

APPENDIX G

Section 31

Outfall 005, February 1, 2008

Test America Analytical Laboratory Report

LABORATORY REPORT

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

Project: Annual Outfall 005

Sampled: 02/01/08
Received: 02/01/08
Revised: 04/04/08 12:30

NELAP #01108CA California ELAP#1197 CSDLAC #10256

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

This entire report was reviewed and approved for release.

CASE NARRATIVE

SAMPLE RECEIPT: Samples were received intact, at 3°C, on ice and with chain of custody documentation.

HOLDING TIMES: Not all holding times were met. Results were qualified where the sample analysis did not occur within method specified holding time requirements.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis. Results were qualified where the sample container did not meet the method preservation requirements.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

Internal Standard recovery for sample IRB0073-01 was outside of method limits for Chlorpyrifos and Diazinon. The IS must be within 50% of the daily calibration verification. The extraction tower had a clog and could not properly pull the sample through the solid phase extraction disk causing the low internal standard recoveries. Sample reanalyzed outside of hold time for Diazinon.

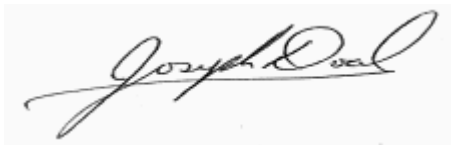
COMMENTS: Results that fall between the MDL and RL are 'J' flagged.

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

ADDITIONAL INFORMATION: This is a Revised Report to correct dilution factor for Chlorpyrifos and Diazinon from 4 to 2. Reprinting Limits and Method Detection Limits have been adjusted accordingly.

LABORATORY ID	CLIENT ID	MATRIX
IRB0073-01	Outfall 005	Water
IRB0073-02	Trip Blanks	Water

Reviewed By:



TestAmerica Irvine

Joseph Doak
Project Manager

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

CORRECTIVE ACTION REPORT

Department: GCMS-Volatiles

Date: 04/03/2008

Method: EPA 525.2

Matrix: Water

QC Batch: C8B1302

Identification and Definition of Problem:

The data for sample CRB0030-01RE1 was reported with a total dilution factor of 4 when the actual total dilution factor was only 2. The sample had Not Detected (ND) results for the analytes reported, but the Method Detection Limit (MDL) and the Reporting Limit (RL) were twice as high as they should have been.

Determination of the Cause of the Problem:

Based on matrix interference from a previous extraction of the sample, the analyst re-extracted the sample at an initial volume of 500 mL instead of the default 1000 mL, resulting in a dilution factor of 2. This was documented on the Sample Preparation Track Sheet, and the initial volume of 500 mL was entered into the Bench Sheet. When the analyst posted the analysis data into the Laboratory Information Management System (LIMS), he entered a dilution factor of 2 in the Data Entry Table. The LIMS had already calculated the dilution factor based on the reduced initial volume that was entered on the Bench Sheet, and the dilution factor of 2 that the analyst entered in the Data Entry Table resulted in a total dilution factor of 4. The only indication of this total dilution factor in the Data Entry Table is the fact that the MDL, RL, and sample results (if any) are multiplied by it. Neither the analyst nor the second level reviewer detected the fact that the total dilution factor was too high.

Corrective Action Taken:

The correct procedures for reporting dilution factors have been reviewed with the analyst. Dilutions performed by reducing the initial sample volume are accounted for by entering the reduced initial volume on the Bench Sheet, and the dilution factor in the Data Entry Table is only used for dilutions performed on the sample extracts. The correct procedures for performing second level reviews of data including dilutions have been reviewed with the second level data reviewer. The dilution factor in the data entry table was corrected and the report reissued with the correct MDL and RL. The sample is still ND for the analytes reported.

Quality Assurance Approval:



Jacob Staley

Date: 04/04/2008 10:03 AM

TestAmerica Irvine

Joseph Doak
Project Manager

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

PURGEABLES BY GC/MS (EPA 624)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0073-01 (Outfall 005 - Water)									
Reporting Units: ug/l									
1,1,1-Trichloroethane	EPA 624	8B05038	0.30	0.50	ND	1	02/05/08	02/06/08	
1,1,2,2-Tetrachloroethane	EPA 624	8B05038	0.24	0.50	ND	1	02/05/08	02/06/08	
1,1,2-Trichloroethane	EPA 624	8B05038	0.30	0.50	ND	1	02/05/08	02/06/08	
1,1-Dichloroethane	EPA 624	8B05038	0.27	0.50	ND	1	02/05/08	02/06/08	
1,1-Dichloroethene	EPA 624	8B05038	0.42	0.50	ND	1	02/05/08	02/06/08	
1,2-Dichloroethane	EPA 624	8B05038	0.28	0.50	ND	1	02/05/08	02/06/08	
1,2-Dichlorobenzene	EPA 624	8B05038	0.32	0.50	ND	1	02/05/08	02/06/08	
1,2-Dichloropropane	EPA 624	8B05038	0.35	0.50	ND	1	02/05/08	02/06/08	
1,3-Dichlorobenzene	EPA 624	8B05038	0.35	0.50	ND	1	02/05/08	02/06/08	
1,4-Dichlorobenzene	EPA 624	8B05038	0.37	0.50	ND	1	02/05/08	02/06/08	
Benzene	EPA 624	8B05038	0.28	0.50	ND	1	02/05/08	02/06/08	
Bromodichloromethane	EPA 624	8B05038	0.30	0.50	ND	1	02/05/08	02/06/08	
Bromoform	EPA 624	8B05038	0.40	1.0	ND	1	02/05/08	02/06/08	
Bromomethane	EPA 624	8B05038	0.42	1.0	ND	1	02/05/08	02/06/08	
Carbon tetrachloride	EPA 624	8B05038	0.28	0.50	ND	1	02/05/08	02/06/08	
Chlorobenzene	EPA 624	8B05038	0.36	0.50	ND	1	02/05/08	02/06/08	
Chloroethane	EPA 624	8B05038	0.40	1.0	ND	1	02/05/08	02/06/08	
Chloroform	EPA 624	8B05038	0.33	0.50	ND	1	02/05/08	02/06/08	
Chloromethane	EPA 624	8B05038	0.40	0.50	ND	1	02/05/08	02/06/08	
cis-1,3-Dichloropropene	EPA 624	8B05038	0.22	0.50	ND	1	02/05/08	02/06/08	
Dibromochloromethane	EPA 624	8B05038	0.28	0.50	ND	1	02/05/08	02/06/08	
Ethylbenzene	EPA 624	8B05038	0.25	0.50	ND	1	02/05/08	02/06/08	
Methylene chloride	EPA 624	8B05038	0.95	2.0	ND	1	02/05/08	02/06/08	
Tetrachloroethene	EPA 624	8B05038	0.32	0.50	ND	1	02/05/08	02/06/08	
Toluene	EPA 624	8B05038	0.36	0.50	ND	1	02/05/08	02/06/08	
trans-1,2-Dichloroethene	EPA 624	8B05038	0.27	0.50	ND	1	02/05/08	02/06/08	
trans-1,3-Dichloropropene	EPA 624	8B05038	0.32	0.50	ND	1	02/05/08	02/06/08	
Trichloroethene	EPA 624	8B05038	0.26	0.50	ND	1	02/05/08	02/06/08	
Trichlorofluoromethane	EPA 624	8B05038	0.34	0.50	ND	1	02/05/08	02/06/08	
Trichlorotrifluoroethane (Freon 113)	EPA 624	8B05038	0.50	5.0	ND	1	02/05/08	02/06/08	
Vinyl chloride	EPA 624	8B05038	0.30	0.50	ND	1	02/05/08	02/06/08	
Xylenes, Total	EPA 624	8B05038	0.90	1.5	ND	1	02/05/08	02/06/08	
Surrogate: Dibromofluoromethane (80-120%)					93 %				
Surrogate: Toluene-d8 (80-120%)					102 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					84 %				

TestAmerica Irvine

Joseph Doak
 Project Manager

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

PURGEABLES BY GC/MS (EPA 624)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0073-02 (Trip Blanks - Water)									
Reporting Units: ug/l									
1,1,1-Trichloroethane	EPA 624	8B02014	0.30	0.50	ND	1	02/02/08	02/02/08	
1,1,2,2-Tetrachloroethane	EPA 624	8B02014	0.24	0.50	ND	1	02/02/08	02/02/08	
1,1,2-Trichloroethane	EPA 624	8B02014	0.30	0.50	ND	1	02/02/08	02/02/08	
1,1-Dichloroethane	EPA 624	8B02014	0.27	0.50	ND	1	02/02/08	02/02/08	
1,1-Dichloroethene	EPA 624	8B02014	0.42	0.50	ND	1	02/02/08	02/02/08	
1,2-Dichloroethane	EPA 624	8B02014	0.28	0.50	ND	1	02/02/08	02/02/08	
1,2-Dichlorobenzene	EPA 624	8B02014	0.32	0.50	ND	1	02/02/08	02/02/08	
1,2-Dichloropropane	EPA 624	8B02014	0.35	0.50	ND	1	02/02/08	02/02/08	
1,3-Dichlorobenzene	EPA 624	8B02014	0.35	0.50	ND	1	02/02/08	02/02/08	
1,4-Dichlorobenzene	EPA 624	8B02014	0.37	0.50	ND	1	02/02/08	02/02/08	
Benzene	EPA 624	8B02014	0.28	0.50	ND	1	02/02/08	02/02/08	
Bromodichloromethane	EPA 624	8B02014	0.30	0.50	ND	1	02/02/08	02/02/08	
Bromoform	EPA 624	8B02014	0.40	0.50	ND	1	02/02/08	02/02/08	
Bromomethane	EPA 624	8B02014	0.42	1.0	ND	1	02/02/08	02/02/08	
Carbon tetrachloride	EPA 624	8B02014	0.28	0.50	ND	1	02/02/08	02/02/08	
Chlorobenzene	EPA 624	8B02014	0.36	0.50	ND	1	02/02/08	02/02/08	
Chloroethane	EPA 624	8B02014	0.40	1.0	ND	1	02/02/08	02/02/08	
Chloroform	EPA 624	8B02014	0.33	0.50	ND	1	02/02/08	02/02/08	
Chloromethane	EPA 624	8B02014	0.40	0.50	ND	1	02/02/08	02/02/08	
cis-1,3-Dichloropropene	EPA 624	8B02014	0.22	0.50	ND	1	02/02/08	02/02/08	
Dibromochloromethane	EPA 624	8B02014	0.28	0.50	ND	1	02/02/08	02/02/08	
Ethylbenzene	EPA 624	8B02014	0.25	0.50	ND	1	02/02/08	02/02/08	
Methylene chloride	EPA 624	8B02014	0.95	2.0	ND	1	02/02/08	02/02/08	
Tetrachloroethene	EPA 624	8B02014	0.32	0.50	ND	1	02/02/08	02/02/08	
Toluene	EPA 624	8B02014	0.36	0.50	ND	1	02/02/08	02/02/08	
trans-1,2-Dichloroethene	EPA 624	8B02014	0.27	0.50	ND	1	02/02/08	02/02/08	
trans-1,3-Dichloropropene	EPA 624	8B02014	0.32	0.50	ND	1	02/02/08	02/02/08	
Trichloroethene	EPA 624	8B02014	0.26	0.50	ND	1	02/02/08	02/02/08	
Trichlorofluoromethane	EPA 624	8B02014	0.34	0.50	ND	1	02/02/08	02/02/08	
Trichlorotrifluoroethane (Freon 113)	EPA 624	8B02014	0.50	5.0	ND	1	02/02/08	02/02/08	
Vinyl chloride	EPA 624	8B02014	0.30	0.50	ND	1	02/02/08	02/02/08	
Xylenes, Total	EPA 624	8B02014	0.90	1.5	ND	1	02/02/08	02/02/08	
<i>Surrogate: Dibromofluoromethane (80-120%)</i>					86 %				
<i>Surrogate: Toluene-d8 (80-120%)</i>					94 %				
<i>Surrogate: 4-Bromofluorobenzene (80-120%)</i>					83 %				

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Joseph Doak
 Project Manager

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

PURGEABLES-- GC/MS (EPA 624)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0073-01 (Outfall 005 - Water)									
Reporting Units: ug/l									
Acrolein	EPA 624	8B02014	4.0	5.0	ND	1	02/02/08	02/02/08	
Acrylonitrile	EPA 624	8B02014	0.70	2.0	ND	1	02/02/08	02/02/08	
2-Chloroethyl vinyl ether	EPA 624	8B02014	1.8	5.0	ND	1	02/02/08	02/02/08	
Surrogate: Dibromofluoromethane (80-120%)					87 %				
Surrogate: Toluene-d8 (80-120%)					94 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					84 %				
Sample ID: IRB0073-02 (Trip Blanks - Water)									
Reporting Units: ug/l									
Acrolein	EPA 624	8B02014	4.0	5.0	ND	1	02/02/08	02/02/08	P9
Acrylonitrile	EPA 624	8B02014	0.70	2.0	ND	1	02/02/08	02/02/08	
2-Chloroethyl vinyl ether	EPA 624	8B02014	1.8	5.0	ND	1	02/02/08	02/02/08	P9
Surrogate: Dibromofluoromethane (80-120%)					86 %				
Surrogate: Toluene-d8 (80-120%)					94 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					83 %				

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Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

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

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0073-01 (Outfall 005 - Water)									
Reporting Units: ug/l									
Acenaphthene	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
Acenaphthylene	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
Aniline	EPA 625	8B04111	2.4	9.6	ND	0.957	02/04/08	02/07/08	
Anthracene	EPA 625	8B04111	1.9	9.6	ND	0.957	02/04/08	02/07/08	
Benzidine	EPA 625	8B04111	8.1	19	ND	0.957	02/04/08	02/07/08	L6
Benzoic acid	EPA 625	8B04111	9.6	19	ND	0.957	02/04/08	02/07/08	
Benzo(a)anthracene	EPA 625	8B04111	1.9	9.6	ND	0.957	02/04/08	02/07/08	
Benzo(b)fluoranthene	EPA 625	8B04111	1.9	9.6	ND	0.957	02/04/08	02/07/08	
Benzo(k)fluoranthene	EPA 625	8B04111	2.4	9.6	ND	0.957	02/04/08	02/07/08	
Benzo(g,h,i)perylene	EPA 625	8B04111	3.8	9.6	ND	0.957	02/04/08	02/07/08	
Benzo(a)pyrene	EPA 625	8B04111	1.9	9.6	ND	0.957	02/04/08	02/07/08	
Benzyl alcohol	EPA 625	8B04111	2.4	19	ND	0.957	02/04/08	02/07/08	
Bis(2-chloroethoxy)methane	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
Bis(2-chloroethyl)ether	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
Bis(2-chloroisopropyl)ether	EPA 625	8B04111	2.4	9.6	ND	0.957	02/04/08	02/07/08	
Bis(2-ethylhexyl)phthalate	EPA 625	8B04111	3.8	48	ND	0.957	02/04/08	02/07/08	
4-Bromophenyl phenyl ether	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
Butyl benzyl phthalate	EPA 625	8B04111	3.8	19	ND	0.957	02/04/08	02/07/08	
4-Chloroaniline	EPA 625	8B04111	1.9	9.6	ND	0.957	02/04/08	02/07/08	
2-Chloronaphthalene	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
4-Chloro-3-methylphenol	EPA 625	8B04111	2.4	19	ND	0.957	02/04/08	02/07/08	
2-Chlorophenol	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
4-Chlorophenyl phenyl ether	EPA 625	8B04111	2.4	9.6	ND	0.957	02/04/08	02/07/08	
Chrysene	EPA 625	8B04111	2.4	9.6	ND	0.957	02/04/08	02/07/08	
Dibenz(a,h)anthracene	EPA 625	8B04111	2.9	19	ND	0.957	02/04/08	02/07/08	
Dibenzofuran	EPA 625	8B04111	3.8	9.6	ND	0.957	02/04/08	02/07/08	
Di-n-butyl phthalate	EPA 625	8B04111	2.9	19	ND	0.957	02/04/08	02/07/08	
1,3-Dichlorobenzene	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
1,4-Dichlorobenzene	EPA 625	8B04111	2.4	9.6	ND	0.957	02/04/08	02/07/08	
1,2-Dichlorobenzene	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
3,3-Dichlorobenzidine	EPA 625	8B04111	2.9	19	ND	0.957	02/04/08	02/07/08	
2,4-Dichlorophenol	EPA 625	8B04111	3.3	9.6	ND	0.957	02/04/08	02/07/08	
Diethyl phthalate	EPA 625	8B04111	3.3	9.6	ND	0.957	02/04/08	02/07/08	
2,4-Dimethylphenol	EPA 625	8B04111	3.3	19	ND	0.957	02/04/08	02/07/08	
Dimethyl phthalate	EPA 625	8B04111	1.9	9.6	ND	0.957	02/04/08	02/07/08	
4,6-Dinitro-2-methylphenol	EPA 625	8B04111	3.8	19	ND	0.957	02/04/08	02/07/08	
2,4-Dinitrophenol	EPA 625	8B04111	7.7	19	ND	0.957	02/04/08	02/07/08	
2,4-Dinitrotoluene	EPA 625	8B04111	3.3	9.6	ND	0.957	02/04/08	02/07/08	
2,6-Dinitrotoluene	EPA 625	8B04111	1.9	9.6	ND	0.957	02/04/08	02/07/08	
Di-n-octyl phthalate	EPA 625	8B04111	3.3	19	ND	0.957	02/04/08	02/07/08	
Fluoranthene	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	

TestAmerica Irvine

Joseph Doak
Project Manager

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NPDES - 1250

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

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

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0073-01 (Outfall 005 - Water) - cont.									
Reporting Units: ug/l									
Fluorene	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
Hexachlorobenzene	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
Hexachlorobutadiene	EPA 625	8B04111	3.8	9.6	ND	0.957	02/04/08	02/07/08	
Hexachlorocyclopentadiene	EPA 625	8B04111	4.8	19	ND	0.957	02/04/08	02/07/08	
Hexachloroethane	EPA 625	8B04111	3.3	9.6	ND	0.957	02/04/08	02/07/08	
Indeno(1,2,3-cd)pyrene	EPA 625	8B04111	3.3	19	ND	0.957	02/04/08	02/07/08	
Isophorone	EPA 625	8B04111	2.4	9.6	ND	0.957	02/04/08	02/07/08	
2-Methylnaphthalene	EPA 625	8B04111	1.9	9.6	ND	0.957	02/04/08	02/07/08	
2-Methylphenol	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
4-Methylphenol	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
Naphthalene	EPA 625	8B04111	2.9	9.6	ND	0.957	02/04/08	02/07/08	
2-Nitroaniline	EPA 625	8B04111	1.9	19	ND	0.957	02/04/08	02/07/08	
3-Nitroaniline	EPA 625	8B04111	2.9	19	ND	0.957	02/04/08	02/07/08	
4-Nitroaniline	EPA 625	8B04111	3.8	19	ND	0.957	02/04/08	02/07/08	
Nitrobenzene	EPA 625	8B04111	2.4	19	ND	0.957	02/04/08	02/07/08	
2-Nitrophenol	EPA 625	8B04111	3.3	9.6	ND	0.957	02/04/08	02/07/08	
4-Nitrophenol	EPA 625	8B04111	5.3	19	ND	0.957	02/04/08	02/07/08	
N-Nitrosodiphenylamine	EPA 625	8B04111	1.9	9.6	ND	0.957	02/04/08	02/07/08	
N-Nitroso-di-n-propylamine	EPA 625	8B04111	3.3	9.6	ND	0.957	02/04/08	02/07/08	
Pentachlorophenol	EPA 625	8B04111	3.3	19	ND	0.957	02/04/08	02/07/08	
Phenanthrene	EPA 625	8B04111	3.3	9.6	ND	0.957	02/04/08	02/07/08	
Phenol	EPA 625	8B04111	1.9	9.6	ND	0.957	02/04/08	02/07/08	
Pyrene	EPA 625	8B04111	3.8	9.6	ND	0.957	02/04/08	02/07/08	
1,2,4-Trichlorobenzene	EPA 625	8B04111	2.4	9.6	ND	0.957	02/04/08	02/07/08	
2,4,5-Trichlorophenol	EPA 625	8B04111	2.9	19	ND	0.957	02/04/08	02/07/08	
2,4,6-Trichlorophenol	EPA 625	8B04111	4.3	19	ND	0.957	02/04/08	02/07/08	
1,2-Diphenylhydrazine/Azobenzene	EPA 625	8B04111	2.4	19	ND	0.957	02/04/08	02/07/08	
N-Nitrosodimethylamine	EPA 625	8B04111	2.4	19	ND	0.957	02/04/08	02/07/08	
Surrogate: 2-Fluorophenol (30-120%)					75 %				
Surrogate: Phenol-d6 (35-120%)					80 %				
Surrogate: 2,4,6-Tribromophenol (40-120%)					65 %				
Surrogate: Nitrobenzene-d5 (45-120%)					81 %				
Surrogate: 2-Fluorobiphenyl (50-120%)					89 %				
Surrogate: Terphenyl-d14 (50-125%)					96 %				

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0073-01 (Outfall 005 - Water) - cont.									
Reporting Units: ug/l									
Aldrin	EPA 608	8B04071	0.0014	0.0047	ND	0.943	02/04/08	02/05/08	
alpha-BHC	EPA 608	8B04071	0.0024	0.0047	ND	0.943	02/04/08	02/05/08	
beta-BHC	EPA 608	8B04071	0.0038	0.0094	ND	0.943	02/04/08	02/05/08	
delta-BHC	EPA 608	8B04071	0.0033	0.0047	ND	0.943	02/04/08	02/05/08	
gamma-BHC (Lindane)	EPA 608	8B04071	0.0028	0.0094	ND	0.943	02/04/08	02/05/08	
Chlordane	EPA 608	8B04071	0.028	0.094	ND	0.943	02/04/08	02/05/08	
4,4'-DDD	EPA 608	8B04071	0.0019	0.0047	ND	0.943	02/04/08	02/05/08	
4,4'-DDE	EPA 608	8B04071	0.0028	0.0047	ND	0.943	02/04/08	02/05/08	
4,4'-DDT	EPA 608	8B04071	0.0038	0.0094	ND	0.943	02/04/08	02/05/08	
Dieldrin	EPA 608	8B04071	0.0019	0.0047	ND	0.943	02/04/08	02/05/08	
Endosulfan I	EPA 608	8B04071	0.0019	0.0047	ND	0.943	02/04/08	02/05/08	
Endosulfan II	EPA 608	8B04071	0.0028	0.0047	ND	0.943	02/04/08	02/05/08	
Endosulfan sulfate	EPA 608	8B04071	0.0028	0.0094	ND	0.943	02/04/08	02/05/08	
Endrin	EPA 608	8B04071	0.0019	0.0047	ND	0.943	02/04/08	02/05/08	
Endrin aldehyde	EPA 608	8B04071	0.0019	0.0094	ND	0.943	02/04/08	02/05/08	
Endrin ketone	EPA 608	8B04071	0.0028	0.0094	ND	0.943	02/04/08	02/05/08	
Heptachlor	EPA 608	8B04071	0.0028	0.0094	ND	0.943	02/04/08	02/05/08	
Heptachlor epoxide	EPA 608	8B04071	0.0024	0.0047	ND	0.943	02/04/08	02/05/08	
Methoxychlor	EPA 608	8B04071	0.0033	0.0047	ND	0.943	02/04/08	02/05/08	
Toxaphene	EPA 608	8B04071	0.066	0.094	ND	0.943	02/04/08	02/05/08	
Surrogate: Decachlorobiphenyl (45-120%)					78 %				
Surrogate: Tetrachloro-m-xylene (35-115%)					65 %				

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

TOTAL PCBS (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0073-01 (Outfall 005 - Water) - cont.									
Reporting Units: ug/l									
Aroclor 1016	EPA 608	8B04071	0.42	0.47	ND	0.943	02/04/08	02/05/08	
Aroclor 1221	EPA 608	8B04071	0.24	0.47	ND	0.943	02/04/08	02/05/08	
Aroclor 1232	EPA 608	8B04071	0.24	0.47	ND	0.943	02/04/08	02/05/08	
Aroclor 1242	EPA 608	8B04071	0.24	0.47	ND	0.943	02/04/08	02/05/08	
Aroclor 1248	EPA 608	8B04071	0.24	0.47	ND	0.943	02/04/08	02/05/08	
Aroclor 1254	EPA 608	8B04071	0.24	0.47	ND	0.943	02/04/08	02/05/08	
Aroclor 1260	EPA 608	8B04071	0.28	0.47	ND	0.943	02/04/08	02/05/08	
<i>Surrogate: Decachlorobiphenyl (45-120%)</i>					86 %				

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Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0073-01 (Outfall 005 - Water) - cont.									
Reporting Units: mg/l									
Hardness as CaCO3	SM2340B	[CALC]	N/A	0.33	170	1	02/05/08	02/05/08	
Boron	EPA 200.7	8B05087	0.020	0.050	0.034	1	02/05/08	02/05/08	J
Calcium	EPA 200.7	8B05087	0.050	0.10	54	1	02/05/08	02/05/08	
Iron	EPA 200.7	8B05087	0.015	0.040	3.4	1	02/05/08	02/05/08	
Magnesium	EPA 200.7	8B05087	0.012	0.020	8.1	1	02/05/08	02/05/08	

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NPDES - 1254

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0073-01 (Outfall 005 - Water) - cont.									
Reporting Units: ug/l									
Aluminum	EPA 200.7	8B05087	40	50	3800	1	02/05/08	02/05/08	
Antimony	EPA 200.8	8B05090	0.20	2.0	0.43	1	02/05/08	02/05/08	J
Arsenic	EPA 200.7	8B05087	7.0	10	ND	1	02/05/08	02/05/08	
Beryllium	EPA 200.7	8B05087	0.90	2.0	ND	1	02/05/08	02/05/08	
Cadmium	EPA 200.8	8B05090	0.11	1.0	0.48	1	02/05/08	02/05/08	J
Chromium	EPA 200.7	8B05087	2.0	5.0	4.2	1	02/05/08	02/05/08	J
Copper	EPA 200.8	8B05090	0.75	2.0	3.8	1	02/05/08	02/05/08	
Lead	EPA 200.8	8B05090	0.30	1.0	1.4	1	02/05/08	02/05/08	
Nickel	EPA 200.7	8B05087	2.0	10	15	1	02/05/08	02/05/08	
Selenium	EPA 200.7	8B05087	8.0	10	ND	1	02/05/08	02/05/08	
Silver	EPA 200.7	8B05087	6.0	10	ND	1	02/05/08	02/05/08	
Thallium	EPA 200.8	8B05090	0.20	1.0	ND	1	02/05/08	02/05/08	
Vanadium	EPA 200.7	8B05087	3.0	10	7.2	1	02/05/08	02/05/08	J
Zinc	EPA 200.7	8B05087	6.0	20	25	1	02/05/08	02/05/08	

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08

Received: 02/01/08

DISSOLVED METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0073-01 (Outfall 005 - Water) - cont.									
Reporting Units: mg/l									
Hardness as CaCO3	SM2340B-Diss	[CALC]	N/A	0.33	170	1	02/05/08	02/06/08	
Boron	EPA 200.7-Diss	8B05111	0.020	0.050	0.031	1	02/05/08	02/06/08	J
Calcium	EPA 200.7-Diss	8B05111	0.050	0.10	55	1	02/05/08	02/06/08	MHA
Iron	EPA 200.7-Diss	8B05111	0.015	0.040	0.030	1	02/05/08	02/06/08	J
Magnesium	EPA 200.7-Diss	8B05111	0.012	0.020	7.5	1	02/05/08	02/06/08	

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

DISSOLVED METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0073-01 (Outfall 005 - Water) - cont.									
Reporting Units: ug/l									
Aluminum	EPA 200.7-Diss	8B05111	40	50	62	1	02/05/08	02/06/08	
Antimony	EPA 200.8-Diss	8B04144	0.20	2.0	0.30	1	02/04/08	02/05/08	J
Arsenic	EPA 200.7-Diss	8B05111	7.0	10	ND	1	02/05/08	02/06/08	
Beryllium	EPA 200.7-Diss	8B05111	0.90	2.0	ND	1	02/05/08	02/06/08	
Cadmium	EPA 200.8-Diss	8B04144	0.11	1.0	0.22	1	02/04/08	02/05/08	J
Chromium	EPA 200.7-Diss	8B05111	2.0	5.0	ND	1	02/05/08	02/06/08	
Copper	EPA 200.8-Diss	8B04144	0.75	2.0	1.7	1	02/04/08	02/05/08	J
Lead	EPA 200.8-Diss	8B04144	0.30	1.0	ND	1	02/04/08	02/05/08	
Nickel	EPA 200.7-Diss	8B05111	2.0	10	12	1	02/05/08	02/06/08	
Selenium	EPA 200.7-Diss	8B05111	8.0	10	ND	1	02/05/08	02/06/08	
Silver	EPA 200.7-Diss	8B05111	6.0	10	ND	1	02/05/08	02/06/08	
Thallium	EPA 200.8-Diss	8B04144	0.20	1.0	ND	1	02/04/08	02/05/08	
Vanadium	EPA 200.7-Diss	8B05111	3.0	10	ND	1	02/05/08	02/06/08	
Zinc	EPA 200.7-Diss	8B05111	6.0	20	12	1	02/05/08	02/06/08	J

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0073-01 (Outfall 005 - Water) - cont.									
Reporting Units: mg/l									
Hexane Extractable Material (Oil & Grease)	EPA 1664A	8B11060	1.3	4.8	2.2	1	02/11/08	02/11/08	J
Chloride	EPA 300.0	8B01050	0.25	0.50	13	1	02/01/08	02/01/08	
Fluoride	EPA 300.0	8B01050	0.15	0.50	0.27	1	02/01/08	02/01/08	J
Nitrate/Nitrite-N	EPA 300.0	8B01050	0.15	0.26	0.17	1	02/01/08	02/01/08	J
Sulfate	EPA 300.0	8B01050	4.0	10	140	20	02/01/08	02/01/08	M-3
Total Dissolved Solids	SM2540C	8B07122	10	10	310	1	02/07/08	02/07/08	
Total Suspended Solids	EPA 160.2	8B04128	10	10	55	1	02/04/08	02/04/08	

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08

Received: 02/01/08

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0073-01 (Outfall 005 - Water) - cont.									
Reporting Units: ug/l									
Total Cyanide	EPA 335.2	8B04112	2.2	5.0	ND	1	02/04/08	02/04/08	
Perchlorate	EPA 314.0	8B11053	1.5	4.0	ND	1	02/11/08	02/11/08	

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NPDES - 1259

MWH-Pasadena/Boeing
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 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

ORGANIC COMPOUNDS BY GC/MS (EPA 525.2)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0073-01 (Outfall 005 - Water) - cont.									N1, P, pHa
Reporting Units: ug/l									
Chlorpyrifos	EPA 525.2	C8B0516	0.10	1.0	ND	1	02/05/08	02/07/08	
Diazinon	EPA 525.2	C8B0516	0.24	0.25	ND	1	02/05/08	02/07/08	
<i>Surrogate: 1,3-Dimethyl-2-nitrobenzene (70-130%)</i>					97 %				
<i>Surrogate: Triphenylphosphate (70-130%)</i>					112 %				
<i>Surrogate: Perylene-d12 (70-130%)</i>					97 %				

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

ORGANIC COMPOUNDS BY GC/MS (EPA 525.2)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0073-01RE1 (Outfall 005 - Water) - cont.									
Reporting Units: ug/l									
Chlorpyrifos	EPA 525.2	C8B1302	0.21	2.0	ND	2	02/05/08	02/14/08	
Diazinon	EPA 525.2	C8B1302	0.48	0.50	ND	2	02/05/08	02/14/08	H2
<i>Surrogate: 1,3-Dimethyl-2-nitrobenzene (70-130%)</i>					<i>112 %</i>				
<i>Surrogate: Triphenylphosphate (70-130%)</i>					<i>111 %</i>				
<i>Surrogate: Perylene-d12 (70-130%)</i>					<i>93 %</i>				

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08

Received: 02/01/08

Metals by EPA 200 Series Methods

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRB0073-01 (Outfall 005 - Water) - cont.									
Reporting Units: ug/l									
Mercury, Dissolved	EPA 245.1	W8B0147	0.050	0.20	ND	1	02/05/08	02/07/08	
Mercury, Total	EPA 245.1	W8B0147	0.050	0.20	ND	1	02/05/08	02/07/08	

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NPDES - 1262

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: Outfall 005 (IRB0073-01) - Water					
EPA 300.0	2	02/01/2008 08:30	02/01/2008 18:30	02/01/2008 19:00	02/01/2008 20:13
EPA 624	3	02/01/2008 08:30	02/01/2008 18:30	02/02/2008 00:00	02/02/2008 15:50
Sample ID: Trip Blanks (IRB0073-02) - Water					
EPA 624	3	02/01/2008 08:30	02/01/2008 18:30	02/02/2008 00:00	02/02/2008 15:21

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IRB0073 <Page 19 of 56>
NPDES - 1263

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B02014 Extracted: 02/02/08											
Blank Analyzed: 02/02/2008 (8B02014-BLK1)											
1,1,1-Trichloroethane	ND	0.50	0.30	ug/l							
1,1,2,2-Tetrachloroethane	ND	0.50	0.24	ug/l							
1,1,2-Trichloroethane	ND	0.50	0.30	ug/l							
1,1-Dichloroethane	ND	0.50	0.27	ug/l							
1,1-Dichloroethene	ND	0.50	0.42	ug/l							
1,2-Dichloroethane	ND	0.50	0.28	ug/l							
1,2-Dichlorobenzene	ND	0.50	0.32	ug/l							
1,2-Dichloropropane	ND	0.50	0.35	ug/l							
1,3-Dichlorobenzene	ND	0.50	0.35	ug/l							
1,4-Dichlorobenzene	ND	0.50	0.37	ug/l							
Benzene	ND	0.50	0.28	ug/l							
Bromodichloromethane	ND	0.50	0.30	ug/l							
Bromoform	ND	0.50	0.40	ug/l							
Bromomethane	ND	1.0	0.42	ug/l							
Carbon tetrachloride	ND	0.50	0.28	ug/l							
Chlorobenzene	ND	0.50	0.36	ug/l							
Chloroethane	ND	1.0	0.40	ug/l							
Chloroform	ND	0.50	0.33	ug/l							
Chloromethane	ND	0.50	0.40	ug/l							
cis-1,3-Dichloropropene	ND	0.50	0.22	ug/l							
Dibromochloromethane	ND	0.50	0.28	ug/l							
Ethylbenzene	ND	0.50	0.25	ug/l							
Methylene chloride	ND	2.0	0.95	ug/l							
Tetrachloroethene	ND	0.50	0.32	ug/l							
Toluene	ND	0.50	0.36	ug/l							
trans-1,2-Dichloroethene	ND	0.50	0.27	ug/l							
trans-1,3-Dichloropropene	ND	0.50	0.32	ug/l							
Trichloroethene	ND	0.50	0.26	ug/l							
Trichlorofluoromethane	ND	0.50	0.34	ug/l							
Trichlorotrifluoroethane (Freon 113)	ND	5.0	0.50	ug/l							
Vinyl chloride	ND	0.50	0.30	ug/l							
Xylenes, Total	ND	1.5	0.90	ug/l							
Surrogate: Dibromofluoromethane	20.5			ug/l	25.0		82	80-120			
Surrogate: Toluene-d8	23.8			ug/l	25.0		95	80-120			
Surrogate: 4-Bromofluorobenzene	20.6			ug/l	25.0		83	80-120			

TestAmerica Irvine

Joseph Doak
Project Manager

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

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: 8B02014 Extracted: 02/02/08											
LCS Analyzed: 02/02/2008 (8B02014-BS1)											
1,1,1-Trichloroethane	25.2	0.50	0.30	ug/l	25.0		101	65-135			
1,1,2,2-Tetrachloroethane	24.9	0.50	0.24	ug/l	25.0		100	55-130			
1,1,2-Trichloroethane	24.0	0.50	0.30	ug/l	25.0		96	70-125			
1,1-Dichloroethane	23.0	0.50	0.27	ug/l	25.0		92	70-125			
1,1-Dichloroethene	22.3	0.50	0.42	ug/l	25.0		89	70-125			
1,2-Dichloroethane	23.0	0.50	0.28	ug/l	25.0		92	60-140			
1,2-Dichlorobenzene	26.9	0.50	0.32	ug/l	25.0		108	75-120			
1,2-Dichloropropane	24.3	0.50	0.35	ug/l	25.0		97	70-125			
1,3-Dichlorobenzene	26.8	0.50	0.35	ug/l	25.0		107	75-120			
1,4-Dichlorobenzene	24.7	0.50	0.37	ug/l	25.0		99	75-120			
Benzene	25.2	0.50	0.28	ug/l	25.0		101	70-120			
Bromodichloromethane	26.4	0.50	0.30	ug/l	25.0		106	70-135			
Bromoform	22.1	0.50	0.40	ug/l	25.0		88	55-130			
Bromomethane	32.7	1.0	0.42	ug/l	25.0		131	65-140			
Carbon tetrachloride	26.9	0.50	0.28	ug/l	25.0		108	65-140			
Chlorobenzene	25.1	0.50	0.36	ug/l	25.0		100	75-120			
Chloroethane	24.8	1.0	0.40	ug/l	25.0		99	60-140			
Chloroform	23.7	0.50	0.33	ug/l	25.0		95	70-130			
Chloromethane	20.3	0.50	0.40	ug/l	25.0		81	50-140			
cis-1,3-Dichloropropene	24.5	0.50	0.22	ug/l	25.0		98	75-125			
Dibromochloromethane	25.0	0.50	0.28	ug/l	25.0		100	70-140			
Ethylbenzene	26.4	0.50	0.25	ug/l	25.0		106	75-125			
Methylene chloride	22.2	2.0	0.95	ug/l	25.0		89	55-130			
Tetrachloroethene	25.3	0.50	0.32	ug/l	25.0		101	70-125			
Toluene	24.5	0.50	0.36	ug/l	25.0		98	70-120			
trans-1,2-Dichloroethene	25.4	0.50	0.27	ug/l	25.0		102	70-125			
trans-1,3-Dichloropropene	22.4	0.50	0.32	ug/l	25.0		90	70-125			
Trichloroethene	25.4	0.50	0.26	ug/l	25.0		101	70-125			
Trichlorofluoromethane	26.9	0.50	0.34	ug/l	25.0		107	65-145			
Vinyl chloride	22.6	0.50	0.30	ug/l	25.0		90	55-135			
Xylenes, Total	76.0	1.5	0.90	ug/l	75.0		101	70-125			
Surrogate: Dibromofluoromethane	21.2			ug/l	25.0		85	80-120			
Surrogate: Toluene-d8	23.8			ug/l	25.0		95	80-120			
Surrogate: 4-Bromofluorobenzene	21.3			ug/l	25.0		85	80-120			

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Joseph Doak
Project Manager

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

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: 8B02014 Extracted: 02/02/08											
Matrix Spike Analyzed: 02/02/2008 (8B02014-MS1)					Source: IRA2902-06						
1,1,1-Trichloroethane	24.3	0.50	0.30	ug/l	25.0	ND	97	65-140			
1,1,2,2-Tetrachloroethane	24.6	0.50	0.24	ug/l	25.0	ND	98	55-135			
1,1,2-Trichloroethane	24.0	0.50	0.30	ug/l	25.0	ND	96	65-130			
1,1-Dichloroethane	23.0	0.50	0.27	ug/l	25.0	0.490	90	65-130			
1,1-Dichloroethene	24.4	0.50	0.42	ug/l	25.0	1.78	90	60-130			
1,2-Dichloroethane	23.1	0.50	0.28	ug/l	25.0	ND	92	60-140			
1,2-Dichlorobenzene	25.1	0.50	0.32	ug/l	25.0	ND	100	75-125			
1,2-Dichloropropane	23.8	0.50	0.35	ug/l	25.0	ND	95	65-130			
1,3-Dichlorobenzene	25.4	0.50	0.35	ug/l	25.0	ND	102	75-125			
1,4-Dichlorobenzene	23.3	0.50	0.37	ug/l	25.0	ND	93	75-125			
Benzene	26.1	0.50	0.28	ug/l	25.0	1.60	98	65-125			
Bromodichloromethane	25.6	0.50	0.30	ug/l	25.0	ND	102	70-135			
Bromoform	21.3	0.50	0.40	ug/l	25.0	ND	85	55-135			
Bromomethane	22.1	1.0	0.42	ug/l	25.0	ND	88	55-145			
Carbon tetrachloride	26.0	0.50	0.28	ug/l	25.0	ND	104	65-140			
Chlorobenzene	23.9	0.50	0.36	ug/l	25.0	ND	95	75-125			
Chloroethane	15.8	1.0	0.40	ug/l	25.0	ND	63	55-140			
Chloroform	23.0	0.50	0.33	ug/l	25.0	ND	92	65-135			
Chloromethane	17.1	0.50	0.40	ug/l	25.0	ND	69	45-145			
cis-1,3-Dichloropropene	23.7	0.50	0.22	ug/l	25.0	ND	95	70-130			
Dibromochloromethane	23.8	0.50	0.28	ug/l	25.0	ND	95	65-140			
Ethylbenzene	25.4	0.50	0.25	ug/l	25.0	0.450	100	65-130			
Methylene chloride	21.5	2.0	0.95	ug/l	25.0	ND	86	50-135			
Tetrachloroethene	32.4	0.50	0.32	ug/l	25.0	6.19	105	65-130			
Toluene	23.0	0.50	0.36	ug/l	25.0	ND	92	70-125			
trans-1,2-Dichloroethene	24.7	0.50	0.27	ug/l	25.0	ND	99	65-130			
trans-1,3-Dichloropropene	21.8	0.50	0.32	ug/l	25.0	ND	87	65-135			
Trichloroethene	27.2	0.50	0.26	ug/l	25.0	2.20	100	65-125			
Trichlorofluoromethane	25.9	0.50	0.34	ug/l	25.0	ND	104	60-145			
Vinyl chloride	20.2	0.50	0.30	ug/l	25.0	ND	81	45-140			
Xylenes, Total	71.6	1.5	0.90	ug/l	75.0	ND	95	60-130			
Surrogate: Dibromofluoromethane	21.3			ug/l	25.0		85	80-120			
Surrogate: Toluene-d8	24.0			ug/l	25.0		96	80-120			
Surrogate: 4-Bromofluorobenzene	21.3			ug/l	25.0		85	80-120			

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Joseph Doak
Project Manager

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

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: 8B02014 Extracted: 02/02/08											
Matrix Spike Dup Analyzed: 02/02/2008 (8B02014-MSD1)						Source: IRA2902-06					
1,1,1-Trichloroethane	23.7	0.50	0.30	ug/l	25.0	ND	95	65-140	2	20	
1,1,2,2-Tetrachloroethane	24.1	0.50	0.24	ug/l	25.0	ND	96	55-135	2	30	
1,1,2-Trichloroethane	23.0	0.50	0.30	ug/l	25.0	ND	92	65-130	4	25	
1,1-Dichloroethane	22.5	0.50	0.27	ug/l	25.0	0.490	88	65-130	3	20	
1,1-Dichloroethene	23.3	0.50	0.42	ug/l	25.0	1.78	86	60-130	5	20	
1,2-Dichloroethane	22.5	0.50	0.28	ug/l	25.0	ND	90	60-140	3	20	
1,2-Dichlorobenzene	24.8	0.50	0.32	ug/l	25.0	ND	99	75-125	1	20	
1,2-Dichloropropane	22.9	0.50	0.35	ug/l	25.0	ND	92	65-130	4	20	
1,3-Dichlorobenzene	24.8	0.50	0.35	ug/l	25.0	ND	99	75-125	3	20	
1,4-Dichlorobenzene	22.7	0.50	0.37	ug/l	25.0	ND	91	75-125	3	20	
Benzene	24.8	0.50	0.28	ug/l	25.0	1.60	93	65-125	5	20	
Bromodichloromethane	25.0	0.50	0.30	ug/l	25.0	ND	100	70-135	3	20	
Bromoform	21.4	0.50	0.40	ug/l	25.0	ND	86	55-135	1	25	
Bromomethane	29.4	1.0	0.42	ug/l	25.0	ND	118	55-145	28	25	R
Carbon tetrachloride	25.3	0.50	0.28	ug/l	25.0	ND	101	65-140	3	25	
Chlorobenzene	23.6	0.50	0.36	ug/l	25.0	ND	95	75-125	1	20	
Chloroethane	23.2	1.0	0.40	ug/l	25.0	ND	93	55-140	38	25	R
Chloroform	22.6	0.50	0.33	ug/l	25.0	ND	90	65-135	2	20	
Chloromethane	18.4	0.50	0.40	ug/l	25.0	ND	74	45-145	7	25	
cis-1,3-Dichloropropene	22.5	0.50	0.22	ug/l	25.0	ND	90	70-130	5	20	
Dibromochloromethane	24.2	0.50	0.28	ug/l	25.0	ND	97	65-140	2	25	
Ethylbenzene	25.0	0.50	0.25	ug/l	25.0	0.450	98	65-130	1	20	
Methylene chloride	21.2	2.0	0.95	ug/l	25.0	ND	85	50-135	2	20	
Tetrachloroethene	31.3	0.50	0.32	ug/l	25.0	6.19	100	65-130	3	20	
Toluene	22.4	0.50	0.36	ug/l	25.0	ND	89	70-125	3	20	
trans-1,2-Dichloroethene	24.1	0.50	0.27	ug/l	25.0	ND	96	65-130	2	20	
trans-1,3-Dichloropropene	21.1	0.50	0.32	ug/l	25.0	ND	84	65-135	3	25	
Trichloroethene	26.1	0.50	0.26	ug/l	25.0	2.20	96	65-125	4	20	
Trichlorofluoromethane	25.1	0.50	0.34	ug/l	25.0	ND	100	60-145	3	25	
Vinyl chloride	21.1	0.50	0.30	ug/l	25.0	ND	85	45-140	4	30	
Xylenes, Total	70.4	1.5	0.90	ug/l	75.0	ND	94	60-130	2	20	
Surrogate: Dibromofluoromethane	21.4			ug/l	25.0		85	80-120			
Surrogate: Toluene-d8	23.8			ug/l	25.0		95	80-120			
Surrogate: 4-Bromofluorobenzene	21.5			ug/l	25.0		86	80-120			

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Joseph Doak
Project Manager

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B05038 Extracted: 02/05/08											
Blank Analyzed: 02/05/2008 (8B05038-BLK1)											
1,1,1-Trichloroethane	ND	0.50	0.30	ug/l							
1,1,2,2-Tetrachloroethane	ND	0.50	0.24	ug/l							
1,1,2-Trichloroethane	ND	0.50	0.30	ug/l							
1,1-Dichloroethane	ND	0.50	0.27	ug/l							
1,1-Dichloroethene	ND	0.50	0.42	ug/l							
1,2-Dichloroethane	ND	0.50	0.28	ug/l							
1,2-Dichlorobenzene	ND	0.50	0.32	ug/l							
1,2-Dichloropropane	ND	0.50	0.35	ug/l							
1,3-Dichlorobenzene	ND	0.50	0.35	ug/l							
1,4-Dichlorobenzene	ND	0.50	0.37	ug/l							
Benzene	ND	0.50	0.28	ug/l							
Bromodichloromethane	ND	0.50	0.30	ug/l							
Bromoform	ND	1.0	0.40	ug/l							
Bromomethane	ND	1.0	0.42	ug/l							
Carbon tetrachloride	ND	0.50	0.28	ug/l							
Chlorobenzene	ND	0.50	0.36	ug/l							
Chloroethane	ND	1.0	0.40	ug/l							
Chloroform	ND	0.50	0.33	ug/l							
Chloromethane	ND	0.50	0.40	ug/l							
cis-1,3-Dichloropropene	ND	0.50	0.22	ug/l							
Dibromochloromethane	ND	0.50	0.28	ug/l							
Ethylbenzene	ND	0.50	0.25	ug/l							
Methylene chloride	1.18	2.0	0.95	ug/l							J
Tetrachloroethene	ND	0.50	0.32	ug/l							
Toluene	ND	0.50	0.36	ug/l							
trans-1,2-Dichloroethene	ND	0.50	0.27	ug/l							
trans-1,3-Dichloropropene	ND	0.50	0.32	ug/l							
Trichloroethene	ND	0.50	0.26	ug/l							
Trichlorofluoromethane	ND	0.50	0.34	ug/l							
Trichlorotrifluoroethane (Freon 113)	ND	5.0	0.50	ug/l							
Vinyl chloride	ND	0.50	0.30	ug/l							
Xylenes, Total	ND	1.5	0.90	ug/l							
Surrogate: Dibromofluoromethane	24.2			ug/l	25.0		97	80-120			
Surrogate: Toluene-d8	25.7			ug/l	25.0		103	80-120			
Surrogate: 4-Bromofluorobenzene	21.5			ug/l	25.0		86	80-120			

TestAmerica Irvine

Joseph Doak
Project Manager

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

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: 8B05038 Extracted: 02/05/08											
LCS Analyzed: 02/05/2008 (8B05038-BS1)											
1,1,1-Trichloroethane	23.3	0.50	0.30	ug/l	25.0		93	65-135			
1,1,2,2-Tetrachloroethane	26.1	0.50	0.24	ug/l	25.0		104	55-130			
1,1,2-Trichloroethane	25.0	0.50	0.30	ug/l	25.0		100	70-125			
1,1-Dichloroethane	23.4	0.50	0.27	ug/l	25.0		94	70-125			
1,1-Dichloroethene	20.6	0.50	0.42	ug/l	25.0		83	70-125			
1,2-Dichloroethane	25.0	0.50	0.28	ug/l	25.0		100	60-140			
1,2-Dichlorobenzene	25.9	0.50	0.32	ug/l	25.0		104	75-120			
1,2-Dichloropropane	25.1	0.50	0.35	ug/l	25.0		101	70-125			
1,3-Dichlorobenzene	26.1	0.50	0.35	ug/l	25.0		104	75-120			
1,4-Dichlorobenzene	23.7	0.50	0.37	ug/l	25.0		95	75-120			
Benzene	23.6	0.50	0.28	ug/l	25.0		95	70-120			
Bromodichloromethane	25.8	0.50	0.30	ug/l	25.0		103	70-135			
Bromoform	23.0	1.0	0.40	ug/l	25.0		92	55-130			
Bromomethane	24.9	1.0	0.42	ug/l	25.0		100	65-140			
Carbon tetrachloride	23.7	0.50	0.28	ug/l	25.0		95	65-140			
Chlorobenzene	25.8	0.50	0.36	ug/l	25.0		103	75-120			
Chloroethane	25.5	1.0	0.40	ug/l	25.0		102	60-140			
Chloroform	24.4	0.50	0.33	ug/l	25.0		97	70-130			
Chloromethane	25.0	0.50	0.40	ug/l	25.0		100	50-140			
cis-1,3-Dichloropropene	25.8	0.50	0.22	ug/l	25.0		103	75-125			
Dibromochloromethane	27.5	0.50	0.28	ug/l	25.0		110	70-140			
Ethylbenzene	24.7	0.50	0.25	ug/l	25.0		99	75-125			
Methylene chloride	23.2	2.0	0.95	ug/l	25.0		93	55-130			
Tetrachloroethene	23.7	0.50	0.32	ug/l	25.0		95	70-125			
Toluene	24.3	0.50	0.36	ug/l	25.0		97	70-120			
trans-1,2-Dichloroethene	25.3	0.50	0.27	ug/l	25.0		101	70-125			
trans-1,3-Dichloropropene	26.6	0.50	0.32	ug/l	25.0		107	70-125			
Trichloroethene	24.4	0.50	0.26	ug/l	25.0		97	70-125			
Trichlorofluoromethane	27.0	0.50	0.34	ug/l	25.0		108	65-145			
Vinyl chloride	24.1	0.50	0.30	ug/l	25.0		97	55-135			
Xylenes, Total	77.3	1.5	0.90	ug/l	75.0		103	70-125			
Surrogate: Dibromofluoromethane	25.2			ug/l	25.0		101	80-120			
Surrogate: Toluene-d8	25.6			ug/l	25.0		103	80-120			
Surrogate: 4-Bromofluorobenzene	25.5			ug/l	25.0		102	80-120			

TestAmerica Irvine

Joseph Doak
Project Manager

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

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: 8B05038 Extracted: 02/05/08											
Matrix Spike Analyzed: 02/05/2008 (8B05038-MS1)						Source: IRA3037-08					
1,1,1-Trichloroethane	22.0	0.50	0.30	ug/l	25.0	ND	88	65-140			
1,1,2,2-Tetrachloroethane	24.3	0.50	0.24	ug/l	25.0	ND	97	55-135			
1,1,2-Trichloroethane	24.2	0.50	0.30	ug/l	25.0	ND	97	65-130			
1,1-Dichloroethane	22.4	0.50	0.27	ug/l	25.0	ND	89	65-130			
1,1-Dichloroethene	19.5	0.50	0.42	ug/l	25.0	ND	78	60-130			
1,2-Dichloroethane	24.0	0.50	0.28	ug/l	25.0	ND	96	60-140			
1,2-Dichlorobenzene	24.8	0.50	0.32	ug/l	25.0	ND	99	75-125			
1,2-Dichloropropane	24.2	0.50	0.35	ug/l	25.0	ND	97	65-130			
1,3-Dichlorobenzene	24.7	0.50	0.35	ug/l	25.0	ND	99	75-125			
1,4-Dichlorobenzene	22.4	0.50	0.37	ug/l	25.0	ND	89	75-125			
Benzene	22.6	0.50	0.28	ug/l	25.0	ND	90	65-125			
Bromodichloromethane	24.3	0.50	0.30	ug/l	25.0	ND	97	70-135			
Bromoform	21.3	1.0	0.40	ug/l	25.0	ND	85	55-135			
Bromomethane	24.3	1.0	0.42	ug/l	25.0	ND	97	55-145			
Carbon tetrachloride	22.6	0.50	0.28	ug/l	25.0	ND	91	65-140			
Chlorobenzene	24.0	0.50	0.36	ug/l	25.0	ND	96	75-125			
Chloroethane	24.8	1.0	0.40	ug/l	25.0	ND	99	55-140			
Chloroform	23.4	0.50	0.33	ug/l	25.0	ND	94	65-135			
Chloromethane	24.6	0.50	0.40	ug/l	25.0	ND	98	45-145			
cis-1,3-Dichloropropene	25.0	0.50	0.22	ug/l	25.0	ND	100	70-130			
Dibromochloromethane	25.5	0.50	0.28	ug/l	25.0	ND	102	65-140			
Ethylbenzene	23.2	0.50	0.25	ug/l	25.0	ND	93	65-130			
Methylene chloride	21.2	2.0	0.95	ug/l	25.0	ND	85	50-135			
Tetrachloroethene	22.3	0.50	0.32	ug/l	25.0	ND	89	65-130			
Toluene	23.4	0.50	0.36	ug/l	25.0	ND	93	70-125			
trans-1,2-Dichloroethene	24.3	0.50	0.27	ug/l	25.0	ND	97	65-130			
trans-1,3-Dichloropropene	25.8	0.50	0.32	ug/l	25.0	ND	103	65-135			
Trichloroethene	23.4	0.50	0.26	ug/l	25.0	ND	94	65-125			
Trichlorofluoromethane	26.7	0.50	0.34	ug/l	25.0	ND	107	60-145			
Vinyl chloride	23.6	0.50	0.30	ug/l	25.0	ND	94	45-140			
Xylenes, Total	71.4	1.5	0.90	ug/l	75.0	ND	95	60-130			
Surrogate: Dibromofluoromethane	24.8			ug/l	25.0		99	80-120			
Surrogate: Toluene-d8	25.9			ug/l	25.0		104	80-120			
Surrogate: 4-Bromofluorobenzene	24.8			ug/l	25.0		99	80-120			

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Joseph Doak
Project Manager

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

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: 8B05038 Extracted: 02/05/08											
Matrix Spike Dup Analyzed: 02/05/2008 (8B05038-MSD1)						Source: IRA3037-08					
1,1,1-Trichloroethane	22.7	0.50	0.30	ug/l	25.0	ND	91	65-140	3	20	
1,1,2,2-Tetrachloroethane	22.3	0.50	0.24	ug/l	25.0	ND	89	55-135	9	30	
1,1,2-Trichloroethane	22.8	0.50	0.30	ug/l	25.0	ND	91	65-130	6	25	
1,1-Dichloroethane	22.6	0.50	0.27	ug/l	25.0	ND	90	65-130	1	20	
1,1-Dichloroethene	20.2	0.50	0.42	ug/l	25.0	ND	81	60-130	3	20	
1,2-Dichloroethane	23.0	0.50	0.28	ug/l	25.0	ND	92	60-140	4	20	
1,2-Dichlorobenzene	24.8	0.50	0.32	ug/l	25.0	ND	99	75-125	0	20	
1,2-Dichloropropane	24.3	0.50	0.35	ug/l	25.0	ND	97	65-130	0	20	
1,3-Dichlorobenzene	25.5	0.50	0.35	ug/l	25.0	ND	102	75-125	3	20	
1,4-Dichlorobenzene	22.8	0.50	0.37	ug/l	25.0	ND	91	75-125	2	20	
Benzene	22.7	0.50	0.28	ug/l	25.0	ND	91	65-125	1	20	
Bromodichloromethane	24.1	0.50	0.30	ug/l	25.0	ND	97	70-135	1	20	
Bromoform	20.0	1.0	0.40	ug/l	25.0	ND	80	55-135	6	25	
Bromomethane	25.7	1.0	0.42	ug/l	25.0	ND	103	55-145	5	25	
Carbon tetrachloride	22.9	0.50	0.28	ug/l	25.0	ND	92	65-140	1	25	
Chlorobenzene	24.1	0.50	0.36	ug/l	25.0	ND	96	75-125	1	20	
Chloroethane	25.3	1.0	0.40	ug/l	25.0	ND	101	55-140	2	25	
Chloroform	23.5	0.50	0.33	ug/l	25.0	ND	94	65-135	0	20	
Chloromethane	25.6	0.50	0.40	ug/l	25.0	ND	102	45-145	4	25	
cis-1,3-Dichloropropene	24.5	0.50	0.22	ug/l	25.0	ND	98	70-130	2	20	
Dibromochloromethane	24.7	0.50	0.28	ug/l	25.0	ND	99	65-140	3	25	
Ethylbenzene	23.6	0.50	0.25	ug/l	25.0	ND	94	65-130	2	20	
Methylene chloride	21.5	2.0	0.95	ug/l	25.0	ND	86	50-135	1	20	
Tetrachloroethene	22.6	0.50	0.32	ug/l	25.0	ND	91	65-130	2	20	
Toluene	23.3	0.50	0.36	ug/l	25.0	ND	93	70-125	0	20	
trans-1,2-Dichloroethene	24.6	0.50	0.27	ug/l	25.0	ND	98	65-130	1	20	
trans-1,3-Dichloropropene	24.4	0.50	0.32	ug/l	25.0	ND	98	65-135	5	25	
Trichloroethene	23.5	0.50	0.26	ug/l	25.0	ND	94	65-125	1	20	
Trichlorofluoromethane	27.1	0.50	0.34	ug/l	25.0	ND	108	60-145	1	25	
Vinyl chloride	24.3	0.50	0.30	ug/l	25.0	ND	97	45-140	3	30	
Xylenes, Total	72.4	1.5	0.90	ug/l	75.0	ND	97	60-130	1	20	
Surrogate: Dibromofluoromethane	24.8			ug/l	25.0		99	80-120			
Surrogate: Toluene-d8	25.8			ug/l	25.0		103	80-120			
Surrogate: 4-Bromofluorobenzene	24.3			ug/l	25.0		97	80-120			

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

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: 8B02014 Extracted: 02/02/08											
Blank Analyzed: 02/02/2008 (8B02014-BLK1)											
Acrolein	ND	5.0	4.0	ug/l							
Acrylonitrile	ND	2.0	0.70	ug/l							
2-Chloroethyl vinyl ether	ND	5.0	1.8	ug/l							
Surrogate: Dibromofluoromethane	20.5			ug/l	25.0		82	80-120			
Surrogate: Toluene-d8	23.8			ug/l	25.0		95	80-120			
Surrogate: 4-Bromofluorobenzene	20.6			ug/l	25.0		83	80-120			
LCS Analyzed: 02/02/2008 (8B02014-BS1)											
2-Chloroethyl vinyl ether	23.5	5.0	1.8	ug/l	25.0		94	25-170			
Surrogate: Dibromofluoromethane	21.2			ug/l	25.0		85	80-120			
Surrogate: Toluene-d8	23.8			ug/l	25.0		95	80-120			
Surrogate: 4-Bromofluorobenzene	21.3			ug/l	25.0		85	80-120			
Matrix Spike Analyzed: 02/02/2008 (8B02014-MS1) Source: IRA2902-06											
2-Chloroethyl vinyl ether	ND	5.0	1.8	ug/l	25.0	ND		25-170			M13
Surrogate: Dibromofluoromethane	21.3			ug/l	25.0		85	80-120			
Surrogate: Toluene-d8	24.0			ug/l	25.0		96	80-120			
Surrogate: 4-Bromofluorobenzene	21.3			ug/l	25.0		85	80-120			
Matrix Spike Dup Analyzed: 02/02/2008 (8B02014-MSD1) Source: IRA2902-06											
2-Chloroethyl vinyl ether	ND	5.0	1.8	ug/l	25.0	ND		25-170		25	M13
Surrogate: Dibromofluoromethane	21.4			ug/l	25.0		85	80-120			
Surrogate: Toluene-d8	23.8			ug/l	25.0		95	80-120			
Surrogate: 4-Bromofluorobenzene	21.5			ug/l	25.0		86	80-120			

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 Project Manager

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Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

METHOD BLANK/QC DATA

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

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

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Project Manager

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
Batch: 8B04111 Extracted: 02/04/08											
Blank Analyzed: 02/07/2008 (8B04111-BLK1)											
4,6-Dinitro-2-methylphenol	ND	20	4.0	ug/l							
2,4-Dinitrophenol	ND	20	8.0	ug/l							
2,4-Dinitrotoluene	ND	10	3.5	ug/l							
2,6-Dinitrotoluene	ND	10	2.0	ug/l							
Di-n-octyl phthalate	ND	20	3.5	ug/l							
Fluoranthene	ND	10	3.0	ug/l							
Fluorene	ND	10	3.0	ug/l							
Hexachlorobenzene	ND	10	3.0	ug/l							
Hexachlorobutadiene	ND	10	4.0	ug/l							
Hexachlorocyclopentadiene	ND	20	5.0	ug/l							
Hexachloroethane	ND	10	3.5	ug/l							
Indeno(1,2,3-cd)pyrene	ND	20	3.5	ug/l							
Isophorone	ND	10	2.5	ug/l							
2-Methylnaphthalene	ND	10	2.0	ug/l							
2-Methylphenol	ND	10	3.0	ug/l							
4-Methylphenol	ND	10	3.0	ug/l							
Naphthalene	ND	10	3.0	ug/l							
2-Nitroaniline	ND	20	2.0	ug/l							
3-Nitroaniline	ND	20	3.0	ug/l							
4-Nitroaniline	ND	20	4.0	ug/l							
Nitrobenzene	ND	20	2.5	ug/l							
2-Nitrophenol	ND	10	3.5	ug/l							
4-Nitrophenol	ND	20	5.5	ug/l							
N-Nitrosodiphenylamine	ND	10	2.0	ug/l							
N-Nitroso-di-n-propylamine	ND	10	3.5	ug/l							
Pentachlorophenol	ND	20	3.5	ug/l							
Phenanthrene	ND	10	3.5	ug/l							
Phenol	ND	10	2.0	ug/l							
Pyrene	ND	10	4.0	ug/l							
1,2,4-Trichlorobenzene	ND	10	2.5	ug/l							
2,4,5-Trichlorophenol	ND	20	3.0	ug/l							
2,4,6-Trichlorophenol	ND	20	4.5	ug/l							
1,2-Diphenylhydrazine/Azobenzene	ND	20	2.5	ug/l							
N-Nitrosodimethylamine	ND	20	2.5	ug/l							
Surrogate: 2-Fluorophenol	159			ug/l	200		80		30-120		

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Project Manager

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B04111 Extracted: 02/04/08											
Blank Analyzed: 02/07/2008 (8B04111-BLK1)											
Surrogate: Phenol-d6	166			ug/l	200		83	35-120			
Surrogate: 2,4,6-Tribromophenol	129			ug/l	200		64	40-120			
Surrogate: Nitrobenzene-d5	83.8			ug/l	100		84	45-120			
Surrogate: 2-Fluorobiphenyl	82.4			ug/l	100		82	50-120			
Surrogate: Terphenyl-d14	82.8			ug/l	100		83	50-125			
LCS Analyzed: 02/07/2008 (8B04111-BS1)											
Acenaphthene	92.8	10	3.0	ug/l	100		93	60-120			
Acenaphthylene	97.0	10	3.0	ug/l	100		97	60-120			
Aniline	86.7	10	2.5	ug/l	100		87	35-120			
Anthracene	91.1	10	2.0	ug/l	100		91	65-120			
Benzidine	161	20	8.5	ug/l	100		161	30-160			L6
Benzoic acid	74.5	20	10	ug/l	100		74	25-120			
Benzo(a)anthracene	95.9	10	2.0	ug/l	100		96	65-120			
Benzo(b)fluoranthene	87.2	10	2.0	ug/l	100		87	55-125			
Benzo(k)fluoranthene	88.9	10	2.5	ug/l	100		89	50-125			
Benzo(g,h,i)perylene	83.0	10	4.0	ug/l	100		83	45-135			
Benzo(a)pyrene	91.9	10	2.0	ug/l	100		92	55-130			
Benzyl alcohol	99.9	20	2.5	ug/l	100		100	50-120			
Bis(2-chloroethoxy)methane	92.9	10	3.0	ug/l	100		93	55-120			
Bis(2-chloroethyl)ether	86.4	10	3.0	ug/l	100		86	50-120			
Bis(2-chloroisopropyl)ether	98.4	10	2.5	ug/l	100		98	45-120			
Bis(2-ethylhexyl)phthalate	99.9	50	4.0	ug/l	100		100	65-130			
4-Bromophenyl phenyl ether	86.0	10	3.0	ug/l	100		86	60-120			
Butyl benzyl phthalate	104	20	4.0	ug/l	100		104	55-130			
4-Chloroaniline	95.8	10	2.0	ug/l	100		96	55-120			
2-Chloronaphthalene	91.9	10	3.0	ug/l	100		92	60-120			
4-Chloro-3-methylphenol	97.9	20	2.5	ug/l	100		98	60-120			
2-Chlorophenol	86.3	10	3.0	ug/l	100		86	45-120			
4-Chlorophenyl phenyl ether	89.9	10	2.5	ug/l	100		90	65-120			
Chrysene	92.3	10	2.5	ug/l	100		92	65-120			
Dibenz(a,h)anthracene	84.8	20	3.0	ug/l	100		85	50-135			
Dibenzofuran	93.2	10	4.0	ug/l	100		93	65-120			
Di-n-butyl phthalate	85.8	20	3.0	ug/l	100		86	60-125			
1,3-Dichlorobenzene	74.9	10	3.0	ug/l	100		75	35-120			
1,4-Dichlorobenzene	79.8	10	2.5	ug/l	100		80	35-120			

TestAmerica Irvine

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Project Manager

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B04111 Extracted: 02/04/08											
LCS Analyzed: 02/07/2008 (8B04111-BS1)											
1,2-Dichlorobenzene	80.6	10	3.0	ug/l	100		81	40-120			
3,3-Dichlorobenzidine	84.1	20	3.0	ug/l	100		84	45-135			
2,4-Dichlorophenol	91.0	10	3.5	ug/l	100		91	55-120			
Diethyl phthalate	92.2	10	3.5	ug/l	100		92	55-120			
2,4-Dimethylphenol	80.5	20	3.5	ug/l	100		81	40-120			
Dimethyl phthalate	89.5	10	2.0	ug/l	100		90	30-120			
4,6-Dinitro-2-methylphenol	85.8	20	4.0	ug/l	100		86	45-120			
2,4-Dinitrophenol	94.2	20	8.0	ug/l	100		94	40-120			
2,4-Dinitrotoluene	101	10	3.5	ug/l	100		101	65-120			
2,6-Dinitrotoluene	98.1	10	2.0	ug/l	100		98	65-120			
Di-n-octyl phthalate	89.3	20	3.5	ug/l	100		89	65-135			
Fluoranthene	82.3	10	3.0	ug/l	100		82	60-120			
Fluorene	95.6	10	3.0	ug/l	100		96	65-120			
Hexachlorobenzene	80.7	10	3.0	ug/l	100		81	60-120			
Hexachlorobutadiene	76.8	10	4.0	ug/l	100		77	40-120			
Hexachlorocyclopentadiene	105	20	5.0	ug/l	100		105	25-120			
Hexachloroethane	76.5	10	3.5	ug/l	100		77	35-120			
Indeno(1,2,3-cd)pyrene	85.2	20	3.5	ug/l	100		85	45-135			
Isophorone	93.8	10	2.5	ug/l	100		94	50-120			
2-Methylnaphthalene	91.2	10	2.0	ug/l	100		91	55-120			
2-Methylphenol	90.9	10	3.0	ug/l	100		91	50-120			
4-Methylphenol	90.3	10	3.0	ug/l	100		90	50-120			
Naphthalene	87.4	10	3.0	ug/l	100		87	55-120			
2-Nitroaniline	105	20	2.0	ug/l	100		105	65-120			
3-Nitroaniline	97.2	20	3.0	ug/l	100		97	60-120			
4-Nitroaniline	99.5	20	4.0	ug/l	100		99	55-125			
Nitrobenzene	93.5	20	2.5	ug/l	100		94	55-120			
2-Nitrophenol	90.9	10	3.5	ug/l	100		91	50-120			
4-Nitrophenol	90.3	20	5.5	ug/l	100		90	45-120			
N-Nitrosodiphenylamine	94.4	10	2.0	ug/l	100		94	60-120			
N-Nitroso-di-n-propylamine	94.6	10	3.5	ug/l	100		95	45-120			
Pentachlorophenol	76.0	20	3.5	ug/l	100		76	50-120			
Phenanthrene	87.8	10	3.5	ug/l	100		88	65-120			
Phenol	84.3	10	2.0	ug/l	100		84	40-120			
Pyrene	112	10	4.0	ug/l	100		112	55-125			

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Joseph Doak
Project Manager

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B04111 Extracted: 02/04/08											
LCS Analyzed: 02/07/2008 (8B04111-BS1)											
1,2,4-Trichlorobenzene	82.1	10	2.5	ug/l	100		82	45-120			
2,4,5-Trichlorophenol	94.0	20	3.0	ug/l	100		94	55-120			
2,4,6-Trichlorophenol	91.5	20	4.5	ug/l	100		92	55-120			
1,2-Diphenylhydrazine/Azobenzene	97.8	20	2.5	ug/l	100		98	60-120			
N-Nitrosodimethylamine	98.9	20	2.5	ug/l	100		99	45-120			
Surrogate: 2-Fluorophenol	167			ug/l	200		83	30-120			
Surrogate: Phenol-d6	171			ug/l	200		86	35-120			
Surrogate: 2,4,6-Tribromophenol	153			ug/l	200		77	40-120			
Surrogate: Nitrobenzene-d5	89.0			ug/l	100		89	45-120			
Surrogate: 2-Fluorobiphenyl	87.6			ug/l	100		88	50-120			
Surrogate: Terphenyl-d14	100			ug/l	100		100	50-125			
Matrix Spike Analyzed: 02/07/2008 (8B04111-MS1)											
Source: IRA3018-06											
Acenaphthene	93.7	48	14	ug/l	95.2	ND	98	60-120			
Acenaphthylene	40.8	48	14	ug/l	95.2	ND	43	60-120			M2, J
Aniline	53.5	48	12	ug/l	95.2	ND	56	35-120			
Anthracene	84.9	48	9.5	ug/l	95.2	ND	89	65-120			
Benzidine	ND	95	40	ug/l	95.2	ND		30-160			M2
Benzoic acid	107	95	48	ug/l	95.2	ND	112	25-125			
Benzo(a)anthracene	89.0	48	9.5	ug/l	95.2	ND	94	65-120			
Benzo(b)fluoranthene	83.0	48	9.5	ug/l	95.2	ND	87	55-125			
Benzo(k)fluoranthene	95.6	48	12	ug/l	95.2	ND	100	55-125			
Benzo(g,h,i)perylene	68.7	48	19	ug/l	95.2	ND	72	45-135			
Benzo(a)pyrene	90.1	48	9.5	ug/l	95.2	ND	95	55-130			
Benzyl alcohol	34.9	95	12	ug/l	95.2	ND	37	40-120			M2, J
Bis(2-chloroethoxy)methane	76.3	48	14	ug/l	95.2	ND	80	50-120			
Bis(2-chloroethyl)ether	106	48	14	ug/l	95.2	ND	112	50-120			
Bis(2-chloroisopropyl)ether	86.9	48	12	ug/l	95.2	ND	91	45-120			
Bis(2-ethylhexyl)phthalate	91.0	240	19	ug/l	95.2	ND	96	65-130			J
4-Bromophenyl phenyl ether	75.0	48	14	ug/l	95.2	ND	79	60-120			
Butyl benzyl phthalate	92.6	95	19	ug/l	95.2	ND	97	55-130			J
4-Chloroaniline	19.6	48	9.5	ug/l	95.2	ND	21	55-120			M2, J
2-Chloronaphthalene	83.3	48	14	ug/l	95.2	ND	87	60-120			
4-Chloro-3-methylphenol	84.0	95	12	ug/l	95.2	ND	88	60-120			J
2-Chlorophenol	77.2	48	14	ug/l	95.2	ND	81	45-120			
4-Chlorophenyl phenyl ether	92.5	48	12	ug/l	95.2	ND	97	65-120			

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Project Manager

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B04111 Extracted: 02/04/08											
Matrix Spike Analyzed: 02/07/2008 (8B04111-MS1)						Source: IRA3018-06					
Chrysene	85.3	48	12	ug/l	95.2	ND	90	65-120			
Dibenz(a,h)anthracene	71.9	95	14	ug/l	95.2	ND	76	45-135			J
Dibenzofuran	89.2	48	19	ug/l	95.2	ND	94	65-120			
Di-n-butyl phthalate	80.5	95	14	ug/l	95.2	ND	84	60-125			J
1,3-Dichlorobenzene	71.9	48	14	ug/l	95.2	ND	76	35-120			
1,4-Dichlorobenzene	181	48	12	ug/l	95.2	ND	190	35-120			M1
1,2-Dichlorobenzene	139	48	14	ug/l	95.2	65.3	78	40-120			
3,3-Dichlorobenzidine	ND	95	14	ug/l	95.2	ND		45-135			M2
2,4-Dichlorophenol	81.7	48	17	ug/l	95.2	ND	86	55-120			
Diethyl phthalate	89.8	48	17	ug/l	95.2	ND	94	55-120			
2,4-Dimethylphenol	83.3	95	17	ug/l	95.2	ND	87	40-120			J
Dimethyl phthalate	93.8	48	9.5	ug/l	95.2	ND	98	30-120			
4,6-Dinitro-2-methylphenol	121	95	19	ug/l	95.2	ND	128	45-120			M1
2,4-Dinitrophenol	112	95	38	ug/l	95.2	ND	118	40-120			
2,4-Dinitrotoluene	81.5	48	17	ug/l	95.2	ND	86	65-120			
2,6-Dinitrotoluene	81.5	48	9.5	ug/l	95.2	ND	86	65-120			
Di-n-octyl phthalate	87.2	95	17	ug/l	95.2	ND	92	65-135			J
Fluoranthene	82.8	48	14	ug/l	95.2	ND	87	60-120			
Fluorene	93.2	48	14	ug/l	95.2	ND	98	65-120			
Hexachlorobenzene	70.5	48	14	ug/l	95.2	ND	74	60-120			
Hexachlorobutadiene	73.3	48	19	ug/l	95.2	ND	77	40-120			
Hexachlorocyclopentadiene	67.8	95	24	ug/l	95.2	ND	71	25-120			J
Hexachloroethane	68.9	48	17	ug/l	95.2	ND	72	35-120			
Indeno(1,2,3-cd)pyrene	71.6	95	17	ug/l	95.2	ND	75	40-135			J
Isophorone	49.0	48	12	ug/l	95.2	ND	52	50-120			
2-Methylnaphthalene	86.2	48	9.5	ug/l	95.2	ND	90	55-120			
2-Methylphenol	84.3	48	14	ug/l	95.2	ND	88	50-120			
4-Methylphenol	75.9	48	14	ug/l	95.2	ND	80	50-120			
Naphthalene	82.8	48	14	ug/l	95.2	ND	87	55-120			
2-Nitroaniline	91.7	95	9.5	ug/l	95.2	ND	96	65-120			J
3-Nitroaniline	27.3	95	14	ug/l	95.2	ND	29	60-120			M2, J
4-Nitroaniline	51.6	95	19	ug/l	95.2	ND	54	55-125			M2, J
Nitrobenzene	80.4	95	12	ug/l	95.2	ND	84	55-120			J
2-Nitrophenol	75.0	48	17	ug/l	95.2	ND	79	50-120			
4-Nitrophenol	110	95	26	ug/l	95.2	ND	115	45-120			

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Joseph Doak
Project Manager

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B04111 Extracted: 02/04/08											
Matrix Spike Analyzed: 02/07/2008 (8B04111-MS1)						Source: IRA3018-06					
N-Nitrosodiphenylamine	78.2	48	9.5	ug/l	95.2	ND	82	60-120			
N-Nitroso-di-n-propylamine	ND	48	17	ug/l	95.2	ND		45-120			M2
Pentachlorophenol	81.0	95	17	ug/l	95.2	ND	85	50-120			J
Phenanthrene	84.2	48	17	ug/l	95.2	ND	88	65-120			
Phenol	79.1	48	9.5	ug/l	95.2	ND	83	40-120			
Pyrene	100	48	19	ug/l	95.2	ND	105	55-125			
1,2,4-Trichlorobenzene	197	48	12	ug/l	95.2	130	71	45-120			
2,4,5-Trichlorophenol	88.3	95	14	ug/l	95.2	ND	93	55-120			J
2,4,6-Trichlorophenol	88.8	95	21	ug/l	95.2	ND	93	55-120			J
1,2-Diphenylhydrazine/Azobenzene	ND	95	12	ug/l	95.2	ND		60-120			M2
N-Nitrosodimethylamine	ND	95	12	ug/l	95.2	ND		45-120			M2
Surrogate: 2-Fluorophenol	148			ug/l	190		77	30-120			
Surrogate: Phenol-d6	150			ug/l	190		78	35-120			
Surrogate: 2,4,6-Tribromophenol	147			ug/l	190		77	40-120			
Surrogate: Nitrobenzene-d5	74.0			ug/l	95.2		78	45-120			
Surrogate: 2-Fluorobiphenyl	80.5			ug/l	95.2		84	50-120			
Surrogate: Terphenyl-d14	92.3			ug/l	95.2		97	50-125			
Matrix Spike Dup Analyzed: 02/07/2008 (8B04111-MSD1)						Source: IRA3018-06					
Acenaphthene	91.1	48	14	ug/l	95.2	ND	96	60-120	3	25	
Acenaphthylene	53.7	48	14	ug/l	95.2	ND	56	60-120	27	25	M2, R-3
Aniline	49.4	48	12	ug/l	95.2	ND	52	35-120	8	30	
Anthracene	82.0	48	9.5	ug/l	95.2	ND	86	65-120	3	25	
Benzidine	ND	95	40	ug/l	95.2	ND		30-160		35	M2
Benzoic acid	104	95	48	ug/l	95.2	ND	110	25-125	3	30	
Benzo(a)anthracene	83.4	48	9.5	ug/l	95.2	ND	88	65-120	7	20	
Benzo(b)fluoranthene	79.0	48	9.5	ug/l	95.2	ND	83	55-125	5	25	
Benzo(k)fluoranthene	87.0	48	12	ug/l	95.2	ND	91	55-125	9	30	
Benzo(g,h,i)perylene	65.9	48	19	ug/l	95.2	ND	69	45-135	4	30	
Benzo(a)pyrene	85.2	48	9.5	ug/l	95.2	ND	90	55-130	6	25	
Benzyl alcohol	36.6	95	12	ug/l	95.2	ND	38	40-120	5	30	M2, J
Bis(2-chloroethoxy)methane	70.4	48	14	ug/l	95.2	ND	74	50-120	8	25	
Bis(2-chloroethyl)ether	68.1	48	14	ug/l	95.2	ND	72	50-120	44	25	R
Bis(2-chloroisopropyl)ether	83.1	48	12	ug/l	95.2	ND	87	45-120	4	25	
Bis(2-ethylhexyl)phthalate	86.8	240	19	ug/l	95.2	ND	91	65-130	5	25	J
4-Bromophenyl phenyl ether	69.8	48	14	ug/l	95.2	ND	73	60-120	7	25	

TestAmerica Irvine

Joseph Doak
Project Manager

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B04111 Extracted: 02/04/08											
Matrix Spike Dup Analyzed: 02/07/2008 (8B04111-MSD1)					Source: IRA3018-06						
Butyl benzyl phthalate	90.5	95	19	ug/l	95.2	ND	95	55-130	2	25	J
4-Chloroaniline	39.1	48	9.5	ug/l	95.2	ND	41	55-120	66	25	M2, R-3, J
2-Chloronaphthalene	78.2	48	14	ug/l	95.2	ND	82	60-120	6	20	
4-Chloro-3-methylphenol	82.4	95	12	ug/l	95.2	ND	86	60-120	2	25	J
2-Chlorophenol	69.2	48	14	ug/l	95.2	ND	73	45-120	11	25	
4-Chlorophenyl phenyl ether	84.3	48	12	ug/l	95.2	ND	88	65-120	9	25	
Chrysene	83.3	48	12	ug/l	95.2	ND	87	65-120	2	25	
Dibenz(a,h)anthracene	69.2	95	14	ug/l	95.2	ND	73	45-135	4	30	J
Dibenzofuran	82.9	48	19	ug/l	95.2	ND	87	65-120	7	25	
Di-n-butyl phthalate	77.4	95	14	ug/l	95.2	ND	81	60-125	4	25	J
1,3-Dichlorobenzene	64.5	48	14	ug/l	95.2	ND	68	35-120	11	25	
1,4-Dichlorobenzene	168	48	12	ug/l	95.2	ND	177	35-120	7	25	M1
1,2-Dichlorobenzene	123	48	14	ug/l	95.2	65.3	61	40-120	12	25	
3,3-Dichlorobenzidine	ND	95	14	ug/l	95.2	ND		45-135		25	M2
2,4-Dichlorophenol	76.4	48	17	ug/l	95.2	ND	80	55-120	7	25	
Diethyl phthalate	85.0	48	17	ug/l	95.2	ND	89	55-120	6	30	
2,4-Dimethylphenol	75.8	95	17	ug/l	95.2	ND	80	40-120	9	25	J
Dimethyl phthalate	87.5	48	9.5	ug/l	95.2	ND	92	30-120	7	30	
4,6-Dinitro-2-methylphenol	112	95	19	ug/l	95.2	ND	118	45-120	8	25	
2,4-Dinitrophenol	91.4	95	38	ug/l	95.2	ND	96	40-120	20	25	J
2,4-Dinitrotoluene	69.1	48	17	ug/l	95.2	ND	73	65-120	16	25	
2,6-Dinitrotoluene	77.2	48	9.5	ug/l	95.2	ND	81	65-120	5	20	
Di-n-octyl phthalate	81.3	95	17	ug/l	95.2	ND	85	65-135	7	20	J
Fluoranthene	79.0	48	14	ug/l	95.2	ND	83	60-120	5	25	
Fluorene	88.1	48	14	ug/l	95.2	ND	92	65-120	6	25	
Hexachlorobenzene	69.5	48	14	ug/l	95.2	ND	73	60-120	1	25	
Hexachlorobutadiene	66.5	48	19	ug/l	95.2	ND	70	40-120	10	25	
Hexachlorocyclopentadiene	41.9	95	24	ug/l	95.2	ND	44	25-120	47	30	R, J
Hexachloroethane	58.5	48	17	ug/l	95.2	ND	61	35-120	16	25	
Indeno(1,2,3-cd)pyrene	67.4	95	17	ug/l	95.2	ND	71	40-135	6	30	J
Isophorone	50.0	48	12	ug/l	95.2	ND	52	50-120	2	25	
2-Methylnaphthalene	79.4	48	9.5	ug/l	95.2	ND	83	55-120	8	20	
2-Methylphenol	73.3	48	14	ug/l	95.2	ND	77	50-120	14	25	
4-Methylphenol	70.0	48	14	ug/l	95.2	ND	74	50-120	8	25	
Naphthalene	82.0	48	14	ug/l	95.2	ND	86	55-120	1	25	

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Joseph Doak
Project Manager

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B04111 Extracted: 02/04/08											
Matrix Spike Dup Analyzed: 02/07/2008 (8B04111-MSD1)						Source: IRA3018-06					
2-Nitroaniline	85.6	95	9.5	ug/l	95.2	ND	90	65-120	7	25	J
3-Nitroaniline	18.4	95	14	ug/l	95.2	ND	19	60-120	39	25	M2, R-3, J
4-Nitroaniline	31.6	95	19	ug/l	95.2	ND	33	55-125	48	25	M2, R-3, J
Nitrobenzene	80.5	95	12	ug/l	95.2	ND	84	55-120	0	25	J
2-Nitrophenol	72.8	48	17	ug/l	95.2	ND	76	50-120	3	25	
4-Nitrophenol	134	95	26	ug/l	95.2	ND	141	45-120	20	30	M1
N-Nitrosodiphenylamine	60.8	48	9.5	ug/l	95.2	ND	64	60-120	25	25	
N-Nitroso-di-n-propylamine	ND	48	17	ug/l	95.2	ND		45-120		25	M2
Pentachlorophenol	76.7	95	17	ug/l	95.2	ND	80	50-120	5	25	J
Phenanthrene	79.1	48	17	ug/l	95.2	ND	83	65-120	6	25	
Phenol	69.3	48	9.5	ug/l	95.2	ND	73	40-120	13	25	
Pyrene	96.9	48	19	ug/l	95.2	ND	102	55-125	3	25	
1,2,4-Trichlorobenzene	182	48	12	ug/l	95.2	130	55	45-120	8	20	
2,4,5-Trichlorophenol	75.5	95	14	ug/l	95.2	ND	79	55-120	16	30	J
2,4,6-Trichlorophenol	80.5	95	21	ug/l	95.2	ND	84	55-120	10	30	J
1,2-Diphenylhydrazine/Azobenzene	ND	95	12	ug/l	95.2	ND		60-120		25	M2
N-Nitrosodimethylamine	ND	95	12	ug/l	95.2	ND		45-120		25	M2
Surrogate: 2-Fluorophenol	138			ug/l	190		72	30-120			
Surrogate: Phenol-d6	132			ug/l	190		70	35-120			
Surrogate: 2,4,6-Tribromophenol	134			ug/l	190		70	40-120			
Surrogate: Nitrobenzene-d5	72.5			ug/l	95.2		76	45-120			
Surrogate: 2-Fluorobiphenyl	77.3			ug/l	95.2		81	50-120			
Surrogate: Terphenyl-d14	86.6			ug/l	95.2		91	50-125			

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Project Manager

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NPDES - 1281

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

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: 8B04071 Extracted: 02/04/08											
Blank Analyzed: 02/06/2008 (8B04071-BLK1)											
Aldrin	ND	0.0050	0.0015	ug/l							
alpha-BHC	ND	0.0050	0.0025	ug/l							
beta-BHC	ND	0.010	0.0040	ug/l							
delta-BHC	ND	0.0050	0.0035	ug/l							
gamma-BHC (Lindane)	ND	0.010	0.0030	ug/l							
Chlordane	ND	0.10	0.030	ug/l							
4,4'-DDD	ND	0.0050	0.0020	ug/l							
4,4'-DDE	ND	0.0050	0.0030	ug/l							
4,4'-DDT	ND	0.010	0.0040	ug/l							
Dieldrin	ND	0.0050	0.0020	ug/l							
Endosulfan I	ND	0.0050	0.0020	ug/l							
Endosulfan II	ND	0.0050	0.0030	ug/l							
Endosulfan sulfate	ND	0.010	0.0030	ug/l							
Endrin	ND	0.0050	0.0020	ug/l							
Endrin aldehyde	ND	0.010	0.0020	ug/l							
Endrin ketone	ND	0.010	0.0030	ug/l							
Heptachlor	ND	0.010	0.0030	ug/l							
Heptachlor epoxide	ND	0.0050	0.0025	ug/l							
Methoxychlor	ND	0.0050	0.0035	ug/l							
Toxaphene	ND	0.10	0.070	ug/l							
Surrogate: Decachlorobiphenyl	0.473			ug/l	0.500		95	45-120			
Surrogate: Tetrachloro-m-xylene	0.447			ug/l	0.500		89	35-115			

LCS Analyzed: 02/05/2008 (8B04071-BS1)

Aldrin	0.437	0.0050	0.0015	ug/l	0.500		87	40-115			
alpha-BHC	0.482	0.0050	0.0025	ug/l	0.500		96	45-115			
beta-BHC	0.475	0.010	0.0040	ug/l	0.500		95	55-115			
delta-BHC	0.490	0.0050	0.0035	ug/l	0.500		98	55-115			
gamma-BHC (Lindane)	0.485	0.010	0.0030	ug/l	0.500		97	45-115			
4,4'-DDD	0.490	0.0050	0.0020	ug/l	0.500		98	55-120			
4,4'-DDE	0.451	0.0050	0.0030	ug/l	0.500		90	50-120			
4,4'-DDT	0.494	0.010	0.0040	ug/l	0.500		99	55-120			
Dieldrin	0.472	0.0050	0.0020	ug/l	0.500		94	55-115			
Endosulfan I	0.440	0.0050	0.0020	ug/l	0.500		88	55-115			
Endosulfan II	0.476	0.0050	0.0030	ug/l	0.500		95	55-120			
Endosulfan sulfate	0.476	0.010	0.0030	ug/l	0.500		95	60-120			

MNR1

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

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: 8B04071 Extracted: 02/04/08											
LCS Analyzed: 02/05/2008 (8B04071-BS1)											
Endrin	0.482	0.0050	0.0020	ug/l	0.500		96	55-115			MNR1
Endrin aldehyde	0.449	0.010	0.0020	ug/l	0.500		90	50-120			
Endrin ketone	0.471	0.010	0.0030	ug/l	0.500		94	55-120			
Heptachlor	0.468	0.010	0.0030	ug/l	0.500		94	45-115			
Heptachlor epoxide	0.453	0.0050	0.0025	ug/l	0.500		91	55-115			
Methoxychlor	0.474	0.0050	0.0035	ug/l	0.500		95	60-120			
Surrogate: Decachlorobiphenyl	0.464			ug/l	0.500		93	45-120			
Surrogate: Tetrachloro-m-xylene	0.433			ug/l	0.500		87	35-115			
LCS Dup Analyzed: 02/05/2008 (8B04071-BSD1)											
Aldrin	0.433	0.0050	0.0015	ug/l	0.500		87	40-115	1	30	
alpha-BHC	0.474	0.0050	0.0025	ug/l	0.500		95	45-115	2	30	
beta-BHC	0.466	0.010	0.0040	ug/l	0.500		93	55-115	2	30	
delta-BHC	0.480	0.0050	0.0035	ug/l	0.500		96	55-115	2	30	
gamma-BHC (Lindane)	0.476	0.010	0.0030	ug/l	0.500		95	45-115	2	30	
4,4'-DDD	0.481	0.0050	0.0020	ug/l	0.500		96	55-120	2	30	
4,4'-DDE	0.450	0.0050	0.0030	ug/l	0.500		90	50-120	0	30	
4,4'-DDT	0.483	0.010	0.0040	ug/l	0.500		97	55-120	2	30	
Dieldrin	0.463	0.0050	0.0020	ug/l	0.500		93	55-115	2	30	
Endosulfan I	0.439	0.0050	0.0020	ug/l	0.500		88	55-115	0	30	
Endosulfan II	0.466	0.0050	0.0030	ug/l	0.500		93	55-120	2	30	
Endosulfan sulfate	0.466	0.010	0.0030	ug/l	0.500		93	60-120	2	30	
Endrin	0.471	0.0050	0.0020	ug/l	0.500		94	55-115	2	30	
Endrin aldehyde	0.441	0.010	0.0020	ug/l	0.500		88	50-120	2	30	
Endrin ketone	0.460	0.010	0.0030	ug/l	0.500		92	55-120	2	30	
Heptachlor	0.461	0.010	0.0030	ug/l	0.500		92	45-115	2	30	
Heptachlor epoxide	0.444	0.0050	0.0025	ug/l	0.500		89	55-115	2	30	
Methoxychlor	0.464	0.0050	0.0035	ug/l	0.500		93	60-120	2	30	
Surrogate: Decachlorobiphenyl	0.453			ug/l	0.500		91	45-120			
Surrogate: Tetrachloro-m-xylene	0.430			ug/l	0.500		86	35-115			

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

METHOD BLANK/QC DATA

TOTAL PCBS (EPA 608)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B04071 Extracted: 02/04/08											
Blank Analyzed: 02/05/2008 (8B04071-BLK1)											
Aroclor 1016	ND	0.50	0.45	ug/l							
Aroclor 1221	ND	0.50	0.25	ug/l							
Aroclor 1232	ND	0.50	0.25	ug/l							
Aroclor 1242	ND	0.50	0.25	ug/l							
Aroclor 1248	ND	0.50	0.25	ug/l							
Aroclor 1254	ND	0.50	0.25	ug/l							
Aroclor 1260	ND	0.50	0.30	ug/l							
Surrogate: Decachlorobiphenyl	0.484			ug/l	0.500		97	45-120			
LCS Analyzed: 02/05/2008 (8B04071-BS2)											
Aroclor 1016	3.71	0.50	0.45	ug/l	4.00		93	50-115			MNR1
Aroclor 1260	3.92	0.50	0.30	ug/l	4.00		98	60-120			
Surrogate: Decachlorobiphenyl	0.462			ug/l	0.500		92	45-120			
LCS Dup Analyzed: 02/05/2008 (8B04071-BSD2)											
Aroclor 1016	3.60	0.50	0.45	ug/l	4.00		90	50-115	3	30	
Aroclor 1260	3.98	0.50	0.30	ug/l	4.00		100	60-120	2	25	
Surrogate: Decachlorobiphenyl	0.489			ug/l	0.500		98	45-120			

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Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
Batch: 8B05087 Extracted: 02/05/08											
Blank Analyzed: 02/05/2008 (8B05087-BLK1)											
Aluminum	ND	50	40	ug/l							
Arsenic	ND	10	7.0	ug/l							
Beryllium	ND	2.0	0.90	ug/l							
Boron	ND	0.050	0.020	mg/l							
Calcium	ND	0.10	0.050	mg/l							
Chromium	ND	5.0	2.0	ug/l							
Iron	ND	0.040	0.015	mg/l							
Magnesium	ND	0.020	0.012	mg/l							
Nickel	ND	10	2.0	ug/l							
Selenium	ND	10	8.0	ug/l							
Silver	ND	10	6.0	ug/l							
Vanadium	ND	10	3.0	ug/l							
Zinc	ND	20	6.0	ug/l							
LCS Analyzed: 02/05/2008 (8B05087-BS1)											
Aluminum	479	50	40	ug/l	500		96	85-115			
Arsenic	492	10	7.0	ug/l	500		98	85-115			
Beryllium	496	2.0	0.90	ug/l	500		99	85-115			
Boron	0.491	0.050	0.020	mg/l	0.500		98	85-115			
Calcium	2.56	0.10	0.050	mg/l	2.50		102	85-115			
Chromium	500	5.0	2.0	ug/l	500		100	85-115			
Iron	0.496	0.040	0.015	mg/l	0.500		99	85-115			
Magnesium	2.56	0.020	0.012	mg/l	2.50		102	85-115			
Nickel	508	10	2.0	ug/l	500		102	85-115			
Selenium	477	10	8.0	ug/l	500		95	85-115			
Silver	245	10	6.0	ug/l	250		98	85-115			
Vanadium	487	10	3.0	ug/l	500		97	85-115			
Zinc	488	20	6.0	ug/l	500		98	85-115			

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Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B05087 Extracted: 02/05/08											
Matrix Spike Analyzed: 02/05/2008 (8B05087-MS1)						Source: IRB0207-01					
Aluminum	726	50	40	ug/l	500	235	98	70-130			
Arsenic	497	10	7.0	ug/l	500	ND	99	70-130			
Beryllium	502	2.0	0.90	ug/l	500	ND	100	70-130			
Boron	0.521	0.050	0.020	mg/l	0.500	0.0219	100	70-130			
Calcium	108	0.10	0.050	mg/l	2.50	106	68	70-130			MHA
Chromium	946	5.0	2.0	ug/l	500	454	98	70-130			
Iron	0.556	0.040	0.015	mg/l	0.500	0.0657	98	70-130			
Magnesium	2.55	0.020	0.012	mg/l	2.50	0.0560	100	70-130			
Nickel	500	10	2.0	ug/l	500	3.02	99	70-130			
Selenium	488	10	8.0	ug/l	500	9.86	96	70-130			
Silver	257	10	6.0	ug/l	250	ND	103	70-130			
Vanadium	517	10	3.0	ug/l	500	23.5	99	70-130			
Zinc	491	20	6.0	ug/l	500	ND	98	70-130			
Matrix Spike Dup Analyzed: 02/05/2008 (8B05087-MSD1)						Source: IRB0207-01					
Aluminum	721	50	40	ug/l	500	235	97	70-130	1	20	
Arsenic	496	10	7.0	ug/l	500	ND	99	70-130	0	20	
Beryllium	492	2.0	0.90	ug/l	500	ND	98	70-130	2	20	
Boron	0.513	0.050	0.020	mg/l	0.500	0.0219	98	70-130	2	20	
Calcium	109	0.10	0.050	mg/l	2.50	106	121	70-130	1	20	MHA
Chromium	944	5.0	2.0	ug/l	500	454	98	70-130	0	20	
Iron	0.547	0.040	0.015	mg/l	0.500	0.0657	96	70-130	2	20	
Magnesium	2.50	0.020	0.012	mg/l	2.50	0.0560	98	70-130	2	20	
Nickel	496	10	2.0	ug/l	500	3.02	99	70-130	1	20	
Selenium	488	10	8.0	ug/l	500	9.86	96	70-130	0	20	
Silver	251	10	6.0	ug/l	250	ND	101	70-130	2	20	
Vanadium	506	10	3.0	ug/l	500	23.5	97	70-130	2	20	
Zinc	482	20	6.0	ug/l	500	ND	96	70-130	2	20	

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B05090 Extracted: 02/05/08											
Blank Analyzed: 02/05/2008 (8B05090-BLK1)											
Antimony	ND	2.0	0.20	ug/l							
Cadmium	ND	1.0	0.11	ug/l							
Copper	ND	2.0	0.75	ug/l							
Lead	ND	1.0	0.30	ug/l							
Thallium	ND	1.0	0.20	ug/l							
LCS Analyzed: 02/05/2008 (8B05090-BS1)											
Antimony	84.1	2.0	0.20	ug/l	80.0		105	85-115			
Cadmium	84.6	1.0	0.11	ug/l	80.0		106	85-115			
Copper	86.8	2.0	0.75	ug/l	80.0		109	85-115			
Lead	83.6	1.0	0.30	ug/l	80.0		104	85-115			
Thallium	84.6	1.0	0.20	ug/l	80.0		106	85-115			
Matrix Spike Analyzed: 02/05/2008 (8B05090-MS1) Source: IRB0119-01											
Antimony	89.8	2.0	0.20	ug/l	80.0	0.417	112	70-130			
Cadmium	83.3	1.0	0.11	ug/l	80.0	ND	104	70-130			
Copper	76.4	2.0	0.75	ug/l	80.0	1.92	93	70-130			
Lead	72.1	1.0	0.30	ug/l	80.0	ND	90	70-130			
Thallium	74.3	1.0	0.20	ug/l	80.0	ND	93	70-130			
Matrix Spike Analyzed: 02/05/2008 (8B05090-MS2) Source: IRB0120-04											
Antimony	87.6	2.0	0.20	ug/l	80.0	ND	110	70-130			
Cadmium	82.5	1.0	0.11	ug/l	80.0	ND	103	70-130			
Copper	78.0	2.0	0.75	ug/l	80.0	1.34	96	70-130			
Lead	73.0	1.0	0.30	ug/l	80.0	ND	91	70-130			
Thallium	75.2	1.0	0.20	ug/l	80.0	ND	94	70-130			
Matrix Spike Dup Analyzed: 02/05/2008 (8B05090-MSD1) Source: IRB0119-01											
Antimony	88.9	2.0	0.20	ug/l	80.0	0.417	111	70-130	1	20	
Cadmium	85.7	1.0	0.11	ug/l	80.0	ND	107	70-130	3	20	
Copper	78.2	2.0	0.75	ug/l	80.0	1.92	95	70-130	2	20	
Lead	73.8	1.0	0.30	ug/l	80.0	ND	92	70-130	2	20	
Thallium	75.1	1.0	0.20	ug/l	80.0	ND	94	70-130	1	20	

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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 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

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: 8B04144 Extracted: 02/04/08											
Blank Analyzed: 02/05/2008 (8B04144-BLK1)											
Antimony	ND	2.0	0.20	ug/l							
Cadmium	ND	1.0	0.11	ug/l							
Copper	ND	2.0	0.75	ug/l							
Lead	ND	1.0	0.30	ug/l							
Thallium	ND	1.0	0.20	ug/l							
LCS Analyzed: 02/05/2008 (8B04144-BS1)											
Antimony	84.8	2.0	0.20	ug/l	80.0		106	85-115			
Cadmium	82.9	1.0	0.11	ug/l	80.0		104	85-115			
Copper	80.0	2.0	0.75	ug/l	80.0		100	85-115			
Lead	80.0	1.0	0.30	ug/l	80.0		100	85-115			
Thallium	82.5	1.0	0.20	ug/l	80.0		103	85-115			
Matrix Spike Analyzed: 02/05/2008 (8B04144-MS1) Source: IRB0073-01											
Antimony	84.0	2.0	0.20	ug/l	80.0	0.305	105	70-130			
Cadmium	84.5	1.0	0.11	ug/l	80.0	0.221	105	70-130			
Copper	77.7	2.0	0.75	ug/l	80.0	1.70	95	70-130			
Lead	74.3	1.0	0.30	ug/l	80.0	ND	93	70-130			
Thallium	76.6	1.0	0.20	ug/l	80.0	ND	96	70-130			
Matrix Spike Dup Analyzed: 02/05/2008 (8B04144-MSD1) Source: IRB0073-01											
Antimony	83.1	2.0	0.20	ug/l	80.0	0.305	103	70-130	1	20	
Cadmium	84.2	1.0	0.11	ug/l	80.0	0.221	105	70-130	0	20	
Copper	79.5	2.0	0.75	ug/l	80.0	1.70	97	70-130	2	20	
Lead	74.4	1.0	0.30	ug/l	80.0	ND	93	70-130	0	20	
Thallium	76.2	1.0	0.20	ug/l	80.0	ND	95	70-130	0	20	

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MWH-Pasadena/Boeing
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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
Batch: 8B05111 Extracted: 02/05/08											
Blank Analyzed: 02/06/2008 (8B05111-BLK1)											
Aluminum	ND	50	40	ug/l							
Arsenic	ND	10	7.0	ug/l							
Beryllium	ND	2.0	0.90	ug/l							
Boron	ND	0.050	0.020	mg/l							
Calcium	ND	0.10	0.050	mg/l							
Chromium	ND	5.0	2.0	ug/l							
Iron	ND	0.040	0.015	mg/l							
Magnesium	ND	0.020	0.012	mg/l							
Nickel	ND	10	2.0	ug/l							
Selenium	ND	10	8.0	ug/l							
Silver	ND	10	6.0	ug/l							
Vanadium	ND	10	3.0	ug/l							
Zinc	ND	20	6.0	ug/l							
LCS Analyzed: 02/06/2008 (8B05111-BS1)											
Aluminum	563	50	40	ug/l	500		113	85-115			
Arsenic	525	10	7.0	ug/l	500		105	85-115			
Beryllium	519	2.0	0.90	ug/l	500		104	85-115			
Boron	0.520	0.050	0.020	mg/l	0.500		104	85-115			
Calcium	2.67	0.10	0.050	mg/l	2.50		107	85-115			
Chromium	512	5.0	2.0	ug/l	500		102	85-115			
Iron	0.526	0.040	0.015	mg/l	0.500		105	85-115			
Magnesium	2.60	0.020	0.012	mg/l	2.50		104	85-115			
Nickel	515	10	2.0	ug/l	500		103	85-115			
Selenium	491	10	8.0	ug/l	500		98	85-115			
Silver	256	10	6.0	ug/l	250		102	85-115			
Vanadium	509	10	3.0	ug/l	500		102	85-115			
Zinc	509	20	6.0	ug/l	500		102	85-115			

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Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

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: 8B05111 Extracted: 02/05/08											
Matrix Spike Analyzed: 02/06/2008 (8B05111-MS1)					Source: IRB0073-01						
Aluminum	564	50	40	ug/l	500	62.5	100	70-130			
Arsenic	519	10	7.0	ug/l	500	ND	104	70-130			
Beryllium	513	2.0	0.90	ug/l	500	ND	103	70-130			
Boron	0.549	0.050	0.020	mg/l	0.500	0.0311	104	70-130			
Calcium	58.9	0.10	0.050	mg/l	2.50	55.2	147	70-130			MHA
Chromium	502	5.0	2.0	ug/l	500	ND	100	70-130			
Iron	0.554	0.040	0.015	mg/l	0.500	0.0302	105	70-130			
Magnesium	10.3	0.020	0.012	mg/l	2.50	7.52	112	70-130			
Nickel	514	10	2.0	ug/l	500	11.5	101	70-130			
Selenium	486	10	8.0	ug/l	500	ND	97	70-130			
Silver	257	10	6.0	ug/l	250	ND	103	70-130			
Vanadium	507	10	3.0	ug/l	500	ND	101	70-130			
Zinc	509	20	6.0	ug/l	500	11.6	99	70-130			
Matrix Spike Dup Analyzed: 02/06/2008 (8B05111-MSD1)					Source: IRB0073-01						
Aluminum	587	50	40	ug/l	500	62.5	105	70-130	4	20	
Arsenic	541	10	7.0	ug/l	500	ND	108	70-130	4	20	
Beryllium	518	2.0	0.90	ug/l	500	ND	104	70-130	1	20	
Boron	0.554	0.050	0.020	mg/l	0.500	0.0311	105	70-130	1	20	
Calcium	58.4	0.10	0.050	mg/l	2.50	55.2	125	70-130	1	20	MHA
Chromium	517	5.0	2.0	ug/l	500	ND	103	70-130	3	20	
Iron	0.565	0.040	0.015	mg/l	0.500	0.0302	107	70-130	2	20	
Magnesium	10.3	0.020	0.012	mg/l	2.50	7.52	112	70-130	0	20	
Nickel	530	10	2.0	ug/l	500	11.5	104	70-130	3	20	
Selenium	503	10	8.0	ug/l	500	ND	101	70-130	3	20	
Silver	262	10	6.0	ug/l	250	ND	105	70-130	2	20	
Vanadium	518	10	3.0	ug/l	500	ND	104	70-130	2	20	
Zinc	528	20	6.0	ug/l	500	11.6	103	70-130	4	20	

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B01050 Extracted: 02/01/08											
Blank Analyzed: 02/01/2008 (8B01050-BLK1)											
Chloride	ND	0.50	0.25	mg/l							
Fluoride	ND	0.50	0.15	mg/l							
Nitrate/Nitrite-N	ND	0.26	0.15	mg/l							
Sulfate	ND	0.50	0.20	mg/l							
LCS Analyzed: 02/01/2008 (8B01050-BS1)											
Chloride	4.80	0.50	0.25	mg/l	5.00		96	90-110			M-3
Fluoride	4.77	0.50	0.15	mg/l	5.00		95	90-110			
Sulfate	10.1	0.50	0.20	mg/l	10.0		101	90-110			M-3
Matrix Spike Analyzed: 02/01/2008 (8B01050-MS1) Source: IRB0073-01											
Chloride	17.4	0.50	0.25	mg/l	5.00	13.1	87	80-120			
Fluoride	4.94	0.50	0.15	mg/l	5.00	0.266	94	80-120			
Matrix Spike Analyzed: 02/02/2008 (8B01050-MS2) Source: IRB0112-05											
Fluoride	5.56	0.50	0.15	mg/l	5.00	0.955	92	80-120			
Matrix Spike Dup Analyzed: 02/01/2008 (8B01050-MSD1) Source: IRB0073-01											
Chloride	17.3	0.50	0.25	mg/l	5.00	13.1	84	80-120	1	20	
Fluoride	4.92	0.50	0.15	mg/l	5.00	0.266	93	80-120	1	20	
Batch: 8B04112 Extracted: 02/04/08											
Blank Analyzed: 02/04/2008 (8B04112-BLK1)											
Total Cyanide	ND	5.0	2.2	ug/l							
LCS Analyzed: 02/04/2008 (8B04112-BS1)											
Total Cyanide	184	5.0	2.2	ug/l	200		92	90-110			

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 8B04112 Extracted: 02/04/08</u>											
Matrix Spike Analyzed: 02/04/2008 (8B04112-MS1)						Source: IRA3072-06					
Total Cyanide	189	5.0	2.2	ug/l	200	ND	94	70-115			
Matrix Spike Dup Analyzed: 02/04/2008 (8B04112-MSD1)						Source: IRA3072-06					
Total Cyanide	189	5.0	2.2	ug/l	200	ND	95	70-115	0	15	
<u>Batch: 8B04128 Extracted: 02/04/08</u>											
Blank Analyzed: 02/04/2008 (8B04128-BLK1)											
Total Suspended Solids	ND	10	10	mg/l							
LCS Analyzed: 02/04/2008 (8B04128-BS1)											
Total Suspended Solids	971	10	10	mg/l	1000		97	85-115			
Duplicate Analyzed: 02/04/2008 (8B04128-DUP1)						Source: IRB0070-02					
Total Suspended Solids	ND	10	10	mg/l		ND				10	
<u>Batch: 8B07122 Extracted: 02/07/08</u>											
Blank Analyzed: 02/07/2008 (8B07122-BLK1)											
Total Dissolved Solids	ND	10	10	mg/l							
LCS Analyzed: 02/07/2008 (8B07122-BS1)											
Total Dissolved Solids	990	10	10	mg/l	1000		99	90-110			
Duplicate Analyzed: 02/07/2008 (8B07122-DUP1)						Source: IRB0146-01					
Total Dissolved Solids	296	10	10	mg/l		292			1	10	

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B11053 Extracted: 02/11/08											
Blank Analyzed: 02/11/2008 (8B11053-BLK1)											
Perchlorate	ND	4.0	1.5	ug/l							
LCS Analyzed: 02/11/2008 (8B11053-BS1)											
Perchlorate	49.4	4.0	1.5	ug/l	50.0		99	85-115			
Matrix Spike Analyzed: 02/11/2008 (8B11053-MS1)											
						Source: IRA2969-01					
Perchlorate	78.8	4.0	1.5	ug/l	50.0	28.1	101	80-120			
Matrix Spike Dup Analyzed: 02/11/2008 (8B11053-MSD1)											
						Source: IRA2969-01					
Perchlorate	79.7	4.0	1.5	ug/l	50.0	28.1	103	80-120	1	20	
Batch: 8B11060 Extracted: 02/11/08											
Blank Analyzed: 02/11/2008 (8B11060-BLK1)											
Hexane Extractable Material (Oil & Grease)	ND	5.0	1.4	mg/l							
LCS Analyzed: 02/11/2008 (8B11060-BS1)											
Hexane Extractable Material (Oil & Grease)	21.1	5.0	1.4	mg/l	20.2		104	78-114			MNR1
LCS Dup Analyzed: 02/11/2008 (8B11060-BSD1)											
Hexane Extractable Material (Oil & Grease)	21.4	5.0	1.4	mg/l	20.2		106	78-114	1	11	

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

METHOD BLANK/QC DATA

ORGANIC COMPOUNDS BY GC/MS (EPA 525.2)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: C8B0516 Extracted: 02/05/08</u>											
Blank Analyzed: 02/07/2008 (C8B0516-BLK1)											
Chlorpyrifos	ND	1.0	0.10	ug/l							
Diazinon	ND	0.25	0.24	ug/l							
Surrogate: 1,3-Dimethyl-2-nitrobenzene	4.76			ug/l	5.00		95	70-130			
Surrogate: Triphenylphosphate	5.79			ug/l	5.00		116	70-130			
Surrogate: Perylene-d12	5.00			ug/l	5.00		100	70-130			
LCS Analyzed: 02/07/2008 (C8B0516-BS1)											
Chlorpyrifos	5.48	1.0	0.10	ug/l	5.00		110	70-130			
Diazinon	3.82	0.25	0.24	ug/l	5.00		76	70-130			
Surrogate: 1,3-Dimethyl-2-nitrobenzene	4.66			ug/l	5.00		93	70-130			
Surrogate: Triphenylphosphate	5.66			ug/l	5.00		113	70-130			
Surrogate: Perylene-d12	4.87			ug/l	5.00		97	70-130			
LCS Dup Analyzed: 02/07/2008 (C8B0516-BSD1)											
Chlorpyrifos	4.90	1.0	0.10	ug/l	5.00		98	70-130	11	10	R-7
Diazinon	3.82	0.25	0.24	ug/l	5.00		76	70-130	0	50	
Surrogate: 1,3-Dimethyl-2-nitrobenzene	4.50			ug/l	5.00		90	70-130			
Surrogate: Triphenylphosphate	5.52			ug/l	5.00		110	70-130			
Surrogate: Perylene-d12	4.79			ug/l	5.00		96	70-130			
<u>Batch: C8B1302 Extracted: 02/13/08</u>											
Blank Analyzed: 02/13/2008 (C8B1302-BLK1)											
Chlorpyrifos	ND	1.0	0.10	ug/l							
Diazinon	ND	0.25	0.24	ug/l							
Surrogate: 1,3-Dimethyl-2-nitrobenzene	4.65			ug/l	5.00		93	70-130			
Surrogate: Triphenylphosphate	5.62			ug/l	5.00		112	70-130			
Surrogate: Perylene-d12	5.02			ug/l	5.00		100	70-130			

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MWH-Pasadena/Boeing
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 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

METHOD BLANK/QC DATA

ORGANIC COMPOUNDS BY GC/MS (EPA 525.2)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: C8B1302 Extracted: 02/13/08</u>											
LCS Analyzed: 02/13/2008 (C8B1302-BS1)											
Chlorpyrifos	5.29	1.0	0.10	ug/l	5.00		106	70-130			
Diazinon	4.70	0.25	0.24	ug/l	5.00		94	70-130			
Surrogate: 1,3-Dimethyl-2-nitrobenzene	4.54			ug/l	5.00		91	70-130			
Surrogate: Triphenylphosphate	5.57			ug/l	5.00		111	70-130			
Surrogate: Perylene-d12	5.15			ug/l	5.00		103	70-130			
LCS Dup Analyzed: 02/13/2008 (C8B1302-BSD1)											
Chlorpyrifos	5.10	1.0	0.10	ug/l	5.00		102	70-130	4	10	
Diazinon	3.88	0.25	0.24	ug/l	5.00		78	70-130	19	50	
Surrogate: 1,3-Dimethyl-2-nitrobenzene	4.82			ug/l	5.00		96	70-130			
Surrogate: Triphenylphosphate	5.42			ug/l	5.00		108	70-130			
Surrogate: Perylene-d12	5.08			ug/l	5.00		102	70-130			

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

METHOD BLANK/QC DATA

Metals by EPA 200 Series Methods

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: W8B0147 Extracted: 02/05/08											
Blank Analyzed: 02/07/2008 (W8B0147-BLK1)											
Mercury, Dissolved	ND	0.20	0.050	ug/l							
Mercury, Total	ND	0.20	0.050	ug/l							
LCS Analyzed: 02/07/2008 (W8B0147-BS1)											
Mercury, Dissolved	1.04	0.20	0.050	ug/l	1.00		104	85-115			
Mercury, Total	1.04	0.20	0.050	ug/l	1.00		104	85-115			
Matrix Spike Analyzed: 02/07/2008 (W8B0147-MS1) Source: 8020444-01											
Mercury, Dissolved	1.04	0.20	0.050	ug/l	1.00	ND	104	70-130			
Mercury, Total	1.04	0.20	0.050	ug/l	1.00	ND	104	70-130			
Matrix Spike Analyzed: 02/07/2008 (W8B0147-MS2) Source: 8020445-01											
Mercury, Dissolved	1.04	0.20	0.050	ug/l	1.00	ND	104	70-130			
Mercury, Total	1.04	0.20	0.050	ug/l	1.00	ND	104	70-130			
Matrix Spike Dup Analyzed: 02/07/2008 (W8B0147-MSD1) Source: 8020444-01											
Mercury, Dissolved	1.05	0.20	0.050	ug/l	1.00	ND	105	70-130	1	20	
Mercury, Total	1.05	0.20	0.050	ug/l	1.00	ND	105	70-130	1	20	
Matrix Spike Dup Analyzed: 02/07/2008 (W8B0147-MSD2) Source: 8020445-01											
Mercury, Dissolved	1.06	0.20	0.050	ug/l	1.00	ND	106	70-130	2	20	
Mercury, Total	1.06	0.20	0.050	ug/l	1.00	ND	106	70-130	2	20	

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
 Received: 02/01/08

Compliance Check

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

LabNumber	Analysis	Analyte	Units	Result	MRL	Compliance Limit
IRB0073-01	1664-HEM	Hexane Extractable Material (Oil & Greas	mg/l	2.19	4.8	15
IRB0073-01	Antimony-200.8	Antimony	ug/l	0.43	2.0	6
IRB0073-01	Boron-200.7	Boron	mg/l	0.034	0.050	1
IRB0073-01	Cadmium-200.8	Cadmium	ug/l	0.48	1.0	4
IRB0073-01	Chloride - 300.0	Chloride	mg/l	13	0.50	150
IRB0073-01	Copper-200.8	Copper	ug/l	3.82	2.0	14
IRB0073-01	Fluoride-300.0	Fluoride	mg/l	0.27	0.50	1.6
IRB0073-01	Hg_w 245.1	Mercury, Total	ug/l	0.034	0.20	0.2
IRB0073-01	Lead-200.8	Lead	ug/l	1.39	1.0	5.2
IRB0073-01	Nickel-200.7	Nickel	ug/l	15	10	10
IRB0073-01	Nitrogen, NO3+NO2 -N	Nitrate/Nitrite-N	mg/l	0.17	0.26	10
IRB0073-01	Perchlorate 314.0-DEFAULT	Perchlorate	ug/l	0	4.0	6
IRB0073-01	Sulfate-300.0	Sulfate	mg/l	140	10	250
IRB0073-01	TDS - SM 2540C	Total Dissolved Solids	mg/l	307	10	850
IRB0073-01	Thallium-200.8	Thallium	ug/l	0.034	1.0	2

Compliance Check

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LabNumber	Analysis	Analyte	Units	Result	MRL	Compliance Limit
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Compliance Check

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

LabNumber	Analysis	Analyte	Units	Result	MRL	Compliance Limit
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TestAmerica Irvine

Joseph Doak
 Project Manager

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

DATA QUALIFIERS AND DEFINITIONS

H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
J	Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). The user of this data should be aware that this data is of limited reliability.
L6	Per the EPA methods, benzidine is known to be subject to oxidative losses during solvent concentration.
M1	The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
M13	The sample spiked had a pH of less than 2. 2-Chloroethylvinylether degrades under acidic conditions.
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.
N1	See case narrative.
P	The sample, as received, was not preserved in accordance to the referenced analytical method.
P9	This analyte has been shown to degrade upon preservation with HCl and cannot accurately be quantitated.
pH	pH = <2
pHa	pH = 7
R	The RPD exceeded the method control limit due to sample matrix effects. The individual analyte QA/QC recoveries, however, were within acceptance limits.
R-3	The RPD exceeded the acceptance limit due to sample matrix effects.
R-7	LFB/LFBD RPD exceeded the acceptance limit. Recovery met acceptance criteria.
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
RPD	Relative Percent Difference

ADDITIONAL COMMENTS

For 1,2-Diphenylhydrazine:

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

TestAmerica Irvine

Joseph Doak
Project Manager

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IRB0073 <Page 54 of 56>
NPDES - 1298

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

Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

Certification Summary

TestAmerica Irvine

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

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

Subcontracted Laboratories

Aquatic Testing Laboratories-SUB *California Cert #1775*

4350 Transport Street, Unit 107 - Ventura, CA 93003

Analysis Performed: Bioassay-7 dy Chrnrc
Samples: IRB0073-01

Analysis Performed: Bioassay-Acute 96hr
Samples: IRB0073-01

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Project ID: Annual Outfall 005

Report Number: IRB0073

Sampled: 02/01/08
Received: 02/01/08

Eberline Services - SUB

2030 Wright Avenue - Richmond, CA 94804

Analysis Performed: Gamma Spec
Samples: IRB0073-01

Analysis Performed: Gross Alpha
Samples: IRB0073-01

Analysis Performed: Gross Beta
Samples: IRB0073-01

Analysis Performed: Radium, Combined
Samples: IRB0073-01

Analysis Performed: Strontium 90
Samples: IRB0073-01

Analysis Performed: Tritium
Samples: IRB0073-01

Analysis Performed: Uranium, Combined
Samples: IRB0073-01

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

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

Method Performed: EPA 525.2
Samples: IRB0073-01, IRB0073-01RE1

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

1104 Windfield Way - El Dorado Hills, CA 95762

Analysis Performed: 1613-Dioxin-HR-Alta
Samples: IRB0073-01

Weck Laboratories, Inc. *California Cert #1132*

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

Method Performed: EPA 245.1
Samples: IRB0073-01

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Project Manager

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IRB0073

IN0070

CHAIN OF CUSTODY FORM

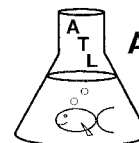
Test America Version 12/20/07

Client Name/Address: MWH-Arcadia 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Test America Contact: Joseph Doak		Project: Boeing-SSFL NPDES Annual Outfall 005 Stormwater at FSDDF-1		Project Manager: Bronwyn Kelly Phone Number: (626) 568-6691 Fax Number: (626) 568-6515 Sampler: R. BARNES K. SANFORD		Total Recoverable Metals: Sb, Cd, Cu, Pb, Hg, B, V, Tl, Fe, Al, Ni, + PP, Hardness as Ca CO ₃		TCDD (and all congeners) Oil & Grease (1664-HDM) Cr, SO ₄ , NO ₃ +NO ₂ -N, F, Perchlorate		TDS, TSS VOCs (624), xylenes + PP VOCs A+A+2CVE Pesticides/PCBs, Chlorpyrifos, Diazinon + PP Gross Alpha(900.0), Gross Beta(900.0), Tritium (H-3) (906.0), Sr-90 (905.0), Total Combined Radium 226 (903.0 or 903.1) & Radium 228 (904.0), Uranium (908.0), K-40, CS-137 (901.0 or 901.1)		Cyanide Total Dissolved Metals: Sb, Cd, Cu, Pb, Hg, B, V, Tl, Fe, Al, Ni + PP, Hardness as Ca CO ₃		Field readings: Temp = 81°C = 46 pH = 6.6 Time of readings = 08:30		Comments					
Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #	Hardness as Ca CO ₃	TCDD (and all congeners)	Oil & Grease (1664-HDM)	Cr, SO ₄ , NO ₃ +NO ₂ -N, F, Perchlorate	TDS, TSS	VOCs (624), xylenes + PP	VOCs A+A+2CVE	Pesticides/PCBs, Chlorpyrifos, Diazinon + PP	Gross Alpha(900.0), Gross Beta(900.0), Tritium (H-3) (906.0), Sr-90 (905.0), Total Combined Radium 226 (903.0 or 903.1) & Radium 228 (904.0), Uranium (908.0), K-40, CS-137 (901.0 or 901.1)	Cyanide	Total Dissolved Metals: Sb, Cd, Cu, Pb, Hg, B, V, Tl, Fe, Al, Ni + PP, Hardness as Ca CO ₃	Field readings: Temp = 81°C = 46 pH = 6.6 Time of readings = 08:30	Comments		
Outfall 005	W	1L Poly	1	2-1-08 08:30	HNO ₃	1A	X														
Outfall 005-Dup	W	1L Poly	1		HNO ₃	1B	X														
Outfall 005	W	1L Amber	2		None	2A, 2B		X													
Outfall 005	W	1L Amber	2		HCl	3A, 3B			X												
Outfall 005	W	500 ml Poly	2		None	4A, 4B				X											
Outfall 005	W	500 ml Poly	2		None	5A, 5B					X										
Outfall 005	W	VOAs	3		HCl	6A, 6B, 6C						X									
Outfall 005	W	VOAs	3		None	7A, 7B, 7C							X								
Outfall 005	W	1L Amber	2		None	8A, 8B								X							
Outfall 005	W	2.5 Gal Cube 500 ml Amber	1		None	9A															
Outfall 005	W	500 ml Amber	1		None	9B															
Outfall 005	W	1L Amber	2		None	10A, 10B															
Outfall 005	W	1 Gal Poly	2		None	11A, 11B															
Outfall 005	W	500ml Poly	1		NaOH	12															
Outfall 005	W	1L Poly	1		None	13															
Trip Blanks	W	VOAs	3		HCl	14A, 14B, 14C						X									
Trip Blanks	W	VOAs	3		None	15A, 15B, 15C							X								
Relinquished By	J. Doak			2-1-08	0955	Received By		Gwendolyn Ventum		2/1/08	0955	Date/Time:		2/1/08		Date/Time:		0955		Date/Time:	
Relinquished By	DEL TO ATC			2-1-08	0955	Received By		Lori Montoya		2-1-08	1100	Date/Time:		2-1-08		Date/Time:		1100		Date/Time:	
Relinquished By	Gwendolyn Ventum			2/1/08	1830	Received By		Jenny Nguyen		2/1/08	1830	Date/Time:		2/1/08		Date/Time:		1830		Date/Time:	

A.C. 2/1/08

4.5°C

LABORATORY REPORT



**Aquatic
Testing
Laboratories**

"dedicated to providing quality aquatic toxicity testing"

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

Date: February 8, 2008
Client: TestAmerica - Irvine
17461 Derian Ave., Suite 100
Irvine, CA 92614
Attn: Joseph Doak

Laboratory No.: A-08020107-001
Sample ID.: IRB0073-01 (Outfall 005)

Sample Control: The sample was received by ATL within the recommended hold time, in a chilled state, and with the chain of custody record attached. Testing was conducted on only one sample per client instruction.

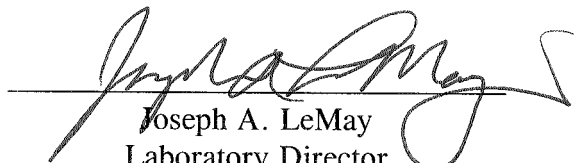
Date Sampled: 02/01/08
Date Received: 02/01/08
Temp. Received: 5°C
Chlorine (TRC): 0.0 mg/l
Date Tested: 02/01/08 to 02/08/08

Sample Analysis: The following analyses were performed on your sample:
Fathead Minnow 96hr Percent Survival Bioassay (EPA Method 2000.0),
Ceriodaphnia dubia Survival and Reproduction Test (EPA Method 1002).
Attached are the test data generated from the analysis of your sample.

Result Summary:

Acute:	<u>Survival</u>	<u>TUa</u>
Fathead Minnow:	100%	0.0
Chronic:	<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

FATHEAD MINNOW PERCENT SURVIVAL TEST
EPA Method 2000.0



Lab No.: A-08020107-001

Client/ID: TestAmerica - Outfall 005

Start Date: 02/01/2008

TEST SUMMARY

Species: *Pimephales promelas*.
 Age: 13 (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-080103.

TEST DATA

		°C	DO	pH	# Dead		Analyst & Time of Readings
					A	B	
INITIAL	Control	20.2	8.8	8.0	0	0	R 1300
	100%	19.7	10.9	6.6	0	0	
24 Hr	Control	19.6	8.0	7.3	0	0	R 1200
	100%	19.6	7.8	7.1	0	0	
48 Hr	Control	20.1	6.3	7.3	0	0	Z 1300
	100%	20.1	6.6	7.2	0	0	
Renewal	Control	20.4	7.4	7.6	0	0	Z 1300
	100%	20.0	8.4	6.8	0	0	
72 Hr	Control	19.5	7.3	7.4	0	0	R 1400
	100%	19.6	7.6	7.4	0	0	
96 Hr	Control	19.3	7.3	7.6	0	0	R 1300
	100%	19.2	7.3	7.3	0	0	

Comments:

Sample as received: Chlorine: 0.0 mg/l; pH: 6.6; Conductivity: 380 umho; Temp: 5°C;
 DO: 10.9 mg/l; Alkalinity: 42 mg/l; Hardness: 171 mg/l; NH₃-N: 0.5 mg/l.
 Sample aerated moderately (approx. 500 ml/min) to raise or lower DO? Yes / No.
 Control: Alkalinity: 68 mg/l; Hardness: 91 mg/l; Conductivity: 275 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 %



CERIODAPHNIA SURVIVAL AND REPRODUCTION TEST

- *Test and Results Summary*
- *Data Summary and Statistical Analyses*
- *Raw Test Data: Water Quality & Test Organism Measurements*

**CERIODAPHNIA CHRONIC BIOASSAY
EPA METHOD 1002.0**



Lab No.: A-08020107-001
Client/ID: Test America – IRB0073-01 (Outfall 005)

Date Tested: 02/01/08 to 02/08/08

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-080106.

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%	26.2
100% Sample	100%	30.6

Sample not statistically significantly less than Control for either endpoint.

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 (26.2 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 = 7.2%)
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: 2/1/2008 14:00 Test ID: 8020107 Sample ID: Outfall 005
 End Date: 2/8/2009 14:00 Lab ID: CAATL-Aquatic Testing Labs Sample Type: EFF2-Industrial
 Sample Date: 2/1/2008 08:30 Protocol: FWCH 4TH-EPA-821-R-02-0 Test Species: CD-Ceriodaphnia dubia

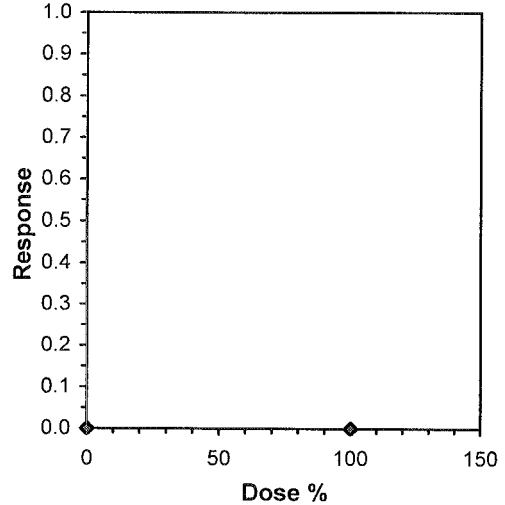
Comments:

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 Exact P	1-Tailed Critical	Isotonic 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: 2/1/2008 14:00 Test ID: 8020107 Sample ID: Outfall 005
 End Date: 2/8/2009 14:00 Lab ID: CAATL-Aquatic Testing Labs Sample Type: EFF2-Industrial
 Sample Date: 2/1/2008 08:30 Protocol: FWCH 4TH-EPA-821-R-02-0 Test Species: CD-Ceriodaphnia dubia

Comments:

Conc-%	1	2	3	4	5	6	7	8	9	10
D-Control	28.000	28.000	29.000	28.000	25.000	29.000	20.000	26.000	24.000	25.000
100	33.000	27.000	31.000	33.000	30.000	30.000	31.000	29.000	29.000	33.000

Conc-%	Mean	N-Mean	Transform: Untransformed				N	t-Stat	1-Tailed Critical	MSD	Isotonic	
			Mean	Min	Max	CV%					Mean	N-Mean
D-Control	26.200	1.0000	26.200	20.000	29.000	10.765	10				28.400	1.0000
100	30.600	1.1679	30.600	27.000	33.000	6.572	10	-4.017	1.734	1.900	28.400	1.0000

Auxiliary Tests

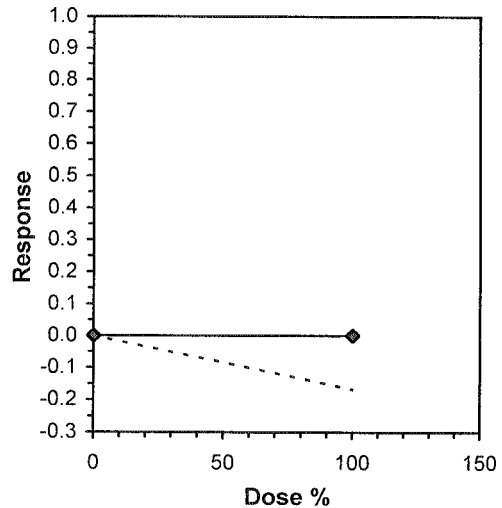
	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.05)	0.91288	0.905	-0.8834	0.79946
F-Test indicates equal variances (p = 0.33)	1.96703	6.54109		

Hypothesis Test (1-tail, 0.05)

	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences	1.89957	0.0725	96.8	6	8.1E-04	1, 18
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 DUBIA CHRONIC BIOASSAY
EPA METHOD 1002.0 Raw Data Sheet



Lab No.: A-08020107-001

Client ID: TestAmerica - Outfall 005

Start Date: 02/01/2008

		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:		1400	1500	1500	1400	1400	1500	1500	1530	1530	1100	1600	1500	1500	1400
Control	DO	8.0	8.9	8.1	8.4	7.5	8.2	7.8	8.4	7.8	8.3	7.3	8.4	8.3	8.4
	pH	7.6	7.7	7.6	7.7	7.6	7.7	7.3	7.9	7.5	7.8	7.7	7.6	7.6	7.8
	Temp	25.0	24.5	25.4	24.4	24.0	24.4	24.0	24.3	24.9	24.2	25.0	24.6	25.6	24.3
100%	DO	10.9	8.7	11.0	8.6	10.8	8.3	10.6	8.3	11.5	8.1	11.0	8.4	11.5	9.3
	pH	6.6	7.4	6.3	7.4	6.6	7.4	6.6	7.5	6.7	7.4	7.0	7.3	6.8	7.6
	Temp	24.6	24.4	24.3	24.4	24.5	24.4	24.5	24.2	24.4	24.2	24.3	24.9	24.3	24.5

Additional Parameters	Control	100% Sample
Conductivity (umohms)	275	380
Alkalinity (mg/l CaCO ₃)	68	42
Hardness (mg/l CaCO ₃)	91	171
Ammonia (mg/l NH ₃ -N)	<0.2	0.5

Source of Neonates											
Replicate:	A	B	C	D	E	F	G	H	I	J	
Brood ID:	B1	B3	C1	E1	E3	F1	G3	H3	I1	F2	

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	4	3	3	0	0	13	10	Rm
	4	0	5	4	5	4	0	0	0	3	4	25	10	Rm
	5	11	10	0	8	7	9	7	8	7	9	76	10	Rm
	6	14	13	12	15	0	16	0	0	0	0	70	10	Rm
	7	0	0	13	14	14	0	10	15	14	12	78	10	Rm
	Total	28	28	29	28	25	29	20	26	24	25	262	10	Rm
100%	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	0	3	0	3	0	3	4	3	3	0	19	10	Rm
	4	5	0	4	0	5	0	0	0	0	4	18	10	Rm
	5	12	10	0	13	11	12	11	12	10	13	104	10	Rm
	6	16	14	12	17	14	15	16	14	0	0	118	10	Rm
	7	0	0	15	0	0	0	0	0	16	16	47	10	Rm
	Total	33	27	31	33	30	30	31	29	29	33	306	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

IRB0073

SENDING LABORATORY:

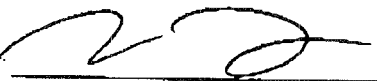
TestAmerica Irvine
17461 Derian Avenue. Suite 100
Irvine, CA 92614
Phone: (949) 261-1022
Fax: (949) 260-3297
Project Manager: Joseph Doak

RECEIVING LABORATORY:


Aquatic Testing Laboratories-SUB
4350 Transport Street, Unit 107
Ventura, CA 93003
Phone : (805) 650-0546
Fax: (805) 650-0756
Project Location: California
Receipt Temperature: 5 °C

Ice: (Y) / N

Analysis	Units	Due	Expires	Comments
Sample ID: IRB0073-01	Water		Sampled: 02/01/08 08:30	
Bioassay-7 dy Chmic	N/A	02/12/08	02/02/08 20:30	Cerio, EPA/821-R02-013, Sub to AqTox Labs
Bioassay-Acute 96hr	% Survival	02/12/08	02/02/08 20:30	FH minnow, EPA/821-R02-012, Sub to AqTox Labs
Containers Supplied:				
1 gal Poly (W)	1 gal Poly (X)			


Released By _____ Date/Time 2/1/08

Released By _____ Date/Time _____


Received By _____ Date/Time 2-1-8 1102

Received By _____ Date/Time _____



***REFERENCE
TOXICANT
DATA***

FATHEAD MINNOW ACUTE
Method 2000.0
Reference Toxicant - SDS



QA/QC Batch No.: RT-080103

TEST SUMMARY

Species: *Pimephales promelas*.

Age: 11 days old.

Regulations: NPDES.

Test chamber volume: 250 ml.

Feeding: Prior to renewal at 48 hrs.

Temperature: 20 +/- 1°C.

Number of replicates: 2.

Dilution water: MHSF.

Source: In-lab culture.

Test type: Static-Renewal.

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

Endpoints: LC50 at 96 hrs.

Test chamber: 600 ml glass beakers.

Aeration: None.

Number of organisms per chamber: 10.

Photoperiod: 16/8 hrs light/dark.

TEST DATA

Date/Time:	INITIAL			24 Hr					48 Hr				
	<u>1-3-08 1400</u>			<u>1-4-08 1200</u>					<u>1-5-08 1200</u>				
	<u>[Signature]</u>			<u>[Signature]</u>					<u>[Signature]</u>				
	°C	DO	pH	°C	DO	pH	# Dead		°C	DO	pH	# Dead	
A							B	A				B	
Control	20.3	8.8	7.9	19.9	6.8	7.5	0	0	19.9	7.6	7.4	0	0
1.0 mg/l	20.3	8.8	7.9	19.9	6.8	7.4	0	0	19.9	7.4	7.4	0	0
2.0 mg/l	20.3	8.9	7.9	19.9	7.0	7.3	0	0	20.0	7.5	7.3	0	0
4.0 mg/l	20.3	8.9	7.8	19.9	6.9	7.3	0	0	20.1	7.3	7.3	0	0
8.0 mg/l	20.3	9.0	7.8	19.9	5.7	7.2	10	10	-	-	-	-	-

Date/Time:	RENEWAL			72 Hr					96 Hr				
	<u>1-5-08 1200</u>			<u>1-6-08 1330</u>					<u>1-7-08 13:45</u>				
	<u>[Signature]</u>			<u>[Signature]</u>					<u>[Signature]</u>				
	°C	DO	pH	°C	DO	pH	# Dead		°C	DO	pH	# Dead	
A							B	A				B	
Control	20.4	9.0	7.7	20.0	7.1	8.0	0	0	19.9	6.4	7.6	0	0
1.0 mg/l	20.4	9.0	7.7	20.0	6.9	8.0	0	0	20.0	6.6	7.6	0	0
2.0 mg/l	20.4	9.1	7.7	20.0	7.1	7.9	0	0	19.9	6.8	7.5	0	0
4.0 mg/l	20.4	9.1	7.7	20.0	7.3	7.9	1	0	19.8	6.2	7.0	0	1
8.0 mg/l	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments: Control: Alkalinity: 62 mg/l; Hardness: 97 mg/l; Conductivity: 290 umho.

SDS: Alkalinity: 62 mg/l; Hardness: 96 mg/l; Conductivity: 285 umho.

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

Yes (response curve normal)

No (dose interrupted indicated or non-normal)

Acute Fish Test-96 Hr Survival

Start Date: 1/3/2008 14:00 Test ID: RT-080103f Sample ID: REF-Ref Toxicant
 End Date: 1/7/2008 13:45 Lab ID: CAATL-Aquatic Testing Labs Sample Type: SDS-Sodium dodecyl sulfate
 Sample Date: 1/3/2008 Protocol: ACUTE-EPA-821-R-02-012 Test Species: PP-Pimephales promelas
 Comments:

Conc-mg/L	1	2
D-Control	1.0000	1.0000
1	1.0000	1.0000
2	1.0000	1.0000
4	0.9000	0.9000
8	0.0000	0.0000

Conc-mg/L	Mean	N-Mean	Transform: Arcsin Square Root					N	Number Resp	Total Number
			Mean	Min	Max	CV%				
D-Control	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2	0	20	
1	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2	0	20	
2	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2	0	20	
4	0.9000	0.9000	1.2490	1.2490	1.2490	0.000	2	2	20	
8	0.0000	0.0000	0.1588	0.1588	0.1588	0.000	2	20	20	

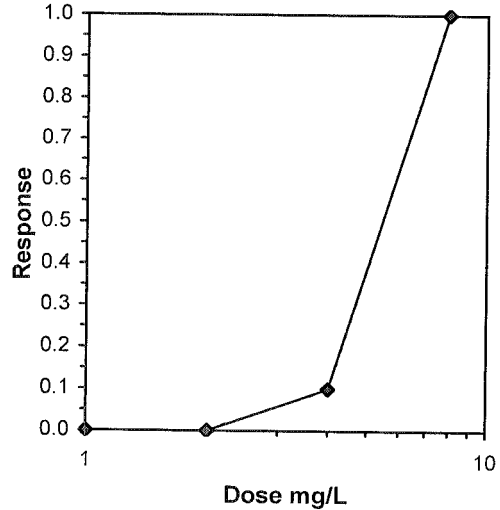
Auxiliary Tests

Normality of the data set cannot be confirmed
 Equality of variance cannot be confirmed

Statistic Critical Skew Kurt

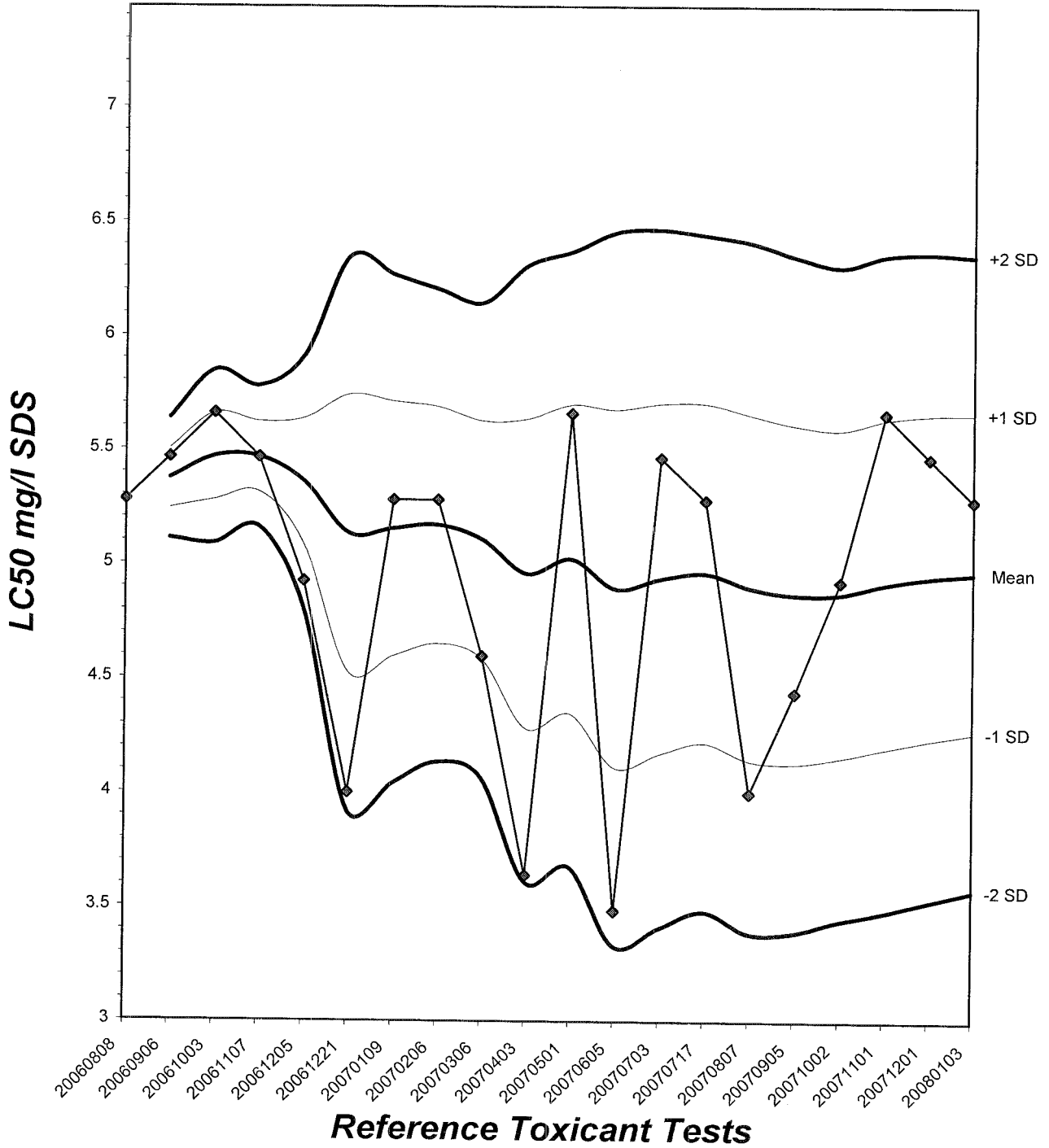
Trimmed Spearman-Kärber

Trim Level	EC50	95% CL	
0.0%	5.2780	4.8093	5.7924
5.0%	5.3968	4.8053	6.0611
10.0%	5.4432	5.1395	5.7648
20.0%	5.4432	5.1395	5.7648
Auto-0.0%	5.2780	4.8093	5.7924



Fathead Minnow Acute Laboratory Control Chart

CV% = 14



TEST ORGANISM LOG



FATHEAD MINNOW - LARVAL (*Pimephales promelas*)

QA/QC BATCH NO.: RT-080103

SOURCE: In-Lab Culture

DATE HATCHED: 12-23-07

APPROXIMATE QUANTITY: 400

GENERAL APPEARANCE: good

MORTALITIES 48 HOURS PRIOR TO
TO USE IN TESTING: 0

DATE USED IN LAB: 1/3/08

AVERAGE FISH WEIGHT: 0.006 gm

TEST LOADING LIMITS: 0.65 gm/liter

200 ml test solution volume = 0.013 gm mean fish weight limit

250 ml test solution volume = 0.016 gm mean fish weight limit

ACCLIMATION WATER QUALITY:

Temp.: 20.3 °C

pH: 7.9

Ammonia: 2.01 mg/l NH₃-N

DO: 8.5 mg/l

Alkalinity: 62 mg/l

Hardness: 97 mg/l

READINGS RECORDED BY: JH

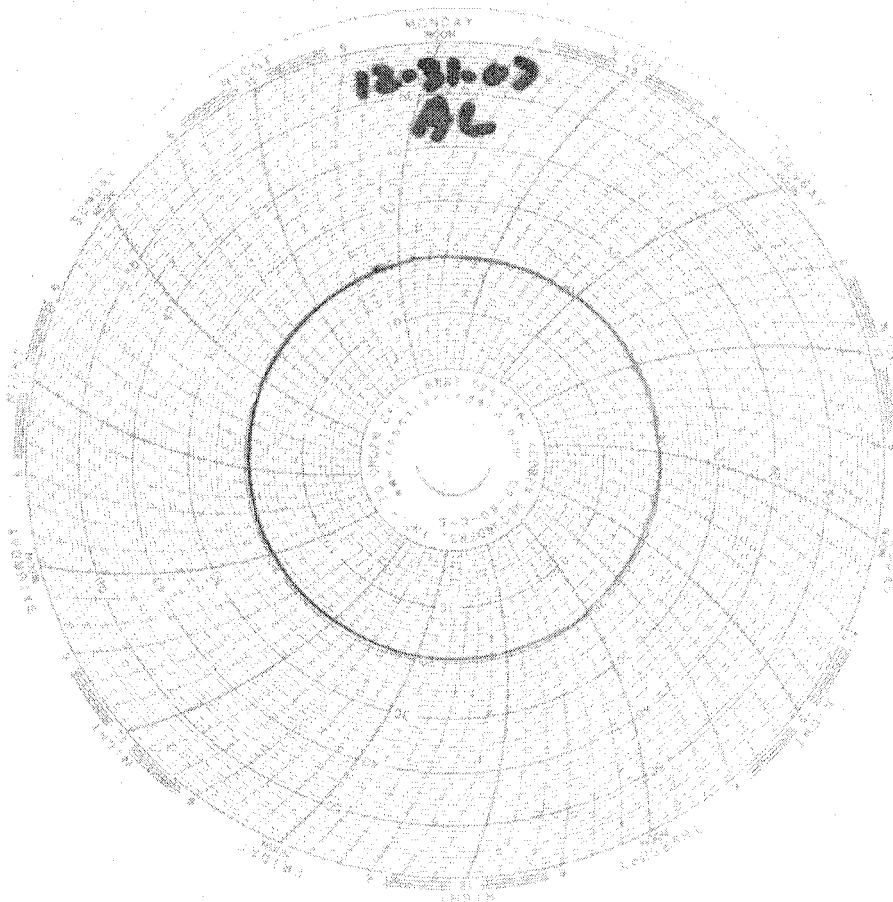
DATE: 1-4-08

Laboratory Temperature Chart

QA/QC Batch No: RT-080103

Date Tested: 01/03/08 to 01/07/08

Acceptable Range: 20+/- 1°C



CERIODAPHNIA SURVIVAL AND REPRODUCTION TEST

- *Test and Results Summary*
- *Data Summary and Statistical Analyses*
- *Raw Test Data: Water Quality & Test Organism Measurements*

CERIODAPHNIA CHRONIC BIOASSAY
EPA METHOD 1002.0
REFERENCE TOXICANT - NaCl



QA/QC Batch No.: RT-080106

Date Tested: 01/06/08 to 01/12/08

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: 6 days.

Statistics: ToxCalc computer program.

RESULTS SUMMARY

Sample Concentration	Percent Survival		Mean Number of Young Per Female	
Control	100%		20.5	
0.25 g/l	100%		19.5	
0.5 g/l	100%		19.5	
1.0 g/l	100%		14.0	*
2.0 g/l	80%		3.2	*
4.0 g/l	0%	*	0	**

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

CHRONIC TOXICITY

Survival LC50	2.5 g/l
Reproduction IC25	0.88 g/l

QA/QC TEST ACCEPTABILITY

Parameter	Result
Control survival ≥80%	Pass (100% Survival)
≥15 young per surviving control female	Pass (20.5 young)
≥60% surviving controls had 3 broods	Pass (90% with 3 broods)
PMSD <47% for reproduction	Pass (PMSD = 19.1%)
Stat. sig. diff. conc. relative difference >13%	Pass (Stat. sig. diff. conc. = 31.7%)
Concentration response relationship acceptable	Pass (Response curve normal)

Ceriodaphnia Survival and Reproduction Test-Survival Day 6

Start Date: 1/6/2008 13:00 Test ID: RT-080106c Sample ID: REF-Ref Toxicant
 End Date: 1/12/2008 13:00 Lab ID: CAATL-Aquatic Testing Labs Sample Type: NACL-Sodium chloride
 Sample Date: 1/6/2008 Protocol: FWCH-EPA-821-R-02-013 Test Species: CD-Ceriodaphnia dubia
 Comments:

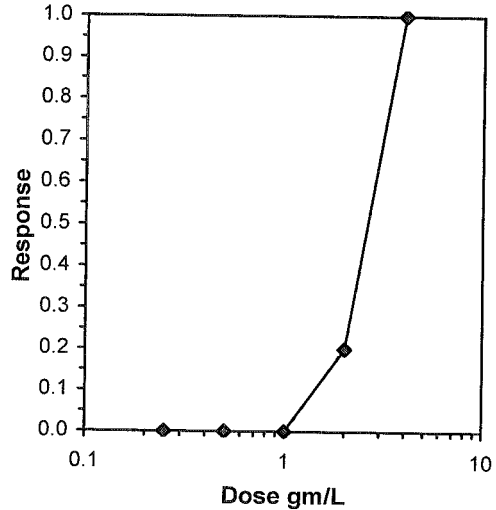
Conc-gm/L	1	2	3	4	5	6	7	8	9	10
D-Control	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.25	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.5	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	0.0000	0.0000
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	0.8000	0.8000	2	8	10	10	0.2368	0.0500	2	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				

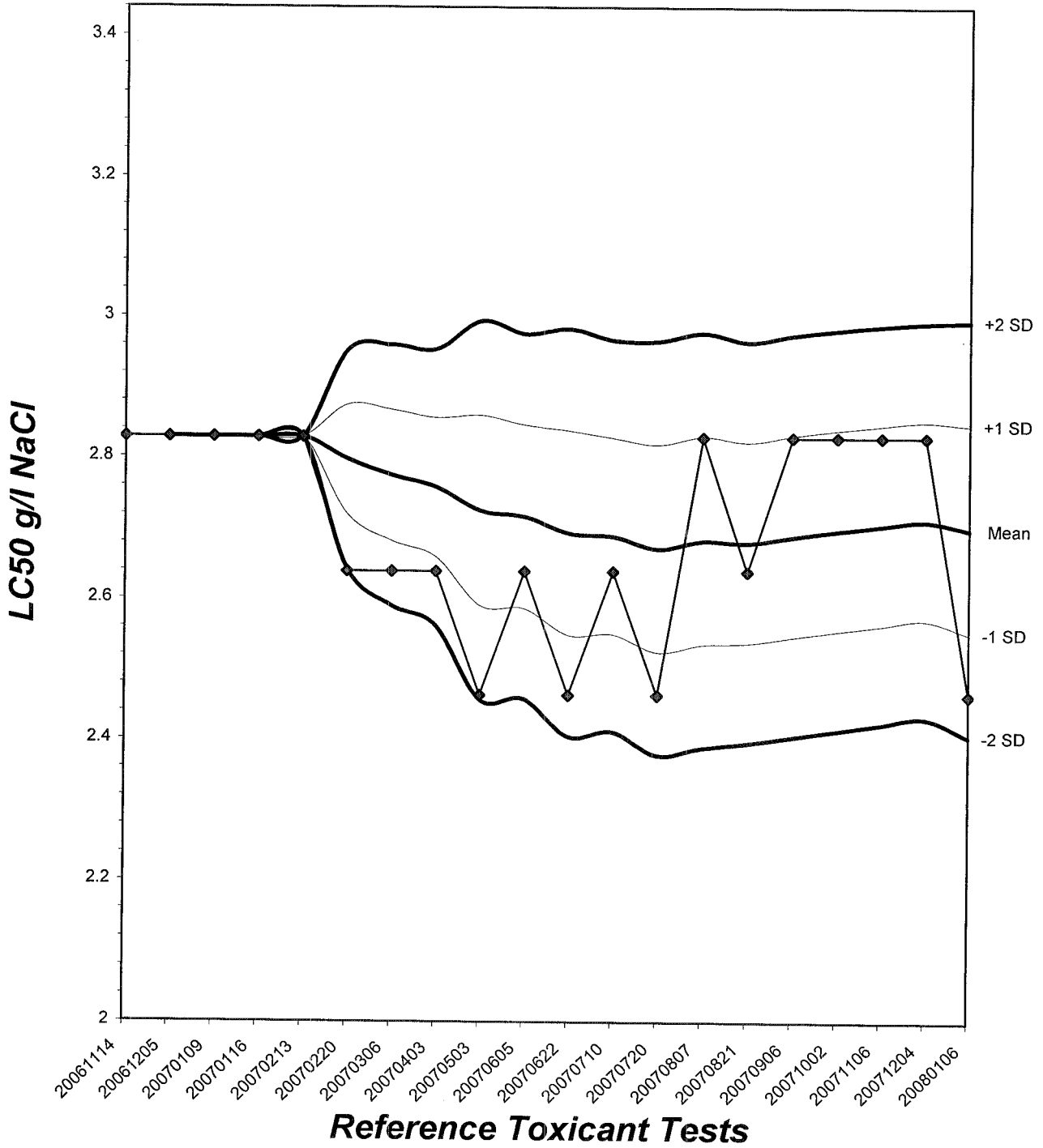
Trim Level	EC50	95% CL	
0.0%	2.4623	2.0663	2.9342
5.0%	2.5108	2.0545	3.0683
10.0%	2.5519	1.9976	3.2599
20.0%	2.5937	2.2616	2.9745
Auto-0.0%	2.4623	2.0663	2.9342

Trimmed Spearman-Kärber



Ceriodaphnia dubia Chronic Survival Laboratory Control Chart

CV% = 5.46



Ceriodaphnia Survival and Reproduction Test-Reproduction

Start Date: 1/6/2008 13:00 Test ID: RT-080106c Sample ID: REF-Ref Toxicant
 End Date: 1/12/2008 13:00 Lab ID: CAATL-Aquatic Testing Labs Sample Type: NACL-Sodium chloride
 Sample Date: 1/6/2008 Protocol: FWCH-EPA-821-R-02-013 Test Species: CD-Ceriodaphnia dubia
 Comments:

Conc-gm/L	1	2	3	4	5	6	7	8	9	10
D-Control	23.000	11.000	21.000	21.000	23.000	20.000	19.000	22.000	20.000	25.000
0.25	12.000	24.000	19.000	22.000	9.000	20.000	21.000	21.000	22.000	25.000
0.5	21.000	19.000	21.000	22.000	16.000	12.000	22.000	21.000	22.000	19.000
1	19.000	9.000	9.000	19.000	14.000	10.000	16.000	17.000	19.000	8.000
2	8.000	2.000	2.000	5.000	4.000	3.000	3.000	5.000	0.000	0.000
4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Conc-gm/L	Mean	N-Mean	Transform: Untransformed					Rank Sum	1-Tailed Critical	Isotonic	
			Mean	Min	Max	CV%	N			Mean	N-Mean
D-Control	20.500	1.0000	20.500	11.000	25.000	18.432	10			20.500	1.0000
0.25	19.500	0.9512	19.500	9.000	25.000	26.177	10	102.00	76.00	19.500	0.9512
0.5	19.500	0.9512	19.500	12.000	22.000	16.617	10	94.50	76.00	19.500	0.9512
*1	14.000	0.6829	14.000	8.000	19.000	32.819	10	62.50	76.00	14.000	0.6829
*2	3.200	0.1561	3.200	0.000	8.000	76.263	10	55.00	76.00	3.200	0.1561
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)	0.91281	0.947	-0.9793
Bartlett's Test indicates equal variances (p = 0.25)	5.39	13.2767	0.67912

Hypothesis Test (1-tail, 0.05)

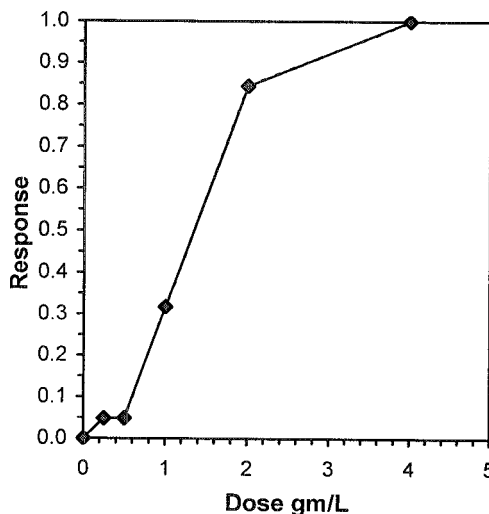
NOEC	LOEC	ChV	TU
0.5	1	0.70711	

Steel's Many-One Rank Test

Treatments vs D-Control

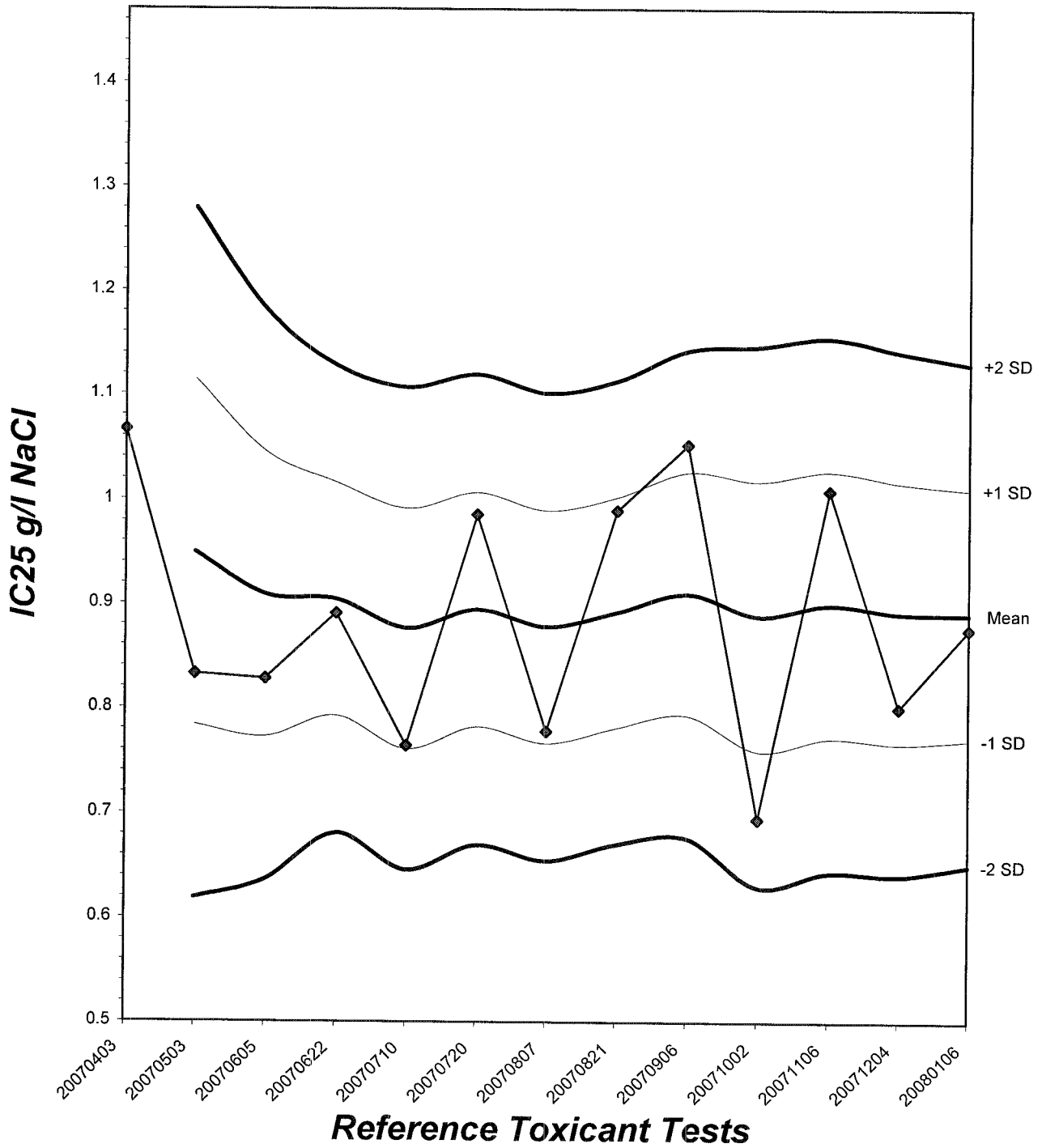
Linear Interpolation (200 Resamples)

Point	gm/L	SD	95% CL		Skew
IC05	0.5023	0.1876	0.0809	0.6178	-0.0659
IC10	0.5955	0.1768	0.1617	0.7497	-0.5184
IC15	0.6886	0.1424	0.2426	0.9253	-0.5389
IC20	0.7818	0.1259	0.4995	1.0352	0.2728
IC25	0.8750	0.1224	0.6413	1.1094	0.3153
IC40	1.1574	0.1139	0.9216	1.3331	-0.0890
IC50	1.3472	0.0972	1.1197	1.4847	-0.4227



***Ceriodaphnia dubia* Chronic Reproduction Laboratory Control Chart**

CV% = 13.5



CERIODAPHNIA DUBIA CHRONIC BIOASSAY

Reference Toxicant - NaCl

Reproduction and Survival Raw Data Sheet



QA/QC No.: RT-080106

Start Date: 01/06/2008

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	h
	2	0	0	0	0	0	0	0	0	0	0	0	10	h
	3	0	0	2	0	0	0	3	0	3	0	8	10	h
	4	4	3	0	4	3	2	0	2	0	3	21	10	h
	5	9	8	7	7	6	7	6	7	6	7	70	10	h
	6	10	0	12	10	14	11	10	13	11	15	106	10	h
	7	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total	23	11	21	21	73	20	19	22	20	25	205	10	h
0.25 g/l	1	0	0	0	0	0	0	0	0	0	0	10	h	
	2	0	0	0	0	0	0	0	0	0	0	10	h	
	3	0	3	0	3	0	2	0	0	3	0	11	10	h
	4	4	0	2	0	3	6	4	2	0	3	24	10	h
	5	8	8	7	5	6	0	7	6	7	8	62	10	h
	6	0	13	10	14	0	12	10	13	12	14	98	10	h
	7	-	-	-	-	-	-	-	-	-	-	-	-	h
	Total	12	24	19	22	9	20	21	21	22	25	195	10	h
0.5 g/l	1	0	0	0	0	0	0	0	0	0	0	10	h	
	2	0	0	0	0	0	0	0	0	0	0	10	h	
	3	2	0	2	0	0	0	3	2	0	0	9	10	h
	4	0	3	0	3	4	3	0	0	3	3	19	10	h
	5	9	6	7	7	0	9	8	7	7	6	66	10	h
	6	10	10	12	12	12	0	11	10	12	10	101	10	h
	7	-	-	-	-	-	-	-	-	-	-	-	-	h
	Total	21	19	21	22	16	12	22	21	22	19	195	10	h

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-080106

Start Date: 01/06/2008

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	h
	2	0	0	0	0	0	0	0	0	0	0	0	10	
	3	0	0	0	0	0	3	0	0	2	0	5	10	
	4	3	2	2	3	0	0	3	2	0	2	17	10	
	5	5	7	7	4	5	7	5	4	7	6	57	10	
	6	11	0	0	12	9	0	8	11	10	0	61	10	
	7	-	-	-	-	-	-	-	-	-	-	-	-	
	Total	19	9	9	19	14	10	16	17	19	8	140	10	
2.0 g/l	1	0	0	0	0	0	0	0	X	0	0	9	h	
	2	0	0	0	0	0	0	0	-	0	0	9		
	3	0	0	0	0	0	0	0	-	0	0	9		
	4	2	0	2	3	0	0	0	2	-	0	9		9
	5	3	0	0	2	2	3	3	0	-	0	13		9
	6	3	2	0	0	2	0	0	3	-	X	10		8
	7	-	-	-	-	-	-	-	-	-	-	-		-
	Total	8	2	2	5	4	3	3	5	0	0	32		8
4.0 g/l	1	X	X	X	X	X	X	X	X	X	0	0	h	
	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.

CERIODAPHNIA DUBIA CHRONIC BIOASSAY

Reference Toxicant - NaCl Water Chemistries Raw Data Sheet



QA/QC No.: RT-080106

Start Date: 01/06/2008

		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:		1300	1330	1330	1300	1300	1230	1230	1300	1300	1300	1300	1300	1300	—	—
Control	DO	7.6	7.2	7.4	7.7	7.4	7.6	7.4	7.5	8.2	7.8	7.9	7.7	—	—	
	pH	7.6	7.4	7.4	7.3	7.3	7.2	7.2	7.7	7.5	7.6	7.9	7.6	—	—	
	Temp	24.3	25.1	25.4	24.8	24.1	24.9	24.9	25.1	24.4	25.0	24.6	25.1	—	—	
0.25 g/l	DO	7.5	7.3	7.5	7.5	7.5	7.7	7.3	7.4	8.2	7.8	7.9	7.7	—	—	
	pH	7.6	7.3	7.4	7.4	7.4	7.2	7.3	7.4	7.6	7.5	7.6	7.7	—	—	
	Temp	24.4	25.2	25.3	24.9	24.2	24.9	24.7	25.0	24.4	25.1	24.6	25.1	—	—	
0.5 g/l	DO	7.4	7.2	7.4	7.6	7.4	7.5	7.4	7.6	8.5	7.6	8.0	7.8	—	—	
	pH	7.5	7.3	7.4	7.4	7.4	7.2	7.3	7.5	7.6	7.5	7.7	7.7	—	—	
	Temp	24.3	25.1	25.3	24.9	24.1	25.2	24.6	24.9	24.4	24.9	24.4	24.9	—	—	
1.0 g/l	DO	7.5	7.2	7.6	7.7	7.3	7.8	7.4	7.4	8.4	7.8	7.7	7.7	—	—	
	pH	7.5	7.3	7.6	7.5	7.4	7.2	7.3	7.5	7.6	7.6	7.4	7.6	—	—	
	Temp	24.4	25.2	25.1	24.7	24.2	25.2	24.6	25.0	24.4	24.9	24.6	25.0	—	—	
2.0 g/l	DO	7.4	7.4	7.6	7.5	7.4	7.8	7.2	7.6	8.2	7.6	7.6	7.7	—	—	
	pH	7.5	7.4	7.6	7.6	7.4	7.3	7.2	7.6	7.5	7.6	7.9	7.6	—	—	
	Temp	24.5	25.1	25.0	24.6	24.2	25.3	24.8	25.2	24.4	24.8	24.6	25.1	—	—	
4.0 g/l	DO	7.5	7.8	—	—	—	—	—	—	—	—	—	—	—	—	
	pH	7.6	7.8	—	—	—	—	—	—	—	—	—	—	—	—	
	Temp	24.3	24.6	—	—	—	—	—	—	—	—	—	—	—	—	

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)	350	348	305	6400	3100	3210
Alkalinity (mg/l CaCO ₃)	66	65	63	65	66	64
Hardness (mg/l CaCO ₃)	98	97	98	98	97	98

Source of Neonates

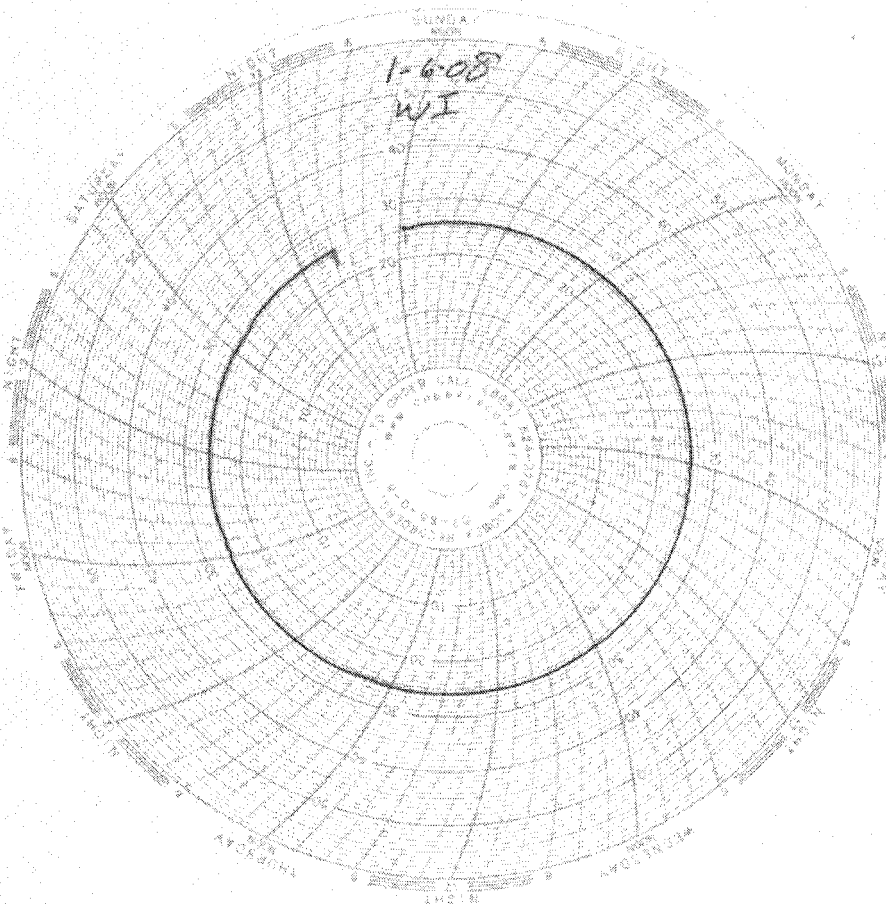
Replicate:	A	B	C	D	E	F	G	H	I	J
Brood ID:	2B	1B	3C	2C	2A	3D	3E	2F	3F	2G

Laboratory Temperature Chart

QA/QC Batch No: RT-080106

Date Tested: 01/06/08 to 01/12/08

Acceptable Range: 25+/- 1°C





EBERLINE SERVICES

March 10, 2008

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

Reference: Test America Project Nos. IRB0073, IRB0146, IRB0147, IRB0148, IRB0149,
IRB0150, IRB0151, IRB0152, IRB0153, IRB0154,
IRB0156, IRB0480, IRB0751
Eberline Services NELAP Cert #01120CA
Eberline Services Reports R802024-8693, R802040-8694, R802041-8695,
R802042-8696, R802043-8697, R802044-8698
R802045-8699, R802046-8600, R802047-8601
R802048-8602, R802049-8603, R802054-8604
R802084-8608

Dear Mr. Doak:

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

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

Regards,

Melissa Mannion
Senior Program Manager

MCM/njv

Enclosure: Report on CD

Analytical Services
2030 Wright Avenue
P.O. Box 4040
Richmond, California 94804-0040
(510) 235-2633 Fax (510) 235-0438
Toll Free (800) 841-5487
www.eberlineservices.com
NPDES - 1327

Eberline Services

ANALYSIS RESULTS

SDG <u>8693</u> Work Order <u>R802024-01</u> Received Date <u>02/05/08</u>	Client <u>TA IRVINE</u> Contract <u>PROJECT# IRB0073</u> Matrix <u>WATER</u>
--	--

Client	Lab						
<u>Sample ID</u>	<u>Sample ID</u>	<u>Collected</u>	<u>Analyzed</u>	<u>Nuclide</u>	<u>Results ± 2σ</u>	<u>Units</u>	<u>MDA</u>
IRB0073-01	8693-001	02/01/08	02/27/08	GrossAlpha	0.763 ± 0.99	pCi/L	1.3
			02/27/08	Gross Beta	14.2 ± 0.93	pCi/L	0.97
			02/27/08	Ra-228	0.295 ± 0.19	pCi/L	0.49
			02/23/08	K-40 (G)	24.0 ± 11	pCi/L	8.2
			02/23/08	Cs-137 (G)	U	pCi/L	0.86
			02/28/08	H-3	7.12 ± 78	pCi/L	130
			03/03/08	Ra-226	0.426 ± 0.44	pCi/L	0.70
			02/18/08	Sr-90	0.026 ± 0.31	pCi/L	0.72
			02/26/08	Total U	0.578 ± 0.064	pCi/L	0.022

Certified by <u></u> Report Date <u>03/11/08</u> Page 1

Eberline Services

QC RESULTS

SDG <u>8693</u>	Client <u>TA IRVINE</u>
Work Order <u>R802024-01</u>	Contract <u>PROJECT# IRB0073</u>
Received Date <u>02/05/08</u>	Matrix <u>WATER</u>

Lab	Sample ID	Nuclide	Results	Units	Amount Added	MDA	Evaluation
<u>LCS</u>							
	8693-002	GrossAlpha	10.6 ± 0.82	pCi/Smpl	10.2	0.31	104% recovery
		Gross Beta	9.07 ± 0.36	pCi/Smpl	9.38	0.28	97% recovery
		Ra-228	8.40 ± 0.59	pCi/Smpl	8.66	0.88	97% recovery
		Co-60 (G)	214 ± 14	pCi/Smpl	224	9.1	96% recovery
		Cs-137 (G)	240 ± 12	pCi/Smpl	236	9.2	102% recovery
		Am-241 (G)	255 ± 26	pCi/Smpl	254	31	100% recovery
		H-3	222 ± 12	pCi/Smpl	239	13	93% recovery
		Ra-226	5.35 ± 0.24	pCi/Smpl	5.02	0.076	107% recovery
		Sr-90	10.7 ± 0.80	pCi/Smpl	9.39	0.37	114% recovery
		Total U	1.12 ± 0.13	pCi/Smpl	1.13	0.004	99% recovery

<u>BLANK</u>							
	8693-003	GrossAlpha	-0.103 ± 0.17	pCi/Smpl	NA	0.34	<MDA
		Gross Beta	-0.111 ± 0.15	pCi/Smpl	NA	0.27	<MDA
		Ra-228	0.239 ± 0.48	pCi/Smpl	NA	0.68	<MDA
		K-40 (G)	U	pCi/Smpl	NA	110	<MDA
		Cs-137 (G)	U	pCi/Smpl	NA	5.4	<MDA
		H-3	-1.64 ± 8.3	pCi/Smpl	NA	15	<MDA
		Ra-226	0.016 ± 0.034	pCi/Smpl	NA	0.062	<MDA
		Sr-90	0.099 ± 0.15	pCi/Smpl	NA	0.27	<MDA
		Total U	0.00E 00 ± 1.9E 04	pCi/Smpl	NA	4.5E-04	<MDA

<u>DUPLICATES</u>				<u>ORIGINALS</u>			
Sample ID	Nuclide	Results ± 2σ	MDA	Sample ID	Results ± 2σ	MDA	RPD (Tot) Eval
8693-004	GrossAlpha	1.03 ± 1.0	1.5	8693-001	0.763 ± 0.99	1.3	- 0 satis.
	Gross Beta	15.0 ± 1.2	1.6		14.2 ± 0.93	0.97	5 46 satis.
	Ra-228	0.099 ± 0.18	0.48		0.295 ± 0.19	0.49	- 0 satis.
	K-40 (G)	24.8 ± 7.8	4.9		24.0 ± 11	8.2	3 86 satis.
	Cs-137 (G)	U	0.53		U	0.86	- 0 satis.
	H-3	-6.31 ± 84	150		7.12 ± 78	130	- 0 satis.
	Ra-226	0.583 ± 0.52	0.81		0.426 ± 0.44	0.70	- 0 satis.
	Sr-90	-0.021 ± 0.29	0.71		0.026 ± 0.31	0.72	- 0 satis.
	Total U	0.611 ± 0.067	0.022		0.578 ± 0.064	0.022	6 30 satis.


Certified by _____ *mgj*
 Report Date 03/11/08
 Page 2

Eberline Services

QC RESULTS

SDG <u>8693</u>	Client <u>TA IRVINE</u>
Work Order <u>R802024-01</u>	Contract <u>PROJECT# IRB0073</u>
Received Date <u>02/05/08</u>	Matrix <u>WATER</u>

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

Certified by <u></u>
Report Date <u>03/11/08</u>
Page 3

SUBCONTRACT ORDER

TestAmerica Irvine

IRB0073

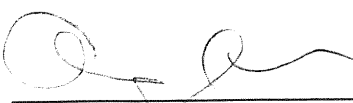
SENDING LABORATORY:

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

RECEIVING LABORATORY:

Eberline Services
2030 Wright Avenue
Richmond, CA 94804
Phone : (510) 235-2633
Fax: (510) 235-0438
Project Location: California
Receipt Temperature: 4.0 °C Ice: (Y) / N

Analysis	Units	Due	Expires	Comments
Sample ID: IRB0073-01			Sampled: 02/01/08 08:30	
EDD + Level 4	N/A	02/12/08	02/29/08 08:30	
Gamma Spec-O	mg/kg	02/12/08	01/31/09 08:30	Out to Eberline, k-40 and cs-137 only
Gross Alpha-O	pCi/L	02/12/08	07/30/08 08:30	Out to Eberline, Boeing
Gross Beta-O	pCi/L	02/12/08	07/30/08 08:30	Out to Eberline, Boeing
Radium, Combined-O	pCi/L	02/12/08	01/31/09 08:30	Out to Eberline, Boeing
Strontium 90-O	pCi/L	02/12/08	01/31/09 08:30	Out to Eberline, Boeing
Tritium-O	pCi/L	02/12/08	01/31/09 08:30	Out to Eberline, Boeing
Uranium, Combined-O	pCi/L	02/12/08	01/31/09 08:30	Out to Eberline, Boeing
<i>Containers Supplied:</i>				
2.5 gal Poly (S)	500 mL Amber (T)			

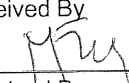
 2/4/08 17:00

Released By Date/Time

FedEx 2/4/08 17:00

Received By Date/Time

Released By Date/Time

 02/05/08 09:30

Received By Date/Time

JK 2/5/08

Client: TEST AMERICA City: IRVINE State: CA

Date/Time received: 02/05/08 09:30 DOC No: IRB0073

Container... No: 16 CHEST Requested TAT (Days): _____ F.O. Received: Yes No

INSPECTION

- 1. Custody seals on shipping container intact? Yes No N/A
- 2. Custody seals on shipping container dated & signed? Yes No N/A
- 3. Custody seals on sample containers intact? Yes No N/A
- 4. Custody seals on sample containers dated & signed? Yes No N/A
- 5. Packing materials: 1 Yes No
- 6. Number of samples in shipping container: 1 Sample Matrix: W
- 7. Number of containers per sample: 2 (Or see Doc: _____)
- 8. Samples are in correct container? Yes No
- 9. Paperwork agrees with samples? Yes No
- 10. Samples have: Tape Hazard labels Rad labels Appropriate sample labels
- 11. Samples are: in good condition Leaking Broken Container Missing
- 12. Samples are: Preserved Not preserved or Preservative: _____
- 13. Describe any anomalies: _____

14. Was P.M. notified of any anomalies? Yes No Date: _____

15. Inspected by: [Signature] Date: 02/05/08 Time: 10:45

Customer Sample No	Beta/Gamma con	Ion Chamber mRun	Wipe	Customer Sample No	Beta/Gamma con	Ion Chamber mRun	Wipe
IRB 0073-1	460						

Ion Chamber Ser. No: _____ Calibration date: _____
 Alpha Meter Ser. No: _____ Calibration date: _____
 Beta/Gamma Meter Ser. No: 100482 Calibration date: 09 MAY 07

February 23, 2008

Vista Project I.D.: 30229

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

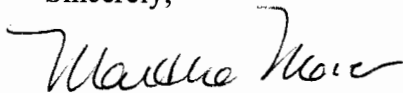
Dear Mr. Doak,

Enclosed are the results for the one aqueous sample received at Vista Analytical Laboratory on February 05, 2008 under your Project Name "IRB0073". This sample was extracted and analyzed using EPA Method 1613 for tetra-through-octa chlorinated dioxins and furans. A standard turnaround time was provided for this work.

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

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

Sincerely,



Martha M. Maier
Laboratory Director



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



Section I: Sample Inventory Report

Date Received: 2/5/2008

Vista Lab. ID

Client Sample ID

30229-001

IRB0073-01

SECTION II

Method Blank					EPA Method 1613			
Matrix:	Aqueous	QC Batch No.:	9953	Lab Sample:	0-MB001			
Sample Size:	1.00 L	Date Extracted:	15-Feb-08	Date Analyzed DB-5:	19-Feb-08	Date Analyzed DB-225:	NA	
Analyte	Conc. (ug/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	ND	0.00000705			IS 13C-2,3,7,8-TCDD	82.9	25 - 164	
1,2,3,7,8-PeCDD	ND	0.00000681			13C-1,2,3,7,8-PeCDD	75.4	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.00000165			13C-1,2,3,4,7,8-HxCDD	81.7	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.00000174			13C-1,2,3,6,7,8-HxCDD	83.0	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.00000162			13C-1,2,3,4,6,7,8-HpCDD	85.6	23 - 140	
1,2,3,4,6,7,8-HpCDD	ND	0.00000511			13C-OCDD	73.4	17 - 157	
OCDD	0.00000899			J	13C-2,3,7,8-TCDF	88.8	24 - 169	
2,3,7,8-TCDF	ND	0.00000647			13C-1,2,3,7,8-PeCDF	74.4	24 - 185	
1,2,3,7,8-PeCDF	ND	0.00000731			13C-2,3,4,7,8-PeCDF	77.1	21 - 178	
2,3,4,7,8-PeCDF	ND	0.00000752			13C-1,2,3,4,7,8-HxCDF	75.8	26 - 152	
1,2,3,4,7,8-HxCDF	ND	0.00000943			13C-1,2,3,6,7,8-HxCDF	77.6	26 - 123	
1,2,3,6,7,8-HxCDF	ND	0.00000974			13C-2,3,4,6,7,8-HxCDF	78.0	28 - 136	
2,3,4,6,7,8-HxCDF	ND	0.00000105			13C-1,2,3,7,8,9-HxCDF	81.9	29 - 147	
1,2,3,7,8,9-HxCDF	ND	0.00000136			13C-1,2,3,4,6,7,8-HpCDF	75.7	28 - 143	
1,2,3,4,6,7,8-HpCDF	ND	0.00000333			13C-1,2,3,4,7,8,9-HpCDF	82.1	26 - 138	
1,2,3,4,7,8,9-HpCDF	ND	0.00000202			13C-OCDF	76.2	17 - 157	
OCDF	ND	0.00000591			CRS 37Cl-2,3,7,8-TCDD	85.1	35 - 197	
Totals					Footnotes			
Total TCDD	ND	0.00000705			a. Sample specific estimated detection limit.			
Total PeCDD	ND	0.00000122			b. Estimated maximum possible concentration.			
Total HxCDD	ND	0.00000167			c. Method detection limit.			
Total HpCDD	ND	0.00000511			d. Lower control limit - upper control limit.			
Total TCDF	ND	0.00000647						
Total PeCDF	ND	0.00000742						
Total HxCDF	ND	0.00000107						
Total HpCDF	ND	0.00000335						

Analyst: MAS

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

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

Analyst: MAS

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

Sample ID: IRB0073-01					EPA Method 1613			
Client Data			Sample Data		Laboratory Data			
Name:	Test America-Irvine, CA		Matrix:	Aqueous	Lab Sample:	30229-001	Date Received:	5-Feb-08
Project:	IRB0073		Sample Size:	0.997 L	QC Batch No.:	9953	Date Extracted:	15-Feb-08
Date Collected:	1-Feb-08				Date Analyzed DB-5:	19-Feb-08	Date Analyzed DB-225:	NA
Time Collected:	0830							
Analyte	Conc. (ug/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	ND	0.000000623			IS 13C-2,3,7,8-TCDD	87.9	25 - 164	
1,2,3,7,8-PeCDD	ND	0.000000755			13C-1,2,3,7,8-PeCDD	78.3	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.00000172			13C-1,2,3,4,7,8-HxCDD	81.4	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.00000158			13C-1,2,3,6,7,8-HxCDD	80.6	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.00000158			13C-1,2,3,4,6,7,8-HpCDD	88.2	23 - 140	
1,2,3,4,6,7,8-HpCDD	0.0000101			J	13C-OCDD	82.3	17 - 157	
OCDD	0.000165			B	13C-2,3,7,8-TCDF	90.2	24 - 169	
2,3,7,8-TCDF	ND	0.000000565			13C-1,2,3,7,8-PeCDF	77.9	24 - 185	
1,2,3,7,8-PeCDF	ND	0.000000812			13C-2,3,4,7,8-PeCDF	76.9	21 - 178	
2,3,4,7,8-PeCDF	ND	0.000000823			13C-1,2,3,4,7,8-HxCDF	80.0	26 - 152	
1,2,3,4,7,8-HxCDF	ND	0.000000832			13C-1,2,3,6,7,8-HxCDF	79.0	26 - 123	
1,2,3,6,7,8-HxCDF	ND	0.000000902			13C-2,3,4,6,7,8-HxCDF	76.8	28 - 136	
2,3,4,6,7,8-HxCDF	ND	0.00000101			13C-1,2,3,7,8,9-HxCDF	82.7	29 - 147	
1,2,3,7,8,9-HxCDF	ND	0.00000125			13C-1,2,3,4,6,7,8-HpCDF	77.0	28 - 143	
1,2,3,4,6,7,8-HpCDF	0.00000156			J	13C-1,2,3,4,7,8,9-HpCDF	83.9	26 - 138	
1,2,3,4,7,8,9-HpCDF	ND	0.00000113			13C-OCDF	83.2	17 - 157	
OCDF	0.00000310			J	CRS 37Cl-2,3,7,8-TCDD	88.1	35 - 197	
Totals					Footnotes			
Total TCDD	ND	0.000000623			a. Sample specific estimated detection limit.			
Total PeCDD	ND	0.00000189			b. Estimated maximum possible concentration.			
Total HxCDD	ND	0.00000338			c. Method detection limit.			
Total HpCDD	0.0000217				d. Lower control limit - upper control limit.			
Total TCDF	ND	0.000000565						
Total PeCDF	ND	0.000000817						
Total HxCDF	ND		0.000000859					
Total HpCDF	0.00000391							

Analyst: MAS

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

APPENDIX

DATA QUALIFIERS & ABBREVIATIONS

B	This compound was also detected in the method blank.
D	Dilution
E	The amount detected is above the High Calibration Limit.
P	The amount reported is the maximum possible concentration due to possible chlorinated diphenylether interference.
H	The signal-to-noise ratio is greater than 10:1.
I	Chemical Interference
J	The amount detected is below the Low Calibration Limit.
*	See Cover Letter
Conc.	Concentration
DL	Sample-specific estimated detection limit
MDL	The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero in the matrix tested.
EMPC	Estimated Maximum Possible Concentration
NA	Not applicable
RL	Reporting Limit – concentrations that correspond to low calibration point
ND	Not Detected
TEQ	Toxic Equivalency

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

CERTIFICATIONS

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

SUBCONTRACT ORDER

TestAmerica Irvine

IRB0073

30229

SENDING LABORATORY:

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


RECEIVING LABORATORY:

Vista Analytical Laboratory- SUB
1104 Windfield Way
El Dorado Hills, CA 95762
Phone : (916) 673-1520
Fax: (916) 673-0106
Project Location: California
Receipt Temperature: _____ °C

2.2°C

Ice: Y / N

Analysis	Units	Due	Expires	Comments
Sample ID: IRB0073-01	Water		Sampled: 02/01/08 08:30	
1613-Dioxin-HR-Alta	ug/l	02/12/08	02/08/08 08:30	J flags, 17 congeners, no TEQ, ug/L, sub=Vista
Level 4 + EDD-OUT	N/A	02/12/08	02/29/08 08:30	Excel EDD email to pm, include Std logs for Lvl IV
<i>Containers Supplied:</i>				
1 L Amber (C)	1 L Amber (D)			


Released By

2/4/08 17:00
Date/Time

Fedex

Received By

2/4/08 17:00
Date/Time

Released By
Project 30229

Date/Time

2.5.08 / 0929
Date/Time

SAMPLE LOG-IN CHECKLIST



Vista Project #: 30229

TAT Standard

Samples Arrival:	Date/Time <u>2/5/08 0929</u>	Initials: <u>YBS</u>	Location: <u>WR-2</u>
			Shelf/Rack: <u>N/A</u>
Logged In:	Date/Time <u>2/6/08 0857</u>	Initials: <u>YBS</u>	Location: <u>WR-2</u>
			Shelf/Rack: <u>B4</u>
Delivered By:	<u>FedEx</u>	UPS	Cal
		DHL	Hand Delivered
		Other	
Preservation:	<u>Ice</u>	Blue Ice	Dry Ice
		None	
Temp °C	<u>2.2</u>	Time: <u>0940</u>	Thermometer ID: IR-1

	YES	NO	NA
Adequate Sample Volume Received?	X		
Holding Time Acceptable?	✓		
Shipping Container(s) Intact?	X		
Shipping Custody Seals Intact?	X		
Shipping Documentation Present?	✓		
Airbill	Trk # <u>7988 6628 2271</u>		
Sample Container Intact?	X		
Sample Custody Seals Intact?			X
Chain of Custody / Sample Documentation Present?	X		
COC Anomaly/Sample Acceptance Form completed?		✓	
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓
Na ₂ S ₂ O ₃ Preservation Documented?	COC	Sample Container	<u>None</u>
Shipping Container	Vista	<u>Client</u>	Retain
		<u>Return</u>	Dispose

Comments:

SUBCONTRACT ORDER

TestAmerica Irvine
IRB0073

8020449

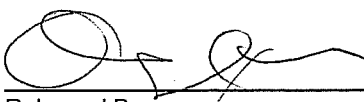
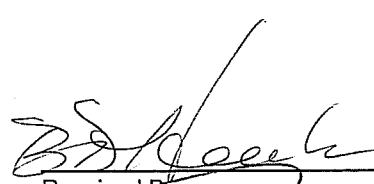
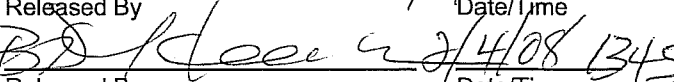
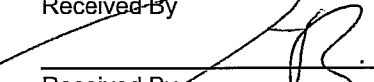
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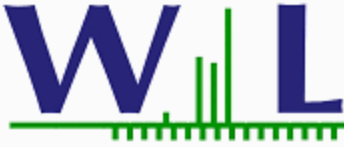
TestAmerica Irvine
17461 Derian Avenue. Suite 100
Irvine, CA 92614
Phone: (949) 261-1022
Fax: (949) 260-3297
Project Manager: Joseph Doak

RECEIVING LABORATORY:

Weck Laboratories, Inc
14859 E. Clark Avenue
City of Industry, CA 91745
Phone : (626) 336-2139
Fax: (626) 336-2634
Project Location: California
Receipt Temperature: _____ °C Ice: Y / N

Analysis	Units	Due	Expires	Comments
Sample ID: IRB0073-01	Water		Sampled: 02/01/08 08:30	
Level 4 Data Package - Weck	N/A	02/12/08	02/29/08 08:30	
Mercury - 245.1, Diss -OUT	mg/l	02/12/08	02/29/08 08:30	OUT to Weck, Boeing, permit, J flags
Mercury - 245.1-OUT	mg/l	02/12/08	02/29/08 08:30	OUT to Weck, Boeing, permit, J flags
<i>Containers Supplied:</i>				
125 mL Poly (AA)	125 mL Poly w/HNO3 (AB)			

 2/4/08 1005
  2/4/08 1005
 Released By _____ Date/Time _____ Received By _____ Date/Time _____
 2/4/08 1345
  02/04/08
 Released By _____ Date/Time _____ Received By _____ Date/Time _____



CERTIFICATE OF ANALYSIS

Client: TestAmerica, Inc. - Irvine
17461 Derian Ave, Suite 100
Irvine, CA 92614
Attention: Joseph Doak

Report Date: 02/11/08 16:21
Received Date: 02/04/08 13:45
Turn Around: Normal

Phone: (949) 261-1022

Work Order #: 8020449

Fax: (949) 260-3297

Client Project: IRB0073

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

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

Dear Joseph Doak :

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

Reviewed by:

Kim G Tu

Project Manager



Page 1 of 6





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

TestAmerica, Inc. - Irvine
17461 Derian Ave, Suite 100
Irvine CA, 92614

Report ID: 8020449
Project ID: IRB0073

Date Received: 02/04/08 13:45
Date Reported: 02/11/08 16:21

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Sampled by:	Sample Comments	Laboratory	Matrix	Date Sampled
IRB0073-01	Client		8020449-01	Water	02/01/08 08:30



Weck Laboratories, Inc.
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Industry, CA 91745
Phone 626.336.2139 Fax 626.336.2634

TestAmerica, Inc. - Irvine
17461 Derian Ave, Suite 100
Irvine CA, 92614

Report ID: 8020449
Project ID: IRB0073

Date Received: 02/04/08 13:45
Date Reported: 02/11/08 16:21

IRB0073-01 8020449-01 (Water)

Date Sampled: 02/01/08 08:30

Metals by EPA 200 Series Methods

Analyte	Result	MDL	Units	Reporting Limit	Dilution Factor	Method	Batch Number	Date Prepared	Date Analyzed	Data Qualifiers
Mercury, Dissolved	ND	0.050	ug/l	0.20	1	EPA 245.1	W8B0147	02/05/08	02/07/08	jlp
Mercury, Total	ND	0.050	ug/l	0.20	1	EPA 245.1	W8B0147	02/05/08	02/07/08	jlp



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TestAmerica, Inc. - Irvine
17461 Derian Ave, Suite 100
Irvine CA, 92614

Report ID: 8020449
Project ID: IRB0073

Date Received: 02/04/08 13:45
Date Reported: 02/11/08 16:21

QUALITY CONTROL SECTION



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

TestAmerica, Inc. - Irvine
 17461 Derian Ave, Suite 100
 Irvine CA, 92614

Report ID: 8020449
 Project ID: IRB0073

Date Received: 02/04/08 13:45
 Date Reported: 02/11/08 16:21

Metals by EPA 200 Series Methods - Quality Control

%REC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-----------------

Batch W8B0147 - EPA 245.1

Blank (W8B0147-BLK1)

Analyzed: 02/07/08

Mercury, Dissolved	ND	0.20	ug/l							
Mercury, Total	ND	0.20	ug/l							

LCS (W8B0147-BS1)

Analyzed: 02/07/08

Mercury, Dissolved	1.04	0.20	ug/l	1.00		104	85-115			
Mercury, Total	1.04	0.20	ug/l	1.00		104	85-115			

Matrix Spike (W8B0147-MS1)

Source: 8020444-01

Analyzed: 02/07/08

Mercury, Dissolved	1.04	0.20	ug/l	1.00	ND	104	70-130			
Mercury, Total	1.04	0.20	ug/l	1.00	ND	104	70-130			

Matrix Spike (W8B0147-MS2)

Source: 8020445-01

Analyzed: 02/07/08

Mercury, Dissolved	1.04	0.20	ug/l	1.00	ND	104	70-130			
Mercury, Total	1.04	0.20	ug/l	1.00	ND	104	70-130			

Matrix Spike Dup (W8B0147-MSD1)

Source: 8020444-01

Analyzed: 02/07/08

Mercury, Dissolved	1.05	0.20	ug/l	1.00	ND	105	70-130	1	20	
Mercury, Total	1.05	0.20	ug/l	1.00	ND	105	70-130	1	20	

Matrix Spike Dup (W8B0147-MSD2)

Source: 8020445-01

Analyzed: 02/07/08

Mercury, Dissolved	1.06	0.20	ug/l	1.00	ND	106	70-130	2	20	
Mercury, Total	1.06	0.20	ug/l	1.00	ND	106	70-130	2	20	



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Irvine CA, 92614

Report ID: 8020449
Project ID: IRB0073

Date Received: 02/04/08 13:45
Date Reported: 02/11/08 16:21

Notes and Definitions

ND	NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL)
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
% Rec	Percent Recovery
Sub	Subcontracted analysis, original report available upon request
MDL	Method Detection Limit
MDA	Minimum Detectable Activity

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

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

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

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

APPENDIX G

Section 32

Outfall 006, January 5, 2008

MEC^X Data Validation Reports



DATA VALIDATION REPORT

Boeing SSFL NPDES

SAMPLE DELIVERY GROUP: IRA0398

Prepared by

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

I. INTRODUCTION

Task Order Title: Boeing SSFL NPDES
 Contract Task Order: 1261.100D.00
 Sample Delivery Group: IRA0398
 Project Manager: B. Kelly
 Matrix: Soil
 QC Level: IV
 No. of Samples: 1
 No. of Reanalyses/Dilutions: 1
 Laboratory: TestAmerica-Irvine

Table 1. Sample Identification

Client ID	Laboratory ID	Sub-Laboratory ID	Matrix	Collected	Method
Outfall 006	IRA0398-01	30121-001, 801069-01, 8677- 001	Water	01/05/08 1045	200.8, 245.1, 300.0, 900.0, 901.1, 903.1, 904.0, 905.0, 906.0, 1613, ASTM D-5174
Outfall 006RE	IRA0398-01RE	N/A	Water	01/05/08 1045	300.0

II. Sample Management

No anomalies were observed regarding sample management. The sample in this SDG was received at TestAmerica-Irvine, Eberline, and Weck within the temperature limits of 4°C ±2°C. The sample was received below the temperature limits at Vista; however, the sample was not noted to have been frozen. According to the case narrative for this SDG, the sample was received intact at all laboratories. The COCs were appropriately signed and dated by field and/or laboratory personnel. As the sample was couriered to TestAmerica-Irvine, custody seals were not required. Custody seals were intact upon arrival at Eberline, Vista, and Weck. 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.	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: K. Shadowlight

Date Reviewed: February 29, 2008

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

- Holding Times: Extraction and analytical holding times were met. The water sample was extracted and analyzed within one year of collection.
- Instrument Performance: Instrument performance criteria were met. Following are findings associated with instrument performance.
 - GC Column Performance: A Windows Defining Mix (WDM) containing the first and last eluting congeners of each descriptor and isomer specificity compounds was not analyzed prior to the initial calibration sequence or at the beginning of each analytical sequence; however, the first and last eluting congeners and isomer specificity compounds were added to the midpoint of the initial calibration and to the continuing calibration standards. The GC column performance in the calibrations was acceptable, with the height of the valley between the closely eluting isomers and 2,3,7,8-TCDD reported as less than 25%.
 - Mass Spectrometer Performance: The mass spectrometer performance was acceptable with the static resolving power greater than 10,000.
- Calibration: Calibration criteria were met.
 - Initial Calibration: Initial calibration criteria were met. The initial calibration was acceptable with %RSDs $\leq 20\%$ 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 no target compound detects above the EDL.

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

B. EPA METHODS 200.8, 245.1—Metals and Mercury

Reviewed By: P. Meeks

Date Reviewed: February 29, 2008

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

- Holding Times: The analytical holding times, 6 months for metals and 28 days for mercury, were met.
- Tuning: The mass calibration and resolution checks criteria were met. All tuning solution %RSDs were $\leq 5\%$, 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-MS metals and 85-115% for mercury.
- Blanks: There were no applicable detects in the method blanks or CCBs.
- Interference Check Samples: ICSA/B analyses were performed in association with the dissolved metals analyses only. Recoveries were within the method-established control limits. Most analytes were reported in the 6020 ICSA solution; however, the reviewer was not able to ascertain if the detection was indicative of matrix interference.
- Blank Spikes and Laboratory Control Samples: The recoveries were within laboratory-established QC limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on the sample in this SDG. Evaluation of method accuracy was based on LCS results.
- Serial Dilution: No serial dilution analyses were performed.
- Internal Standards Performance: All sample internal standard intensities were within 30-120% of the internal standard intensities measured in the initial calibration. The bracketing CCV and CCB internal standard intensities were within 80-120% of the internal standard intensities measured in the initial calibration.
- Sample Result Verification: Calculations were verified and the sample results reported on the sample result summary were verified against the raw data. No transcription errors or calculation errors were noted. Detects reported below the reporting limit were qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES permit. Reported nondetects are valid to the MDL.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.

C. VARIOUS EPA METHODS — Radionuclides

Reviewed By: P. Meeks

Date Reviewed: March 3, 2008

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

- **Holding Times:** The tritium sample was analyzed within 180 days of collection. Aliquots for gross alpha, gross beta, radium-226, radium-228, strontium-90, and gamma spectroscopy were prepared within the five-day analytical holding time for unpreserved samples. The aliquot for total uranium was prepared within five days of collection.
- **Calibration:** The laboratory calibration information included the standard certificates and applicable preparation/dilutions logs for NIST-traceability.

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

The tritium aliquot was spiked for efficiency determination; therefore, no calibration was necessary. The tritium detector efficiency for the sample was at least 20% and was considered acceptable. The internal spike efficiency to default efficiency ratios was near 1, indicating that quenching did not occur.

The strontium chemical yield was at least 70% and was considered acceptable. The strontium continuing calibration results were within the laboratory control limits.

The radium-226 cell efficiencies were determined in September 2006. The radium-226 continuing calibration results were within the laboratory-established control limits. The radium-228 calibration utilized actinium-228 and was verified in February 2001. The radium-228 tracer, yttrium oxalate yields were greater than 70%.

The gamma spectroscopy geometry-specific, detector efficiencies were determined in September 1999 and February 2007. All analytes were determined at the maximum photopeak energy.

The kinetic phosphorescence analyzer (KPA) was calibrated immediately prior to the sample analysis. All calibration check standard recoveries were within 90-110% and were deemed acceptable.

- **Blanks:** There were no analytes detected in the method blank.

- Blank Spikes and Laboratory Control Samples: The gross alpha recovery was above the control limit at 129%; however, gross alpha was not detected in the samples. The remaining recoveries were within laboratory-established control limits.
- Laboratory Duplicates: A laboratory duplicate analysis was performed on the sample in this SDG for radium-228. The RPD was within the laboratory-established control limits.
- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed for the sample in this SDG. Method accuracy was evaluated based on the LCS results.
- Sample Result Verification: An EPA Level IV review was performed for the sample in this data package. The sample results and MDAs reported on the sample result form were verified against the raw data and no calculation or transcription errors were noted. Reported nondetects are valid to the MDA.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.

D. VARIOUS EPA METHODS—General Minerals

Reviewed By: P. Meeks

Date Reviewed: March 3, 2008

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *MEC^x Data Validation Procedure for General Minerals (DVP-6, Rev. 0)*, *EPA Method 300.0* and the *National Functional Guidelines for Inorganic Data Review (2/94)*.

- Holding Times: The sample was originally analyzed within the 48-hour holding time for nitrate/nitrite. The sample was subsequently reanalyzed outside of holding time. Nitrate/nitrite reported in the reanalysis was qualified as estimated, “J.”
- Calibration: Calibration criteria were met. Initial calibration r^2 values were ≥ 0.995 and all initial and continuing calibration recoveries were within 90-110%.
- Blanks: There were no applicable detects in the method blanks or CCBs.
- Blank Spikes and Laboratory Control Samples: A nitrate/nitrite LCS recovery was not listed by the laboratory, but during the review of the raw data, the reviewer noted an

acceptable recovery. An LCS was also analyzed with the reanalysis and the reviewer noted an acceptable nitrate/nitrite recovery.

- Laboratory Duplicates: No laboratory duplicate analyses were performed.
- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed. Method accuracy was evaluated based on LCS results.
- Sample Result Verification: The sample results were verified against the raw data. No transcription or calculation errors were noted. After the original analysis, the laboratory determined that the original analysis was performed on a sample aliquot that had been preserved with nitric acid. The laboratory subsequently reanalyzed the sample from an unpreserved aliquot. The review rejected, "R," the original nitrate/nitrite result in favor of the reanalysis result.
- 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.

Sample ID: IRA0398-01 *Outfall 006*

EPA Method 1613

Client Data
 Name: Test America-Irvine, CA
 Project: IRA0398
 Date Collected: 5-Jan-08
 Time Collected: 1045

Sample Data
 Matrix: Aqueous
 Sample Size: 0.991 L

Laboratory Data
 Lab Sample: 30121-001
 QC Batch No.: 9886
 Date Analyzed DB-5: 19-Jan-08

Analyte	Conc. (ug/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	ND	0.00000105			13C-2,3,7,8-TCDD	80.8	25 - 164	
1,2,3,7,8-PeCDD	ND	0.00000452			13C-1,2,3,7,8-PeCDD	75.1	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.00000245			13C-1,2,3,4,7,8-HxCDD	73.4	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.00000253			13C-1,2,3,6,7,8-HxCDD	71.1	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.00000239			13C-1,2,3,4,6,7,8-HpCDD	83.4	23 - 140	
1,2,3,4,6,7,8-HpCDD	ND	0.00000627			13C-OCDD	69.6	17 - 157	
OCDD	0.0000273			J	13C-2,3,7,8-TCDF	81.2	24 - 169	
2,3,7,8-TCDF	ND	0.000000833			13C-1,2,3,7,8-PeCDF	70.2	24 - 185	
1,2,3,7,8-PeCDF	ND	0.00000169			13C-2,3,4,7,8-PeCDF	72.8	21 - 178	
2,3,4,7,8-PeCDF	ND	0.00000156			13C-1,2,3,4,7,8-HxCDF	70.7	26 - 152	
1,2,3,4,7,8-HxCDF	ND	0.000000631			13C-1,2,3,6,7,8-HxCDF	71.4	26 - 123	
1,2,3,6,7,8-HxCDF	ND	0.000000635			13C-2,3,4,6,7,8-HxCDF	72.6	28 - 136	
2,3,4,6,7,8-HxCDF	ND	0.000000687			13C-1,2,3,7,8,9-HxCDF	79.0	29 - 147	
1,2,3,7,8,9-HxCDF	ND	0.000000930			13C-1,2,3,4,6,7,8-HpCDF	83.2	28 - 143	
1,2,3,4,6,7,8-HpCDF	ND	0.000001131			13C-1,2,3,4,7,8,9-HpCDF	76.5	26 - 138	
1,2,3,4,7,8,9-HpCDF	ND	0.00000189			13C-OCDF	69.2	17 - 157	
OCDF	ND	0.00000323			CRS 37Cl-2,3,7,8-TCDD	90.9	35 - 197	

Totals

Total TCDD	ND	0.00000105						
Total PeCDD	ND	0.00000146						
Total HxCDD	ND	0.00000245						
Total HpCDD	ND	0.00000307						
Total TCDF	ND	0.000000833						
Total PeCDF	ND	0.00000162						
Total HxCDF	ND	0.000000717						
Total HpCDF	ND	0.00000156						

Footnotes

a. Sample specific estimated detection limit.
 b. Estimated maximum possible concentration.
 c. Method detection limit.
 d. Lower control limit - upper control limit.

Analyst: MAS

Level IV

Approved By: Martha M. Maier 23-Jan-2008 08:41

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

Project ID: Routine Outfall 006
Report Number: IRA0398

Sampled: 01/05/08
Received: 01/05/08

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers	
Sample ID: IRA0398-01 (Outfall 006 - Water)										
Reporting Units: ug/l										
Antimony	EPA 200.8	8A07054	0.20	2.0	0.37	1	01/07/08	01/08/08	J	
Cadmium	EPA 200.8	8A07054	0.11	1.0	0.14	1	01/07/08	01/08/08	J	
Copper	EPA 200.8	8A07054	0.75	2.0	1.9	1	01/07/08	01/08/08	J	
Lead	EPA 200.8	8A07054	0.30	1.0	0.70	1	01/07/08	01/08/08	J	
Thallium	EPA 200.8	8A07054	0.20	1.0	ND	1	01/07/08	01/08/08		

LEVEL IV

TestAmerica Irvine

Joseph Doak
Project Manager

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

Project ID: Routine Outfall 006
Report Number: IRA0398

Sampled: 01/05/08
Received: 01/05/08

DISSOLVED METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA0398-01 (Outfall 006 - Water) - cont.									
Reporting Units: ug/l									
Antimony	EPA 200.8-Diss	8A08129	0.20	2.0	0.35	1	01/08/08	01/08/08	J
Cadmium	EPA 200.8-Diss	8A08129	0.11	1.0	ND	1	01/08/08	01/08/08	
Copper	EPA 200.8-Diss	8A08129	0.75	2.0	ND	1	01/08/08	01/08/08	
Lead	EPA 200.8-Diss	8A08129	0.30	1.0	ND	1	01/08/08	01/08/08	
Thallium	EPA 200.8-Diss	8A08129	0.20	1.0	ND	1	01/08/08	01/08/08	

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

Project ID: Routine Outfall 006
Report Number: IRA0398

Sampled: 01/05/08
Received: 01/05/08

Metals by EPA 200 Series Methods

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA0398-01 (Outfall 006 - Water) - cont.									
Reporting Units: ug/l									
Mercury, Dissolved	EPA 245.1	W8A0148	0.050	0.20	ND	1	01/08/08	01/09/08	
Mercury, Total	EPA 245.1	W8A0148	0.050	0.20	ND	1	01/08/08	01/09/08	

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Eberline Services

ANALYSIS RESULTS

SDG <u>8677</u>	Client <u>TA IRVINE</u>
Work Order <u>R801024-01</u>	Contract <u>PROJECT# IRA0398</u>
Received Date <u>01/08/08</u>	Matrix <u>WATER</u>

Client	Lab	Sample ID	Collected	Analyzed	Nuclide	Results ± 2σ	Units	MDA
Client <u>Sample ID</u> Outfall 006 IRA0398-01	8677-001		01/05/08	01/21/08	GrossAlpha	-0.498 ± 1.4	pCi/L	2.4
				01/21/08	Gross Beta	9.99 ± 1.2	pCi/L	1.6
				01/23/08	Ra-228	0.018 ± 0.21	pCi/L	0.44
				01/12/08	K-40 (G)	22.0 ± 12	pCi/L	9.4
				01/12/08	Cs-137 (G)	U	pCi/L	0.89
				01/23/08	H-3	-63.3 ± 86	pCi/L	150
				01/25/08	Ra-226	0.077 ± 0.38	pCi/L	0.76
				01/28/08	Sr-90	-0.087 ± 0.41	pCi/L	0.96
				02/15/08	Total U	0.301 ± 0.035	pCi/L	0.021

PM 3/3/08

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Certified by <u>ng</u>
Report Date <u>02/19/08</u>
Page 1

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

Project ID: Routine Outfall 006
 Report Number: IRA0398

Sampled: 01/05/08
 Received: 01/05/08

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA0398-01 (Outfall 006 - Water) - cont.									
Reporting Units: mg/l									
Hexane Extractable Material (Oil & Grease) *	EPA 1664A	8A07065	1.3	4.8	ND	1	01/07/08	01/07/08	
Chloride *	EPA 300.0	8A06026	5.0	10	110	20	01/06/08	01/06/08	
Nitrate/Nitrite-N R/D	EPA 300.0	8A06026	15	26	420	100	01/06/08	01/06/08	A-01
Sulfate *	EPA 300.0	8A06026	4.0	10	21	20	01/06/08	01/06/08	
Total Dissolved Solids *	SM2540C	8A08083	10	10	370	1	01/08/08	01/08/08	
Sample ID: IRA0398-01RE1 (Outfall 006 - Water)									
Reporting Units: mg/l									
Nitrate/Nitrite-N J/H	EPA 300.0	8B18046	0.15	0.26	1.2	1	01/18/08	02/18/08	H

* Analysis not validated

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Joseph Doak
 Project Manager

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