.20 2.0 2.5 02/28/08 02/28/08 Antimony 1 EPA 200.7 8B27069 7.0 10 ND 02/27/08 02/29/08 Arsenic 1 ND 8B27069 0.90 2.0 02/27/08 02/29/08 Beryllium EPA 200.7 1 Cadmium 8B28067 1.9 EPA 200.8 0.11 1.0 1 02/28/08 02/28/08 8B27069 5.0 ND 02/27/08 02/29/08 Chromium EPA 200.7 2.0 1 Copper EPA 200.8 8B28067 0.75 2.0 2.8 1 02/28/08 02/28/08 Lead EPA 200.8 8B28067 0.30 1.0 1.7 1 02/28/08 02/28/08 EPA 200.7 8B27069 2.0 10 ND 1 02/27/08 02/29/08 Nickel Selenium EPA 200.8 8B28067 0.30 2.0 ND 1 02/28/08 02/28/08 Silver EPA 200.8 8B28067 0.30 1.0 ND 1 02/28/08 02/28/08 Thallium EPA 200.8 8B28067 0.20 1.0 ND 1 02/28/08 02/28/08 Zinc EPA 200.8 8B28067 20 02/28/08 02/28/08 2.5 66 1

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

DISSOLVED METALS											
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers		
Sample ID: IRB2402-01 (Outfall 013 - V	Water) - cont.										
Reporting Units: mg/l											
Boron	EPA 200.7-Diss	8B25122	0.020	0.050	ND	1	02/25/08	02/26/08			
Calcium	EPA 200.7-Diss	8B25122	0.050	0.10	7.7	1	02/25/08	02/26/08			
Magnesium	EPA 200.7-Diss	8B25122	0.012	0.020	0.88	1	02/25/08	02/26/08			
Hardness (as CaCO3)	SM2340B	8B25122	1.0	1.0	23	1	02/25/08	02/26/08			

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Joseph Doak Project Manager

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

Project ID: Annual Outfall 013

DISSOLVED METALS

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

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

MDL Reporting Sample Dilution Date Date Data Qualifiers Method Batch Limit Result Factor Extracted Analyte Limit Analyzed Sample ID: IRB2402-01 (Outfall 013 - Water) - cont. Reporting Units: ug/l EPA 200.8-Diss 8B25123 0.20 2.0 2.4 02/25/08 02/26/08 Antimony 1 EPA 200.7-Diss 8B25122 7.0 10 ND 02/25/08 02/26/08 Arsenic 1 8B25122 2.0 ND 02/25/08 Beryllium EPA 200.7-Diss 0.90 02/26/08 1 Cadmium 8B25123 EPA 200.8-Diss 0.11 1.0 1.6 1 02/25/08 02/26/08 8B25122 5.0 ND 02/25/08 02/26/08 Chromium EPA 200.7-Diss 2.0 1 Copper EPA 200.8-Diss 8B25123 0.75 2.0 1.6 1 02/25/08 02/26/08 J Lead EPA 200.8-Diss 8B25123 0.30 1.0 0.50 1 02/25/08 02/26/08 J EPA 200.7-Diss 8B25122 2.0 10 ND 1 02/25/08 02/26/08 Nickel Selenium EPA 200.8-Diss 8B25123 0.30 2.0 ND 1 02/25/08 02/26/08 Silver EPA 200.8-Diss 8C04081 0.30 1.0 ND 1 03/04/08 03/04/08 Thallium EPA 200.8-Diss 8B25123 0.20 1.0 ND 1 02/25/08 02/26/08 Zinc EPA 200.8-Diss 8B25123 20 64 02/25/08 02/26/08 2.5 1

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Project ID: Annual Outfall 013

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

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

INORGANICS									
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB2402-01 (Outfall 013 -	Water) - cont.								
Reporting Units: mg/l									
Hexane Extractable Material (Oil &	EPA 1664A	8C04046	1.3	4.7	1.6	1	03/04/08	03/04/08	J
Grease)		0.5.4.4.4					00105100	00105100	
Ammonia-N (Distilled)	EPA 350.2	8B26101	0.30	0.50	ND	1	02/26/08	02/26/08	
Biochemical Oxygen Demand	EPA 405.1	8B25101	0.59	2.0	1.5	1	02/25/08	03/01/08	J
Chloride	EPA 300.0	8B25042	0.25	0.50	11	1	02/25/08	02/25/08	
Total Cyanide	EPA 335.2	8B26098	0.0022	0.0050	ND	1	02/26/08	02/26/08	
Fluoride	EPA 340.2	8B25072	0.014	0.10	0.12	1	02/25/08	02/25/08	В
Nitrate-N	EPA 300.0	8B25042	0.060	0.11	0.72	1	02/25/08	02/25/08	
Nitrite-N	EPA 300.0	8B25042	0.090	0.15	ND	1	02/25/08	02/25/08	
Nitrate/Nitrite-N	EPA 300.0	8B25042	0.15	0.26	0.72	1	02/25/08	02/25/08	
Sulfate	EPA 300.0	8B25042	0.20	0.50	4.2	1	02/25/08	02/25/08	
Total Dissolved Solids	SM2540C	8B27119	10	10	96	1	02/27/08	02/27/08	
Total Suspended Solids	EPA 160.2	8B28123	10	10	ND	1	02/28/08	02/28/08	

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

INORGANICS											
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers		
Sample ID: IRB2402-01 (Outfall 013	- Water) - cont.										
Reporting Units: ml/l/hr											
Total Settleable Solids	EPA 160.5	8B26062	0.10	0.10	ND	1	02/26/08	02/26/08			

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

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

	INORGANICS													
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers					
Sample ID: IRB2402-01 (Outfall 013	6 - Water) - cont.													
Reporting Units: NTU														
Turbidity	EPA 180.1	8B26063	0.040	1.0	3.0	1	02/26/08	02/26/08						

Project ID: Annual Outfall 013

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

		INC	DRGA	NICS					
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB2402-01 (Outfall 013	8 - Water) - cont.								
Reporting Units: ug/l									
Perchlorate	EPA 314.0	8B28045	1.5	4.0	ND	1	02/28/08	02/29/08	

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

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: IRB2402-01 (Outfall 013 - Wa	ater) - 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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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: Outfall 013 (IRB2402-01) - Water	•				
EPA 160.5	2	02/24/2008 10:00	02/25/2008 05:20	02/26/2008 09:25	02/26/2008 09:25
EPA 180.1	2	02/24/2008 10:00	02/25/2008 05:20	02/26/2008 09:55	02/26/2008 09:55
EPA 300.0	2	02/24/2008 10:00	02/25/2008 05:20	02/25/2008 07:00	02/25/2008 10:23
EPA 405.1	2	02/24/2008 10:00	02/25/2008 05:20	02/25/2008 16:53	03/01/2008 10:00
EPA 624	3	02/24/2008 10:00	02/25/2008 05:20	02/26/2008 00:00	02/26/2008 12:20
Filtration	1	02/24/2008 10:00	02/25/2008 05:20	02/25/2008 09:45	02/25/2008 10:11
Sample ID: Trip Blanks (IRB2402-02) - Wate	er				
EPA 624	3	02/24/2008 17:00	02/25/2008 05:20	02/26/2008 00:00	02/26/2008 09:17



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

Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

METHOD BLANK/QC DATA

EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result		%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B27068 Extracted: 02/27/08	<u></u>										
Blank Analyzed: 02/27/2008 (8B27068-B	LK1)										
DRO (C13-C22)	ND	0.10	0.027	mg/l							
Surrogate: n-Octacosane	0.154			mg/l	0.200		77	40-125			
LCS Analyzed: 02/27/2008 (8B27068-BS	1)										MNR1
EFH (C13 - C40)	0.483	0.10	0.027	mg/l	0.750		64	40-115			
Surrogate: n-Octacosane	0.139			mg/l	0.200		70	40-125			
LCS Dup Analyzed: 02/27/2008 (8B2706	8-BSD1)										
EFH (C13 - C40)	0.530	0.10	0.027	mg/l	0.750		71	40-115	9	25	
Surrogate: n-Octacosane	0.148			mg/l	0.200		74	40-125			

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

1

METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS (EPA 5030/8015M)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B28031 Extracted: 02/28/08	<u>}_</u>										
Blank Analyzed: 02/28/2008 (8B28031-B	LK1)										
GRO (C4 - C12)	ND	0.050	0.030	mg/l							
Surrogate: 4-BFB (FID)	0.00798			mg/l	0.0100		80	65-140			
LCS Analyzed: 02/28/2008 (8B28031-BS	1)										
GRO (C4 - C12)	0.745	0.050	0.030	mg/l	0.800		93	80-120			
Surrogate: 4-BFB (FID)	0.0132			mg/l	0.0100		132	65-140			
Matrix Spike Analyzed: 02/28/2008 (8B2	28031-MS1)				Sou	rce: IRB2	2289-01				
GRO (C4 - C12)	0.217	0.050	0.030	mg/l	0.220	ND	99	65-140			
Surrogate: 4-BFB (FID)	0.00954			mg/l	0.0100		95	65-140			
Matrix Spike Dup Analyzed: 02/28/2008	(8B28031-M	SD1)			Sou	rce: IRB2	2289-01				
GRO (C4 - C12)	0.209	0.050	0.030	mg/l	0.220	ND	95	65-140	4	20	
Surrogate: 4-BFB (FID)	0.00861			mg/l	0.0100		86	65-140			

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

METHOD BLANK/QC DATA

VOLATILE ORGANICS by GCMS SIM

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B27016 Extracted: 02/27/08	-										
Blank Analyzed: 02/27/2008 (8B27016-B	LK1)										
1,4-Dioxane	ND	2.0	1.0	ug/l							
Surrogate: Dibromofluoromethane	1.04			ug/l	1.00		104	80-120			
LCS Analyzed: 02/27/2008 (8B27016-BS)	l)										
1,4-Dioxane	8.15	2.0	1.0	ug/l	10.0		82	70-125			
Surrogate: Dibromofluoromethane	1.06			ug/l	1.00		106	80-120			
Matrix Spike Analyzed: 02/27/2008 (8B2	7016-MS1)				Sou	rce: IRB	997-01				
1,4-Dioxane	8.11	2.0	1.0	ug/l	10.0	ND	81	70-130			
Surrogate: Dibromofluoromethane	1.01			ug/l	1.00		101	80-120			
Matrix Spike Dup Analyzed: 02/27/2008	(8B27016-M	SD1)			Sou	rce: IRB	997-01				
1,4-Dioxane	8.43	2.0	1.0	ug/l	10.0	ND	84	70-130	4	30	
Surrogate: Dibromofluoromethane	0.910			ug/l	1.00		91	80-120			

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

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: 8B28024 Extracted: 02/28/08	8										
Blank Analyzed: 02/28/2008 (8B28024-F	BLK1)										
1,1,1-Trichloroethane	ND	0.50	0.30	ug/l							
1,2,3-Trichloropropane	ND	1.0	0.40	ug/l							
1,1,2,2-Tetrachloroethane	ND	0.50	0.24	ug/l							
1,2-Dibromoethane (EDB)	ND	0.50	0.40	ug/l							
1,1,2-Trichloroethane	ND	0.50	0.30	ug/l							
Di-isopropyl Ether (DIPE)	ND	0.50	0.25	ug/l							
1,1-Dichloroethane	ND	0.50	0.27	ug/l							
Methyl-tert-butyl Ether (MTBE)	ND	0.50	0.32	ug/l							
1,1-Dichloroethene	ND	0.50	0.42	ug/l							
tert-Butanol (TBA)	ND	10	4.9	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							

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
·							,				X
Batch: 8B28024 Extracted: 02/28/08	<u>s</u>										
Blank Analyzed: 02/28/2008 (8B28024-B	SLK1)										
Vinyl chloride	ND	0.50	0.30	ug/l							
Xylenes, Total	ND	1.5	0.90	ug/l							
Surrogate: Dibromofluoromethane	23.6			ug/l	25.0		94	80-120			
Surrogate: Toluene-d8	25.1			ug/l	25.0		100	80-120			
Surrogate: 4-Bromofluorobenzene	21.6			ug/l	25.0		86	80-120			
LCS Analyzed: 02/28/2008 (8B28024-BS	1)										
1,1,1-Trichloroethane	24.3	0.50	0.30	ug/l	25.0		97	65-135			
1,2,3-Trichloropropane	23.3	1.0	0.40	ug/l	25.0		93	60-130			
1,1,2,2-Tetrachloroethane	21.4	0.50	0.24	ug/l	25.0		86	55-130			
1,2-Dibromoethane (EDB)	23.8	0.50	0.40	ug/l	25.0		95	75-125			
1,1,2-Trichloroethane	24.0	0.50	0.30	ug/l	25.0		96	70-125			
Di-isopropyl Ether (DIPE)	26.8	0.50	0.25	ug/l	25.0		107	60-135			
1,1-Dichloroethane	21.7	0.50	0.27	ug/l	25.0		87	70-125			
Methyl-tert-butyl Ether (MTBE)	27.2	0.50	0.32	ug/l	25.0		109	60-135			
1,1-Dichloroethene	20.6	0.50	0.42	ug/l	25.0		82	70-125			
tert-Butanol (TBA)	126	10	4.9	ug/l	125		101	70-135			
1,2-Dichloroethane	24.2	0.50	0.28	ug/l	25.0		97	60-140			
1,2-Dichlorobenzene	25.5	0.50	0.32	ug/l	25.0		102	75-120			
1,2-Dichloropropane	23.9	0.50	0.35	ug/l	25.0		95	70-125			
1,3-Dichlorobenzene	24.1	0.50	0.35	ug/l	25.0		96	75-120			
1,4-Dichlorobenzene	23.1	0.50	0.37	ug/l	25.0		92	75-120			
Benzene	21.9	0.50	0.28	ug/l	25.0		88	70-120			
Bromodichloromethane	25.4	0.50	0.30	ug/l	25.0		102	70-135			
Bromoform	24.4	0.50	0.40	ug/l	25.0		98	55-130			
Bromomethane	24.1	1.0	0.42	ug/l	25.0		96	65-140			
Carbon tetrachloride	23.2	0.50	0.28	ug/l	25.0		93	65-140			
Chlorobenzene	23.8	0.50	0.36	ug/l	25.0		95	75-120			
Chloroethane	23.1	1.0	0.40	ug/l	25.0		92	60-140			
Chloroform	22.9	0.50	0.33	ug/l	25.0		92	70-130			
Chloromethane	22.2	0.50	0.40	ug/l	25.0		89	50-140			
cis-1,3-Dichloropropene	23.4	0.50	0.22	ug/l	25.0		93	75-125			
Dibromochloromethane	25.6	0.50	0.28	ug/l	25.0		102	70-140			
Ethylbenzene	26.3	0.50	0.25	ug/l	25.0		105	75-125			
Methylene chloride	21.6	1.0	0.95	ug/l	25.0		86	55-130			
Tetrachloroethene	25.1	0.50	0.32	ug/l	25.0		100	70-125			

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
e e e e e e e e e e e e e e e e e e e		Linnt		emis	Lever	itesuit	, und e	Linits	NI D	Linnt	Quanners
Batch: 8B28024 Extracted: 02/28/08	<u> </u>										
LCS Analyzed: 02/28/2008 (8B28024-BS	1)										
Toluene	23.6	0.50	0.36	ug/l	25.0		95	70-120			
trans-1,2-Dichloroethene	23.4	0.50	0.27	ug/l	25.0		93	70-125			
trans-1,3-Dichloropropene	21.7	0.50	0.32	ug/l	25.0		87	70-125			
Trichloroethene	23.2	0.50	0.26	ug/l	25.0		93	70-125			
Trichlorofluoromethane	24.8	0.50	0.34	ug/l	25.0		99	65-145			
Vinyl chloride	23.1	0.50	0.30	ug/l	25.0		92	55-135			
Xylenes, Total	78.1	1.5	0.90	ug/l	75.0		104	70-125			
Surrogate: Dibromofluoromethane	24.3			ug/l	25.0		97	80-120			
Surrogate: Toluene-d8	24.2			ug/l	25.0		97	80-120			
Surrogate: 4-Bromofluorobenzene	25.2			ug/l	25.0		101	80-120			
Matrix Spike Analyzed: 02/28/2008 (8B2	8024-MS1)				Sou	rce: IRB2	2429-01				
1,1,1-Trichloroethane	24.8	0.50	0.30	ug/l	25.0	ND	99	65-140			
1,2,3-Trichloropropane	24.3	1.0	0.40	ug/l	25.0	ND	97	55-135			
1,1,2,2-Tetrachloroethane	23.8	0.50	0.24	ug/l	25.0	ND	95	55-135			
1,2-Dibromoethane (EDB)	24.9	0.50	0.40	ug/l	25.0	ND	100	70-130			
1,1,2-Trichloroethane	26.8	0.50	0.30	ug/l	25.0	ND	107	65-130			
Di-isopropyl Ether (DIPE)	27.9	0.50	0.25	ug/l	25.0	ND	111	60-140			
1,1-Dichloroethane	22.7	0.50	0.27	ug/l	25.0	ND	91	65-130			
Methyl-tert-butyl Ether (MTBE)	32.8	0.50	0.32	ug/l	25.0	5.22	110	55-145			
1,1-Dichloroethene	25.9	0.50	0.42	ug/l	25.0	ND	103	60-130			
tert-Butanol (TBA)	224	10	4.9	ug/l	125	86.0	111	65-140			
1,2-Dichloroethane	29.0	0.50	0.28	ug/l	25.0	1.47	110	60-140			
1,2-Dichlorobenzene	26.3	0.50	0.32	ug/l	25.0	ND	105	75-125			
1,2-Dichloropropane	26.5	0.50	0.35	ug/l	25.0	ND	106	65-130			
1,3-Dichlorobenzene	25.2	0.50	0.35	ug/l	25.0	ND	101	75-125			
1,4-Dichlorobenzene	24.1	0.50	0.37	ug/l	25.0	ND	96	75-125			
Benzene	24.0	0.50	0.28	ug/l	25.0	ND	96	65-125			
Bromodichloromethane	28.5	0.50	0.30	ug/l	25.0	ND	114	70-135			
Bromoform	25.6	0.50	0.40	ug/l	25.0	ND	102	55-135			
Bromomethane	24.2	1.0	0.42	ug/l	25.0	ND	97	55-145			
Carbon tetrachloride	25.8	0.50	0.28	ug/l	25.0	ND	103	65-140			
Chlorobenzene	24.7	0.50	0.36	ug/l	25.0	ND	99	75-125			
Chloroethane	23.3	1.0	0.40	ug/l	25.0	ND	93	55-140			
Chloroform	23.4	0.50	0.33	ug/l	25.0	ND	94	65-135			
Chloromethane	22.4	0.50	0.40	ug/l	25.0	ND	90	45-145			

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyta	Result	Reporting Limit	MDL	Units	Spike Level	Source	%REC	%REC	RPD	RPD Limit	Data Qualifiers
Analyte		Limit	MDL	Units	Level	Result	70KEU	Linnts	KPD	Limit	Quaimers
Batch: 8B28024 Extracted: 02/28/08	<u>}</u>										
					G	IDD					
Matrix Spike Analyzed: 02/28/2008 (8B2	,					rce: IRB					
cis-1,3-Dichloropropene	25.4	0.50	0.22	ug/l	25.0	ND	101	70-130			
Dibromochloromethane	26.1	0.50	0.28	ug/l	25.0	ND	104	65-140			
Ethylbenzene	27.2	0.50	0.25	ug/l	25.0	ND	109	65-130			
Methylene chloride	24.3	1.0	0.95	ug/l	25.0	ND	97	50-135			
Tetrachloroethene	23.9	0.50	0.32	ug/l	25.0	ND	96	65-130			
Toluene	26.8	0.50	0.36	ug/l	25.0	ND	107	70-125			
trans-1,2-Dichloroethene	22.9	0.50	0.27	ug/l	25.0	ND	91	65-130			
trans-1,3-Dichloropropene	24.5	0.50	0.32	ug/l	25.0	ND	98	65-135			
Trichloroethene	26.0	0.50	0.26	ug/l	25.0	ND	104	65-125			
Trichlorofluoromethane	25.4	0.50	0.34	ug/l	25.0	ND	102	60-145			
Vinyl chloride	22.6	0.50	0.30	ug/l	25.0	ND	90	45-140			
Xylenes, Total	79.0	1.5	0.90	ug/l	75.0	ND	105	60-130			
Surrogate: Dibromofluoromethane	23.5			ug/l	25.0		94	80-120			
Surrogate: Toluene-d8	25.2			ug/l	25.0		101	80-120			
Surrogate: 4-Bromofluorobenzene	24.0			ug/l	25.0		96	80-120			
Matrix Spike Dup Analyzed: 02/28/2008	(8B28024-M	ISD1)			Sou	rce: IRB2	2429-01				
1,1,1-Trichloroethane	24.2	0.50	0.30	ug/l	25.0	ND	97	65-140	3	20	
1,2,3-Trichloropropane	24.4	1.0	0.40	ug/l	25.0	ND	98	55-135	1	30	
1,1,2,2-Tetrachloroethane	23.5	0.50	0.24	ug/l	25.0	ND	94	55-135	1	30	
1,2-Dibromoethane (EDB)	23.8	0.50	0.40	ug/l	25.0	ND	95	70-130	4	25	
1,1,2-Trichloroethane	26.0	0.50	0.30	ug/l	25.0	ND	104	65-130	3	25	
Di-isopropyl Ether (DIPE)	26.9	0.50	0.25	ug/l	25.0	ND	107	60-140	4	25	
1,1-Dichloroethane	23.0	0.50	0.27	ug/l	25.0	ND	92	65-130	1	20	
Methyl-tert-butyl Ether (MTBE)	32.8	0.50	0.32	ug/l	25.0	5.22	110	55-145	0	25	
1,1-Dichloroethene	26.6	0.50	0.42	ug/l	25.0	ND	106	60-130	3	20	
tert-Butanol (TBA)	206	10	4.9	ug/l	125	86.0	96	65-140	9	25	
1,2-Dichloroethane	27.8	0.50	0.28	ug/l	25.0	1.47	105	60-140	4	20	
1,2-Dichlorobenzene	26.3	0.50	0.32	ug/l	25.0	ND	105	75-125	0	20	
1,2-Dichloropropane	25.9	0.50	0.35	ug/l	25.0	ND	104	65-130	2	20	
1,3-Dichlorobenzene	25.5	0.50	0.35	ug/l	25.0	ND	102	75-125	1	20	
1,4-Dichlorobenzene	23.8	0.50	0.37	ug/l	25.0	ND	95	75-125	1	20	
Benzene	23.3	0.50	0.28	ug/l	25.0	ND	93	65-125	3	20	
Bromodichloromethane	26.7	0.50	0.30	ug/l	25.0	ND	107	70-135	7	20	
Bromoform	24.8	0.50	0.40	ug/l	25.0	ND	99	55-135	3	25	
Bromomethane	23.6	1.0	0.42	ug/l	25.0	ND	94	55-145	2	25	

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
		Linnt	MIDL	Onits	Lever	Result	JUNEC	Linnts	ΜD	Linnt	Quanners
Batch: 8B28024 Extracted: 02/28/08	-										
Matrix Spike Dup Analyzed: 02/28/2008	(8B28024-N	ISD1)			Sou	rce: IRB2	2429-01				
Carbon tetrachloride	24.9	0.50	0.28	ug/l	25.0	ND	99	65-140	4	25	
Chlorobenzene	23.5	0.50	0.36	ug/l	25.0	ND	94	75-125	5	20	
Chloroethane	23.6	1.0	0.40	ug/l	25.0	ND	94	55-140	1	25	
Chloroform	23.0	0.50	0.33	ug/l	25.0	ND	92	65-135	2	20	
Chloromethane	23.1	0.50	0.40	ug/l	25.0	ND	92	45-145	3	25	
cis-1,3-Dichloropropene	25.1	0.50	0.22	ug/l	25.0	ND	100	70-130	1	20	
Dibromochloromethane	25.8	0.50	0.28	ug/l	25.0	ND	103	65-140	1	25	
Ethylbenzene	26.3	0.50	0.25	ug/l	25.0	ND	105	65-130	3	20	
Methylene chloride	23.5	1.0	0.95	ug/l	25.0	ND	94	50-135	3	20	
Tetrachloroethene	23.7	0.50	0.32	ug/l	25.0	ND	95	65-130	1	20	
Toluene	25.7	0.50	0.36	ug/l	25.0	ND	103	70-125	4	20	
trans-1,2-Dichloroethene	23.8	0.50	0.27	ug/l	25.0	ND	95	65-130	4	20	
trans-1,3-Dichloropropene	23.8	0.50	0.32	ug/l	25.0	ND	95	65-135	3	25	
Trichloroethene	24.2	0.50	0.26	ug/l	25.0	ND	97	65-125	7	20	
Trichlorofluoromethane	25.2	0.50	0.34	ug/l	25.0	ND	101	60-145	1	25	
Vinyl chloride	23.9	0.50	0.30	ug/l	25.0	ND	96	45-140	6	30	
Xylenes, Total	76.5	1.5	0.90	ug/l	75.0	ND	102	60-130	3	20	
Surrogate: Dibromofluoromethane	23.5			ug/l	25.0		94	80-120			
Surrogate: Toluene-d8	24.8			ug/l	25.0		99	80-120			
Surrogate: 4-Bromofluorobenzene	24.1			ug/l	25.0		97	80-120			

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

METHOD BLANK/QC DATA

PURGEABLES-- GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B26001 Extracted: 02/26/08	_										
	T 121)										
Blank Analyzed: 02/26/2008 (8B26001-B		5.0									
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	23.8			ug/l	25.0		95	80-120			
Surrogate: Toluene-d8	25.1			ug/l	25.0		100	80-120			
Surrogate: 4-Bromofluorobenzene	22.4			ug/l	25.0		89	80-120			
LCS Analyzed: 02/26/2008 (8B26001-BS)	1)										
2-Chloroethyl vinyl ether	19.0	5.0	1.8	ug/l	25.0		76	25-170			
Surrogate: Dibromofluoromethane	24.3			ug/l	25.0		97	80-120			
Surrogate: Toluene-d8	25.4			ug/l	25.0		102	80-120			
Surrogate: 4-Bromofluorobenzene	23.5			ug/l	25.0		94	80-120			
Matrix Spike Analyzed: 02/26/2008 (8B2	6001-MS1)				Sou	rce: IRB2	2176-03				
2-Chloroethyl vinyl ether	ND	5.0	1.8	ug/l	25.0	ND		25-170			M13
Surrogate: Dibromofluoromethane	25.0			ug/l	25.0		100	80-120			
Surrogate: Toluene-d8	25.2			ug/l	25.0		101	80-120			
Surrogate: 4-Bromofluorobenzene	23.6			ug/l	25.0		94	80-120			
Matrix Spike Dup Analyzed: 02/26/2008 (8B26001-MSD1)					Sou	rce: IRB2	2176-03				
2-Chloroethyl vinyl ether	ND	5.0	1.8	ug/l	25.0	ND		25-170		25	M13
Surrogate: Dibromofluoromethane	24.6			ug/l	25.0		98	80-120			
Surrogate: Toluene-d8	25.0			ug/l	25.0		100	80-120			
Surrogate: 4-Bromofluorobenzene	23.7			ug/l	25.0		95	80-120			

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B26045 Extracted: 02/26/08	3										
Blank Analyzed: 02/28/2008 (8B26045-B			• •								
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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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

METHOD BLANK/QC DATA

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

Reporting Spike Source	%REC RPD Data Limits RPD Limit Qualifiers
Batch: 8B26045 Extracted: 02/26/08	
Blank Analyzed: 02/28/2008 (8B26045-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 154 ug/l 200 77	30-120

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

Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

METHOD BLANK/QC DATA

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

Ameliote	Result	Reporting Limit	MDL	Units	Spike Level	Source	%REC	%REC	RPD	RPD Limit	Data Qualifiers
Analyte		Linnt	MDL	Units	Level	Result	70KEU	Limits	KPD	Limit	Quaimers
Batch: 8B26045 Extracted: 02/26/08	8										
Blank Analyzed: 02/28/2008 (8B26045-E	,										
Surrogate: Phenol-d6	164			ug/l	200		82	35-120			
Surrogate: 2,4,6-Tribromophenol	202			ug/l	200		101	40-120			
Surrogate: Nitrobenzene-d5	83.0			ug/l	100		83	45-120			
Surrogate: 2-Fluorobiphenyl	81.4			ug/l	100		81	50-120			
Surrogate: Terphenyl-d14	87.6			ug/l	100		88	50-125			
LCS Analyzed: 02/28/2008 (8B26045-BS	51)										MNR1
Acenaphthene	77.4	10	3.0	ug/l	100		77	60-120			
Acenaphthylene	82.4	10	3.0	ug/l	100		82	60-120			
Aniline	77.7	10	2.5	ug/l	100		78	35-120			
Anthracene	83.1	10	2.0	ug/l	100		83	65-120			
Benzidine	53.1	20	8.5	ug/l	100		53	30-160			
Benzoic acid	67.9	20	10	ug/l	100		68	25-120			
Benzo(a)anthracene	77.1	10	2.0	ug/l	100		77	65-120			
Benzo(b)fluoranthene	71.1	10	2.0	ug/l	100		71	55-125			
Benzo(k)fluoranthene	77.5	10	2.5	ug/l	100		78	50-125			
Benzo(g,h,i)perylene	73.8	10	4.0	ug/l	100		74	45-135			
Benzo(a)pyrene	77.8	10	2.0	ug/l	100		78	55-130			
Benzyl alcohol	73.9	20	2.5	ug/l	100		74	50-120			
Bis(2-chloroethoxy)methane	71.6	10	3.0	ug/l	100		72	55-120			
Bis(2-chloroethyl)ether	67.3	10	3.0	ug/l	100		67	50-120			
Bis(2-chloroisopropyl)ether	71.4	10	2.5	ug/l	100		71	45-120			
Bis(2-ethylhexyl)phthalate	77.2	50	4.0	ug/l	100		77	65-130			
4-Bromophenyl phenyl ether	78.6	10	3.0	ug/l	100		79	60-120			
Butyl benzyl phthalate	80.9	20	4.0	ug/l	100		81	55-130			
4-Chloroaniline	77.8	10	2.0	ug/l	100		78	55-120			
2-Chloronaphthalene	75.0	10	3.0	ug/l	100		75	60-120			
4-Chloro-3-methylphenol	79.2	20	2.5	ug/l	100		79	60-120			
2-Chlorophenol	65.3	10	3.0	ug/l	100		65	45-120			
4-Chlorophenyl phenyl ether	76.8	10	2.5	ug/l	100		77	65-120			
Chrysene	73.7	10	2.5	ug/l	100		74	65-120			
Dibenz(a,h)anthracene	74.8	20	3.0	ug/l	100		75	50-135			
Dibenzofuran	77.3	10	4.0	ug/l	100		77	65-120			
Di-n-butyl phthalate	85.1	20	3.0	ug/l	100		85	60-125			
1,3-Dichlorobenzene	62.8	10	3.0	ug/l	100		63	35-120			
1,4-Dichlorobenzene	61.4	10	2.5	ug/l	100		61	35-120			

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

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METHOD BLANK/QC DATA

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

Analyte Result Limit MDL Units Level Result %REC Limits RPD Limit (•
Batch: 8B26045 Extracted: 02/26/08	
LCS Analyzed: 02/28/2008 (8B26045-BS1)	MNR1
1,2-Dichlorobenzene 63.4 10 3.0 ug/l 100 63 40-120	
3,3-Dichlorobenzidine 57.7 20 3.0 ug/l 100 58 45-135	
2,4-Dichlorophenol 75.8 10 3.5 ug/l 100 76 55-120	
Diethyl phthalate 83.4 10 3.5 ug/l 100 83 55-120	
2,4-Dimethylphenol 63.7 20 3.5 ug/l 100 64 40-120	
Dimethyl phthalate 79.6 10 2.0 ug/l 100 80 30-120	
4,6-Dinitro-2-methylphenol 78.7 20 4.0 ug/l 100 79 45-120	
2,4-Dinitrophenol 74.5 20 8.0 ug/l 100 75 40-120	
2,4-Dinitrotoluene 87.1 10 3.5 ug/l 100 87 65-120	
2,6-Dinitrotoluene 76.9 10 2.0 ug/l 100 77 65-120	
Di-n-octyl phthalate 79.3 20 3.5 ug/l 100 79 65-135	
Fluoranthene 78.9 10 3.0 ug/l 100 79 60-120	
Fluorene 76.9 10 3.0 ug/l 100 77 65-120	
Hexachlorobenzene 77.9 10 3.0 ug/l 100 78 60-120	
Hexachlorobutadiene 66.2 10 4.0 ug/l 100 66 40-120	
Hexachlorocyclopentadiene 75.7 20 5.0 ug/l 100 76 25-120	
Hexachloroethane 60.6 10 3.5 ug/l 100 61 35-120	
Indeno(1,2,3-cd)pyrene 71.2 20 3.5 ug/l 100 71 45-135	
Isophorone 75.6 10 2.5 ug/l 100 76 50-120	
2-Methylnaphthalene 75.1 10 2.0 ug/l 100 75 55-120	
2-Methylphenol 69.8 10 3.0 ug/l 100 70 50-120	
4-Methylphenol 70.5 10 3.0 ug/l 100 71 50-120	
Naphthalene 70.3 10 3.0 ug/l 100 70 55-120	
2-Nitroaniline 81.3 20 2.0 ug/l 100 81 65-120	
3-Nitroaniline 79.5 20 3.0 ug/l 100 79 60-120	
4-Nitroaniline 89.8 20 4.0 ug/l 100 90 55-125	
Nitrobenzene 71.0 20 2.5 ug/l 100 71 55-120	
2-Nitrophenol 68.6 10 3.5 ug/l 100 69 50-120	
4-Nitrophenol 75.3 20 5.5 ug/l 100 75 45-120	
N-Nitrosodiphenylamine 77.5 10 2.0 ug/l 100 77 60-120	
N-Nitroso-di-n-propylamine 75.2 10 3.5 ug/l 100 75 45-120	
Pentachlorophenol 74.4 20 3.5 ug/l 100 74 50-120	
Phenanthrene 77.8 10 3.5 ug/l 100 78 65-120	
Phenol 61.2 10 2.0 ug/l 100 61 40-120	
Pyrene 79.0 10 4.0 ug/l 100 79 55-125	

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

eport Number. http://www.

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B26045 Extracted: 02/26/0	8										
	<u> </u>										
LCS Analyzed: 02/28/2008 (8B26045-BS	S1)										MNR1
1,2,4-Trichlorobenzene	69.6	10	2.5	ug/l	100		70	45-120			
2,4,5-Trichlorophenol	73.8	20	3.0	ug/l	100		74	55-120			
2,4,6-Trichlorophenol	80.0	20	4.5	ug/l	100		80	55-120			
1,2-Diphenylhydrazine/Azobenzene	83.4	20	2.5	ug/l	100		83	60-120			
N-Nitrosodimethylamine	63.8	20	2.5	ug/l	100		64	45-120			
Surrogate: 2-Fluorophenol	117			ug/l	200		58	30-120			
Surrogate: Phenol-d6	126			ug/l	200		63	35-120			
Surrogate: 2,4,6-Tribromophenol	158			ug/l	200		79	40-120			
Surrogate: Nitrobenzene-d5	67.6			ug/l	100		68	45-120			
Surrogate: 2-Fluorobiphenyl	67.6			ug/l	100		68	50-120			
Surrogate: Terphenyl-d14	75.6			ug/l	100		76	50-125			
LCS Dup Analyzed: 02/28/2008 (8B260	45-BSD1)										
Acenaphthene	80.2	10	3.0	ug/l	100		80	60-120	4	20	
Acenaphthylene	86.7	10	3.0	ug/l	100		87	60-120	5	20	
Aniline	39.6	10	2.5	ug/l	100		40	35-120	65	30	R-7
Anthracene	85.6	10	2.0	ug/l	100		86	65-120	3	20	
Benzidine	ND	20	8.5	ug/l	100			30-160		35	<i>L6</i>
Benzoic acid	66.8	20	10	ug/l	100		67	25-120	2	30	
Benzo(a)anthracene	80.7	10	2.0	ug/l	100		81	65-120	5	20	
Benzo(b)fluoranthene	76.7	10	2.0	ug/l	100		77	55-125	8	25	
Benzo(k)fluoranthene	79.2	10	2.5	ug/l	100		79	50-125	2	20	
Benzo(g,h,i)perylene	78.5	10	4.0	ug/l	100		79	45-135	6	25	
Benzo(a)pyrene	80.9	10	2.0	ug/l	100		81	55-130	4	25	
Benzyl alcohol	78.4	20	2.5	ug/l	100		78	50-120	6	20	
Bis(2-chloroethoxy)methane	78.9	10	3.0	ug/l	100		79	55-120	10	20	
Bis(2-chloroethyl)ether	70.7	10	3.0	ug/l	100		71	50-120	5	20	
Bis(2-chloroisopropyl)ether	77.2	10	2.5	ug/l	100		77	45-120	8	20	
Bis(2-ethylhexyl)phthalate	81.6	50	4.0	ug/l	100		82	65-130	6	20	
4-Bromophenyl phenyl ether	81.1	10	3.0	ug/l	100		81	60-120	3	25	
Butyl benzyl phthalate	84.3	20	4.0	ug/l	100		84	55-130	4	20	
4-Chloroaniline	66.3	10	2.0	ug/l	100		66	55-120	16	25	
2-Chloronaphthalene	78.5	10	3.0	ug/l	100		78	60-120	4	20	
4-Chloro-3-methylphenol	82.1	20	2.5	ug/l	100		82	60-120	4	25	
2-Chlorophenol	67.2	10	3.0	ug/l	100		67	45-120	3	25	
4-Chlorophenyl phenyl ether	78.8	10	2.5	ug/l	100		79	65-120	3	20	

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B26045 Extracted: 02/26/08	,										
Batch. 8B20045 Extracted. 02/20/06)										
LCS Dup Analyzed: 02/28/2008 (8B2604	5-BSD1)										
Chrysene	78.3	10	2.5	ug/l	100		78	65-120	6	20	
Dibenz(a,h)anthracene	78.3	20	3.0	ug/l	100		78	50-135	5	25	
Dibenzofuran	80.6	10	4.0	ug/l	100		81	65-120	4	20	
Di-n-butyl phthalate	90.6	20	3.0	ug/l	100		91	60-125	6	20	
1,3-Dichlorobenzene	58.5	10	3.0	ug/l	100		59	35-120	7	25	
1,4-Dichlorobenzene	60.4	10	2.5	ug/l	100		60	35-120	2	25	
1,2-Dichlorobenzene	64.8	10	3.0	ug/l	100		65	40-120	2	25	
3,3-Dichlorobenzidine	53.6	20	3.0	ug/l	100		54	45-135	7	25	
2,4-Dichlorophenol	78.4	10	3.5	ug/l	100		78	55-120	3	20	
Diethyl phthalate	87.2	10	3.5	ug/l	100		87	55-120	5	30	
2,4-Dimethylphenol	69.1	20	3.5	ug/l	100		69	40-120	8	25	
Dimethyl phthalate	82.4	10	2.0	ug/l	100		82	30-120	4	30	
4,6-Dinitro-2-methylphenol	84.7	20	4.0	ug/l	100		85	45-120	7	25	
2,4-Dinitrophenol	81.0	20	8.0	ug/l	100		81	40-120	8	25	
2,4-Dinitrotoluene	93.1	10	3.5	ug/l	100		93	65-120	7	20	
2,6-Dinitrotoluene	83.3	10	2.0	ug/l	100		83	65-120	8	20	
Di-n-octyl phthalate	83.5	20	3.5	ug/l	100		84	65-135	5	20	
Fluoranthene	84.1	10	3.0	ug/l	100		84	60-120	6	20	
Fluorene	80.8	10	3.0	ug/l	100		81	65-120	5	20	
Hexachlorobenzene	81.2	10	3.0	ug/l	100		81	60-120	4	20	
Hexachlorobutadiene	64.1	10	4.0	ug/l	100		64	40-120	3	25	
Hexachlorocyclopentadiene	81.7	20	5.0	ug/l	100		82	25-120	8	30	
Hexachloroethane	57.5	10	3.5	ug/l	100		57	35-120	5	25	
Indeno(1,2,3-cd)pyrene	76.4	20	3.5	ug/l	100		76	45-135	7	25	
Isophorone	79.8	10	2.5	ug/l	100		80	50-120	5	20	
2-Methylnaphthalene	79.9	10	2.0	ug/l	100		80	55-120	6	20	
2-Methylphenol	72.5	10	3.0	ug/l	100		72	50-120	4	20	
4-Methylphenol	74.9	10	3.0	ug/l	100		75	50-120	6	20	
Naphthalene	72.5	10	3.0	ug/l	100		73	55-120	3	20	
2-Nitroaniline	87.8	20	2.0	ug/l	100		88	65-120	8	20	
3-Nitroaniline	87.3	20	3.0	ug/l	100		87	60-120	9	25	
4-Nitroaniline	94.1	20	4.0	ug/l	100		94	55-125	5	20	
Nitrobenzene	74.4	20	2.5	ug/l	100		74	55-120	5	25	
2-Nitrophenol	70.7	10	3.5	ug/l	100		71	50-120	3	25	
4-Nitrophenol	78.2	20	5.5	ug/l	100		78	45-120	4	30	

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B26045 Extracted: 02/26/08	<u></u>										
LCS Dup Analyzed: 02/28/2008 (8B2604	5-BSD1)										
N-Nitrosodiphenylamine	78.9	10	2.0	ug/l	100		79	60-120	2	20	
N-Nitroso-di-n-propylamine	78.6	10	3.5	ug/l	100		79	45-120	4	20	
Pentachlorophenol	80.3	20	3.5	ug/l	100		80	50-120	8	25	
Phenanthrene	81.5	10	3.5	ug/l	100		82	65-120	5	20	
Phenol	59.3	10	2.0	ug/l	100		59	40-120	3	25	
Pyrene	80.5	10	4.0	ug/l	100		80	55-125	2	25	
1,2,4-Trichlorobenzene	69.4	10	2.5	ug/l	100		69	45-120	0	20	
2,4,5-Trichlorophenol	76.8	20	3.0	ug/l	100		77	55-120	4	30	
2,4,6-Trichlorophenol	82.9	20	4.5	ug/l	100		83	55-120	4	30	
1,2-Diphenylhydrazine/Azobenzene	88.9	20	2.5	ug/l	100		89	60-120	6	25	
N-Nitrosodimethylamine	65.5	20	2.5	ug/l	100		65	45-120	3	20	
Surrogate: 2-Fluorophenol	110			ug/l	200		55	30-120			
Surrogate: Phenol-d6	120			ug/l	200		60	35-120			
Surrogate: 2,4,6-Tribromophenol	160			ug/l	200		80	40-120			
Surrogate: Nitrobenzene-d5	72.0			ug/l	100		72	45-120			
Surrogate: 2-Fluorobiphenyl	70.1			ug/l	100		70	50-120			
Surrogate: Terphenyl-d14	79.8			ug/l	100		80	50-125			

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
e e											
Batch: 8B25062 Extracted: 02/25/08	<u>)</u>										
Blank Analyzed: 02/25/2008 (8B25062-B	LK1)										
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	0.434			ug/l	0.500		87	45-120			
Surrogate: Tetrachloro-m-xylene	0.427			ug/l	0.500		85	35-115			
LCS Analyzed: 02/25/2008 (8B25062-BS	1)										MNR1
Aldrin	0.401	0.0050	0.0015	ug/l	0.500		80	40-115			
alpha-BHC	0.442	0.0050	0.0025	ug/l	0.500		88	45-115			
beta-BHC	0.447	0.010	0.0040	ug/l	0.500		89	55-115			
delta-BHC	0.451	0.0050	0.0035	ug/l	0.500		90	55-115			
gamma-BHC (Lindane)	0.429	0.010	0.0030	ug/l	0.500		86	45-115			
4,4'-DDD	0.444	0.0050	0.0020	ug/l	0.500		89	55-120			
4,4'-DDE	0.441	0.0050	0.0030	ug/l	0.500		88	50-120			
4,4'-DDT	0.472	0.010	0.0040	ug/l	0.500		94	55-120			
Dieldrin	0.417	0.0050	0.0020	ug/l	0.500		83	55-115			
Endosulfan I	0.428	0.0050	0.0020	ug/l	0.500		86	55-115			
Endosulfan II	0.439	0.0050	0.0030	ug/l	0.500		88	55-120			
Endosulfan sulfate	0.461	0.010	0.0030	ug/l	0.500		92	60-120			
				5							

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METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B25062 Extracted: 02/25/08	_										
LCS Analyzed: 02/25/2008 (8B25062-BS	1)										MNR1
Endrin	0.449	0.0050	0.0020	ug/l	0.500		90	55-115			
Endrin aldehyde	0.410	0.010	0.0020	ug/l	0.500		82	50-120			
Endrin ketone	0.447	0.010	0.0030	ug/l	0.500		89	55-120			
Heptachlor	0.422	0.010	0.0030	ug/l	0.500		84	45-115			
Heptachlor epoxide	0.416	0.0050	0.0025	ug/l	0.500		83	55-115			
Methoxychlor	0.466	0.0050	0.0035	ug/l	0.500		93	60-120			
Surrogate: Decachlorobiphenyl	0.441			ug/l	0.500		88	45-120			
Surrogate: Tetrachloro-m-xylene	0.425			ug/l	0.500		85	35-115			
LCS Dup Analyzed: 02/25/2008 (8B2506)	2-BSD1)										
Aldrin	0.365	0.0050	0.0015	ug/l	0.500		73	40-115	9	30	
alpha-BHC	0.408	0.0050	0.0025	ug/l	0.500		82	45-115	8	30	
beta-BHC	0.419	0.010	0.0040	ug/l	0.500		84	55-115	6	30	
delta-BHC	0.433	0.0050	0.0035	ug/l	0.500		87	55-115	4	30	
gamma-BHC (Lindane)	0.400	0.010	0.0030	ug/l	0.500		80	45-115	7	30	
4,4'-DDD	0.441	0.0050	0.0020	ug/l	0.500		88	55-120	1	30	
4,4'-DDE	0.447	0.0050	0.0030	ug/l	0.500		89	50-120	1	30	
4,4'-DDT	0.474	0.010	0.0040	ug/l	0.500		95	55-120	0	30	
Dieldrin	0.408	0.0050	0.0020	ug/l	0.500		82	55-115	2	30	
Endosulfan I	0.412	0.0050	0.0020	ug/l	0.500		82	55-115	4	30	
Endosulfan II	0.433	0.0050	0.0030	ug/l	0.500		87	55-120	1	30	
Endosulfan sulfate	0.458	0.010	0.0030	ug/l	0.500		92	60-120	1	30	
Endrin	0.437	0.0050	0.0020	ug/l	0.500		87	55-115	3	30	
Endrin aldehyde	0.413	0.010	0.0020	ug/l	0.500		83	50-120	1	30	
Endrin ketone	0.442	0.010	0.0030	ug/l	0.500		88	55-120	1	30	
Heptachlor	0.386	0.010	0.0030	ug/l	0.500		77	45-115	9	30	
Heptachlor epoxide	0.400	0.0050	0.0025	ug/l	0.500		80	55-115	4	30	
Methoxychlor	0.443	0.0050	0.0035	ug/l	0.500		89	60-120	5	30	
Surrogate: Decachlorobiphenyl	0.439			ug/l	0.500		88	45-120			
Surrogate: Tetrachloro-m-xylene	0.384			ug/l	0.500		77	35-115			

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Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

METHOD BLANK/QC DATA

TOTAL PCBS (EPA 608)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B25062 Extracted: 02/25/08							,				2
Blank Analyzed: 02/26/2008 (8B25062-B	LK1)										
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	0.476			ug/l	0.500		95	45-120			
LCS Analyzed: 02/26/2008 (8B25062-BS	2)										MNR1
Aroclor 1016	4.00	0.50	0.45	ug/l	4.00		100	50-115			
Aroclor 1260	4.16	0.50	0.30	ug/l	4.00		104	60-120			
Surrogate: Decachlorobiphenyl	0.514			ug/l	0.500		103	45-120			
LCS Dup Analyzed: 02/26/2008 (8B2506	2-BSD2)										
Aroclor 1016	3.95	0.50	0.45	ug/l	4.00		99	50-115	1	30	
Aroclor 1260	4.13	0.50	0.30	ug/l	4.00		103	60-120	1	25	
Surrogate: Decachlorobiphenyl	0.511			ug/l	0.500		102	45-120			

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Project ID: Annual Outfall 013

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Sampled: 02/24/08 Received: 02/25/08

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

METHOD BLANK/QC DATA

METALS

Analyta	Decult	Reporting Limit	MDI	Units	Spike Level	Source	%REC	%REC	RPD	RPD Limit	Data Qualifiers
•	Result	Limit	MDL	Units	Level	Result	70KEU	Linnts	KPD	Limit	Quanners
Batch: 8B27069 Extracted: 02/27/08											
Blank Analyzed: 02/29/2008 (8B27069-BL	K1)										
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							
Magnesium	ND	0.020	0.012	mg/l							
Nickel	ND	10	2.0	ug/l							
LCS Analyzed: 02/29/2008 (8B27069-BS1)	1										
Arsenic	478	10	7.0	ug/l	500		96	85-115			
Beryllium	468	2.0	0.90	ug/l	500		94	85-115			
Boron	0.487	0.050	0.020	mg/l	0.500		97	85-115			
Calcium	2.41	0.10	0.050	mg/l	2.50		96	85-115			
Chromium	479	5.0	2.0	ug/l	500		96	85-115			
Magnesium	2.34	0.020	0.012	mg/l	2.50		94	85-115			
Nickel	472	10	2.0	ug/l	500		94	85-115			
Matrix Spike Analyzed: 02/29/2008 (8B27	069-MS1)				Sou	rce: IRB2	2473-01				
Arsenic	492	10	7.0	ug/l	500	ND	98	70-130			
Beryllium	483	2.0	0.90	ug/l	500	ND	97	70-130			
Boron	0.493	0.050	0.020	mg/l	0.500	ND	99	70-130			
Calcium	10.0	0.10	0.050	mg/l	2.50	7.62	96	70-130			
Chromium	484	5.0	2.0	ug/l	500	ND	97	70-130			
Magnesium	3.31	0.020	0.012	mg/l	2.50	0.963	94	70-130			
Nickel	475	10	2.0	ug/l	500	ND	95	70-130			
Matrix Spike Analyzed: 02/29/2008 (8B27	069-MS2)				Sou	rce: IRB2	2540-01				
Arsenic	465	10	7.0	ug/l	500	ND	93	70-130			
Beryllium	458	2.0	0.90	ug/l	500	ND	92	70-130			
Boron	0.617	0.050	0.020	mg/l	0.500	0.165	90	70-130			
Calcium	42.5	0.10	0.050	mg/l	2.50	42.3	9	70-130			MHA
Chromium	453	5.0	2.0	ug/l	500	ND	91	70-130			
Magnesium	13.7	0.020	0.012	mg/l	2.50	12.5	46	70-130			MHA
Nickel	500	10	2.0	ug/l	500	62.1	88	70-130			

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METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B27069 Extracted: 02/27/08	_										
					_						
Matrix Spike Dup Analyzed: 02/29/2008		,				rce: IRB					
Arsenic	501	10	7.0	ug/l	500	ND	100	70-130	2	20	
Beryllium	488	2.0	0.90	ug/l	500	ND	98	70-130	1	20	
Boron	0.503	0.050	0.020	mg/l	0.500	ND	101	70-130	2	20	
Calcium	9.96	0.10	0.050	mg/l	2.50	7.62	93	70-130	1	20	
Chromium	493	5.0	2.0	ug/l	500	ND	99	70-130	2	20	
Magnesium	3.35	0.020	0.012	mg/l	2.50	0.963	96	70-130	1	20	
Nickel	485	10	2.0	ug/l	500	ND	97	70-130	2	20	
Batch: 8B28067 Extracted: 02/28/08	_										
Blank Analyzed: 02/28/2008 (8B28067-B	LK1)										
Antimony	ND	2.0	0.20	ug/l							
Cadmium	0.133	1.0	0.11	ug/l							J
Copper	ND	2.0	0.75	ug/l							
Lead	ND	1.0	0.30	ug/l							
Selenium	ND	2.0	0.30	ug/l							
Silver	ND	1.0	0.30	ug/l							
Thallium	ND	1.0	0.20	ug/l							
Zinc	6.39	20	2.5	ug/l							J
LCS Analyzed: 02/28/2008 (8B28067-BS	1)										
Antimony	77.9	2.0	0.20	ug/l	80.0		97	85-115			
Cadmium	76.7	1.0	0.11	ug/l	80.0		96	85-115			
Copper	79.3	2.0	0.75	ug/l	80.0		99	85-115			
Lead	79.9	1.0	0.30	ug/l	80.0		100	85-115			
Selenium	74.4	2.0	0.30	ug/l	80.0		93	85-115			
Silver	78.1	1.0	0.30	ug/l	80.0		98	85-115			
Thallium	75.5	1.0	0.20	ug/l	80.0		94	85-115			
Zinc	77.1	20	2.5	ug/l	80.0		96	85-115			

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METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B28067 Extracted: 02/28/08	-										
Matrix Spike Analyzed: 02/28/2008 (8B2	8067-MS1)				Sou	rce: IRB2	2460-02				
Antimony	78.3	2.0	0.20	ug/l	80.0	ND	98	70-130			
Cadmium	74.6	1.0	0.11	ug/l	80.0	0.128	93	70-130			
Copper	76.4	2.0	0.75	ug/l	80.0	1.05	94	70-130			
Lead	77.7	1.0	0.30	ug/l	80.0	ND	97	70-130			
Selenium	71.5	2.0	0.30	ug/l	80.0	ND	89	70-130			
Silver	73.7	1.0	0.30	ug/l	80.0	ND	92	70-130			
Thallium	73.2	1.0	0.20	ug/l	80.0	ND	92	70-130			
Zinc	74.0	20	2.5	ug/l	80.0	6.52	84	70-130			
Matrix Spike Analyzed: 02/28/2008 (8B2	8067-MS2)				Sou	rce: IRB2	2402-01				
Antimony	77.4	2.0	0.20	ug/l	80.0	2.51	94	70-130			
Cadmium	75.9	1.0	0.11	ug/l	80.0	1.94	92	70-130			
Copper	78.5	2.0	0.75	ug/l	80.0	2.79	95	70-130			
Lead	79.1	1.0	0.30	ug/l	80.0	1.66	97	70-130			
Selenium	69.4	2.0	0.30	ug/l	80.0	ND	87	70-130			
Silver	74.7	1.0	0.30	ug/l	80.0	ND	93	70-130			
Thallium	76.3	1.0	0.20	ug/l	80.0	ND	95	70-130			
Zinc	133	20	2.5	ug/l	80.0	65.8	84	70-130			
Matrix Spike Dup Analyzed: 02/28/2008	(8B28067-M	SD1)			Sou	rce: IRB2	2460-02				
Antimony	78.5	2.0	0.20	ug/l	80.0	ND	98	70-130	0	20	
Cadmium	76.2	1.0	0.11	ug/l	80.0	0.128	95	70-130	2	20	
Copper	78.4	2.0	0.75	ug/l	80.0	1.05	97	70-130	3	20	
Lead	78.3	1.0	0.30	ug/l	80.0	ND	98	70-130	1	20	
Selenium	72.4	2.0	0.30	ug/l	80.0	ND	91	70-130	1	20	
Silver	75.9	1.0	0.30	ug/l	80.0	ND	95	70-130	3	20	
Thallium	76.6	1.0	0.20	ug/l	80.0	ND	96	70-130	5	20	
Zinc	75.2	20	2.5	ug/l	80.0	6.52	86	70-130	2	20	



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Project ID: Annual Outfall 013

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METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
-		Linnt		emis	Lever	nesun	/unee	Linits	IC D	Linit	Quanners
Batch: 8B25122 Extracted: 02/25/0	<u>8</u>										
Blank Analyzed: 02/26/2008 (8B25122-I	BLK1)										
Arsenic	ND	10	7.0	ug/l							
Beryllium	ND	2.0	0.90	ug/l							
Boron	0.0320	0.050	0.020	mg/l							J
Calcium	ND	0.10	0.050	mg/l							
Chromium	ND	5.0	2.0	ug/l							
Magnesium	ND	0.020	0.012	mg/l							
Nickel	ND	10	2.0	ug/l							
Hardness (as CaCO3)	ND	1.0	1.0	mg/l							
LCS Analyzed: 02/26/2008 (8B25122-B	51)										
Arsenic	988	10	7.0	ug/l	1000		99	85-115			
Beryllium	990	2.0	0.90	ug/l	1000		99	85-115			
Boron	1.01	0.050	0.020	mg/l	1.00		101	85-115			
Calcium	0.964	0.10	0.050	mg/l	1.00		96	85-115			
Chromium	976	5.0	2.0	ug/l	1000		98	85-115			
Magnesium	0.950	0.020	0.012	mg/l	1.00		95	85-115			
Nickel	998	10	2.0	ug/l	1000		100	85-115			
Matrix Spike Analyzed: 02/26/2008 (8B	25122-MS1)				Sou	rce: IRB	2473-01				
Arsenic	1030	10	7.0	ug/l	1000	7.56	102	70-130			
Beryllium	999	2.0	0.90	ug/l	1000	ND	100	70-130			
Boron	1.03	0.050	0.020	mg/l	1.00	ND	103	70-130			
Calcium	8.38	0.10	0.050	mg/l	1.00	7.52	86	70-130			MHA
Chromium	996	5.0	2.0	ug/l	1000	ND	100	70-130			
Magnesium	1.98	0.020	0.012	mg/l	1.00	1.00	97	70-130			
Nickel	1020	10	2.0	ug/l	1000	ND	102	70-130			
Matrix Spike Dup Analyzed: 02/26/2008	8 (8B25122-N	ISD1)			Sou	rce: IRB	2473-01				
Arsenic	1030	10	7.0	ug/l	1000	7.56	102	70-130	0	20	
Beryllium	1010	2.0	0.90	ug/l	1000	ND	101	70-130	2	20	
Boron	1.02	0.050	0.020	mg/l	1.00	ND	102	70-130	1	20	
Calcium	8.50	0.10	0.050	mg/l	1.00	7.52	98	70-130	1	20	MHA
Chromium	1000	5.0	2.0	ug/l	1000	ND	100	70-130	1	20	
Magnesium	2.00	0.020	0.012	mg/l	1.00	1.00	99	70-130	1	20	
Nickel	1030	10	2.0	ug/l	1000	ND	103	70-130	0	20	

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METHOD BLANK/QC DATA

DISSOLVED METALS

Heak: 825123 Extracted: 825123- Bank-Analyzet: 82762008 (882513)- Atimony ND 20 020 ugl Copper ND 20 020 ugl Cadminin ND 20 030 ugl Selenium ND 20 030 ugl Selenium ND 20 020 ugl Autimony ND 20 020 ugl Atimony ND 20 020 ugl Commony 78.6 20 021 ugl 80.7 98 55.15 Copper 80.6 2.0 0.75 ugl 80.7 98 55.15 Copper 80.6 2.0 0.75 ugl 80.7 98 55.15 Copper 80.6 2.0 0.75 ugl 80.7 9.10 85.15 Cadmium 79.4 2.0 0.70 10.8 85.15 5<.15 5 Cadmium 79.4 2.0 0.70 10.8 85.15 5<.15 5	Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Hank Analyzed: 02/26/2008 (8B25123-BL-K) Antimony ND 2.0 0.20 ug1 Cadmiam ND 1.0 0.11 ug1 Cadmiam ND 2.0 0.30 ug1 Lead ND 1.0 0.30 ug1 Selenium ND 2.0 0.30 ug1 Thallium ND 2.0 0.30 ug1 Kir ND 2.0 0.20 ug1 Kir ND 2.0 0.20 ug1 Kir ND 2.0 2.5 ug1 Cadmiam ND 2.0 0.20 ug1 80.0 98 85-115 Cadmiam 78.6 2.0 0.75 ug1 80.0 99 85-115 Cadmiam 78.7 2.0 0.30 ug1 85.115 15 Lead 83.1 1.0 0.20 ug1 80.0 99 85-115 Lead 83.1 1.0 0.20 ug1 80.0 99 85-115 Cadmiam	Batch: 8B25123 Extracted: 02/25/08											
AnimonyND2.00.20ug1CadmiumND1.00.01ug1CopperND2.00.30ug1IcadND1.00.30ug1SciniumND2.00.30ug1ThalliumND1.00.20ug1CaroND2.00.20ug1AnimonyR5.62.00.20ug1AnimonyR5.62.00.20ug1Copper0.620.21ug18.09.8CadmiumR5.62.00.20ug1Copper0.620.01ug18.09.8CadmiumR5.62.00.02ug1ScieniumR5.72.00.30ug1ScieniumR5.72.00.30ug1ScieniumR7.72.00.30ug1AntinonyR4.62.00.21ug1ScieniumR7.72.00.30ug1Copper6.62.00.21ug1CommonyR4.62.00.21ug1Copper2.00.23ug18.0ND10.6Copper2.00.24ug18.0ND10.5ScieniumR7.72.00.25ug18.0ND10.5CopperCopper2.00.01ug18.0ND10.510.1Copper2.00.01ug18.0ND10.78.1 <td></td> <td>_</td> <td></td>		_										
CadmianND1.00.110.170.17CopperND2.00.070.170.17LeadND1.00.030.17StelniumND1.00.200.17ThalluonND1.00.200.17ZineND1.00.200.17Antimony78.62.00.219885-115Copper80.62.00.7380.79885-115Codmian78.91.00.1080.79885-115Cadmian78.72.00.3080.79885-115Steinium78.72.00.3080.79885-115Steinium78.72.00.3080.79885-115Steinium78.72.00.3080.79885-115Steinium79.41.00.2080.79885-115Steinium79.41.00.2080.79885-115Cadinium79.41.00.2080.79885-115Cadinium79.41.00.2080.79885-115Cadinium79.41.00.2080.79885-115Cadinium79.41.00.2080.79885-115Cadinium79.41.080.080.79885-115Steinium79.41.080.780.79885-115Steinium79.62.0 <td>-</td> <td></td>	-											
CopperND2.00.75ug'LeadND1.00.30ug'SeleniumND2.00.30ug'ThalliumND2.00.30ug'ZineND2.02.5ug'CASAnalyzet: 02/26/2008 (8B25123-BS):Castana ND2.00.20ug'80.09.885-115Colspan="4">Colspan="4">Selenium78.00.00.9180.09.885-115Copper80.62.00.75ug'80.01.0185-115Cadmium78.72.00.30ug'80.01.0185-115Selenium78.41.00.30ug'80.09.985-115Ladium78.41.00.30ug'80.01.0185-115Selenium78.41.00.30ug'80.01.0185-115Zine80.62.02.5ug'80.01.0185-115Zine78.41.00.20ug'80.01.0185-115Zine79.42.00.30ug'80.01.0185-115Zine79.41.00.00ug'80.01.0185-115Zine79.41.00.00ug'80.01.0185-115Zine79.41.00.01ug'80.01.0185-115Copper69.62.00.05ug'80.01.01	5				-							
LeadND1.00.30ug/lSeleniumND2.00.30ug/lThalliumND2.00.20ug/lZiacND2.00.25ug/lCostantave: 0.2026/2008 (B25213-BE):Antimony78.62.00.20ug/l80.09885-115Cadmium78.91.00.11ug/l80.09885-115Cadmium78.91.00.01ug/l80.09885-115Selenium78.72.00.30ug/l80.09885-115Selenium78.72.00.30ug/l80.09885-115Selenium78.72.00.30ug/l80.09885-115Selenium78.72.00.30ug/l80.09885-115Selenium78.72.00.30ug/l80.09885-115Selenium78.72.00.30ug/l80.09985-115Attimony84.62.00.20ug/l80.09985-115Cadmium71.01.00.10ug/l80.0ND10514Cadmium71.01.00.11ug/l80.0ND9070.13014Cadmium71.01.00.30ug/l80.0ND9070.13014Cadmium71.01.00.30ug/l80.00.91712070					U							
SeleniumND2.00.30ug/lThalliumND1.00.20ug/lZineND1.00.20ug/lConspan="4">Conspan="4">Version 100Antimony78.00.00ug/l80.09885-115Cadmium78.91.00.11ug/l80.09985-115Cadmium78.91.00.30ug/l80.09985-115Lead83.11.00.30ug/l80.09885-115Selenium78.72.00.30ug/l80.09885-115Thallium79.41.00.30ug/l80.09885-115Zine8.62.00.75ug/l80.09885-115Coper8.62.00.20ug/l80.09885-115Zine78.71.00.20ug/l80.09885-115Zine79.41.00.20ug/l80.09885-115Zine79.41.00.20ug/l80.01.085-115Zine79.41.00.20ug/l80.0ND9885-115Zine79.41.00.20ug/l80.0ND9871.15Codenium79.41.00.20ug/l80.0ND9870.130Cadmium71.01.00.11ug/l80.0ND9070.130 <tr<< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr<<>												
Thallium ND 1.0 0.20 0.20 0.21 Zine ND 2.0 2.5 ug/l					-							
Zine ND 20 2.5 ugl LCS Analyzed: 02/26/2008 (8B25123-BS) Antimony 78.6 2.0 0.20 ugl 80.0 98 85-115 Cadmium 78.9 1.0 0.11 ugl 80.0 99 85-115 Cadmium 78.9 0.0 0.30 ugl 80.0 101 85-115 Lead 83.1 1.0 0.30 ugl 80.0 99 85-115 Sclenium 78.7 2.0 0.30 ugl 80.0 99 85-115 Zine 80.6 20 0.25 ugl 80.0 99 85-115 Zine 80.6 20 0.20 ugl 80.0 99 85-115 Zine 80.6 20 0.20 ugl 80.0 ND 85-115 Cadmium 79.4 1.0 0.20 ugl 80.0 ND 96 70-130 Came 97.6 2.0 0.75 ugl 80.0 ND 97 70-130 Cadmium </td <td></td> <td></td> <td>2.0</td> <td></td> <td>ug/l</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>			2.0		ug/l							
Antimony 78.6 2.0 0.20 ug/l 8.0 98 85-115 Cadmium 78.9 1.0 0.11 ug/l 80.0 99 85-115 Copper 80.6 2.0 0.75 ug/l 80.0 101 85-115 Lead 83.1 1.0 0.30 ug/l 80.0 98 85-115 Selenium 78.7 2.0 0.30 ug/l 80.0 99 85-115 Thalium 79.4 1.0 0.20 ug/l 80.0 99 85-115 Zine 80.6 2.0 2.5 ug/l 80.0 99 85-115 Copmer 66.6 2.0 0.25 ug/l 80.0 1.01 85-115 Codmium 77.0 1.0 0.11 ug/l 80.0 ND 166 70-130 Cadmium 77.8 1.0 0.30 ug/l 80.0 ND 97 70-130 Lead 77.8 1.0 0.30 ug/l 80.0 ND 91 2.0 <td>Thallium</td> <td></td>	Thallium											
Antimony 78.6 2.0 0.20 ug/l 80.0 98 85-115 Cadmium 78.9 1.0 0.11 ug/l 80.0 99 85-115 Copper 80.6 2.0 0.75 ug/l 80.0 101 85-115 Lead 83.1 1.0 0.30 ug/l 80.0 99 85-115 Selenium 78.7 2.0 0.30 ug/l 80.0 99 85-115 Thallium 79.4 1.0 0.20 ug/l 80.0 99 85-115 Zine 80.6 2.0 2.5 ug/l 80.0 ND 99 85-115 Antimony 84.6 2.0 0.20 ug/l 80.0 ND 106 70-130 Cadmium 77.0 1.0 0.11 ug/l 80.0 ND 96 70-130 Cadmium 77.8 1.0 0.30 ug/l 80.0 0.917 120 70-130 Selenium 97.0 2.0 0.30 ug/l 80.0 0.917 <td>Zinc</td> <td>ND</td> <td>20</td> <td>2.5</td> <td>ug/l</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Zinc	ND	20	2.5	ug/l							
Cadmium 78.9 1.0 0.11 ug/l 80.0 99 85-115 Copper 80.6 2.0 0.75 ug/l 80.0 101 85-115 Lead 83.1 1.0 0.30 ug/l 80.0 104 85-115 Selenium 78.7 2.0 0.30 ug/l 80.0 99 85-115 Thallium 79.4 1.0 0.20 ug/l 80.0 99 85-115 Zine 80.6 20 2.5 ug/l 80.0 99 85-115 Antimony 84.6 2.0 0.20 ug/l 80.0 ND 106 70-130 Cadmium 77.0 1.0 0.11 ug/l 80.0 ND 96 70-130 Cadmium 77.8 1.0 0.30 ug/l 80.0 ND 96 70-130 Selenium 75.2 1.0 0.30 ug/l 80.0 ND 91 70-130 Zine 72.5 20 2.5 ug/l 80.0 ND	LCS Analyzed: 02/26/2008 (8B25123-BS	1)										
Copper80.62.00.75uu80.010185-115Lead83.11.00.30ug/l80.010485-115Selenium78.72.00.30ug/l80.09885-115Thallium79.41.00.20ug/l80.09985-115Zinc80.6202.5ug/l80.010185-115Supression (20/26/2008 (8B25/3-MS1)Supression (20/26/2008 (8D2)Supression (20/	Antimony	78.6	2.0	0.20	ug/l	80.0		98	85-115			
Lead83.11.00.30ug/l80.010485-115Selenium78.72.00.30ug/l80.09885-115Thallium79.41.00.20ug/l80.09985-115Zine80.6202.5ug/l80.010185-115Surve: IRE: U-01Antinony84.62.00.20ug/l80.0ND10670-130Cadmium77.01.00.11ug/l80.0ND9670-130Copper69.62.00.75ug/l80.0ND9770-130Selenium77.21.00.30ug/l80.0ND9170-130Selenium75.21.00.30ug/l80.0ND9170-130Surve: IRE: IRE: IRE: IRE: IRE: IRE: IRE: IRE	Cadmium	78.9	1.0	0.11	ug/l	80.0		99	85-115			
Selenium 78.7 2.0 0.30 u/1 80.0 98 85-115 Thallium 79.4 1.0 0.20 ug/1 80.0 99 85-115 Zine 80.6 20 2.5 ug/1 80.0 101 85-115 Matrix Spike Analyzed: 02/26/2008 (8B25123-MS1) source: IRB21000000000000000000000000000000000000	Copper	80.6	2.0	0.75	ug/l	80.0		101	85-115			
Thallium79.41.00.20u/l80.09985-115Zine80.6202.5u/l80.010185-115Matrix Spike Analyzed: 02/26/2008 (8B25123-MS1)Source: IRB210-10Antimony84.62.00.20u/l80.0ND10670-130Cadmium77.01.00.11u/l80.0ND9770-130Copper69.62.00.75u/l80.0ND9770-130Lead77.81.00.30u/l80.00.91712070-130Selenium97.02.00.30u/l80.0ND9170-130Thallium75.21.00.20u/l80.0ND9170-130Charrix Spike Dup Analyzed: 02/26/2008 (BE25123-MSU)Source: ISE	Lead	83.1	1.0	0.30	ug/l	80.0		104	85-115			
Zinc80.6202.5ug/l80.010185-115Matrix Spike Analyzed: 02/26/2008 (8B25123-MS1)Source: IRB210-01Antimony84.62.00.20ug/l80.0ND10670-130Cadmium77.01.00.11ug/l80.0ND9670-130Copper69.62.00.75ug/l80.0ND9770-130Lead77.81.00.30ug/l80.0ND9770-130Selenium97.02.00.30ug/l80.00.91712070-130Thallium75.21.00.20ug/l80.0ND9170-130Zinc72.5202.5ug/l80.0ND9170-130Cadmium89.12.00.20ug/l80.0ND10170-130520Cadmium82.51.00.111.0180.0ND10370-130520Cadmium82.51.00.30ug/l80.0ND10370-130520Cadmium82.51.00.30ug/l80.0ND9970-130220Cadmium82.51.00.30ug/l80.0ND10370-130520Cadmium82.51.00.30ug/l80.0ND9970-130220Cadmium82.51.00.30 <td>Selenium</td> <td>78.7</td> <td>2.0</td> <td>0.30</td> <td>ug/l</td> <td>80.0</td> <td></td> <td>98</td> <td>85-115</td> <td></td> <td></td> <td></td>	Selenium	78.7	2.0	0.30	ug/l	80.0		98	85-115			
Surce: IRB210-01 Antimony 84.6 2.0 0.20 ug/l 80.0 ND 106 70-130 Cadmium 77.0 1.0 0.11 ug/l 80.0 ND 96 70-130 Copper 69.6 2.0 0.75 ug/l 80.0 ND 97 70-130 Lead 77.8 1.0 0.30 ug/l 80.0 0.917 120 70-130 Selenium 97.0 2.0 0.30 ug/l 80.0 0.917 120 70-130 Static 72.5 1.0 0.20 ug/l 80.0 0.917 120 70-130 Static 72.5 2.0 0.20 ug/l 80.0 0.917 120 70-130 Matrix Spike Dup Analyzed: 02/26/2008 (8B25123-MSUT Source: IRB2/000 Matrix Spike Dup Analyzed: 02/26/2008 (8B25123-MSUT Source: IRB2/000 Antimony 89.1 2.0 0.20 ug/l 80.0 ND 111 70-130 5 20 Copper 71.8 2.0	Thallium	79.4	1.0	0.20	ug/l	80.0		99	85-115			
Antimony84.62.00.20ug/l80.0ND10670-130Cadmium77.01.00.11ug/l80.0ND9670-130Copper69.62.00.75ug/l80.01.178570-130Lead77.81.00.30ug/l80.0ND9770-130Selenium97.02.00.30ug/l80.00.91712070-130Thallium75.21.00.20ug/l80.0ND9170-130Zinc72.5202.5ug/l80.0ND9170-130Source: IRE21-UEAntimony89.12.00.20ug/l80.0ND11170-130520Copper71.82.00.25ug/l80.0ND11170-130520Copper71.82.00.20ug/l80.0ND11370-130720Codmium82.51.00.11ug/l80.0ND10370-130720Copper71.82.00.75ug/l80.0ND9970-130220Lead79.11.00.30ug/l80.0ND9970-130220Lead79.11.00.30ug/l80.0ND9970-130220Selenium1012.00.30ug/l80.0	Zinc	80.6	20	2.5	ug/l	80.0		101	85-115			
Antimony84.62.00.20ug/l80.0ND10670-130Cadmium77.01.00.11ug/l80.0ND9670-130Copper69.62.00.75ug/l80.01.178570-130Lead77.81.00.30ug/l80.0ND9770-130Selenium97.02.00.30ug/l80.00.91712070-130Thallium75.21.00.20ug/l80.0ND9170-130Zinc72.5202.5ug/l80.0ND9170-130Source: IRE21-UEAntimony89.12.00.20ug/l80.0ND11170-130520Copper71.82.00.25ug/l80.0ND11170-130520Copper71.82.00.20ug/l80.0ND11370-130720Codmium82.51.00.11ug/l80.0ND10370-130720Copper71.82.00.75ug/l80.0ND9970-130220Lead79.11.00.30ug/l80.0ND9970-130220Lead79.11.00.30ug/l80.0ND9970-130220Selenium1012.00.30ug/l80.0	Matrix Spike Analyzed: 02/26/2008 (8B2	5123-MS1)				Sou	rce: IRB	2107-01				
Cadmun77.01.00.11u/l80.0ND9670-130Copper69.62.00.75ug/l80.01.178570-130Lead77.81.00.30ug/l80.0ND9770-130Selenium97.02.00.30ug/l80.00.91712070-130Thallium75.21.00.20ug/l80.00.2309470-130Zinc72.5202.5ug/l80.0ND9170-130Matrix Spike Dup Analyzed:02/26/2008 (8B25123-MSD1)Source: IRB21/DETAntimony89.12.00.20ug/l80.0ND11170-130520Cadmium82.51.00.11ug/l80.0ND10370-130720Copper71.82.00.75ug/l80.0ND10370-130720Lead79.11.00.30ug/l80.0ND10370-130720Copper71.82.00.75ug/l80.0ND9970-130220Lead79.11.00.30ug/l80.0ND9970-130220Selenium1012.00.30ug/l80.00.91712570-130420Icad76.51.00.20ug/l80.00.2309570-13022			2.0	0.20	ug/l				70-130			
Copper69.62.00.75ug/l80.01.178570-130Lead77.81.00.30ug/l80.0ND9770-130Selenium97.02.00.30ug/l80.00.91712070-130Thallium75.21.00.20ug/l80.00.2309470-130Zinc72.5202.5ug/l80.0ND9170-130 Matrix Spike Dup Analyzed: 02/26/2008 (BE25123-MSUF)Source: IRB21/-OU Antimony89.12.00.20ug/l80.0ND11170-130520Cadmium82.51.00.11ug/l80.0ND10370-130720Copper71.82.00.75ug/l80.01.178870-130320Lead79.11.00.30ug/l80.0ND19370-130220Selenium1012.00.30ug/l80.0ND9970-130220Selenium1012.00.30ug/l80.00.91712570-130420Selenium76.51.00.20ug/l80.00.2309570-130220	Cadmium				-			96	70-130			
Lad77.81.00.30ug/l80.0ND9770-130Selenium97.02.00.30ug/l80.00.91712070-130Thallium75.21.00.20ug/l80.00.2309470-130Zinc72.5202.5ug/l80.0ND9170-130Matrix Spike Dup Analyzed: 02/26/2008 (8B25123-MSDISource: IRB2107-01Antimony89.12.00.20ug/l80.0ND11170-130520Cadmium82.51.00.11ug/l80.0ND10370-130720Copper71.82.00.75ug/l80.0ND10370-130320Lead79.11.00.30ug/l80.0ND9970-130220Selenium1012.00.30ug/l80.0ND9970-130220Selenium1012.00.30ug/l80.0ND9970-130220Selenium1012.00.30ug/l80.0ND9970-130220Selenium1012.00.30ug/l80.00.91712570-130420Thallium76.51.00.20ug/l80.00.2309570-130220	Copper	69.6	2.0	0.75	-	80.0		85	70-130			
Selenium97.02.00.30ug/l80.00.91712070-130Thallium75.21.00.20ug/l80.00.2309470-130Zinc72.5202.5ug/l80.0ND9170-130 Matrix Spike Dup Analyzed: 02/26/2008 (B25123-MSU Solution 10.000Solution 10.000Antimony89.12.00.20ug/l80.0ND11170-130520Cadmium82.51.00.11ug/l80.0ND10370-130720Copper71.82.00.75ug/l80.0ND10370-130320Lead79.11.00.30ug/l80.0ND9970-130220Selenium1012.00.30ug/l80.00.91712570-130420Itallium76.51.00.20ug/l80.00.2309570-130220		77.8	1.0	0.30	-	80.0		97	70-130			
Thallium75.21.00.20ug/l80.00.2309470-130Zinc72.5202.5ug/l80.0ND9170-130 Matrix Spike Dup Analyzed: 02/26/2008 (8B25123-MSD: Source: IRB2107-01Antimony89.12.00.20ug/l80.0ND11170-130520Cadmium82.51.00.11ug/l80.0ND10370-130720Copper71.82.00.75ug/l80.0ND9970-130320Lead79.11.00.30ug/l80.0ND9970-130220Selenium1012.00.30ug/l80.00.91712570-130420Thallium76.51.00.20ug/l80.00.2309570-130220	Selenium	97.0	2.0	0.30	-	80.0		120	70-130			
Zinc72.5202.5ug/l80.0ND9170-130Matrix Spike Dup Analyzed: 02/26/2008 (8E25123-MSU)Source: IRB21/0-11Antimony89.12.00.20ug/l80.0ND11170-130520Cadmium82.51.00.11ug/l80.0ND10370-130720Copper71.82.00.75ug/l80.0ND9970-130320Lead79.11.00.30ug/l80.0ND9970-130220Selenium1012.00.30ug/l80.00.91712570-130420Thallium76.51.00.20ug/l80.00.2309570-130220	Thallium	75.2	1.0	0.20	ug/l	80.0		94	70-130			
Antimony89.12.00.20ug/l80.0ND11170-130520Cadmium82.51.00.11ug/l80.0ND10370-130720Copper71.82.00.75ug/l80.01.178870-130320Lead79.11.00.30ug/l80.0ND9970-130220Selenium1012.00.30ug/l80.00.91712570-130420Thallium76.51.00.20ug/l80.00.2309570-130220	Zinc	72.5	20	2.5		80.0		91	70-130			
Cadmium82.51.00.11ug/l80.0ND10370-130720Copper71.82.00.75ug/l80.01.178870-130320Lead79.11.00.30ug/l80.0ND9970-130220Selenium1012.00.30ug/l80.00.91712570-130420Thallium76.51.00.20ug/l80.00.2309570-130220	Matrix Spike Dup Analyzed: 02/26/2008	(8B25123-M	ISD1)			Sou	rce: IRB	2107-01				
Copper71.82.00.75ug/l80.01.178870-130320Lead79.11.00.30ug/l80.0ND9970-130220Selenium1012.00.30ug/l80.00.91712570-130420Thallium76.51.00.20ug/l80.00.2309570-130220	Antimony	89.1	2.0	0.20	ug/l	80.0	ND	111	70-130	5	20	
Lead79.11.00.30ug/l80.0ND9970-130220Selenium1012.00.30ug/l80.00.91712570-130420Thallium76.51.00.20ug/l80.00.2309570-130220	Cadmium	82.5	1.0	0.11	ug/l	80.0	ND	103	70-130	7	20	
Selenium1012.00.30ug/l80.00.91712570-130420Thallium76.51.00.20ug/l80.00.2309570-130220	Copper	71.8	2.0	0.75	ug/l	80.0	1.17	88	70-130	3	20	
Thallium 76.5 1.0 0.20 ug/l 80.0 0.230 95 70-130 2 20	Lead	79.1	1.0	0.30	ug/l	80.0	ND	99	70-130	2	20	
	Selenium	101	2.0	0.30	ug/l	80.0	0.917	125	70-130	4	20	
	Thallium	76.5	1.0	0.20	ug/l	80.0	0.230	95	70-130	2	20	
Zinc 75.6 20 2.5 ug/l 80.0 ND 95 70-130 4 20	Zinc	75.6	20	2.5	ug/l	80.0	ND	95	70-130	4	20	

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result		%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8C04081 Extracted: 03/04/08	_										
Blank Analyzed: 03/04/2008 (8C04081-B	LK1)										
Silver	ND	1.0	0.30	ug/l							
LCS Analyzed: 03/04/2008 (8C04081-BS	1)										
Silver	84.3	1.0	0.30	ug/l	80.0		105	85-115			
Matrix Spike Analyzed: 03/04/2008 (8C0	4081-MS1)				Sou	rce: IRB	2840-01				
Silver	83.2	1.0	0.30	ug/l	80.0	ND	104	70-130			
Matrix Spike Dup Analyzed: 03/04/2008 (8C04081-MSD1)					Sou	rce: IRB	2840-01				
Silver	81.3	1.0	0.30	ug/l	80.0	ND	102	70-130	2	20	

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Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

METHOD BLANK/QC DATA

INORGANICS

	D	Reporting		TT 1 /	Spike	Source		%REC	DDD	RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 8B25042 Extracted: 02/25/08	_										
Blank Analyzed: 02/25/2008 (8B25042-B	I K 1)										
Chloride	ND	0.50	0.25	mg/l							
Nitrate-N	ND	0.11	0.060	mg/l							
Nitrite-N	ND	0.11	0.000	mg/l							
Nitrate/Nitrite-N	ND	0.15	0.050	mg/l							
Sulfate	ND	0.20	0.13	mg/l							
Sunac	ND	0.50	0.20	iiig/i							
LCS Analyzed: 02/25/2008 (8B25042-BS	1)										
Chloride	5.09	0.50	0.25	mg/l	5.00		102	90-110			
Nitrate-N	1.09	0.11	0.060	mg/l	1.13		96	90-110			
Nitrite-N	1.49	0.15	0.090	mg/l	1.52		98	90-110			
Sulfate	9.95	0.50	0.20	mg/l	10.0		99	90-110			M-3
Matrix Spike Analyzed: 02/25/2008 (8B2	5042-MS1)				Sou	rce: IRB	2399-01				
Chloride	20.2	0.50	0.25	mg/l	5.00	15.9	88	80-120			
Nitrate-N	1.61	0.11	0.060	mg/l	1.13	0.512	97	80-120			
Nitrite-N	1.74	0.15	0.090	mg/l	1.52	ND	115	80-120			
Matrix Spike Dup Analyzed: 02/25/2008	(8B25042-MS	SD1)			Sou	rce: IRB2	2399-01				
Chloride	20.2	0.50	0.25	mg/l	5.00	15.9	87	80-120	0	20	
Nitrate-N	1.56	0.11	0.060	mg/l	1.13	0.512	93	80-120	3	20	
Nitrite-N	1.76	0.15	0.090	mg/l	1.52	ND	116	80-120	1	20	
Batch: 8B25072 Extracted: 02/25/08	_										

Blank Analyzed: 02/25/2008 (8B25072-B	SLK1)		
Fluoride	0.0276	0.10	0.014

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Joseph Doak Project Manager mg/l

J



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Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B25072 Extracted: 02/25/08	-										
LCS Analyzed: 02/25/2008 (8B25072-BS1)										
Fluoride	1.03	0.10	0.014	mg/l	1.00		103	90-110			
Matrix Spike Analyzed: 02/25/2008 (8B2	5072-MS1)				Sou	rce: IRB2	2189-01				
Fluoride	1.26	0.10	0.014	mg/l	1.00	0.340	92	80-120			
Matrix Spike Dup Analyzed: 02/25/2008	(8B25072-M	SD1)			Sou	rce: IRB2	2189-01				
Fluoride	1.29	0.10	0.014	mg/l	1.00	0.340	95	80-120	2	20	
Batch: 8B25101 Extracted: 02/25/08	-										
Blank Analyzed: 03/01/2008 (8B25101-Bl	L K1)										
Biochemical Oxygen Demand	ND	2.0	0.59	mg/l							
LCS Analyzed: 03/01/2008 (8B25101-BS1	l)										
Biochemical Oxygen Demand	184	100	30	mg/l	198		93	85-115			
LCS Dup Analyzed: 03/01/2008 (8B25101	-BSD1)										
Biochemical Oxygen Demand	184	100	30	mg/l	198		93	85-115	0	20	
Batch: 8B26063 Extracted: 02/26/08	-										
Blank Analyzed: 02/26/2008 (8B26063-Bl	L K1)										
Turbidity	0.100	1.0	0.040	NTU							J
Duplicate Analyzed: 02/26/2008 (8B26063	3-DUP1)				Sou	rce: IRB2	2402-01				
Turbidity	2.98	1.0	0.040	NTU		3.03			2	20	

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METHOD BLANK/QC DATA

INORGANICS

Analyte <u>Batch: 8B26098 Extracted: 02/26/08</u>	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Baten. 0020070 Extracted. 02/20/00	<u> </u>										
Blank Analyzed: 02/26/2008 (8B26098-B	,										
Total Cyanide	ND	0.0050	0.0022	mg/l							
LCS Analyzed: 02/26/2008 (8B26098-BS	1)										
Total Cyanide	0.197	0.0050	0.0022	mg/l	0.200		99	90-110			
Matrix Spike Analyzed: 02/26/2008 (8B2	6098-MS1)				Sou	rce: IRB	2473-01				
Total Cyanide	0.198	0.0050	0.0022	mg/l	0.200	ND	99	70-115			
Matrix Spike Dup Analyzed: 02/26/2008	(8B26098-M	SD1)			Sou	rce: IRB	2473-01				
Total Cyanide	0.200	0.0050	0.0022	mg/l	0.200	ND	100	70-115	1	15	
Batch: 8B26101 Extracted: 02/26/08	<u> </u>										
	T TZ1)										
Blank Analyzed: 02/26/2008 (8B26101-B Ammonia-N (Distilled)	LKI) ND	0.50	0.30	mg/l							
		0.50	0.50	ing/1							
LCS Analyzed: 02/26/2008 (8B26101-BS Ammonia-N (Distilled)	1) 10.1	0.50	0.30	mg/l	10.0		101	80-115			
		0.50	0.50	1115/1		IDD		00 115			
Matrix Spike Analyzed: 02/26/2008 (8B2 Ammonia-N (Distilled)	6101-MS1) 10.1	0.50	0.30	mg/l	Sou 10.0	rce: IRB2 ND	2 399-01 101	70-120			
			0.50	iiig/i				70-120			
Matrix Spike Dup Analyzed: 02/26/2008 Ammonia-N (Distilled)	(8B26101-M3 10.1	SD1) 0.50	0.30	mg/l	Sou 10.0	rce: IRB	2 399-01 101	70-120	0	15	
		0.50	0.30	Ing/1	10.0	ND	101	/0-120	0	15	
Batch: 8B27119 Extracted: 02/27/08	<u>-</u>										
Blank Analyzed: 02/27/2008 (8B27119-B	LK1)										
Total Dissolved Solids	ND	10	10	mg/l							

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METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B27119 Extracted: 02/27/08	-										
LCS Analyzed: 02/27/2008 (8B27119-BS)	l)										
Total Dissolved Solids	980	10	10	mg/l	1000		98	90-110			
Duplicate Analyzed: 02/27/2008 (8B2711)	9-DUP1)				Sou	rce: IRB	2154-02				
Total Dissolved Solids	4760	10	10	mg/l		4760			0	10	
Batch: 8B28045 Extracted: 02/28/08	-										
Blank Analyzed: 02/28/2008 (8B28045-Bl	LK1)										
Perchlorate	ND	4.0	1.5	ug/l							
LCS Analyzed: 02/28/2008 (8B28045-BS)	l)										
Perchlorate	54.9	4.0	1.5	ug/l	50.0		110	85-115			
Matrix Spike Analyzed: 02/28/2008 (8B2	8045-MS1)				Sou	rce: IRB	2453-07				
Perchlorate	61.1	4.0	1.5	ug/l	50.0	5.03	112	80-120			
Matrix Spike Dup Analyzed: 02/28/2008	(8B28045-MSI	D1)			Sou	rce: IRB	2453-07				
Perchlorate	60.6	4.0	1.5	ug/l	50.0	5.03	111	80-120	1	20	
Batch: 8B28123 Extracted: 02/28/08	-										
Blank Analyzed: 02/28/2008 (8B28123-B	LK1)										
Total Suspended Solids	ND	10	10	mg/l							
LCS Analyzed: 02/28/2008 (8B28123-BS)	l)										
Total Suspended Solids	1030	10	10	mg/l	1000		103	85-115			

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METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B28123 Extracted: 02/28/08	<u>.</u>										
Duplicate Analyzed: 02/28/2008 (8B2812	3-DUP1)				Sou	rce: IRB2	355-10				
Total Suspended Solids	ND	10	10	mg/l		ND				10	
Batch: 8C04046 Extracted: 03/04/08	<u>}</u>										
Blank Analyzed: 03/04/2008 (8C04046-B	LK1)										
Hexane Extractable Material (Oil & Grease)	ND	5.0	1.4	mg/l							
LCS Analyzed: 03/04/2008 (8C04046-BS	1)										MNR1
Hexane Extractable Material (Oil & Grease)	18.1	5.0	1.4	mg/l	20.2		90	78-114			
LCS Dup Analyzed: 03/04/2008 (8C0404	6-BSD1)										
Hexane Extractable Material (Oil & Grease)	18.9	5.0	1.4	mg/l	20.2		94	78-114	4	11	

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METHOD BLANK/QC DATA

Metals by EPA 200 Series Methods

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
·		Linnt	MDL	Units	Level	Kesuit	/0KEC	Linnts	ΚID	Linnt	Quanners
Batch: W8B0982 Extracted: 02/26/0	<u>8</u>										
Blank Analyzed: 02/27/2008 (W8B0982-J	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: IRB2	2402-01				
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: IRB2	2402-01				
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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Joseph Doak Project Manager

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Complement

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
IRB2402-01	1664-HEM	Hexane Extractable Material (Oil & Greas	mg/l	1.61	4.7	15
IRB2402-01	624-Boeing 012/013/014 DT, LOW		ug/l	0	0.50	50
IRB2402-01	624-Boeing 012/013/014 DT, LOW		ug/l	0	10	12
IRB2402-01	625+NDMA+Hydrazine	Naphthalene	ug/l	0	9.5	21
IRB2402-01	8015B-DRO(C13-C22)LL	DRO (C13-C22)	mg/l	0.020	0.096	0.1
IRB2402-01	8015B-GRO(C4-C12)	GRO (C4 - C12)	mg/l	0.010	0.050	0.1
IRB2402-01	8260B-SIM 1,4-Dioxane	1,4-Dioxane	ug/l	0.24	2.0	3
IRB2402-01	Ammonia-N, Titr (350.2) w/dist	Ammonia-N (Distilled)	mg/l	0.28	0.50	10
IRB2402-01	Boron-200.7	Boron	mg/l	0	0.050	1
IRB2402-01	Cadmium-200.8	Cadmium	ug/l	1.94	1.0	3.1
IRB2402-01	Chloride - 300.0	Chloride	mg/l	11	0.50	150
IRB2402-01	Copper-200.8	Copper	ug/l	2.79	2.0	14
IRB2402-01	Fluoride - 340.2	Fluoride	mg/l	0.12	0.10	1.6
IRB2402-01	Hg_w 245.1	Mercury, Total	ug/l	0.0100	0.20	0.2
IRB2402-01	Lead-200.8	Lead	ug/l	1.66	1.0	5.2
IRB2402-01	Nitrate-N, 300.0	Nitrate-N	mg/l	0.72	0.11	8
IRB2402-01	Nitrite-N, 300.0	Nitrite-N	mg/l	0	0.15	1
IRB2402-01	Nitrogen, NO3+NO2 -N	Nitrate/Nitrite-N	mg/l	0.72	0.26	8
IRB2402-01	Perchlorate 314.0-DEFAULT	Perchlorate	ug/l	0	4.0	6
IRB2402-01	Selenium-200.8	Selenium	ug/l	0.13	2.0	5
IRB2402-01	Settleable Solids	Total Settleable Solids	ml/l/hr	0	0.10	0.3
IRB2402-01	Sulfate-300.0	Sulfate	mg/l	4.18	0.50	300
IRB2402-01	TDS - SM 2540C	Total Dissolved Solids	mg/l	96	10	950
IRB2402-01	TSS - EPA 160.2	Total Suspended Solids	mg/l	-2	10	45
IRB2402-01	Zinc-200.8	Zinc	ug/l	66	20	160

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
IRB2402-02	624-Boeing 012/013/014 DT, LOW 1,2-Dibromoetha	ug/l	0	0.50	50
IRB2402-02	624-Boeing 012/013/014 DT, LOW tert-Butanol (TB	A) ug/l	0	10	12

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 013

Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

DATA QUALIFIERS AND DEFINITIONS

- **B** Analyte was detected in the associated Method Blank.
- 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.
- L6 Per the EPA methods, benzidine is known to be subject to oxidative losses during solvent concentration.
- M13 The sample spiked had a pH of less than 2. 2-Chloroethylvinylether degrades under acidic conditions.
- **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.
- **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.

For GRO (C4-C12):

GRO (C4-C12) is quantitated against a gasoline standard. Quantitation begins immediately following the methanol peak.

For Extractable Fuel Hydrocarbons (EFH, DRO, ORO) :

Unless otherwise noted, Extractable Fuel Hydrocarbons (EFH, DRO, ORO) are quantitated against a Diesel Fuel Standard.



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Report Number: IRB2402

Sampled: 02/24/08 Received: 02/25/08

Certification Summary

TestAmerica Irvine

Method	Matrix	Nelac	California
EPA 160.2	Water	Х	Х
EPA 160.5	Water	Х	Х
EPA 1664A	Water		
EPA 180.1	Water	Х	Х
EPA 200.7-Diss	Water	Х	Х
EPA 200.7	Water	Х	Х
EPA 200.8-Diss	Water	Х	Х
EPA 200.8	Water	Х	Х
EPA 300.0	Water	Х	Х
EPA 314.0	Water	Х	Х
EPA 335.2	Water	Х	Х
EPA 340.2	Water	Х	Х
EPA 350.2	Water		Х
EPA 405.1	Water	Х	Х
EPA 608	Water	Х	Х
EPA 624	Water	Х	Х
EPA 625	Water	Х	Х
EPA 8015B	Water	Х	Х
EPA 8260B-SIM	Water		
Filtration	Water	N/A	N/A
SM2340B	Water	Х	Х
SM2540C	Water	Х	

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: IRB2402-01

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: IRB2402-01

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Report Number: IRB2402

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Weck Laboratories, Inc

14859 E. Clark Avenue - City of Industry, CA 91745 Method Performed: EPA 245.1 Samples: IRB2402-01

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lia Avenue, Suite 200 Avenue, Suite 200 ontact: Joseph Doak er: Bronwyn Kelly rev	Averue: Averu	Client Name/Address	ress		Project:							AN	ANAL YSI	S REQU	EQUIRED	
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Date/Time: Received By Date/Time Z/ZU/CS YZE Tum around Time: (check) 24 Hours 24 Hours 5 Days 27 Z V CS 24 Hours 5 Days 27 Z V CS 14 Second Time: (check) 27 Date/Time: Received By 27 Z V CS 14 Second Time: (check) 27 Hours Received By 28 Hours 10 Days 72 Hours 72 Hours 72 Hours 10 Days 72 Hours 72 Hours 72 Hours 10 Days 72 Hours 72 Hours 73 Hours Normal 74 Hours 24 Hours 75 Hours 10 Days 72 Hours 10 Days 73 Hours 10 Days 74 Hours 10 Days 74 Hours 10 Days 77 Hours 10 Days <td>Fridge 2/25/06 12/2 Carlos By Date/Time. Pate/Time: Received By Date/Time: 2/24/08 1436 Date/Time: Received By Date/Time: 2/24/08 1436 Pridge 2/24/08 1520 English Check Date/Time:</td> <td></td> <td>500 ml Poly</td> <td></td> <td>2-24-05</td> <td>None</td> <td>10 V</td> <td>(</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>×</td> <td></td>	Fridge 2/25/06 12/2 Carlos By Date/Time. Pate/Time: Received By Date/Time: 2/24/08 1436 Date/Time: Received By Date/Time: 2/24/08 1436 Pridge 2/24/08 1520 English Check Date/Time:		500 ml Poly		2-24-05	None	10 V	(×	
Pate/Time: Received By Date/Time: 10 Days Pridge 2/24/cg Received By Date/Time: Normal Pridge 2/200 (530) Chupt Check 2/25/05 0.520 Sample Integrity: (check) Sample Integrity: (check)	Fridge 2/25/06 (520 Chinged By Date/Time: Date/Time: Date/Time: Received By Date/Time: D	linquished By	1	1 7 7)ate/Time: 1430	1			Date	ATime		r /61		26	Tum a 24 Ho	around Time: (check) urs5 Days
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Test America Contact: Joseph Doak					S	и 'а		+ 6H	dd -					
Project Manager: Bronwyn Kelly		Phone Number (626) 568-6691	mber 6691			ΟT-£,		ЬР' I	+ 6H .		•			Comments
Sampler: m ANScal.	- •	Fax Number. (626) 568-6515	ber: -6515		SOT , yik	able Soli 2,1,203	+2CVE 624, xyl +2CVE	Recover n, B, Cu, 9 ess as (Dissolve , Cu, Pb,) ss ssei	əp	O9\sebi:	(and all Toxicity		
Container ≢ Type C	# of Cont.	Sampling Date/Time	Preservative	Bottle #		924 (1	NOCs	Se, Zi	'a 'uZ	Cyani				
500 ml Poly	7	2.34-68	None	11A, 11B	×						-			
1L Poly	-		None	12		×								
VOAs	1		HCI	13A		×								
VOAs	2		HCI	13B, 13C		×								
VOAs	m		None	14A, 14B, 14C			×							
1L Poly	2		HNO3	15A, 15B				×						
1L Poly	-		None	16					×					Filter w/in 24hrs of receipt at lab
500 ml Poly	-		NaOH	17						×				
1L Amber	2		None	18A, 18B							×			
1L Amber	2	>	None	19A, 19B								×		
1 Gal Cube	-	2-24-08	None	20								×		
VOAs	e		нсі	21A, 21B, 21C		×								
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	Date.	Date/Time: באשביב	Received BY			Dat	Date/Time:		Ŀ.	R	Tum a 24 Ho	round T	ime: (ct	Turn around Time: (check) 24 Hours 5 Days
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					N									<u> </u>

NPDES - 3464

-20

LABORATORY REPORT



February 29, 2008 Date:

Client: Test America - Irvine 17461 Derian Ave., Suite 100 Irvine, CA 92614 Attn: Joseph Doak

"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-08022504-001 Sample ID.: IRB2402-01 (Outfall 013)

The sample was received by ATL in a chilled state, within the recommended hold **Sample Control:** time and with the chain of custody record attached.

Date Sampled:	02/24/08
Date Received:	02/25/08
Temp. Received:	2°C
Chlorine (TRC):	0.0 mg/l
Date Tested:	02/25/08 to 02/29/08

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 IRB2402-01 100% Survival (TUa = 0.0)

Quality Control:

Reviewed and approved by:

Joseph À. LeMay

Laboratory Director

FATHEAD MINNOW PERCENT SURVIVAL TEST EPA Method 2000.0



Lab No.: A-08022504-001 Client/ID: TestAmerica - IRB2402-01

Start Date: 02/25/2008

TEST SUMMARY

TEST DATA

Species: Pimephales promelas. Age: $\underline{/2}$ (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.

		L 1	LOI DAIA	L			
		°C	DO		# E	Dead	Analyst & Time
		<u>ئ</u>	DO	рН	А	В	of Readings
	Control	20.5	7-9	7-9	0	Ø	1/-
INITIAL	100%	20,7	8.2	7.4	0	0	1300
	Control	20.3	10.9	7.7	0	0	An- 1400
24 Hr	100%	20.2	5.9	7.3	0		1400
49.11.	Control	20.1	7.4	7.6	0	õ	â
48 Hr	100%	20.2	7.9	7.5	\Box	0	1200
	Control	20.8	9.1	7.7	0	° 0	1200
Renewal	100%	19.3	9.5	6.7	0	0	1200
70.11	Control	20.3	6-8	7.4	0	O	A~ 1200
72 Hr	100%	20.2	6.7	7.3	\mathcal{O}	0	1200
	Control	20.3	6.9	7.3	\square	\Box	2- 12a
96 Hr	100%	20.3	7.0	7.1	\tilde{o}	0	1200
Comments: Sample as received: Chlorine: 0.0 mg/l; pH: <u>7-4</u> ; Conductivity: <u>16</u> umho; Temp: 2°C; DO: <u>S.2</u> mg/l; Alkalinity: <u>30</u> mg/l; Hardness: <u>26</u> mg/l; NH ₃ -N: <u>0-6</u> mg/l. Sample aerated moderately (approx. 500 ml/min) to raise or lower DO? Yes / No. Control: Alkalinity: <u>62</u> mg/l; Hardness: <u>92</u> mg/l; Conductivity: <u>970</u> 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

Percent Survival In:

Control: ______ %

% 10



SUBCONTRACT ORDER - PROJECT # IRB2402

SENDING LABORATORY:	RECEIVING LABORATORY:		
FestAmerica Irvine 17461 Derian Avenue. Suite 100 Irvine, CA 92614 Phone: (949) 261-1022 Fax: (949) 260-3297	Aquatic Testing Laboratories-SUB 4350 Transport Street, Unit 107 Ventura, CA 93003 Phone :(805) 650-0546 Fax: (805) 650-0756		
Project Manager: Joseph Doak Standard TAT is requested unless specific due date is requested	Project Location: California I. => Due Date: Initials:		

Analysis	Expiration	Comments
Sample ID: IRB2402-01 W Bioassay-Acute 96hr	Vater Sampled: 02/24/08 10:00 02/25/08 22:00	FH minnow, EPA/821-R02-012, Sub to AqTox Labs
Containers Supplied: 1 gal Poly (IRB2402-01AK	()	

			SAMPLE	INTEGRI	TY:		
		No No	Sample labels/COC agree: Samples Preserved Properly:	🗷 Yes 🔎 Yes		Samples Received On Ice:: Samples Received at (temp):	Yes I No
	And	225	08 0935	. C	torow	- TAI 2/2	10/08 D935
\langle	Released By	Date 2/25/00	Time 8 /215	Received B		Date	Time $(2-1)$
	Released By	Date	Time	Received B	y /	Date	Time Page 1 of 1
							NPDES - 3467



REFERENCE TOXICANT DATA

FATHEAD MINNOW ACUTE Method 2000.0 Reference Toxicant - SDS



QA/QC Batch No.: RT-080204

Species: *Pimephales promel*as. Age: <u>(4</u> 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.

\TEST SUMMARY

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:	2-4-8 1430 2-5-08 1330 2-6-08 143					2-5-08 1330			143				
Analyst:		h				h				\bigwedge	2		
	°C	DO	рH	°C	DO	pН	# D	ead	°C	DO	pН	# D	Dead
						·	А	В		_		A	В
Control	19.8	8.4	7-4	19.1	7.9	7.5	\odot	0	19,4	7.2	7.6	0	0
1.0 mg/l	14.9	8.4	7.5	19.1	7.8	7.4		U	19.4	69	7.6	0	0
2.0 mg/l	19.9	8.5	7.5	19.0	7.6	2.4	0	0	19.4	6.6	7.5	\mathcal{O}	0
4.0 mg/l	200	8.5	7-5	19.0	8.0	7.4	0	/	19.4	6.7	7.5	2	O
8.0 mg/l	20.0	8.6	7-5	19.1	8.0	7.4	10	10	. a n ananan	Becaution	Woodstate to a con-	Waydord was	
	R	ENEWA	L	72 Hr			96 Hr						
Date/Time:	2-6.	03	1430	2-7-1	08		16	lor	2-8	-08		/	1300
Analyst:		×-	p.		and the second	2			La				
	°C	DO	pН	°C	DO	pН	# D	ead	°C	DO	pН	# E	Dead
							A	В			F	A	В
Control	20.3	8.9	7.8	19.4	7.5	2.7	\cup	$-\mathcal{O}$	19.2	8.0	7.5	0	\Box
1.0 mg/l	20.3	8.9	2.8	19.3	7.5	7.6	0	Ũ	19.2	8.0	7.5	0	Ũ
2.0 mg/l	20.3	8.8	7.8	19.3	7.7	7.5	0	U	19.3	8.1	7.4	0	O
4.0 mg/l	20,3	8.8	7.8	19.3	7.6	7.5	0	\Box	19.3	8.2	7.4	0	1
8.0 mg/l													
Comments: Control: Alkalinity: 124 mg/l; Hardness: 96 mg/l; Conductivity: 289 umho. SDS: Alkalinity: 64 mg/l; Hardness: 97 mg/l; Conductivity: 290 umho.													
Concentr	Concentration-response telationship acceptable? (see attached computer analysis): Yes (response curve normal) No (dose interrupted indicated or non-normal)												

Acute Fish Test-96 Hr Survival							
Start Date:	2/4/2008	14:30	Test ID:	RT-080204	Sample ID:	REF-Ref Toxicant	
End Date:	2/8/2008	13:00	Lab ID:	CAATL-Aquatic Testing Labs	Sample Type:	SDS-Sodium dodecyl sulfate	
Sample Date:	2/4/2008		Protocol:	ACUTE-EPA-821-R-02-012	Test Species:	PP-Pimephales promelas	
Comments:				a second second second second			
Conc-mg/L	1	2					
D-Control	1.0000	1.0000					
1	1.0000	1.0000					
2	1.0000	1.0000					
4	0.8000	0.8000					

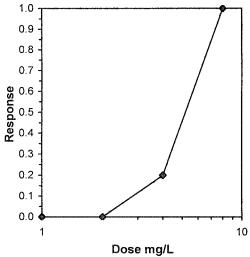
4	0.8000	0.8000
8	0.0000	0.0000

Transform: Arcsin Square Root							Number	Total	
Conc-mg/L	Mean	N-Mean	Mean	Min	Max	CV%	N	Resp N	lumber_
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 Normality of the data set cannot be confirmed Equality of variance cannot be confirmed

				Trimmed Spearman-Karber	
Trim Level	EC50	95%	CL		
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 m	**************************************
20.0%	5.1874	4.7084	5.7150		
Auto-0.0%	4.9246	4.3503	5.5747	0.9	
				0.8 -	/
				0.7	

Statistic



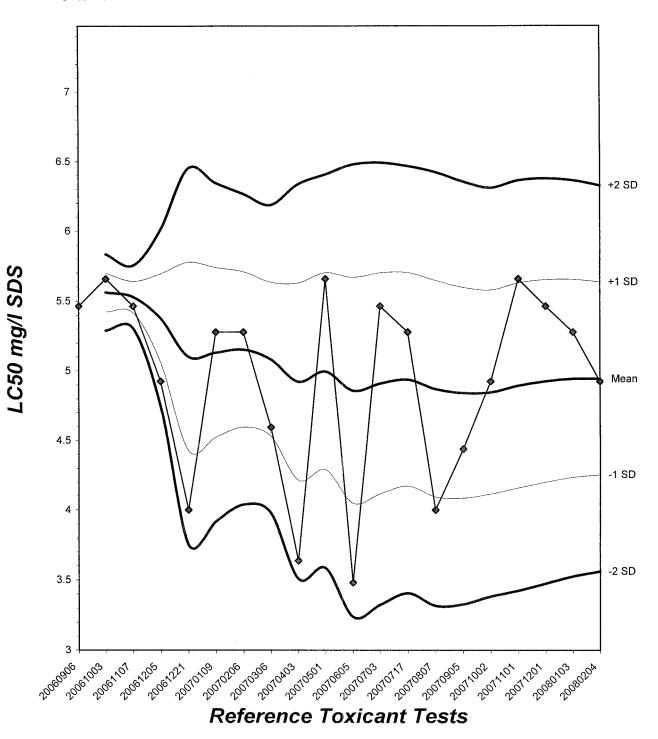
Critical

Skew

Kurt

Fathead Minnow Acute Laboratory Control Chart

CV% = 14



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: $2/4/08$
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:

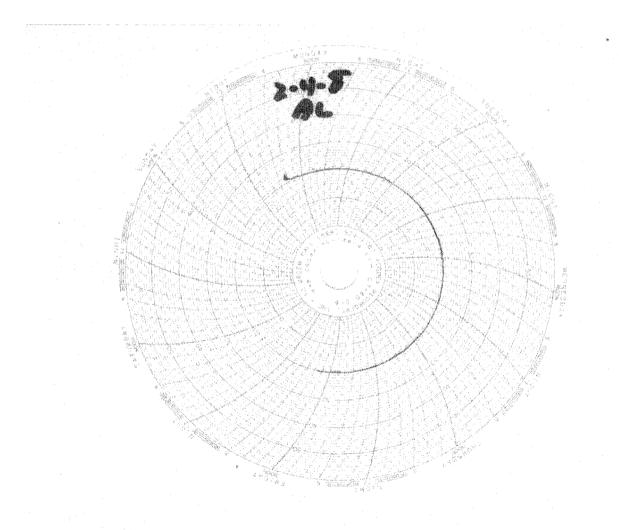
Temp.: <u>198</u> °C	pH: <u>74</u> Amn	nonia: <u>/ / mg</u> /l NH ₃ -N
DO: $\sqrt{2}$, $\sqrt{2}$ mg/l	Alkalinity: <u>6</u> mg/l	Hardness: <u>96</u> mg/l

READINGS RECORDED BY: Mar 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



SUBCONTRACT ORDER

TestAmerica Irvine

IRB2402

8022633

RECEIVING LABORATORY: SENDING LABORATORY: Weck Laboratories, Inc-SUB **TestAmerica** Irvine 17461 Derian Avenue. Suite 100 14859 E. Clark Avenue City of Industry, CA 91745 Irvine, CA 92614 Phone :(626) 336-2139 Phone: (949) 261-1022 Fax: (626) 336-2634 Fax: (949) 260-3297 Project Location: California Project Manager: Joseph Doak Receipt Temperature: 4.62 \mathbf{Y} °C / N Ice:

Analysis	Units	Due	Expires	Comments
Sample ID: IRB2402-01	Water		Sampled: 02/24/08	10:00
Level 4 Data Package - Wee	N/A	03/05/08	03/23/08 10:00	
Mercury - 245.1, Diss -OUT	ug/l	03/05/08	03/23/08 10:00	Boeing, permit, J flags/ OUT to Weck
Mercury - 245.1-OUT	ug/l	03/05/08	03/23/08 10:00	Boeing, permit, J flags/ OUT to Weck
Containers Supplied:			L	
125 mL Poly w/HNO3 2 (AL)	250 mL Poly	y (AM)		

Chinatter Cher))			atalk	9)5
Released By	Dąte/Time	Received By		Date/Time	
N · · ·	ARTH DO	Jamelimer	1205	- ZIZUUB	S - 3474
Released By	Date/Time	Received By		Date/Time	S <u>3474</u> Page 1 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@weeklabs.com www.weeklabs.com

CERTIFICATE OF ANALYSIS

Client:	TestAmerica, Inc Irvine	Report Date:	02/28/08 07:50
	17461 Derian Ave, Suite 100	Received Date:	02/26/08 12:05
	Irvine, CA 92614	Turn Around:	6 days
	Attention: Joseph Doak	Work Order #: 8022633	
	Phone: (949) 261-1022 Fax: (949) 260-3297	Client Project: IRB2402	

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 02/26/08 12:05 with the Chain of Custody document. The samples were received in good condition. The samples were received at 4.6 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Reviewed by: in

Kim G Tu

Project Manager







TestAmerica, Inc. - Irvine 17461 Derian Ave, Suite 100 Irvine CA, 92614 Report ID: 8022633 Project ID: IRB2402 Weck Laboratories, Inc. 14859 E. Clark Ave. Industry, CA 91745 Phone 626.336.2139 Fax 626.336.2634

 Date Received:
 02/26/08 12:05

 Date Reported:
 02/28/08 07:50

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Sampled by:	Sample Comments	Laboratory	Matrix	Date Sampled
IRB2402-01	Client		8022633-01	Water	02/24/08 10:00



TestAmerica, Inc. - Irvine 17461 Derian Ave, Suite 100 Irvine CA, 92614 Weck Laboratories, Inc. 14859 E. Clark Ave. Industry, CA 91745 Phone 626.336.2139 Fax 626.336.2634

Date Received: 02/26/08 12:05 Date Reported: 02/28/08 07:50

IRB2402-01 8022633-01 (Water)

Report ID: 8022633

Project ID: IRB2402

Date Sampled: 02/24/08 10:00

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	



TestAmerica, Inc. - Irvine 17461 Derian Ave, Suite 100 Irvine CA, 92614 Report ID: 8022633 Project ID: IRB2402 Weck Laboratories, Inc. 14859 E. Clark Ave. Industry, CA 91745 Phone 626.336.2139 Fax 626.336.2634

 Date Received:
 02/26/08 12:05

 Date Reported:
 02/28/08 07:50

QUALITY CONTROL SECTION



TestAmerica, Inc. - Irvine 17461 Derian Ave, Suite 100 Irvine CA, 92614
 Date Received:
 02/26/08 12:05

 Date Reported:
 02/28/08 07:50

Metals by EPA 200 Series Methods - Quality Control

Report ID: 8022633

Project ID: IRB2402

							%REC			
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data 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	urce: 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	urce: 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	urce: 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	urce: 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	



TestAmerica, Inc. - Irvine 17461 Derian Ave, Suite 100 Irvine CA, 92614 Report ID: 8022633 Project ID: IRB2402 Weck Laboratories, Inc. 14859 E. Clark Ave. Industry, CA 91745 Phone 626.336.2139 Fax 626.336.2634

Date Received: 02/26/08 12:05 Date Reported: 02/28/08 07:50

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 14, 2008

Vista Project I.D.: 30304

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

Dear Mr. Doak,

Enclosed are the results for the samples received at Vista Analytical Laboratory on February 26, 2008 under your Project Name "IRB2402". 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,

Marine Mare

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.



Project 30304

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

<u>Vista Lab. ID</u>

Client Sample ID

30304-001

IRB2402-01

SECTION II

Method Blank				EPA Method 1613
Matrix: Aqueou	18	QC Batch No.: 99997	Lab Sample: 0-MB001	
Sample Size: 1.00	L	Date Extracted: 9-Mar-08	Date Analyzed DB-5: 10-Mar-08	Date Analyzed DB-225: NA
Analyte C	Conc. (ug/L)	DL ^a EMPC ^b Qualifiers	Labeled Standard	%R LCL-UCL ^d Qualifiers
2,3,7,8-TCDD	ND	0.000000937	<u>IS</u> 13C-2,3,7,8-TCDD	87.0 25 - 164
1,2,3,7,8-PeCDD	ND	0.00000106	13C-1,2,3,7,8-PeCDD	77.8 25 - 181
1,2,3,4,7,8-HxCDD	ND	0.00000142	13C-1,2,3,4,7,8-HxCDD	82.4 32 - 141
1,2,3,6,7,8-HxCDD	ND	0.00000142	13C-1,2,3,6,7,8-HxCDD	88.5 28 - 130
1,2,3,7,8,9-HxCDD	ND	0.00000136	13C-1,2,3,4,6,7,8-HpCDD	81.0 23 - 140
1,2,3,4,6,7,8-HpCDD	ND	0.00000250	13C-OCDD	72.3 17 - 157
OCDD	ND	0.0000890	13C-2,3,7,8-TCDF	85.2 24 - 169
2,3,7,8-TCDF	ND	0.000000547	13C-1,2,3,7,8-PeCDF	73.1 24 - 185
1,2,3,7,8-PeCDF	ND	0.000000924	13C-2,3,4,7,8-PeCDF	73.2 21 - 178
2,3,4,7,8-PeCDF	ND	0.000000985	13C-1,2,3,4,7,8-HxCDF	82.4 26 - 152
1,2,3,4,7,8-HxCDF	ND	0.00000699	13C-1,2,3,6,7,8-HxCDF	94.2 26 - 123
1,2,3,6,7,8-HxCDF	ND	0.00000669	13C-2,3,4,6,7,8-HxCDF	89.8 28 - 136
2,3,4,6,7,8-HxCDF	ND	0.000000795	13C-1,2,3,7,8,9-HxCDF	83.4 29 - 147
1,2,3,7,8,9-HxCDF	ND	0.00000107	13C-1,2,3,4,6,7,8-HpCDF	79.0 28 - 143
1,2,3,4,6,7,8-HpCDF	ND	0.000000964	13C-1,2,3,4,7,8,9-HpCDF	81.7 26 - 138
1,2,3,4,7,8,9-HpCDF	ND	0.00000105	13C-OCDF	72.4 17 - 157
OCDF	ND	0.00000275	<u>CRS</u> 37Cl-2,3,7,8-TCDD	113 35 - 197
Totals			Footnotes	
Total TCDD	ND	0.00000937	a. Sample specific estimated detection limit.	
Total PeCDD	ND	0.00000167	b. Estimated maximum possible concentration.	
Total HxCDD	ND	0.00000235	c. Method detection limit.	
Total HpCDD	ND	0.00000320	d. Lower 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

OPR Results					EP	A Method 1	1613
Matrix: Aqueous Sample Size: 1.00 L		QC Batch No.: Date Extracted:	9997 9-Mar-08	Lab Sample:0-OPR001Date 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-TCDD	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-PeCDD	50.0	50.9	35 - 71	13C-1,2,3,7,8-PeCDD	78.2	25 - 181	
1,2,3,4,7,8-HxCDD	50.0	49.8	35 - 82	13C-1,2,3,4,7,8-HxCDD	77.7	32 - 141	
1,2,3,6,7,8-HxCDD	50.0	50.3	38 - 67	13C-1,2,3,6,7,8-HxCDD	80.5	28 - 130	
1,2,3,7,8,9-HxCDD	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-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	10.0	9.70	7.5 - 15.8	13C-1,2,3,7,8-PeCDF	72.2	24 - 185	
1,2,3,7,8-PeCDF	50.0	51.5	40 - 67	13C-2,3,4,7,8-PeCDF	73.8	21 - 178	
2,3,4,7,8-PeCDF	50.0	51.5	34 - 80	13C-1,2,3,4,7,8-HxCDF	78.8	26 - 152	
1,2,3,4,7,8-HxCDF	50.0	52.0	36 - 67	13C-1,2,3,6,7,8-HxCDF	82.8	26 - 123	
1,2,3,6,7,8-HxCDF	50.0	52.6	42 - 65	13C-2,3,4,6,7,8-HxCDF	78.7	28 - 136	
2,3,4,6,7,8-HxCDF	50.0	53.6	35 - 78	13C-1,2,3,7,8,9-HxCDF	78.2	29 - 147	
1,2,3,7,8,9-HxCDF	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-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-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.

Martha M. Maier 14-Mar-2008 11:28

Sample ID: IRB2	402-01								EPA N	Iethod 1613
Client DataName:Test JProject:IRB2Date Collected:24-FeTime Collected:1000			Sample Data Matrix: Sample Size:	Aqueous 1.01 L	Lab QC	oratory Data Sample: Batch No.: Analyzed DB-5:	30304-001 9997 10-Mar-08	Date Re Date Ex Date An		26-Feb-08 9-Mar-08 NA
Analyte (Conc. (ug/L)	DL ^a	EMPC ^b	Qualifiers		Labeled Standa	rd	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	ND	0.000000	774		<u>IS</u>	13C-2,3,7,8-TCD	D	73.7	25 - 164	
1,2,3,7,8-PeCDD	ND	0.000001	21			13C-1,2,3,7,8-PeC	CDD	67.3	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.000002	17			13С-1,2,3,4,7,8-Н	xCDD	65.4	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.000002	09			13С-1,2,3,6,7,8-Н	xCDD	72.7	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.000002	04			13C-1,2,3,4,6,7,8-	HpCDD	68.1	23 - 140	
1,2,3,4,6,7,8-HpCDD	0.00000206			J		13C-OCDD		56.1	17 - 157	
OCDD	0.0000101			J		13C-2,3,7,8-TCD	F	76.9	24 - 169	
2,3,7,8-TCDF	ND	0.000000	944			13C-1,2,3,7,8-PeC	CDF	62.0	24 - 185	
1,2,3,7,8-PeCDF	ND	0.000000	894			13C-2,3,4,7,8-PeC	CDF	64.9	21 - 178	
2,3,4,7,8-PeCDF	ND	0.000000	843			13С-1,2,3,4,7,8-Н	xCDF	65.0	26 - 152	
1,2,3,4,7,8-HxCDF	ND	0.000000	854			13С-1,2,3,6,7,8-Н	xCDF	73.8	26 - 123	
1,2,3,6,7,8-HxCDF	ND	0.000000	859			13С-2,3,4,6,7,8-Н	xCDF	69.3	28 - 136	
2,3,4,6,7,8-HxCDF	ND	0.000000	919			13С-1,2,3,7,8,9-Н	xCDF	69.2	29 - 147	
1,2,3,7,8,9-HxCDF	ND	0.000001	18			13C-1,2,3,4,6,7,8-	HpCDF	62.5	28 - 143	
1,2,3,4,6,7,8-HpCDF	ND	0.000001	14			13C-1,2,3,4,7,8,9-	HpCDF	67.9	26 - 138	
1,2,3,4,7,8,9-HpCDF	ND	0.000001	17			13C-OCDF		59.6	17 - 157	
OCDF	ND	0.000003	26		CRS	37Cl-2,3,7,8-TCD	D	105	35 - 197	
Totals					Foo	otnotes				
Total TCDD	ND	0.000000	774		a. Sa	mple specific estimated	detection limit.			
Total PeCDD	ND	0.000002	24		b. Es	timated maximum possi	ble concentration.			
Total HxCDD	ND	0.000002	09		c. M	ethod detection limit.				
Total HpCDD	0.00000432				d. Le	ower control limit - upper	r control limit.			
Total TCDF	ND	0.000002	19							
Total PeCDF	ND	0.000001	36							
Total HxCDF	ND	0.000000	943							
Total HpCDF	ND	0.000001	15							

Analyst: MAS

APPENDIX

DATA QUALIFIERS & ABBREVIATIONS

В	This compound was also detected in the method blank.
D	Dilution
Ε	The amount detected is above the High Calibration Limit.
Р	The amount reported is the maximum possible concentration due to possible chlorinated diphenylether interference.
Н	The signal-to-noise ratio is greater than 10:1.
Ι	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



30304 2.10

SUBCONTRACT ORDER - PROJECT # IRB2402

SENDING LABORATORY:RECEIVING LABORATORY:TestAmerica IrvineVista Analytical Laboratory- SUB17461 Derian Avenue. Suite 1001104 Windfield WayIrvine, CA 92614El Dorado Hills, CA 95762Phone: (949) 261-1022Phone :(916) 673-1520Fax: (949) 260-3297Fax: (916) 673-0106Project Manager: Joseph DoakProject Location: California

Standard TAT is req	uested unless specific du	e date is requested. => Due Date: Initials:
Analysis	Expiration	Comments
Sample ID: IRB2402-01 1613-Dioxin-HR-Alta	03/02/08 10:00	2/24/08 10:00 J flags,17 congeners,no TEQ,ug/L,sub=Vista
Level 4 + EDD-OUT Containers Supplied: 1 L Amber (IRB2402-01 1 L Amber (IRB2402-01		Excel EDD email to pm,Include Std logs for Lvl IV

		SAMI	PLE INTEGRITY:		
All containers intact:		pple labels/COC agre		Samples Received On Ice:: Samples Received at (temp):	☐ Yes ☐ No
<u><u><u></u><u></u><u><u></u><u></u><u></u><u></u><u>Released</u> By</u></u></u>	Date	(Time	Belline Received By	Benedict 2/24/2 Date	78 1530 Time
Released By	Date	Time	Received By	Date	Time Page 1 of 1 NPDES - 3490

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SAMPLE LOG-IN CHECKLIST



Vista Project #:	30304				TAT	Stan	dar	d
	Date/Time		Initials:	• -	Locatio	n: W	R-D	-
Samples Arrival:	2/26/08	0910	As	1B	Shelf/Ra	nck:/	VIA	
	Date/Time		Initials:		Locatio	n: (NR-	2
Logged In:	2/26/08	1530	UB	B	Shelf/Ra	ack:	E-	2
Delivered By:	FedEx	UPS	Cal	DHL		and ivered	Otł	ner
Preservation:	lce	Blue	e Ice	Dr	y ice		None	
Temp °C 2.	(Tin	ne: 💍	924		Thermo	meter II	D: IR-	1
			NAMES AND ADDRESS ADDR			\$1		
						YES	NO	NA
Adequate Sample	Volume Received	d?						
Holding Time Acce	ptable?						ł	

Holding Time Acceptable?		\checkmark	,							
Shipping Container(s) Intact?		•			V					
Shipping Custody Seals Intact?		V								
Shipping Documentation Present	!?				V_{\prime}					
Airbill Trk #	1992 :	779987	26	l						
Sample Container Intact?		\checkmark								
Sample Custody Seals Intact?							\checkmark			
Chain of Custody / Sample Docu	mentation P	resent?			~	(· .			
COC Anomaly/Sample Acceptan	ice Form cor	npleted?	·.			\checkmark				
If Chlorinated or Drinking Water Samples, Acceptable Preservation?										
Na ₂ S ₂ O ₃ Preservation Document	ed?	coc	San Conta	nple ainer	./	None	\mathbf{Y}			
Shipping Container	Vista	Client	Retain	Retu	ILU	Disp	ose			
Comments:				U						

APPENDIX G

Section 91

Outfall 014, January 5, 2008 MECX Data Validation Reports



DATA VALIDATION REPORT

Boeing SSFL NPDES

SAMPLE DELIVERY GROUP: IRA0404

Prepared by

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

I. INTRODUCTION

Task Order Title: Contract Task Order: Sample Delivery Group: Project Manager: Matrix: QC Level: No. of Samples: No. of Reanalyses/Dilutions:	Boeing SSFL NPDES 1261.100D.00 IRA0404 B. Kelly Soil IV 1 0
Laboratory:	TestAmerica-Irvine, Weck, Vista

Table 1. Sample Identification

Client ID	Laboratory ID	Sub-Laboratory ID	Matrix	Collected	Method
Outfall 014	IRA0404-01	30124-001, 8010773-01	Water	01/05/08 1100	180.1, 200.8, 245.1, 405.1, 624, 625, 1613, 8315M
Trip Blank	IRA0404-02		Water		624

II. Sample Management

No anomalies were observed regarding sample management. The sample in this SDG was received at TestAmerica-Irvine, Truesdail, and Weck within the temperature limits of 4°C ±2°C. The sample was received below the temperature limit at Vista; however, the sample was not noted to have been frozen. According to the case narrative for this SDG, the sample was 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, custody seals were not required. Custody seals were intact upon arrival at Vista and Weck. Custody seal were not present on the cooler shipped to Truesdail. If necessary, the client ID was added to the sample result summary by the reviewer.

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.
Ν	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 Qualifier 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.
Е	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
М	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

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.
Ρ	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.

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III. Method Analyses

A. EPA METHOD 1613—Dioxin/Furans

Reviewed By: K. Shadowlight Date Reviewed: February 28, 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.
 - 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.
 - 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.

- 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: February 29, 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 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 metals and 85-115% for mercury.

- Blanks: There were no applicable detects in the method blanks or CCBs.
- Interference Check Samples: ICSA/B analyses were performed in association with the dissolved metals analyses only. Recoveries were within the method-established control limits. Most analytes were reported in the 6020 ICSA solution; however, the reviewer was not able to ascertain if the detection was 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 not performed on the sample in this SDG. Evaluation of 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.
- 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 625—Semivolatile Organic Compounds (SVOCs)

Reviewed By: L. Calvin Date Reviewed: March 1, 2008

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^X* Data Validation Procedure for Semivolatile Organics (DVP-3, Rev. 0), EPA Method 8270C, and the National Functional Guidelines for Organic Data Review (2/94).

- Holding Times: Extraction and analytical holding times were met. The water sample was extracted within seven days of collection and analyzed within 40 days of extraction.
- GC/MS Tuning: The DFTPP tunes met the method abundance criteria. Samples were analyzed within 12 hours of the DFTPP injection time.
- Calibration: For applicable target compounds, initial calibration average RRFs were ≥0.05 and %RSDs ≤35%, and continuing calibration RRFs were ≥0.05 and %Ds ≤20%.
- 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 of this SDG. Evaluation of method accuracy and precision was based on LSC/LSCD 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 control limits established by the continuing calibration standards: -50%/+100% for internal standard areas and ±30 seconds for retention times.
- Compound Identification: Compound identification was verified. The laboratory analyzed for semivolatile target compounds naphthalene and n-nirosodimethylamine by EPA

Method 625. 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. Any results reported between the MDL and 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 reporting limit.
- Tentatively Identified Compounds: TICs were not reported by the laboratory for this SDG.
- System Performance: Review of the raw data indicated no problems with system performance.

D. EPA METHOD 624—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin Date Reviewed: March 1, 2008

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^X* Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method 8260B, and the National Functional Guidelines for Organic Data Review (2/94).

- Holding Times: Analytical holding times were met. The preserved water samples were analyzed within 14 days of collection.
- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 12 hours of the BFB injection time.
- Calibration: Calibration criteria were met. For applicable target compounds, initial calibration average RRFs were ≥0.05 and %RSDs ≤35%. Continuing calibration RRFs were ≥0.05 and %Ds ≤20%.
- Blanks: The method blank had no target compound detects above the MDL.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratoryestablished 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 of this SDG. Evaluation of method accuracy was based on LSC 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

9

data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

- Trip Blanks: Sample Trip Blank was the trip blank associated with site sample Outfall 014. The trip blank had no target compound detects above the MDL.
- 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 control limits established by the continuing calibration standards: -50%/+100% for internal standard areas and ±30 seconds for retention times.
- Compound Identification: Compound identification was verified. The laboratory analyzed for five volatile target compounds by EPA Method 624. 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. Any results reported between the MDL and 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 reporting limit.
- Tentatively Identified Compounds: TICs were not reported by the laboratory for this SDG.
- System Performance: Review of the raw data indicated no problems with system performance.

E. VARIOUS EPA METHODS—General Minerals

Reviewed By: P. Meeks Date Reviewed: March 3, 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 General Minerals (DVP-6, Rev. 0), EPA Methods 180.1, 405.1, and 8015M, and the National Functional Guidelines for Inorganic Data Review (2/94).

• Holding Times: The holding times, 48 hours for BOD and turbidity, were met. The hydrazine sample was derivitized within three days of sampling and was analyzed within three days of derivitization.

- Calibration: Calibration criteria are not applicable to BOD.. The turbidity check standard recoveries were acceptable.
- Blanks: There were no applicable detects in the method blanks.
- Blank Spikes and Laboratory Control Samples: The BOD recoveries and RPD were within the laboratory-established control limits. The LCS is not applicable to turbidity.
- Laboratory Duplicates: No laboratory duplicate analyses were performed.
- Matrix Spike/Matrix Spike Duplicate: BOD MS/MSD analyses were not performed. Method accuracy and precision were evaluated based on the LCS/LCSD results. MS/MSD analyses are not applicable to turbidity. Hydrazine MS/MSD analyses were performed on the sample in this SDG. The recoveries and RPD were within the laboratory-established control limits.
- Sample Result Verification: The sample results were verified against the raw data. No transcription or calculation errors were noted.
- 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.

Client Data			Sample Data		Laboratory Data				
Name: T Project: D Date Collected: 5 Time Collected: 1	Test America-Irvine, CA IRA0404 5-Jan-08 1100		Matrix: Sample Size:	Aqueous 0.998 L	Lab Sample: 30124 QC Batch No.: 9886 Date Analyzed DB-5: 19-Ja	30124-001 9886 19-Jan-08	Date Received: Date Extracted: Date Analyzed DB-225:	: l: DB-225:	8-Jan-08 17-Jan-08 NA
Analyte	Conc. (ug/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard		%R LCI	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	R	0.00000164	2	学校である	<u>IS</u> 13C-2,3,7,8-TCDD		70.8 25	25 - 164	1. 6. 240
1,2,3,7,8-PeCDD	£	0.00000354	2		13C-1,2,3,7,8-PeCDD	n 2 Fel version south the second state	64.5 25	25 - 181	VILLENAL CONTRACTOR OF THE SECTION
1,2,3,4,7,8-HxCDD	e e	0.00000532	32	があるとない。	13C-1,2,3,4,7,8-HxCDD	0	130.7	32 - 141	
1,2,3,6,7,8-HxCDD	CHE CON	0.00000520	50	The second s	13C-1,2,3,6,7,8-HxCDI	0	61.2 28	28 - 130	
1,2,3,7,8,9-HxCDD	2	0.00000505	5		13C-1,2,3,4,6,7,8-HpCDD	00	73.0 23	23 - 140	
1,2,3,4,6,7,8-HpCDD	Sector Sector	· · · · · · · · · · ·	and the second		13C-OCDD		57.2 17	17 - 157	
ocdd	0.000564			は、「「「「「」」」、「」」、「」」、「」」、「」」、「」」、「」」、「」」、「	13C-2,3,7,8-TCDF		72.1 24	24 - 169	
2,3,7,8-TCDF	æ	0.00000128	8		13C-1,2,3,7,8-PeCDF			24 - 185	
1,2,3,7,8-PeCDF	Q	0.00000187	1		13C-2,3,4,7,8-PeCDF		66.0 21	21 - 178	
2,3,4,7,8-PeCDF	R	0.00000318	8	and the second	13C-1,2,3,4,7,8-HxCDF	ſr.		26 - 152	
1,2,3,4,7,8-HxCDF	R	0.00000151	I. S.	ないない	13C-1,2,3,6,7,8-HxCDF	F. C. Martin	59:9 26	26 - 123	
1,2,3,6,7,8-HxCDF	22.00.22	0.00000149	61	and the second se	13C-2,3,4,6,7,8-HxCDF	Ľ	62.3 28	28 - 136	
2,3,4,6,7,8-HxCDF		0.00000157	L		13C-1,2,3,7,8,9-HxCDF	A State of the second s	63.6 29	29 - 147	
1,2,3,7,8,9-HxCDF	Ø	0.00000214	4	a constant statements of the	13C-1,2,3,4,6,7,8-HpCDF	DF	71.9 28	28 - 143	
1,2,3,4,6,7,8-HpCDF	F 0.00000814			1	13C-1,2,3,4,7,8,9-HpCDF	DF	66.9 26	26 - 138	
1,2,3,4,7,8,9-HpCDF	Q H	0.0000027	1		13C-OCDF		55.8 17	17-157	
OCDF	0.0000258				CRS 37CI-2,3,7,8-TCDD		90.0 35	35 - 197	
Totals					Footnotes		-		- - -
Total TCDD	The second s	0.00000164	4		a. Sample specific estimated detection limit	on limit.			
Total PeCDD	£	0.00000354	4	変換が見たい	b. Estimated maximum possible concentration.	icentration.			
Total HxCDD	14	Alter Structure of Structure of	0.0000103	03	c. Method detection limit.				
Total HpCDD	0.000155				d. Lower control limit - upper control limit	ol limit.		San Partie	
Total TCDF	R	0.00000128	8.		an and the state of the state o	THE STATE AND AND A	CONCOUNT OF MILE AND ADD	Andread The Contra Ma	a Constantina di Antonio di Antonio
Total PeCDF	R	0.00000323	3						
Total HxCDF	0.00000223	a land of the state of the	0.00000424	424 10.000		and the second second	A LUMBER REAL PROPERTY.	Rene - Collins	E 4405 - 12.05 (1.877) 44
Total HpCDF	0.0000238	の記録を		ないないのであるというない		が、ため、一般など		「日本」をないう	ないというない



THE LEADER IN ENVIRONMENTAL TESTING

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: Routine Outfall 014

METALS

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

		1							
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA0404-01 (OUTFALL Reporting Units: mg/l	014 - Water) - cont.				Sample	ed: 01/05/0	08		
Boron K	EPA 200.7	8A07084	0.020	0.050	ND	1	01/07/08	01/08/08	
Sample ID: IRA0404-01 (OUTFALL	014 - Water)	~			Sample	ed: 01/05/0	08		
Reporting Units: ug/l									
Cadmium J/DNQ	EPA 200.8	8A07086	0.11	1.0	0.77	1	01/07/08	01/08/08	J
Copper V	EPA 200.8	8A07086	0.75	2.0	1.8	1	01/07/08	01/08/08	J
Lead	EPA 200.8	8A07086	0.30	1.0	2.8	1	01/07/08	01/08/08	
Selenium ()	EPA 200.8	8A07086	0.30	2.0	ND	1	01/07/08	01/08/08	
Zinc	EPA 200.8	8A07086	2.5	20	28	1	01/07/08	01/08/08	

Analysis not validated LEVEL IV

TestAmerica Irvine

Joseph Doak Project Manager

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

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THE LEADER IN ENVIRONMENTAL TESTING

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: Routine Outfall 014

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA0404-01 (OUTFALL	. 014 - Water) - cont.				Sample	d: 01/05/0	8		
Reporting Units: mg/l Boron	EPA 200.7-Diss	8A08130	0.020	0.050	ND	1	01/08/08	01/08/08	
Sample ID: IRA0404-01 (OUTFALI	014 - Water)				Sample	d: 01/05/0	8		
Reporting Units: ug/l									
Cadmium J(DNQ	EPA 200.8-Diss	8A08129	0.11	1.0	0.46	1	01/08/08	01/08/08	J
Copper ()	EPA 200.8-Diss	8A08129	0.75	2.0	ND	1	01/08/08	01/08/08	
Lead J/DNQ	EPA 200.8-Diss	8A08129	0.30	1.0	0.52	1	01/08/08	01/09/08	J
Selenium U	EPA 200.8-Diss	8A08129	0.30	2.0	ND	1	01/08/08	01/08/08	
Zinc JON 9	EPA 200.8-Diss	8A08129	2.5	20	17	1	01/08/08	01/08/08	J

DISSOLVED METALS

Analysis not validated LEVEL IV

TestAmerica Irvine

Joseph Doak Project Manager

IRA0404 <Page 8 of 30>



THE LEADER IN ENVIRONMENTAL TESTING

EVEL IV

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: Routine Outfall 014

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

Metals by EPA 200 Series Methods MDL Reporting Data Sample Dilution Date Date Qualifiers Method Batch Limit Limit Result Factor Extracted Analyzed Analyte Sample ID: IRA0404-01 (OUTFALL 014 - Water) - cont. Sampled: 01/05/08 Reporting Units: ug/l Mercury, Dissolved \cup EPA 245.1 W8A0148 0.050 0.20 ND 1 01/08/08 01/09/08 U EPA 245.1 W8A0148 0.050 0.20 ND 1 01/08/08 01/09/08 Mercury, Total

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Joseph Doak Project Manager

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

Project ID: Routine Outfall 014

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

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: IRA0404-01 (OUTFALL 014 - Reporting Units: ug/l	Water)				Sample	ed: 01/05/0		mayzeu	Quanners
Naphthalene U N-Nitrosodimethylamine V Surrogate: 2-Fluorophenol (30-120%) Surrogate: Phenol-d6 (35-120%) Surrogate: 2,4,6-Tribromophenol (40-120%) Surrogate: Nitrobenzene-d5 (45-120%) Surrogate: 2-Fluorobiphenyl (50-120%) Surrogate: Terphenyl-d14 (50-125%)	EPA 625 EPA 625	8A06033 8A06033	2.8 2.4	9.4 19	ND ND 61 % 72 % 68 % 73 % 80 % 75 %	0.943 0.943	01/06/08 01/06/08	01/09/08 01/09/08	

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

Report Number: IRA0404

Project ID: Routine Outfall 014

Sampled: 01/04/08-01/05/08 Received: 01/05/08

PURGEABLES BY GC/MS (EPA 624)

				MDL	Reporting	Sample	Dilution	Date	Date	Data
Analyte		Method	Batch	Limit	Limit	Result	Factor	Extracted	Analyzed	Qualifiers
Sample ID: IRA0404-01 (OUTFA Reporting Units: ug/l	LL 014 -	Water) - cont.				Sample	ed: 01/05/	08		
1,2-Dibromoethane (EDB)	U	EPA 624	8A09005	0.40	2.0	ND	1	01/09/08	01/09/08	
Methyl-tert-butyl Ether (MTBE)	1	EPA 624	8A09005	0.32	5.0	ND	1 '	01/09/08	01/09/08	
1,2,3-Trichloropropane		EPA 624	8A09005	0.40	10	ND	1	01/09/08	01/09/08	
Di-isopropyl Ether (DIPE)		EPA 624	8A09005	0.25	5.0	ND	1	01/09/08	01/09/08	
tert-Butanol (TBA)	· •	EPA 624	8A09005	4.9	25	ND	1	01/09/08	01/09/08	
Surrogate: Dibromofluoromethane	(80-120%	6)				106 %				
Surrogate: Toluene-d8 (80-120%)						103 %				
Surrogate: 4-Bromofluorobenzene	(80-120%)				89 %				
Sample ID: IRA0404-02 (TRIP B) Reporting Units: ug/l	LANK - V	Water)				Sample	ed: 01/04/0	8	:	
1,2-Dibromoethane (EDB)	U	EPA 624	8A09005	0.40	2.0	ND	1	01/09/08	01/09/08	
Methyl-tert-butyl Ether (MTBE)	1	EPA 624	8A09005	0.32	5.0	ND	1	01/09/08	01/09/08	
1,2,3-Trichloropropane		EPA 624	8A09005	0.40	10	ND	1	01/09/08	01/09/08	
Di-isopropyl Ether (DIPE)		EPA 624	8A09005	0.25	5.0	ND	1 .	01/09/08	01/09/08	
tert-Butanol (TBA)	V	EPA 624	8A09005	4.9	25	ND	1	01/09/08	01/09/08	
Surrogate: Dibromofluoromethane	(80-120%	6)				101 %				
Surrogate: Toluene-d8 (80-120%)						102 %				
Surrogate: 4-Bromofluorobenzene	80-120%)				90 %				
	2	evelI	J							

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THE LEADER IN ENVIRONMENTAL TESTING

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Routine Outfall 014

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

		INC	ORGA	NICS					
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA0404-01 (OUTFALL 01	4 - Water) - cont.				Sample	ed: 01/05/0	08		
Reporting Units: mg/l									
Hexane Extractable Material (Oil & –———————————————————————————————————	EPA 1664A	8A07065	1.3	4.7	ND	1	01/07/08	01/07/08	
Ammonia-N (Distilled)	EPA 350.2	8A07093	0.30	0.50	ND	1	01/07/08	01/07/08	
Biochemical Oxygen Demand	EPA 405.1	8A07076	0.59	2.0	8.6	1	01/07/08	01/12/08	
Chloride 🔶	EPA 300.0	8A06026	2.5	5.0	91	10	01/06/08	01/06/08	
Fluoride	EPA 340.2	8A09065	0.014	0.10	0.72	1	01/09/08	01/09/08	
Nitrate-N	EPA 300.0	8A06026	0.060	0.11	ND	1	01/06/08	01/06/08	
Nitrite-N	EPA 300.0	8A06026	0.090	0.15	ND	1	01/06/08	01/06/08	
Nitrate/Nitrite-N	EPA 300.0	8A06026	0.15	0.26	ND	1	01/06/08	01/06/08	
Sulfate	EPA 300.0	8A06026	0.20	0.50	14	1	01/06/08	01/06/08	
Total Dissolved Solids	SM2540C	8A08084	10	10	280	1	01/08/08	01/08/08	
Total Suspended Solids	EPA 160.2	8A07105	10	10	21	1	01/07/08	01/07/08	
Sample ID: IRA0404-01 (OUTFALL 01 Reporting Units: ml/l/hr	4 - Water)				Sample	ed: 01/05/0	08		
Total Settleable Solids	EPA 160.5	8A06031	0.10	0.10	ND	1	01/06/08	01/06/08	
Sample ID: IRA0404-01 (OUTFALL 01 Reporting Units: NTU	4 - Water)				Sample	ed: 01/05/0	08		
Turbidity	EPA 180.1	8A06032	0.040	1.0	13	1	01/06/08	01/06/08	
Sample ID: IRA0404-01 (OUTFALL 01 Reporting Units: ug/l	4 - Water)				Sample	ed: 01/05/0	08		
Perchlorate -V-	EPA 314.0	8A07062	1.5	4.0	ND	1	01/07/08	01/07/08	
* Analysis not validated									

LEVEL IV

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Joseph Doak Project Manager

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IRA0404 <Page 9 of 30>

FRUESDAIL LABOR Excellence in Independent Testing	TRUESDAIL LABORATORIES, INC. Excellence in Independent Testing	IES, INC.				Establis	Established 1931	74
						14201 FRANKLIN AVENUE - TU (714) 730-6239 - FAX (714)	14201 FFAANKLIN AVENUE - TUSTIN, CALIFORNIA \$2780-7008 (714) 730-6239 - FAX (714) 730-6462 - www.trussdef.com	0
Cilent:	TestAmerica Analytical-irvine 17461 Derian Avenue, Suite 100 irvine, CA 92614-5817	ical-irvine le, Suite 100 17		REPORT		Laboratory No: Report Date:	972443 January 14, 2008 January 5, 2008	
Attention: Sample: Project Name: P.O. Number: Method Number: Investigation:	Joseph Dosk Water / 1 Sample IRA0404 8315 (Modified) Hydrazines					Receiving Date: Extraction Date: Analysis Date: Units: Reported By:	January 7, 2008 January 7, 2008 January 8, 2008 Jug/L JS	
			Analy	Analytical Results				
Sample (D Sample	Sample Descript	Sample Amount (mL)	Dilution	Monomethyl Hvdrazine	u-Dimethyl Hydrazine	Hydrazine	Qualifier Codes	
	Method Blank 🗶	100	1	ND	ND	QN	None	
972443	IRA0404-01	100	1) CN) N) dn	None	
				0.56	0.32	0.15		
				5.0	5.0	1.00		
Sample Reporting Limits	\$2			5.0	5.0	1.00		
* An	* Analysis not va	validated						
		Ŭ	ביוכי ווי		~	er.	~	
					Z)		
Results based on	Note: Results based on detector #1 {UV=365nm} data.	n} data.		ł	Analytical Servic	Analytical Services, Truesdall Laboratorie	es, inc.	
						2		
eport applies only to l nese iaboratories, this žiy matter without prio	he sample, or samples, inve s report is submitted and ac r written authorization from ⁻	sstigated and is not ne cepted for the exclusi Fruesdail Laboratorie	cessarily indicative ve use of the client s.	of the quality or condition of a	pparently (dentical or sin upon the condition that i	niiar products. As a mutual p It is not to be used, in whole o	This report applies only to the samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to dients, the public, and the samples, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicty matter without prior written authorization from Truesdail Laboratories.	

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APPENDIX G

Section 92

Outfall 014, January 5, 2008 Test America Analytical Laboratory Report

THE LEADER IN ENVIRONMENTAL TESTING

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

LABORATORY REPORT

Prepared For: MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project: Routine Outfall 014

Sampled: 01/04/08-01/05/08 Received: 01/05/08 Revised: 02/27/08 15:48

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(s) of Custody, 2 pages, are included and are an integral part of this report.

This entire report was reviewed and approved for release.

SAMPLE CROSS REFERENCE

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

ADDITIONAL

INFORMATION:

This report was revised to correct reported carbon range for EFH.

LABORATORY ID	CLIENT ID	MATRIX
IRA0404-01	OUTFALL 014	Water
IRA0404-02	TRIP BLANK	Water

Reviewed By:

Joseph Dock

TestAmerica Irvine Joseph Doak Project Manager



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: Routine Outfall 014

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA0404-01 (OUTFALL 014 - Water)				Sampled: 01/05/08					
Reporting Units: mg/l									
EFH (C13 - C22)	EPA 8015B	8A07066	0.094	0.47	ND	0.943	01/07/08	01/08/08	
Surrogate: n-Octacosane (40-125%)					83 %				A-01

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Routine Outfall 014

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

VOLATILE FUEL HYDROCARBONS (EPA 5030/CADHS Mod. 8015)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA0404-01 (OUTFALL 0			Sample	ed: 01/05/0	8				
Reporting Units: ug/l									
GRO (C4 - C12)	EPA 8015 Mod.	8A09029	25	100	ND	1	01/09/08	01/09/08	
Surrogate: 4-BFB (FID) (65-140%)					96 %				

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Routine Outfall 014

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

VOLATILE ORGANICS by GCMS SIM											
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers		
Sample ID: IRA0404-01 (OUTFALL				Sample	d: 01/05/0)8					
Reporting Units: ug/l											
1,4-Dioxane	EPA 8260B-SIM	8A06013	1.0	2.0	ND	1	01/06/08	01/06/08			
Surrogate: Dibromofluoromethane (80	0-120%)				101 %						

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Routine Outfall 014

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

PURGEABLES BY GC/MS (EPA 624)												
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers			
Sample ID: IRA0404-01 (OUTFALL 014 -	Water) - cont.		Sampled: 01/05/08									
Reporting Units: ug/l												
1,2-Dibromoethane (EDB)	EPA 624	8A09005	0.40	2.0	ND	1	01/09/08	01/09/08				
Methyl-tert-butyl Ether (MTBE)	EPA 624	8A09005	0.32	5.0	ND	1	01/09/08	01/09/08				
1,2,3-Trichloropropane	EPA 624	8A09005	0.40	10	ND	1	01/09/08	01/09/08				
Di-isopropyl Ether (DIPE)	EPA 624	8A09005	0.25	5.0	ND	1	01/09/08	01/09/08				
tert-Butanol (TBA)	EPA 624	8A09005	4.9	25	ND	1	01/09/08	01/09/08				
Surrogate: Dibromofluoromethane (80-120%)				106 %							
Surrogate: Toluene-d8 (80-120%)					103 %							
Surrogate: 4-Bromofluorobenzene (80-120%)					89 %							
Sample ID: IRA0404-02 (TRIP BLANK - V	/ater)				Sample	d: 01/04/0)8					
Reporting Units: ug/l												
1,2-Dibromoethane (EDB)	EPA 624	8A09005	0.40	2.0	ND	1	01/09/08	01/09/08				
Methyl-tert-butyl Ether (MTBE)	EPA 624	8A09005	0.32	5.0	ND	1	01/09/08	01/09/08				
1,2,3-Trichloropropane	EPA 624	8A09005	0.40	10	ND	1	01/09/08	01/09/08				
Di-isopropyl Ether (DIPE)	EPA 624	8A09005	0.25	5.0	ND	1	01/09/08	01/09/08				
tert-Butanol (TBA)	EPA 624	8A09005	4.9	25	ND	1	01/09/08	01/09/08				
Surrogate: Dibromofluoromethane (80-120%)				101 %							
Surrogate: Toluene-d8 (80-120%)					102 %							
Surrogate: 4-Bromofluorobenzene (80-120%)					90 %							

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Routine Outfall 014

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

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: IRA0404-01 (OUTFALL 014 -)	Sampled: 01/05/08								
Reporting Units: ug/l									
Naphthalene	EPA 625	8A06033	2.8	9.4	ND	0.943	01/06/08	01/09/08	
N-Nitrosodimethylamine	EPA 625	8A06033	2.4	19	ND	0.943	01/06/08	01/09/08	
Surrogate: 2-Fluorophenol (30-120%)					61 %				
Surrogate: Phenol-d6 (35-120%)					72 %				
Surrogate: 2,4,6-Tribromophenol (40-120%)					68 %				
Surrogate: Nitrobenzene-d5 (45-120%)					73 %				
Surrogate: 2-Fluorobiphenyl (50-120%)					80 %				
Surrogate: Terphenyl-d14 (50-125%)					75 %				

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Routine Outfall 014

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

METALS											
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers		
Sample ID: IRA0404-01 (OUTFALL 0 Reporting Units: mg/l	14 - Water) - cont.				Sample	d: 01/05/0)8				
Boron	EPA 200.7	8A07084	0.020	0.050	ND	1	01/07/08	01/08/08			
Sample ID: IRA0404-01 (OUTFALL 0	14 - Water)				Sample	d: 01/05/0)8				
Reporting Units: ug/l											
Cadmium	EPA 200.8	8A07086	0.11	1.0	0.77	1	01/07/08	01/08/08	J		
Copper	EPA 200.8	8A07086	0.75	2.0	1.8	1	01/07/08	01/08/08	J		
Lead	EPA 200.8	8A07086	0.30	1.0	2.8	1	01/07/08	01/08/08			
Selenium	EPA 200.8	8A07086	0.30	2.0	ND	1	01/07/08	01/08/08			
Zinc	EPA 200.8	8A07086	2.5	20	28	1	01/07/08	01/08/08			

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Project ID: Routine Outfall 014

DISSOLVED METALS

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

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

MDL Reporting Sample Dilution Date Date Data Analyte Method Batch Limit Result Factor Extracted Analyzed Qualifiers Limit Sample ID: IRA0404-01 (OUTFALL 014 - Water) - cont. Sampled: 01/05/08 Reporting Units: mg/l 0.020 0.050 01/08/08 01/08/08 Boron EPA 200.7-Diss 8A08130 ND 1 Sample ID: IRA0404-01 (OUTFALL 014 - Water) Sampled: 01/05/08 Reporting Units: ug/l EPA 200.8-Diss 8A08129 0.11 0.46 01/08/08 01/08/08 Cadmium 1.0 J 1 Copper EPA 200.8-Diss 8A08129 0.75 2.0 ND 1 01/08/08 01/08/08 0.52 01/08/08 Lead EPA 200.8-Diss 8A08129 0.30 1.0 1 01/09/08 J Selenium EPA 200.8-Diss 8A08129 0.30 2.0 ND 1 01/08/08 01/08/08 EPA 200.8-Diss 01/08/08 01/08/08 Zinc 8A08129 2.5 20 17 1 J

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THE LEADER IN ENVIRONMENTAL TESTING

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Project ID: Routine Outfall 014

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

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

INORGANICS											
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers		
Sample ID: IRA0404-01 (OUTFALL 014 -	Water) - cont.				Sample	ed: 01/05/0)8				
Reporting Units: mg/l					-						
Hexane Extractable Material (Oil & Grease)	EPA 1664A	8A07065	1.3	4.7	ND	1	01/07/08	01/07/08			
Ammonia-N (Distilled)	EPA 350.2	8A07093	0.30	0.50	ND	1	01/07/08	01/07/08			
Biochemical Oxygen Demand	EPA 405.1	8A07076	0.59	2.0	8.6	1	01/07/08	01/12/08			
Chloride	EPA 300.0	8A06026	2.5	5.0	91	10	01/06/08	01/06/08			
Fluoride	EPA 340.2	8A09065	0.014	0.10	0.72	1	01/09/08	01/09/08			
Nitrate-N	EPA 300.0	8A06026	0.060	0.11	ND	1	01/06/08	01/06/08			
Nitrite-N	EPA 300.0	8A06026	0.090	0.15	ND	1	01/06/08	01/06/08			
Nitrate/Nitrite-N	EPA 300.0	8A06026	0.15	0.26	ND	1	01/06/08	01/06/08			
Sulfate	EPA 300.0	8A06026	0.20	0.50	14	1	01/06/08	01/06/08			
Total Dissolved Solids	SM2540C	8A08084	10	10	280	1	01/08/08	01/08/08			
Total Suspended Solids	EPA 160.2	8A07105	10	10	21	1	01/07/08	01/07/08			
Sample ID: IRA0404-01 (OUTFALL 014 - Reporting Units: ml/l/hr	Water)				Sample	ed: 01/05/0)8				
Total Settleable Solids	EPA 160.5	8A06031	0.10	0.10	ND	1	01/06/08	01/06/08			
Sample ID: IRA0404-01 (OUTFALL 014 - Reporting Units: NTU	Water)				Sample	ed: 01/05/0)8				
Turbidity	EPA 180.1	8A06032	0.040	1.0	13	1	01/06/08	01/06/08			
Sample ID: IRA0404-01 (OUTFALL 014 - Reporting Units: ug/l	Water)				Sample	ed: 01/05/0)8				
Perchlorate	EPA 314.0	8A07062	1.5	4.0	ND	1	01/07/08	01/07/08			

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Routine Outfall 014

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

Metals by EPA 200 Series Methods												
MDL Reporting Sample Dilution Date Date Data Analyte Method Batch Limit Limit Result Factor Extracted Analyzed Qualifier												
Sample ID: IRA0404-01 (OUTFALL 01	4 - Water) - cont.				Sample	ed: 01/05/0)8					
Reporting Units: ug/l												
Mercury, Dissolved	EPA 245.1	W8A0148	0.050	0.20	ND	1	01/08/08	01/09/08				

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Routine Outfall 014

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

SHORT HOLD TIME DETAIL REPORT

Sample ID: OUTFALL 014 (IRA0404-01) -	Hold Time (in days) Water	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
EPA 160.5	2	01/05/2008 11:00	01/05/2008 19:00	01/06/2008 10:50	01/06/2008 10:50
EPA 180.1	2	01/05/2008 11:00	01/05/2008 19:00	01/06/2008 12:10	01/06/2008 12:10
EPA 300.0	2	01/05/2008 11:00	01/05/2008 19:00	01/06/2008 07:00	01/06/2008 09:12
EPA 405.1	2	01/05/2008 11:00	01/05/2008 19:00	01/07/2008 10:00	01/12/2008 10:00

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Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

METHOD BLANK/QC DATA

EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8A07066 Extracted: 01/07/08	<u>.</u>										
Blank Analyzed: 01/07/2008 (8A07066-B	LK1)										
EFH (C13 - C22)	ND	0.50	0.10	mg/l							
Surrogate: n-Octacosane	0.198			mg/l	0.200		99	40-125			
LCS Analyzed: 01/07/2008 (8A07066-BS	1)										MNR1
EFH (C13 - C40)	0.721	0.50	0.10	mg/l	0.750		96	40-115			
Surrogate: n-Octacosane	0.200			mg/l	0.200		100	40-125			
LCS Dup Analyzed: 01/07/2008 (8A0706	6-BSD1)										
EFH (C13 - C40)	0.728	0.50	0.10	mg/l	0.750		97	40-115	1	25	
Surrogate: n-Octacosane	0.185			mg/l	0.200		92	40-125			

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Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS (EPA 5030/CADHS Mod. 8015)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8A09029 Extracted: 01/09/08											
Blank Analyzed: 01/09/2008 (8A09029-B	LK1)										
GRO (C4 - C12)	ND	100	25	ug/l							
Surrogate: 4-BFB (FID)	9.07			ug/l	10.0		91	65-140			
LCS Analyzed: 01/09/2008 (8A09029-BS	1)										
GRO (C4 - C12)	781	100	25	ug/l	800		98	80-120			
Surrogate: 4-BFB (FID)	12.8			ug/l	10.0		128	65-140			
Matrix Spike Analyzed: 01/09/2008 (8A0	9029-MS1)				Sou	rce: IRA	0484-01				
GRO (C4 - C12)	228	100	25	ug/l	220	ND	103	65-140			
Surrogate: 4-BFB (FID)	10.1			ug/l	10.0		101	65-140			
Matrix Spike Dup Analyzed: 01/09/2008	(8A09029-M	SD1)			Sou	rce: IRA	0484-01				
GRO (C4 - C12)	227	100	25	ug/l	220	ND	103	65-140	0	20	
Surrogate: 4-BFB (FID)	10.4			ug/l	10.0		104	65-140			

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Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

METHOD BLANK/QC DATA

VOLATILE ORGANICS by GCMS SIM

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8A06013 Extracted: 01/06/08	_										
Blank Analyzed: 01/06/2008 (8A06013-B	LK1)										
1,4-Dioxane	ND	2.0	1.0	ug/l							
Surrogate: Dibromofluoromethane	0.980			ug/l	1.00		98	80-120			
LCS Analyzed: 01/06/2008 (8A06013-BS	1)										
1,4-Dioxane	9.04	2.0	1.0	ug/l	10.0		90	70-125			
Surrogate: Dibromofluoromethane	0.970			ug/l	1.00		97	80-120			
Matrix Spike Analyzed: 01/06/2008 (8A0	6013-MS1)				Sou	rce: IRA()014-01				
1,4-Dioxane	9.01	2.0	1.0	ug/l	10.0	ND	90	70-130			
Surrogate: Dibromofluoromethane	0.990			ug/l	1.00		99	80-120			
Matrix Spike Dup Analyzed: 01/06/2008	(8A06013-M	SD1)			Sou	rce: IRA(014-01				
1,4-Dioxane	8.95	2.0	1.0	ug/l	10.0	ND	90	70-130	1	30	
Surrogate: Dibromofluoromethane	0.990			ug/l	1.00		99	80-120			

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Joseph Doak Project Manager

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Project ID: Routine Outfall 014

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

	D. L	Reporting	MDI		Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 8A09005 Extracted: 01/09/08	<u>}_</u>										
Blank Analyzed: 01/09/2008 (8A09005-B	LK1)										
1,2-Dibromoethane (EDB)	ND	2.0	0.40	ug/l							
Methyl-tert-butyl Ether (MTBE)	ND	5.0	0.32	ug/l							
1,2,3-Trichloropropane	ND	10	0.40	ug/l							
Di-isopropyl Ether (DIPE)	ND	5.0	0.25	ug/l							
tert-Butanol (TBA)	ND	25	4.9	ug/l							
Surrogate: Dibromofluoromethane	24.4			ug/l	25.0		98	80-120			
Surrogate: Toluene-d8	25.3			ug/l	25.0		101	80-120			
Surrogate: 4-Bromofluorobenzene	22.6			ug/l	25.0		90	80-120			
LCS Analyzed: 01/09/2008 (8A09005-BS	1)			0							
1,2-Dibromoethane (EDB)	23.7	2.0	0.40	11 <i>a</i> /l	25.0		95	75-125			
Methyl-tert-butyl Ether (MTBE)	25.0	2.0 5.0	0.40	ug/l	25.0 25.0		93 100	60-135			
1,2,3-Trichloropropane	23.0	3.0 10	0.32	ug/l	25.0 25.0		99	60-133 60-130			
Di-isopropyl Ether (DIPE)	24.8 29.5	5.0	0.40	ug/l	25.0 25.0			60-130			
tert-Butanol (TBA)	29.3 149	3.0 25	0.23 4.9	ug/l	125.0		118 119	70-135			
Surrogate: Dibromofluoromethane	26.3	23	4.9	ug/l	25.0		105	70-133 80-120			
Surrogate: Toluene-d8	20.3 25.5			ug/l ug/l	25.0 25.0		103	80-120			
Surrogate: 1-Bromofluorobenzene	23.7			ug/l ug/l	25.0 25.0		102 95	80-120 80-120			
Surrogate. 4-Bromojiuorobenzene	23.7			ug/i	25.0		95	80-120			
Matrix Spike Analyzed: 01/09/2008 (8A0	9005-MS1)				Sou	irce: IRA	0464-01				
1,2-Dibromoethane (EDB)	22.1	2.0	0.40	ug/l	25.0	ND	88	70-130			
Methyl-tert-butyl Ether (MTBE)	23.6	5.0	0.32	ug/l	25.0	ND	95	55-145			
1,2,3-Trichloropropane	23.6	10	0.40	ug/l	25.0	ND	94	55-135			
Di-isopropyl Ether (DIPE)	28.1	5.0	0.25	ug/l	25.0	ND	112	60-140			
tert-Butanol (TBA)	146	25	4.9	ug/l	125	ND	116	65-140			
Surrogate: Dibromofluoromethane	26.8			ug/l	25.0		107	80-120			
Surrogate: Toluene-d8	25.1			ug/l	25.0		100	80-120			
Surrogate: 4-Bromofluorobenzene	23.7			ug/l	25.0		95	80-120			

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Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

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: 8A09005 Extracted: 01/09/08											
Matrix Spike Dup Analyzed: 01/09/2008	(8A09005-MS	SD1)			Sou	rce: IRA	0464-01				
1,2-Dibromoethane (EDB)	23.0	2.0	0.40	ug/l	25.0	ND	92	70-130	4	25	
Methyl-tert-butyl Ether (MTBE)	24.4	5.0	0.32	ug/l	25.0	ND	98	55-145	3	25	
1,2,3-Trichloropropane	24.1	10	0.40	ug/l	25.0	ND	96	55-135	2	30	
Di-isopropyl Ether (DIPE)	28.6	5.0	0.25	ug/l	25.0	ND	114	60-140	2	25	
tert-Butanol (TBA)	151	25	4.9	ug/l	125	ND	121	65-140	4	25	
Surrogate: Dibromofluoromethane	26.5			ug/l	25.0		106	80-120			
Surrogate: Toluene-d8	25.5			ug/l	25.0		102	80-120			
Surrogate: 4-Bromofluorobenzene	23.9			ug/l	25.0		96	80-120			

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Project ID: Routine Outfall 014

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8A06033 Extracted: 01/06/08	<u>}_</u>										
Blank Analyzed: 01/08/2008 (8A06033-B	LK1)										
Naphthalene	ND	10	3.0	ug/l							
N-Nitrosodimethylamine	ND	20	2.5	ug/l							
Surrogate: 2-Fluorophenol	123			ug/l	200		61	30-120			
Surrogate: Phenol-d6	143			ug/l	200		72	35-120			
Surrogate: 2,4,6-Tribromophenol	139			ug/l	200		69	40-120			
Surrogate: Nitrobenzene-d5	68.3			ug/l	100		68	45-120			
Surrogate: 2-Fluorobiphenyl	82.7			ug/l	100		83	50-120			
Surrogate: Terphenyl-d14	80.1			ug/l	100		80	50-125			
LCS Analyzed: 01/08/2008 (8A06033-BS	1)										MNR1
Naphthalene	73.2	10	3.0	ug/l	100		73	55-120			
N-Nitrosodimethylamine	60.1	20	2.5	ug/l	100		60	45-120			
Surrogate: 2-Fluorophenol	110			ug/l	200		55	30-120			
Surrogate: Phenol-d6	128			ug/l	200		64	35-120			
Surrogate: 2,4,6-Tribromophenol	136			ug/l	200		68	40-120			
Surrogate: Nitrobenzene-d5	64.7			ug/l	100		65	45-120			
Surrogate: 2-Fluorobiphenyl	73.9			ug/l	100		74	50-120			
Surrogate: Terphenyl-d14	71.5			ug/l	100		72	50-125			
LCS Dup Analyzed: 01/08/2008 (8A0603	3-BSD1)										
Naphthalene	76.2	10	3.0	ug/l	100		76	55-120	4	20	
N-Nitrosodimethylamine	59.6	20	2.5	ug/l	100		60	45-120	1	20	
Surrogate: 2-Fluorophenol	116			ug/l	200		58	30-120			
Surrogate: Phenol-d6	136			ug/l	200		68	35-120			
Surrogate: 2,4,6-Tribromophenol	145			ug/l	200		72	40-120			
Surrogate: Nitrobenzene-d5	67.3			ug/l	100		67	45-120			
Surrogate: 2-Fluorobiphenyl	76.2			ug/l	100		76	50-120			
Surrogate: Terphenyl-d14	75.8			ug/l	100		76	50-125			

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Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

METHOD BLANK/QC DATA

METALS

Analyte Batch: 8A07084 Extracted: 01/07/08	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
	_										
Blank Analyzed: 01/08/2008 (8A07084-B	LK1)										
Boron	ND	0.050	0.020	mg/l							
LCS Analyzed: 01/08/2008 (8A07084-BS	1)										
Boron	0.476	0.050	0.020	mg/l	0.500		95	85-115			
Matrix Spike Analyzed: 01/08/2008 (8A0	7084-MS1)				Sou	irce: IRA	0397-01				
Boron	0.521	0.050	0.020	mg/l	0.500	0.0534	94	70-130			
Matrix Spike Analyzed: 01/08/2008 (8A0	7084-MS2)				Sou	irce: IRA	0317-02				
Boron	0.762	0.050	0.020	mg/l	0.500	0.296	93	70-130			
Matrix Spike Dup Analyzed: 01/08/2008			Sou	irce: IRA	0397-01						
Boron	0.523	0.050	0.020	mg/l	0.500	0.0534	94	70-130	0	20	
Batch: 8A07086 Extracted: 01/07/08	5										
Blank Analyzed: 01/08/2008 (8A07086-B	LK1)										
Cadmium	ND	1.0	0.11	ug/l							
Copper	ND	2.0	0.75	ug/l							
Lead	ND	1.0	0.30	ug/l							
Selenium	ND	2.0	0.30	ug/l							
Zinc	ND	20	2.5	ug/l							
LCS Analyzed: 01/08/2008 (8A07086-BS	1)										
Cadmium	86.8	1.0	0.11	ug/l	80.0		109	85-115			
Copper	84.2	2.0	0.75	ug/l	80.0		105	85-115			
Lead	85.6	1.0	0.30	ug/l	80.0		107	85-115			
Selenium	80.9	2.0	0.30	ug/l	80.0		101	85-115			
Zinc	83.2	20	2.5	ug/l	80.0		104	85-115			

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Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8A07086 Extracted: 01/07/08	<u>}_</u>										
Matrix Spike Analyzed: 01/08/2008 (8A0	7086-MS1)				Sou	rce: IRA	0400-01				
Cadmium	86.4	1.0	0.11	ug/l	80.0	ND	108	70-130			
Copper	81.9	2.0	0.75	ug/l	80.0	ND	102	70-130			
Lead	86.5	1.0	0.30	ug/l	80.0	ND	108	70-130			
Selenium	78.4	2.0	0.30	ug/l	80.0	ND	98	70-130			
Zinc	79.6	20	2.5	ug/l	80.0	2.81	96	70-130			
Matrix Spike Dup Analyzed: 01/08/2008	(8A07086-M	(SD1)			Sou	rce: IRA	0400-01				
Cadmium	86.4	1.0	0.11	ug/l	80.0	ND	108	70-130	0	20	
Copper	82.1	2.0	0.75	ug/l	80.0	ND	103	70-130	0	20	
Lead	86.0	1.0	0.30	ug/l	80.0	ND	108	70-130	1	20	
Selenium	78.4	2.0	0.30	ug/l	80.0	ND	98	70-130	0	20	
Zinc	80.3	20	2.5	ug/l	80.0	2.81	97	70-130	1	20	

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Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
·		2		emos	2000	100000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2	111 2		Quanto o
Batch: 8A08129 Extracted: 01/08/08	-										
Blank Analyzed: 01/08/2008 (8A08129-B	LK1)										
Cadmium	ND	1.0	0.11	ug/l							
Copper	ND	2.0	0.75	ug/l							
Lead	ND	1.0	0.30	ug/l							
Selenium	ND	2.0	0.30	ug/l							
Zinc	ND	20	2.5	ug/l							
LCS Analyzed: 01/08/2008 (8A08129-BS	1)										
Cadmium	79.9	1.0	0.11	ug/l	80.0		100	85-115			
Copper	76.8	2.0	0.75	ug/l	80.0		96	85-115			
Lead	85.3	1.0	0.30	ug/l	80.0		107	85-115			
Selenium	91.1	2.0	0.30	ug/l	80.0		114	85-115			
Zinc	88.0	20	2.5	ug/l	80.0		110	85-115			
Matrix Spike Analyzed: 01/08/2008 (8A0	8129-MS1)				Sou	rce: IRA	0393-01				
Cadmium	76.6	1.0	0.11	ug/l	80.0	ND	96	70-130			
Copper	76.2	2.0	0.75	ug/l	80.0	2.23	92	70-130			
Lead	83.2	1.0	0.30	ug/l	80.0	ND	104	70-130			
Selenium	96.7	2.0	0.30	ug/l	80.0	1.16	119	70-130			
Zinc	79.6	20	2.5	ug/l	80.0	ND	100	70-130			
Matrix Spike Dup Analyzed: 01/08/2008	(8A08129-M	ISD1)			Sou	rce: IRA	0393-01				
Cadmium	76.4	1.0	0.11	ug/l	80.0	ND	96	70-130	0	20	
Copper	76.0	2.0	0.75	ug/l	80.0	2.23	92	70-130	0	20	
Lead	82.9	1.0	0.30	ug/l	80.0	ND	104	70-130	0	20	
Selenium	96.3	2.0	0.30	ug/l	80.0	1.16	119	70-130	0	20	
Zinc	79.7	20	2.5	ug/l	80.0	ND	100	70-130	0	20	

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Routine Outfall 014

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8A08130 Extracted: 01/08/08	_										
Blank Analyzed: 01/08/2008 (8A08130-B	LK1)										
Boron	ND	0.050	0.020	mg/l							
LCS Analyzed: 01/08/2008 (8A08130-BS	l)										
Boron	0.974	0.050	0.020	mg/l	1.00		97	85-115			
Matrix Spike Analyzed: 01/08/2008 (8A0	8130-MS1)				Source: IRA0401-01						
Boron	1.05	0.050	0.020	mg/l	1.00	0.0649	98	70-130			
latrix Spike Dup Analyzed: 01/08/2008 (8A08130-MSD1)					Sou	rce: IRA	0401-01				
Boron	1.06	0.050	0.020	mg/l	1.00	0.0649	100	70-130	1	20	

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Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8A06026 Extracted: 01/06/08											
	-										
Blank Analyzed: 01/06/2008 (8A06026-B	LK1)										
Chloride	ND	0.50	0.25	mg/l							
Nitrate-N	ND	0.11	0.060	mg/l							
Nitrite-N	ND	0.15	0.090	mg/l							
Nitrate/Nitrite-N	ND	0.26	0.15	mg/l							
Sulfate	0.320	0.50	0.20	mg/l							J
LCS Analyzed: 01/06/2008 (8A06026-BS	1)										
Chloride	4.53	0.50	0.25	mg/l	5.00		91	90-110			
Nitrate-N	1.05	0.11	0.060	mg/l	1.13		93	90-110			
Nitrite-N	1.53	0.15	0.090	mg/l	1.52		101	90-110			
Sulfate	9.97	0.50	0.20	mg/l	10.0		100	90-110			
Matrix Spike Analyzed: 01/06/2008 (8A0	6026-MS1)				Sou	rce: IRA	0399-01				
Chloride	12.9	0.50	0.25	mg/l	5.00	7.84	101	80-120			
Nitrate-N	3.84	0.11	0.060	mg/l	1.13	2.51	118	80-120			
Nitrite-N	1.87	0.15	0.090	mg/l	1.52	ND	123	80-120			<i>M1</i>
Sulfate	22.3	0.50	0.20	mg/l	10.0	12.0	103	80-120			
Matrix Spike Dup Analyzed: 01/06/2008	(8A06026-M	SD1)			Sou	rce: IRA	0399-01				
Chloride	12.6	0.50	0.25	mg/l	5.00	7.84	94	80-120	3	20	
Nitrate-N	3.62	0.11	0.060	mg/l	1.13	2.51	99	80-120	6	20	
Nitrite-N	1.68	0.15	0.090	mg/l	1.52	ND	111	80-120	10	20	
Sulfate	21.6	0.50	0.20	mg/l	10.0	12.0	96	80-120	3	20	
Batch: 8A06032 Extracted: 01/06/08	<u> </u>										
Blank Analyzed: 01/06/2008 (8A06032-B	LK1)										
Turbidity	ND	1.0	0.040	NTU							

TestAmerica Irvine



MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly 17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

Project ID: Routine Outfall 014

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8A06032 Extracted: 01/06/08	-										
Duplicate Analyzed: 01/06/2008 (8A0603	2-DUP1)				Sou	rce: IRA	0401-01				
Turbidity	5.44	1.0	0.040	NTU		5.39			1	20	
Batch: 8A07062 Extracted: 01/07/08	-										
Blank Analyzed: 01/07/2008 (8A07062-B	LK1)										
Perchlorate	ND	4.0	1.5	ug/l							
LCS Analyzed: 01/07/2008 (8A07062-BS	1)										
Perchlorate	50.8	4.0	1.5	ug/l	50.0		102	85-115			
Matrix Spike Analyzed: 01/07/2008 (8A0	7062-MS1)				Sou	rce: IRA	0314-03				
Perchlorate	55.2	4.0	1.5	ug/l	50.0	ND	110	80-120			
Matrix Spike Dup Analyzed: 01/07/2008		,				rce: IRA					
Perchlorate	56.4	4.0	1.5	ug/l	50.0	ND	113	80-120	2	20	
Batch: 8A07065 Extracted: 01/07/08	-										
Blank Analyzed: 01/07/2008 (8A07065-B	LK1)										
Hexane Extractable Material (Oil & Grease)	ND	5.0	1.4	mg/l							
LCS Analyzed: 01/07/2008 (8A07065-BS	1)										MNR1
Hexane Extractable Material (Oil & Grease)	17.9	5.0	1.4	mg/l	20.2		89	78-114			
LCS Dup Analyzed: 01/07/2008 (8A0706)	5-BSD1)										
Hexane Extractable Material (Oil & Grease)	18.6	5.0	1.4	mg/l	20.2		92	78-114	4	11	

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Project ID: Routine Outfall 014

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result		%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8A07076 Extracted: 01/07/08	-										
Blank Analyzed: 01/12/2008 (8A07076-B	LK1)										
Biochemical Oxygen Demand	ND	2.0	0.59	mg/l							
LCS Analyzed: 01/12/2008 (8A07076-BS)	l)										
Biochemical Oxygen Demand	182	100	30	mg/l	198		92	85-115			
LCS Dup Analyzed: 01/12/2008 (8A0707	6-BSD1)										
Biochemical Oxygen Demand	178	100	30	mg/l	198		90	85-115	2	20	
Batch: 8A07093 Extracted: 01/07/08	-										
Blank Analyzed: 01/07/2008 (8A07093-B	LK1)										
Ammonia-N (Distilled)	ND	0.50	0.30	mg/l							
LCS Analyzed: 01/07/2008 (8A07093-BS)	1)										
Ammonia-N (Distilled)	10.6	0.50	0.30	mg/l	10.0		106	80-115			
Matrix Spike Analyzed: 01/07/2008 (8A0	7093-MS1)				Sou	rce: IRA	0401-01				
Ammonia-N (Distilled)	11.2	0.50	0.30	mg/l	10.0	ND	112	70-120			
Matrix Spike Dup Analyzed: 01/07/2008	(8A07093-M	SD1)			Sou	rce: IRA	0401-01				
Ammonia-N (Distilled)	11.2	0.50	0.30	mg/l	10.0	ND	112	70-120	0	15	
Batch: 8A07105 Extracted: 01/07/08	-										
Blank Analyzed: 01/07/2008 (8A07105-B	LK1)										
Total Suspended Solids	ND	10	10	mg/l							

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Project ID: Routine Outfall 014

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result		%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8A07105 Extracted: 01/07/08	<u>.</u>										
LCS Analyzed: 01/07/2008 (8A07105-BS Total Suspended Solids	1) 965	10	10	mg/l	1000		96	85-115			
Duplicate Analyzed: 01/07/2008 (8A0710 Total Suspended Solids	5-DUP1) ND	10	10	mg/l	Sou	rce: IRA ND	0401-01			10	
Batch: 8A08084 Extracted: 01/08/08	<u>.</u>										
Blank Analyzed: 01/08/2008 (8A08084-B Total Dissolved Solids	LK1) ND	10	10	mg/l							
LCS Analyzed: 01/08/2008 (8A08084-BS Total Dissolved Solids	1) 996	10	10	mg/l	1000		100	90-110			
Duplicate Analyzed: 01/08/2008 (8A0808 Total Dissolved Solids	4-DUP1) 238	10	10	mg/l	Sou	rce: IRA 240	0400-01		1	10	
Batch: 8A09065 Extracted: 01/09/08	<u>.</u>										
Blank Analyzed: 01/09/2008 (8A09065-B Fluoride	LK1) 0.0303	0.10	0.014	mg/l							J
LCS Analyzed: 01/09/2008 (8A09065-BS)		0.10	5.011								v
Fluoride	1.07	0.10	0.014	mg/l	1.00		107	90-110			
Matrix Spike Analyzed: 01/09/2008 (8A0 Fluoride	9065-MS1) 2.29	0.10	0.014	mg/l	Sou 2.00	rce: IRA 0.340	0648-01 97	80-120			

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Routine Outfall 014

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8A09065 Extracted: 01/09/0	8										
Matrix Spike Dup Analyzed: 01/09/200	8 (8A09065-N	(ISD1)			Sou	rce: IRA	0648-01				
Fluoride	2.27	0.10	0.014	mg/l	2.00	0.340	97	80-120	1	20	

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Routine Outfall 014

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

METHOD BLANK/QC DATA

Metals by EPA 200 Series Methods

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result		%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: W8A0148 Extracted: 01/08/0							,				C
Blank Analyzed: 01/09/2008 (W8A0148-	BLK1)										
Mercury, Dissolved	ND	0.20	0.050	ug/l							
Mercury, Total	ND	0.20	0.050	ug/l							
LCS Analyzed: 01/09/2008 (W8A0148-B	S1)										
Mercury, Dissolved	0.965	0.20	0.050	ug/l	1.00		96	85-115			
Mercury, Total	0.965	0.20	0.050	ug/l	1.00		96	85-115			
Matrix Spike Analyzed: 01/09/2008 (W8	A0148-MS1)				Sou	rce: 7120	722-01				
Mercury, Dissolved	1.97	0.40	0.10	ug/l	2.00	ND	98	70-130			
Mercury, Total	1.97	0.40	0.10	ug/l	2.00	ND	98	70-130			
Matrix Spike Analyzed: 01/09/2008 (W8	A0148-MS2)				Sou	rce: 7120	722-03				
Mercury, Dissolved	1.88	0.40	0.10	ug/l	2.00	ND	94	70-130			
Mercury, Total	1.88	0.40	0.10	ug/l	2.00	ND	94	70-130			
Matrix Spike Dup Analyzed: 01/09/2008	(W8A0148-M	SD1)			Sou	rce: 7120	722-01				
Mercury, Dissolved	1.92	0.40	0.10	ug/l	2.00	ND	96	70-130	2	20	
Mercury, Total	1.92	0.40	0.10	ug/l	2.00	ND	96	70-130	2	20	
Matrix Spike Dup Analyzed: 01/09/2008	(W8A0148-M	SD2)			Sou	rce: 7120	722-03				
Mercury, Dissolved	1.96	0.40	0.10	ug/l	2.00	ND	98	70-130	4	20	
Mercury, Total	1.96	0.40	0.10	ug/l	2.00	ND	98	70-130	4	20	

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Routine Outfall 014

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

DATA QUALIFIERS AND DEFINITIONS

A-01	Surrogate double-spiked; reported from a second run at a 2x dilution
С	Calibration Verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
J M1	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. The MS and/or MSD were above the acceptance limits due to sample matrix interference. 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.
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
RPD	Relative Percent Difference

ADDITIONAL COMMENTS

For GRO (C4-C12):

GRO (C4-C12) is quantitated against a gasoline standard. Quantitation begins immediately following the methanol peak.

For Extractable Fuel Hydrocarbons (EFH, DRO, ORO) :

Unless otherwise noted, Extractable Fuel Hydrocarbons (EFH, DRO, ORO) are quantitated against a Diesel Fuel Standard.



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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Routine Outfall 014

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

Certification Summary

TestAmerica Irvine

Method	Matrix	Nelac	California
EPA 160.2	Water	Х	Х
EPA 160.5	Water	Х	Х
EPA 1664A	Water		
EPA 180.1	Water	Х	Х
EPA 200.7-Diss	Water	Х	Х
EPA 200.7	Water	Х	Х
EPA 200.8-Diss	Water	Х	Х
EPA 200.8	Water	Х	Х
EPA 300.0	Water	Х	Х
EPA 314.0	Water	Х	Х
EPA 340.2	Water	Х	Х
EPA 350.2	Water		Х
EPA 405.1	Water	Х	Х
EPA 624	Water	Х	Х
EPA 625	Water	Х	Х
EPA 8015 Mod.	Water	Х	Х
EPA 8015B	Water	Х	Х
EPA 8260B-SIM	Water		
SM2540C	Water	Х	

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

Truesdail Laboratories-SUB California Cert #1237

14201 Franklin Avenue - Tustin, CA 92680

Analysis Performed: Hydrazine Samples: IRA0404-01

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: IRA0404-01

Weck Laboratories, Inc

14859 E. Clark Avenue - City of Industry, CA 91745 Method Performed: EPA 245.1 Samples: IRA0404-01

TestAmerica Irvine



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

Project ID: Routine Outfall 014

Report Number: IRA0404

Sampled: 01/04/08-01/05/08 Received: 01/05/08

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

TestAmerica Irvine

Joseph Doak Project Manager

IRA0404 <Page 30 of 30> NPDES - 3543

		est America version 12/20/07	120/07		CHAIN OF		CUSIODY	ר כ	Y FORM	Σ	/	THACTOR	10-	(C_{i})		Page 1 of 2
Client Name/Address	ie/Addr€	SS		Project:								ANALY	SIS F	ANALYSIS REQUÍRED	RD	
MWH-Arcadia	cadia	Lie Stute 2	2	Boeing-S Routine	Boeing-SSFL NPDES Routine Outfall 014	თ	(A				Field readings
Arcadia, CA 91007	91007	ne, Julie z	2	APTF Te	APTF Test Stand		МЭН			((;	/WON		'N- [∠] (·	Temn =
Test America Contact: Joseph Doak	a Contac	:t: Joseph E	Joak				I- Þ 99			809) sə	1+ ƏL	(2.0	ON+		
Project Manager: Bronwyn Kelly	nager:	Bronwyn ŀ	(elly	Phone Number (626) 568-6691	umber: 1-6691)) əs		etal Re	28) əi	qeâre	iəleri	N (32			
Sampler: $oldsymbol{\mathcal{A}}$	C & #	ろみったい		Fax Number: (626) 568-6515	ber: 1-6515		sen a	sefi - <u>c</u>	5) oT∷ H mu∋lo ō - dies	nsxoiO	02) ^c	yqısis) (Vaph	I-sinon	SO.4, F	I ,N-91	Unite of readings = 7700
Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	e Bottle #	8 IIO		ЧЯТ		BOD		nmA		stin	Comments
	N	1L Amber	-	80-2-1	нсі	1A	×									
Outfall 014 Dup	8	1L Amber	-		ЧĊ	1 B	×									
all 014	W	VOAs	1		HCI	2A		×								
Outfall 014	M,	VOAs	2		HCI	2B, 2C		×							3	
all 014	N	1L Amber	1		None	3A		Ê	×							
Outfall 014 Dup	>	1L Amber	-		None	3B			×							
all 014	M	1L Amber	1		нсі	4A			×							
Outfall 014 Dup	W	1L Amber	Ļ		HCI	4B			×							
all 014	N	VOAs	1		нсі	5A				×						
Outfall 014 Dup	N	VOAs	2		НСІ	5B, 5C				×						
Outfall 014	W	1L Poly	1		None	9					×					
	N	1L Amber	1		None	7A						х			L	
Outfall 014 Dup	N	1L Amber	.+		None	7B						×				
all 014	W	500 ml Poly	1		H₂S0₄	8							×			
Outfall 014	W	500 ml Poly	2		None	9A, 9B								×		
Outfall 014	N	500 ml Polv	-	1.200	None	10									×	
Relinquished By	B Ch	1-1-1	□ ∞	Date/Time:	Received By	, int](3	Ĭ	Date/Time:		Nor	60/		737	Turn a 24 Hot	Turn around Time: (check) 24 Hours 5 Days
Reinduished By		Deel	THE I	Date/Time:	Profiled By	sy Ader (S	Ğ ğ	Date/Time: /	65	3	(2:61	+	T	48 Hours 72 Hours	urs 10 Days urs Normal X
Retinquished By	By			Date/Time:	Received By			ŏ	Date/Time:						Samol	Sample Intearity: (check)

Version 12/20/07	
America	
Test A	

CHAIN OF CUSTODY FORM

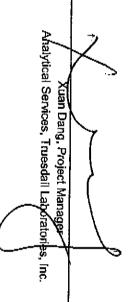
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ר מעכ ב	REQUIRED						Comments									Filter w/in 24hrs of receipt at lab										Turn around Time: (check)			72 Hours Normal	Samola Interrity: (check)	Intact On Ice:
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)))										Bottle #	11A, 11B	12	13A	13B, 13C	14A, 14B	15	16A, 16B	17A, 17B	18A, 18B, 18C								1		para ()	
		DACING CCEL NUDEC		t Stand			mper. 6691	er:	6515	Preservative	None	None	HCI	Ю	HNO3	None	None	None	HCI							Received By	2	Received By	Hrey	Received By	
5	Project:			APTE Test Stand) - -		Phone Number. (626) 568-6691	Fax Number:	(626) 568-6515	Sampling Date/Time	1-5-04						\$	60.11								Date/Time:	7)	Date/Time:		Date/Time:	
20/07			-		 	Y I	 ≧			# of Cont.	2	-	1	2	5	1	7	2	m								-	SW Cater	2nt	Date	
COLORINGICA Version 12/20/07	SS:			618 Michillinda Avenue. Suite 200 Arcadia CA 9 1007	tool dagaat		bronwyn Ke	A.M.		Container Type	500 ml Poly	1L Poly	VOAs	VOAs	1L Poly	1L Poly	1L Amber	1L Amber	VOAs							1.5-08		yle C	Guert		
בובו	he/Addre	0:20	cadia	o 1007			nager	1	1941	Sample Matrix	3	3	3	3	3	3	3	3	3							L.	•	By	Lec	By and the second se	
ומטר או	Client Name/Address:		MVH-Arcadia	618 Michillir		lest Americ	Project Ma	Sampler.		Sample Description	Outfall 014	Outfall 014	Outfall 014	Outfall 014 Dup	Outfall 014	Outfall 014	Outfall 014	Outfall 014	Trip Blanks							Relinquished By		Relinquished By	Kon.	Relinquished By	

1					1		8 Þ			
ł		IRA0404-01	Method Blank	Sample Descript			Attention: Joseph Doak Sample: Water / 1 Sam Project Name: IRA0404	Client: TestAm 17461 D Irvine, C		EXCELLENCE IN INDEPENDENT TESTING
		-01	lank			1 odified) nes	Joseph Doak Water / 1 Sample IRA0404	TestAmerica Analytic 17461 Derian Avenue, Irvine, CA 92614-5817		
		100	100	Sampre Amount (mL)				tical-Irvine .e, Suite 100 17		IES, INC.
			1	Factor	Anal					
00.0	0.58	N	ND	Monomethy1 Hydrazine	vtical Results			REPORT		
0.32	0 0 0	S	ND	u-Dimethyl Hydrazine						
0.15		5	S	Hydrazine		Reported By:	Receiving Date: Extraction Date:	Laboratory No: Report Date: Samiling Date:	14201 FRANKLIN AVENUE • TU (714) 730-6239 • FAX (714)	Establis
	DION	None	None	Qualifier		JS	January 7, 2008 January 7, 2008	972443 January 14, 2008	13TIN, CALIFORNIA 92780-7008 730-6462 - www.truesdail.com	Established 1931
	U.32	0.32 0.15	1 ND ND ND ND	1 ND ND ND 1 ND ND ND 0.56 0.32 0.15	Dilution Monomethyl u-Dimethyl Hydrazine 1) Factor Hydrazine Hydrazine 1 ND ND ND 1 ND ND ND 1 0.56 0.32 0.15	Analytical Results Dilution Monomethyl u-Dimethyl Hydrazine Factor Hydrazine Hydrazine 1 ND ND ND 1 ND ND ND 1 ND ND ND 1 ND ND ND	Analytical Results Sample Dilution Monomethyl u-Dimethyl Hydrazine 100 1 ND ND ND ND 100 1 ND ND ND ND 100 1 ND ND ND ND 100 1 ND ND ND 100 1 ND ND ND 100 1 ND ND ND 100 1 ND 100 100 ND 100 ND	e Receiving Date: Receiving Date: Extraction Date: Extraction Date: Analysis Date: Units: Reported By: 100 1 Monomethyl u-Dimethyl Hydrazine 100 1 ND ND ND 100 1 ND ND 100 1 ND ND 100 1 0.56 0.32 0.15	nalytical-Irvine REPORT Laboratory No: Report Date: Sample 4-5817 Analytical Results Report Date: Sample Sample Dilution Monomethyl u-Dimethyl 100 1 ND ND 100 1 ND ND 0.56 0.32 0.15	malytical-Irvine 1200 FRANKLIM AVENUE - 1051 venue, Suite 100 REPORT Laboratory No: 4-5817 Laboratory No: Report Date: e Analytical Results Sample billution Monomethy u-Dimethy 100 1 ND 100 1 ND 0.56 0.32 0.15

Note: Results based on detector #1 (UV=365nm) data.

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This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from Fruesdail Laboratories.

- Joint a	-twittazine	u-Dimethyl Hydrazine	Monomethyl Hydrazine		Parameter		Run Batch No.;	Investigation:	Method Number:	P.O. Number:	Sample ID:	Sample:	Client Contact:			Client:	EXCELLENCE IN INDEPENDENT TESTING
3.0	50.0	25.0	25.0	Value (ug/L)	Theoretical	IÇV		 Hydrazines 	: 8315 (Modified)	:: IRA0404): IRA0404	H: Water / 1 Sample	t: Joseph Doak	IIVIN9, CA	17461 Der		DEPENDENT TEST
5.62	20.3	0 50	23.2	Value (ug/L)	Vastirad		Extraction: 4237; Analysis: 593	u,	ified)			ample	¥.	IIVIN9, GA 32614-5817	17461 Derian Avenue, Suite 100	TestAmerica Analyticai-Irvine	
112	93,4	05.0	976	Recovery	Downant	Qualit	593								ite 100	vine	ES, INC.
85-115	85-115		85.115	Limits		y Control/											
PASS	PASS	CHAO CHAO	DACO	Hag		Quality A											
Hydrazinė	u-Dimethyl Hydrazine	MONORBURY Hydrazine	Janamath J Lindar 1	Parameter		Quality Control/Quality Assurance Calibration Report									•		
10.0	50,0	50,0		Theoretical Value (up/1)		Report											
10.7	50.5	45.4	Value (ug/L)	Measured			Rep	Analy	Extract	Samp	vel.	ahina adulta in:	Project	Ŕ		4201 FRANKLIN AV. 714) 730-6239 - F	
107	101	90.7	Recovery	Percent			Reported By:	Analyzia Data:	Receiving Date:	Sampling uale:	Report Late:	ampie iu:	Project Lab. No.:	QC Lab. No.:		ENUE - TUSTIA AX (714) 730	Established 1931
85-115	A-115	85-115	Limits	Control			JS JS	January 7, 2008	January 7, 2008	January 5, 2008	January 14, 2008	972443	972443	707158		14201 FRANKLIN AVENUE - TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 - FAX (714) 730-6462 - www.truesdail.com	1931
PASS	DACC	PASS		Flag					-		<u>б</u>						3547

Quality Control/Quality Assurance Spikes Report

		LCS/LCSI	CSD							MS/MSD	-						
	Spiked	_	Recovered		Per	Percent			Control								
	Sig	2	noontenti		D			ļ		Recovered	vered	Pe	Percent	NS/		Accu	Accuracy
7	0000	ç	Concentration	9	Kecov	Recovery (%)	LCSD	Flag	Limits	Concentration	fration	Raro	Many /W		1		
Parameter	ug/L	LCS	LCSD	NB	5 <u>3</u> 1	CSD	RPD	ı					increased (m)		Piag	Control Limits	Limits
Monomethyl Hydrazine	50.0	45.8	44.6	3	01 7	80.3	272	DACC		EMPLINA AANA AANA	Metting a		mot	22		8	XD X Rec.
u-Dimethyl Hydrazine	50.0	3					C. 1 / D	1000	20 /0-130	37.6 39	.0 0.00	75.3	78.0		PASS	20	11-134
	.v.v	14.0	40,U	0.0	90.0	96,1	2.63%	PASS	20 70-130	42.0 42	4 0.00	84.0			- 1	3	
alitypinki	10.0	05	10.9	0	ŝ	B	1 200	0400				4				20	42-109
								1000	001-01	11. 0.11	.4 0.00	116				3	37-139

ć ķ 37-128 ſ ì ï ļ

Analytical Services, Truesdail Laboratories Xuan Dang, Project Manager हे

Mote: Results based on detactor #1 (UV≃385nm) data.

-

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from Truesdail Laboratories.

NO05 3547

SUBCONTRACT ORDER

TestAmerica Irvine **IRA0404**

972443

SEND	NG	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:					
Truesdail Laboratories-SUB 14201 Franklin Avenue Tustin, CA 92680		R S.	lec'i 18 1 9	≀ 7	01/0 7 /08 2443
Phone :(714) 730-6239				•	773
Fax: (714) 730-6462					
Project Location: California Receipt Temperature:	<u>°C</u>	Ice:	Y	/	N

Analysis	Units	Due	Expires	Comments
Sample ID: IRA0404-01	Water			
Hydrazine-OUT	%	01/15/08	<u>Sampled: 01/05/08 /</u> 01/08/08 11:00	11:00 ph=8.4, temp=51.80 Truesdail-Monomethylhydrazine, J
Containers Supplied:				flags, 72hr HT!!!
1 L Amber (AG)	1 L Amber (AH)			

For Sample Conditions See Form Attached

m745 Released B Date/Time t Released By Date/Time

1/7/07-0845 Received By J. Straleursine Date/Time 10F

Date/Time Page 1 of 1 NFDE883548

9:12



January 23, 2008

Vista Project I.D.: 30124

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 January 08, 2008 under your Project Name "IRA0404". 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,

Marche Mainer

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.



Project 30124

Section I: Sample Inventory Report Date Received: 1/8/2008

<u>Vista Lab. ID</u>

Client Sample ID

30124-001

IRA0404-01

SECTION II

Method Blank					EPA Method 1613	
Matrix:	Aqueous	QC Batch No.:	9886	Lab Sample: 0-MB001	1	
Sample Size:	1.00 L	Date Extracted:	17-Jan-08	Date Analyzed DB-5: 19-Jan-0	8 Date Analyzed DB-225: NA	
Analyte	Conc. (ug/L)	DL ^a E	MPC ^b Qualifiers	Labeled Standard	%R LCL-UCL ^d Qualifiers	
2,3,7,8-TCDD	ND	0.00000111		<u>IS</u> 13C-2,3,7,8-TCDD	85.7 25 - 164	
1,2,3,7,8-PeCDI	D ND	0.00000171		13C-1,2,3,7,8-PeCDD	76.8 25 - 181	
1,2,3,4,7,8-HxC	DD ND	0.00000174		13C-1,2,3,4,7,8-HxCDD	75.3 32 - 141	
1,2,3,6,7,8-HxC	DD ND	0.00000184		13C-1,2,3,6,7,8-HxCDD	75.1 28 - 130	
1,2,3,7,8,9-HxC	DD ND	0.00000172		13C-1,2,3,4,6,7,8-HpCDD	87.8 23 - 140	
1,2,3,4,6,7,8-Hp	CDD ND	0.00000243		13C-OCDD	70.8 17 - 157	
OCDD	ND	0.00000780		13C-2,3,7,8-TCDF	83.6 24 - 169	
2,3,7,8-TCDF	ND	0.00000116		13C-1,2,3,7,8-PeCDF	72.8 24 - 185	
1,2,3,7,8-PeCDF	F ND	0.00000159		13C-2,3,4,7,8-PeCDF	75.3 21 - 178	
2,3,4,7,8-PeCDF	F ND	0.00000156		13C-1,2,3,4,7,8-HxCDF	72.9 26 - 152	
1,2,3,4,7,8-HxC		0.000000815		13C-1,2,3,6,7,8-HxCDF	73.2 26 - 123	
1,2,3,6,7,8-HxC		0.00000832		13C-2,3,4,6,7,8-HxCDF	76.3 28 - 136	
2,3,4,6,7,8-HxC	DF ND	0.00000894		13C-1,2,3,7,8,9-HxCDF	79.4 29 - 147	
1,2,3,7,8,9-HxC	DF ND	0.00000120		13C-1,2,3,4,6,7,8-HpCDF	88.5 28 - 143	
1,2,3,4,6,7,8-Hp	CDF ND	0.00000977		13C-1,2,3,4,7,8,9-HpCDF	86.1 26 - 138	
1,2,3,4,7,8,9-Hp		0.00000133		13C-OCDF	72.3 17 - 157	
OCDF	ND	0.00000313		<u>CRS</u> 37Cl-2,3,7,8-TCDD	105 35 - 197	
Totals				Footnotes		
Total TCDD	ND	0.00000111		a. Sample specific estimated detection limit		
Total PeCDD	ND	0.00000373		b. Estimated maximum possible concentrati	on.	
Total HxCDD	ND	0.00000177		c. Method detection limit.		
Total HpCDD	ND	0.00000314		d. Lower control limit - upper control limit.		
Total TCDF	ND	0.00000116				
Total PeCDF	ND	0.00000157				
Total HxCDF	ND	0.000000928				
Total HpCDF	ND	0.00000114				

Analyst: MAS

OPR Results					EP	A Method 1	1613
Matrix: Aqueous Sample Size: 1.00 L		QC Batch No.: Date Extracted:	9886 17-Jan-08	Lab Sample:0-OPR001Date Analyzed DB-5:19-Jan-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-TCDD	10.0	10.4	6.7 - 15.8	<u>IS</u> 13C-2,3,7,8-TCDD	76.2	25 - 164	
1,2,3,7,8-PeCDD	50.0	52.4	35 - 71	13C-1,2,3,7,8-PeCDD	68.3	25 - 181	
1,2,3,4,7,8-HxCDD	50.0	52.8	35 - 82	13C-1,2,3,4,7,8-HxCDD	66.2	32 - 141	
1,2,3,6,7,8-HxCDD	50.0	51.4	38 - 67	13C-1,2,3,6,7,8-HxCDD	66.8	28 - 130	
1,2,3,7,8,9-HxCDD	50.0	52.3	32 - 81	13C-1,2,3,4,6,7,8-HpCDD	87.2	23 - 140	
1,2,3,4,6,7,8-HpCDD	50.0	51.7	35 - 70	13C-OCDD	70.1	17 - 157	
OCDD	100	103	78 - 144	13C-2,3,7,8-TCDF	74.1	24 - 169	
2,3,7,8-TCDF	10.0	9.71	7.5 - 15.8	13C-1,2,3,7,8-PeCDF	64.3	24 - 185	
1,2,3,7,8-PeCDF	50.0	50.9	40 - 67	13C-2,3,4,7,8-PeCDF	67.4	21 - 178	
2,3,4,7,8-PeCDF	50.0	51.2	34 - 80	13C-1,2,3,4,7,8-HxCDF	62.5	26 - 152	
1,2,3,4,7,8-HxCDF	50.0	51.5	36 - 67	13C-1,2,3,6,7,8-HxCDF	63.5	26 - 123	
1,2,3,6,7,8-HxCDF	50.0	52.2	42 - 65	13C-2,3,4,6,7,8-HxCDF	66.6	28 - 136	
2,3,4,6,7,8-HxCDF	50.0	52.3	35 - 78	13C-1,2,3,7,8,9-HxCDF	69.3	29 - 147	
1,2,3,7,8,9-HxCDF	50.0	51.7	39 - 65	13C-1,2,3,4,6,7,8-HpCDF	76.7	28 - 143	
1,2,3,4,6,7,8-HpCDF	50.0	50.6	41 - 61	13C-1,2,3,4,7,8,9-HpCDF	85.4	26 - 138	
1,2,3,4,7,8,9-HpCDF	50.0	51.2	39 - 69	13C-OCDF	71.9	17 - 157	
OCDF	100	104	63 - 170	<u>CRS</u> 37Cl-2,3,7,8-TCDD	84.4	35 - 197	

Analyst: MAS

Approved By: Martha M. M

Martha M. Maier 23-Jan-2008 09:05

Sample ID: IRA	0404-01								EPA N	Aethod 1613
Client Data Name: Test Project: IRA0 Date Collected: 5-Jar Time Collected: 1100	1-08		Sample Data Matrix: Sample Size:	Aqueous 0.998 L	Lab QC	oratory Data Sample: Batch No.: Analyzed DB-5:	30124-001 9886 19-Jan-08	Date Re Date Ex Date An		8-Jan-08 17-Jan-08 NA
Analyte	Conc. (ug/L)	DL ^a	EMPC ^b	Qualifiers		Labeled Standa	rd	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD 2,3,7,8-TCDF 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF	ND ND ND ND 0.0000408 0.000564 ND ND	0.000001 0.000005 0.000005 0.000005 0.000005 0.000001 0.000001 0.000001 0.000001 0.000001	54 32 20 05 28 87 18 51 49 57		<u>IS</u>	13C-2,3,7,8-TCD 13C-1,2,3,7,8-Pe0 13C-1,2,3,4,7,8-F 13C-1,2,3,6,7,8-F 13C-1,2,3,4,6,7,8-F 13C-2,3,7,8-TCD 13C-2,3,7,8-TCD 13C-2,3,4,7,8-Pe0 13C-1,2,3,4,7,8-F 13C-1,2,3,6,7,8-F 13C-2,3,4,6,7,8-F 13C-2,3,4,6,7,8-F	CDD HxCDD HxCDD HpCDD F CDF CDF HxCDF HxCDF HxCDF HxCDF HxCDF	70.8 64.5 62.6 61.2 73.0 57.2 72.1 60.3 66.0 58.5 59.9 62.3 63.6	$\begin{array}{c} 25 - 164 \\ 25 - 181 \\ 32 - 141 \\ 28 - 130 \\ 23 - 140 \\ 17 - 157 \\ 24 - 169 \\ 24 - 185 \\ 21 - 178 \\ 26 - 152 \\ 26 - 152 \\ 26 - 123 \\ 28 - 136 \\ 29 - 147 \end{array}$	
1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	ND 0.00000814 ND 0.0000258	0.000002		J	CRS	13C-1,2,3,4,6,7,8 13C-1,2,3,4,7,8,9 13C-OCDF 37Cl-2,3,7,8-TCL	-HpCDF	71.9 66.9 55.8 90.0	28 - 143 26 - 138 17 - 157 35 - 197	
Totals					Foo	otnotes				
Total TCDD Total PeCDD Total HxCDD Total HpCDD Total TCDF Total PeCDF Total HxCDF	ND ND 0.00000644 0.000155 ND ND 0.00000223	0.000001 0.000003 0.000001 0.000003	54 0.000010 28		b. E: c. M	imple specific estimated stimated maximum possi ethod detection limit. ower control limit - uppe	ible concentration.			
Total HxCDF Total HpCDF	0.00000223		0.000004	124						

Analyst: MAS

APPENDIX

DATA QUALIFIERS & ABBREVIATIONS

В	This compound was also detected in the method blank.
D	Dilution
Р	The amount reported is the maximum possible concentration due to possible chlorinated diphenylether interference.
Н	The signal-to-noise ratio is greater than 10:1.
Ι	Chemical Interference
J	The amount detected is below the Lower Calibration Limit of the instrument.
*	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

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:

1.62 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: °C

Ice: Y / N

Analysis	Units	Due	Expires	Comments
Sample ID: IRA0404-01	Water		Sampled: 01/05/08 11:00	ph=8.4, temp=51.80
1613-Dioxin-HR-Alta	ug/l	01/16/08	01/12/08 11:00	J flags,17 congeners,no TEQ,ug/L,sub=Vista
Level 4 Data Package - Out	N/A	01/16/08	02/02/08 11:00	Boeing
Containers Supplied: 1 L Amber (Y) 1	L Amber (Z)			

Released By

Released By

- 2

681700 ľ Date/Time

Date/Time Received By

18/08 101x Page 1 of 1 Date/Time

200

Project 30124

Date/Time

Received By

NPDES - 3558 Page 10 of 262

SAMPLE LOG-IN CHECKLIST



Vista Project #:	3012	24f				Ĩ		Hand	lard	(
Samples Arrival:	Date/Time	۵ <i>۵</i>	NA	Initials:	B			WR		
	1/8/08	091	59	Mar		She	elf/Ra	ck:	IA	
	Date/Time	t		Initials:		Loc	cation	: Wr	2-2	L-
Logged In:	12/08	la	68	ASB)	Sho	elf/Ra	ck:	3	
Delivered By:	FedEx	UP	s	Cal	Cal DHL		Hand		Oth	ıer
Preservation:	lice		BI	Blue Ice Dry Ice)	None		
Temp °C	Temp °C 1.6°C Time: 0929 Thermometer ID: IR-1								1	
		ANG CONTRACTORS AND				111.4254-6444480				
								YES	NO	NA
Adequate Sample	√olume Rece	ived?		<u>.</u>				V		
Holding Time Acce	Holding Time Acceptable?									
Shipping Container(s) Intact?										
Shipping Custody Seals Intact?										
Shipping Documen	tation Preser	nt?	•.				.N		ł	
Airbill	Trk #	792	6 0	2674	347	-6.		V		
								. /		[

Airbill Trk #	Mdb a	XVTY C	04 TQ				
Sample Container Intact?	V						
Sample Custody Seals Intact?				·L			
Chain of Custody / Sample Documentation Present?							
COC Anomaly/Sample Acceptance Form completed?							
If Chlorinated or Drinking Water	Samples, Ac	ceptable Pres	ervation?	• • • •			
Na ₂ S ₂ O ₃ Preservation Document	Sample					None	\sum
Shipping Container	Vista	Client	Retain	Return		Disp	ose

Comments:

SUBCONTRACT ORDER

TestAmerica Irvine

IRA0404

801	0-	17	3
$\cdot \sim \cdot$	~		

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-SUB 14859 E. Clark Avenue City of Industry, CA 91745 Phone :(626) 336-2139 Fax: (626) 336-2634 Project Location: California Receipt Temperature: <u>34</u> °C Ice: **X** / N

Analysis	Units	Due	Expires	Comments
Sample ID: IRA0404-01	Water		Sampled: 01/05/08	11:00 ph=8.4, temp=51.80
Level 4 + EDD-OUT	N/A	01/16/08	02/02/08 11:00	Excel EDD email to pm,Include Std logs for LvI IV
Level 4 Data Package - Wec	N/A	01/16/08	02/02/08 11:00	
Mercury - 245.1, Diss -OUT	mg/l	01/16/08	02/02/08 11:00	Out to Weck Level 4 Boeing, permit, J flags
Mercury - 245.1-OUT	mg/l	01/16/08	02/02/08 11:00	Out to Weck Level 4 Boeing, permit, J flags
Containers Supplied:				
125 mL Poly w/HNO3 1 (AE)	25 mL Pol	y (AF)		

	1/2 000		16/2 0902
Released By	17/08 ()400 Date/Time	Received By	Date/Time 102
Catom THE	1/7/08 1420	Jaimelymer	17109 1960
Released By	∕Da⁄te/Time	Received By	Date/Time Page 1 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

Client:	TestAmerica, Inc Irvine	Report Date:	01/10/08 08:42
	17461 Derian Ave, Suite 100	Received Date:	01/07/08 14:20
	Irvine, CA 92614	Turn Around:	7 days
	Attention: Joseph Doak	Work Order #: 8010773	
	Phone: (949) 261-1022 Fax: (949) 260-3297	Client Project: IRA0404	

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 01/07/08 14:20 with the Chain of Custody document. The samples were received in good condition. The samples were received at 3.1 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Reviewed by: in

Kim G Tu

Project Manager







Report ID: 8010773 Project ID: IRA0404

Date Received: 01/07/08 14:20 Date Reported: 01/10/08 08:42

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Sampled by:	Sample Comments	Laboratory	Matrix	Date Sampled
IRA0404-01	Client		8010773-01	Water	01/05/08 11:00



Date Received: 01/07/08 14:20 Date Reported: 01/10/08 08:42

IRA0404-01	8010773-01 (Water)
------------	--------------------

Report ID: 8010773

Project ID: IRA0404

Date Sampled: 01/05/08 11:00

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 Mercury, Total	ND ND	0.050 0.050	ug/l ug/l	0.20 0.20	1	EPA 245.1 EPA 245.1	W8A0148 W8A0148	01/08/08 01/08/08	01/09/08 jlp 01/09/08 jlp	



Report ID: 8010773 Project ID: IRA0404 Weck Laboratories, Inc. 14859 E. Clark Ave. Industry, CA 91745 Phone 626.336.2139 Fax 626.336.2634

Date Received: 01/07/08 14:20 Date Reported: 01/10/08 08:42

QUALITY CONTROL SECTION



Date Received: 01/07/08 14:20 Date Reported: 01/10/08 08:42

Metals by EPA 200 Series Methods - Quality Control

Report ID: 8010773

Project ID: IRA0404

							%REC			
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch W8A0148 - EPA 245.1										
Blank (W8A0148-BLK1)				Analyzed:	01/09/08					
Mercury, Dissolved	ND	0.20	ug/l							
Mercury, Total	ND	0.20	ug/l							
LCS (W8A0148-BS1)	A		Analyzed:	01/09/08						
Mercury, Dissolved	0.965	0.20	ug/l	1.00		96	85-115			
Mercury, Total	0.965	0.20	ug/l	1.00		96	85-115			
Matrix Spike (W8A0148-MS1)	S	ource: 7120722	-01	Analyzed:	01/09/08					
Mercury, Dissolved	1.97	0.40	ug/l	2.00	ND	98	70-130			
Mercury, Total	1.97	0.40	ug/l	2.00	ND	98	70-130			
Matrix Spike (W8A0148-MS2)	S	ource: 7120722	-03	Analyzed:	01/09/08					
Mercury, Dissolved	1.88	0.40	ug/l	2.00	ND	94	70-130			
Mercury, Total	1.88	0.40	ug/l	2.00	ND	94	70-130			
Matrix Spike Dup (W8A0148-MSD1)	S	Source: 7120722-01		Analyzed: 01/09/08						
Mercury, Dissolved	1.92	0.40	ug/l	2.00	ND	96	70-130	2	20	
Mercury, Total	1.92	0.40	ug/l	2.00	ND	96	70-130	2	20	
Matrix Spike Dup (W8A0148-MSD2)	S	ource: 7120722	-03	Analyzed: 01/09/08						
Mercury, Dissolved	1.96	0.40	ug/l	2.00	ND	98	70-130	4	20	
Mercury, Total	1.96	0.40	ug/l	2.00	ND	98	70-130	4	20	



Report ID: 8010773 Project ID: IRA0404 Weck Laboratories, Inc. 14859 E. Clark Ave. Industry, CA 91745 Phone 626.336.2139 Fax 626.336.2634

Date Received: 01/07/08 14:20 Date Reported: 01/10/08 08:42

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.

APPENDIX G

Section 93

Outfall 014, January 22, 2008 MEC^X Data Validation Reports



DATA VALIDATION REPORT

Boeing SSFL NPDES

SAMPLE DELIVERY GROUP: IRA2026

Prepared by

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

I. INTRODUCTION

Task Order Title: Contract Task Order:	Boeing SSFL NPDES 1261.100D.00
Sample Delivery Group:	IRA2026
Project Manager:	B. Kelly
Matrix:	Soil
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 014	IRA2026-01	30192-001, 8012321-01, 972906	Water	01/22/08 1030	180.1, 200.8, 245.1, 405.1, 1613, 625, 624, 8315M
Trip Blank	IRA2026-02	N/A	Water	01/22/08	624

II. Sample Management

No anomalies were observed regarding sample management. The sample in this SDG was received at TestAmerica-Irvine and Truesdail within the temperature limits of $4^{\circ}C \pm 2^{\circ}C$. The sample was received below the temperature limit at Vista; however, the sample was not noted to have been frozen. The sample was received above the temperature limit at Weck; however, mercury is not considered volatile. According to the case narrative for this SDG, the sample was 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, custody seals were not required. Custody seals were intact upon arrival at Vista. Custody seals were not present on the cooler received at Weck or Truesdail. If necessary, the client ID was added to the sample result summary by the reviewer.

NPDES - 3569

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.
Ν	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 Qualifier 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.
Е	Not applicable.	Duplicates showed poor agreement.
Ι	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
Μ	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

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.
Ρ	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.

III. Method Analyses

A. EPA METHOD 1613—Dioxin/Furans

Reviewed By: K. Shadowlight Date Reviewed: February 29, 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.
 - 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.
 - 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.

- 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. Any EMPC value was qualified as an estimated nondetect, "UJ." 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: March 4, 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 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 metals and 85-115% for mercury.
- 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 metals analyses.
- 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 not performed on the sample in this SDG. Evaluation of 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.
- 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 625—Semivolatile Organic Compounds (SVOCs)

Reviewed By: L. Calvin Date Reviewed: March 1, 2008

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^X* Data Validation Procedure for Semivolatile Organics (DVP-3, Rev. 0), EPA Method 8270C, and the National Functional Guidelines for Organic Data Review (2/94).

- Holding Times: Extraction and analytical holding times were met. The water sample was extracted within seven days of collection and analyzed within 40 days of extraction.
- GC/MS Tuning: The DFTPP tunes met the method abundance criteria. Samples were analyzed within 12 hours of the DFTPP injection time.
- Calibration: Calibration criteria were met. Initial calibration average RRFs were ≥0.05 and %RSDs ≤35%. Continuing calibration RRFs were ≥0.05 and %Ds ≤20%.
- 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 of this SDG. Evaluation of method accuracy and precision was based on LSC/LSCD 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 control limits established by the continuing calibration standards: -50%/+100% for internal standard areas and ±30 seconds for retention times.
- Compound Identification: Compound identification was verified. The laboratory analyzed for naphthalene and n-nitrosodimethylamine by EPA Method 625. 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.
- Tentatively Identified Compounds: TICs were not reported by the laboratory for this SDG.
- System Performance: Review of the raw data indicated no problems with system performance.

D. EPA METHOD 624—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin Date Reviewed: March 1, 2008

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^X* Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method 8260B, and the National Functional Guidelines for Organic Data Review (2/94).

- Holding Times: Analytical holding times were met. The preserved water samples were analyzed within 14 days of collection.
- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 12 hours of the BFB injection time.
- Calibration: Calibration criteria were met. For applicable target compounds, initial calibration average RRFs were ≥0.05 and %RSDs ≤35%. Continuing calibration RRFs were ≥0.05 and %Ds ≤20%.
- Blanks: The method blank had no target compound detects above the MDL.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratoryestablished 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 of this SDG. Evaluation of method accuracy was based on LSC 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:

- Trip Blanks: Sample Trip Blank was the trip blank associated with site sample Outfall 014. The trip blank had no target compound detects above the MDL.
- 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 control limits established by the continuing calibration standards: -50%/+100% for internal standard areas and ±30 seconds for retention times.
- Compound Identification: Compound identification was verified. The laboratory analyzed for five volatile target compounds by EPA Method 624. 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.
- Tentatively Identified Compounds: TICs were not reported by the laboratory for this SDG.
- System Performance: Review of the raw data indicated no problems with system performance.

E. VARIOUS EPA METHODS—General Minerals

Reviewed By: P. Meeks Date Reviewed: March 4, 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 General Minerals (DVP-6, Rev. 0), EPA Methods 180.1, 405.1, and 8015M, and the National Functional Guidelines for Inorganic Data Review (2/94).

- Holding Times: The holding times, 48 hours for BOD and turbidity, were met. The hydrazine sample was derivitized within three days of collection and was analyzed within three days of derivitization.
- Calibration: Calibration criteria are not applicable to BOD. The turbidity check standard recoveries were acceptable.
- Blanks: There were no applicable detects in the method blanks.

- Blank Spikes and Laboratory Control Samples: The BOD recoveries and RPD were within the laboratory-established control limits. The LCS is not applicable to turbidity.
- Laboratory Duplicates: Laboratory duplicate analyses were performed for turbidity. The RPD was within the laboratory-established control limit.
- Matrix Spike/Matrix Spike Duplicate: BOD MS/MSD analyses were not performed. Method accuracy and precision were evaluated based on the LCS/LCSD results. MS/MSD analyses are not applicable to turbidity. Hydrazine MS/MSD analyses were performed on the sample in this SDG. The recoveries and RPD were within the laboratory-established control limits.
- Sample Result Verification: The sample results were verified against the raw data. No transcription or calculation errors were noted.
- 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.

	Client Data			Sample Data		Laboratory Data				
	Name: Test. Project: IRA2 Date Collected: 22-Ja Time Collected: 1020	Test America-Irvine, CA IRA2026 22-Jan-08		Matrix: Sample Size:	Aqueous 1.01 L	Lab Sample: QC Batch No.: Date Analyzed DB-5:	30192-001 9906 29-1 ₃₁₁₋₀₈	Date Received: Date Extracted: Date Analyzed I	Date Received: Date Extracted: Date Analyzed DB-225:	24-Jan-08 27-Jan-08 NA
		Conc. (ug/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	lard	%R]	LCL-UCL ^d	Oualifiers
2	2,3,7,8-TCDD	CIN .	0.000000	000723	いたの時の教室	<u>IS</u> 13C-2,3,7,8-TCDD	DD	73.8	25-164	
2	1,2,3,7,8-PeCDD	QN	0.00000146	46	THE OWNER WARMAN DOWNER WAS	13C-1,2,3,7,8-PeCDD	eCDD	66.2	25 - 181	er in al allerance of the
5/04(0)	1,2,3,4,7,8-HxCDD	0.00000125				13C-1,2,3,4,7,8-HxCDD	HxCDD	70.5	32 - 141	
Att I	1,2,3,6,7,8-HxCDD	Ð		0.00000122	122	13C-1,2,3,6,7,8-HxCDD	-HxCDD	70.5	28-130	
川	1,2,3,7,8,9-HxCDD	ę		0.00000138	138	13C-1,2,3,4,6,7,8-HpCDD	,8-HpCDD	69.4	23 - 140	
_	l,2,3,4,6,7,8-HpCDD	0.0000365				13C-OCDD		56.0	17 - 157	
-	ocdd	0.000456				13C-2,3,7,8-TCDF	DF	77.4	24-169	
14	2,3,7,8-TCDF	Ð	0.000000462	462		13C-1,2,3,7,8-PeCDF	eCDF	61.6	24-185	the second s
10	1,2,3,7,8-PeCDF	Ŕ	0.00000110	10		13C-2,3,4,7,8-PeCDF	PecDF	63.5	21-178	
(1)	2,3,4,7,8-PeCDF	Ð	0.00000115	15	and the second se	13C-1,2,3,4,7,8-HxCDF	-HxCDF	65.2	26-152	
	1,2,3,4,7,8-HxCDF	£	0.000000890	890		13C-1,2,3,6,7,8-HxCDF	-HxCDF	66.3	26-123	
	1,2,3,6,7,8-HxCDF	Ð	0.000000932	932		13C-2,3,4,6,7,8-HxCDF	-HxCDF	62.9	28-136	and the second
C.N	2,3,4,6,7,8-HxCDF	ĝ	0.000000969	969	「「「「「「「」」」」	13C-1,2,3,7,8,9-HxCDF	-HxCDF	70.2	29 - 147	
-	1,2,3,7,8,9-HxCDF	Ð	0.00000123	23		13C-1,2,3,4,6,7,8-HpCDF	',8-HpCDF	62.3	28 - 143	and the second second of the
6	1,2,3,4,6,7,8-HpCDF	0.00000350				13C-1,2,3,4,7,8,9-HpCDF	,9-HpCDF	66.1	26-138	
	1,2,3,4,7,8,9-HpCDF	Ð	0.00000129	29			A STATE AND A STAT	58.7	17 - 157	A COLUMN THE ADDRESS OF ADDRESS
Toral T	OCDF	0.00000729	にいたのでで	学になた意思		CRS 37CI-2,3,7,8-TCDD	CDD	86.7	35 - 197	
	Totals					Footnotes				
<u> </u>	Total TCDD	Ð	0.0000011	16		a. Sample specific estimated detection limit	ted detection limit.			
同	Total PeCDD	£	である。	0.00000134	134	b. Estimated maximum possible concentration	ossible concentration.			
-	Total HxCDD	0.00000653		0.000011	17	c. Method detection limit.				and the second se
	Total HpCDD	0.0000991	「「「「「「」」			d. Lower control limit - upper control limit	pper control limit.			
5	Total TCDF	R	0.000000686	686		and the state of t	a shift have a second shift of the second	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		100 100 100 100 100 100 100 100 100 100
<u>. (</u> 91	Total PeCDF	£	0.00000195	95						
~ ~;	Total HxCDF	0.00000275		0.00000333	333	1 - Control and a strategy of the strategy		of the set water of the		10, 1111 and 10 10 1000 (17 1 and 10 10
	Total HnCDF	0.00000755	「「「「「「「」」」	「「「「「「「」」」」	などのではないない		のないというないないであったい	「二日の一日」 「二日」		

Level N

THE LEADER IN ENVIRONMENTAL TESTING

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: Routine Outfall 014

Report Number: IRA2026

Sampled: 01/22/08 Received: 01/22/08

		1	META	LS					
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA2026-01 (OUTFAL Reporting Units: mg/l	L 014 - Water) - cont.								
Boron 🐥	EPA 200.7	8A23081	0.020	0.050	ND	1	01/23/08	01/23/08	
Sample ID: IRA2026-01 (OUTFAL	L 014 - Water)								
Reporting Units: ug/l									
Cadmium J/DNQ	EPA 200.8	8A23079	0.11	1.0	0.74	1	01/23/08	01/24/08	J
Copper	EPA 200.8	8A23079	0.75	2.0	2.9	1	01/23/08	01/24/08	
Lead	EPA 200.8	8A23079	0.30	1.0	2.0	1	01/23/08	01/24/08	
Selenium J/DNQ	EPA 200.8	8A23079	0.30	2.0	0.35	1	01/23/08	01/24/08	J
Zinc	EPA 200.8	8A23079	2.5	20	23	1	01/23/08	01/24/08	
, , , , , , , , , , , , , , , , , , , ,									

* Analysis not validated

LEVEL IV

TestAmerica Irvine

Joseph Doak Project Manager

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

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THE LEADER IN ENVIRONMENTAL TESTING

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: Routine Outfall 014

Report Number: IRA2026

Sampled: 01/22/08 Received: 01/22/08

DISSOLVED METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA2026-01 (OUTFALI	014 - Water) - cont.								
Reporting Units: mg/l									
Boron -	EPA 200.7-Diss	8A22137	0.020	0.050	ND	1	01/22/08	01/23/08	
Sample ID: IRA2026-01 (OUTFALI	. 014 - Water)								
Reporting Units: ug/l									
Cadmium J/DNQ	EPA 200.8-Diss	8A22140	0.11	1.0	0.15	1	01/22/08	01/23/08	J
Copper Q	EPA 200.8-Diss	8A22140	0.75	2.0	ND	1	01/22/08	01/23/08	
Lead	EPA 200.8-Diss	8A22140	0.30	1.0	ND	1	01/22/08	01/23/08	
Selenium	EPA 200.8-Diss	8A22140	0.30	2.0	ND	1	01/22/08	01/23/08	
Zine JIDNG	EPA 200.8-Diss	8A22140	2.5	20	3.3	1	01/22/08	01/23/08	J

* Analysis not validated LEVEL IV

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

Project ID: Routine Outfall 014

Report Number: IRA2026

Sampled: 01/22/08 Received: 01/22/08

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: IRA2026-01 (OUTFALL 0	14 - Water) - cont.								
Reporting Units: ug/l										
Mercury, Dissolved	U	EPA 245.1	W8A0913	0.050	0.20	ND	1	01/25/08	01/28/08	
Mercury, Total	U	EPA 245.1	W8A0913	0.050	0.20	ND	1	01/25/08	01/28/08	

LEVEL IV

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Project ID: Routine Outfall 014

Report Number: IRA2026

Sampled: 01/22/08 Received: 01/22/08

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

Analyte		Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution	Date	Date	Data
Sample ID: IRA2026-01 (DUTFALL 01	4 - Water)		- and the	Linnt	Result	Factor	Extracted	Analyzed	Qualifiers
Reporting Units: ug/l	SO THILL OF	- water)								
Naphthalene	4	EPA 625	8A23097	2.9	9.6	ND	0.962	01/23/08	01/05/00	
N-Nitrosodimethylamine	¥	EPA 625	8A23097	2.4	19	ND	0.962	01/23/08	01/25/08	
Surrogate: 2-Fluorophenol					17	69 %	0.902	01/23/08	01/25/08	
Surrogate: Phenol-d6 (35-1	20%)					80 %				
Surrogate: 2, 4, 6-Tribromop	henol (40-120	%)								
Surrogate: Nitrobenzene-d5	5 (45-120%)					72 %				
Surrogate: 2-Fluorobipheny						72 %				
Surrogate: Terphenyl-d14 (.						79 %				
	evel	IV				100 %				

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Level TV

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Project ID: Routine Outfall 014

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

Report Number: IRA2026

Sampled: 01/22/08 Received: 01/22/08

		PUR	GEABLES	S BY G	C/MS (EI	PA 624)				
Analyte		Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA2026-01 (OUTH Reporting Units: ug/l	ALL 014	- Water) - cont.								
'1,2-Dibromoethane (EDB)	U	EPA 624	8A25008	0.40	2.0	ND	1	01/25/00	01/05/00	
Methyl-tert-butyl Ether (MTBE)	Ĩ	EPA 624	8A25008	0.32	5.0	ND	1	01/25/08	01/25/08	
1,2,3-Trichloropropane		EPA 624	8A25008	0.40	10		1	01/25/08	01/25/08	
· Di-isopropyl Ether (DIPE)		EPA 624	8A25008	0.40		ND	1	01/25/08	01/25/08	
· tert-Butanol (TBA)	V	EPA 624	8A25008	4.9	5.0	ND	1	01/25/08	01/25/08	
Surrogate: Dibromofluoromethan	ne (80-120)%)	0A25008	4.9	25	ND	1	01/25/08	01/25/08	
Surrogate: Toluene-d8 (80-120%))	70				107%				
Surrogate: 4-Bromofluorobenzen		96)				107%				
						96 %				
Sample ID: IRA2026-02 (TRIP) Reporting Units: ug/l	BLANK -	Water)								
1,2-Dibromoethane (EDB)	U	EPA 624	8A25008	0.40	2.0	ND	1	01/25/08	01/25/08	
Methyl-tert-butyl Ether (MTBE)		EPA 624	8A25008	0.32	5.0	ND	1	01/25/08		
1,2,3-Trichloropropane		EPA 624	8A25008	0.40	10	ND	1	01/25/08	01/25/08	
Di-isopropyl Ether (DIPE)		EPA 624	8A25008	0.25	5.0	ND	1		01/25/08	
tert-Butanol (TBA)	V	EPA 624	8A25008	4.9	25	ND	1	01/25/08	01/25/08	
Surrogate: Dibromofluoromethan	e (80-120	%)	01120000	1.5	25	103 %	1	01/25/08	01/25/08	
Surrogate: Toluene-d8 (80-120%)	1									
Surrogate: 4-Bromofluorobenzene		%)				107%				
	1	7				96 %				

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Routine Outfall 014

Report Number: IRA2026

Sampled: 01/22/08 Received: 01/22/08

			INC	ORGA	NICS					
Analyte		Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA2026-01 (C	DUTFALL 0	14 - Water) - cont.								
Reporting Units: mg/l			0 4 20002	1.2	4.9			01/20/00	01/20/00	
Hexane Extractable Material (C Grease)	n & _₹	EPA 1664A	8A28083	1.3	4.8	ND	1	01/28/08	01/28/08	
Ammonia-N (Distilled)		EPA 350.2	8A23117	0.30	0.50	ND	1	01/23/08	01/23/08	
Biochemical Oxygen Dema	w bnd	EPA 405.1	8A23070	0.59	2.0	4.8	1	01/23/08	01/28/08	
Chloride	*	EPA 300.0	8A22048	5.0	10	50	20	01/22/08	01/23/08	
Fluoride	1	EPA 340.2	8A24126	0.014	0.10	0.49	1	01/24/08	01/24/08	
Nitrate-N		EPA 300.0	8A22048	0.060	0.11	ND	1	01/22/08	01/23/08	
Nitrite-N		EPA 300.0	8A22048	0.090	0.15	ND	1	01/22/08	01/23/08	
Nitrate/Nitrite-N		EPA 300.0	8A22048	0.15	0.26	ND	1	01/22/08	01/23/08	
Sulfate		EPA 300.0	8A22048	0.20	0.50	7.1	1	01/22/08	01/23/08	
Total Dissolved Solids		SM2540C	8A23102	10	10	230	1	01/23/08	01/23/08	
Total Suspended Solids	\checkmark	EPA 160.2	8A23124	10	10	18	1	01/23/08	01/23/08	
Sample ID: IRA2026-01 (C	DUTFALL 0	14 - Water)								
Reporting Units: ml/l/l	hr									
Total Settleable Solids	X	EPA 160.5	8A23073	0.10	0.10	ND	1	01/23/08	01/23/08	
Sample ID: IRA2026-01 (C Reporting Units: NTU		14 - Water)								
Turbidity		EPA 180.1	8A23074	0.040	1.0	26	1	01/23/08	01/23/08	
Sample ID: IRA2026-01 (C Reporting Units: ug/l	OUTFALL 0	14 - Water)								
Perchlorate	-*	EPA 314.0	8A23064	1.5	4.0	ND	1	01/23/08	01/23/08	
* Analysis	not va	lidated								
	EV0	EL /1/								
		I V								

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REPORT 100 REPORT 100 Analytical Results 100 1 Nutron Monometry II Hudrametry 100 1 ND		*					14201 FRANKLIN AVENUE - TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 - FAX (714) 730-6462 - www.truesdail.com	37IN, CALIFORNIA 92780-700 730-6462 www.truesdail.co
The Dilution Monomethyl Factor Hydrazine 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	Cllent:	TestAmerica Analyti 17461 Derlan Avenu Irvine, CA 92614-581	ical-irvine le, Suite 100 17		REPORT		Laboratory No: Report Date:	972906 February 8, 2008
Analytical Results Analytical Results Analytical Results Analytical Results Analytical Results Monomethyl Hydrazine 5.0 5.0 5.0 5.0	Attention: Sample: Project Name: P.O. Number: Method Number: Investigation:	Joseph Doak Water / 1 Sample IRA2026-01 IRA0404 B315 (Modified) Hydrazines					Sampling Date: Receiving Date: Extraction Date: Analysis Date: Units: Reported By:	January 22, 2008 January 23, 2008 January 25, 2008 µg/L JAM
rple Dilution Monomethyl t (mL) Factor Hydrazine ND 0 0.56 5.0 5.0 5.0				Analy	ytical Results			
00 1 ND C 0.56 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	Sample ID Sample D	Jescript	Sample Amount (mL)	Dilution Factor	Monomethyl Hvdrazine	u-Dimethyl Hvdrazine	Hydrazine	Qualifier Codes
00 1 ND C	707192-MB	Method Blank	100	1	QN	QN	QN	None
0.56 6.0 5.0 5.0 5.0	906	IRA2026-01	100	-) dn	D ON	() DN	None
5.0 5.0 5.0					0.56	0.32	0.15	
dated					5.0	5.0	1.00	
deted	uple Reporting Limits				5.0	5.0	1.00	
	*	- 2(3	velledated			~		~
		EVE	I IV			\neq		<u> </u>
	e: Results based on	detector #1 (UV=365n	m) data.			Analvtical Servic	Dang, Project Manager ces Truesdail Laboratorie	
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REAL DOCTOR DESCRIPTION OF DESCRIPTI