

APPENDIX G

Section 59

Outfall 011 – February 6 & 7, 2010

Test America Analytical Laboratory Report

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LABORATORY REPORT

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

Project: Annual Outfall 011
Annual Outfall 011

Sampled: 02/06/10-02/07/10
Received: 02/06/10
Revised: 04/01/10 13:00

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

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

This entire report was reviewed and approved for release.

SAMPLE CROSS REFERENCE

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

ADDITIONAL INFORMATION: Final revised report to provide corrected units and merge .pdf for Radchem.

LABORATORY ID

ITB0891-01
ITB0891-02
ITB0896-01

CLIENT ID

Outfall 011 (Grab)
Trip Blank
Outfall 011

MATRIX

Water
Water
Water

Reviewed By:



TestAmerica Irvine

Kathleen A. Robb For Heather Clark
Project Manager

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

Project ID: Annual Outfall 011
Annual Outfall 011
Report Number: ITB0891

Sampled: 02/06/10-02/07/10
Received: 02/06/10

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: ITB0891-01 (Outfall 011 (Grab) - Water)					Sampled: 02/06/10				
Reporting Units: mg/l									
GRO (C4 - C12)	EPA 8015 Mod.	10B1582	0.025	0.10	ND	1	02/12/10	02/12/10	
<i>Surrogate: 4-BFB (FID) (65-140%)</i>					78 %				

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Kathleen A. Robb For Heather Clark
Project Manager

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

Project ID: Annual Outfall 011
Annual Outfall 011
Report Number: ITB0891

Sampled: 02/06/10-02/07/10
Received: 02/06/10

EXTRACTABLE FUEL HYDROCARBONS (EPA 3510C/EPA 8015B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0891-01 (Outfall 011 (Grab) - Water)					Sampled: 02/06/10				
Reporting Units: ug/l									
DRO (C13 - C28)	EPA 8015B	10B1526	48	96	ND	0.962	02/12/10	02/12/10	
<i>Surrogate: n-Octacosane (45-120%)</i>					<i>57 %</i>				

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618 Michillinda Avenue, Suite 200
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Attention: Bronwyn Kelly

Project ID: Annual Outfall 011
Annual Outfall 011
Report Number: ITB0891

Sampled: 02/06/10-02/07/10
Received: 02/06/10

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: ITB0891-01 (Outfall 011 (Grab) - Water)					Sampled: 02/06/10				
Reporting Units: ug/l									
Benzene	EPA 624	10B0840	0.28	0.50	ND	1	02/08/10	02/08/10	
Bromodichloromethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/08/10	
Bromoform	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/08/10	
Bromomethane	EPA 624	10B0840	0.42	1.0	ND	1	02/08/10	02/08/10	
Carbon tetrachloride	EPA 624	10B0840	0.28	0.50	ND	1	02/08/10	02/08/10	
Chlorobenzene	EPA 624	10B0840	0.36	0.50	ND	1	02/08/10	02/08/10	
Chloroethane	EPA 624	10B0840	0.40	1.0	ND	1	02/08/10	02/08/10	
Chloroform	EPA 624	10B0840	0.33	0.50	ND	1	02/08/10	02/08/10	
Chloromethane	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/08/10	
Dibromochloromethane	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/08/10	
1,2-Dichlorobenzene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/08/10	
1,3-Dichlorobenzene	EPA 624	10B0840	0.35	0.50	ND	1	02/08/10	02/08/10	
1,4-Dichlorobenzene	EPA 624	10B0840	0.37	0.50	ND	1	02/08/10	02/08/10	
1,1-Dichloroethane	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/08/10	
1,2-Dichloroethane	EPA 624	10B0840	0.28	0.50	ND	1	02/08/10	02/08/10	
1,1-Dichloroethene	EPA 624	10B0840	0.42	0.50	ND	1	02/08/10	02/08/10	
cis-1,2-Dichloroethene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/08/10	
trans-1,2-Dichloroethene	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/08/10	
1,2-Dichloropropane	EPA 624	10B0840	0.35	0.50	ND	1	02/08/10	02/08/10	
cis-1,3-Dichloropropene	EPA 624	10B0840	0.22	0.50	ND	1	02/08/10	02/08/10	
trans-1,3-Dichloropropene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/08/10	
1,2-Dichloro-1,1,2-trifluoroethane	EPA 624	10B0840	1.1	2.0	ND	1	02/08/10	02/08/10	
Ethylbenzene	EPA 624	10B0840	0.25	0.50	ND	1	02/08/10	02/08/10	
Methylene chloride	EPA 624	10B0840	0.95	1.0	ND	1	02/08/10	02/08/10	
1,1,2,2-Tetrachloroethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/08/10	
Tetrachloroethene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/08/10	
Toluene	EPA 624	10B0840	0.36	0.50	ND	1	02/08/10	02/08/10	
1,1,1-Trichloroethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/08/10	
1,1,2-Trichloroethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/08/10	
Trichloroethene	EPA 624	10B0840	0.26	0.50	ND	1	02/08/10	02/08/10	
Trichlorofluoromethane	EPA 624	10B0840	0.34	0.50	ND	1	02/08/10	02/08/10	
Trichlorotrifluoroethane (Freon 113)	EPA 624	10B0840	0.50	5.0	ND	1	02/08/10	02/08/10	
Vinyl chloride	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/08/10	
Xylenes, Total	EPA 624	10B0840	0.90	1.5	ND	1	02/08/10	02/08/10	
Cyclohexane	EPA 624	10B0840	0.40	1.0	ND	1	02/08/10	02/08/10	
Surrogate: 4-Bromofluorobenzene (80-120%)					93 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					93 %				
Surrogate: Dibromofluoromethane (80-120%)					105 %				
Surrogate: Dibromofluoromethane (80-120%)					105 %				
Surrogate: Toluene-d8 (80-120%)					108 %				
Surrogate: Toluene-d8 (80-120%)					108 %				

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Annual Outfall 011
Report Number: ITB0891

Sampled: 02/06/10-02/07/10
Received: 02/06/10

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: ITB0891-02 (Trip Blank - Water)					Sampled: 02/06/10				
Reporting Units: ug/l									
Benzene	EPA 624	10B0840	0.28	0.50	ND	1	02/08/10	02/08/10	
Bromodichloromethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/08/10	
Bromoform	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/08/10	
Bromomethane	EPA 624	10B0840	0.42	1.0	ND	1	02/08/10	02/08/10	
Carbon tetrachloride	EPA 624	10B0840	0.28	0.50	ND	1	02/08/10	02/08/10	
Chlorobenzene	EPA 624	10B0840	0.36	0.50	ND	1	02/08/10	02/08/10	
Chloroethane	EPA 624	10B0840	0.40	1.0	ND	1	02/08/10	02/08/10	
Chloroform	EPA 624	10B0840	0.33	0.50	ND	1	02/08/10	02/08/10	
Chloromethane	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/08/10	
Dibromochloromethane	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/08/10	
1,2-Dichlorobenzene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/08/10	
1,3-Dichlorobenzene	EPA 624	10B0840	0.35	0.50	ND	1	02/08/10	02/08/10	
1,4-Dichlorobenzene	EPA 624	10B0840	0.37	0.50	ND	1	02/08/10	02/08/10	
1,1-Dichloroethane	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/08/10	
1,2-Dichloroethane	EPA 624	10B0840	0.28	0.50	ND	1	02/08/10	02/08/10	
1,1-Dichloroethene	EPA 624	10B0840	0.42	0.50	ND	1	02/08/10	02/08/10	
cis-1,2-Dichloroethene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/08/10	
trans-1,2-Dichloroethene	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/08/10	
1,2-Dichloropropane	EPA 624	10B0840	0.35	0.50	ND	1	02/08/10	02/08/10	
cis-1,3-Dichloropropene	EPA 624	10B0840	0.22	0.50	ND	1	02/08/10	02/08/10	
trans-1,3-Dichloropropene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/08/10	
1,2-Dichloro-1,1,2-trifluoroethane	EPA 624	10B0840	1.1	2.0	ND	1	02/08/10	02/08/10	
Ethylbenzene	EPA 624	10B0840	0.25	0.50	ND	1	02/08/10	02/08/10	
Methylene chloride	EPA 624	10B0840	0.95	1.0	ND	1	02/08/10	02/08/10	
1,1,2,2-Tetrachloroethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/08/10	
Tetrachloroethene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/08/10	
Toluene	EPA 624	10B0840	0.36	0.50	ND	1	02/08/10	02/08/10	
1,1,1-Trichloroethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/08/10	
1,1,2-Trichloroethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/08/10	
Trichloroethene	EPA 624	10B0840	0.26	0.50	ND	1	02/08/10	02/08/10	
Trichlorofluoromethane	EPA 624	10B0840	0.34	0.50	ND	1	02/08/10	02/08/10	
Trichlorotrifluoroethane (Freon 113)	EPA 624	10B0840	0.50	5.0	ND	1	02/08/10	02/08/10	
Vinyl chloride	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/08/10	
Xylenes, Total	EPA 624	10B0840	0.90	1.5	ND	1	02/08/10	02/08/10	
Cyclohexane	EPA 624	10B0840	0.40	1.0	ND	1	02/08/10	02/08/10	
Surrogate: 4-Bromofluorobenzene (80-120%)					92 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					92 %				
Surrogate: Dibromofluoromethane (80-120%)					103 %				
Surrogate: Dibromofluoromethane (80-120%)					103 %				
Surrogate: Toluene-d8 (80-120%)					107 %				
Surrogate: Toluene-d8 (80-120%)					107 %				

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Project Manager

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 011
 Annual Outfall 011
 Report Number: ITB0891

Sampled: 02/06/10-02/07/10
 Received: 02/06/10

PURGEABLES-- GC/MS (EPA 624)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0891-01 (Outfall 011 (Grab) - Water)					Sampled: 02/06/10				
Reporting Units: ug/l									
Acrolein	EPA 624	10B0840	4.0	5.0	ND	1	02/08/10	02/08/10	
Acrylonitrile	EPA 624	10B0840	1.2	2.0	ND	1	02/08/10	02/08/10	
2-Chloroethyl vinyl ether	EPA 624	10B0840	1.8	5.0	ND	1	02/08/10	02/08/10	
<i>Surrogate: 4-Bromofluorobenzene (80-120%)</i>					93 %				
<i>Surrogate: Dibromofluoromethane (80-120%)</i>					105 %				
<i>Surrogate: Toluene-d8 (80-120%)</i>					108 %				
Sample ID: ITB0891-02 (Trip Blank - Water)					Sampled: 02/06/10				
Reporting Units: ug/l									
Acrolein	EPA 624	10B0840	4.0	5.0	ND	1	02/08/10	02/08/10	
Acrylonitrile	EPA 624	10B0840	1.2	2.0	ND	1	02/08/10	02/08/10	
2-Chloroethyl vinyl ether	EPA 624	10B0840	1.8	5.0	ND	1	02/08/10	02/08/10	
<i>Surrogate: 4-Bromofluorobenzene (80-120%)</i>					92 %				
<i>Surrogate: Dibromofluoromethane (80-120%)</i>					103 %				
<i>Surrogate: Toluene-d8 (80-120%)</i>					107 %				

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Project ID: Annual Outfall 011
Annual Outfall 011
Report Number: ITB0891

Sampled: 02/06/10-02/07/10
Received: 02/06/10

1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0896-01 (Outfall 011 - Water)					Sampled: 02/07/10				
Reporting Units: ug/l									
1,4-Dioxane	EPA 8260B-SIM	10B0317	1.0	2.0	ND	1	02/08/10	02/08/10	
<i>Surrogate: Dibromofluoromethane (80-120%)</i>					99 %				

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Annual Outfall 011
Report Number: ITB0891

Sampled: 02/06/10-02/07/10
Received: 02/06/10

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: ITB0896-01 (Outfall 011 - Water)					Sampled: 02/07/10				
Reporting Units: ug/l									
Acenaphthene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10	
Acenaphthylene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10	
Aniline	EPA 625	10B1393	0.28	9.4	ND	0.943	02/11/10	02/15/10	L2
Anthracene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10	
Benzidine	EPA 625	10B1393	4.7	4.7	ND	0.943	02/11/10	02/15/10	L2
Benzo(a)anthracene	EPA 625	10B1393	0.094	4.7	ND	0.943	02/11/10	02/15/10	
Benzo(a)pyrene	EPA 625	10B1393	0.094	1.9	ND	0.943	02/11/10	02/15/10	
Benzo(b)fluoranthene	EPA 625	10B1393	0.094	1.9	ND	0.943	02/11/10	02/15/10	
Benzo(g,h,i)perylene	EPA 625	10B1393	0.094	4.7	ND	0.943	02/11/10	02/15/10	
Benzo(k)fluoranthene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10	
Benzoic acid	EPA 625	10B1393	2.8	19	ND	0.943	02/11/10	02/15/10	
Benzyl alcohol	EPA 625	10B1393	0.094	4.7	ND	0.943	02/11/10	02/15/10	
4-Bromophenyl phenyl ether	EPA 625	10B1393	0.094	0.94	ND	0.943	02/11/10	02/15/10	
Butyl benzyl phthalate	EPA 625	10B1393	0.66	4.7	ND	0.943	02/11/10	02/15/10	
4-Chloro-3-methylphenol	EPA 625	10B1393	0.19	1.9	ND	0.943	02/11/10	02/15/10	
4-Chloroaniline	EPA 625	10B1393	0.094	1.9	ND	0.943	02/11/10	02/15/10	L2
Bis(2-chloroethoxy)methane	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10	
Bis(2-chloroethyl)ether	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10	
Bis(2-chloroisopropyl)ether	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10	
Bis(2-ethylhexyl)phthalate	EPA 625	10B1393	1.6	4.7	ND	0.943	02/11/10	02/15/10	
2-Chloronaphthalene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10	
2-Chlorophenol	EPA 625	10B1393	0.19	0.94	ND	0.943	02/11/10	02/15/10	
4-Chlorophenyl phenyl ether	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10	
Chrysene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10	
Dibenz(a,h)anthracene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10	
Dibenzofuran	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10	
Di-n-butyl phthalate	EPA 625	10B1393	0.19	1.9	ND	0.943	02/11/10	02/15/10	
1,2-Dichlorobenzene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10	
1,3-Dichlorobenzene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10	
1,4-Dichlorobenzene	EPA 625	10B1393	0.19	0.47	ND	0.943	02/11/10	02/15/10	
3,3'-Dichlorobenzidine	EPA 625	10B1393	4.7	4.7	ND	0.943	02/11/10	02/15/10	L2
2,4-Dichlorophenol	EPA 625	10B1393	0.19	1.9	ND	0.943	02/11/10	02/15/10	
Diethyl phthalate	EPA 625	10B1393	0.094	0.94	0.15	0.943	02/11/10	02/15/10	J
2,4-Dimethylphenol	EPA 625	10B1393	0.28	1.9	ND	0.943	02/11/10	02/15/10	
Dimethyl phthalate	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10	
4,6-Dinitro-2-methylphenol	EPA 625	10B1393	0.19	4.7	ND	0.943	02/11/10	02/15/10	
2,4-Dinitrophenol	EPA 625	10B1393	0.85	4.7	ND	0.943	02/11/10	02/15/10	
2,4-Dinitrotoluene	EPA 625	10B1393	0.19	4.7	ND	0.943	02/11/10	02/15/10	
2,6-Dinitrotoluene	EPA 625	10B1393	0.094	4.7	ND	0.943	02/11/10	02/15/10	
Di-n-octyl phthalate	EPA 625	10B1393	0.094	4.7	ND	0.943	02/11/10	02/15/10	
1,2-Diphenylhydrazine/Azobenzene	EPA 625	10B1393	0.094	0.94	ND	0.943	02/11/10	02/15/10	

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Report Number: ITB0891

Sampled: 02/06/10-02/07/10
Received: 02/06/10

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: ITB0896-01 (Outfall 011 - Water) - cont.					Sampled: 02/07/10				
Reporting Units: ug/l									
Fluoranthene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10	
Fluorene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10	
Hexachlorobenzene	EPA 625	10B1393	0.094	0.94	ND	0.943	02/11/10	02/15/10	
Hexachlorobutadiene	EPA 625	10B1393	0.19	1.9	ND	0.943	02/11/10	02/15/10	
Hexachlorocyclopentadiene	EPA 625	10B1393	0.094	4.7	ND	0.943	02/11/10	02/15/10	
Hexachloroethane	EPA 625	10B1393	0.19	2.8	ND	0.943	02/11/10	02/15/10	
Indeno(1,2,3-cd)pyrene	EPA 625	10B1393	0.094	1.9	ND	0.943	02/11/10	02/15/10	
Isophorone	EPA 625	10B1393	0.094	0.94	ND	0.943	02/11/10	02/15/10	
2-Methylnaphthalene	EPA 625	10B1393	0.094	0.94	ND	0.943	02/11/10	02/15/10	
2-Methylphenol	EPA 625	10B1393	0.094	1.9	ND	0.943	02/11/10	02/15/10	
4-Methylphenol	EPA 625	10B1393	0.19	4.7	ND	0.943	02/11/10	02/15/10	
Naphthalene	EPA 625	10B1393	0.094	0.94	ND	0.943	02/11/10	02/15/10	
2-Nitroaniline	EPA 625	10B1393	0.094	4.7	ND	0.943	02/11/10	02/15/10	
3-Nitroaniline	EPA 625	10B1393	0.19	4.7	ND	0.943	02/11/10	02/15/10	L2
4-Nitroaniline	EPA 625	10B1393	0.47	4.7	ND	0.943	02/11/10	02/15/10	L2
Nitrobenzene	EPA 625	10B1393	0.094	0.94	ND	0.943	02/11/10	02/15/10	
2-Nitrophenol	EPA 625	10B1393	0.094	1.9	ND	0.943	02/11/10	02/15/10	
4-Nitrophenol	EPA 625	10B1393	2.4	4.7	ND	0.943	02/11/10	02/15/10	
N-Nitroso-di-n-propylamine	EPA 625	10B1393	0.094	1.9	ND	0.943	02/11/10	02/15/10	
N-Nitrosodimethylamine	EPA 625	10B1393	0.094	1.9	ND	0.943	02/11/10	02/15/10	
N-Nitrosodiphenylamine	EPA 625	10B1393	0.094	0.94	ND	0.943	02/11/10	02/15/10	
Pentachlorophenol	EPA 625	10B1393	0.094	1.9	ND	0.943	02/11/10	02/15/10	
Phenanthrene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10	
Phenol	EPA 625	10B1393	0.28	0.94	ND	0.943	02/11/10	02/15/10	
Pyrene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10	
1,2,4-Trichlorobenzene	EPA 625	10B1393	0.094	0.94	ND	0.943	02/11/10	02/15/10	
2,4,5-Trichlorophenol	EPA 625	10B1393	0.19	1.9	ND	0.943	02/11/10	02/15/10	
2,4,6-Trichlorophenol	EPA 625	10B1393	0.094	0.94	ND	0.943	02/11/10	02/15/10	
Surrogate: 2,4,6-Tribromophenol (40-120%)					98 %				
Surrogate: 2-Fluorobiphenyl (50-120%)					79 %				
Surrogate: 2-Fluorophenol (30-120%)					63 %				
Surrogate: Nitrobenzene-d5 (45-120%)					79 %				
Surrogate: Phenol-d6 (35-120%)					67 %				
Surrogate: Terphenyl-d14 (50-125%)					99 %				

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

Project ID: Annual Outfall 011
 Annual Outfall 011
 Report Number: ITB0891

Sampled: 02/06/10-02/07/10
 Received: 02/06/10

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0896-01 (Outfall 011 - Water)					Sampled: 02/07/10				
Reporting Units: ug/l									
4,4'-DDD	EPA 608	10B1291	0.0019	0.0047	ND	0.943	02/11/10	02/13/10	C
4,4'-DDE	EPA 608	10B1291	0.0028	0.0047	ND	0.943	02/11/10	02/13/10	
4,4'-DDT	EPA 608	10B1291	0.0038	0.0094	ND	0.943	02/11/10	02/13/10	
Aldrin	EPA 608	10B1291	0.0014	0.0047	ND	0.943	02/11/10	02/13/10	
alpha-BHC	EPA 608	10B1291	0.0024	0.0047	ND	0.943	02/11/10	02/13/10	
beta-BHC	EPA 608	10B1291	0.0038	0.0094	ND	0.943	02/11/10	02/13/10	
delta-BHC	EPA 608	10B1291	0.0033	0.0047	ND	0.943	02/11/10	02/13/10	
Dieldrin	EPA 608	10B1291	0.0019	0.0047	ND	0.943	02/11/10	02/13/10	
Endosulfan I	EPA 608	10B1291	0.0019	0.0047	ND	0.943	02/11/10	02/13/10	
Endosulfan II	EPA 608	10B1291	0.0028	0.0047	ND	0.943	02/11/10	02/13/10	
Endosulfan sulfate	EPA 608	10B1291	0.0028	0.0094	ND	0.943	02/11/10	02/13/10	
Endrin	EPA 608	10B1291	0.0019	0.0047	ND	0.943	02/11/10	02/13/10	C
Endrin aldehyde	EPA 608	10B1291	0.0019	0.0094	ND	0.943	02/11/10	02/13/10	
Endrin ketone	EPA 608	10B1291	0.0028	0.0094	ND	0.943	02/11/10	02/13/10	
gamma-BHC (Lindane)	EPA 608	10B1291	0.0028	0.019	ND	0.943	02/11/10	02/13/10	
Heptachlor	EPA 608	10B1291	0.0028	0.0094	ND	0.943	02/11/10	02/13/10	C
Heptachlor epoxide	EPA 608	10B1291	0.0024	0.0047	ND	0.943	02/11/10	02/13/10	
Methoxychlor	EPA 608	10B1291	0.0033	0.0047	ND	0.943	02/11/10	02/13/10	
Chlordane	EPA 608	10B1291	0.038	0.094	ND	0.943	02/11/10	02/13/10	
Toxaphene	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/13/10	
Surrogate: Decachlorobiphenyl (45-120%)					71 %				
Surrogate: Decachlorobiphenyl (45-120%)					71 %				
Surrogate: Tetrachloro-m-xylene (35-115%)					51 %				
Surrogate: Tetrachloro-m-xylene (35-115%)					51 %				

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 Annual Outfall 011
 Report Number: ITB0891

Sampled: 02/06/10-02/07/10
 Received: 02/06/10

TOTAL PCBS (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0896-01 (Outfall 011 - Water) - cont.					Sampled: 02/07/10				
Reporting Units: ug/l									
Aroclor 1016	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/12/10	
Aroclor 1221	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/12/10	
Aroclor 1232	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/12/10	
Aroclor 1242	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/12/10	
Aroclor 1248	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/12/10	
Aroclor 1254	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/12/10	
Aroclor 1260	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/12/10	
<i>Surrogate: Decachlorobiphenyl (45-120%)</i>					76 %				

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Project ID: Annual Outfall 011
Annual Outfall 011
Report Number: ITB0891

Sampled: 02/06/10-02/07/10
Received: 02/06/10

HEXANE EXTRACTABLE MATERIAL

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0891-01 (Outfall 011 (Grab) - Water)					Sampled: 02/06/10				
Reporting Units: mg/l									
Hexane Extractable Material (Oil & Grease)	EPA 1664A	10B1991	1.3	4.7	ND	1	02/17/10	02/17/10	

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Project ID: Annual Outfall 011
 Annual Outfall 011
 Report Number: ITB0891

Sampled: 02/06/10-02/07/10
 Received: 02/06/10

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0896-01 (Outfall 011 - Water)					Sampled: 02/07/10				
Reporting Units: mg/l									
Hardness as CaCO3	SM2340B	[CALC]	N/A	0.33	53	1	02/09/10	02/09/10	
Barium	EPA 200.7	10B1079	0.0060	0.010	0.026	1	02/09/10	02/09/10	
Boron	EPA 200.7	10B1079	0.020	0.050	ND	1	02/09/10	02/09/10	
Calcium	EPA 200.7	10B1079	0.050	0.10	16	1	02/09/10	02/09/10	MHA
Iron	EPA 200.7	10B1079	0.015	0.040	2.0	1	02/09/10	02/09/10	
Magnesium	EPA 200.7	10B1079	0.012	0.020	3.1	1	02/09/10	02/09/10	
Sample ID: ITB0896-01 (Outfall 011 - Water)					Sampled: 02/07/10				
Reporting Units: ug/l									
Mercury	EPA 245.1	10B1085	0.10	0.20	ND	1	02/09/10	02/10/10	
Arsenic	EPA 200.7	10B1079	7.0	10	ND	1	02/09/10	02/09/10	
Antimony	EPA 200.8	10B1087	0.30	2.0	1.0	1	02/09/10	02/10/10	J
Beryllium	EPA 200.7	10B1079	0.90	2.0	ND	1	02/09/10	02/09/10	
Chromium	EPA 200.7	10B1911	2.0	5.0	ND	1	02/16/10	02/17/10	
Cobalt	EPA 200.7	10B1079	2.0	10	ND	1	02/09/10	02/09/10	
Manganese	EPA 200.7	10B1079	7.0	20	120	1	02/09/10	02/09/10	
Nickel	EPA 200.7	10B1079	2.0	10	2.1	1	02/09/10	02/09/10	J
Cadmium	EPA 200.8	10B1087	0.10	1.0	0.30	1	02/09/10	02/10/10	J
Vanadium	EPA 200.7	10B1079	3.0	10	4.5	1	02/09/10	02/09/10	J
Zinc	EPA 200.7	10B1079	6.0	20	17	1	02/09/10	02/09/10	J
Copper	EPA 200.8	10B1087	0.50	2.0	6.8	1	02/09/10	02/10/10	
Lead	EPA 200.8	10B1087	0.20	1.0	2.2	1	02/09/10	02/10/10	
Selenium	EPA 200.8	10B1087	0.50	2.0	0.55	1	02/09/10	02/10/10	J
Silver	EPA 200.8	10B1087	0.10	1.0	0.12	1	02/09/10	02/10/10	J
Thallium	EPA 200.8	10B1087	0.20	1.0	0.20	1	02/09/10	02/10/10	J

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Project ID: Annual Outfall 011
Annual Outfall 011
Report Number: ITB0891

Sampled: 02/06/10-02/07/10
Received: 02/06/10

DISSOLVED METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0896-01 (Outfall 011 - Water)					Sampled: 02/07/10				
Reporting Units: mg/l									
Hardness as CaCO3	SM2340B-Diss	[CALC]	N/A	0.33	52	1	02/09/10	02/11/10	
Barium	EPA 200.7-Diss	10B1091	0.0060	0.010	0.016	1	02/09/10	02/11/10	
Boron	EPA 200.7-Diss	10B1091	0.020	0.050	ND	1	02/09/10	02/11/10	
Calcium	EPA 200.7-Diss	10B1091	0.050	0.10	16	1	02/09/10	02/11/10	
Iron	EPA 200.7-Diss	10B1091	0.015	0.040	0.20	1	02/09/10	02/11/10	
Magnesium	EPA 200.7-Diss	10B1091	0.012	0.020	2.7	1	02/09/10	02/11/10	
Sample ID: ITB0896-01 (Outfall 011 - Water)					Sampled: 02/07/10				
Reporting Units: ug/l									
Mercury	EPA 245.1-Diss	10B1086	0.10	0.20	ND	1	02/09/10	02/10/10	
Arsenic	EPA 200.7-Diss	10B1091	7.0	10	ND	1	02/09/10	02/11/10	C
Antimony	EPA 200.8-Diss	10B1089	0.30	2.0	1.0	1	02/09/10	02/10/10	J
Beryllium	EPA 200.7-Diss	10B1091	0.90	2.0	ND	1	02/09/10	02/11/10	
Cobalt	EPA 200.7-Diss	10B1091	2.0	10	ND	1	02/09/10	02/11/10	
Manganese	EPA 200.7-Diss	10B1091	7.0	20	75	1	02/09/10	02/11/10	
Nickel	EPA 200.7-Diss	10B1091	2.0	10	2.9	1	02/09/10	02/11/10	J
Cadmium	EPA 200.8-Diss	10B1089	0.10	1.0	0.23	1	02/09/10	02/10/10	J
Vanadium	EPA 200.7-Diss	10B1091	3.0	10	ND	1	02/09/10	02/11/10	
Zinc	EPA 200.7-Diss	10B1091	6.0	20	10	1	02/09/10	02/11/10	J
Copper	EPA 200.8-Diss	10B1089	0.50	2.0	5.1	1	02/09/10	02/10/10	
Lead	EPA 200.8-Diss	10B1089	0.20	1.0	0.75	1	02/09/10	02/10/10	J, B
Selenium	EPA 200.8-Diss	10B1089	0.50	2.0	0.56	1	02/09/10	02/10/10	J
Silver	EPA 200.8-Diss	10B1089	0.10	1.0	ND	1	02/09/10	02/10/10	
Thallium	EPA 200.8-Diss	10B1089	0.20	1.0	ND	1	02/09/10	02/10/10	

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Project Manager

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618 Michillinda Avenue, Suite 200
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Attention: Bronwyn Kelly

Project ID: Annual Outfall 011
Annual Outfall 011
Report Number: ITB0891

Sampled: 02/06/10-02/07/10
Received: 02/06/10

DISSOLVED INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0891-01 (Outfall 011 (Grab) - Water)					Sampled: 02/06/10				
Reporting Units: ug/l									
Chromium VI	EPA 218.6	10B0756	0.25	1.0	ND	1	02/06/10	02/06/10	

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Project ID: Annual Outfall 011
 Annual Outfall 011
 Report Number: ITB0891

Sampled: 02/06/10-02/07/10
 Received: 02/06/10

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0896-01 (Outfall 011 - Water)					Sampled: 02/07/10				
Reporting Units: mg/l									
Ammonia-N (Distilled)	SM4500NH3-C	10B1575	0.50	0.50	ND	1	02/12/10	02/12/10	
Biochemical Oxygen Demand	SM5210B	10B0912	0.50	2.0	2.0	1	02/08/10	02/13/10	
Chloride	EPA 300.0	10B0856	0.25	0.50	3.7	1	02/08/10	02/08/10	
Fluoride	SM 4500-F-C	10B0814	0.020	0.10	0.21	1	02/08/10	02/08/10	B
Nitrate-N	EPA 300.0	10B0856	0.060	0.11	0.93	1	02/08/10	02/08/10	
Nitrite-N	EPA 300.0	10B0856	0.090	0.15	ND	1	02/08/10	02/08/10	
Nitrate/Nitrite-N	EPA 300.0	10B0856	0.15	0.26	0.93	1	02/08/10	02/08/10	
Sulfate	EPA 300.0	10B0856	0.20	0.50	13	1	02/08/10	02/08/10	
Surfactants (MBAS)	SM5540-C	10B0951	0.025	0.10	0.042	1	02/08/10	02/08/10	J
Total Dissolved Solids	SM2540C	10B1487	1.0	10	120	1	02/12/10	02/12/10	
Total Organic Carbon	SM5310B	10B1284	0.50	1.0	10	1	02/11/10	02/11/10	
Total Suspended Solids	SM 2540D	10B1648	1.0	10	10	1	02/12/10	02/12/10	
Sample ID: ITB0891-01 (Outfall 011 (Grab) - Water)					Sampled: 02/06/10				
Reporting Units: ml/l									
Total Settleable Solids	SM2540F	10B0770	0.10	0.10	ND	1	02/07/10	02/07/10	
Sample ID: ITB0896-01 (Outfall 011 - Water)					Sampled: 02/07/10				
Reporting Units: NTU									
Turbidity	EPA 180.1	10B1015	0.040	1.0	36	1	02/08/10	02/08/10	
Sample ID: ITB0891-01 (Outfall 011 (Grab) - Water)					Sampled: 02/06/10				
Reporting Units: ug/l									
Total Cyanide	SM4500CN-E	10B1250	2.2	5.0	ND	1	02/10/10	02/10/10	
Sample ID: ITB0896-01 (Outfall 011 - Water)					Sampled: 02/07/10				
Reporting Units: ug/l									
Perchlorate	EPA 314.0	10B1004	0.90	4.0	ND	1	02/10/10	02/10/10	
Sample ID: ITB0891-01 (Outfall 011 (Grab) - Water)					Sampled: 02/06/10				
Reporting Units: umhos/cm									
Specific Conductance	EPA 120.1	10B1155	1.0	1.0	140	1	02/10/10	02/10/10	

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618 Michillinda Avenue, Suite 200
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Attention: Bronwyn Kelly

Project ID: Annual Outfall 011
Annual Outfall 011
Report Number: ITB0891

Sampled: 02/06/10-02/07/10
Received: 02/06/10

ASTM 5174-91

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0896-01 (Outfall 011 - Water)					Sampled: 02/07/10				
Reporting Units: pCi/L									
Total Uranium	ASTM 5174-91	53280	0.43	1.39	0.566	1	02/23/10	02/26/10	Jb

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Attention: Bronwyn Kelly

Project ID: Annual Outfall 011
Annual Outfall 011
Report Number: ITB0891

Sampled: 02/06/10-02/07/10
Received: 02/06/10

EPA 900.0 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0896-01 (Outfall 011 - Water)					Sampled: 02/07/10				
Reporting Units: pCi/L									
Gross Alpha	EPA 900.0 MOD	43108	0.93	3	2	1	02/10/10	02/18/10	Jb
Gross Beta	EPA 900.0 MOD	43108	1.6	4	3.9	1	02/10/10	02/18/10	Jb

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Sampled: 02/06/10-02/07/10
Received: 02/06/10

EPA 901.1 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0896-01 (Outfall 011 - Water)					Sampled: 02/07/10				
Reporting Units: pCi/L									
Cesium 137	EPA 901.1 MOD	42136	16	20	-2.9	1	02/11/10	02/19/10	U
Potassium 40	EPA 901.1 MOD	42136	300	NA	-100	1	02/11/10	02/19/10	U

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618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Annual Outfall 011
Annual Outfall 011
Report Number: ITB0891

Sampled: 02/06/10-02/07/10
Received: 02/06/10

EPA 903.0 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0896-01 (Outfall 011 - Water)					Sampled: 02/07/10				
Reporting Units: pCi/L									
Radium (226)	EPA 903.0 MOD	41160	0.2	1	0.1	1	02/10/10	02/26/10	U

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Sampled: 02/06/10-02/07/10
Received: 02/06/10

EPA 904 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0896-01RE1 (Outfall 011 - Water)					Sampled: 02/07/10				
Reporting Units: pCi/L									
Radium 228	EPA 904 MOD	60257	0.31	1	0.33	1	03/01/10	03/05/10	Jb

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Sampled: 02/06/10-02/07/10
Received: 02/06/10

EPA 905 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0896-01 (Outfall 011 - Water)					Sampled: 02/07/10				
Reporting Units: pCi/L									
Strontium 90	EPA 905 MOD	41162	4.3	3	-2	1	02/10/10	02/19/10	U

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Sampled: 02/06/10-02/07/10
Received: 02/06/10

EPA 906.0 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0896-01 (Outfall 011 - Water)					Sampled: 02/07/10				
Reporting Units: pCi/L									
Tritium	EPA 906.0 MOD	49035	94	500	114	1	02/18/10	02/18/10	Jb

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Report Number: ITB0891

Sampled: 02/06/10-02/07/10
Received: 02/06/10

EPA-5 1613B

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0896-01 (Outfall 011 - Water)					Sampled: 02/07/10				
Reporting Units: ug/L									
1,2,3,4,6,7,8-HpCDD	EPA-5 1613B	48124	0.00000091	0.000049	0.000024	0.98	02/17/10	02/19/10	J, Ba
1,2,3,4,6,7,8-HpCDF	EPA-5 1613B	48124	0.00000055	0.000049	0.000015	0.98	02/17/10	02/19/10	J, Ba
1,2,3,4,7,8,9-HpCDF	EPA-5 1613B	48124	0.00000097	0.000049	0.000023	0.98	02/17/10	02/19/10	J
1,2,3,4,7,8-HxCDD	EPA-5 1613B	48124	0.00000052	0.000049	0.000021	0.98	02/17/10	02/19/10	J
1,2,3,4,7,8-HxCDF	EPA-5 1613B	48124	0.00000006	0.000049	0.000029	0.98	02/17/10	02/19/10	J
1,2,3,6,7,8-HxCDD	EPA-5 1613B	48124	0.00000045	0.000049	0.000021	0.98	02/17/10	02/19/10	J
1,2,3,6,7,8-HxCDF	EPA-5 1613B	48124	0.00000052	0.000049	0.000024	0.98	02/17/10	02/19/10	J
1,2,3,7,8,9-HxCDD	EPA-5 1613B	48124	0.00000041	0.000049	0.000017	0.98	02/17/10	02/19/10	J, Q
1,2,3,7,8,9-HxCDF	EPA-5 1613B	48124	0.00000069	0.000049	0.000016	0.98	02/17/10	02/19/10	J, Q
1,2,3,7,8-PeCDD	EPA-5 1613B	48124	0.00000008	0.000049	0.000022	0.98	02/17/10	02/19/10	J
1,2,3,7,8-PeCDF	EPA-5 1613B	48124	0.00000005	0.000049	0.000019	0.98	02/17/10	02/19/10	J
2,3,4,6,7,8-HxCDF	EPA-5 1613B	48124	0.00000052	0.000049	0.000015	0.98	02/17/10	02/19/10	J, Q
2,3,4,7,8-PeCDF	EPA-5 1613B	48124	0.00000063	0.000049	0.000022	0.98	02/17/10	02/19/10	J, Q
2,3,7,8-TCDD	EPA-5 1613B	48124	0.000000550.0000099		ND	0.98	02/17/10	02/19/10	
2,3,7,8-TCDF	EPA-5 1613B	48124	0.000000420.0000099		ND	0.98	02/17/10	02/19/10	
OCDD	EPA-5 1613B	48124	0.00000024	0.000099	0.00023	0.98	02/17/10	02/19/10	Ba
OCDF	EPA-5 1613B	48124	0.00000089	0.000099	0.000026	0.98	02/17/10	02/19/10	J, Q, Ba
Total HpCDD	EPA-5 1613B	48124	0.00000091	0.000049	0.000056	0.98	02/17/10	02/19/10	Ba
Total HpCDF	EPA-5 1613B	48124	0.00000055	0.000049	0.000032	0.98	02/17/10	02/19/10	J, Ba
Total HxCDD	EPA-5 1613B	48124	0.00000041	0.000049	0.0000084	0.98	02/17/10	02/19/10	J, Q
Total HxCDF	EPA-5 1613B	48124	0.00000052	0.000049	0.000014	0.98	02/17/10	02/19/10	J, Q
Total PeCDD	EPA-5 1613B	48124	0.00000008	0.000049	0.000022	0.98	02/17/10	02/19/10	J
Total PeCDF	EPA-5 1613B	48124	0.00000046	0.000049	0.0000043	0.98	02/17/10	02/19/10	J, Q
Total TCDD	EPA-5 1613B	48124	0.000000550.0000099		ND	0.98	02/17/10	02/19/10	
Total TCDF	EPA-5 1613B	48124	0.000000420.0000099		ND	0.98	02/17/10	02/19/10	

Surrogate: 13C-1,2,3,4,6,7,8-HpCDD (23-140%)	85 %
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF (28-143%)	83 %
Surrogate: 13C-1,2,3,4,7,8,9-HpCDF (26-138%)	74 %
Surrogate: 13C-1,2,3,4,7,8-HxCDD (32-141%)	82 %
Surrogate: 13C-1,2,3,4,7,8-HxCDF (26-152%)	81 %
Surrogate: 13C-1,2,3,6,7,8-HxCDD (28-130%)	89 %
Surrogate: 13C-1,2,3,6,7,8-HxCDF (26-123%)	85 %
Surrogate: 13C-1,2,3,7,8,9-HxCDF (29-147%)	80 %
Surrogate: 13C-1,2,3,7,8-PeCDD (25-181%)	83 %
Surrogate: 13C-1,2,3,7,8-PeCDF (24-185%)	78 %
Surrogate: 13C-2,3,4,6,7,8-HxCDF (28-136%)	89 %
Surrogate: 13C-2,3,4,7,8-PeCDF (21-178%)	74 %
Surrogate: 13C-2,3,7,8-TCDD (25-164%)	73 %
Surrogate: 13C-2,3,7,8-TCDF (24-169%)	66 %
Surrogate: 13C-OCDD (17-157%)	86 %
Surrogate: 37Cl4-2,3,7,8-TCDD (35-197%)	88 %

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Project ID: Annual Outfall 011
 Annual Outfall 011
 Report Number: ITB0891

Sampled: 02/06/10-02/07/10
 Received: 02/06/10

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: Outfall 011 (Grab) (ITB0891-01) - Water					
EPA 218.6	1	02/06/2010 14:45	02/06/2010 18:48	02/06/2010 19:20	02/06/2010 20:38
EPA 624	3	02/06/2010 14:45	02/06/2010 18:48	02/08/2010 00:00	02/08/2010 22:49
SM2540F	2	02/06/2010 14:45	02/06/2010 18:48	02/07/2010 08:03	02/07/2010 09:00
Sample ID: Trip Blank (ITB0891-02) - Water					
EPA 624	3	02/06/2010 07:00	02/06/2010 18:48	02/08/2010 00:00	02/08/2010 23:19
Sample ID: Outfall 011 (ITB0896-01) - Water					
EPA 180.1	2	02/07/2010 11:43	02/07/2010 15:40	02/08/2010 20:00	02/08/2010 20:00
EPA 300.0	2	02/07/2010 11:43	02/07/2010 15:40	02/08/2010 14:00	02/08/2010 14:37
Filtration	1	02/07/2010 11:43	02/07/2010 15:40	02/07/2010 19:33	02/07/2010 19:35
SM5210B	2	02/07/2010 11:43	02/07/2010 15:40	02/08/2010 13:30	02/13/2010 11:00
SM5540-C	2	02/07/2010 11:43	02/07/2010 15:40	02/08/2010 20:13	02/08/2010 20:59

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 Received: 02/06/10

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1582 Extracted: 02/12/10											
Blank Analyzed: 02/12/2010 (10B1582-BLK1)											
GRO (C4 - C12)	ND	0.10	0.025	mg/l							
Surrogate: 4-BFB (FID)	0.00901			mg/l	0.0100		90	65-140			
LCS Analyzed: 02/12/2010 (10B1582-BS1)											
GRO (C4 - C12)	0.824	0.10	0.025	mg/l	0.800		103	80-120			
Surrogate: 4-BFB (FID)	0.0141			mg/l	0.0100		141	65-140			Z2
Matrix Spike Analyzed: 02/12/2010 (10B1582-MS1) Source: ITB1073-01											
GRO (C4 - C12)	0.296	0.10	0.025	mg/l	0.220	ND	134	65-140			
Surrogate: 4-BFB (FID)	0.00845			mg/l	0.0100		84	65-140			
Matrix Spike Dup Analyzed: 02/12/2010 (10B1582-MSD1) Source: ITB1073-01											
GRO (C4 - C12)	0.267	0.10	0.025	mg/l	0.220	ND	122	65-140	10	20	
Surrogate: 4-BFB (FID)	0.00842			mg/l	0.0100		84	65-140			

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 Received: 02/06/10

METHOD BLANK/QC DATA

EXTRACTABLE FUEL HYDROCARBONS (EPA 3510C/EPA 8015B)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1526 Extracted: 02/12/10											
Blank Analyzed: 02/12/2010 (10B1526-BLK1)											
DRO (C13 - C28)	ND	100	50	ug/l							
EFH (C10 - C28)	ND	100	50	ug/l							
Surrogate: n-Octacosane	145			ug/l	200		72	45-120			
LCS Analyzed: 02/12/2010 (10B1526-BS1)											
EFH (C10 - C28)	547	100	50	ug/l	1000		55	40-115			MNR1
Surrogate: n-Octacosane	116			ug/l	200		58	45-120			
LCS Dup Analyzed: 02/12/2010 (10B1526-BSD1)											
EFH (C10 - C28)	584	100	50	ug/l	1000		58	40-115	7	25	
Surrogate: n-Octacosane	125			ug/l	200		63	45-120			

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METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Data Qualifiers
Batch: 10B0840 Extracted: 02/08/10											
Blank Analyzed: 02/08/2010 (10B0840-BLK1)											
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							
Dibromochloromethane	ND	0.50	0.40	ug/l							
1,2-Dichlorobenzene	ND	0.50	0.32	ug/l							
1,3-Dichlorobenzene	ND	0.50	0.35	ug/l							
1,4-Dichlorobenzene	ND	0.50	0.37	ug/l							
1,1-Dichloroethane	ND	0.50	0.40	ug/l							
1,2-Dichloroethane	ND	0.50	0.28	ug/l							
1,1-Dichloroethene	ND	0.50	0.42	ug/l							
cis-1,2-Dichloroethene	ND	0.50	0.32	ug/l							
trans-1,2-Dichloroethene	ND	0.50	0.30	ug/l							
1,2-Dichloropropane	ND	0.50	0.35	ug/l							
cis-1,3-Dichloropropene	ND	0.50	0.22	ug/l							
trans-1,3-Dichloropropene	ND	0.50	0.32	ug/l							
1,2-Dichloro-1,1,2-trifluoroethane	ND	2.0	1.1	ug/l							
Ethylbenzene	ND	0.50	0.25	ug/l							
Methylene chloride	ND	1.0	0.95	ug/l							
1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l							
Tetrachloroethene	ND	0.50	0.32	ug/l							
Toluene	ND	0.50	0.36	ug/l							
1,1,1-Trichloroethane	ND	0.50	0.30	ug/l							
1,1,2-Trichloroethane	ND	0.50	0.30	ug/l							
Trichloroethene	ND	0.50	0.26	ug/l							
Trichlorofluoromethane	ND	0.50	0.34	ug/l							
Trichlorotrifluoroethane (Freon 113)	ND	5.0	0.50	ug/l							
Vinyl chloride	ND	0.50	0.40	ug/l							
Xylenes, Total	ND	1.5	0.90	ug/l							
Cyclohexane	ND	1.0	0.40	ug/l							

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METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0840 Extracted: 02/08/10											
Blank Analyzed: 02/08/2010 (10B0840-BLK1)											
Surrogate: 4-Bromofluorobenzene	23.4			ug/l	25.0		94	80-120			
Surrogate: 4-Bromofluorobenzene	23.4			ug/l	25.0		94	80-120			
Surrogate: Dibromofluoromethane	25.6			ug/l	25.0		102	80-120			
Surrogate: Dibromofluoromethane	25.6			ug/l	25.0		102	80-120			
Surrogate: Toluene-d8	27.0			ug/l	25.0		108	80-120			
Surrogate: Toluene-d8	27.0			ug/l	25.0		108	80-120			
LCS Analyzed: 02/08/2010 (10B0840-BS1)											
Benzene	23.2	0.50	0.28	ug/l	25.0		93	70-120			
Bromodichloromethane	24.0	0.50	0.30	ug/l	25.0		96	70-135			
Bromoform	20.1	0.50	0.40	ug/l	25.0		81	55-130			
Bromomethane	28.6	1.0	0.42	ug/l	25.0		115	65-140			
Carbon tetrachloride	24.9	0.50	0.28	ug/l	25.0		99	65-140			
Chlorobenzene	24.7	0.50	0.36	ug/l	25.0		99	75-120			
Chloroethane	26.6	1.0	0.40	ug/l	25.0		107	60-140			
Chloroform	24.0	0.50	0.33	ug/l	25.0		96	70-130			
Chloromethane	28.4	0.50	0.40	ug/l	25.0		114	50-140			
Dibromochloromethane	22.3	0.50	0.40	ug/l	25.0		89	70-140			
1,2-Dichlorobenzene	24.5	0.50	0.32	ug/l	25.0		98	75-120			
1,3-Dichlorobenzene	25.1	0.50	0.35	ug/l	25.0		100	75-120			
1,4-Dichlorobenzene	24.6	0.50	0.37	ug/l	25.0		99	75-120			
1,1-Dichloroethane	23.8	0.50	0.40	ug/l	25.0		95	70-125			
1,2-Dichloroethane	23.1	0.50	0.28	ug/l	25.0		92	60-140			
1,1-Dichloroethene	26.6	0.50	0.42	ug/l	25.0		106	70-125			
cis-1,2-Dichloroethene	26.5	0.50	0.32	ug/l	25.0		106	70-125			
trans-1,2-Dichloroethene	25.9	0.50	0.30	ug/l	25.0		104	70-125			
1,2-Dichloropropane	21.7	0.50	0.35	ug/l	25.0		87	70-125			
cis-1,3-Dichloropropene	25.8	0.50	0.22	ug/l	25.0		103	75-125			
trans-1,3-Dichloropropene	19.9	0.50	0.32	ug/l	25.0		80	70-125			
Ethylbenzene	25.0	0.50	0.25	ug/l	25.0		100	75-125			
Methylene chloride	24.0	1.0	0.95	ug/l	25.0		96	55-130			
1,1,2,2-Tetrachloroethane	25.5	0.50	0.30	ug/l	25.0		102	55-130			
Tetrachloroethene	25.2	0.50	0.32	ug/l	25.0		101	70-125			
Toluene	24.1	0.50	0.36	ug/l	25.0		96	70-120			
1,1,1-Trichloroethane	24.2	0.50	0.30	ug/l	25.0		97	65-135			
1,1,2-Trichloroethane	24.2	0.50	0.30	ug/l	25.0		97	70-125			

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Sampled: 02/06/10-02/07/10
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METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0840 Extracted: 02/08/10											
LCS Analyzed: 02/08/2010 (10B0840-BS1)											
Trichloroethene	25.6	0.50	0.26	ug/l	25.0		102	70-125			
Trichlorofluoromethane	28.1	0.50	0.34	ug/l	25.0		112	65-145			
Vinyl chloride	33.6	0.50	0.40	ug/l	25.0		134	55-135			
Xylenes, Total	77.5	1.5	0.90	ug/l	75.0		103	70-125			
Surrogate: 4-Bromofluorobenzene	25.5			ug/l	25.0		102	80-120			
Surrogate: 4-Bromofluorobenzene	25.5			ug/l	25.0		102	80-120			
Surrogate: Dibromofluoromethane	26.0			ug/l	25.0		104	80-120			
Surrogate: Dibromofluoromethane	26.0			ug/l	25.0		104	80-120			
Surrogate: Toluene-d8	26.4			ug/l	25.0		105	80-120			
Surrogate: Toluene-d8	26.4			ug/l	25.0		105	80-120			
Matrix Spike Analyzed: 02/08/2010 (10B0840-MS1)											
Source: ITB0892-01											
Benzene	24.9	0.50	0.28	ug/l	25.0	ND	100	65-125			
Bromodichloromethane	27.4	0.50	0.30	ug/l	25.0	ND	109	70-135			
Bromoform	22.2	0.50	0.40	ug/l	25.0	ND	89	55-135			
Bromomethane	30.0	1.0	0.42	ug/l	25.0	ND	120	55-145			
Carbon tetrachloride	25.9	0.50	0.28	ug/l	25.0	ND	103	65-140			
Chlorobenzene	26.9	0.50	0.36	ug/l	25.0	ND	108	75-125			
Chloroethane	28.3	1.0	0.40	ug/l	25.0	ND	113	55-140			
Chloroform	27.1	0.50	0.33	ug/l	25.0	ND	108	65-135			
Chloromethane	29.6	0.50	0.40	ug/l	25.0	ND	118	45-145			
Dibromochloromethane	25.1	0.50	0.40	ug/l	25.0	ND	100	65-140			
1,2-Dichlorobenzene	26.3	0.50	0.32	ug/l	25.0	ND	105	75-125			
1,3-Dichlorobenzene	27.5	0.50	0.35	ug/l	25.0	ND	110	75-125			
1,4-Dichlorobenzene	27.0	0.50	0.37	ug/l	25.0	ND	108	75-125			
1,1-Dichloroethane	26.2	0.50	0.40	ug/l	25.0	ND	105	65-130			
1,2-Dichloroethane	25.0	0.50	0.28	ug/l	25.0	ND	100	60-140			
1,1-Dichloroethene	27.3	0.50	0.42	ug/l	25.0	ND	109	60-130			
cis-1,2-Dichloroethene	29.2	0.50	0.32	ug/l	25.0	ND	117	65-130			
trans-1,2-Dichloroethene	27.6	0.50	0.30	ug/l	25.0	ND	111	65-130			
1,2-Dichloropropane	24.3	0.50	0.35	ug/l	25.0	ND	97	65-130			
cis-1,3-Dichloropropene	29.5	0.50	0.22	ug/l	25.0	ND	118	70-130			
trans-1,3-Dichloropropene	22.6	0.50	0.32	ug/l	25.0	ND	90	65-135			
Ethylbenzene	26.3	0.50	0.25	ug/l	25.0	ND	105	65-130			
Methylene chloride	26.0	1.0	0.95	ug/l	25.0	ND	104	50-135			
1,1,2,2-Tetrachloroethane	26.1	0.50	0.30	ug/l	25.0	ND	104	55-135			

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Kathleen A. Robb For Heather Clark
Project Manager

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

Project ID: Annual Outfall 011
Annual Outfall 011
Report Number: ITB0891

Sampled: 02/06/10-02/07/10
Received: 02/06/10

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0840 Extracted: 02/08/10											
Matrix Spike Analyzed: 02/08/2010 (10B0840-MS1)						Source: ITB0892-01					
Tetrachloroethene	26.4	0.50	0.32	ug/l	25.0	ND	106	65-130			
Toluene	25.9	0.50	0.36	ug/l	25.0	ND	104	70-125			
1,1,1-Trichloroethane	25.8	0.50	0.30	ug/l	25.0	ND	103	65-140			
1,1,2-Trichloroethane	26.8	0.50	0.30	ug/l	25.0	ND	107	65-130			
Trichloroethene	26.8	0.50	0.26	ug/l	25.0	ND	107	65-125			
Trichlorofluoromethane	29.0	0.50	0.34	ug/l	25.0	ND	116	60-145			
Vinyl chloride	34.1	0.50	0.40	ug/l	25.0	ND	137	45-140			
Xylenes, Total	83.0	1.5	0.90	ug/l	75.0	ND	111	60-130			
Surrogate: 4-Bromofluorobenzene	26.5			ug/l	25.0		106	80-120			
Surrogate: 4-Bromofluorobenzene	26.5			ug/l	25.0		106	80-120			
Surrogate: Dibromofluoromethane	26.8			ug/l	25.0		107	80-120			
Surrogate: Dibromofluoromethane	26.8			ug/l	25.0		107	80-120			
Surrogate: Toluene-d8	26.7			ug/l	25.0		107	80-120			
Surrogate: Toluene-d8	26.7			ug/l	25.0		107	80-120			
Matrix Spike Dup Analyzed: 02/08/2010 (10B0840-MSD1)						Source: ITB0892-01					
Benzene	23.8	0.50	0.28	ug/l	25.0	ND	95	65-125	4	20	
Bromodichloromethane	25.6	0.50	0.30	ug/l	25.0	ND	102	70-135	7	20	
Bromoform	21.2	0.50	0.40	ug/l	25.0	ND	85	55-135	5	25	
Bromomethane	29.2	1.0	0.42	ug/l	25.0	ND	117	55-145	3	25	
Carbon tetrachloride	25.1	0.50	0.28	ug/l	25.0	ND	100	65-140	3	25	
Chlorobenzene	26.0	0.50	0.36	ug/l	25.0	ND	104	75-125	3	20	
Chloroethane	26.8	1.0	0.40	ug/l	25.0	ND	107	55-140	5	25	
Chloroform	25.4	0.50	0.33	ug/l	25.0	ND	102	65-135	6	20	
Chloromethane	28.7	0.50	0.40	ug/l	25.0	ND	115	45-145	3	25	
Dibromochloromethane	23.7	0.50	0.40	ug/l	25.0	ND	95	65-140	6	25	
1,2-Dichlorobenzene	25.2	0.50	0.32	ug/l	25.0	ND	101	75-125	4	20	
1,3-Dichlorobenzene	26.2	0.50	0.35	ug/l	25.0	ND	105	75-125	5	20	
1,4-Dichlorobenzene	25.9	0.50	0.37	ug/l	25.0	ND	103	75-125	4	20	
1,1-Dichloroethane	25.1	0.50	0.40	ug/l	25.0	ND	100	65-130	4	20	
1,2-Dichloroethane	23.4	0.50	0.28	ug/l	25.0	ND	94	60-140	6	20	
1,1-Dichloroethene	26.4	0.50	0.42	ug/l	25.0	ND	106	60-130	3	20	
cis-1,2-Dichloroethene	27.3	0.50	0.32	ug/l	25.0	ND	109	65-130	7	20	
trans-1,2-Dichloroethene	26.2	0.50	0.30	ug/l	25.0	ND	105	65-130	6	20	
1,2-Dichloropropane	23.2	0.50	0.35	ug/l	25.0	ND	93	65-130	5	20	
cis-1,3-Dichloropropene	28.0	0.50	0.22	ug/l	25.0	ND	112	70-130	5	20	

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 Annual Outfall 011
 Report Number: ITB0891

Sampled: 02/06/10-02/07/10
 Received: 02/06/10

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
Batch: 10B0840 Extracted: 02/08/10											
Matrix Spike Dup Analyzed: 02/08/2010 (10B0840-MSD1)						Source: ITB0892-01					
trans-1,3-Dichloropropene	20.9	0.50	0.32	ug/l	25.0	ND	84	65-135	8	25	
Ethylbenzene	25.5	0.50	0.25	ug/l	25.0	ND	102	65-130	3	20	
Methylene chloride	25.0	1.0	0.95	ug/l	25.0	ND	100	50-135	4	20	
1,1,2,2-Tetrachloroethane	24.5	0.50	0.30	ug/l	25.0	ND	98	55-135	6	30	
Tetrachloroethene	25.8	0.50	0.32	ug/l	25.0	ND	103	65-130	2	20	
Toluene	24.8	0.50	0.36	ug/l	25.0	ND	99	70-125	4	20	
1,1,1-Trichloroethane	25.1	0.50	0.30	ug/l	25.0	ND	100	65-140	3	20	
1,1,2-Trichloroethane	24.4	0.50	0.30	ug/l	25.0	ND	97	65-130	9	25	
Trichloroethene	25.8	0.50	0.26	ug/l	25.0	ND	103	65-125	4	20	
Trichlorofluoromethane	28.2	0.50	0.34	ug/l	25.0	ND	113	60-145	3	25	
Vinyl chloride	33.1	0.50	0.40	ug/l	25.0	ND	132	45-140	3	30	
Xylenes, Total	81.0	1.5	0.90	ug/l	75.0	ND	108	60-130	2	20	
Surrogate: 4-Bromofluorobenzene	25.8			ug/l	25.0		103	80-120			
Surrogate: 4-Bromofluorobenzene	25.8			ug/l	25.0		103	80-120			
Surrogate: Dibromofluoromethane	26.7			ug/l	25.0		107	80-120			
Surrogate: Dibromofluoromethane	26.7			ug/l	25.0		107	80-120			
Surrogate: Toluene-d8	26.3			ug/l	25.0		105	80-120			
Surrogate: Toluene-d8	26.3			ug/l	25.0		105	80-120			

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METHOD BLANK/QC DATA

PURGEABLES-- GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0840 Extracted: 02/08/10											
Blank Analyzed: 02/08/2010 (10B0840-BLK1)											
Acrolein	ND	5.0	4.0	ug/l							
Acrylonitrile	ND	2.0	1.2	ug/l							
2-Chloroethyl vinyl ether	ND	5.0	1.8	ug/l							
Surrogate: 4-Bromofluorobenzene	23.4			ug/l	25.0		94	80-120			
Surrogate: Dibromofluoromethane	25.6			ug/l	25.0		102	80-120			
Surrogate: Toluene-d8	27.0			ug/l	25.0		108	80-120			
LCS Analyzed: 02/08/2010 (10B0840-BS1)											
2-Chloroethyl vinyl ether	13.8	5.0	1.8	ug/l	25.0		55	25-170			
Surrogate: 4-Bromofluorobenzene	25.5			ug/l	25.0		102	80-120			
Surrogate: Dibromofluoromethane	26.0			ug/l	25.0		104	80-120			
Surrogate: Toluene-d8	26.4			ug/l	25.0		105	80-120			
Matrix Spike Analyzed: 02/08/2010 (10B0840-MS1) Source: ITB0892-01											
2-Chloroethyl vinyl ether	13.8	5.0	1.8	ug/l	25.0	ND	55	25-170			
Surrogate: 4-Bromofluorobenzene	26.5			ug/l	25.0		106	80-120			
Surrogate: Dibromofluoromethane	26.8			ug/l	25.0		107	80-120			
Surrogate: Toluene-d8	26.7			ug/l	25.0		107	80-120			
Matrix Spike Dup Analyzed: 02/08/2010 (10B0840-MSD1) Source: ITB0892-01											
2-Chloroethyl vinyl ether	12.8	5.0	1.8	ug/l	25.0	ND	51	25-170	7	25	
Surrogate: 4-Bromofluorobenzene	25.8			ug/l	25.0		103	80-120			
Surrogate: Dibromofluoromethane	26.7			ug/l	25.0		107	80-120			
Surrogate: Toluene-d8	26.3			ug/l	25.0		105	80-120			

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METHOD BLANK/QC DATA

1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0317 Extracted: 02/08/10											
Blank Analyzed: 02/08/2010 (10B0317-BLK1)											
1,4-Dioxane	ND	2.0	1.0	ug/l							
Surrogate: Dibromofluoromethane	0.980			ug/l	1.00		98	80-120			
LCS Analyzed: 02/08/2010 (10B0317-BS1)											
1,4-Dioxane	9.80	2.0	1.0	ug/l	10.0		98	70-125			
Surrogate: Dibromofluoromethane	0.960			ug/l	1.00		96	80-120			
Matrix Spike Analyzed: 02/08/2010 (10B0317-MS1) Source: ITB0632-01											
1,4-Dioxane	9.00	2.0	1.0	ug/l	10.0	ND	90	70-130			
Surrogate: Dibromofluoromethane	1.03			ug/l	1.00		103	80-120			
Matrix Spike Dup Analyzed: 02/08/2010 (10B0317-MSD1) Source: ITB0632-01											
1,4-Dioxane	9.37	2.0	1.0	ug/l	10.0	ND	94	70-130	4	30	
Surrogate: Dibromofluoromethane	1.02			ug/l	1.00		102	80-120			

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METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
Batch: 10B1393 Extracted: 02/11/10											
Blank Analyzed: 02/15/2010 (10B1393-BLK1)											
Acenaphthene	ND	0.50	0.10	ug/l							
Acenaphthylene	ND	0.50	0.10	ug/l							
Aniline	ND	10	0.30	ug/l							
Anthracene	ND	0.50	0.10	ug/l							
Benzidine	ND	5.0	5.0	ug/l							
Benzo(a)anthracene	ND	5.0	0.10	ug/l							
Benzo(a)pyrene	ND	2.0	0.10	ug/l							
Benzo(b)fluoranthene	ND	2.0	0.10	ug/l							
Benzo(g,h,i)perylene	ND	5.0	0.10	ug/l							
Benzo(k)fluoranthene	ND	0.50	0.10	ug/l							
Benzoic acid	ND	20	3.0	ug/l							
Benzyl alcohol	ND	5.0	0.10	ug/l							
4-Bromophenyl phenyl ether	ND	1.0	0.10	ug/l							
Butyl benzyl phthalate	ND	5.0	0.70	ug/l							
4-Chloro-3-methylphenol	ND	2.0	0.20	ug/l							
4-Chloroaniline	ND	2.0	0.10	ug/l							
Bis(2-chloroethoxy)methane	ND	0.50	0.10	ug/l							
Bis(2-chloroethyl)ether	ND	0.50	0.10	ug/l							
Bis(2-chloroisopropyl)ether	ND	0.50	0.10	ug/l							
Bis(2-ethylhexyl)phthalate	ND	5.0	1.7	ug/l							
2-Chloronaphthalene	ND	0.50	0.10	ug/l							
2-Chlorophenol	ND	1.0	0.20	ug/l							
4-Chlorophenyl phenyl ether	ND	0.50	0.10	ug/l							
Chrysene	ND	0.50	0.10	ug/l							
Dibenz(a,h)anthracene	ND	0.50	0.10	ug/l							
Dibenzofuran	ND	0.50	0.10	ug/l							
Di-n-butyl phthalate	ND	2.0	0.20	ug/l							
1,2-Dichlorobenzene	ND	0.50	0.10	ug/l							
1,3-Dichlorobenzene	ND	0.50	0.10	ug/l							
1,4-Dichlorobenzene	ND	0.50	0.20	ug/l							
3,3'-Dichlorobenzidine	ND	5.0	5.0	ug/l							
2,4-Dichlorophenol	ND	2.0	0.20	ug/l							
Diethyl phthalate	ND	1.0	0.10	ug/l							
2,4-Dimethylphenol	ND	2.0	0.30	ug/l							
Dimethyl phthalate	ND	0.50	0.10	ug/l							

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
Batch: 10B1393 Extracted: 02/11/10											
Blank Analyzed: 02/15/2010 (10B1393-BLK1)											
4,6-Dinitro-2-methylphenol	ND	5.0	0.20	ug/l							
2,4-Dinitrophenol	ND	5.0	0.90	ug/l							
2,4-Dinitrotoluene	ND	5.0	0.20	ug/l							
2,6-Dinitrotoluene	ND	5.0	0.10	ug/l							
Di-n-octyl phthalate	ND	5.0	0.10	ug/l							
1,2-Diphenylhydrazine/Azobenzene	ND	1.0	0.10	ug/l							
Fluoranthene	ND	0.50	0.10	ug/l							
Fluorene	ND	0.50	0.10	ug/l							
Hexachlorobenzene	ND	1.0	0.10	ug/l							
Hexachlorobutadiene	ND	2.0	0.20	ug/l							
Hexachlorocyclopentadiene	ND	5.0	0.10	ug/l							
Hexachloroethane	ND	3.0	0.20	ug/l							
Indeno(1,2,3-cd)pyrene	ND	2.0	0.10	ug/l							
Isophorone	ND	1.0	0.10	ug/l							
2-Methylnaphthalene	ND	1.0	0.10	ug/l							
2-Methylphenol	ND	2.0	0.10	ug/l							
4-Methylphenol	ND	5.0	0.20	ug/l							
Naphthalene	ND	1.0	0.10	ug/l							
2-Nitroaniline	ND	5.0	0.10	ug/l							
3-Nitroaniline	ND	5.0	0.20	ug/l							
4-Nitroaniline	ND	5.0	0.50	ug/l							
Nitrobenzene	ND	1.0	0.10	ug/l							
2-Nitrophenol	ND	2.0	0.10	ug/l							
4-Nitrophenol	ND	5.0	2.5	ug/l							
N-Nitroso-di-n-propylamine	ND	2.0	0.10	ug/l							
N-Nitrosodimethylamine	0.860	2.0	0.10	ug/l							J
N-Nitrosodiphenylamine	ND	1.0	0.10	ug/l							
Pentachlorophenol	ND	2.0	0.10	ug/l							
Phenanthrene	ND	0.50	0.10	ug/l							
Phenol	ND	1.0	0.30	ug/l							
Pyrene	ND	0.50	0.10	ug/l							
1,2,4-Trichlorobenzene	ND	1.0	0.10	ug/l							
2,4,5-Trichlorophenol	ND	2.0	0.20	ug/l							
2,4,6-Trichlorophenol	ND	1.0	0.10	ug/l							
Surrogate: 2,4,6-Tribromophenol	17.8			ug/l	20.0		89	40-120			

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1393 Extracted: 02/11/10											
Blank Analyzed: 02/15/2010 (10B1393-BLK1)											
Surrogate: 2-Fluorobiphenyl	8.44			ug/l	10.0		84	50-120			
Surrogate: 2-Fluorophenol	13.9			ug/l	20.0		70	30-120			
Surrogate: Nitrobenzene-d5	7.20			ug/l	10.0		72	45-120			
Surrogate: Phenol-d6	14.2			ug/l	20.0		71	35-120			
Surrogate: Terphenyl-d14	9.32			ug/l	10.0		93	50-125			
LCS Analyzed: 02/15/2010 (10B1393-BS1)											
Acenaphthene	8.34	0.50	0.10	ug/l	10.0		83	60-120			
Acenaphthylene	8.32	0.50	0.10	ug/l	10.0		83	60-120			
Aniline	7.38	10	0.30	ug/l	10.0		74	35-120			J
Anthracene	9.00	0.50	0.10	ug/l	10.0		90	65-120			
Benzidine	6.32	5.0	5.0	ug/l	10.0		63	30-160			
Benzo(a)anthracene	9.34	5.0	0.10	ug/l	10.0		93	65-120			
Benzo(a)pyrene	9.58	2.0	0.10	ug/l	10.0		96	55-130			
Benzo(b)fluoranthene	9.44	2.0	0.10	ug/l	10.0		94	55-125			
Benzo(g,h,i)perylene	11.5	5.0	0.10	ug/l	10.0		115	45-135			
Benzo(k)fluoranthene	9.36	0.50	0.10	ug/l	10.0		94	50-125			
Benzoic acid	7.22	20	3.0	ug/l	10.0		72	25-120			J
Benzyl alcohol	7.18	5.0	0.10	ug/l	10.0		72	50-120			
4-Bromophenyl phenyl ether	9.16	1.0	0.10	ug/l	10.0		92	60-120			
Butyl benzyl phthalate	9.66	5.0	0.70	ug/l	10.0		97	55-130			
4-Chloro-3-methylphenol	7.42	2.0	0.20	ug/l	10.0		74	60-120			
4-Chloroaniline	7.34	2.0	0.10	ug/l	10.0		73	55-120			
Bis(2-chloroethoxy)methane	7.94	0.50	0.10	ug/l	10.0		79	55-120			
Bis(2-chloroethyl)ether	7.20	0.50	0.10	ug/l	10.0		72	50-120			
Bis(2-chloroisopropyl)ether	6.66	0.50	0.10	ug/l	10.0		67	45-120			
Bis(2-ethylhexyl)phthalate	10.3	5.0	1.7	ug/l	10.0		103	65-130			
2-Chloronaphthalene	8.08	0.50	0.10	ug/l	10.0		81	60-120			
2-Chlorophenol	7.14	1.0	0.20	ug/l	10.0		71	45-120			
4-Chlorophenyl phenyl ether	9.72	0.50	0.10	ug/l	10.0		97	65-120			
Chrysene	9.44	0.50	0.10	ug/l	10.0		94	65-120			
Dibenz(a,h)anthracene	10.4	0.50	0.10	ug/l	10.0		104	50-135			
Dibenzofuran	8.78	0.50	0.10	ug/l	10.0		88	65-120			
Di-n-butyl phthalate	9.34	2.0	0.20	ug/l	10.0		93	60-125			
1,2-Dichlorobenzene	6.50	0.50	0.10	ug/l	10.0		65	40-120			
1,3-Dichlorobenzene	6.20	0.50	0.10	ug/l	10.0		62	35-120			

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Kathleen A. Robb For Heather Clark
Project Manager

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

Project ID: Annual Outfall 011
Annual Outfall 011
Report Number: ITB0891

Sampled: 02/06/10-02/07/10
Received: 02/06/10

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1393 Extracted: 02/11/10											
LCS Analyzed: 02/15/2010 (10B1393-BS1)											
1,4-Dichlorobenzene	6.22	0.50	0.20	ug/l	10.0		62	35-120			MNR1
3,3'-Dichlorobenzidine	7.54	5.0	5.0	ug/l	10.0		75	45-135			
2,4-Dichlorophenol	7.58	2.0	0.20	ug/l	10.0		76	55-120			
Diethyl phthalate	9.94	1.0	0.10	ug/l	10.0		99	55-120			
2,4-Dimethylphenol	5.72	2.0	0.30	ug/l	10.0		57	40-120			
Dimethyl phthalate	9.56	0.50	0.10	ug/l	10.0		96	30-120			
4,6-Dinitro-2-methylphenol	8.68	5.0	0.20	ug/l	10.0		87	45-120			
2,4-Dinitrophenol	8.26	5.0	0.90	ug/l	10.0		83	40-120			
2,4-Dinitrotoluene	9.70	5.0	0.20	ug/l	10.0		97	65-120			
2,6-Dinitrotoluene	9.46	5.0	0.10	ug/l	10.0		95	65-120			
Di-n-octyl phthalate	9.70	5.0	0.10	ug/l	10.0		97	65-135			
1,2-Diphenylhydrazine/Azobenzene	9.68	1.0	0.10	ug/l	10.0		97	60-120			
Fluoranthene	9.48	0.50	0.10	ug/l	10.0		95	60-120			
Fluorene	9.78	0.50	0.10	ug/l	10.0		98	65-120			
Hexachlorobenzene	9.06	1.0	0.10	ug/l	10.0		91	60-120			
Hexachlorobutadiene	6.24	2.0	0.20	ug/l	10.0		62	40-120			
Hexachlorocyclopentadiene	3.42	5.0	0.10	ug/l	10.0		34	25-120			J
Hexachloroethane	5.78	3.0	0.20	ug/l	10.0		58	35-120			
Indeno(1,2,3-cd)pyrene	11.1	2.0	0.10	ug/l	10.0		111	45-135			
Isophorone	7.82	1.0	0.10	ug/l	10.0		78	50-120			
2-Methylnaphthalene	7.38	1.0	0.10	ug/l	10.0		74	55-120			
2-Methylphenol	7.28	2.0	0.10	ug/l	10.0		73	50-120			
4-Methylphenol	7.92	5.0	0.20	ug/l	10.0		79	50-120			
Naphthalene	7.12	1.0	0.10	ug/l	10.0		71	55-120			
2-Nitroaniline	8.30	5.0	0.10	ug/l	10.0		83	65-120			
3-Nitroaniline	9.74	5.0	0.20	ug/l	10.0		97	60-120			
4-Nitroaniline	9.52	5.0	0.50	ug/l	10.0		95	55-125			
Nitrobenzene	7.84	1.0	0.10	ug/l	10.0		78	55-120			
2-Nitrophenol	7.74	2.0	0.10	ug/l	10.0		77	50-120			
4-Nitrophenol	11.2	5.0	2.5	ug/l	10.0		112	45-120			
N-Nitroso-di-n-propylamine	7.62	2.0	0.10	ug/l	10.0		76	45-120			
N-Nitrosodimethylamine	7.84	2.0	0.10	ug/l	10.0		78	45-120			
N-Nitrosodiphenylamine	8.94	1.0	0.10	ug/l	10.0		89	60-120			
Pentachlorophenol	8.20	2.0	0.10	ug/l	10.0		82	50-120			
Phenanthrene	9.14	0.50	0.10	ug/l	10.0		91	65-120			

TestAmerica Irvine

Kathleen A. Robb For Heather Clark
Project Manager

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

Project ID: Annual Outfall 011
Annual Outfall 011
Report Number: ITB0891

Sampled: 02/06/10-02/07/10
Received: 02/06/10

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1393 Extracted: 02/11/10											
LCS Analyzed: 02/15/2010 (10B1393-BS1)											
Phenol	7.56	1.0	0.30	ug/l	10.0		76	40-120			MNR1
Pyrene	9.54	0.50	0.10	ug/l	10.0		95	55-125			
1,2,4-Trichlorobenzene	6.70	1.0	0.10	ug/l	10.0		67	45-120			
2,4,5-Trichlorophenol	8.30	2.0	0.20	ug/l	10.0		83	55-120			
2,4,6-Trichlorophenol	8.42	1.0	0.10	ug/l	10.0		84	55-120			
Surrogate: 2,4,6-Tribromophenol	19.7			ug/l	20.0		98	40-120			
Surrogate: 2-Fluorobiphenyl	8.40			ug/l	10.0		84	50-120			
Surrogate: 2-Fluorophenol	12.9			ug/l	20.0		64	30-120			
Surrogate: Nitrobenzene-d5	7.68			ug/l	10.0		77	45-120			
Surrogate: Phenol-d6	14.6			ug/l	20.0		73	35-120			
Surrogate: Terphenyl-d14	9.36			ug/l	10.0		94	50-125			
LCS Dup Analyzed: 02/15/2010 (10B1393-BSD1)											
Acenaphthene	8.78	0.50	0.10	ug/l	10.0		88	60-120	5	20	
Acenaphthylene	8.54	0.50	0.10	ug/l	10.0		85	60-120	3	20	
Aniline	ND	10	0.30	ug/l	10.0			35-120		30	L2
Anthracene	9.04	0.50	0.10	ug/l	10.0		90	65-120	0.4	20	
Benzidine	ND	5.0	5.0	ug/l	10.0			30-160		35	L2
Benzo(a)anthracene	9.34	5.0	0.10	ug/l	10.0		93	65-120	0	20	
Benzo(a)pyrene	9.42	2.0	0.10	ug/l	10.0		94	55-130	2	25	
Benzo(b)fluoranthene	9.62	2.0	0.10	ug/l	10.0		96	55-125	2	25	
Benzo(g,h,i)perylene	11.7	5.0	0.10	ug/l	10.0		117	45-135	1	25	
Benzo(k)fluoranthene	9.52	0.50	0.10	ug/l	10.0		95	50-125	2	20	
Benzoic acid	7.32	20	3.0	ug/l	10.0		73	25-120	1	30	J
Benzyl alcohol	6.98	5.0	0.10	ug/l	10.0		70	50-120	3	20	
4-Bromophenyl phenyl ether	9.14	1.0	0.10	ug/l	10.0		91	60-120	0.2	25	
Butyl benzyl phthalate	9.02	5.0	0.70	ug/l	10.0		90	55-130	7	20	
4-Chloro-3-methylphenol	7.58	2.0	0.20	ug/l	10.0		76	60-120	2	25	
4-Chloroaniline	0.100	2.0	0.10	ug/l	10.0		1	55-120	195	25	L2, R-2, J
Bis(2-chloroethoxy)methane	7.20	0.50	0.10	ug/l	10.0		72	55-120	10	20	
Bis(2-chloroethyl)ether	8.08	0.50	0.10	ug/l	10.0		81	50-120	12	20	
Bis(2-chloroisopropyl)ether	7.42	0.50	0.10	ug/l	10.0		74	45-120	11	20	
Bis(2-ethylhexyl)phthalate	9.40	5.0	1.7	ug/l	10.0		94	65-130	9	20	
2-Chloronaphthalene	9.02	0.50	0.10	ug/l	10.0		90	60-120	11	20	
2-Chlorophenol	7.60	1.0	0.20	ug/l	10.0		76	45-120	6	25	
4-Chlorophenyl phenyl ether	11.2	0.50	0.10	ug/l	10.0		112	65-120	15	20	

TestAmerica Irvine

Kathleen A. Robb For Heather Clark
Project Manager

MWH-Pasadena/Boeing
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Annual Outfall 011
Report Number: ITB0891

Sampled: 02/06/10-02/07/10
Received: 02/06/10

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1393 Extracted: 02/11/10											
LCS Dup Analyzed: 02/15/2010 (10B1393-BSD1)											
Chrysene	9.34	0.50	0.10	ug/l	10.0		93	65-120	1	20	
Dibenz(a,h)anthracene	10.7	0.50	0.10	ug/l	10.0		107	50-135	3	25	
Dibenzofuran	9.56	0.50	0.10	ug/l	10.0		96	65-120	9	20	
Di-n-butyl phthalate	9.26	2.0	0.20	ug/l	10.0		93	60-125	0.9	20	
1,2-Dichlorobenzene	7.10	0.50	0.10	ug/l	10.0		71	40-120	9	25	
1,3-Dichlorobenzene	6.62	0.50	0.10	ug/l	10.0		66	35-120	7	25	
1,4-Dichlorobenzene	6.88	0.50	0.20	ug/l	10.0		69	35-120	10	25	
3,3'-Dichlorobenzidine	ND	5.0	5.0	ug/l	10.0			45-135		25	L2
2,4-Dichlorophenol	7.64	2.0	0.20	ug/l	10.0		76	55-120	0.8	20	
Diethyl phthalate	10.2	1.0	0.10	ug/l	10.0		102	55-120	3	30	
2,4-Dimethylphenol	6.84	2.0	0.30	ug/l	10.0		68	40-120	18	25	
Dimethyl phthalate	10.8	0.50	0.10	ug/l	10.0		108	30-120	12	30	
4,6-Dinitro-2-methylphenol	7.46	5.0	0.20	ug/l	10.0		75	45-120	15	25	
2,4-Dinitrophenol	8.44	5.0	0.90	ug/l	10.0		84	40-120	2	25	
2,4-Dinitrotoluene	10.1	5.0	0.20	ug/l	10.0		101	65-120	4	20	
2,6-Dinitrotoluene	10.3	5.0	0.10	ug/l	10.0		103	65-120	9	20	
Di-n-octyl phthalate	9.46	5.0	0.10	ug/l	10.0		95	65-135	3	20	
1,2-Diphenylhydrazine/Azobenzene	9.92	1.0	0.10	ug/l	10.0		99	60-120	2	25	
Fluoranthene	9.34	0.50	0.10	ug/l	10.0		93	60-120	1	20	
Fluorene	10.4	0.50	0.10	ug/l	10.0		104	65-120	7	20	
Hexachlorobenzene	9.18	1.0	0.10	ug/l	10.0		92	60-120	1	20	
Hexachlorobutadiene	6.94	2.0	0.20	ug/l	10.0		69	40-120	11	25	
Hexachlorocyclopentadiene	5.02	5.0	0.10	ug/l	10.0		50	25-120	38	30	R-7
Hexachloroethane	6.76	3.0	0.20	ug/l	10.0		68	35-120	16	25	
Indeno(1,2,3-cd)pyrene	11.2	2.0	0.10	ug/l	10.0		112	45-135	0.7	25	
Isophorone	7.46	1.0	0.10	ug/l	10.0		75	50-120	5	20	
2-Methylnaphthalene	7.94	1.0	0.10	ug/l	10.0		79	55-120	7	20	
2-Methylphenol	7.56	2.0	0.10	ug/l	10.0		76	50-120	4	20	
4-Methylphenol	7.72	5.0	0.20	ug/l	10.0		77	50-120	3	20	
Naphthalene	7.96	1.0	0.10	ug/l	10.0		80	55-120	11	20	
2-Nitroaniline	7.88	5.0	0.10	ug/l	10.0		79	65-120	5	20	
3-Nitroaniline	0.940	5.0	0.20	ug/l	10.0		9	60-120	165	25	L2, R-2, J
4-Nitroaniline	3.98	5.0	0.50	ug/l	10.0		40	55-125	82	20	L2, R-2, J
Nitrobenzene	8.40	1.0	0.10	ug/l	10.0		84	55-120	7	25	
2-Nitrophenol	7.84	2.0	0.10	ug/l	10.0		78	50-120	1	25	

TestAmerica Irvine

Kathleen A. Robb For Heather Clark
Project Manager

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 011
 Annual Outfall 011
 Report Number: ITB0891

Sampled: 02/06/10-02/07/10
 Received: 02/06/10

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1393 Extracted: 02/11/10											
LCS Dup Analyzed: 02/15/2010 (10B1393-BSD1)											
4-Nitrophenol	10.4	5.0	2.5	ug/l	10.0		104	45-120	7	30	
N-Nitroso-di-n-propylamine	7.98	2.0	0.10	ug/l	10.0		80	45-120	5	20	
N-Nitrosodimethylamine	7.78	2.0	0.10	ug/l	10.0		78	45-120	0.8	20	
N-Nitrosodiphenylamine	8.24	1.0	0.10	ug/l	10.0		82	60-120	8	20	
Pentachlorophenol	8.58	2.0	0.10	ug/l	10.0		86	50-120	5	25	
Phenanthrene	9.28	0.50	0.10	ug/l	10.0		93	65-120	2	20	
Phenol	6.78	1.0	0.30	ug/l	10.0		68	40-120	11	25	
Pyrene	9.58	0.50	0.10	ug/l	10.0		96	55-125	0.4	25	
1,2,4-Trichlorobenzene	7.14	1.0	0.10	ug/l	10.0		71	45-120	6	20	
2,4,5-Trichlorophenol	8.72	2.0	0.20	ug/l	10.0		87	55-120	5	30	
2,4,6-Trichlorophenol	9.06	1.0	0.10	ug/l	10.0		91	55-120	7	30	
Surrogate: 2,4,6-Tribromophenol	19.7			ug/l	20.0		99	40-120			
Surrogate: 2-Fluorobiphenyl	9.14			ug/l	10.0		91	50-120			
Surrogate: 2-Fluorophenol	12.8			ug/l	20.0		64	30-120			
Surrogate: Nitrobenzene-d5	8.12			ug/l	10.0		81	45-120			
Surrogate: Phenol-d6	13.9			ug/l	20.0		69	35-120			
Surrogate: Terphenyl-d14	9.54			ug/l	10.0		95	50-125			

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METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1291 Extracted: 02/11/10											
Blank Analyzed: 02/12/2010 (10B1291-BLK1)											
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							
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							
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							
gamma-BHC (Lindane)	ND	0.020	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							
Chlordane	ND	0.10	0.040	ug/l							
Toxaphene	ND	0.50	0.25	ug/l							
Surrogate: Decachlorobiphenyl	0.387			ug/l	0.500		77	45-120			
Surrogate: Decachlorobiphenyl	0.387			ug/l	0.500		77	45-120			
Surrogate: Tetrachloro-m-xylene	0.240			ug/l	0.500		48	35-115			
Surrogate: Tetrachloro-m-xylene	0.240			ug/l	0.500		48	35-115			
LCS Analyzed: 02/12/2010 (10B1291-BS1)											
4,4'-DDD	0.464	0.0050	0.0020	ug/l	0.500		93	55-120			
4,4'-DDE	0.418	0.0050	0.0030	ug/l	0.500		84	50-120			
4,4'-DDT	0.450	0.010	0.0040	ug/l	0.500		90	55-120			
Aldrin	0.374	0.0050	0.0015	ug/l	0.500		75	40-115			
alpha-BHC	0.369	0.0050	0.0025	ug/l	0.500		74	45-115			
beta-BHC	0.361	0.010	0.0040	ug/l	0.500		72	55-115			
delta-BHC	0.404	0.0050	0.0035	ug/l	0.500		81	55-115			
Dieldrin	0.434	0.0050	0.0020	ug/l	0.500		87	55-115			

TestAmerica Irvine

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METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1291 Extracted: 02/11/10											
LCS Analyzed: 02/12/2010 (10B1291-BS1)											
Endosulfan I	0.423	0.0050	0.0020	ug/l	0.500		85	55-115			
Endosulfan II	0.464	0.0050	0.0030	ug/l	0.500		93	55-120			
Endosulfan sulfate	0.431	0.010	0.0030	ug/l	0.500		86	60-120			
Endrin	0.477	0.0050	0.0020	ug/l	0.500		95	55-115			
Endrin aldehyde	0.393	0.010	0.0020	ug/l	0.500		79	50-120			
Endrin ketone	0.454	0.010	0.0030	ug/l	0.500		91	55-120			
gamma-BHC (Lindane)	0.381	0.020	0.0030	ug/l	0.500		76	45-115			
Heptachlor	0.415	0.010	0.0030	ug/l	0.500		83	45-115			
Heptachlor epoxide	0.407	0.0050	0.0025	ug/l	0.500		81	55-115			
Methoxychlor	0.485	0.0050	0.0035	ug/l	0.500		97	60-120			
Surrogate: Decachlorobiphenyl	0.394			ug/l	0.500		79	45-120			
Surrogate: Decachlorobiphenyl	0.394			ug/l	0.500		79	45-120			
Surrogate: Tetrachloro-m-xylene	0.339			ug/l	0.500		68	35-115			
Surrogate: Tetrachloro-m-xylene	0.339			ug/l	0.500		68	35-115			
Matrix Spike Analyzed: 02/12/2010 (10B1291-MS1)											
Source: ITB0602-01											
4,4'-DDD	0.362	0.019	0.0075	ug/l	0.472	ND	77	50-125			
4,4'-DDE	0.530	0.019	0.011	ug/l	0.472	ND	112	45-125			
4,4'-DDT	0.402	0.038	0.015	ug/l	0.472	ND	85	50-125			
Aldrin	0.386	0.019	0.0057	ug/l	0.472	ND	82	35-120			
alpha-BHC	0.372	0.019	0.0094	ug/l	0.472	ND	79	40-120			
beta-BHC	0.186	0.038	0.015	ug/l	0.472	ND	39	50-120			M2
delta-BHC	0.314	0.019	0.013	ug/l	0.472	ND	67	50-120			
Dieldrin	0.390	0.019	0.0075	ug/l	0.472	ND	83	50-120			
Endosulfan I	0.475	0.019	0.0075	ug/l	0.472	ND	101	50-120			
Endosulfan II	0.390	0.019	0.011	ug/l	0.472	ND	83	50-125			
Endosulfan sulfate	0.333	0.038	0.011	ug/l	0.472	ND	71	55-125			
Endrin	0.413	0.019	0.0075	ug/l	0.472	ND	88	50-120			
Endrin aldehyde	0.190	0.038	0.0075	ug/l	0.472	ND	40	45-125			M2
Endrin ketone	0.342	0.038	0.011	ug/l	0.472	ND	72	50-125			
gamma-BHC (Lindane)	0.371	0.075	0.011	ug/l	0.472	ND	79	40-120			
Heptachlor	0.452	0.038	0.011	ug/l	0.472	ND	96	40-120			
Heptachlor epoxide	0.450	0.019	0.0094	ug/l	0.472	ND	95	50-120			
Methoxychlor	0.447	0.019	0.013	ug/l	0.472	ND	95	55-125			
Surrogate: Decachlorobiphenyl	0.418			ug/l	0.472		89	45-120			

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Annual Outfall 011
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METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1291 Extracted: 02/11/10											
Matrix Spike Analyzed: 02/12/2010 (10B1291-MS1)						Source: ITB0602-01					
Surrogate: Decachlorobiphenyl	0.418			ug/l	0.472		89	45-120			
Surrogate: Tetrachloro-m-xylene	0.220			ug/l	0.472		47	35-115			
Surrogate: Tetrachloro-m-xylene	0.220			ug/l	0.472		47	35-115			
Matrix Spike Dup Analyzed: 02/12/2010 (10B1291-MSD1)						Source: ITB0602-01					
4,4'-DDD	0.364	0.019	0.0075	ug/l	0.472	ND	77	50-125	0.5	30	
4,4'-DDE	0.527	0.019	0.011	ug/l	0.472	ND	112	45-125	0.7	30	
4,4'-DDT	0.396	0.038	0.015	ug/l	0.472	ND	84	50-125	1	30	
Aldrin	0.384	0.019	0.0057	ug/l	0.472	ND	81	35-120	0.6	30	
alpha-BHC	0.367	0.019	0.0094	ug/l	0.472	ND	78	40-120	1	30	
beta-BHC	0.196	0.038	0.015	ug/l	0.472	ND	42	50-120	5	30	M2
delta-BHC	0.313	0.019	0.013	ug/l	0.472	ND	66	50-120	0.2	30	
Dieldrin	0.387	0.019	0.0075	ug/l	0.472	ND	82	50-120	0.7	30	
Endosulfan I	0.471	0.019	0.0075	ug/l	0.472	ND	100	50-120	1	30	
Endosulfan II	0.393	0.019	0.011	ug/l	0.472	ND	83	50-125	0.7	30	
Endosulfan sulfate	0.346	0.038	0.011	ug/l	0.472	ND	73	55-125	4	30	
Endrin	0.409	0.019	0.0075	ug/l	0.472	ND	87	50-120	1	30	
Endrin aldehyde	0.197	0.038	0.0075	ug/l	0.472	ND	42	45-125	4	30	M2
Endrin ketone	0.338	0.038	0.011	ug/l	0.472	ND	72	50-125	1	30	
gamma-BHC (Lindane)	0.368	0.075	0.011	ug/l	0.472	ND	78	40-120	0.6	30	
Heptachlor	0.441	0.038	0.011	ug/l	0.472	ND	93	40-120	3	30	
Heptachlor epoxide	0.447	0.019	0.0094	ug/l	0.472	ND	95	50-120	0.7	30	
Methoxychlor	0.442	0.019	0.013	ug/l	0.472	ND	94	55-125	1	30	
Surrogate: Decachlorobiphenyl	0.407			ug/l	0.472		86	45-120			
Surrogate: Decachlorobiphenyl	0.407			ug/l	0.472		86	45-120			
Surrogate: Tetrachloro-m-xylene	0.264			ug/l	0.472		56	35-115			
Surrogate: Tetrachloro-m-xylene	0.264			ug/l	0.472		56	35-115			

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METHOD BLANK/QC DATA

TOTAL PCBS (EPA 608)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Data Qualifiers
Batch: 10B1291 Extracted: 02/11/10											
Blank Analyzed: 02/11/2010 (10B1291-BLK1)											
Aroclor 1016	ND	0.50	0.25	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	0.25	ug/l							
Surrogate: Decachlorobiphenyl	0.422			ug/l	0.500		84	45-120			
LCS Analyzed: 02/11/2010 (10B1291-BS2)											
Aroclor 1016	2.94	0.50	0.25	ug/l	4.00		74	50-115			
Aroclor 1260	3.60	0.50	0.25	ug/l	4.00		90	60-120			
Surrogate: Decachlorobiphenyl	0.432			ug/l	0.500		86	45-120			
Matrix Spike Analyzed: 02/11/2010 (10B1291-MS2) Source: ITB0602-01											
Aroclor 1016	4.30	0.47	0.24	ug/l	3.77	ND	114	45-120			
Aroclor 1260	3.32	0.47	0.24	ug/l	3.77	ND	88	55-125			
Surrogate: Decachlorobiphenyl	0.388			ug/l	0.472		82	45-120			
Matrix Spike Dup Analyzed: 02/11/2010 (10B1291-MSD2) Source: ITB0602-01											
Aroclor 1016	4.36	0.47	0.24	ug/l	3.77	ND	116	45-120	1	30	
Aroclor 1260	3.32	0.47	0.24	ug/l	3.77	ND	88	55-125	0.2	25	
Surrogate: Decachlorobiphenyl	0.383			ug/l	0.472		81	45-120			

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METHOD BLANK/QC DATA

HEXANE EXTRACTABLE MATERIAL

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1991 Extracted: 02/17/10											
Blank Analyzed: 02/17/2010 (10B1991-BLK1)											
Hexane Extractable Material (Oil & Grease)	ND	5.0	1.4	mg/l							
LCS Analyzed: 02/17/2010 (10B1991-BS1)											
Hexane Extractable Material (Oil & Grease)	20.5	5.0	1.4	mg/l	20.0		102	78-114			
LCS Dup Analyzed: 02/17/2010 (10B1991-BSD1)											
Hexane Extractable Material (Oil & Grease)	20.2	5.0	1.4	mg/l	20.0		101	78-114	1	11	

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METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	RPD Limits	RPD RPD	Data Qualifiers
Batch: 10B1079 Extracted: 02/09/10										
Blank Analyzed: 02/09/2010 (10B1079-BLK1)										
Arsenic	ND	10	7.0	ug/l						
Barium	ND	0.010	0.0060	mg/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						
Cobalt	ND	10	2.0	ug/l						
Iron	ND	0.040	0.015	mg/l						
Magnesium	ND	0.020	0.012	mg/l						
Manganese	ND	20	7.0	ug/l						
Nickel	ND	10	2.0	ug/l						
Vanadium	ND	10	3.0	ug/l						
Zinc	ND	20	6.0	ug/l						
LCS Analyzed: 02/09/2010 (10B1079-BS1)										
Arsenic	540	10	7.0	ug/l	500		108	85-115		
Barium	0.534	0.010	0.0060	mg/l	0.500		107	85-115		
Beryllium	534	2.0	0.90	ug/l	500		107	85-115		
Boron	0.530	0.050	0.020	mg/l	0.500		106	85-115		
Calcium	2.59	0.10	0.050	mg/l	2.50		104	85-115		
Cobalt	509	10	2.0	ug/l	500		102	85-115		
Iron	0.528	0.040	0.015	mg/l	0.500		106	85-115		
Magnesium	2.60	0.020	0.012	mg/l	2.50		104	85-115		
Manganese	524	20	7.0	ug/l	500		105	85-115		
Nickel	524	10	2.0	ug/l	500		105	85-115		
Vanadium	518	10	3.0	ug/l	500		104	85-115		
Zinc	520	20	6.0	ug/l	500		104	85-115		
Matrix Spike Analyzed: 02/09/2010 (10B1079-MS1)										
Source: ITB0896-01										
Arsenic	537	10	7.0	ug/l	500	ND	107	70-130		
Barium	0.556	0.010	0.0060	mg/l	0.500	0.0263	106	70-130		
Beryllium	529	2.0	0.90	ug/l	500	ND	106	70-130		
Boron	0.545	0.050	0.020	mg/l	0.500	ND	109	70-130		
Calcium	18.5	0.10	0.050	mg/l	2.50	16.0	101	70-130		MHA
Cobalt	504	10	2.0	ug/l	500	ND	101	70-130		
Iron	2.45	0.040	0.015	mg/l	0.500	2.02	85	70-130		
Magnesium	5.67	0.020	0.012	mg/l	2.50	3.11	102	70-130		

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METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1079 Extracted: 02/09/10											
Matrix Spike Analyzed: 02/09/2010 (10B1079-MS1)						Source: ITB0896-01					
Manganese	636	20	7.0	ug/l	500	119	104	70-130			
Nickel	521	10	2.0	ug/l	500	2.06	104	70-130			
Vanadium	518	10	3.0	ug/l	500	4.45	103	70-130			
Zinc	529	20	6.0	ug/l	500	16.5	102	70-130			
Matrix Spike Dup Analyzed: 02/09/2010 (10B1079-MSD1)						Source: ITB0896-01					
Arsenic	536	10	7.0	ug/l	500	ND	107	70-130	0.2	20	
Barium	0.547	0.010	0.0060	mg/l	0.500	0.0263	104	70-130	2	20	
Beryllium	525	2.0	0.90	ug/l	500	ND	105	70-130	0.8	20	
Boron	0.537	0.050	0.020	mg/l	0.500	ND	107	70-130	2	20	
Calcium	18.4	0.10	0.050	mg/l	2.50	16.0	95	70-130	0.8	20	MHA
Cobalt	502	10	2.0	ug/l	500	ND	100	70-130	0.4	20	
Iron	2.40	0.040	0.015	mg/l	0.500	2.02	75	70-130	2	20	
Magnesium	5.62	0.020	0.012	mg/l	2.50	3.11	100	70-130	0.9	20	
Manganese	632	20	7.0	ug/l	500	119	103	70-130	0.7	20	
Nickel	517	10	2.0	ug/l	500	2.06	103	70-130	0.9	20	
Vanadium	514	10	3.0	ug/l	500	4.45	102	70-130	0.7	20	
Zinc	525	20	6.0	ug/l	500	16.5	102	70-130	0.6	20	
Batch: 10B1085 Extracted: 02/09/10											
Blank Analyzed: 02/10/2010 (10B1085-BLK1)											
Mercury	ND	0.20	0.10	ug/l							
LCS Analyzed: 02/10/2010 (10B1085-BS1)											
Mercury	8.27	0.20	0.10	ug/l	8.00		103	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: 10B1085 Extracted: 02/09/10											
Matrix Spike Analyzed: 02/10/2010 (10B1085-MS1)						Source: ITB0442-01					
Mercury	8.10	0.20	0.10	ug/l	8.00	ND	101	70-130			
Matrix Spike Dup Analyzed: 02/10/2010 (10B1085-MSD1)						Source: ITB0442-01					
Mercury	8.21	0.20	0.10	ug/l	8.00	ND	103	70-130	1	20	
Batch: 10B1087 Extracted: 02/09/10											
Blank Analyzed: 02/10/2010 (10B1087-BLK1)											
Antimony	ND	2.0	0.30	ug/l							
Cadmium	ND	1.0	0.10	ug/l							
Copper	ND	2.0	0.50	ug/l							
Lead	ND	1.0	0.20	ug/l							
Selenium	ND	2.0	0.50	ug/l							
Silver	ND	1.0	0.10	ug/l							
Thallium	ND	1.0	0.20	ug/l							
LCS Analyzed: 02/10/2010 (10B1087-BS1)											
Antimony	83.7	2.0	0.30	ug/l	80.0		105	85-115			
Cadmium	83.8	1.0	0.10	ug/l	80.0		105	85-115			
Copper	83.8	2.0	0.50	ug/l	80.0		105	85-115			
Lead	85.3	1.0	0.20	ug/l	80.0		107	85-115			
Selenium	83.1	2.0	0.50	ug/l	80.0		104	85-115			
Silver	83.7	1.0	0.10	ug/l	80.0		105	85-115			
Thallium	84.5	1.0	0.20	ug/l	80.0		106	85-115			
Matrix Spike Analyzed: 02/10/2010 (10B1087-MS1)						Source: ITB0896-01					
Antimony	84.0	2.0	0.30	ug/l	80.0	0.997	104	70-130			
Cadmium	85.9	1.0	0.10	ug/l	80.0	0.296	107	70-130			
Copper	93.7	2.0	0.50	ug/l	80.0	6.83	109	70-130			
Lead	88.0	1.0	0.20	ug/l	80.0	2.24	107	70-130			
Selenium	82.5	2.0	0.50	ug/l	80.0	0.554	102	70-130			
Silver	86.2	1.0	0.10	ug/l	80.0	0.119	108	70-130			
Thallium	88.3	1.0	0.20	ug/l	80.0	ND	110	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: 10B1087 Extracted: 02/09/10											
Matrix Spike Dup Analyzed: 02/10/2010 (10B1087-MSD1)						Source: ITB0896-01					
Antimony	89.4	2.0	0.30	ug/l	80.0	0.997	111	70-130	6	20	
Cadmium	89.7	1.0	0.10	ug/l	80.0	0.296	112	70-130	4	20	
Copper	99.1	2.0	0.50	ug/l	80.0	6.83	115	70-130	6	20	
Lead	93.5	1.0	0.20	ug/l	80.0	2.24	114	70-130	6	20	
Selenium	88.2	2.0	0.50	ug/l	80.0	0.554	110	70-130	7	20	
Silver	89.0	1.0	0.10	ug/l	80.0	0.119	111	70-130	3	20	
Thallium	94.0	1.0	0.20	ug/l	80.0	ND	118	70-130	6	20	

Batch: 10B1911 Extracted: 02/16/10

Blank Analyzed: 02/16/2010 (10B1911-BLK1)

Chromium	ND	5.0	2.0	ug/l							
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LCS Analyzed: 02/16/2010 (10B1911-BS1)

Chromium	456	5.0	2.0	ug/l	500		91	85-115			
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Matrix Spike Analyzed: 02/16/2010 (10B1911-MS1)

Source: ITB1030-02

Chromium	461	5.0	2.0	ug/l	500	ND	92	70-130			
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Matrix Spike Dup Analyzed: 02/16/2010 (10B1911-MSD1)

Source: ITB1030-02

Chromium	451	5.0	2.0	ug/l	500	ND	90	70-130	2	20	
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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
<u>Batch: 10B1086 Extracted: 02/09/10</u>											
Blank Analyzed: 02/10/2010 (10B1086-BLK1)											
Mercury	ND	0.20	0.10	ug/l							
LCS Analyzed: 02/10/2010 (10B1086-BS1)											
Mercury	8.27	0.20	0.10	ug/l	8.00		103	85-115			
Matrix Spike Analyzed: 02/10/2010 (10B1086-MS1)											
						Source: ITB0355-03					
Mercury	8.22	0.20	0.10	ug/l	8.00	ND	103	70-130			
Matrix Spike Dup Analyzed: 02/10/2010 (10B1086-MSD1)											
						Source: ITB0355-03					
Mercury	8.29	0.20	0.10	ug/l	8.00	ND	104	70-130	0.8	20	
<u>Batch: 10B1089 Extracted: 02/09/10</u>											
Blank Analyzed: 02/10/2010 (10B1089-BLK1)											
Antimony	ND	2.0	0.30	ug/l							
Cadmium	ND	1.0	0.10	ug/l							
Copper	ND	2.0	0.50	ug/l							
Lead	0.363	1.0	0.20	ug/l							J
Selenium	ND	2.0	0.50	ug/l							
Silver	ND	1.0	0.10	ug/l							
Thallium	ND	1.0	0.20	ug/l							
LCS Analyzed: 02/10/2010 (10B1089-BS1)											
Antimony	83.6	2.0	0.30	ug/l	80.0		104	85-115			
Cadmium	83.4	1.0	0.10	ug/l	80.0		104	85-115			
Copper	84.2	2.0	0.50	ug/l	80.0		105	85-115			
Lead	83.7	1.0	0.20	ug/l	80.0		105	85-115			
Selenium	81.1	2.0	0.50	ug/l	80.0		101	85-115			
Silver	84.5	1.0	0.10	ug/l	80.0		106	85-115			
Thallium	84.9	1.0	0.20	ug/l	80.0		106	85-115			

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Annual Outfall 011
Report Number: ITB0891

Sampled: 02/06/10-02/07/10
Received: 02/06/10

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1089 Extracted: 02/09/10											
Matrix Spike Analyzed: 02/10/2010 (10B1089-MS1)						Source: ITB0896-01					
Antimony	87.5	2.0	0.30	ug/l	80.0	1.01	108	70-130			
Cadmium	85.4	1.0	0.10	ug/l	80.0	0.231	107	70-130			
Copper	91.3	2.0	0.50	ug/l	80.0	5.13	108	70-130			
Lead	85.1	1.0	0.20	ug/l	80.0	0.749	105	70-130			
Selenium	84.0	2.0	0.50	ug/l	80.0	0.559	104	70-130			
Silver	85.5	1.0	0.10	ug/l	80.0	ND	107	70-130			
Thallium	87.2	1.0	0.20	ug/l	80.0	ND	109	70-130			
Matrix Spike Dup Analyzed: 02/10/2010 (10B1089-MSD1)						Source: ITB0896-01					
Antimony	86.1	2.0	0.30	ug/l	80.0	1.01	106	70-130	2	20	
Cadmium	83.8	1.0	0.10	ug/l	80.0	0.231	104	70-130	2	20	
Copper	89.0	2.0	0.50	ug/l	80.0	5.13	105	70-130	3	20	
Lead	82.8	1.0	0.20	ug/l	80.0	0.749	103	70-130	3	20	
Selenium	82.1	2.0	0.50	ug/l	80.0	0.559	102	70-130	2	20	
Silver	82.8	1.0	0.10	ug/l	80.0	ND	103	70-130	3	20	
Thallium	86.0	1.0	0.20	ug/l	80.0	ND	108	70-130	1	20	
Batch: 10B1091 Extracted: 02/09/10											
Blank Analyzed: 02/11/2010 (10B1091-BLK1)											
Arsenic	ND	10	7.0	ug/l							
Barium	ND	0.010	0.0060	mg/l							
Beryllium	ND	2.0	0.90	ug/l							
Boron	ND	0.050	0.020	mg/l							
Calcium	0.0638	0.10	0.050	mg/l							J
Cobalt	ND	10	2.0	ug/l							
Iron	ND	0.040	0.015	mg/l							
Magnesium	ND	0.020	0.012	mg/l							
Manganese	ND	20	7.0	ug/l							
Nickel	ND	10	2.0	ug/l							
Vanadium	ND	10	3.0	ug/l							
Zinc	ND	20	6.0	ug/l							

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METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1091 Extracted: 02/09/10											
LCS Analyzed: 02/11/2010 (10B1091-BS1)											
Arsenic	559	10	7.0	ug/l	500		112	85-115			MNR1
Barium	0.519	0.010	0.0060	mg/l	0.500		104	85-115			
Beryllium	525	2.0	0.90	ug/l	500		105	85-115			
Boron	0.491	0.050	0.020	mg/l	0.500		98	85-115			
Calcium	2.62	0.10	0.050	mg/l	2.50		105	85-115			
Cobalt	503	10	2.0	ug/l	500		101	85-115			
Iron	0.511	0.040	0.015	mg/l	0.500		102	85-115			
Magnesium	2.45	0.020	0.012	mg/l	2.50		98	85-115			
Manganese	519	20	7.0	ug/l	500		104	85-115			
Nickel	520	10	2.0	ug/l	500		104	85-115			
Vanadium	523	10	3.0	ug/l	500		105	85-115			
Zinc	516	20	6.0	ug/l	500		103	85-115			
LCS Dup Analyzed: 02/11/2010 (10B1091-BSD1)											
Arsenic	550	10	7.0	ug/l	500		110	85-115	2	20	
Barium	0.518	0.010	0.0060	mg/l	0.500		104	85-115	0.2	20	
Beryllium	524	2.0	0.90	ug/l	500		105	85-115	0.2	20	
Boron	0.490	0.050	0.020	mg/l	0.500		98	85-115	0.09	20	
Calcium	2.61	0.10	0.050	mg/l	2.50		105	85-115	0.2	20	
Cobalt	497	10	2.0	ug/l	500		99	85-115	1	20	
Iron	0.506	0.040	0.015	mg/l	0.500		101	85-115	1	20	
Magnesium	2.45	0.020	0.012	mg/l	2.50		98	85-115	0.1	20	
Manganese	514	20	7.0	ug/l	500		103	85-115	0.9	20	
Nickel	515	10	2.0	ug/l	500		103	85-115	1	20	
Vanadium	519	10	3.0	ug/l	500		104	85-115	0.9	20	
Zinc	510	20	6.0	ug/l	500		102	85-115	1	20	

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METHOD BLANK/QC DATA

DISSOLVED INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0756 Extracted: 02/06/10											
Blank Analyzed: 02/06/2010 (10B0756-BLK1)											
Chromium VI	ND	1.0	0.25	ug/l							
LCS Analyzed: 02/06/2010 (10B0756-BS1)											
Chromium VI	4.95	1.0	0.25	ug/l	5.00		99	90-110			
Matrix Spike Analyzed: 02/06/2010 (10B0756-MS1)											
						Source: ITB0889-01					
Chromium VI	4.80	1.0	0.25	ug/l	5.00	ND	96	90-110			
Matrix Spike Dup Analyzed: 02/06/2010 (10B0756-MSD1)											
						Source: ITB0889-01					
Chromium VI	4.91	1.0	0.25	ug/l	5.00	ND	98	90-110	2	10	

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INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0814 Extracted: 02/08/10											
Blank Analyzed: 02/08/2010 (10B0814-BLK1)											
Fluoride	0.0335	0.10	0.020	mg/l							J
LCS Analyzed: 02/08/2010 (10B0814-BS1)											
Fluoride	1.04	0.10	0.020	mg/l	1.00		104	90-110			
Matrix Spike Analyzed: 02/08/2010 (10B0814-MS1) Source: ITB0610-01											
Fluoride	1.48	0.10	0.020	mg/l	1.00	0.481	100	80-120			
Matrix Spike Dup Analyzed: 02/08/2010 (10B0814-MSD1) Source: ITB0610-01											
Fluoride	1.50	0.10	0.020	mg/l	1.00	0.481	101	80-120	1	20	
Batch: 10B0856 Extracted: 02/08/10											
Blank Analyzed: 02/08/2010 (10B0856-BLK1)											
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	ND	0.50	0.20	mg/l							
LCS Analyzed: 02/08/2010 (10B0856-BS1)											
Chloride	4.73	0.50	0.25	mg/l	5.00		95	90-110			M-3
Nitrate-N	1.05	0.11	0.060	mg/l	1.13		93	90-110			
Nitrite-N	1.44	0.15	0.090	mg/l	1.52		94	90-110			
Sulfate	9.84	0.50	0.20	mg/l	10.0		98	90-110			M-3
Matrix Spike Analyzed: 02/08/2010 (10B0856-MS1) Source: ITB0894-01											
Chloride	11.2	0.50	0.25	mg/l	5.00	5.65	112	80-120			
Nitrate-N	2.01	0.11	0.060	mg/l	1.13	0.816	105	80-120			
Nitrite-N	1.53	0.15	0.090	mg/l	1.52	ND	101	80-120			
Sulfate	23.8	0.50	0.20	mg/l	10.0	12.8	110	80-120			

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INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0856 Extracted: 02/08/10											
Matrix Spike Analyzed: 02/09/2010 (10B0856-MS2)						Source: ITB0963-03					
Nitrate-N	1.47	0.11	0.060	mg/l	1.13	0.349	99	80-120			
Nitrite-N	1.90	0.15	0.090	mg/l	1.52	0.298	105	80-120			
Matrix Spike Dup Analyzed: 02/08/2010 (10B0856-MSD1)						Source: ITB0894-01					
Chloride	11.2	0.50	0.25	mg/l	5.00	5.65	111	80-120	0.5	20	
Nitrate-N	1.99	0.11	0.060	mg/l	1.13	0.816	104	80-120	0.9	20	
Nitrite-N	1.52	0.15	0.090	mg/l	1.52	ND	100	80-120	0.5	20	
Sulfate	23.6	0.50	0.20	mg/l	10.0	12.8	108	80-120	0.6	20	
Batch: 10B0912 Extracted: 02/08/10											
Blank Analyzed: 02/13/2010 (10B0912-BLK1)											
Biochemical Oxygen Demand	ND	2.0	0.50	mg/l							
LCS Analyzed: 02/13/2010 (10B0912-BS1)											
Biochemical Oxygen Demand	208	100	25	mg/l	198		105	85-115			
LCS Dup Analyzed: 02/13/2010 (10B0912-BSD1)											
Biochemical Oxygen Demand	208	100	25	mg/l	198		105	85-115	0.2	20	
Batch: 10B0951 Extracted: 02/08/10											
Blank Analyzed: 02/08/2010 (10B0951-BLK1)											
Surfactants (MBAS)	ND	0.10	0.025	mg/l							
LCS Analyzed: 02/08/2010 (10B0951-BS1)											
Surfactants (MBAS)	0.255	0.10	0.025	mg/l	0.250		102	90-110			

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INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0951 Extracted: 02/08/10											
Matrix Spike Analyzed: 02/08/2010 (10B0951-MS1)						Source: ITB0896-01					
Surfactants (MBAS)	0.287	0.10	0.025	mg/l	0.250	0.0423	98	50-125			
Matrix Spike Dup Analyzed: 02/08/2010 (10B0951-MSD1)						Source: ITB0896-01					
Surfactants (MBAS)	0.298	0.10	0.025	mg/l	0.250	0.0423	102	50-125	4	20	
Batch: 10B1004 Extracted: 02/09/10											
Blank Analyzed: 02/09/2010 (10B1004-BLK1)											
Perchlorate	ND	4.0	0.90	ug/l							
LCS Analyzed: 02/09/2010 (10B1004-BS1)											
Perchlorate	26.5	4.0	0.90	ug/l	25.0		106	85-115			
Matrix Spike Analyzed: 02/09/2010 (10B1004-MS1)						Source: ITB0481-07					
Perchlorate	24.1	4.0	0.90	ug/l	25.0	ND	97	80-120			
Matrix Spike Dup Analyzed: 02/09/2010 (10B1004-MSD1)						Source: ITB0481-07					
Perchlorate	23.6	4.0	0.90	ug/l	25.0	ND	94	80-120	2	20	
Batch: 10B1015 Extracted: 02/08/10											
Blank Analyzed: 02/08/2010 (10B1015-BLK1)											
Turbidity	ND	1.0	0.040	NTU							
Duplicate Analyzed: 02/08/2010 (10B1015-DUP1)						Source: ITB0895-01					
Turbidity	0.110	1.0	0.040	NTU		0.100			10	20	J

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INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1155 Extracted: 02/10/10											
Blank Analyzed: 02/10/2010 (10B1155-BLK1)											
Specific Conductance	ND	1.0	1.0	umhos/cm							
LCS Analyzed: 02/10/2010 (10B1155-BS1)											
Specific Conductance	1460	1.0	1.0	umhos/cm	1410		103	90-110			
Duplicate Analyzed: 02/10/2010 (10B1155-DUP1)											
Specific Conductance	156	1.0	1.0	umhos/cm		Source: ITB0864-01 155			0.5	5	
Batch: 10B1250 Extracted: 02/10/10											
Blank Analyzed: 02/10/2010 (10B1250-BLK1)											
Total Cyanide	ND	5.0	2.2	ug/l							
LCS Analyzed: 02/10/2010 (10B1250-BS1)											
Total Cyanide	190	5.0	2.2	ug/l	200		95	90-110			
Matrix Spike Analyzed: 02/10/2010 (10B1250-MS1)											
Total Cyanide	187	5.0	2.2	ug/l	200	ND	94	70-115			
Matrix Spike Dup Analyzed: 02/10/2010 (10B1250-MSD1)											
Total Cyanide	182	5.0	2.2	ug/l	200	ND	91	70-115	3	15	
Batch: 10B1284 Extracted: 02/11/10											
Blank Analyzed: 02/11/2010 (10B1284-BLK1)											
Total Organic Carbon	ND	1.0	0.50	mg/l							

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INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 10B1284 Extracted: 02/11/10</u>											
LCS Analyzed: 02/11/2010 (10B1284-BS1)											
Total Organic Carbon	10.0	1.0	0.50	mg/l	10.0		100	90-110			
Matrix Spike Analyzed: 02/11/2010 (10B1284-MS1)											
						Source: ITB1082-01					
Total Organic Carbon	9.13	1.0	0.50	mg/l	5.00	4.47	93	80-120			
Matrix Spike Dup Analyzed: 02/11/2010 (10B1284-MSD1)											
						Source: ITB1082-01					
Total Organic Carbon	9.43	1.0	0.50	mg/l	5.00	4.47	99	80-120	3	20	
<u>Batch: 10B1487 Extracted: 02/12/10</u>											
Blank Analyzed: 02/12/2010 (10B1487-BLK1)											
Total Dissolved Solids	ND	10	1.0	mg/l							
LCS Analyzed: 02/12/2010 (10B1487-BS1)											
Total Dissolved Solids	1010	10	1.0	mg/l	1000		101	90-110			
Duplicate Analyzed: 02/12/2010 (10B1487-DUP1)											
						Source: ITB1082-01					
Total Dissolved Solids	2140	10	1.0	mg/l		2150			0.7	10	
<u>Batch: 10B1575 Extracted: 02/12/10</u>											
Blank Analyzed: 02/12/2010 (10B1575-BLK1)											
Ammonia-N (Distilled)	ND	0.50	0.50	mg/l							
LCS Analyzed: 02/12/2010 (10B1575-BS1)											
Ammonia-N (Distilled)	10.6	0.50	0.50	mg/l	10.0		106	80-115			

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INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1575 Extracted: 02/12/10											
Matrix Spike Analyzed: 02/12/2010 (10B1575-MS1)						Source: ITB0887-04					
Ammonia-N (Distilled)	11.2	0.50	0.50	mg/l	10.0	0.560	106	70-120			
Matrix Spike Dup Analyzed: 02/12/2010 (10B1575-MSD1)						Source: ITB0887-04					
Ammonia-N (Distilled)	11.5	0.50	0.50	mg/l	10.0	0.560	109	70-120	2	15	
Batch: 10B1648 Extracted: 02/12/10											
Blank Analyzed: 02/12/2010 (10B1648-BLK1)											
Total Suspended Solids	ND	10	1.0	mg/l							
LCS Analyzed: 02/12/2010 (10B1648-BS1)											
Total Suspended Solids	1000	10	1.0	mg/l	1000		100	85-115			
Duplicate Analyzed: 02/12/2010 (10B1648-DUP1)						Source: ITB1069-01					
Total Suspended Solids	35.0	10	1.0	mg/l		36.0			3	10	

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METHOD BLANK/QC DATA

ASTM 5174-91

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 53280 Extracted: 02/23/10											
Matrix Spike Dup Analyzed: 02/26/2010 (F0B090470001D)						Source: ITB0896-01					
Total Uranium	30	1.4	0.4	pCi/L	27.7	0.566	106	62-150	1	20	
Matrix Spike Analyzed: 02/26/2010 (F0B090470001S)						Source: ITB0896-01					
Total Uranium	29.7	1.4	0.4	pCi/L	27.7	0.566	105	62-150			
Blank Analyzed: 02/26/2010 (F0B220000280B)						Source:					
Total Uranium	0.046	0.693	0.21	pCi/L				-			U
LCS Analyzed: 02/26/2010 (F0B220000280C)						Source:					
Total Uranium	30.2	0.7	0.2	pCi/L	27.7		109	90-120			

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METHOD BLANK/QC DATA

EPA 900.0 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 43108 Extracted: 02/10/10											
Matrix Spike Analyzed: 02/18/2010 (F0B090470001S)						Source: ITB0896-01					
Gross Alpha	47.2	3	1	pCi/L	49.4	2	91	35-150			
Gross Beta	79	4	1.5	pCi/L	68	3.9	110	54-150			
Duplicate Analyzed: 02/18/2010 (F0B090470001X)						Source: ITB0896-01					
Gross Alpha	0.84	3	0.94	pCi/L		2		-			U
Gross Beta	3.2	4	1.5	pCi/L		3.9		-			Jb
Blank Analyzed: 02/19/2010 (F0B120000108B)						Source:					
Gross Alpha	-0.28	2	0.87	pCi/L				-			U
Gross Beta	-0.23	4	1.1	pCi/L				-			U
LCS Analyzed: 02/19/2010 (F0B120000108C)						Source:					
Gross Alpha	34.8	3	1.2	pCi/L	49.4		70	62-134			
Gross Beta	71.6	4	1	pCi/L	68		105	58-133			

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 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 011
 Annual Outfall 011
 Report Number: ITB0891

Sampled: 02/06/10-02/07/10
 Received: 02/06/10

METHOD BLANK/QC DATA

EPA 901.1 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 42136 Extracted: 02/11/10											
Duplicate Analyzed: 02/19/2010 (F0B090470001X)						Source: ITB0896-01					
Cesium 137	1.2	20	14	pCi/L		-2.9		-			U
Potassium 40	-50	NA	200	pCi/L		-100		-			U
Blank Analyzed: 02/19/2010 (F0B110000136B)						Source:					
Cesium 137	1.8	20	14	pCi/L				-			U
Potassium 40	-80	NA	210	pCi/L				-			U
LCS Analyzed: 02/19/2010 (F0B110000136C)						Source:					
Americium 241	140000	NA	500	pCi/L	141000		99	87-110			
Cobalt 60	88000	NA	200	pCi/L	87900		100	89-110			
Cesium 137	52900	20	200	pCi/L	53100		100	90-110			

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Kathleen A. Robb For Heather Clark
 Project Manager

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METHOD BLANK/QC DATA

EPA 903.0 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 41160 Extracted: 02/10/10											
Duplicate Analyzed: 02/26/2010 (F0B090467001X)						Source: F0B090467001					
Radium (226)	0.07	1	0.29	pCi/L		0.089	-				U
Blank Analyzed: 02/26/2010 (F0B100000160B)						Source:					
Radium (226)	0.092	1	0.14	pCi/L			-				U
LCS Analyzed: 02/26/2010 (F0B100000160C)						Source:					
Radium (226)	10.4	1	0.2	pCi/L	11.3		93	68-136			

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Sampled: 02/06/10-02/07/10
 Received: 02/06/10

METHOD BLANK/QC DATA

EPA 904 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 60257 Extracted: 03/01/10											
Blank Analyzed: 03/05/2010 (F0C010000257B)											
Radium 228	0.08	1	0.39	pCi/L				-			U
LCS Analyzed: 03/05/2010 (F0C010000257C)											
Radium 228	6.23	1	0.39	pCi/L	6.4		97	60-142			
LCS Dup Analyzed: 03/05/2010 (F0C010000257L)											
Radium 228	6.35	1	0.4	pCi/L	6.4		99	60-142	2	40	

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Sampled: 02/06/10-02/07/10
 Received: 02/06/10

METHOD BLANK/QC DATA

EPA 905 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 41162 Extracted: 02/10/10											
Duplicate Analyzed: 02/19/2010 (F0B090475001X)						Source: F0B090475001					
Strontium 90	-0.15	3	0.42	pCi/L		-0.05		-			U
Blank Analyzed: 02/19/2010 (F0B100000162B)						Source:					
Strontium 90	-0.15	3	0.38	pCi/L				-			U
LCS Analyzed: 02/19/2010 (F0B100000162C)						Source:					
Strontium 90	6.82	3	0.34	pCi/L	6.8		100	80-130			

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 Report Number: ITB0891

Sampled: 02/06/10-02/07/10
 Received: 02/06/10

METHOD BLANK/QC DATA

EPA 906.0 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 49035 Extracted: 02/18/10											
Duplicate Analyzed: 02/18/2010 (F0B090470001X)						Source: ITB0896-01					
Tritium	80	500	92	pCi/L		114		-			U
Matrix Spike Analyzed: 02/18/2010 (F0B090473001S)						Source: F0B090473001					
Tritium	4650	500	90	pCi/L	4530	122	100	62-147			
Blank Analyzed: 02/18/2010 (F0B180000035B)						Source:					
Tritium	165	500	95	pCi/L				-			Jb
LCS Analyzed: 02/18/2010 (F0B180000035C)						Source:					
Tritium	4440	500	90	pCi/L	4530		98	85-112			

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Sampled: 02/06/10-02/07/10
 Received: 02/06/10

METHOD BLANK/QC DATA

EPA-5 1613B

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	RPD Limits	RPD RPD	RPD Limit	Data Qualifiers
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Batch: 48124 Extracted: 02/17/10

Blank Analyzed: 02/18/2010 (G0B170000124B)

Source:

1,2,3,4,6,7,8-HpCDD	2.3e-006	0.00005	0.0000011	ug/L				-			J, Q
1,2,3,4,6,7,8-HpCDF	6e-007	0.00005	0.0000004	ug/L				-			J, Q
1,2,3,4,7,8,9-HpCDF	ND	0.00005	0.00000069	ug/L				-			
1,2,3,4,7,8-HxCDD	ND	0.00005	0.0000006	ug/L				-			
1,2,3,4,7,8-HxCDF	ND	0.00005	0.00000036	ug/L				-			
1,2,3,6,7,8-HxCDD	ND	0.00005	0.0000005	ug/L				-			
1,2,3,6,7,8-HxCDF	ND	0.00005	0.00000031	ug/L				-			
1,2,3,7,8,9-HxCDD	ND	0.00005	0.00000046	ug/L				-			
1,2,3,7,8,9-HxCDF	ND	0.00005	0.0000004	ug/L				-			
1,2,3,7,8-PeCDD	ND	0.00005	0.00000057	ug/L				-			
1,2,3,7,8-PeCDF	ND	0.00005	0.00000044	ug/L				-			
2,3,4,6,7,8-HxCDF	ND	0.00005	0.00000031	ug/L				-			
2,3,4,7,8-PeCDF	ND	0.00005	0.00000052	ug/L				-			
2,3,7,8-TCDD	ND	0.00001	0.00000046	ug/L				-			
2,3,7,8-TCDF	ND	0.00001	0.00000047	ug/L				-			
OCDD	2.3e-005	0.0001	0.00000084	ug/L				-			J
OCDF	7.2e-007	0.0001	0.0000008	ug/L				-			J, Q
Total HpCDD	1.3e-005	0.00005	0.0000011	ug/L				-			J, Q
Total HpCDF	1.1e-006	0.00005	0.0000004	ug/L				-			J, Q
Total HxCDD	ND	0.00005	0.00000046	ug/L				-			
Total HxCDF	ND	0.00005	0.00000031	ug/L				-			
Total PeCDD	ND	0.00005	0.00000057	ug/L				-			
Total PeCDF	ND	0.00005	0.00000016	ug/L				-			
Total TCDD	ND	0.00001	0.00000046	ug/L				-			
Total TCDF	ND	0.00001	0.00000047	ug/L				-			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDD	0.0018			ug/L	0.002		92	23-140			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF	0.0017			ug/L	0.002		86	28-143			
Surrogate: 13C-1,2,3,4,7,8,9-HpCDF	0.0016			ug/L	0.002		79	26-138			
Surrogate: 13C-1,2,3,4,7,8-HxCDD	0.0017			ug/L	0.002		87	32-141			
Surrogate: 13C-1,2,3,4,7,8-HxCDF	0.0016			ug/L	0.002		82	26-152			
Surrogate: 13C-1,2,3,6,7,8-HxCDD	0.0017			ug/L	0.002		86	28-130			
Surrogate: 13C-1,2,3,6,7,8-HxCDF	0.0017			ug/L	0.002		86	26-123			
Surrogate: 13C-1,2,3,7,8,9-HxCDF	0.0016			ug/L	0.002		81	29-147			
Surrogate: 13C-1,2,3,7,8-PeCDD	0.0016			ug/L	0.002		80	25-181			
Surrogate: 13C-1,2,3,7,8-PeCDF	0.0015			ug/L	0.002		75	24-185			

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Kathleen A. Robb For Heather Clark
 Project Manager

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

Project ID: Annual Outfall 011
Annual Outfall 011
Report Number: ITB0891

Sampled: 02/06/10-02/07/10
Received: 02/06/10

METHOD BLANK/QC DATA

EPA-5 1613B

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 48124 Extracted: 02/17/10											
Blank Analyzed: 02/18/2010 (G0B170000124B)						Source:					
Surrogate: 13C-2,3,4,6,7,8-HxCDF	0.0018			ug/L	0.002		90	28-136			
Surrogate: 13C-2,3,4,7,8-PeCDF	0.0015			ug/L	0.002		74	21-178			
Surrogate: 13C-2,3,7,8-TCDD	0.0014			ug/L	0.002		71	25-164			
Surrogate: 13C-2,3,7,8-TCDF	0.0013			ug/L	0.002		63	24-169			
Surrogate: 13C-OCDD	0.0039			ug/L	0.004		98	17-157			
Surrogate: 37Cl4-2,3,7,8-TCDD	0.00072			ug/L	0.0008		90	35-197			
LCS Analyzed: 02/19/2010 (G0B170000124C)						Source:					
1,2,3,4,6,7,8-HpCDD	0.00111	0.00005	0.0000021	ug/L	0.001		111	70-140			Ba
1,2,3,4,6,7,8-HpCDF	0.00113	0.00005	0.0000023	ug/L	0.001		113	82-122			Ba
1,2,3,4,7,8,9-HpCDF	0.00125	0.00005	0.000004	ug/L	0.001		125	78-138			
1,2,3,4,7,8-HxCDD	0.00128	0.00005	0.0000013	ug/L	0.001		128	70-164			
1,2,3,4,7,8-HxCDF	0.00119	50	0.0000019	ug/L	0.001		119	72-134			
1,2,3,6,7,8-HxCDD	0.00109	0.00005	0.0000011	ug/L	0.001		109	76-134			
1,2,3,6,7,8-HxCDF	0.00114	0.00005	0.0000017	ug/L	0.001		114	84-130			
1,2,3,7,8,9-HxCDD	0.00102	0.00005	0.00000097	ug/L	0.001		102	64-162			
1,2,3,7,8,9-HxCDF	0.00118	0.00005	0.0000022	ug/L	0.001		118	78-130			
1,2,3,7,8-PeCDD	0.00112	0.00005	0.0000013	ug/L	0.001		112	70-142			
1,2,3,7,8-PeCDF	0.00114	0.00005	0.0000014	ug/L	0.001		114	80-134			
2,3,4,6,7,8-HxCDF	0.00116	0.00005	0.0000016	ug/L	0.001		116	70-156			
2,3,4,7,8-PeCDF	0.00115	0.00005	0.0000016	ug/L	0.001		115	68-160			
2,3,7,8-TCDD	0.000231	0.00001	0.00000063	ug/L	0.0002		115	67-158			
2,3,7,8-TCDF	0.000222	0.00001	0.00000048	ug/L	0.0002		111	75-158			
OCDD	0.00222	0.0001	0.0000034	ug/L	0.002		111	78-144			Ba
OCDF	0.0021	0.0001	0.0000025	ug/L	0.002		105	63-170			Ba
Surrogate: 13C-1,2,3,4,6,7,8-HpCDD	0.00186			ug/L	0.002		93	26-166			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF	0.00176			ug/L	0.002		88	21-158			
Surrogate: 13C-1,2,3,4,7,8,9-HpCDF	0.0016			ug/L	0.002		80	20-186			
Surrogate: 13C-1,2,3,4,7,8-HxCDD	0.00179			ug/L	0.002		89	21-193			
Surrogate: 13C-1,2,3,4,7,8-HxCDF	0.00175			ug/L	0.002		87	19-202			
Surrogate: 13C-1,2,3,6,7,8-HxCDD	0.00189			ug/L	0.002		94	25-163			
Surrogate: 13C-1,2,3,6,7,8-HxCDF	0.00177			ug/L	0.002		89	21-159			
Surrogate: 13C-1,2,3,7,8,9-HxCDF	0.00171			ug/L	0.002		85	17-205			
Surrogate: 13C-1,2,3,7,8-PeCDD	0.00174			ug/L	0.002		87	21-227			
Surrogate: 13C-1,2,3,7,8-PeCDF	0.00161			ug/L	0.002		81	21-192			
Surrogate: 13C-2,3,4,6,7,8-HxCDF	0.00192			ug/L	0.002		96	22-176			

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Project ID: Annual Outfall 011
 Annual Outfall 011
 Report Number: ITB0891

Sampled: 02/06/10-02/07/10
 Received: 02/06/10

METHOD BLANK/QC DATA

EPA-5 1613B

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 48124 Extracted: 02/17/10											
LCS Analyzed: 02/19/2010 (G0B170000124C)											
Surrogate: 13C-2,3,4,7,8-PeCDF	0.00158			ug/L	0.002		79	13-328			
Surrogate: 13C-2,3,7,8-TCDD	0.00151			ug/L	0.002		76	20-175			
Surrogate: 13C-2,3,7,8-TCDF	0.00139			ug/L	0.002		70	22-152			
Surrogate: 13C-OCDD	0.00383			ug/L	0.004		96	13-199			
Surrogate: 37Cl-2,3,7,8-TCDD	0.000723			ug/L	0.0008		90	31-191			

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Received: 02/06/10

DATA QUALIFIERS AND DEFINITIONS

- B** Analyte was detected in the associated Method Blank.
- Ba** Method blank contamination. The associated method blank contains the target analyte at a reportable level.
- C** Calibration Verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
- J** Estimated result. Result is less than the reporting limit.
- Jb** Result is greater than sample detection limit but less than stated reporting limit.
- L2** Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was below acceptance limits.
- M2** The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
- M-3** Results exceeded the linear range in the MS/MSD and therefore are not available for reporting. The batch was accepted based on acceptable recovery in the Blank Spike (LCS).
- MHA** Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
- MNR1** There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike/Blank Spike Duplicate.
- Q** Estimated maximum possible concentration (EMPC).
- R-2** The RPD exceeded the acceptance limit.
- R-7** LFB/LFBD RPD exceeded the acceptance limit. Recovery met acceptance criteria.
- U** Result is less than the sample detection limit.
- Z2** Surrogate recovery was above the acceptance limits. Data not impacted.
- 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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Certification Summary

TestAmerica Irvine

Method	Matrix	Nelac	California
EDD + Level 4	Water	N/A	N/A
EPA 120.1	Water	X	X
EPA 1664A	Water	X	X
EPA 180.1	Water	X	X
EPA 200.7-Diss	Water	X	X
EPA 200.7	Water	X	X
EPA 200.8-Diss	Water	X	X
EPA 200.8	Water	X	X
EPA 218.6	Water	X	X
EPA 245.1-Diss	Water	X	X
EPA 245.1	Water	X	X
EPA 300.0	Water	X	X
EPA 314.0	Water	X	X
EPA 608	Water	X	X
EPA 624	Water	X	X
EPA 625	Water	X	X
EPA 8015 Mod.	Water	X	X
EPA 8015B	Water	X	X
EPA 8260B-SIM	Water	X	X
Filtration	Water	N/A	N/A
SM 2540D	Water	X	X
SM 4500-F-C	Water	X	X
SM2340B-Diss	Water		
SM2340B	Water	X	X
SM2540C	Water	X	
SM2540F	Water	X	X
SM4500CN-E	Water	X	X
SM4500NH3-C	Water	X	X
SM5210B	Water	X	X
SM5310B	Water	X	X
SM5540-C	Water	X	X

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

Subcontracted Laboratories

TestAmerica Irvine

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Aquatic Testing Laboratories-SUB *California Cert #1775*

4350 Transport Street, Unit 107 - Ventura, CA 93003

Analysis Performed: Bioassay-7 dy Chronic
Samples: ITB0896-01

Analysis Performed: Bioassay-Acute 96hr
Samples: ITB0891-01

Analysis Performed: Level 4 Data Package
Samples: ITB0896-01

TestAmerica St. Louis

13715 Rider Trail North - Earth City, MO 63045

Method Performed: ASTM 5174-91
Samples: ITB0896-01

Method Performed: EPA 900.0 MOD
Samples: ITB0896-01

Method Performed: EPA 901.1 MOD
Samples: ITB0896-01

Method Performed: EPA 903.0 MOD
Samples: ITB0896-01

Method Performed: EPA 904 MOD
Samples: ITB0896-01RE1

Method Performed: EPA 905 MOD
Samples: ITB0896-01

Method Performed: EPA 906.0 MOD
Samples: ITB0896-01

TestAmerica West Sacramento

880 Riverside Parkway - West Sacramento, CA 95605

Method Performed: EPA-5 1613B
Samples: ITB0896-01

Truesdail Laboratories-SUB *California Cert #1237*

14201 Franklin Avenue - Tustin, CA 92680

Analysis Performed: Hydrazine
Samples: ITB0896-01

Analysis Performed: Level 4 Data Package
Samples: ITB0896-01

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Attention: Bronwyn Kelly

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Annual Outfall 011
Report Number: ITB0891

Sampled: 02/06/10-02/07/10
Received: 02/06/10

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L.F.
28-10
6:20

Client Name/Address: MWH-Arcadia 618 Michillinda Ave, Suite 200 Arcadia, CA 91007 Test America Contact: Joseph Doak		Project: Boeing-SSFL NPDES Annual Outfall 011 GRAB		Project Manager: Bronwyn Kelly Phone Number: (626) 568-6691 Fax Number: (626) 568-6515		Sampler: M. Chell D. Lassen		Field readings: (Log in and include in report Temp and pH) Temp °F = 53.2 pH = 6.85 Total Residual Chlorine = 0.00 Time of readings = 1445							
Sample Description Outfall 011 Outfall 011 Outfall 011 Outfall 011 - Outfall 011 Outfall 011 Outfall 011 Trip Blanks Trip Blanks Outfall 011 Outfall 011 Dup Outfall 011 Outfall 011 Dup Outfall 011 Outfall 011		Container Type VOA's VOA's 500 mL Poly 1L Poly 150ml-Poly 1L Amber 500 mL Poly VOA's VOA's VOA's VOA's 1L Amber 1L Amber 500 mL Poly 1 Gal Cube		# of Cont. 5 3 1 1 1 2 1 3 3 1 2 1 1 2 1 1		Preservative HCl None None None None HCl NaOH HCl None HCl HCl None None None None		Bottle # 1A, 1B, 1C, 1D, 1E 2A, 2B, 2C 3 4 5 6A, 6B 7 8A, 8B, 8C 9A, 9B, 9C 10A 10B, 10C 11A 12A, 12B 13		Sampling Date/Time 020610/1445 020610/1445 020610/1445 020610/1445 020610/1445 020610/1445 020610/1445 020610/1445 020610/1445 020610/1445 020610/1445 020610/1445 020610/1445 020610/1445		ANALYSIS REQUIRED VOCs 624 + A+A+2C+E 123A, Cyclohexane + P VOCs 624 + A+A+2C+E Cr (VI) (218.6) Settleable Solids Total Residual Chlorine Oil & Grease (1664-HEM) Cyanide (total recoverable) 8015 - gas 8015 - diesel/t fuel Conductivity Acute Toxicity		Comments 24 TAT SW	
Relinquished By: [Signature]		Date/Time: 020610/1515		Received By: [Signature]		Date/Time: 26001515		Turn-around time: (Check) 10 Day: <input type="checkbox"/> 72 Hour: <input type="checkbox"/> 5 Day: <input type="checkbox"/> 48 Hour: <input type="checkbox"/> 24 Hour: <input checked="" type="checkbox"/>							
Relinquished By: [Signature]		Date/Time: 26061700		Received By: [Signature]		Date/Time: 26061700		Sample Integrity: (Check) Intact: <input checked="" type="checkbox"/> On Ice: <input type="checkbox"/>							
Relinquished By: [Signature]		Date/Time: 26061700		Received By: [Signature]		Date/Time: 26061700		Data Requirements: (Check) No Level IV: <input type="checkbox"/> All Level IV: <input checked="" type="checkbox"/> NPDES Level IV: <input checked="" type="checkbox"/>							

These Samples are the Grab Portion of Outfall 011 for this storm event. Composite samples will follow and are to be added to this work order.

LABORATORY REPORT



"dedicated to providing quality aquatic toxicity testing"

Date: February 17, 2010
Client: TestAmerica, Irvine
17461 Derian Ave., Suite 100
Irvine, CA 92614
Attn: Joseph Doak

4350 Transport Street, Unit 107
Ventura, CA 93003
(805) 650-0546 FAX (805) 650-0756
CA DOHS ELAP Cert. No.: 1775

Laboratory No.: A-10020804-001
Sample I.D.: ITB0896-01 (Outfall 011)

Sample Control: The sample was received by ATL within the recommended hold time, chilled and with the chain of custody record attached. Testing conducted on only one sample per client instruction (rain runoff sample). Chronic testing initiated outside the recommended hold time of 36 hr per additional client instruction.

Date Sampled: 02/07/10
Date Received: 02/08/10
Temp. Received: 1.3°C
Chlorine (TRC): 0.0 mg/l
Date Tested: 02/09/10 to 02/16/10

Sample Analysis: The following analyses were performed on your sample:
Ceriodaphnia dubia Survival and Reproduction Test (EPA Method 1002).
Attached are the test data generated from the analysis of your sample.

Result Summary:

	<u>NOEC</u>	<u>TUc</u>
<i>Ceriodaphnia</i> Survival:	100%	1.0
<i>Ceriodaphnia</i> Reproduction:	100%	1.0

Quality Control: Reviewed and approved by:


Joseph A. LeMay
Laboratory Director

CERIODAPHNIA CHRONIC BIOASSAY EPA METHOD 1002.0



Lab No.: A-10020804-001
Client/ID: Test America – ITB0896-01 (Outfall 011)

Date Tested: 02/09/10 to 02/16/10

TEST SUMMARY

Test type: Daily static-renewal.
Species: *Ceriodaphnia dubia*.
Age: < 24 hrs; all released within 8 hrs.
Test vessel size: 30 ml.
Number of test organisms per vessel: 1.
Temperature: 25 +/- 1°C.
Dilution water: Mod. hard reconstituted (MHRW).
QA/QC Batch No.: RT-100207.

Endpoints: Survival and Reproduction.
Source: In-laboratory culture.
Food: .1 ml YTC, algae per day.
Test solution volume: 15 ml.
Number of replicates: 10.
Photoperiod: 16/8 hrs. light/dark cycle.
Test duration: 7 days.
Statistics: ToxCalc computer program.

RESULTS SUMMARY

Sample Concentration	Percent Survival	Mean Number of Young Per Female
Control	100%	27.1
100% Sample	100%	29.5
* Sample not statistically significantly less than Control.		

CHRONIC TOXICITY

Survival NOEC	100%
Survival TUc	1.0
Reproduction NOEC	100%
Reproduction TUc	1.0

QA/QC TEST ACCEPTABILITY

Parameter	Result
Control survival ≥80%	Pass (100% survival)
≥15 young per surviving control female	Pass (27.1 young)
≥60% surviving controls had 3 broods	Pass (100% with 3 broods)
PMSD <47% for reproduction; if >47% and no toxicity at IWC, the test must be repeated	Pass (PMSD = 8.3%)
Statistically significantly different concentrations relative difference > 13%	Pass (no concentration significantly different)
Concentration response relationship acceptable	Pass (no significant response at concentration tested)

Ceriodaphnia Survival and Reproduction Test-7 Day Survival

Start Date: 2/9/2010 15:00 Test ID: 10020804c Sample ID: ITB0896-01
 End Date: 2/16/2010 15:00 Lab ID: CAATL-Aquatic Testing Labs Sample Type: EFF2-Industrial
 Sample Date: 2/7/2010 11:43 Protocol: FWCH EPA Test Species: CD-Ceriodaphnia dubia
 Comments:

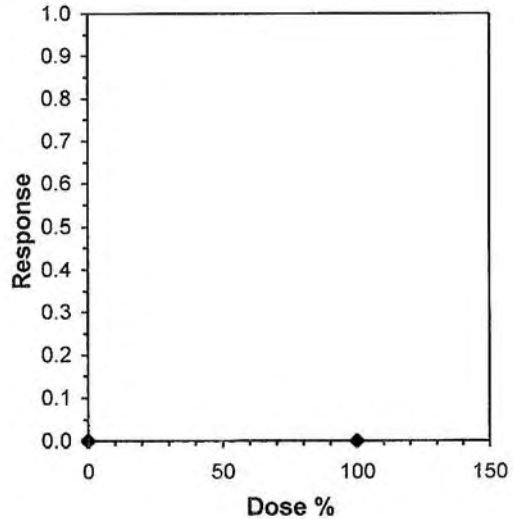
Conc-%	1	2	3	4	5	6	7	8	9	10
D-Control	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Conc-%	Mean	N-Mean	Resp	Not Resp	Total	N	Fisher's 1-Tailed		Isotonic	
							Exact P	Critical	Mean	N-Mean
D-Control	1.0000	1.0000	0	10	10	10			1.0000	1.0000
100	1.0000	1.0000	0	10	10	10	1.0000	0.0500	1.0000	1.0000

Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU
Fisher's Exact Test	100	>100		1
Treatments vs D-Control				

Linear Interpolation (200 Resamples)

Point	%	SD	95% CL	Skew
IC05	>100			
IC10	>100			
IC15	>100			
IC20	>100			
IC25	>100			
IC40	>100			
IC50	>100			



Ceriodaphnia Survival and Reproduction Test-Reproduction

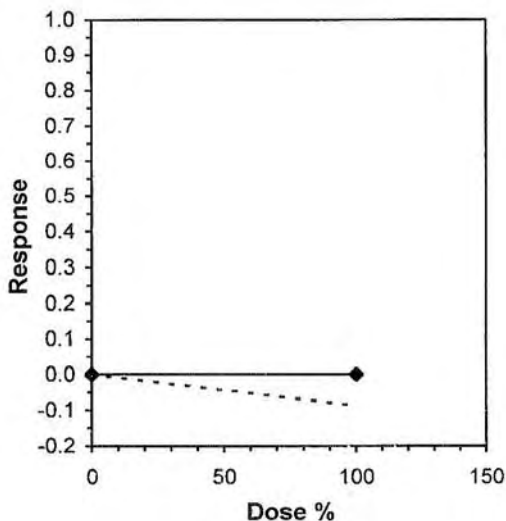
Start Date: 2/9/2010 15:00 Test ID: 10020804c Sample ID: ITB0896-01
 End Date: 2/16/2010 15:00 Lab ID: CAATL-Aquatic Testing Labs Sample Type: EFF2-Industrial
 Sample Date: 2/7/2010 11:43 Protocol: FWCH EPA Test Species: CD-Ceriodaphnia dubia
 Comments:

Conc-%	1	2	3	4	5	6	7	8	9	10
D-Control	23.000	23.000	30.000	27.000	31.000	26.000	31.000	32.000	23.000	25.000
100	31.000	31.000	29.000	27.000	27.000	32.000	31.000	28.000	31.000	28.000

Conc-%	Mean	N-Mean	Transform: Untransformed					N	t-Stat	1-Tailed Critical	MSD	Isotonic	
			Mean	Min	Max	CV%	Mean					N-Mean	
D-Control	27.100	1.0000	27.100	23.000	32.000	13.412	10				28.300	1.0000	
100	29.500	1.0886	29.500	27.000	32.000	6.442	10	-1.850	1.734	2.249	28.300	1.0000	

Auxiliary Tests	Statistic	Critical	Skew	Kurt		
Shapiro-Wilk's Test indicates normal distribution (p > 0.05)	0.94528	0.905	0.08923	-1.1203		
F-Test indicates equal variances (p = 0.07)	3.65846	6.54109				
Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences	2.24909	0.08299	28.8	8.41111	0.08074	1, 18

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



CERIODAPHNIA DUBIA CHRONIC BIOASSAY
EPA METHOD 1002.0 Raw Data Sheet



Lab No.: A-10020804-001

Client ID: TestAmerica - ITB0896-01 Outfall 011

Start Date: 02/09/2010

		DAY 1		DAY 2		DAY 3		DAY 4		DAY 5		DAY 6		DAY 7	
		0 hr	24hr	0 hr	24hr	0 hr	24hr	0 hr	24hr	0 hr	24hr	0 hr	24hr	0 hr	24hr
Analyst Initials:		Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
Time of Readings:		1500	1500	1500	1430	1430	1600	1600	1600	1600	1400	1400	1500	1500	1500
Control	DO	8.2	8.4	8.2	8.5	8.3	8.2	8.1	8.0	8.0	8.1	7.8	8.1	8.2	8.2
	pH	7.8	7.6	7.7	7.6	7.7	7.6	7.7	7.8	7.6	7.8	7.5	7.8	7.8	7.9
	Temp	25.6	25.6	24.4	25.7	25.7	25.7	25.4	25.8	25.9	25.1	25.6	25.2	25.1	24.3
100%	DO	9.4	7.9	10.7	8.1	10.6	8.1	10.0	8.2	9.8	8.2	10.1	8.3	10.2	8.2
	pH	7.7	7.4	7.2	7.3	7.1	7.4	7.3	7.3	7.4	7.3	7.1	7.4	7.4	7.4
	Temp	24.5	25.3	24.8	25.5	25.7	25.7	25.0	25.9	25.4	25.2	25.0	25.2	25.0	24.4

Additional Parameters		Control	100% Sample
Conductivity (umohms)		349	142
Alkalinity (mg/l CaCO ₃)		67	43
Hardness (mg/l CaCO ₃)		90	64
Ammonia (mg/l NH ₃ -N)		20.1	0.1

Source of Neonates											
Replicate:	A	B	C	D	E	F	G	H	I	J	
Brood ID:	6A	5D	6D	4E	4F	5F	6F	4G	5G	6G	

Sample	Day	Number of Young Produced										Total Live Young	No. Live Adults	Analyst Initials
		A	B	C	D	E	F	G	H	I	J			
Control	1	0	0	0	0	0	0	0	0	0	0	0	10	Rm
	2	0	0	0	0	0	0	0	0	0	0	0	10	Rm
	3	3	0	0	0	0	0	4	0	0	0	47	10	Rm
	4	0	4	5	5	4	4	0	5	4	4	35	10	Rm
	5	6	7	10	9	8	7	9	11	0	0	67	10	Rm
	6	0	0	15	0	14	0	0	16	7	6	63	10	Rm
	7	14	12	0	13	0	15	18	0	12	15	99	10	Rm
	Total	23	23	30	27	31	26	31	32	23	25	268	10	Rm
100%	1	0	0	0	0	0	0	0	0	0	0	10	Rm	
	2	0	0	0	0	0	0	0	0	0	0	10	Rm	
	3	4	5	5	4	5	4	0	0	0	27	10	Rm	
	4	0	0	8	0	0	0	3	4	5	3	23	10	Rm
	5	13	10	0	8	7	12	15	9	14	10	98	10	Rm
	6	14	16	0	0	15	16	0	15	12	15	103	10	Rm
	7	0	15	16	15	12	15	13	16	10	0	44	10	Rm
	Total	31	31	29	27	27	32	31	28	31	28	295	10	Rm

Circled fourth brood not used in statistical analysis.

7th day only used if <60% of the surviving control females have produced their third brood.

SUBCONTRACT ORDER

TestAmerica Irvine

ITB0896

SENDING LABORATORY:

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

RECEIVING LABORATORY:

Aquatic Testing Laboratories-SUB
4350 Transport Street, Unit 107
Ventura, CA 93003
Phone : (805) 650-0546
Fax: (805) 650-0756
Project Location: CA - CALIFORNIA
Receipt Temperature: 13 °C Ice: Y / N

Standard TAT is requested unless specific due date is requested. => Due Date: _____ Initials: _____

Analysis	Units	Expires	Comments
Sample ID: ITB0896-01 (Outfall ¹¹ 001 - Water)			
Sampled: 02/07/10 11:43			
Bioassay - Acute 96hr	% Survival	02/08/10 23:43	FH minnow, EPA/821-R02-012, Sub to Aquatic Testing
Level 4 Data Package	N/A	03/07/10 11:43	<i>eric ch</i>
Containers Supplied: 1 gal Poly (AB)			

[Signature] 2/8/10 0730
Released By _____ Date/Time
[Signature] 2/8/10 1200
Released By _____ Date/Time

[Signature] 2/8/10 0730
Received By _____ Date/Time
[Signature] 2-8-10 1200
Received By _____ Date/Time



Ceriodaphnia dubia
Chronic Toxicity Test
Reference
Toxicant
Data

CERIODAPHNIA CHRONIC BIOASSAY
EPA METHOD 1002.0
REFERENCE TOXICANT - NaCl



QA/QC Batch No.: RT-100207

Date Tested: 02/07/10 to 02/14/10

TEST SUMMARY

Test type: Daily static-renewal.
 Species: *Ceriodaphnia dubia*.
 Age: < 24 hrs; all released within 8 hrs.
 Test vessel size: 30 ml.
 Number of test organisms per vessel: 1.
 Temperature: 25 +/- 1°C.
 Dilution water: Mod. hard reconstituted (MHRW).
 Reference Toxicant: Sodium chloride (NaCl).

Endpoints: Survival and Reproduction.
 Source: In-laboratory culture.
 Food: .1 ml YTC, algae per day.
 Test solution volume: 20 ml.
 Number of replicates: 10.
 Photoperiod: 16/8 hrs. light/dark cycle.
 Test duration: 7 days.
 Statistics: ToxCalc computer program.

RESULTS SUMMARY

Sample Concentration	Percent Survival		Mean Number of Young Per Female	
Control	100%		28.5	
0.25 g/l	100%		30.9	
0.5 g/l	100%		25.5	
1.0 g/l	100%		15.4	*
2.0 g/l	100%		2.9	*
4.0 g/l	0%	*	0	**

* Statistically significantly less than control at P = 0.05 level
 ** Reproduction data from concentrations greater than survival NCEC are excluded from statistical analysis.

CHRONIC TOXICITY

Survival LC50	2.8 g/l
Reproduction IC25	0.66 g/l

QA/QC TEST ACCEPTABILITY

Parameter	Result
Control survival ≥ 80%	Pass (100% Survival)
≥ 15 young per surviving control female	Pass (28.5 young)
≥ 60% surviving controls had 3 broods	Pass (100% with 3 broods)
PMSD < 47% for reproduction	Pass (PMSD = 14.7%)
Stat. sig. diff. conc. relative difference > 13%	Pass (Stat. sig. diff. conc. Relative difference = 46.0%)
Concentration response relationship acceptable	Pass (Response curve normal)

Ceriodaphnia Survival and Reproduction Test-7 Day Survival

Start Date: 2/7/2010 15:00 Test ID: RT100207c Sample ID: REF-Ref Toxicant
 End Date: 2/14/2010 14:00 Lab ID: CAATL-Aquatic Testing Labs Sample Type: NACL-Sodium chloride
 Sample Date: 2/7/2010 Protocol: FWCH EPA Test Species: CD-Ceriodaphnia dubia
 Comments:

Conc-gm/L	1	2	3	4	5	6	7	8	9	10
D-Control	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.25	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.5	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

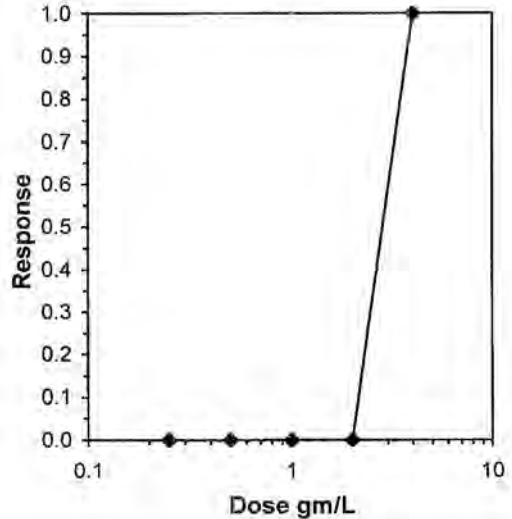
Conc-gm/L	Mean	N-Mean	Resp	Not Resp	Total	N	Fisher's Exact P	1-Tailed Critical	Number Resp	Total Number
D-Control	1.0000	1.0000	0	10	10	10			0	10
0.25	1.0000	1.0000	0	10	10	10	1.0000	0.0500	0	10
0.5	1.0000	1.0000	0	10	10	10	1.0000	0.0500	0	10
1	1.0000	1.0000	0	10	10	10	1.0000	0.0500	0	10
2	1.0000	1.0000	0	10	10	10	1.0000	0.0500	0	10
4	0.0000	0.0000	10	0	10	10			10	10

Hypothesis Test (1-tail, 0.05) **NOEC** **LOEC** **ChV** **TU**
 Fisher's Exact Test 2 4 2.82843
 Treatments vs D-Control

Graphical Method

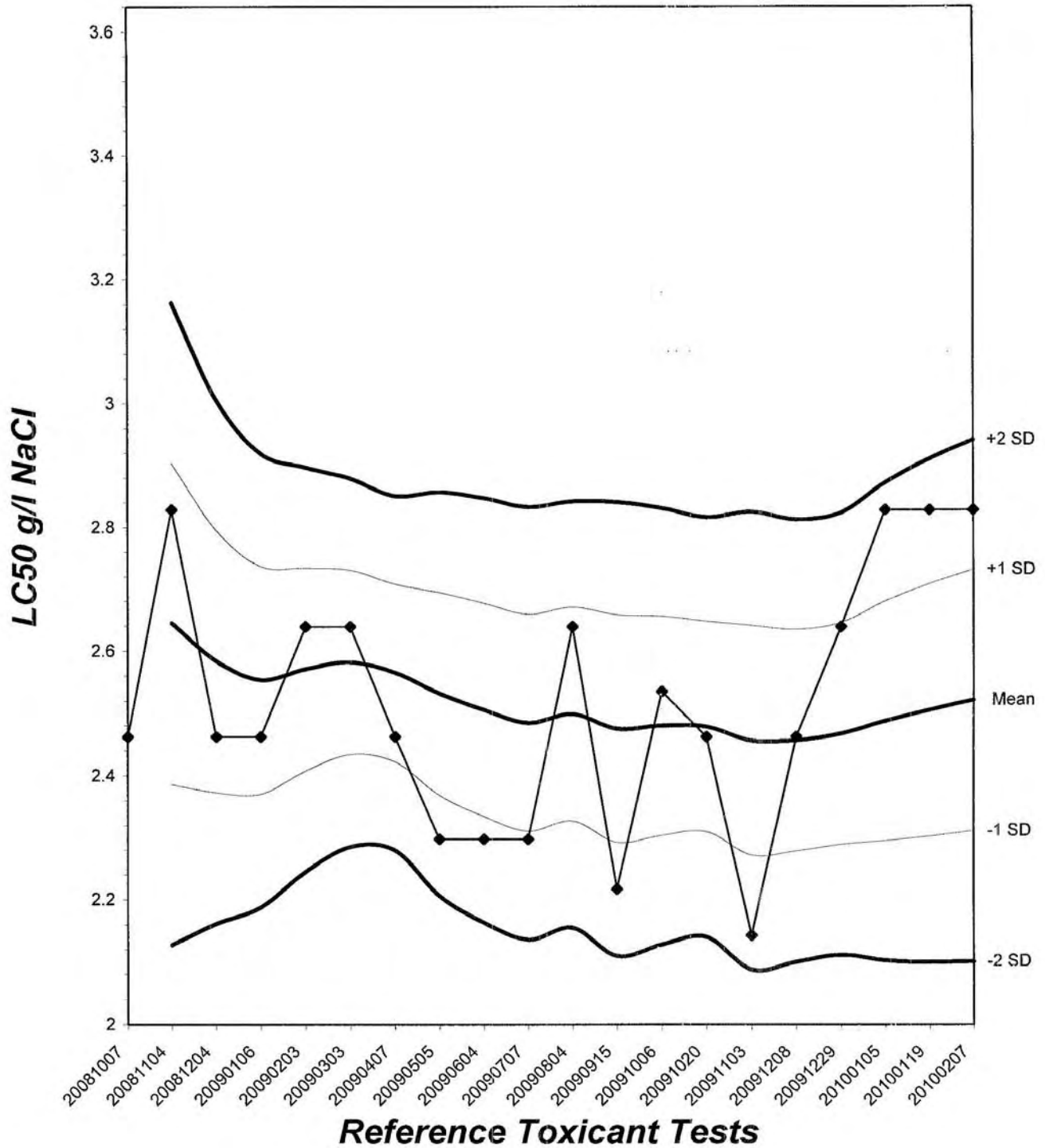
Trim Level **EC50**
 0.0% 2.8284

2.8284



Ceriodaphnia Chronic Survival Laboratory Control Chart

CV% = 8.34



Ceriodaphnia Survival and Reproduction Test-Reproduction

Start Date: 2/7/2010 15:00 Test ID: RT100207c Sample ID: REF-Ref Toxicant
 End Date: 2/14/2010 14:00 Lab ID: CAATL-Aquatic Testing Labs Sample Type: NACL-Sodium chloride
 Sample Date: 2/7/2010 Protocol: FWCH EPA Test Species: CD-Ceriodaphnia dubia
 Comments:

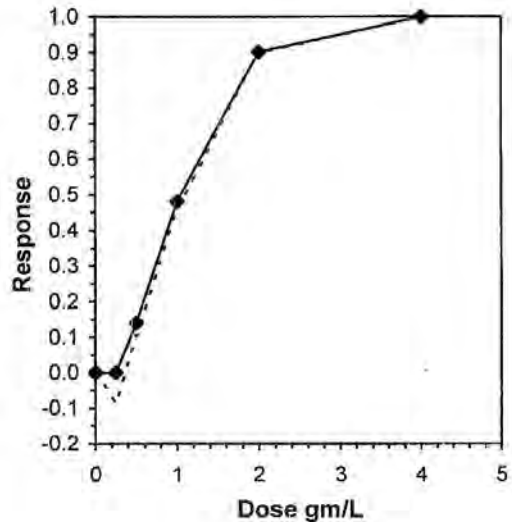
Conc-gm/L	1	2	3	4	5	6	7	8	9	10
D-Control	30.000	29.000	30.000	32.000	29.000	30.000	30.000	25.000	26.000	24.000
0.25	48.000	29.000	31.000	31.000	27.000	27.000	28.000	36.000	25.000	27.000
0.5	27.000	26.000	26.000	28.000	25.000	25.000	30.000	25.000	18.000	25.000
1	24.000	13.000	15.000	19.000	24.000	13.000	11.000	13.000	11.000	11.000
2	3.000	3.000	2.000	3.000	2.000	3.000	4.000	4.000	2.000	3.000
4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Conc-gm/L	Transform: Untransformed							Rank Sum	1-Tailed Critical	Isotonic	
	Mean	N-Mean	Mean	Min	Max	CV%	N			Mean	N-Mean
D-Control	28.500	1.0000	28.500	24.000	32.000	9.097	10			29.700	1.0000
0.25	30.900	1.0842	30.900	25.000	48.000	21.867	10	110.50	76.00	29.700	1.0000
0.5	25.500	0.8947	25.500	18.000	30.000	12.158	10	79.00	76.00	25.500	0.8586
*1	15.400	0.5404	15.400	11.000	24.000	33.280	10	56.00	76.00	15.400	0.5185
*2	2.900	0.1018	2.900	2.000	4.000	25.444	10	55.00	76.00	2.900	0.0976
4	0.000	0.0000	0.000	0.000	0.000	0.000	10			0.000	0.0000

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.05)	0.87968	0.947	1.72192	5.90298
Bartlett's Test indicates unequal variances (p = 1.75E-06)	32.1843	13.2767		
Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU
Steel's Many-One Rank Test	0.5	1	0.70711	
Treatments vs D-Control				

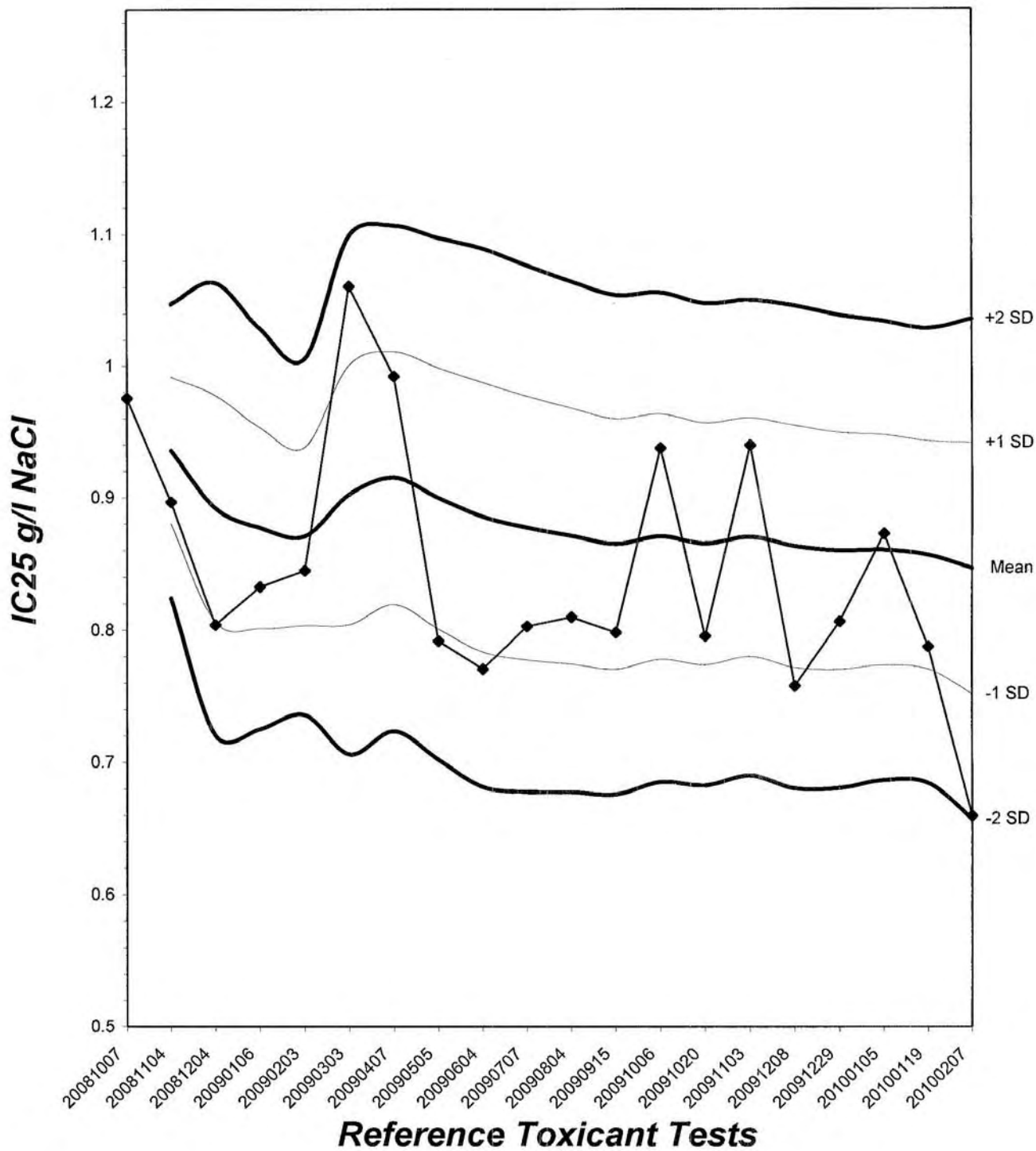
Linear Interpolation (200 Resamples)

Point	gm/L	SD	95% CL		Skew
IC05	0.3384	0.0442	0.2691	0.4525	0.4001
IC10	0.4268	0.0548	0.3537	0.5444	0.4118
IC15	0.5126	0.0553	0.4160	0.6069	0.0105
IC20	0.5861	0.0571	0.4714	0.6748	-0.2745
IC25	0.6597	0.0572	0.5402	0.7608	-0.3338
IC40	0.8802	0.0645	0.7629	1.0101	0.4008
IC50	1.0440	0.0882	0.8903	1.2112	0.2244



Ceriodaphnia Chronic Reproduction Laboratory Control Chart

CV% = 11.2



CERIODAPHNIA DUBIA CHRONIC BIOASSAY

Reference Toxicant - NaCl

Reproduction and Survival Raw Data Sheet



QA/QC No.: RT-100207

Start Date: 02/07/2010

Sample	Day	Number of Young Produced										Total Live Young	No. Live Adults	Analyst Initials
		A	B	C	D	E	F	G	H	I	J			
Control	1	0	0	0	0	0	0	0	0	0	0	0	10	R
	2	0	0	0	0	0	0	0	0	0	0	0	10	R
	3	5	0	4	4	3	4	4	4	3	4	35	10	R
	4	0	5	0	0	0	9	10	7	9	9	49	10	R
	5	8	8	12	11	10	0	16	14	14	11	104	10	R
	6	0	0	0	0	0	17	17	15	17	12	17	10	R
	7	17	16	14	17	16	15	0	0	0	0	80	10	R
	Total	30	29	30	32	29	30	30	25	26	24	285	10	R
0.25 g/l	1	0	0	0	0	0	0	0	0	0	0	10	R	
	2	0	0	0	0	0	0	0	0	0	0	10	R	
	3	0	4	4	4	5	3	4	0	4	3	31	10	R
	4	0	0	0	0	9	8	11	10	9	0	47	10	R
	5	11	8	8	10	13	0	13	11	12	8	94	10	R
	6	18	17	19	17	15	16	13	0	17	16	103	10	R
	7	19	0	17	16	0	17	0	15	0	15	34	10	R
	Total	38	29	31	31	27	27	28	36	25	27	309	10	R
0.5 g/l	1	0	0	0	0	0	0	0	0	0	0	10	R	
	2	0	0	0	0	0	0	0	0	0	0	10	R	
	3	2	0	3	0	3	3	0	0	4	3	18	10	R
	4	0	4	4	2	5	0	6	4	6	5	36	10	R
	5	7	5	0	0	0	7	8	6	8	0	41	10	R
	6	18	17	19	12	17	0	16	0	0	0	99	10	R
	7	0	0	0	14	16	15	0	15	14	17	61	10	R
	Total	27	26	26	28	25	25	30	25	18	25	255	10	R

Circled fourth brood not used in statistical analysis.

7th day only used if <60% of the surviving control females have produced their third brood.

CERIODAPHNIA DUBIA CHRONIC BIOASSAY

Reference Toxicant - NaCl

Reproduction and Survival Raw Data Sheet



QA/QC No.: RT-100207

Start Date: 02/07/2010

Sample	Day	Number of Young Produced										Total Live Young	No. Live Adults	Analyst Initials
		A	B	C	D	E	F	G	H	I	J			
1.0 g/l	1	0	0	0	0	0	0	0	0	0	0	0	10	L
	2	0	0	0	0	0	0	0	0	0	0	0	10	
	3	3 0	0	2	3	3	0	0	2	2	0	15	10	
	4	0	2	5	2	4	0	0	3	3	0	19	10	
	5	5	4	0	0	0	0	4	0	0	0	19	10	
	6	0	0	0	14	17	0	0	0	0	4	35	10	
	7	16	7	8	0	0	2	7	8	6	7	66	10	
	Total	24	13	15	19	24	13	11	13	11	11	154	10	
2.0 g/l	1	0	0	0	0	0	0	0	0	0	0	10	L	
	2	0	0	0	0	0	0	0	0	0	0	10		
	3	0	0	0	0	0	0	0	0	0	0	10		
	4	0	0	0	0	0	0	0	0	0	0	10		
	5	0	0	0	0	0	0	0	0	0	0	10		
	6	0	0	2	0	0	0	0	3	0	0	5		10
	7	3	3	0	3	2	3	4	1	2	3	24		10
	Total	3	3	2	3	2	3	4	4	2	3	29		10
4.0 g/l	1	0	0	0	0	X	X	X	X	X	0	0	L	
	2	-	-	-	-	-	-	-	-	-	-	-		
	3	-	-	-	-	-	-	-	-	-	-	-		
	4	-	-	-	-	-	-	-	-	-	-	-		
	5	-	-	-	-	-	-	-	-	-	-	-		
	6	-	-	-	-	-	-	-	-	-	-	-		
	7	-	-	-	-	-	-	-	-	-	-	-		
	Total	0	0	0	0	0	0	0	0	0	0	0		0

Circled fourth brood not used in statistical analysis.

7th day only used if <60% of the surviving control females have produced their third brood.

CARIODAPHNIA DUBIA CHRONIC BIOASSAY

Reference Toxicant - NaCl Water Chemistries Raw Data Sheet



QA/QC No.: RT-100207

Start Date: 02/07/2010

		DAY 1		DAY 2		DAY 3		DAY 4		DAY 5		DAY 6		DAY 7	
		Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final
Analyst Initials:		[Signature]		[Signature]		[Signature]		[Signature]		[Signature]		[Signature]		[Signature]	
Time of Readings:		1500	1430	1430	1500	1500	1400	1400	1400	1500	1500	1600	1600	1600	1400
Control	DO	8.3	8.3	8.1	8.4	8.2	8.3	8.3	8.2	8.4	8.2	8.1	7.9	8.0	8.0
	pH	7.7	8.0	8.2	8.0	8.0	7.8	8.0	7.8	7.7	7.7	7.7	7.8	7.5	7.6
	Temp	24.3	24.2	24.7	25.0	25.7	25.1	24.4	24.0	25.7	24.8	25.4	25.2	25.9	24.5
0.25 g/l	DO	8.4	8.4	8.2	8.4	8.2	8.3	8.3	8.2	8.4	8.2	8.1	8.0	8.0	7.9
	pH	8.0	7.8	8.0	8.0	8.0	7.8	8.0	7.8	7.7	7.7	7.7	7.8	7.5	7.5
	Temp	24.4	24.2	24.6	25.1	25.8	25.2	24.5	24.2	25.7	24.9	25.4	25.3	25.9	25.0
0.5 g/l	DO	8.2	8.3	8.2	8.3	8.2	8.3	8.3	8.1	8.4	8.2	8.1	8.0	8.0	8.1
	pH	7.9	7.8	7.8	8.0	8.1	7.8	7.8	7.8	7.7	7.7	7.7	7.8	7.6	7.5
	Temp	24.4	24.6	24.4	25.2	25.8	25.4	24.5	24.2	25.7	25.0	25.5	25.4	25.8	24.7
1.0 g/l	DO	8.3	8.4	8.4	8.3	8.3	8.2	8.3	8.1	8.3	8.3	8.2	7.9	8.0	8.0
	pH	7.9	7.8	7.8	8.0	8.1	7.8	7.8	7.8	7.7	7.7	7.7	7.8	7.6	7.6
	Temp	24.4	24.6	24.5	25.2	25.9	25.4	24.6	24.1	25.8	25.0	25.6	25.4	25.8	24.4
2.0 g/l	DO	8.2	8.0	8.4	8.5	8.3	8.2	8.3	8.1	8.3	8.3	8.2	8.1	8.0	8.3
	pH	7.9	7.8	7.7	8.0	8.1	7.8	7.8	7.8	7.7	7.7	7.8	7.8	7.7	7.6
	Temp	24.6	24.8	24.5	25.2	26.0	25.3	24.8	24.1	25.9	25.1	25.8	25.3	25.6	24.7
4.0 g/l	DO	8.3	8.0	-	-	-	-	-	-	-	-	-	-	-	-
	pH	8.1	7.7	-	-	-	-	-	-	-	-	-	-	-	-
	Temp	24.5	25.1	-	-	-	-	-	-	-	-	-	-	-	-

Dissolved Oxygen (DO) readings are in mg/l O₂; Temperature (Temp) readings are in °C.

Additional Parameters	Control			High Concentration		
	Day 1	Day 3	Day 5	Day 1	Day 3	Day 5
Conductivity (µS)	349	335	341	6240	3390	3510
Alkalinity (mg/l CaCO ₃)	67	68	67	67	68	68
Hardness (mg/l CaCO ₃)	90	93	92	90	92	92

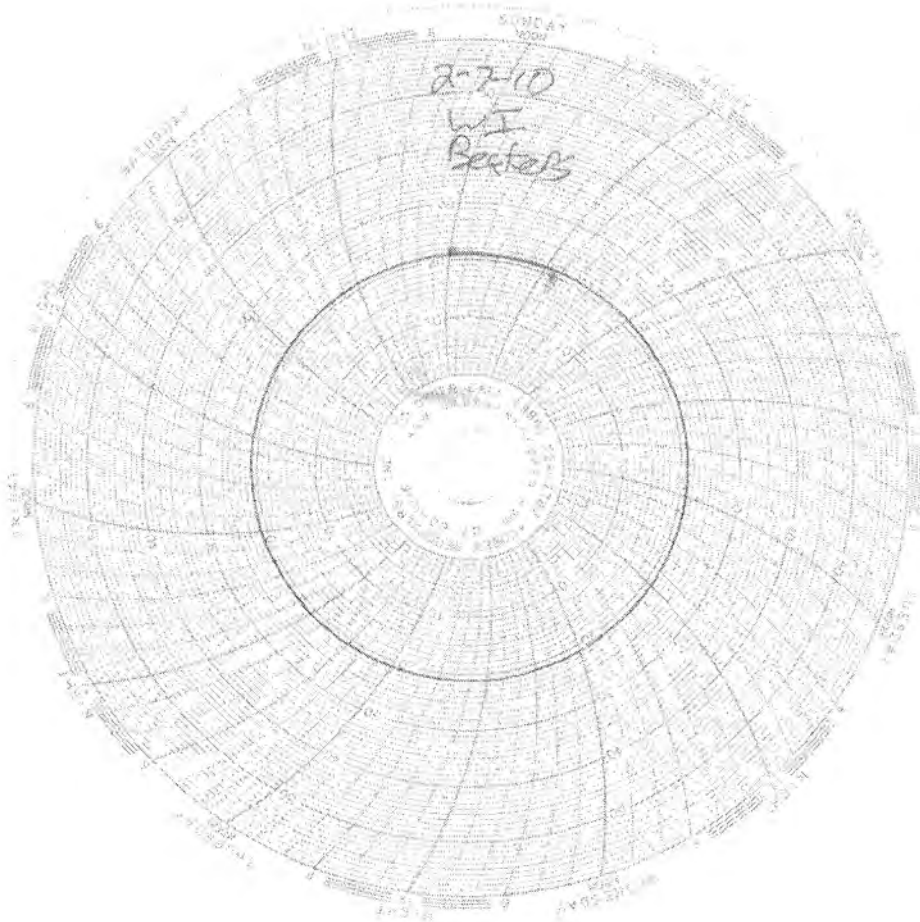
Source of Neonates										
Replicate:	A	B	C	D	E	F	G	H	I	J
Brood ID:	3A	3B	2C	2D	1E	1F	3G	2H	3I	1J

Test Temperature Chart

Test No: RT-100207

Date Tested: 02/07/10 to 02/14/10

Acceptable Range: 25+/- 1°C



LABORATORY REPORT



"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

Date: February 11, 2010
Client: Test America – Irvine
17461 Derian Ave., Suite 100
Irvine, CA 92614
Attn: Joseph Doak

Laboratory No.: A-10020706-001
Sample ID.: ITB0891-01

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

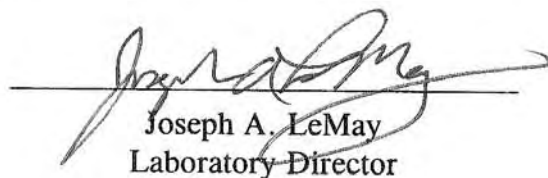
Date Sampled: 02/06/10
Date Received: 02/07/10
Temp. Received: 3.1°C
Chlorine (TRC): 0.0 mg/l
Date Tested: 02/07/10 to 02/11/10

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:

<u>Sample ID.</u>	<u>Results</u>
ITB0891-01	100% Survival (TU _a = 0.0)

Quality Control: Reviewed and approved by:



Joseph A. LeMay
Laboratory Director

FATHEAD MINNOW PERCENT SURVIVAL TEST
EPA Method 2000.0



Lab No.: A-10020706-001

Client/ID: TestAmerica ITB0891-01 Outfall 011

Start Date: 02/07/2010

TEST SUMMARY

Species: *Pimephales promelas*.

Age: 12 (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-100202.

TEST DATA

		°C	DO	pH	# Dead		Analyst & Time of Readings
					A	B	
INITIAL	Control	20.1	8.5	7.7	0	0	JM 1400
	100%	19.6	9.6	7.5	0	0	
24 Hr	Control	19.4	8.1	8.0	0	0	Z 1200
	100%	19.3	8.8	7.9	0	0	
48 Hr	Control	19.3	8.1	7.9	0	0	Rv 1300
	100%	19.1	8.2	8.0	0	0	
Renewal	Control	19.8	9.0	8.0	0	0	Rv 1300
	100%	20.5	9.3	7.3	0	0	
72 Hr	Control	19.4	7.1	7.5	0	0	Rv 1500
	100%	19.0	7.0	7.6	0	0	
96 Hr	Control	19.1	8.2	7.7	0	0	Rv 1400
	100%	19.1	7.5	7.4	0	0	

Comments:

Sample as received: Chlorine: 0.0 mg/l; pH: 7.5; Conductivity: 139 umho; Temp: 3.1°C;

DO: 9.6 mg/l; Alkalinity: 43 mg/l; Hardness: 57 mg/l; NH₃-N: <0.1 mg/l.

Sample aerated moderately (approx. 500 ml/min) to raise or lower DO? Yes / No.

Control: Alkalinity: 71 mg/l; Hardness: 108 mg/l; Conductivity: 325 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: 100 % 100% Sample: 100 %

SUBCONTRACT ORDER

TestAmerica Irvine

ITB0891

SENDING LABORATORY:

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

RECEIVING LABORATORY:

Aquatic Testing Laboratories-SUB
4350 Transport Street, Unit 107
Ventura, CA 93003
Phone : (805) 650-0546
Fax: (805) 650-0756
Project Location: CA - CALIFORNIA
Receipt Temperature: 3-1 °C

Ice: Y N

Standard TAT is requested unless specific due date is requested. => Due Date: _____ Initials: _____

Analysis	Units	Expires	Comments
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Sample ID: ITB0891-01 (Outfall 011 (Grab) - Water)

Sampled: 02/06/10 14:45

Bioassay-Acute 96hr	% Survival	02/08/10 02:45	FH minnow, EPA/821-R02-012, Sub to Aquatic
---------------------	------------	----------------	--

Containers Supplied:

1 gal Poly (R)

~~Released By _____ Date/Time 2-7-10 9:05~~
~~Released By _____ Date/Time 2-7-10 11:00~~

Received By Del Date/Time 2-7-10 9:05
Received By [Signature] Date/Time 2-7-10 11:00



***REFERENCE
TOXICANT
DATA***

**FATHEAD MINNOW ACUTE
Method 2000.0
Reference Toxicant - SDS**



QA/QC Batch No.: RT-100202

TEST SUMMARY

Species: *Pimephales promelas*.

Age: 13 days old.

Regulations: NPDES.

Test chamber volume: 250 ml.

Feeding: Prior to renewal at 48 hrs.

Temperature: 20 +/- 1°C.

Number of replicates: 2.

Dilution water: MHSF.

Source: In-lab culture.

Test type: Static-Renewal.

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

Endpoints: LC50 at 96 hrs.

Test chamber: 600 ml beakers.

Aeration: None.

Number of organisms per chamber: 10.

Photoperiod: 16/8 hrs light/dark.

TEST DATA

Date/Time:	INITIAL			24 Hr					48 Hr				
	<u>2-2-10 1200</u>			<u>2-3-10 1300</u>					<u>2-4-10 1200</u>				
	<u>Rm</u>			<u>Rm</u>					<u>Rm</u>				
	°C	DO	pH	°C	DO	pH	# Dead		°C	DO	pH	# Dead	
A							B	A				B	
Control	<u>19.6</u>	<u>8.4</u>	<u>7.6</u>	<u>19.4</u>	<u>7.9</u>	<u>7.4</u>	<u>0</u>	<u>0</u>	<u>19.2</u>	<u>7.1</u>	<u>7.9</u>	<u>0</u>	<u>0</u>
1.0 mg/l	<u>19.6</u>	<u>8.5</u>	<u>7.6</u>	<u>19.2</u>	<u>8.0</u>	<u>7.4</u>	<u>0</u>	<u>0</u>	<u>19.2</u>	<u>7.3</u>	<u>7.7</u>	<u>0</u>	<u>0</u>
2.0 mg/l	<u>19.6</u>	<u>8.5</u>	<u>7.7</u>	<u>19.1</u>	<u>8.0</u>	<u>7.4</u>	<u>0</u>	<u>0</u>	<u>19.1</u>	<u>7.2</u>	<u>7.6</u>	<u>0</u>	<u>0</u>
4.0 mg/l	<u>19.6</u>	<u>8.5</u>	<u>7.7</u>	<u>19.1</u>	<u>7.6</u>	<u>7.4</u>	<u>0</u>	<u>0</u>	<u>19.1</u>	<u>7.2</u>	<u>7.6</u>	<u>0</u>	<u>0</u>
8.0 mg/l	<u>19.6</u>	<u>8.6</u>	<u>7.7</u>	<u>19.0</u>	<u>6.8</u>	<u>7.3</u>	<u>10</u>	<u>10</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>

Date/Time:	RENEWAL			72 Hr					96 Hr				
	<u>2-4-10 1200</u>			<u>2-5-10 1200</u>					<u>2-6-10 1130</u>				
	<u>Rm</u>			<u>Rm</u>					<u>Rm</u>				
	°C	DO	pH	°C	DO	pH	# Dead		°C	DO	pH	# Dead	
A							B	A				B	
Control	<u>19.5</u>	<u>8.8</u>	<u>7.8</u>	<u>19.5</u>	<u>7.4</u>	<u>7.4</u>	<u>0</u>	<u>0</u>	<u>20.6</u>	<u>6.3</u>	<u>7.4</u>	<u>0</u>	<u>0</u>
1.0 mg/l	<u>19.5</u>	<u>8.8</u>	<u>7.8</u>	<u>19.4</u>	<u>7.4</u>	<u>7.4</u>	<u>0</u>	<u>0</u>	<u>20.6</u>	<u>6.6</u>	<u>7.4</u>	<u>0</u>	<u>0</u>
2.0 mg/l	<u>19.5</u>	<u>8.9</u>	<u>7.8</u>	<u>19.2</u>	<u>7.4</u>	<u>7.4</u>	<u>0</u>	<u>0</u>	<u>20.6</u>	<u>6.5</u>	<u>7.4</u>	<u>0</u>	<u>0</u>
4.0 mg/l	<u>19.5</u>	<u>8.9</u>	<u>7.8</u>	<u>19.2</u>	<u>7.3</u>	<u>7.4</u>	<u>0</u>	<u>0</u>	<u>20.5</u>	<u>6.4</u>	<u>7.4</u>	<u>0</u>	<u>0</u>
8.0 mg/l	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>

Comments: Control: Alkalinity: 69 mg/l; Hardness: 94 mg/l; Conductivity: 330 umho.
 SDS: Alkalinity: 68 mg/l; Hardness: 94 mg/l; Conductivity: 333 umho.

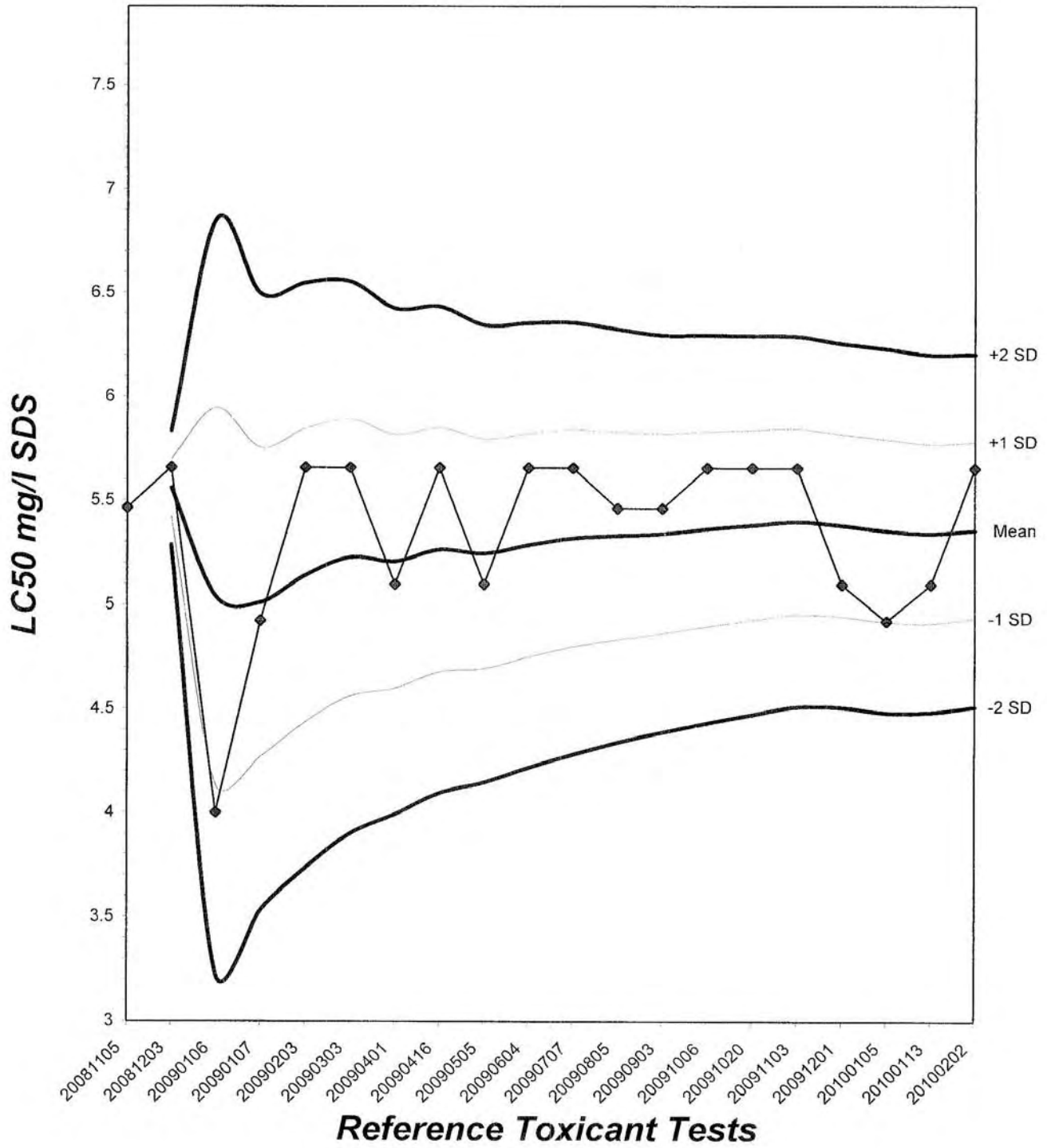
Concentration-response relationship acceptable? (see attached computer analysis):

Yes (response curve normal)

No (dose interrupted indicated or non-normal)

Fathead Minnow Acute Laboratory Control Chart

CV% = 7.91



TEST ORGANISM LOG



FATHEAD MINNOW - LARVAL (*Pimephales promelas*)

QA/QC BATCH NO.: RT-100202

SOURCE: In-Lab Culture

DATE HATCHED: 1-20-10

APPROXIMATE QUANTITY: 400

GENERAL APPEARANCE: good

MORTALITIES 48 HOURS PRIOR TO
TO USE IN TESTING: 0

DATE USED IN LAB: 1-15-10

AVERAGE FISH WEIGHT: 0.006 gm

LOADING LIMITS: 0.65 gm/liter @ 20°C, 0.40 gm/liter @ 25°C

Approximately 1000 fish per 10 liters limit if held overnight for acclimation without filtration @ 20°C for fish with a mean weight of 0.006 gm.

Approximately 650 fish per 10 liters limit if held overnight for acclimation without filtration @ 25°C for fish with a mean weight of 0.006 gm.

200 ml test solution volume = 0.013 gm mean fish weight limit @ 20°C; 0.008 @ 25°C

250 ml test solution volume = 0.016 gm mean fish weight limit @ 20°C; 0.010 @ 25°C

ACCLIMATION WATER QUALITY:

Temp.: 19.6°C

pH: 7.6

Ammonia: 20.1 mg/l NH₃-N

DO: 8.4 mg/l

Alkalinity: 69 mg/l

Hardness: 94 mg/l

READINGS RECORDED BY: _____

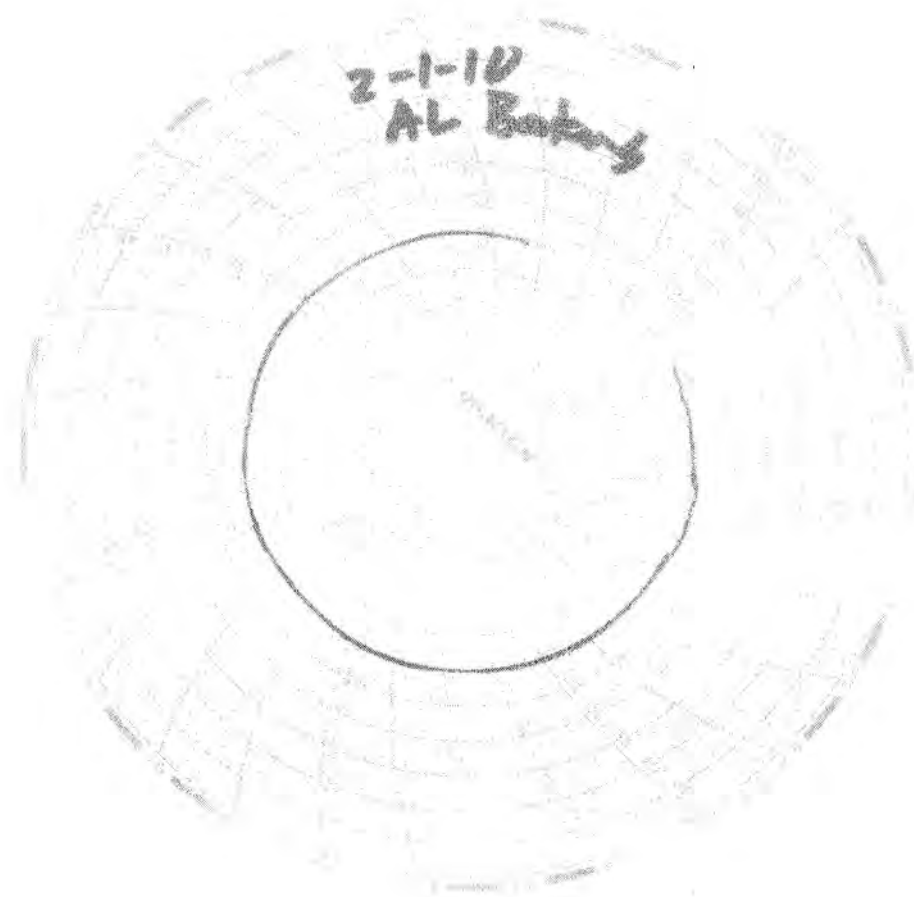
DATE: 2-3-10

Test Temperature Chart

Test No: RT-100202

Date Tested: 02/02/10 to 02/06/10

Acceptable Range: 20+/- 1°C



SUBCONTRACT ORDER
TestAmerica Irvine

ITB0896

987715

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:

Truesdail Laboratories-SUB
14201 Franklin Avenue
Tustin, CA 92680
Phone: (714) 730-6239
Fax: (714) 730-6462
Project Location: CA - CALIFORNIA
Receipt Temperature: _____ °C Ice: Y / N

Rec'd 02/08/10
s9b 987715

Standard TAT is requested unless specific due date is requested. => Due Date: _____ Initials: _____

Analysis	Units	Expires	Comments
Sample ID: ITB0896-01 (Outfall 001 - Water)			
		Sampled: 02/07/10 11:43	
Hydrazine-OUT	%	02/10/10 11:43	Sub Truesdail for Monomethylhydrazine, J flags
Level 4 Data Package - Out	N/A	03/07/10 11:43	
Containers Supplied:			
1 L Amber (AA)	1 L Amber (Z)		

For Sample Conditions
See Form Attached

ALERT !!
Level IV QC

Released By [Signature] 2/8/10 7:42
Date/Time 2/8/10 7:42
Released By _____
Date/Time _____

Received By [Signature] 2/8/10 7:00
Date/Time 2/8/10 7:42
Received By _____
Date/Time _____

TRUESDAIL LABORATORIES, INC.

EXCELLENCE IN INDEPENDENT TESTING



Established 1937

14201 FRANKLIN AVENUE - TUSTIN, CALIFORNIA 92780-7008
(714) 730-6239 - FAX (714) 730-6462 - www.truesdail.com

Client: Test America - Irvine
17461 Derian Avenue, Suite 100
Irvine, CA 92614-5817

REPORT

Attention: Joseph Doak
Sample: Water / 1 Sample
Project Name: ITB0896
Project Number: ITB0896
Method Number: EPA 8315 (Modified)
Investigation: Hydrazines

Laboratory No: 987715
Report Date: February 11, 2010
Sampling Date: February 7, 2010
Receiving Date: February 8, 2010
Extraction Date: February 8, 2010
Analysis Date: February 9, 2010
Units: µg/L
Reported By: JS

Analytical Results

Sample ID	Sample Description	Sample Amount (mL)	Dilution Factor	Monomethyl Hydrazine	u-Dimethyl Hydrazine	Hydrazine	Qualifier Codes
708690-MIB	Method Blank	100	1	ND	ND	ND	None
987715	ITB0896-01	100	1	ND	ND	ND	None
MDL				0.857	1.42	0.452	
PQL				5.0	5.0	1.00	
Sample Reporting Limits				5.0	5.0	1.00	

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

Linda Saetern, Project Manager
Analytical Services, Truesdail Laboratories, Inc.

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.

TRUESDAIL LABORATORIES, INC.

EXCELLENCE IN INDEPENDENT TESTING



Established 1931

Client: Test America - Irvine
17461 Derlan Avenue, Suite 100
Irvine, CA 92614-5817

14201 FRANKLIN AVENUE · TUSTIN, CALIFORNIA 92780-7008
(714) 730-6239 · FAX (714) 730-6462 · www.truesdail.com

Client Contact: Joseph Doak
Sample: Water / 1 Sample
Project Number: ITB0896
Method Number: EPA 8315 (Modified)
Investigation: Hydrazines
Run Batch No.: Extraction: 5138; Analysis: 678

QC Lab. No.: 708690
Project Lab. No.: 987715
Spiked Sample ID: 987712
Report Date: February 11, 2010
Sampling Date: February 7, 2010
Receiving Date: February 8, 2010
Extraction Date: February 8, 2010
Analysis Date: February 9, 2010
Reported By: JS

Quality Control/Quality Assurance Calibration Report

Parameter	Theoretical	Measured	Percent Recovery	Control Limits	Flag
	Value (ug/L)	Value (ug/L)			
Monomethyl Hydrazine	25.0	25.1	100	85-115	PASS
u-Dimethyl Hydrazine	25.0	25.7	103	85-115	PASS
Hydrazine	5.0	4.76	95.2	85-115	PASS

Parameter	Theoretical	Measured	Percent Recovery	Control Limits	Flag
	Value (ug/L)	Value (ug/L)			
Monomethyl Hydrazine	50.0	46.4	92.7	85-115	PASS
u-Dimethyl Hydrazine	50.0	48.0	96.0	85-115	PASS
Hydrazine	10.0	10.2	102	85-115	PASS

LCS/LCSD

Parameter	Spiked Conc.	Recovered Concentration	Percent Recovery (%)	LCS/LCSD RPD	Flag	Control Limits %D % Rec.
	ug/L	LCS LCSD MB				
Monomethyl Hydrazine	50.0	52.3 50.8	105	102	2.93% PASS	20 50-150
u-Dimethyl Hydrazine	50.0	53.4 51.6	107	103	3.30% PASS	20 50-150
Hydrazine	10.0	11.3 11.0	113	110	2.77% PASS	20 50-150

Quality Control/Quality Assurance Spikes Report

MS/MSD

Parameter	Recovered Concentration	Percent Recovery (%)	MS/MSD RPD	Flag	Control Limits %D % Rec.
	MSD Sample				
Monomethyl Hydrazine	41.5 40.8	83.0	81.7	1.55% PASS	20 50-150
u-Dimethyl Hydrazine	44.9 45.7	89.7	91.4	1.91% PASS	20 50-150
Hydrazine	10.3 10.7	103	107	3.33% PASS	20 50-150

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



Linda Saetern, Project Manager
Analytical Services, Truesdail Laboratories, Inc.

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.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

REVISED

PROJECT NO. ITB0896

MWH-Pasadena Boeing

Lot #: FOB090470

Joseph Doak

TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817

TESTAMERICA LABORATORIES, INC.


Kay Clay

Project Manager

March 17, 2010

Case Narrative
LOT NUMBER: F0B090470
Revised 03-17-10

This report contains the analytical results for the sample received under chain of custody by TestAmerica St. Louis on February 9, 2010. This sample is associated with your MWH-Pasadena Boeing project.

The analytical results included in this report meet all applicable quality control procedure requirements except as noted below.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by TestAmerica St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. **TestAmerica St. Louis' Florida certification number is E87689.** The case narrative is an integral part of this report.

This report shall not be reproduced, except in full, without the written approval of the laboratory.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Report revised to report the KPA uranium results in pCi/L.

Observations/Nonconformances

Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

Strontium 90 Method: 905 MOD

The Strontium carrier recovery is outside the lower control limit (40%). There was physical evidence of matrix interference apparent during the initial preparation of the sample. The QC samples associated with the batch have acceptable carrier recovery indicating the presence of matrix interference.

The Strontium 90 reporting limit not met due to reduced strontium carrier recovery. Analytical results are reported.

Affected Sample:

F0B090470 (1); ITB0896-01

Uranium KPA Method: 5174-91

Batch 0053280

The samples were analyzed at a dilution due to the presence of matrix interferences causing low sample lifetimes. The reporting limit has been adjusted for the dilution.

Affected Sample:

F0B090470 (1); ITB0896-01

WV
122

SUBCONTRACT ORDER
TestAmerica Irvine

FOB090470

ITB0896

SENDING LABORATORY:

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

RECEIVING LABORATORY:

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Phone: (314) 298-8566
Fax: (314) 298-8757
Project Location: CA - CALIFORNIA
Receipt Temperature: _____ °C Ice: Y / N

Analysis	Units	Due	Expires	Interlab Price	Surch	Comments
----------	-------	-----	---------	----------------	-------	----------

Sample ID: ITB0896-01 (Outfall 001 - Water)

Sampled: 02/07/10 11:43

Gamma Spec-O	mg/kg	02/17/10	02/07/11 11:43	\$200.00	50%	Out St Louis, k-40 and cs-137 only, DO NOT FILTER!
Gross Alpha-O	pCi/L	02/17/10	08/06/10 11:43	\$90.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Gross Beta-O	pCi/L	02/17/10	08/06/10 11:43	\$90.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Level 4 + EDD-OUT	N/A	02/17/10	03/07/10 11:43	\$0.00	0%	**LEVEL IV QC, ACCESS 7 EDD**
Radium, Combined-O	pCi/L	02/17/10	02/07/11 11:43	\$200.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Strontium 90-O	pCi/L	02/17/10	02/07/11 11:43	\$140.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Tritium-O	pCi/L	02/17/10	02/07/11 11:43	\$80.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Uranium, Combined-O	pCi/L	02/17/10	02/07/11 11:43	\$100.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!

Containers Supplied:

2.5 gal Poly (V) 500 mL Amber (W)

Lucrecia Fritos ^{2/8/10} 17:00
Released By Date/Time

FedEx ^{2/8/10 17:00}
Received By Date/Time

Released By Date/Time

Sue [Signature] ^{2-9-10 1100}
Received By Date/Time

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): FOB 090467, 461 485
470, 482 489
473, 484 491
475, 485 494
478, 486 495

CONDITION UPON RECEIPT FORM

Client: TA Irvine

Quote No: 77635, 95044

COC/RFA No: below

122

Initiated By: EV Date: 2-9-10 Time: 1100

Shipping Information

Shipper: FedEx UPS DHL Courier Client Other: _____ Multiple Packages: Y N

Shipping # (s):*		Sample Temperature (s):**	
1. <u>4289 2133 2309 MP</u>	6. _____	1. <u>ambient</u>	6. _____
2. _____	7. _____	2. _____	7. _____
3. _____	8. _____	3. _____	8. _____
4. _____	9. _____	4. _____	9. _____
5. _____	10. _____	5. _____	10. _____

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1. <input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on the cooler?	8. <input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on bottles?
2. <input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on cooler appear to be tampered with?	9. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Do custody seals on bottles appear to be tampered with?
3. <input checked="" type="radio"/> Y <input type="radio"/> N	Were contents of cooler frisked after opening, but before unpacking?	10. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Was sample received with proper pH? (If not, make note below)
4. <input checked="" type="radio"/> Y <input type="radio"/> N	Sample received with Chain of Custody?	11. <input checked="" type="radio"/> Y <input type="radio"/> N	Sample received in proper containers?
5. <input checked="" type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Does the Chain of Custody match sample ID's on the container(s)?	12. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)
6. <input type="radio"/> Y <input checked="" type="radio"/> N	Was sample received broken?	13. <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Was Internal COC/Workshare received?
7. <input checked="" type="radio"/> Y <input type="radio"/> N	Is sample volume sufficient for analysis?	14. <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Was pH taken by original TestAmerica lab?

¹ For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes: ITB0887 ITB0773

95	36	
88 SW 2.9.10	97	Revised chains were not relinquished for Boeing project.
94	98	
88	99	
92	0800	
86	0590	
85	0602	ITB0800 label time is 1315; c-o-c reads 1254
96		

Corrective Action:

Client Contact Name: _____ Informed by: _____
 Sample(s) processed "as is"
 Sample(s) on hold until: _____
 Project Management Review: Jaymah Pohl If released, notify: _____
 Date: 2-15-10

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

METHODS SUMMARY

FOB090470

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Gamma Spectroscopy - Cesium-137 & Hits	EPA 901.1 MOD	
Gross Alpha/Beta EPA 900	EPA 900.0 MOD	EPA 900.0
H-3 by Distillation & LSC	EPA 906.0 MOD	
Radium-226 by GFPC	EPA 903.0 MOD	
Radium-228 by GFPC	EPA 904 MOD	
Strontium 90 by GFPC	EPA 905 MOD	
Total Uranium By Laser Ph osphorimetry	ASTM 5174-91	

References:

ASTM Annual Book Of ASTM Standards.

EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984

SAMPLE SUMMARY

F0B090470

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LVF3G	001	ITB0896-01	02/07/10	11:43

NOTE(S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

TestAmerica Irvine

Client Sample ID: ITB0896-01

Radiochemistry

Lab Sample ID: FOB090470-001
 Work Order: LVF3G
 Matrix: WATER

Date Collected: 02/07/10 1143
 Date Received: 02/09/10 1100

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	mdc	Prep Date	Analysis Date
Gamma Cs-137 & Hits by EPA 901.1 MOD							
				pCi/L		Batch # 0042136	Yld %
Cesium 137	-2.9	U	9.0	20.0	16	02/11/10	02/19/10
Potassium 40	-100	U	43000		300	02/11/10	02/19/10
Gross Alpha/Beta EPA 900							
				pCi/L		Batch # 0043108	Yld %
Gross Alpha	2.00	J	0.88	3.00	0.93	02/10/10	02/18/10
Gross Beta	3.9	J	1.2	4.0	1.6	02/10/10	02/18/10
SR-90 BY GFPC EPA-905 MOD							
				pCi/L		Batch # 0041162	Yld % 7
Strontium 90	-2.0	U	2.3	3.0	4.3	02/10/10	02/19/10
TRITIUM (Distill) by EPA 906.0 MOD							
				pCi/L		Batch # 0049035	Yld %
Tritium	114	J	75	500	94	02/18/10	02/18/10
Total Uranium by KPA ASTM 5174-91							
				pCi/L		Batch # 0053280	Yld %
Total Uranium	0.566	J	0.068	1.39	0.43	02/23/10	02/26/10
Radium 226 by EPA 903.0 MOD							
				pCi/L		Batch # 0041160	Yld % 76
Radium (226)	0.10	U	0.12	1.00	0.20	02/10/10	02/26/10
Radium 228 by GFPC EPA 904 MOD							
				pCi/L		Batch # 0060257	Yld % 79
Radium 228	0.33	J	0.21	1.00	0.31	03/01/10	03/05/10

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
 Bold results are greater than the MDC.

J Result is greater than sample detection limit but less than stated reporting limit.

U Result is less than the sample detection limit.

METHOD BLANK REPORT

Radiochemistry

Client Lot ID: FOB090470
 Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDC	Prep Date	Lab Sample ID Analysis Date
Radium 228 by GFPC EPA 904 MOD							
Radium 228	0.08	U	0.23	1.00	0.39	03/01/10	FOC010000-257B
Radium 226 by EPA 903.0 MOD							
Radium (226)	0.092	U	0.095	1.00	0.14	02/10/10	FOB100000-160B
SR-90 BY GFPC EPA-905 MOD							
Strontium 90	-0.15	U	0.20	3.00	0.38	02/10/10	FOB100000-162B
Gamma Cs-137 & Hits by EPA 901.1 MOD							
Cesium 137	1.8	U	7.7	20.0	14	02/11/10	FOB110000-136B
Potassium 40	-80	U	620		210	02/11/10	02/19/10
Gross Alpha/Beta EPA 900							
Gross Alpha	-0.28	U	0.35	2.00	0.87	02/10/10	FOB120000-108B
Gross Beta	-0.23	U	0.62	4.00	1.1	02/10/10	02/19/10
TRITIUM (Distill) by EPA 906.0 MOD							
Tritium	165	J	85	500	95	02/18/10	FOB180000-035B
Total Uranium by KPA ASTM 5174-91							
Total Uranium	0.0460	U	0.0057	0.693	0.21	02/23/10	FOB220000-280B

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only

Bold results are greater than the MDC.

J Result is greater than sample detection limit but less than stated reporting limit.

Result is less than the sample detection limit.

Laboratory Control Sample Report

Radiochemistry

Client Lot ID: FOB090470
 Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 σ +/-)	MDC	% Yld	% Rec	Lab Sample ID QC Control Limits
Radium 226 by EPA 903.0 MOD			pCi/L	903.0 MOD			FOB100000-160C
Radium (226)	11.3	10.4	1.1	0.2	97	93	(68 - 136)
	Batch #:	0041160		Analysis Date:	02/26/10		
SR-90 BY GFPC EPA-905 MOD			pCi/L	905 MOD			FOB100000-162C
Strontium 90	6.80	6.82	0.77	0.34	83	100	(80 - 130)
	Batch #:	0041162		Analysis Date:	02/19/10		
Gamma Cs-137 & Hits by EPA 901.1 MOD			pCi/L	901.1 MOD			FOB110000-136C
Americium 241	141000	140000	11000	500		99	(87 - 110)
Cesium 137	53100	52900	3000	200		100	(90 - 110)
Cobalt 60	87900	88000	5000	200		100	(89 - 110)
	Batch #:	0042136		Analysis Date:	02/19/10		
Gross Alpha/Beta EPA 900			pCi/L	900.0 MOD			FOB120000-108C
Gross Beta	68.0	71.6	6.0	1		105	(58 - 133)
	Batch #:	0043108		Analysis Date:	02/19/10		
Gross Alpha/Beta EPA 900			pCi/L	900.0 MOD			FOB120000-108C
Gross Alpha	49.4	34.8	4.3	1.2		70	(62 - 134)
	Batch #:	0043108		Analysis Date:	02/19/10		
TRITIUM (Distill) by EPA 906.0 MOD			pCi/L	906.0 MOD			FOB180000-035C
Tritium	4530	4440	460	90		98	(85 - 112)
	Batch #:	0049035		Analysis Date:	02/18/10		
Total Uranium by KPA ASTM 5174-91			pCi/L	5174-91			FOB220000-280C
Total Uranium	27.7	30.2	3.6	0.2		109	(90 - 120)
	Batch #:	0053280		Analysis Date:	02/26/10		
Total Uranium by KPA ASTM 5174-91			pCi/L	5174-91			FOB220000-280C
Total Uranium	5.54	5.97	0.61	0.21		108	(90 - 120)
	Batch #:	0053280		Analysis Date:	02/26/10		

NOTE(S)

MDC is determined by instrument performance only

Laboratory Control Sample/LCS Duplicate Report

Radiochemistry

Client Lot ID: F08090470
 Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2σ+/-)	% Yld	% Rec	QC Control Limits	Lab Sample ID Precision
Radium 228 by GFPC EPA 904 MOD			pCi/L	904 MOD			F0C010000-257C
Radium 228	6.40	6.23	0.74	87	97	(60 - 142)	
Spk 2	6.40	6.35	0.77	84	99	(60 - 142)	2 %RPD
	Batch #: 0060257			Analysis Date: 03/05/10			

NOTE(S)

Calculations are performed before rounding to avoid round-off error in calculated results

MATRIX SPIKE REPORT

Radiochemistry

Client Lot Id: FOB090473
 Matrix: WATER

Date Sampled: 02/05/10
 Date Received: 02/09/10

Parameter	Spike Amount	Spike Result	Total Uncert. (2σ +/-)	Spike Yld.	Sample Result	Total Uncert. (2σ +/-)	QC Sample ID		QC Control Limits
							%YLD	%REC	
TRITIUM (Distill) by EPA 906.0 MOD			pCi/L	906.0 MOD			FOB090473-001		
Tritium	4530	4650	470		122	77		100	(62 - 147)
	Batch #:	0049035		Analysis Date:	02/18/10				
Gross Alpha/Beta EPA 900			pCi/L	900.0 MOD			FOB090470-001		
Gross Alpha	49.4	47.2	5.2		2.00	0.88		91	(35 - 150)
	Batch #:	0043108		Analysis Date:	02/18/10				
Gross Alpha/Beta EPA 900			pCi/L	900.0 MOD			FOB090470-001		
Gross Beta	68.0	79.0	6.6		3.9	1.2		110	(54 - 150)
	Batch #:	0043108		Analysis Date:	02/18/10				

NOTE (S)

Data are incomplete without the case narrative.

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE REPORT

Radiochemistry

Client Lot ID: FOB090470
 Matrix: WATER

Date Sampled: 02/07/10 1143
 Date Received: 02/09/10 1100

Parameter	Spike Amount	SPIKE Result	Total Uncert. (2σ +/-)	Spike Yld	SAMPLE Result	Total Uncert. (2σ +/-)	QC Sample ID		QC Control Limits
							% Yld	%Rec	
Total Uranium by KPA ASTM 5			pCi/L	5174-91			FOB090470-001		
Total Uranium	27.7	29.7	3.1		0.566 J	0.068		105	(62 - 150)
Spk2	27.7	30.0	3.1		0.566 J	0.068		106	(62 - 150)
						Precision:		1	%RPD
		Batch #: 0053280		Analysis date:	02/26/10				

NOTE(S)

Data are incomplete without the case narrative.

Calculations are performed before rounding to avoid round-off error in calculated results

DUPLICATE EVALUATION REPORT

Radiochemistry

Client Lot ID: FOB090470
 Matrix: WATER

Date Sampled: 02/05/10
 Date Received: 02/09/10

Parameter	SAMPLE		Total Uncert. (2σ+/-)	% Yld	DUPLICATE		Total Uncert. (2σ+/-)	% Yld	QC Sample ID	
	Result				Result				Precision	
Radium 226 by EPA 903.0 MOD					pCi/L	903.0 MOD			FOB090467-001	
Radium (226)	0.089	U	0.098	92	0.07	U	0.16	92	31	%RPD
	Batch #:		0041160	(Sample)	0041160	(Duplicate)				
Gamma Cs-137 & Hits by EPA 901.1 MOD					pCi/L	901.1 MOD			FOB090470-001	
Cesium 137	-2.9	U	9.0		1.2	U	7.8		479	%RPD
Potassium 40	-100	U	43000		-50	U	230		93	%RPD
	Batch #:		0042136	(Sample)	0042136	(Duplicate)				
Gross Alpha/Beta EPA 900					pCi/L	900.0 MOD			FOB090470-001	
Gross Alpha	2.00	J	0.88		0.84	U	0.66		82	%RPD
Gross Beta	3.9	J	1.2		3.2	J	1.1		20	%RPD
	Batch #:		0043108	(Sample)	0043108	(Duplicate)				
TRITIUM (Distill) by EPA 906.0 MOD					pCi/L	906.0 MOD			FOB090470-001	
Tritium	114	J	75		80	U	66		35	%RPD
	Batch #:		0049035	(Sample)	0049035	(Duplicate)				
SR-90 BY GFPC EPA-905 MOD					pCi/L	905 MOD			FOB090475-001	
Strontium 90	-0.05	U	0.23	72	-0.15	U	0.23	69	97	%RPD
	Batch #:		0041162	(Sample)	0041162	(Duplicate)				

NOTE(S)

Data are incomplete without the case narrative.

Calculations are performed before rounding to avoid round-off error in calculated results

J Result is greater than sample detection limit but less than stated reporting limit.

APPENDIX G

Section 60

Outfall 018 – January 18 & 19, 2010

MEC^X Data Validation Report

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DATA VALIDATION REPORT

Boeing SSFL NPDES

SAMPLE DELIVERY GROUP: ITA1331

Prepared by

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

I. INTRODUCTION

Task Order Title: Boeing SSFL NPDES
 Contract Task Order: 1261.100D.00
 Sample Delivery Group: ITA1331
 Project Manager: B. Kelly
 Matrix: Water
 QC Level: IV
 No. of Samples: 2
 No. of Reanalyses/Dilutions: 0
 Laboratory: TestAmerica-Irvine

Table 1. Sample Identification

Client ID	Laboratory ID	Sub-Laboratory ID	Matrix	Collected	Method
Outfall 018 (Comp)	ITA1331-03	F0A210540 -001, G0A210526	Water	1/19/2010 1:41:00 PM	ASTM 5174-91, 180.1, 200.7, 200.7 (Diss), 200.8, 200.8 (Diss), 245.1, 245.1 (Diss), 1613B, 900.0 MOD, 901.1 MOD, 903.0 MOD, 904 MOD, 905 MOD, 906.0 MOD
Outfall 018 (Grab)	ITA1331-01	N/A	Water	1/18/2010 4:00:00 PM	120.1

II. Sample Management

No anomalies were observed regarding sample management. The sample receipt temperature was not noted by TestAmerica-St Louis; however, due to the nonvolatile nature of the analytes, no qualifications were required. The samples in this SDG were received at the remaining laboratories within the temperature limits of 4°C ±2°C. According to the case narrative for this SDG, the samples were received intact, on ice, and properly preserved, if applicable. The COCs were appropriately signed and dated by field and/or laboratory personnel. Custody seals were present upon receipt at TestAmerica-West Sacramento and TestAmerica-St. Louis. As the samples were delivered to the remaining laboratories by courier, no custody seals were necessary. If necessary, the client ID was added to the sample result summary by the reviewer.

Data Qualifier Reference Table

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

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	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
C	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.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
\$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	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.
*II, *III	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: L. Calvin

Date Reviewed: February 25, 2010

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 (9/05)*.

- 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 analyzed with the initial calibration sequence and at the beginning of each analytical sequence. 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 $\leq 20\%$ for the 16 native compounds (calibration by isotope dilution) and $\leq 35\%$ 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 detects between the EDL and the RL for more than half of all compounds, including all of the HxCDD isomers and total HxCDD, 1,2,3,6,7,8-HpCDD and total HpCDD, OCDD, total HxCDF and all of the HxCDF isomers except 1,2,3,4,7,8-HxCDF, 1,2,3,4,6,7,8-HpCDF and total HpCDF, and OCDF. Any sample detects for individual target compound isomers present at concentrations less than five times the

method blank concentrations were qualified as nondetected, "U," at the RL. Several detects in the method blank did not meet ratio criteria and were reported as EMPCs; however, due to the extent of contamination present in the method blank, it was the reviewer's professional opinion that those results be utilized to qualify applicable sample results. Results for totals that included peaks meeting ratio criteria that were not present in the method blank were qualified as estimated, "J," as only a portion of the total was considered method blank contamination. Total HxCDF did not contain any of the same peaks as the method blank and was therefore not qualified. The concentration of 1,2,3,4,6,7,8-HpCDD in the method blank was insufficient to qualify the sample result or total HpCDD.

- Blank Spikes and Laboratory Control Samples: OPR 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 a representative number of reportable sample detects. The laboratory calculated and reported compound-specific detection limits. Any reported totals that included EMPCs were qualified as estimated, "J." Any detects between the estimated detection limit (EDL) and the reporting limit (RL) were qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES permit. Nondetects are valid to the EDL.

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

Reviewed By: P. Meeks

Date Reviewed: February 26, 2010

The sample listed in Table 1 for these analyses were 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 200.7, 200.8, 245.1, and the *National Functional Guidelines for Inorganic Data Review* (7/02).

- Holding Times: Analytical holding times, six months for ICP and ICP-MS metals and 28 days for mercury, were met.
- Tuning: The mass calibration and resolution checks criteria were met. All tuning solution %RSDs were $\leq 5\%$, 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 r^2 values were ≥ 0.995 and all initial and continuing calibration recoveries were within 90-110% for the ICP and ICP-MS metals and 85-115% for mercury. CRDL recoveries were within the control limits of 70-130%.
- Blanks: Method blanks and CCBs had no detects.
- Interference Check Samples: Recoveries were within the method- (6010B) or laboratory- (6020) established control limits. There were no target compounds present in the ICP ICSA solution at concentrations indicative of matrix interference. Most compounds were detected in the ICP-MS ICSA but the reviewer was not able to determine if the sample detects were due to matrix interference.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed on the sample in this SDG.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were performed for the ICP-MS analytes on the dissolved fraction. All recoveries and RPDs were within the method-established control limits. No MS/MSD analyses were performed on the sample for mercury; therefore, mercury, method accuracy was evaluated based on LCS results.
- Serial Dilution: No serial dilution analyses were performed on the sample in this SDG.
- Internal Standards Performance: All sample internal standard intensities were within 30-120% of the internal standard intensities measured in the initial calibration. All CCV and CCB internal standard intensities were within 80-120% of the internal standard intensities measured in the initial calibration. Copper was not bracketed by an internal standard of a lower mass; therefore, copper detected in the sample was qualified as estimated, "J."
- 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. When the sample results were qualified and the reviewer was able to clearly determine bias, detected results were qualified as either "J+" or "J-";

otherwise, bias was not indicated in the qualification. Any detects between the method detection limit 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 MDL.

Cadmium was detected marginally above the reporting limit in the dissolved fraction although it was not detected in the total fraction.

- 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. VARIOUS EPA METHODS — Radionuclides

Reviewed By: P. Meeks

Date Reviewed: February 26, 2010

The sample listed in Table 1 for these analyses was validated based on the guidelines outlined in the *EPA Methods 900.0, 901.1, 903.1, 904.0, 905.0, and 906.0, ASTM Method D-5174*, and the *National Functional Guidelines for Inorganic Data Review (7/02)*.

- Holding Times: The tritium sample was analyzed within 180 days of collection. The aliquot for total uranium was prepared one day beyond 3x the five-day holding time for unpreserved samples; therefore, total uranium detected in the sample was qualified as estimated, "J." Aliquots for gross alpha and gross beta were prepared beyond the five-day analytical holding time for unpreserved samples; therefore, the detected results for these analytes were qualified as estimated, "J." Aliquots for radium-226, radium-228, strontium-90, and gamma spectroscopy were prepared within the five-day holding time for unpreserved aqueous samples.
- Calibration: The laboratory calibration information included the standard certificates and applicable preparation/dilutions logs for NIST-traceability.

The gross alpha and radium-226 detector efficiencies were less than 20%; therefore, the results for these analytes were qualified as estimated, "J," for detects and, "UJ," for nondetects. The remaining detector efficiencies were greater than 20%.

The tritium aliquot was spiked for efficiency determination; therefore, no calibration was necessary. All chemical yields were at least 40% and were considered acceptable. The

gamma spectroscopy analytes were determined at the maximum photopeak energy. The kinetic phosphorescence analyzer (KPA) was calibrated immediately prior to the sample analysis. All KPA calibration check standard recoveries were within 90-110% and were deemed acceptable.

- Blanks: Tritium was detected in the method blank but was not detected in the site sample. There were no other analytes detected in the method blanks or KPA CCBs.
- Blank Spikes and Laboratory Control Samples: The recoveries and RPDs (radium-226, radium-228, strontium) were within laboratory-established control limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed on the sample in this SDG.
- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed for the sample in this SDG. Method accuracy was evaluated based on the LCS results.
- Sample Result Verification: An EPA Level IV review was performed for the sample in this data package. The sample results and MDAs reported on the sample result form were verified against the raw data and no calculation or transcription errors were noted. Any detects between the MDA 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 MDA.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.

D. VARIOUS EPA METHODS—General Minerals

Reviewed By: P. Meeks

Date Reviewed: February 26, 2010

The samples listed in Table 1 for these analysis were validated based on the guidelines outlined in the *MEC^x Data Validation Procedure for General Minerals (DVP-6, Rev. 0)*, *EPA Method 120.1 and 180.1*, and the *National Functional Guidelines for Inorganic Data Review (7/02)*.

- Holding Times: Analytical holding times were met.

- Calibration: Calibration criteria were met. The check standards recoveries were considered acceptable.
- Blanks: Method blanks had no detects.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed on the sample in this SDG.
- Matrix Spike/Matrix Spike Duplicate: Not applicable to these analyses.
- 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. Turbidity was analyzed at a 2x dilution in order to report the analyte within the linear range of the calibration. When the sample results were qualified and the reviewer was able to clearly determine bias, detected results were qualified as either "J+" or "J-"; otherwise, bias was not indicated in the qualification. Any detects between the method detection limit 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.
- 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.

Validated Sample Result Forms: ITA1331

Analysis Method *ASTM 5174-91*

Sample Name Outfall 018 (Comp) **Matrix Type:** WATER **Validation Level:** IV
Lab Sample Name: ITA1331-03 **Sample Date:** 1/19/2010 1:41:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Total Uranium	7440-61-1	0.289	0.693	0.21	pCi/L	Jb	J	H, DNQ

Analysis Method *EPA 120.1*

Sample Name Outfall 018 (Grab) **Matrix Type:** Water **Validation Level:** IV
Lab Sample Name: ITA1331-01 **Sample Date:** 1/18/2010 4:00:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Specific Conductance	NA	1100	1.0	1.0	umhos/c			

Analysis Method *EPA 180.1*

Sample Name Outfall 018 (Comp) **Matrix Type:** Water **Validation Level:** IV
Lab Sample Name: ITA1331-03 **Sample Date:** 1/19/2010 1:41:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Turbidity	Turb	47	2.0	0.080	NTU			

Analysis Method *EPA 200.7*

Sample Name Outfall 018 (Comp) **Matrix Type:** Water **Validation Level:** IV
Lab Sample Name: ITA1331-03 **Sample Date:** 1/19/2010 1:41:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Iron	7439-89-6	1.6	0.040	0.015	mg/l			

Analysis Method *EPA 200.7-Diss*

Sample Name Outfall 018 (Comp) **Matrix Type:** Water **Validation Level:** IV
Lab Sample Name: ITA1331-03 **Sample Date:** 1/19/2010 1:41:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Iron, dissolved	7439-89-6	0.026	0.040	0.015	mg/l	J	J	DNQ

Analysis Method EPA 200.8

Sample Name	Outfall 018 (Comp)	Matrix Type:	Water	Validation Level:	IV			
Lab Sample Name:	ITA1331-03	Sample Date:	1/19/2010 1:41:00 PM					
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Cadmium	7440-43-9	ND	1.0	0.10	ug/l		U	
Copper	7440-50-8	4.0	2.0	0.50	ug/l		J	*III
Lead	7439-92-1	1.5	1.0	0.20	ug/l			
Manganese	7439-96-5	140	1.0	0.70	ug/l			
Selenium	7782-49-2	ND	2.0	0.50	ug/l		U	
Zinc	7440-66-6	15	20	5.0	ug/l	J	J	DNQ

Analysis Method EPA 200.8-Diss

Sample Name	Outfall 018 (Comp)	Matrix Type:	Water	Validation Level:	IV			
Lab Sample Name:	ITA1331-03	Sample Date:	1/19/2010 1:41:00 PM					
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Cadmium, dissolved	7440-43-9	0.19	1.0	0.10	ug/l	J	J	DNQ
Copper, dissolved	7440-50-8	2.1	2.0	0.50	ug/l		J	*III
Lead, dissolved	7439-92-1	0.23	1.0	0.20	ug/l	J	J	DNQ
Manganese, dissolved	7439-96-5	53	1.0	0.70	ug/l			
Selenium, dissolved	7782-49-2	ND	2.0	0.50	ug/l		U	
Zinc, dissolved	7440-66-6	ND	20	5.0	ug/l		U	

Analysis Method EPA 245.1

Sample Name	Outfall 018 (Comp)	Matrix Type:	Water	Validation Level:	IV			
Lab Sample Name:	ITA1331-03	Sample Date:	1/19/2010 1:41:00 PM					
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Mercury	7439-97-6	ND	0.00020	0.00010	mg/l		U	

Analysis Method EPA 900.0 MOD

Sample Name	Outfall 018 (Comp)	Matrix Type:	WATER	Validation Level:	IV			
Lab Sample Name:	ITA1331-03	Sample Date:	1/19/2010 1:41:00 PM					
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Gross Alpha	12587-46-1	2.2	3	1.7	pCi/L	Jb	J	H, C, DNQ
Gross Beta	12587-47-2	6.8	4	1.7	pCi/L		J	H

Analysis Method EPA 901.1 MOD

Sample Name Outfall 018 (Comp) **Matrix Type:** WATER **Validation Level:** IV

Lab Sample Name: ITA1331-03 **Sample Date:** 1/19/2010 1:41:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Cesium 137	10045-97-3	0.2	20	12	pCi/L	U	U	
Potassium 40	13966-00-2	-90	0	240	pCi/L	U	U	

Analysis Method EPA 903.0 MOD

Sample Name Outfall 018 (Comp) **Matrix Type:** WATER **Validation Level:** IV

Lab Sample Name: ITA1331-03 **Sample Date:** 1/19/2010 1:41:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Radium (226)	13982-63-3	0.13	1	0.15	pCi/L	U	UJ	C

Analysis Method EPA 904 MOD

Sample Name Outfall 018 (Comp) **Matrix Type:** WATER **Validation Level:** IV

Lab Sample Name: ITA1331-03 **Sample Date:** 1/19/2010 1:41:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Radium 228	15262-20-1	0.13	1	0.69	pCi/L	U	U	

Analysis Method EPA 905 MOD

Sample Name Outfall 018 (Comp) **Matrix Type:** WATER **Validation Level:** IV

Lab Sample Name: ITA1331-03 **Sample Date:** 1/19/2010 1:41:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Strontium 90	10098-97-2	0.06	3	0.5	pCi/L	U	U	

Analysis Method EPA 906.0 MOD

Sample Name Outfall 018 (Comp) **Matrix Type:** WATER **Validation Level:** IV

Lab Sample Name: ITA1331-03 **Sample Date:** 1/19/2010 1:41:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Tritium	10028-17-8	118	500	140	pCi/L	U	U	

Analysis Method EPA-5 1613B

Sample Name Outfall 018 (Comp) **Matrix Type:** WATER **Validation Level:** IV
Lab Sample Name: ITA1331-03 **Sample Date:** 1/19/2010 1:41:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,2,3,4,6,7,8-HpCDD	35822-46-9	8e-005	0.000047	0.000006	ug/L	B		
1,2,3,4,6,7,8-HpCDF	67562-39-4	ND	0.000047	0.000003	ug/L	J, B	U	B
1,2,3,4,7,8,9-HpCDF	55673-89-7	ND	0.000047	0.000005	ug/L		U	
1,2,3,4,7,8-HxCDD	39227-28-6	ND	0.000047	0.000003	ug/L		U	
1,2,3,4,7,8-HxCDF	70648-26-9	ND	0.000047	0.000003	ug/L		U	
1,2,3,6,7,8-HxCDD	57653-85-7	ND	3.1e-006	0.000003	ug/L	J, Q, B	U	B
1,2,3,6,7,8-HxCDF	57117-44-9	ND	0.000047	0.000002	ug/L		U	
1,2,3,7,8,9-HxCDD	19408-74-3	ND	0.000047	0.000002	ug/L		U	
1,2,3,7,8,9-HxCDF	72918-21-9	ND	0.000047	0.000003	ug/L		U	
1,2,3,7,8-PeCDD	40321-76-4	ND	0.000047	0.000007	ug/L		U	
1,2,3,7,8-PeCDF	57117-41-6	ND	0.000047	0.000004	ug/L		U	
2,3,4,6,7,8-HxCDF	60851-34-5	ND	0.000047	0.000002	ug/L		U	
2,3,4,7,8-PeCDF	57117-31-4	ND	0.000047	0.000004	ug/L		U	
2,3,7,8-TCDD	1746-01-6	ND	0.0000094	0.000002	ug/L		U	
2,3,7,8-TCDF	51207-31-9	ND	0.0000094	0.000002	ug/L		U	
OCDD	3268-87-9	0.00096	0.000094	0.000016	ug/L	B		
OCDF	39001-02-0	ND	0.000094	0.000006	ug/L	J, B	U	B
Total HpCDD	37871-00-4	0.00016	0.000047	0.000006	ug/L	B		
Total HpCDF	38998-75-3	3.2e-005	0.000047	0.000003	ug/L	B	J	B, DNQ
Total HxCDD	34465-46-8	1.1e-005	1.1e-005	0.000002	ug/L	J, Q, B	J	B, *III, DNQ
Total HxCDF	55684-94-1	1.4e-006	1.4e-006	0.000002	ug/L	J, Q, B	J	*III, DNQ
Total PeCDD	36088-22-9	ND	0.000047	0.000007	ug/L		U	
Total PeCDF	30402-15-4	ND	0.000047	0.000003	ug/L		U	
Total TCDD	41903-57-5	ND	0.0000094	0.000002	ug/L		U	
Total TCDF	55722-27-5	ND	0.0000094	0.000002	ug/L		U	

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