

# **APPENDIX G**

## **Section 16**

Outfall 006, February 6, 2009

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 006

Sampled: 02/06/09  
Received: 02/06/09  
Issued: 03/11/09 09:38

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

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

*This entire report was reviewed and approved for release.*

## SAMPLE CROSS REFERENCE

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

### LABORATORY ID

ISB0719-01  
ISB0719-02

### CLIENT ID

Outfall 006  
Trip Blank

### MATRIX

Water  
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 006

Report Number: ISB0719

Sampled: 02/06/09

Received: 02/06/09

## PURGEABLES BY GC/MS (EPA 624)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ISB0719-01 (Outfall 006 - Water)</b>					<b>Sampled: 02/06/09</b>				
<b>Reporting Units: ug/l</b>									
Benzene	EPA 624	9B07011	0.28	0.50	ND	1	02/07/09	02/07/09	
Bromodichloromethane	EPA 624	9B07011	0.30	0.50	ND	1	02/07/09	02/07/09	
Bromoform	EPA 624	9B07011	0.40	0.50	ND	1	02/07/09	02/07/09	
Bromomethane	EPA 624	9B07011	0.42	1.0	ND	1	02/07/09	02/07/09	
Carbon tetrachloride	EPA 624	9B07011	0.28	0.50	ND	1	02/07/09	02/07/09	
Chlorobenzene	EPA 624	9B07011	0.36	0.50	ND	1	02/07/09	02/07/09	
Chloroethane	EPA 624	9B07011	0.40	1.0	ND	1	02/07/09	02/07/09	
Chloroform	EPA 624	9B07011	0.33	0.50	ND	1	02/07/09	02/07/09	
Chloromethane	EPA 624	9B07011	0.40	0.50	ND	1	02/07/09	02/07/09	
Dibromochloromethane	EPA 624	9B07011	0.40	0.50	ND	1	02/07/09	02/07/09	
1,2-Dichlorobenzene	EPA 624	9B07011	0.32	0.50	ND	1	02/07/09	02/07/09	
1,3-Dichlorobenzene	EPA 624	9B07011	0.35	0.50	ND	1	02/07/09	02/07/09	
1,4-Dichlorobenzene	EPA 624	9B07011	0.37	0.50	ND	1	02/07/09	02/07/09	
1,1-Dichloroethane	EPA 624	9B07011	0.40	0.50	ND	1	02/07/09	02/07/09	
1,2-Dichloroethane	EPA 624	9B07011	0.28	0.50	ND	1	02/07/09	02/07/09	
1,1-Dichloroethene	EPA 624	9B07011	0.42	0.50	ND	1	02/07/09	02/07/09	
trans-1,2-Dichloroethene	EPA 624	9B07011	0.30	0.50	ND	1	02/07/09	02/07/09	
1,2-Dichloropropane	EPA 624	9B07011	0.35	0.50	ND	1	02/07/09	02/07/09	
cis-1,3-Dichloropropene	EPA 624	9B07011	0.22	0.50	ND	1	02/07/09	02/07/09	L
trans-1,3-Dichloropropene	EPA 624	9B07011	0.32	0.50	ND	1	02/07/09	02/07/09	
Ethylbenzene	EPA 624	9B07011	0.25	0.50	ND	1	02/07/09	02/07/09	
Methylene chloride	EPA 624	9B07011	0.95	1.0	ND	1	02/07/09	02/07/09	
1,1,2,2-Tetrachloroethane	EPA 624	9B07011	0.30	0.50	ND	1	02/07/09	02/07/09	
Tetrachloroethene	EPA 624	9B07011	0.32	0.50	ND	1	02/07/09	02/07/09	
Toluene	EPA 624	9B07011	0.36	0.50	ND	1	02/07/09	02/07/09	
1,1,1-Trichloroethane	EPA 624	9B07011	0.30	0.50	ND	1	02/07/09	02/07/09	
1,1,2-Trichloroethane	EPA 624	9B07011	0.30	0.50	ND	1	02/07/09	02/07/09	
Trichloroethene	EPA 624	9B07011	0.26	0.50	ND	1	02/07/09	02/07/09	
Trichlorofluoromethane	EPA 624	9B07011	0.34	0.50	ND	1	02/07/09	02/07/09	
Trichlorotrifluoroethane (Freon 113)	EPA 624	9B07011	0.50	5.0	ND	1	02/07/09	02/07/09	
Vinyl chloride	EPA 624	9B07011	0.40	0.50	ND	1	02/07/09	02/07/09	
Xylenes, Total	EPA 624	9B07011	0.90	1.5	ND	1	02/07/09	02/07/09	
<i>Surrogate: 4-Bromofluorobenzene (80-120%)</i>					83 %				
<i>Surrogate: Dibromofluoromethane (80-120%)</i>					91 %				
<i>Surrogate: Toluene-d8 (80-120%)</i>					94 %				

### 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 006

Report Number: ISB0719

Sampled: 02/06/09  
 Received: 02/06/09

## PURGEABLES BY GC/MS (EPA 624)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ISB0719-02 (Trip Blank - Water)</b>					<b>Sampled: 02/06/09</b>				
<b>Reporting Units: ug/l</b>									
Benzene	EPA 624	9B07011	0.28	0.50	ND	1	02/07/09	02/07/09	
Bromodichloromethane	EPA 624	9B07011	0.30	0.50	ND	1	02/07/09	02/07/09	
Bromoform	EPA 624	9B07011	0.40	0.50	ND	1	02/07/09	02/07/09	
Bromomethane	EPA 624	9B07011	0.42	1.0	ND	1	02/07/09	02/07/09	
Carbon tetrachloride	EPA 624	9B07011	0.28	0.50	ND	1	02/07/09	02/07/09	
Chlorobenzene	EPA 624	9B07011	0.36	0.50	ND	1	02/07/09	02/07/09	
Chloroethane	EPA 624	9B07011	0.40	1.0	ND	1	02/07/09	02/07/09	
Chloroform	EPA 624	9B07011	0.33	0.50	ND	1	02/07/09	02/07/09	
Chloromethane	EPA 624	9B07011	0.40	0.50	ND	1	02/07/09	02/07/09	
Dibromochloromethane	EPA 624	9B07011	0.40	0.50	ND	1	02/07/09	02/07/09	
1,2-Dichlorobenzene	EPA 624	9B07011	0.32	0.50	ND	1	02/07/09	02/07/09	
1,3-Dichlorobenzene	EPA 624	9B07011	0.35	0.50	ND	1	02/07/09	02/07/09	
1,4-Dichlorobenzene	EPA 624	9B07011	0.37	0.50	ND	1	02/07/09	02/07/09	
1,1-Dichloroethane	EPA 624	9B07011	0.40	0.50	ND	1	02/07/09	02/07/09	
1,2-Dichloroethane	EPA 624	9B07011	0.28	0.50	ND	1	02/07/09	02/07/09	
1,1-Dichloroethene	EPA 624	9B07011	0.42	0.50	ND	1	02/07/09	02/07/09	
trans-1,2-Dichloroethene	EPA 624	9B07011	0.30	0.50	ND	1	02/07/09	02/07/09	
1,2-Dichloropropane	EPA 624	9B07011	0.35	0.50	ND	1	02/07/09	02/07/09	
cis-1,3-Dichloropropene	EPA 624	9B07011	0.22	0.50	ND	1	02/07/09	02/07/09	L
trans-1,3-Dichloropropene	EPA 624	9B07011	0.32	0.50	ND	1	02/07/09	02/07/09	
Ethylbenzene	EPA 624	9B07011	0.25	0.50	ND	1	02/07/09	02/07/09	
Methylene chloride	EPA 624	9B07011	0.95	1.0	ND	1	02/07/09	02/07/09	
1,1,2,2-Tetrachloroethane	EPA 624	9B07011	0.30	0.50	ND	1	02/07/09	02/07/09	
Tetrachloroethene	EPA 624	9B07011	0.32	0.50	ND	1	02/07/09	02/07/09	
Toluene	EPA 624	9B07011	0.36	0.50	ND	1	02/07/09	02/07/09	
1,1,1-Trichloroethane	EPA 624	9B07011	0.30	0.50	ND	1	02/07/09	02/07/09	
1,1,2-Trichloroethane	EPA 624	9B07011	0.30	0.50	ND	1	02/07/09	02/07/09	
Trichloroethene	EPA 624	9B07011	0.26	0.50	ND	1	02/07/09	02/07/09	
Trichlorofluoromethane	EPA 624	9B07011	0.34	0.50	ND	1	02/07/09	02/07/09	
Trichlorotrifluoroethane (Freon 113)	EPA 624	9B07011	0.50	5.0	ND	1	02/07/09	02/07/09	
Vinyl chloride	EPA 624	9B07011	0.40	0.50	ND	1	02/07/09	02/07/09	
Xylenes, Total	EPA 624	9B07011	0.90	1.5	ND	1	02/07/09	02/07/09	
<i>Surrogate: 4-Bromofluorobenzene (80-120%)</i>					83 %				
<i>Surrogate: Dibromofluoromethane (80-120%)</i>					92 %				
<i>Surrogate: Toluene-d8 (80-120%)</i>					95 %				

**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 006

Report Number: ISB0719

Sampled: 02/06/09  
 Received: 02/06/09

## PURGEABLES-- GC/MS (EPA 624)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ISB0719-01 (Outfall 006 - Water)</b>					<b>Sampled: 02/06/09</b>				
<b>Reporting Units: ug/l</b>									
Acrolein	EPA 624	9B07011	4.0	5.0	ND	1	02/07/09	02/07/09	
Acrylonitrile	EPA 624	9B07011	0.70	2.0	ND	1	02/07/09	02/07/09	
2-Chloroethyl vinyl ether	EPA 624	9B07011	1.8	5.0	ND	1	02/07/09	02/07/09	
<i>Surrogate: 4-Bromofluorobenzene (80-120%)</i>					83 %				
<i>Surrogate: Dibromofluoromethane (80-120%)</i>					91 %				
<i>Surrogate: Toluene-d8 (80-120%)</i>					94 %				
<b>Sample ID: ISB0719-02 (Trip Blank - Water)</b>					<b>Sampled: 02/06/09</b>				
<b>Reporting Units: ug/l</b>									
Acrolein	EPA 624	9B07011	4.0	5.0	ND	1	02/07/09	02/07/09	
Acrylonitrile	EPA 624	9B07011	0.70	2.0	ND	1	02/07/09	02/07/09	
2-Chloroethyl vinyl ether	EPA 624	9B07011	1.8	5.0	ND	1	02/07/09	02/07/09	
<i>Surrogate: 4-Bromofluorobenzene (80-120%)</i>					83 %				
<i>Surrogate: Dibromofluoromethane (80-120%)</i>					92 %				
<i>Surrogate: Toluene-d8 (80-120%)</i>					95 %				

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618 Michillinda Avenue, Suite 200  
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Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: ISB0719

Sampled: 02/06/09  
Received: 02/06/09

## 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
<b>Sample ID: ISB0719-01 (Outfall 006 - Water)</b>					<b>Sampled: 02/06/09</b>				
<b>Reporting Units: ug/l</b>									
Acenaphthene	EPA 625	9B09071	2.8	9.4	ND	0.943	02/09/09	02/12/09	
Acenaphthylene	EPA 625	9B09071	2.8	9.4	ND	0.943	02/09/09	02/12/09	
Aniline	EPA 625	9B09071	3.3	9.4	ND	0.943	02/09/09	02/12/09	
Anthracene	EPA 625	9B09071	2.4	9.4	ND	0.943	02/09/09	02/12/09	
Benzidine	EPA 625	9B09071	9.4	19	ND	0.943	02/09/09	02/12/09	
Benzo(a)anthracene	EPA 625	9B09071	2.4	9.4	ND	0.943	02/09/09	02/12/09	
Benzo(a)pyrene	EPA 625	9B09071	2.8	9.4	ND	0.943	02/09/09	02/12/09	
Benzo(b)fluoranthene	EPA 625	9B09071	1.9	9.4	ND	0.943	02/09/09	02/12/09	
Benzo(g,h,i)perylene	EPA 625	9B09071	3.8	9.4	ND	0.943	02/09/09	02/12/09	
Benzo(k)fluoranthene	EPA 625	9B09071	2.4	9.4	ND	0.943	02/09/09	02/12/09	
Benzoic acid	EPA 625	9B09071	9.4	19	ND	0.943	02/09/09	02/12/09	
Benzyl alcohol	EPA 625	9B09071	3.3	19	ND	0.943	02/09/09	02/12/09	
4-Bromophenyl phenyl ether	EPA 625	9B09071	2.8	9.4	ND	0.943	02/09/09	02/12/09	
Butyl benzyl phthalate	EPA 625	9B09071	3.8	19	ND	0.943	02/09/09	02/12/09	
4-Chloro-3-methylphenol	EPA 625	9B09071	2.4	19	ND	0.943	02/09/09	02/12/09	
4-Chloroaniline	EPA 625	9B09071	1.9	9.4	ND	0.943	02/09/09	02/12/09	
Bis(2-chloroethoxy)methane	EPA 625	9B09071	2.8	9.4	ND	0.943	02/09/09	02/12/09	
Bis(2-chloroethyl)ether	EPA 625	9B09071	2.8	9.4	ND	0.943	02/09/09	02/12/09	
Bis(2-chloroisopropyl)ether	EPA 625	9B09071	2.4	9.4	ND	0.943	02/09/09	02/12/09	
2-Chloronaphthalene	EPA 625	9B09071	2.8	9.4	ND	0.943	02/09/09	02/12/09	
2-Chlorophenol	EPA 625	9B09071	2.8	9.4	ND	0.943	02/09/09	02/12/09	
4-Chlorophenyl phenyl ether	EPA 625	9B09071	2.4	9.4	ND	0.943	02/09/09	02/12/09	
Chrysene	EPA 625	9B09071	2.4	9.4	ND	0.943	02/09/09	02/12/09	
Dibenz(a,h)anthracene	EPA 625	9B09071	2.8	19	ND	0.943	02/09/09	02/12/09	
Dibenzofuran	EPA 625	9B09071	3.8	9.4	ND	0.943	02/09/09	02/12/09	
Di-n-butyl phthalate	EPA 625	9B09071	2.8	19	ND	0.943	02/09/09	02/12/09	
1,2-Dichlorobenzene	EPA 625	9B09071	2.8	9.4	ND	0.943	02/09/09	02/12/09	
1,3-Dichlorobenzene	EPA 625	9B09071	2.8	9.4	ND	0.943	02/09/09	02/12/09	
1,4-Dichlorobenzene	EPA 625	9B09071	2.4	9.4	ND	0.943	02/09/09	02/12/09	
3,3'-Dichlorobenzidine	EPA 625	9B09071	7.1	19	ND	0.943	02/09/09	02/12/09	
2,4-Dichlorophenol	EPA 625	9B09071	3.3	9.4	ND	0.943	02/09/09	02/12/09	
Diethyl phthalate	EPA 625	9B09071	3.3	9.4	ND	0.943	02/09/09	02/12/09	
2,4-Dimethylphenol	EPA 625	9B09071	3.3	19	ND	0.943	02/09/09	02/12/09	
Dimethyl phthalate	EPA 625	9B09071	2.4	9.4	ND	0.943	02/09/09	02/12/09	
4,6-Dinitro-2-methylphenol	EPA 625	9B09071	3.8	19	ND	0.943	02/09/09	02/12/09	
2,4-Dinitrophenol	EPA 625	9B09071	7.5	19	ND	0.943	02/09/09	02/12/09	
2,4-Dinitrotoluene	EPA 625	9B09071	3.3	9.4	ND	0.943	02/09/09	02/12/09	
2,6-Dinitrotoluene	EPA 625	9B09071	1.9	9.4	ND	0.943	02/09/09	02/12/09	
Di-n-octyl phthalate	EPA 625	9B09071	3.3	19	ND	0.943	02/09/09	02/12/09	
1,2-Diphenylhydrazine/Azobenzene	EPA 625	9B09071	2.4	19	ND	0.943	02/09/09	02/12/09	
Bis(2-ethylhexyl)phthalate	EPA 625	9B09071	3.8	47	ND	0.943	02/09/09	02/12/09	

### 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 006

Report Number: ISB0719

Sampled: 02/06/09  
 Received: 02/06/09

## 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
<b>Sample ID: ISB0719-01 (Outfall 006 - Water) - cont.</b>					<b>Sampled: 02/06/09</b>				
<b>Reporting Units: ug/l</b>									
Fluoranthene	EPA 625	9B09071	2.8	9.4	ND	0.943	02/09/09	02/12/09	
Fluorene	EPA 625	9B09071	2.8	9.4	ND	0.943	02/09/09	02/12/09	
Hexachlorobenzene	EPA 625	9B09071	2.8	9.4	ND	0.943	02/09/09	02/12/09	
Hexachlorobutadiene	EPA 625	9B09071	3.8	9.4	ND	0.943	02/09/09	02/12/09	
Hexachlorocyclopentadiene	EPA 625	9B09071	4.7	19	ND	0.943	02/09/09	02/12/09	
Hexachloroethane	EPA 625	9B09071	3.3	9.4	ND	0.943	02/09/09	02/12/09	
Indeno(1,2,3-cd)pyrene	EPA 625	9B09071	3.3	19	ND	0.943	02/09/09	02/12/09	
Isophorone	EPA 625	9B09071	2.8	9.4	ND	0.943	02/09/09	02/12/09	
2-Methylnaphthalene	EPA 625	9B09071	1.9	9.4	ND	0.943	02/09/09	02/12/09	
2-Methylphenol	EPA 625	9B09071	2.8	9.4	ND	0.943	02/09/09	02/12/09	
4-Methylphenol	EPA 625	9B09071	2.8	9.4	ND	0.943	02/09/09	02/12/09	
Naphthalene	EPA 625	9B09071	2.8	9.4	ND	0.943	02/09/09	02/12/09	
2-Nitroaniline	EPA 625	9B09071	1.9	19	ND	0.943	02/09/09	02/12/09	
3-Nitroaniline	EPA 625	9B09071	2.8	19	ND	0.943	02/09/09	02/12/09	
4-Nitroaniline	EPA 625	9B09071	3.8	19	ND	0.943	02/09/09	02/12/09	
Nitrobenzene	EPA 625	9B09071	2.8	19	ND	0.943	02/09/09	02/12/09	
2-Nitrophenol	EPA 625	9B09071	3.3	9.4	ND	0.943	02/09/09	02/12/09	
4-Nitrophenol	EPA 625	9B09071	5.2	19	ND	0.943	02/09/09	02/12/09	
N-Nitroso-di-n-propylamine	EPA 625	9B09071	3.3	9.4	ND	0.943	02/09/09	02/12/09	
N-Nitrosodimethylamine	EPA 625	9B09071	2.4	19	ND	0.943	02/09/09	02/12/09	
N-Nitrosodiphenylamine	EPA 625	9B09071	1.9	9.4	ND	0.943	02/09/09	02/12/09	
Pentachlorophenol	EPA 625	9B09071	3.3	19	ND	0.943	02/09/09	02/12/09	
Phenanthrene	EPA 625	9B09071	3.3	9.4	ND	0.943	02/09/09	02/12/09	
Phenol	EPA 625	9B09071	1.9	9.4	ND	0.943	02/09/09	02/12/09	
Pyrene	EPA 625	9B09071	3.8	9.4	ND	0.943	02/09/09	02/12/09	
1,2,4-Trichlorobenzene	EPA 625	9B09071	2.4	9.4	ND	0.943	02/09/09	02/12/09	
2,4,5-Trichlorophenol	EPA 625	9B09071	2.8	19	ND	0.943	02/09/09	02/12/09	
2,4,6-Trichlorophenol	EPA 625	9B09071	4.2	19	ND	0.943	02/09/09	02/12/09	
Surrogate: 2,4,6-Tribromophenol (40-120%)									72 %
Surrogate: 2-Fluorobiphenyl (50-120%)									70 %
Surrogate: 2-Fluorophenol (30-120%)									60 %
Surrogate: Nitrobenzene-d5 (45-120%)									68 %
Surrogate: Phenol-d6 (35-120%)									65 %
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 006

Report Number: ISB0719

Sampled: 02/06/09  
 Received: 02/06/09

## ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ISB0719-01 (Outfall 006 - Water) - cont.</b>					<b>Sampled: 02/06/09</b>				
<b>Reporting Units: ug/l</b>									
4,4'-DDD	EPA 608	9B12048	0.0019	0.0047	ND	0.943	02/12/09	02/13/09	
4,4'-DDE	EPA 608	9B12048	0.0028	0.0047	ND	0.943	02/12/09	02/13/09	
4,4'-DDT	EPA 608	9B12048	0.0038	0.0094	ND	0.943	02/12/09	02/13/09	
Aldrin	EPA 608	9B12048	0.0014	0.0047	ND	0.943	02/12/09	02/13/09	
alpha-BHC	EPA 608	9B12048	0.0024	0.0047	ND	0.943	02/12/09	02/13/09	
beta-BHC	EPA 608	9B12048	0.0038	0.0094	ND	0.943	02/12/09	02/13/09	
delta-BHC	EPA 608	9B12048	0.0033	0.0047	ND	0.943	02/12/09	02/13/09	
Dieldrin	EPA 608	9B12048	0.0019	0.0047	ND	0.943	02/12/09	02/13/09	
Endosulfan I	EPA 608	9B12048	0.0019	0.0047	ND	0.943	02/12/09	02/13/09	
Endosulfan II	EPA 608	9B12048	0.0028	0.0047	ND	0.943	02/12/09	02/13/09	
Endosulfan sulfate	EPA 608	9B12048	0.0028	0.0094	ND	0.943	02/12/09	02/13/09	
Endrin	EPA 608	9B12048	0.0019	0.0047	ND	0.943	02/12/09	02/13/09	
Endrin aldehyde	EPA 608	9B12048	0.0019	0.0094	ND	0.943	02/12/09	02/13/09	
Endrin ketone	EPA 608	9B12048	0.0028	0.0094	ND	0.943	02/12/09	02/13/09	
gamma-BHC (Lindane)	EPA 608	9B12048	0.0028	0.019	ND	0.943	02/12/09	02/13/09	
Heptachlor	EPA 608	9B12048	0.0028	0.0094	ND	0.943	02/12/09	02/13/09	
Heptachlor epoxide	EPA 608	9B12048	0.0024	0.0047	ND	0.943	02/12/09	02/13/09	
Methoxychlor	EPA 608	9B12048	0.0033	0.0047	ND	0.943	02/12/09	02/13/09	
Chlordane	EPA 608	9B12048	0.038	0.094	ND	0.943	02/12/09	02/13/09	
Toxaphene	EPA 608	9B12048	0.24	0.47	ND	0.943	02/12/09	02/13/09	
<i>Surrogate: Decachlorobiphenyl (45-120%)</i>					85 %				
<i>Surrogate: Tetrachloro-m-xylene (35-115%)</i>					90 %				

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Report Number: ISB0719

Sampled: 02/06/09

Received: 02/06/09

## TOTAL PCBS (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ISB0719-01 (Outfall 006 - Water) - cont.</b>					<b>Sampled: 02/06/09</b>				
<b>Reporting Units: ug/l</b>									
Aroclor 1016	EPA 608	9B12048	0.24	0.47	ND	0.943	02/12/09	02/12/09	
Aroclor 1221	EPA 608	9B12048	0.24	0.47	ND	0.943	02/12/09	02/12/09	
Aroclor 1232	EPA 608	9B12048	0.24	0.47	ND	0.943	02/12/09	02/12/09	
Aroclor 1242	EPA 608	9B12048	0.24	0.47	ND	0.943	02/12/09	02/12/09	
Aroclor 1248	EPA 608	9B12048	0.24	0.47	ND	0.943	02/12/09	02/12/09	
Aroclor 1254	EPA 608	9B12048	0.24	0.47	ND	0.943	02/12/09	02/12/09	
Aroclor 1260	EPA 608	9B12048	0.24	0.47	ND	0.943	02/12/09	02/12/09	
<i>Surrogate: Decachlorobiphenyl (45-120%)</i>					98 %				

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Project ID: Annual Outfall 006

Report Number: ISB0719

Sampled: 02/06/09

Received: 02/06/09

## HEXANE EXTRACTABLE MATERIAL

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ISB0719-01 (Outfall 006 - Water) - cont.</b>					<b>Sampled: 02/06/09</b>				
<b>Reporting Units: mg/l</b>									
Hexane Extractable Material (Oil & Grease)	EPA 1664A	9B12121	1.3	4.8	ND	1	02/12/09	02/12/09	

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**NPDES - 1172**

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Project ID: Annual Outfall 006

Report Number: ISB0719

Sampled: 02/06/09

Received: 02/06/09

## METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ISB0719-01 (Outfall 006 - Water) - cont.</b>					<b>Sampled: 02/06/09</b>				
Reporting Units: mg/l									
Hardness as CaCO3	SM2340B	[CALC]	N/A	0.33	22	1	02/09/09	02/14/09	
Boron	EPA 200.7	9B09073	0.020	0.050	0.064	1	02/09/09	02/16/09	
Calcium	EPA 200.7	9B09073	0.050	0.10	6.5	1	02/09/09	02/14/09	
Iron	EPA 200.7	9B09073	0.015	0.040	0.80	1	02/09/09	02/14/09	
Magnesium	EPA 200.7	9B09073	0.012	0.020	1.4	1	02/09/09	02/14/09	

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Report Number: ISB0719

Sampled: 02/06/09

Received: 02/06/09

## METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ISB0719-01 (Outfall 006 - Water) - cont.</b>					<b>Sampled: 02/06/09</b>				
Reporting Units: ug/l									
Aluminum	EPA 200.7	9B09073	40	50	<b>920</b>	1	02/09/09	02/16/09	M1
Arsenic	EPA 200.7	9B09073	7.0	10	<b>8.6</b>	1	02/09/09	02/14/09	B, J
Antimony	EPA 200.8	9B09075	0.20	2.0	<b>0.58</b>	1	02/09/09	02/10/09	J
Beryllium	EPA 200.7	9B09073	0.90	2.0	ND	1	02/09/09	02/14/09	
Chromium	EPA 200.7	9B09073	2.0	5.0	ND	1	02/09/09	02/14/09	
Nickel	EPA 200.7	9B09073	2.0	10	<b>2.2</b>	1	02/09/09	02/14/09	J
Selenium	EPA 200.7	9B09073	8.0	10	ND	1	02/09/09	02/14/09	
Silver	EPA 200.7	9B09073	6.0	10	ND	1	02/09/09	02/14/09	
Cadmium	EPA 200.8	9B09075	0.11	1.0	ND	1	02/09/09	02/10/09	
Vanadium	EPA 200.7	9B09073	3.0	10	ND	1	02/09/09	02/14/09	
Zinc	EPA 200.7	9B09073	6.0	20	ND	1	02/09/09	02/14/09	
Copper	EPA 200.8	9B09075	0.75	2.0	<b>2.1</b>	1	02/09/09	02/10/09	
Lead	EPA 200.8	9B09075	0.30	1.0	<b>0.74</b>	1	02/09/09	02/10/09	J
Thallium	EPA 200.8	9B09075	0.20	1.0	ND	1	02/09/09	02/10/09	

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Project ID: Annual Outfall 006

Report Number: ISB0719

Sampled: 02/06/09

Received: 02/06/09

## DISSOLVED METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ISB0719-01 (Outfall 006 - Water) - cont.</b>					<b>Sampled: 02/06/09</b>				
Reporting Units: mg/l									
Hardness as CaCO3	SM2340B-Diss	[CALC]	N/A	0.33	20	1	02/09/09	02/11/09	
Boron	EPA 200.7-Diss	9B09083	0.020	0.050	0.054	1	02/09/09	02/11/09	
Calcium	EPA 200.7-Diss	9B09083	0.050	0.10	6.0	1	02/09/09	02/11/09	
Iron	EPA 200.7-Diss	9B09083	0.015	0.040	0.11	1	02/09/09	02/11/09	
Magnesium	EPA 200.7-Diss	9B09083	0.012	0.020	1.2	1	02/09/09	02/11/09	

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Project ID: Annual Outfall 006

Report Number: ISB0719

Sampled: 02/06/09  
 Received: 02/06/09

## DISSOLVED METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ISB0719-01 (Outfall 006 - Water) - cont.</b>					<b>Sampled: 02/06/09</b>				
<b>Reporting Units: ug/l</b>									
<b>Aluminum</b>	EPA 200.7-Diss	9B09083	40	50	<b>160</b>	1	02/09/09	02/11/09	
Arsenic	EPA 200.7-Diss	9B09083	7.0	10	ND	1	02/09/09	02/11/09	
<b>Antimony</b>	EPA 200.8-Diss	9B12130	0.20	2.0	<b>0.41</b>	1	02/12/09	02/13/09	J
Beryllium	EPA 200.7-Diss	9B09083	0.90	2.0	ND	1	02/09/09	02/11/09	
Chromium	EPA 200.7-Diss	9B09083	2.0	5.0	ND	1	02/09/09	02/11/09	
Nickel	EPA 200.7-Diss	9B09083	2.0	10	ND	1	02/09/09	02/11/09	
Selenium	EPA 200.7-Diss	9B09083	8.0	10	ND	1	02/09/09	02/11/09	
Silver	EPA 200.7-Diss	9B09083	6.0	10	ND	1	02/09/09	02/11/09	
Cadmium	EPA 200.8-Diss	9B12130	0.11	1.0	ND	1	02/12/09	02/13/09	
Vanadium	EPA 200.7-Diss	9B09083	3.0	10	ND	1	02/09/09	02/11/09	
Zinc	EPA 200.7-Diss	9B09083	6.0	20	ND	1	02/09/09	02/11/09	
<b>Copper</b>	EPA 200.8-Diss	9B12130	0.75	2.0	<b>1.0</b>	1	02/12/09	02/13/09	J
Lead	EPA 200.8-Diss	9B12130	0.30	1.0	ND	1	02/12/09	02/13/09	
Thallium	EPA 200.8-Diss	9B12130	0.20	1.0	ND	1	02/12/09	02/13/09	C

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Report Number: ISB0719

Sampled: 02/06/09

Received: 02/06/09

## INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ISB0719-01 (Outfall 006 - Water) - cont.</b>					<b>Sampled: 02/06/09</b>				
Reporting Units: mg/l									
Chloride	EPA 300.0	9B06069	0.25	0.50	12	1	02/06/09	02/07/09	
Total Cyanide	SM4500-CN-C,E	9B09095	0.0022	0.0050	0.0096	1	02/09/09	02/09/09	
Fluoride	SM 4500-F-C	9B16034	0.020	0.10	0.27	1	02/16/09	02/16/09	B
Nitrate/Nitrite-N	EPA 300.0	9B06069	0.15	0.26	4.6	1	02/06/09	02/07/09	
Sulfate	EPA 300.0	9B06069	0.20	0.50	8.6	1	02/06/09	02/07/09	
Total Dissolved Solids	SM2540C	9B11043	10	10	140	1	02/11/09	02/11/09	
Total Suspended Solids	SM 2540D	9B12141	1.0	10	ND	1	02/12/09	02/12/09	

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Report Number: ISB0719

Sampled: 02/06/09  
Received: 02/06/09

## INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ISB0719-01 (Outfall 006 - Water) - cont.</b>					<b>Sampled: 02/06/09</b>				
<b>Reporting Units: ug/l</b>									
Perchlorate	EPA 314.0	9B13054	0.90	4.0	ND	1	02/13/09	02/13/09	

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**NPDES - 1178**

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Project ID: Annual Outfall 006

Report Number: ISB0719

Sampled: 02/06/09

Received: 02/06/09

## 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
<b>Sample ID: ISB0719-01 (Outfall 006 - Water) - cont.</b>					<b>Sampled: 02/06/09</b>				
<b>Reporting Units: ug/l</b>									
Chlorpyrifos	EPA 525.2	C9B0701	0.10	1.0	ND	0.99	02/07/09	02/07/09	
Diazinon	EPA 525.2	C9B0701	0.24	0.25	ND	0.99	02/07/09	02/07/09	
<i>Surrogate: 1,3-Dimethyl-2-nitrobenzene (70-130%)</i>					<i>106 %</i>				
<i>Surrogate: Triphenylphosphate (70-130%)</i>					<i>109 %</i>				
<i>Surrogate: Perylene-d12 (70-130%)</i>					<i>92 %</i>				

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**NPDES - 1179**

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Project ID: Annual Outfall 006

Report Number: ISB0719

Sampled: 02/06/09

Received: 02/06/09

## MCAWW 245.1

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ISB0719-01 (Outfall 006 - Water) - cont.</b>					<b>Sampled: 02/06/09</b>				
Reporting Units: ug/L									
Mercury	MCAWW 245.1	9043305	0.027	0.2	0.047	1	02/12/09	02/12/09	J, Ba

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NPDES - 1180

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Project ID: Annual Outfall 006

Report Number: ISB0719

Sampled: 02/06/09

Received: 02/06/09

## MCAWW 245.1-DISS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ISB0719-01 (Outfall 006 - Water) - cont.</b>					<b>Sampled: 02/06/09</b>				
Reporting Units: ug/L									
Mercury	MCAWW 245.1-DISS	9043330	0.027	0.2	0.041	1	02/12/09	02/12/09	J, Ba

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**NPDES - 1181**

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Project ID: Annual Outfall 006

Report Number: ISB0719

Sampled: 02/06/09

Received: 02/06/09

## SHORT HOLD TIME DETAIL REPORT

	<b>Hold Time (in days)</b>	<b>Date/Time Sampled</b>	<b>Date/Time Received</b>	<b>Date/Time Extracted</b>	<b>Date/Time Analyzed</b>
<b>Sample ID: Outfall 006 (ISB0719-01) - Water</b>					
EPA 300.0	2	02/06/2009 10:50	02/06/2009 17:35	02/06/2009 20:00	02/07/2009 00:16
EPA 525.2	1	02/06/2009 10:50	02/06/2009 17:35	02/07/2009 07:30	02/07/2009 13:46
EPA 624	3	02/06/2009 10:50	02/06/2009 17:35	02/07/2009 00:00	02/07/2009 15:09
Filtration	1	02/06/2009 10:50	02/06/2009 17:35	02/06/2009 21:59	02/06/2009 22:02
<b>Sample ID: Trip Blank (ISB0719-02) - Water</b>					
EPA 624	3	02/06/2009 15:00	02/06/2009 17:35	02/07/2009 00:00	02/07/2009 15:40

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**NPDES - 1182**

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: ISB0719

Sampled: 02/06/09  
 Received: 02/06/09

## 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
<b>Batch: 9B07011 Extracted: 02/07/09</b>											
<b>Blank Analyzed: 02/07/2009 (9B07011-BLK1)</b>											
Benzene	ND	0.50	0.28	ug/l							
Bromodichloromethane	ND	0.50	0.30	ug/l							
Bromoform	ND	0.50	0.40	ug/l							
Bromomethane	ND	1.0	0.42	ug/l							
Carbon tetrachloride	ND	0.50	0.28	ug/l							
Chlorobenzene	ND	0.50	0.36	ug/l							
Chloroethane	ND	1.0	0.40	ug/l							
Chloroform	ND	0.50	0.33	ug/l							
Chloromethane	ND	0.50	0.40	ug/l							
Dibromochloromethane	ND	0.50	0.40	ug/l							
1,2-Dichlorobenzene	ND	0.50	0.32	ug/l							
1,3-Dichlorobenzene	ND	0.50	0.35	ug/l							
1,4-Dichlorobenzene	ND	0.50	0.37	ug/l							
1,1-Dichloroethane	ND	0.50	0.40	ug/l							
1,2-Dichloroethane	ND	0.50	0.28	ug/l							
1,1-Dichloroethene	ND	0.50	0.42	ug/l							
trans-1,2-Dichloroethene	ND	0.50	0.30	ug/l							
1,2-Dichloropropane	ND	0.50	0.35	ug/l							
cis-1,3-Dichloropropene	ND	0.50	0.22	ug/l							
trans-1,3-Dichloropropene	ND	0.50	0.32	ug/l							
Ethylbenzene	ND	0.50	0.25	ug/l							
Methylene chloride	ND	1.0	0.95	ug/l							
1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l							
Tetrachloroethene	ND	0.50	0.32	ug/l							
Toluene	ND	0.50	0.36	ug/l							
1,1,1-Trichloroethane	ND	0.50	0.30	ug/l							
1,1,2-Trichloroethane	ND	0.50	0.30	ug/l							
Trichloroethene	ND	0.50	0.26	ug/l							
Trichlorofluoromethane	ND	0.50	0.34	ug/l							
Trichlorotrifluoroethane (Freon 113)	ND	5.0	0.50	ug/l							
Vinyl chloride	ND	0.50	0.40	ug/l							
Xylenes, Total	ND	1.5	0.90	ug/l							
Surrogate: 4-Bromofluorobenzene	21.2			ug/l	25.0		85	80-120			
Surrogate: Dibromofluoromethane	22.5			ug/l	25.0		90	80-120			
Surrogate: Toluene-d8	23.5			ug/l	25.0		94	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 006

Report Number: ISB0719

Sampled: 02/06/09  
 Received: 02/06/09

## 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
<b>Batch: 9B07011 Extracted: 02/07/09</b>											
<b>LCS Analyzed: 02/07/2009 (9B07011-BS1)</b>											
Benzene	24.4	0.50	0.28	ug/l	25.0		98	70-120			
Bromodichloromethane	27.5	0.50	0.30	ug/l	25.0		110	70-135			
Bromoform	22.1	0.50	0.40	ug/l	25.0		88	55-130			
Bromomethane	26.1	1.0	0.42	ug/l	25.0		104	65-140			
Carbon tetrachloride	28.1	0.50	0.28	ug/l	25.0		112	65-140			
Chlorobenzene	24.8	0.50	0.36	ug/l	25.0		99	75-120			
Chloroethane	26.2	1.0	0.40	ug/l	25.0		105	60-140			
Chloroform	26.5	0.50	0.33	ug/l	25.0		106	70-130			
Chloromethane	22.9	0.50	0.40	ug/l	25.0		92	50-140			
Dibromochloromethane	28.2	0.50	0.40	ug/l	25.0		113	70-140			
1,2-Dichlorobenzene	24.9	0.50	0.32	ug/l	25.0		100	75-120			
1,3-Dichlorobenzene	25.4	0.50	0.35	ug/l	25.0		102	75-120			
1,4-Dichlorobenzene	22.6	0.50	0.37	ug/l	25.0		90	75-120			
1,1-Dichloroethane	25.2	0.50	0.40	ug/l	25.0		101	70-125			
1,2-Dichloroethane	24.6	0.50	0.28	ug/l	25.0		99	60-140			
1,1-Dichloroethene	23.0	0.50	0.42	ug/l	25.0		92	70-125			
trans-1,2-Dichloroethene	20.4	0.50	0.30	ug/l	25.0		82	70-125			
1,2-Dichloropropane	25.5	0.50	0.35	ug/l	25.0		102	70-125			
cis-1,3-Dichloropropene	32.4	0.50	0.22	ug/l	25.0		130	75-125			L
trans-1,3-Dichloropropene	25.4	0.50	0.32	ug/l	25.0		102	70-125			
Ethylbenzene	25.9	0.50	0.25	ug/l	25.0		104	75-125			
Methylene chloride	24.2	1.0	0.95	ug/l	25.0		97	55-130			
1,1,2,2-Tetrachloroethane	26.4	0.50	0.30	ug/l	25.0		106	55-130			
Tetrachloroethene	23.7	0.50	0.32	ug/l	25.0		95	70-125			
Toluene	26.5	0.50	0.36	ug/l	25.0		106	70-120			
1,1,1-Trichloroethane	26.7	0.50	0.30	ug/l	25.0		107	65-135			
1,1,2-Trichloroethane	25.4	0.50	0.30	ug/l	25.0		101	70-125			
Trichloroethene	23.8	0.50	0.26	ug/l	25.0		95	70-125			
Trichlorofluoromethane	24.0	0.50	0.34	ug/l	25.0		96	65-145			
Vinyl chloride	22.8	0.50	0.40	ug/l	25.0		91	55-135			
Xylenes, Total	81.0	1.5	0.90	ug/l	75.0		108	70-125			
Surrogate: 4-Bromofluorobenzene	22.4			ug/l	25.0		90	80-120			
Surrogate: Dibromofluoromethane	24.1			ug/l	25.0		96	80-120			
Surrogate: Toluene-d8	23.2			ug/l	25.0		93	80-120			

### 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 006

Report Number: ISB0719

Sampled: 02/06/09  
 Received: 02/06/09

## 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
<b>Batch: 9B07011 Extracted: 02/07/09</b>											
<b>Matrix Spike Analyzed: 02/07/2009 (9B07011-MS1)</b>						<b>Source: ISA2844-05</b>					
Benzene	23.9	0.50	0.28	ug/l	25.0	ND	95	65-125			
Bromodichloromethane	27.1	0.50	0.30	ug/l	25.0	ND	108	70-135			
Bromoform	22.4	0.50	0.40	ug/l	25.0	ND	89	55-135			
Bromomethane	25.6	1.0	0.42	ug/l	25.0	ND	102	55-145			
Carbon tetrachloride	27.0	0.50	0.28	ug/l	25.0	ND	108	65-140			
Chlorobenzene	24.7	0.50	0.36	ug/l	25.0	ND	99	75-125			
Chloroethane	25.2	1.0	0.40	ug/l	25.0	ND	101	55-140			
Chloroform	25.7	0.50	0.33	ug/l	25.0	ND	103	65-135			
Chloromethane	21.9	0.50	0.40	ug/l	25.0	ND	88	45-145			
Dibromochloromethane	28.0	0.50	0.40	ug/l	25.0	ND	112	65-140			
1,2-Dichlorobenzene	24.6	0.50	0.32	ug/l	25.0	ND	98	75-125			
1,3-Dichlorobenzene	24.8	0.50	0.35	ug/l	25.0	ND	99	75-125			
1,4-Dichlorobenzene	22.2	0.50	0.37	ug/l	25.0	ND	89	75-125			
1,1-Dichloroethane	24.7	0.50	0.40	ug/l	25.0	ND	99	65-130			
1,2-Dichloroethane	25.2	0.50	0.28	ug/l	25.0	ND	101	60-140			
1,1-Dichloroethene	22.4	0.50	0.42	ug/l	25.0	ND	90	60-130			
trans-1,2-Dichloroethene	19.7	0.50	0.30	ug/l	25.0	ND	79	65-130			
1,2-Dichloropropane	25.3	0.50	0.35	ug/l	25.0	ND	101	65-130			
cis-1,3-Dichloropropene	32.3	0.50	0.22	ug/l	25.0	ND	129	70-130			
trans-1,3-Dichloropropene	25.6	0.50	0.32	ug/l	25.0	ND	102	65-135			
Ethylbenzene	25.3	0.50	0.25	ug/l	25.0	ND	101	65-130			
Methylene chloride	24.0	1.0	0.95	ug/l	25.0	ND	96	50-135			
1,1,2,2-Tetrachloroethane	26.1	0.50	0.30	ug/l	25.0	ND	105	55-135			
Tetrachloroethene	23.6	0.50	0.32	ug/l	25.0	ND	95	65-130			
Toluene	25.9	0.50	0.36	ug/l	25.0	ND	104	70-125			
1,1,1-Trichloroethane	25.8	0.50	0.30	ug/l	25.0	ND	103	65-140			
1,1,2-Trichloroethane	25.7	0.50	0.30	ug/l	25.0	ND	103	65-130			
Trichloroethene	23.6	0.50	0.26	ug/l	25.0	ND	95	65-125			
Trichlorofluoromethane	23.0	0.50	0.34	ug/l	25.0	ND	92	60-145			
Vinyl chloride	22.2	0.50	0.40	ug/l	25.0	ND	89	45-140			
Xylenes, Total	81.0	1.5	0.90	ug/l	75.0	ND	108	60-130			
Surrogate: 4-Bromofluorobenzene	23.0			ug/l	25.0		92	80-120			
Surrogate: Dibromofluoromethane	23.8			ug/l	25.0		95	80-120			
Surrogate: Toluene-d8	23.4			ug/l	25.0		94	80-120			

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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 006

Report Number: ISB0719

Sampled: 02/06/09  
 Received: 02/06/09

## 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
<b>Batch: 9B07011 Extracted: 02/07/09</b>											
<b>Matrix Spike Dup Analyzed: 02/07/2009 (9B07011-MSD1)</b>						<b>Source: ISA2844-05</b>					
Benzene	25.2	0.50	0.28	ug/l	25.0	ND	101	65-125	5	20	
Bromodichloromethane	28.9	0.50	0.30	ug/l	25.0	ND	116	70-135	6	20	
Bromoform	22.8	0.50	0.40	ug/l	25.0	ND	91	55-135	2	25	
Bromomethane	27.8	1.0	0.42	ug/l	25.0	ND	111	55-145	8	25	
Carbon tetrachloride	28.7	0.50	0.28	ug/l	25.0	ND	115	65-140	6	25	
Chlorobenzene	26.1	0.50	0.36	ug/l	25.0	ND	104	75-125	5	20	
Chloroethane	27.8	1.0	0.40	ug/l	25.0	ND	111	55-140	10	25	
Chloroform	27.3	0.50	0.33	ug/l	25.0	ND	109	65-135	6	20	
Chloromethane	24.3	0.50	0.40	ug/l	25.0	ND	97	45-145	10	25	
Dibromochloromethane	29.3	0.50	0.40	ug/l	25.0	ND	117	65-140	5	25	
1,2-Dichlorobenzene	26.0	0.50	0.32	ug/l	25.0	ND	104	75-125	6	20	
1,3-Dichlorobenzene	26.3	0.50	0.35	ug/l	25.0	ND	105	75-125	6	20	
1,4-Dichlorobenzene	23.5	0.50	0.37	ug/l	25.0	ND	94	75-125	6	20	
1,1-Dichloroethane	26.3	0.50	0.40	ug/l	25.0	ND	105	65-130	6	20	
1,2-Dichloroethane	26.4	0.50	0.28	ug/l	25.0	ND	106	60-140	5	20	
1,1-Dichloroethene	23.8	0.50	0.42	ug/l	25.0	ND	95	60-130	6	20	
trans-1,2-Dichloroethene	21.4	0.50	0.30	ug/l	25.0	ND	86	65-130	9	20	
1,2-Dichloropropane	27.0	0.50	0.35	ug/l	25.0	ND	108	65-130	6	20	
cis-1,3-Dichloropropene	34.5	0.50	0.22	ug/l	25.0	ND	138	70-130	7	20	M7
trans-1,3-Dichloropropene	27.0	0.50	0.32	ug/l	25.0	ND	108	65-135	5	25	
Ethylbenzene	27.0	0.50	0.25	ug/l	25.0	ND	108	65-130	6	20	
Methylene chloride	25.4	1.0	0.95	ug/l	25.0	ND	101	50-135	6	20	
1,1,2,2-Tetrachloroethane	27.7	0.50	0.30	ug/l	25.0	ND	111	55-135	6	30	
Tetrachloroethene	24.9	0.50	0.32	ug/l	25.0	ND	100	65-130	5	20	
Toluene	27.6	0.50	0.36	ug/l	25.0	ND	110	70-125	6	20	
1,1,1-Trichloroethane	27.6	0.50	0.30	ug/l	25.0	ND	110	65-140	7	20	
1,1,2-Trichloroethane	27.0	0.50	0.30	ug/l	25.0	ND	108	65-130	5	25	
Trichloroethene	24.6	0.50	0.26	ug/l	25.0	ND	98	65-125	4	20	
Trichlorofluoromethane	25.0	0.50	0.34	ug/l	25.0	ND	100	60-145	8	25	
Vinyl chloride	22.4	0.50	0.40	ug/l	25.0	ND	89	45-140	1	30	
Xylenes, Total	85.0	1.5	0.90	ug/l	75.0	ND	113	60-130	5	20	
Surrogate: 4-Bromofluorobenzene	23.1			ug/l	25.0		92	80-120			
Surrogate: Dibromofluoromethane	24.3			ug/l	25.0		97	80-120			
Surrogate: Toluene-d8	23.3			ug/l	25.0		93	80-120			

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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 006

Report Number: ISB0719

Sampled: 02/06/09  
 Received: 02/06/09

## METHOD BLANK/QC DATA

### PURGEABLES-- GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Data Qualifiers
<b>Batch: 9B07011 Extracted: 02/07/09</b>											
<b>Blank Analyzed: 02/07/2009 (9B07011-BLK1)</b>											
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: 4-Bromofluorobenzene	21.2			ug/l	25.0		85	80-120			
Surrogate: Dibromofluoromethane	22.5			ug/l	25.0		90	80-120			
Surrogate: Toluene-d8	23.5			ug/l	25.0		94	80-120			
<b>LCS Analyzed: 02/07/2009 (9B07011-BS1)</b>											
2-Chloroethyl vinyl ether	24.9	5.0	1.8	ug/l	25.0		100	25-170			
Surrogate: 4-Bromofluorobenzene	22.4			ug/l	25.0		90	80-120			
Surrogate: Dibromofluoromethane	24.1			ug/l	25.0		96	80-120			
Surrogate: Toluene-d8	23.2			ug/l	25.0		93	80-120			
<b>Matrix Spike Analyzed: 02/07/2009 (9B07011-MS1) Source: ISA2844-05</b>											
2-Chloroethyl vinyl ether	ND	5.0	1.8	ug/l	25.0	ND		25-170			M13
Surrogate: 4-Bromofluorobenzene	23.0			ug/l	25.0		92	80-120			
Surrogate: Dibromofluoromethane	23.8			ug/l	25.0		95	80-120			
Surrogate: Toluene-d8	23.4			ug/l	25.0		94	80-120			
<b>Matrix Spike Dup Analyzed: 02/07/2009 (9B07011-MSD1) Source: ISA2844-05</b>											
2-Chloroethyl vinyl ether	ND	5.0	1.8	ug/l	25.0	ND		25-170		25	M13
Surrogate: 4-Bromofluorobenzene	23.1			ug/l	25.0		92	80-120			
Surrogate: Dibromofluoromethane	24.3			ug/l	25.0		97	80-120			
Surrogate: Toluene-d8	23.3			ug/l	25.0		93	80-120			

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: ISB0719

Sampled: 02/06/09  
 Received: 02/06/09

## 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
<b>Batch: 9B09071 Extracted: 02/09/09</b>											
<b>Blank Analyzed: 02/12/2009 (9B09071-BLK1)</b>											
Acenaphthene	ND	10	3.0	ug/l							
Acenaphthylene	ND	10	3.0	ug/l							
Aniline	ND	10	3.5	ug/l							
Anthracene	ND	10	2.5	ug/l							
Benzidine	ND	20	10	ug/l							
Benzo(a)anthracene	ND	10	2.5	ug/l							
Benzo(a)pyrene	ND	10	3.0	ug/l							
Benzo(b)fluoranthene	ND	10	2.0	ug/l							
Benzo(g,h,i)perylene	ND	10	4.0	ug/l							
Benzo(k)fluoranthene	ND	10	2.5	ug/l							
Benzoic acid	ND	20	10	ug/l							
Benzyl alcohol	ND	20	3.5	ug/l							
4-Bromophenyl phenyl ether	ND	10	3.0	ug/l							
Butyl benzyl phthalate	ND	20	4.0	ug/l							
4-Chloro-3-methylphenol	ND	20	2.5	ug/l							
4-Chloroaniline	ND	10	2.0	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							
2-Chloronaphthalene	ND	10	3.0	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							
1,2-Dichlorobenzene	ND	10	3.0	ug/l							
1,3-Dichlorobenzene	ND	10	3.0	ug/l							
1,4-Dichlorobenzene	ND	10	2.5	ug/l							
3,3'-Dichlorobenzidine	ND	20	7.5	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	2.5	ug/l							
4,6-Dinitro-2-methylphenol	ND	20	4.0	ug/l							

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Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: ISB0719

Sampled: 02/06/09  
Received: 02/06/09

## 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
<b>Batch: 9B09071 Extracted: 02/09/09</b>											
<b>Blank Analyzed: 02/12/2009 (9B09071-BLK1)</b>											
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							
1,2-Diphenylhydrazine/Azobenzene	ND	20	2.5	ug/l							
Bis(2-ethylhexyl)phthalate	ND	50	4.0	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	3.0	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	3.0	ug/l							
2-Nitrophenol	ND	10	3.5	ug/l							
4-Nitrophenol	ND	20	5.5	ug/l							
N-Nitroso-di-n-propylamine	ND	10	3.5	ug/l							
N-Nitrosodimethylamine	ND	20	2.5	ug/l							
N-Nitrosodiphenylamine	ND	10	2.0	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							
Surrogate: 2,4,6-Tribromophenol	171			ug/l	200		85	40-120			

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Project Manager

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Sampled: 02/06/09  
Received: 02/06/09

## 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
<b>Batch: 9B09071 Extracted: 02/09/09</b>											
<b>Blank Analyzed: 02/12/2009 (9B09071-BLK1)</b>											
Surrogate: 2-Fluorobiphenyl	86.4			ug/l	100		86	50-120			
Surrogate: 2-Fluorophenol	156			ug/l	200		78	30-120			
Surrogate: Nitrobenzene-d5	82.8			ug/l	100		83	45-120			
Surrogate: Phenol-d6	158			ug/l	200		79	35-120			
Surrogate: Terphenyl-d14	92.8			ug/l	100		93	50-125			
<b>LCS Analyzed: 02/12/2009 (9B09071-BS1)</b>											
Acenaphthene	84.0	10	3.0	ug/l	100		84	60-120			
Acenaphthylene	89.6	10	3.0	ug/l	100		90	60-120			
Aniline	71.6	10	3.5	ug/l	100		72	35-120			
Anthracene	92.8	10	2.5	ug/l	100		93	65-120			
Benzidine	105	20	10	ug/l	100		105	30-160			
Benzo(a)anthracene	93.0	10	2.5	ug/l	100		93	65-120			
Benzo(a)pyrene	98.8	10	3.0	ug/l	100		99	55-130			
Benzo(b)fluoranthene	90.7	10	2.0	ug/l	100		91	55-125			
Benzo(g,h,i)perylene	92.8	10	4.0	ug/l	100		93	45-135			
Benzo(k)fluoranthene	99.4	10	2.5	ug/l	100		99	50-125			
Benzoic acid	81.5	20	10	ug/l	100		81	25-120			
Benzyl alcohol	80.3	20	3.5	ug/l	100		80	50-120			
4-Bromophenyl phenyl ether	92.3	10	3.0	ug/l	100		92	60-120			
Butyl benzyl phthalate	90.4	20	4.0	ug/l	100		90	55-130			
4-Chloro-3-methylphenol	81.4	20	2.5	ug/l	100		81	60-120			
4-Chloroaniline	86.3	10	2.0	ug/l	100		86	55-120			
Bis(2-chloroethoxy)methane	82.4	10	3.0	ug/l	100		82	55-120			
Bis(2-chloroethyl)ether	76.2	10	3.0	ug/l	100		76	50-120			
Bis(2-chloroisopropyl)ether	79.1	10	2.5	ug/l	100		79	45-120			
2-Chloronaphthalene	87.6	10	3.0	ug/l	100		88	60-120			
2-Chlorophenol	74.7	10	3.0	ug/l	100		75	45-120			
4-Chlorophenyl phenyl ether	87.0	10	2.5	ug/l	100		87	65-120			
Chrysene	95.6	10	2.5	ug/l	100		96	65-120			
Dibenz(a,h)anthracene	100	20	3.0	ug/l	100		100	50-135			
Dibenzofuran	89.3	10	4.0	ug/l	100		89	65-120			
Di-n-butyl phthalate	91.6	20	3.0	ug/l	100		92	60-125			
1,2-Dichlorobenzene	67.6	10	3.0	ug/l	100		68	40-120			
1,3-Dichlorobenzene	63.4	10	3.0	ug/l	100		63	35-120			
1,4-Dichlorobenzene	65.1	10	2.5	ug/l	100		65	35-120			

#### 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 006

Report Number: ISB0719

Sampled: 02/06/09  
Received: 02/06/09

## 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
<b>Batch: 9B09071 Extracted: 02/09/09</b>											
<b>LCS Analyzed: 02/12/2009 (9B09071-BS1)</b>											
3,3'-Dichlorobenzidine	92.9	20	7.5	ug/l	100		93	45-135			
2,4-Dichlorophenol	80.9	10	3.5	ug/l	100		81	55-120			
Diethyl phthalate	89.3	10	3.5	ug/l	100		89	55-120			
2,4-Dimethylphenol	69.6	20	3.5	ug/l	100		70	40-120			
Dimethyl phthalate	87.7	10	2.5	ug/l	100		88	30-120			
4,6-Dinitro-2-methylphenol	87.7	20	4.0	ug/l	100		88	45-120			
2,4-Dinitrophenol	83.9	20	8.0	ug/l	100		84	40-120			
2,4-Dinitrotoluene	92.8	10	3.5	ug/l	100		93	65-120			
2,6-Dinitrotoluene	91.6	10	2.0	ug/l	100		92	65-120			
Di-n-octyl phthalate	106	20	3.5	ug/l	100		106	65-135			
1,2-Diphenylhydrazine/Azobenzene	85.3	20	2.5	ug/l	100		85	60-120			
Bis(2-ethylhexyl)phthalate	92.8	50	4.0	ug/l	100		93	65-130			
Fluoranthene	94.6	10	3.0	ug/l	100		95	60-120			
Fluorene	88.7	10	3.0	ug/l	100		89	65-120			
Hexachlorobenzene	92.9	10	3.0	ug/l	100		93	60-120			
Hexachlorobutadiene	69.2	10	4.0	ug/l	100		69	40-120			
Hexachlorocyclopentadiene	53.8	20	5.0	ug/l	100		54	25-120			
Hexachloroethane	60.8	10	3.5	ug/l	100		61	35-120			
Indeno(1,2,3-cd)pyrene	95.5	20	3.5	ug/l	100		96	45-135			
Isophorone	83.3	10	3.0	ug/l	100		83	50-120			
2-Methylnaphthalene	80.5	10	2.0	ug/l	100		80	55-120			
2-Methylphenol	77.2	10	3.0	ug/l	100		77	50-120			
4-Methylphenol	73.4	10	3.0	ug/l	100		73	50-120			
Naphthalene	78.1	10	3.0	ug/l	100		78	55-120			
2-Nitroaniline	92.8	20	2.0	ug/l	100		93	65-120			
3-Nitroaniline	93.9	20	3.0	ug/l	100		94	60-120			
4-Nitroaniline	92.7	20	4.0	ug/l	100		93	55-125			
Nitrobenzene	83.4	20	3.0	ug/l	100		83	55-120			
2-Nitrophenol	84.9	10	3.5	ug/l	100		85	50-120			
4-Nitrophenol	90.2	20	5.5	ug/l	100		90	45-120			
N-Nitroso-di-n-propylamine	80.3	10	3.5	ug/l	100		80	45-120			
N-Nitrosodimethylamine	80.1	20	2.5	ug/l	100		80	45-120			
N-Nitrosodiphenylamine	90.8	10	2.0	ug/l	100		91	60-120			
Pentachlorophenol	87.3	20	3.5	ug/l	100		87	50-120			
Phenanthrene	92.7	10	3.5	ug/l	100		93	65-120			

#### 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 006

Report Number: ISB0719

Sampled: 02/06/09  
 Received: 02/06/09

## 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
<b>Batch: 9B09071 Extracted: 02/09/09</b>											
<b>LCS Analyzed: 02/12/2009 (9B09071-BS1)</b>											
Phenol	79.0	10	2.0	ug/l	100		79	40-120			
Pyrene	93.6	10	4.0	ug/l	100		94	55-125			
1,2,4-Trichlorobenzene	73.2	10	2.5	ug/l	100		73	45-120			
2,4,5-Trichlorophenol	89.7	20	3.0	ug/l	100		90	55-120			
2,4,6-Trichlorophenol	91.6	20	4.5	ug/l	100		92	55-120			
Surrogate: 2,4,6-Tribromophenol	177			ug/l	200		89	40-120			
Surrogate: 2-Fluorobiphenyl	86.6			ug/l	100		87	50-120			
Surrogate: 2-Fluorophenol	138			ug/l	200		69	30-120			
Surrogate: Nitrobenzene-d5	81.4			ug/l	100		81	45-120			
Surrogate: Phenol-d6	149			ug/l	200		75	35-120			
Surrogate: Terphenyl-d14	89.4			ug/l	100		89	50-125			
<b>LCS Dup Analyzed: 02/12/2009 (9B09071-BSD1)</b>											
Acenaphthene	76.7	10	3.0	ug/l	100		77	60-120	9	20	
Acenaphthylene	80.2	10	3.0	ug/l	100		80	60-120	11	20	
Aniline	68.9	10	3.5	ug/l	100		69	35-120	4	30	
Anthracene	87.9	10	2.5	ug/l	100		88	65-120	5	20	
Benzidine	111	20	10	ug/l	100		111	30-160	5	35	
Benzo(a)anthracene	88.8	10	2.5	ug/l	100		89	65-120	5	20	
Benzo(a)pyrene	93.8	10	3.0	ug/l	100		94	55-130	5	25	
Benzo(b)fluoranthene	87.0	10	2.0	ug/l	100		87	55-125	4	25	
Benzo(g,h,i)perylene	88.0	10	4.0	ug/l	100		88	45-135	5	25	
Benzo(k)fluoranthene	93.8	10	2.5	ug/l	100		94	50-125	6	20	
Benzoic acid	67.9	20	10	ug/l	100		68	25-120	18	30	
Benzyl alcohol	71.5	20	3.5	ug/l	100		72	50-120	12	20	
4-Bromophenyl phenyl ether	87.6	10	3.0	ug/l	100		88	60-120	5	25	
Butyl benzyl phthalate	86.1	20	4.0	ug/l	100		86	55-130	5	20	
4-Chloro-3-methylphenol	74.4	20	2.5	ug/l	100		74	60-120	9	25	
4-Chloroaniline	77.5	10	2.0	ug/l	100		78	55-120	11	25	
Bis(2-chloroethoxy)methane	73.3	10	3.0	ug/l	100		73	55-120	12	20	
Bis(2-chloroethyl)ether	67.7	10	3.0	ug/l	100		68	50-120	12	20	
Bis(2-chloroisopropyl)ether	70.1	10	2.5	ug/l	100		70	45-120	12	20	
2-Chloronaphthalene	78.0	10	3.0	ug/l	100		78	60-120	12	20	
2-Chlorophenol	63.4	10	3.0	ug/l	100		63	45-120	16	25	
4-Chlorophenyl phenyl ether	79.9	10	2.5	ug/l	100		80	65-120	8	20	
Chrysene	90.9	10	2.5	ug/l	100		91	65-120	5	20	

#### 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 006

Report Number: ISB0719

Sampled: 02/06/09  
 Received: 02/06/09

## 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
<b>Batch: 9B09071 Extracted: 02/09/09</b>											
<b>LCS Dup Analyzed: 02/12/2009 (9B09071-BSD1)</b>											
Dibenz(a,h)anthracene	94.1	20	3.0	ug/l	100	94	50-135	6	25		
Dibenzofuran	81.2	10	4.0	ug/l	100	81	65-120	10	20		
Di-n-butyl phthalate	87.4	20	3.0	ug/l	100	87	60-125	5	20		
1,2-Dichlorobenzene	58.0	10	3.0	ug/l	100	58	40-120	15	25		
1,3-Dichlorobenzene	53.4	10	3.0	ug/l	100	53	35-120	17	25		
1,4-Dichlorobenzene	55.5	10	2.5	ug/l	100	55	35-120	16	25		
3,3'-Dichlorobenzidine	80.1	20	7.5	ug/l	100	80	45-135	15	25		
2,4-Dichlorophenol	70.7	10	3.5	ug/l	100	71	55-120	13	20		
Diethyl phthalate	82.9	10	3.5	ug/l	100	83	55-120	7	30		
2,4-Dimethylphenol	63.5	20	3.5	ug/l	100	64	40-120	9	25		
Dimethyl phthalate	82.3	10	2.5	ug/l	100	82	30-120	6	30		
4,6-Dinitro-2-methylphenol	81.3	20	4.0	ug/l	100	81	45-120	8	25		
2,4-Dinitrophenol	76.2	20	8.0	ug/l	100	76	40-120	10	25		
2,4-Dinitrotoluene	86.2	10	3.5	ug/l	100	86	65-120	7	20		
2,6-Dinitrotoluene	83.8	10	2.0	ug/l	100	84	65-120	9	20		
Di-n-octyl phthalate	99.3	20	3.5	ug/l	100	99	65-135	6	20		
1,2-Diphenylhydrazine/Azobenzene	79.4	20	2.5	ug/l	100	79	60-120	7	25		
Bis(2-ethylhexyl)phthalate	87.2	50	4.0	ug/l	100	87	65-130	6	20		
Fluoranthene	92.1	10	3.0	ug/l	100	92	60-120	3	20		
Fluorene	81.9	10	3.0	ug/l	100	82	65-120	8	20		
Hexachlorobenzene	88.3	10	3.0	ug/l	100	88	60-120	5	20		
Hexachlorobutadiene	59.9	10	4.0	ug/l	100	60	40-120	14	25		
Hexachlorocyclopentadiene	44.1	20	5.0	ug/l	100	44	25-120	20	30		
Hexachloroethane	50.0	10	3.5	ug/l	100	50	35-120	19	25		
Indeno(1,2,3-cd)pyrene	88.8	20	3.5	ug/l	100	89	45-135	7	25		
Isophorone	75.8	10	3.0	ug/l	100	76	50-120	9	20		
2-Methylnaphthalene	73.1	10	2.0	ug/l	100	73	55-120	10	20		
2-Methylphenol	67.0	10	3.0	ug/l	100	67	50-120	14	20		
4-Methylphenol	63.7	10	3.0	ug/l	100	64	50-120	14	20		
Naphthalene	68.6	10	3.0	ug/l	100	69	55-120	13	20		
2-Nitroaniline	86.4	20	2.0	ug/l	100	86	65-120	7	20		
3-Nitroaniline	86.2	20	3.0	ug/l	100	86	60-120	9	25		
4-Nitroaniline	86.9	20	4.0	ug/l	100	87	55-125	7	20		
Nitrobenzene	72.5	20	3.0	ug/l	100	73	55-120	14	25		
2-Nitrophenol	73.5	10	3.5	ug/l	100	74	50-120	14	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 006

Report Number: ISB0719

Sampled: 02/06/09  
Received: 02/06/09

## 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
<b>Batch: 9B09071 Extracted: 02/09/09</b>											
<b>LCS Dup Analyzed: 02/12/2009 (9B09071-BSD1)</b>											
4-Nitrophenol	79.2	20	5.5	ug/l	100		79	45-120	13	30	
N-Nitroso-di-n-propylamine	72.8	10	3.5	ug/l	100		73	45-120	10	20	
N-Nitrosodimethylamine	67.9	20	2.5	ug/l	100		68	45-120	16	20	
N-Nitrosodiphenylamine	85.4	10	2.0	ug/l	100		85	60-120	6	20	
Pentachlorophenol	82.1	20	3.5	ug/l	100		82	50-120	6	25	
Phenanthrene	87.5	10	3.5	ug/l	100		87	65-120	6	20	
Phenol	64.6	10	2.0	ug/l	100		65	40-120	20	25	
Pyrene	87.0	10	4.0	ug/l	100		87	55-125	7	25	
1,2,4-Trichlorobenzene	63.9	10	2.5	ug/l	100		64	45-120	14	20	
2,4,5-Trichlorophenol	79.2	20	3.0	ug/l	100		79	55-120	12	30	
2,4,6-Trichlorophenol	80.5	20	4.5	ug/l	100		81	55-120	13	30	
Surrogate: 2,4,6-Tribromophenol	163			ug/l	200		81	40-120			
Surrogate: 2-Fluorobiphenyl	77.7			ug/l	100		78	50-120			
Surrogate: 2-Fluorophenol	108			ug/l	200		54	30-120			
Surrogate: Nitrobenzene-d5	70.9			ug/l	100		71	45-120			
Surrogate: Phenol-d6	120			ug/l	200		60	35-120			
Surrogate: Terphenyl-d14	83.8			ug/l	100		84	50-125			

### Matrix Spike Analyzed: 02/12/2009 (9B09071-MS1)

Source: ISB0559-05

Acenaphthene	78.0	20	5.9	ug/l	99.0	ND	79	60-120			
Acenaphthylene	79.3	20	5.9	ug/l	99.0	ND	80	60-120			
Aniline	58.3	20	6.9	ug/l	99.0	ND	59	35-120			
Anthracene	86.5	20	5.0	ug/l	99.0	ND	87	65-120			
Benzidine	ND	40	20	ug/l	99.0	ND		30-160			M2
Benzo(a)anthracene	85.5	20	5.0	ug/l	99.0	ND	86	65-120			
Benzo(a)pyrene	89.9	20	5.9	ug/l	99.0	ND	91	55-130			
Benzo(b)fluoranthene	87.5	20	4.0	ug/l	99.0	ND	88	55-125			
Benzo(g,h,i)perylene	101	20	7.9	ug/l	99.0	ND	102	45-135			
Benzo(k)fluoranthene	89.8	20	5.0	ug/l	99.0	ND	91	55-125			
Benzoic acid	79.5	40	20	ug/l	99.0	ND	80	25-125			
Benzyl alcohol	72.4	40	6.9	ug/l	99.0	ND	73	40-120			
4-Bromophenyl phenyl ether	84.5	20	5.9	ug/l	99.0	ND	85	60-120			
Butyl benzyl phthalate	85.1	40	7.9	ug/l	99.0	ND	86	55-130			
4-Chloro-3-methylphenol	78.9	40	5.0	ug/l	99.0	ND	80	60-120			
4-Chloroaniline	74.5	20	4.0	ug/l	99.0	ND	75	55-120			
Bis(2-chloroethoxy)methane	78.4	20	5.9	ug/l	99.0	ND	79	50-120			

### 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 006

Report Number: ISB0719

Sampled: 02/06/09  
Received: 02/06/09

## 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
<b>Batch: 9B09071 Extracted: 02/09/09</b>											
<b>Matrix Spike Analyzed: 02/12/2009 (9B09071-MS1)</b>						<b>Source: ISB0559-05</b>					
Bis(2-chloroethyl)ether	71.3	20	5.9	ug/l	99.0	ND	72	50-120			
Bis(2-chloroisopropyl)ether	75.5	20	5.0	ug/l	99.0	ND	76	45-120			
2-Chloronaphthalene	78.8	20	5.9	ug/l	99.0	ND	80	60-120			
2-Chlorophenol	67.8	20	5.9	ug/l	99.0	ND	68	45-120			
4-Chlorophenyl phenyl ether	80.9	20	5.0	ug/l	99.0	ND	82	65-120			
Chrysene	86.1	20	5.0	ug/l	99.0	ND	87	65-120			
Dibenz(a,h)anthracene	98.4	40	5.9	ug/l	99.0	ND	99	45-135			
Dibenzofuran	83.8	20	7.9	ug/l	99.0	ND	85	65-120			
Di-n-butyl phthalate	86.1	40	5.9	ug/l	99.0	ND	87	60-125			
1,2-Dichlorobenzene	65.8	20	5.9	ug/l	99.0	ND	66	40-120			
1,3-Dichlorobenzene	63.1	20	5.9	ug/l	99.0	ND	64	35-120			
1,4-Dichlorobenzene	64.6	20	5.0	ug/l	99.0	ND	65	35-120			
3,3'-Dichlorobenzidine	56.0	40	15	ug/l	99.0	ND	57	45-135			
2,4-Dichlorophenol	74.1	20	6.9	ug/l	99.0	ND	75	55-120			
Diethyl phthalate	89.3	20	6.9	ug/l	99.0	ND	90	55-120			
2,4-Dimethylphenol	83.6	40	6.9	ug/l	99.0	10.8	74	40-120			
Dimethyl phthalate	83.2	20	5.0	ug/l	99.0	ND	84	30-120			
4,6-Dinitro-2-methylphenol	82.6	40	7.9	ug/l	99.0	ND	83	45-120			
2,4-Dinitrophenol	74.8	40	16	ug/l	99.0	ND	76	40-120			
2,4-Dinitrotoluene	85.1	20	6.9	ug/l	99.0	ND	86	65-120			
2,6-Dinitrotoluene	84.0	20	4.0	ug/l	99.0	ND	85	65-120			
Di-n-octyl phthalate	96.8	40	6.9	ug/l	99.0	ND	98	65-135			
1,2-Diphenylhydrazine/Azobenzene	81.3	40	5.0	ug/l	99.0	ND	82	60-120			
Bis(2-ethylhexyl)phthalate	103	99	7.9	ug/l	99.0	ND	104	65-130			
Fluoranthene	86.3	20	5.9	ug/l	99.0	ND	87	60-120			
Fluorene	83.0	20	5.9	ug/l	99.0	ND	84	65-120			
Hexachlorobenzene	85.2	20	5.9	ug/l	99.0	ND	86	60-120			
Hexachlorobutadiene	74.1	20	7.9	ug/l	99.0	ND	75	40-120			
Hexachlorocyclopentadiene	23.1	40	9.9	ug/l	99.0	ND	23	25-120			M2, J
Hexachloroethane	133	20	6.9	ug/l	99.0	ND	134	35-120			MI
Indeno(1,2,3-cd)pyrene	97.1	40	6.9	ug/l	99.0	ND	98	40-135			
Isophorone	77.5	20	5.9	ug/l	99.0	ND	78	50-120			
2-Methylnaphthalene	81.5	20	4.0	ug/l	99.0	ND	82	55-120			
2-Methylphenol	70.9	20	5.9	ug/l	99.0	ND	72	50-120			
4-Methylphenol	68.3	20	5.9	ug/l	99.0	ND	69	50-120			

#### 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 006

Report Number: ISB0719

Sampled: 02/06/09  
Received: 02/06/09

## 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
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**Batch: 9B09071 Extracted: 02/09/09**

**Matrix Spike Analyzed: 02/12/2009 (9B09071-MS1)**

**Source: ISB0559-05**

Naphthalene	139	20	5.9	ug/l	99.0	70.9	69	55-120			
2-Nitroaniline	84.6	40	4.0	ug/l	99.0	ND	85	65-120			
3-Nitroaniline	79.8	40	5.9	ug/l	99.0	ND	81	60-120			
4-Nitroaniline	80.6	40	7.9	ug/l	99.0	ND	81	55-125			
Nitrobenzene	79.0	40	5.9	ug/l	99.0	ND	80	55-120			
2-Nitrophenol	74.5	20	6.9	ug/l	99.0	ND	75	50-120			
4-Nitrophenol	77.7	40	11	ug/l	99.0	ND	78	45-120			
N-Nitroso-di-n-propylamine	73.9	20	6.9	ug/l	99.0	ND	75	45-120			
N-Nitrosodimethylamine	69.1	40	5.0	ug/l	99.0	ND	70	45-120			
N-Nitrosodiphenylamine	79.9	20	4.0	ug/l	99.0	ND	81	60-120			
Pentachlorophenol	73.9	40	6.9	ug/l	99.0	ND	75	50-120			
Phenanthrene	87.2	20	6.9	ug/l	99.0	ND	88	65-120			
Phenol	67.0	20	4.0	ug/l	99.0	ND	68	40-120			
Pyrene	87.0	20	7.9	ug/l	99.0	ND	88	55-125			
1,2,4-Trichlorobenzene	72.9	20	5.0	ug/l	99.0	ND	74	45-120			
2,4,5-Trichlorophenol	79.4	40	5.9	ug/l	99.0	ND	80	55-120			
2,4,6-Trichlorophenol	79.7	40	8.9	ug/l	99.0	ND	80	55-120			
Surrogate: 2,4,6-Tribromophenol	163			ug/l	198		82	40-120			
Surrogate: 2-Fluorobiphenyl	77.8			ug/l	99.0		79	50-120			
Surrogate: 2-Fluorophenol	99.6			ug/l	198		50	30-120			
Surrogate: Nitrobenzene-d5	73.8			ug/l	99.0		75	45-120			
Surrogate: Phenol-d6	126			ug/l	198		64	35-120			
Surrogate: Terphenyl-d14	83.8			ug/l	99.0		85	50-125			

**Matrix Spike Dup Analyzed: 02/12/2009 (9B09071-MSD1)**

**Source: ISB0559-05**

Acenaphthene	78.7	19	5.7	ug/l	94.3	ND	83	60-120	1	25	
Acenaphthylene	80.8	19	5.7	ug/l	94.3	ND	86	60-120	2	25	
Aniline	54.0	19	6.6	ug/l	94.3	ND	57	35-120	8	30	
Anthracene	85.9	19	4.7	ug/l	94.3	ND	91	65-120	1	25	
Benzidine	ND	38	19	ug/l	94.3	ND		30-160		35	M2
Benzo(a)anthracene	85.4	19	4.7	ug/l	94.3	ND	91	65-120	0	20	
Benzo(a)pyrene	90.6	19	5.7	ug/l	94.3	ND	96	55-130	1	25	
Benzo(b)fluoranthene	88.9	19	3.8	ug/l	94.3	ND	94	55-125	2	25	
Benzo(g,h,i)perylene	101	19	7.5	ug/l	94.3	ND	107	45-135	0	30	
Benzo(k)fluoranthene	89.2	19	4.7	ug/l	94.3	ND	95	55-125	1	30	
Benzoic acid	90.5	38	19	ug/l	94.3	ND	96	25-125	13	30	

**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 006

Report Number: ISB0719

Sampled: 02/06/09  
Received: 02/06/09

## 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
<b>Batch: 9B09071 Extracted: 02/09/09</b>											
<b>Matrix Spike Dup Analyzed: 02/12/2009 (9B09071-MSD1)</b>						<b>Source: ISB0559-05</b>					
Benzyl alcohol	76.4	38	6.6	ug/l	94.3	ND	81	40-120	5	30	
4-Bromophenyl phenyl ether	84.9	19	5.7	ug/l	94.3	ND	90	60-120	1	25	
Butyl benzyl phthalate	84.6	38	7.5	ug/l	94.3	ND	90	55-130	1	25	
4-Chloro-3-methylphenol	79.8	38	4.7	ug/l	94.3	ND	85	60-120	1	25	
4-Chloroaniline	75.9	19	3.8	ug/l	94.3	ND	80	55-120	2	25	
Bis(2-chloroethoxy)methane	80.2	19	5.7	ug/l	94.3	ND	85	50-120	2	25	
Bis(2-chloroethyl)ether	75.1	19	5.7	ug/l	94.3	ND	80	50-120	5	25	
Bis(2-chloroisopropyl)ether	77.2	19	4.7	ug/l	94.3	ND	82	45-120	2	25	
2-Chloronaphthalene	81.4	19	5.7	ug/l	94.3	ND	86	60-120	3	20	
2-Chlorophenol	72.1	19	5.7	ug/l	94.3	ND	76	45-120	6	25	
4-Chlorophenyl phenyl ether	80.4	19	4.7	ug/l	94.3	ND	85	65-120	1	25	
Chrysene	87.7	19	4.7	ug/l	94.3	ND	93	65-120	2	25	
Dibenz(a,h)anthracene	97.5	38	5.7	ug/l	94.3	ND	103	45-135	1	30	
Dibenzofuran	83.9	19	7.5	ug/l	94.3	ND	89	65-120	0	25	
Di-n-butyl phthalate	85.1	38	5.7	ug/l	94.3	ND	90	60-125	1	25	
1,2-Dichlorobenzene	67.3	19	5.7	ug/l	94.3	ND	71	40-120	2	25	
1,3-Dichlorobenzene	64.5	19	5.7	ug/l	94.3	ND	68	35-120	2	25	
1,4-Dichlorobenzene	65.2	19	4.7	ug/l	94.3	ND	69	35-120	1	25	
3,3'-Dichlorobenzidine	59.2	38	14	ug/l	94.3	ND	63	45-135	6	25	
2,4-Dichlorophenol	77.2	19	6.6	ug/l	94.3	ND	82	55-120	4	25	
Diethyl phthalate	86.0	19	6.6	ug/l	94.3	ND	91	55-120	4	30	
2,4-Dimethylphenol	85.4	38	6.6	ug/l	94.3	10.8	79	40-120	2	25	
Dimethyl phthalate	81.9	19	4.7	ug/l	94.3	ND	87	30-120	2	30	
4,6-Dinitro-2-methylphenol	82.2	38	7.5	ug/l	94.3	ND	87	45-120	1	25	
2,4-Dinitrophenol	73.7	38	15	ug/l	94.3	ND	78	40-120	1	25	
2,4-Dinitrotoluene	85.4	19	6.6	ug/l	94.3	ND	91	65-120	0	25	
2,6-Dinitrotoluene	83.8	19	3.8	ug/l	94.3	ND	89	65-120	0	20	
Di-n-octyl phthalate	97.7	38	6.6	ug/l	94.3	ND	104	65-135	1	20	
1,2-Diphenylhydrazine/Azobenzene	80.8	38	4.7	ug/l	94.3	ND	86	60-120	1	25	
Bis(2-ethylhexyl)phthalate	88.1	94	7.5	ug/l	94.3	ND	93	65-130	16	25	J
Fluoranthene	88.1	19	5.7	ug/l	94.3	ND	93	60-120	2	25	
Fluorene	83.0	19	5.7	ug/l	94.3	ND	88	65-120	0	25	
Hexachlorobenzene	85.5	19	5.7	ug/l	94.3	ND	91	60-120	0	25	
Hexachlorobutadiene	74.6	19	7.5	ug/l	94.3	ND	79	40-120	1	25	
Hexachlorocyclopentadiene	34.3	38	9.4	ug/l	94.3	ND	36	25-120	39	30	R-2, J

#### 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 006

Report Number: ISB0719

Sampled: 02/06/09  
Received: 02/06/09

## 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
<b>Batch: 9B09071 Extracted: 02/09/09</b>											
<b>Matrix Spike Dup Analyzed: 02/12/2009 (9B09071-MSD1)</b>						<b>Source: ISB0559-05</b>					
Hexachloroethane	150	19	6.6	ug/l	94.3	ND	159	35-120	12	25	MI
Indeno(1,2,3-cd)pyrene	98.0	38	6.6	ug/l	94.3	ND	104	40-135	1	30	
Isophorone	78.6	19	5.7	ug/l	94.3	ND	83	50-120	1	25	
2-Methylnaphthalene	82.5	19	3.8	ug/l	94.3	ND	87	55-120	1	20	
2-Methylphenol	75.2	19	5.7	ug/l	94.3	ND	80	50-120	6	25	
4-Methylphenol	74.0	19	5.7	ug/l	94.3	ND	78	50-120	8	25	
Naphthalene	152	19	5.7	ug/l	94.3	70.9	85	55-120	9	25	
2-Nitroaniline	88.0	38	3.8	ug/l	94.3	ND	93	65-120	4	25	
3-Nitroaniline	78.3	38	5.7	ug/l	94.3	ND	83	60-120	2	25	
4-Nitroaniline	81.5	38	7.5	ug/l	94.3	ND	86	55-125	1	25	
Nitrobenzene	83.2	38	5.7	ug/l	94.3	ND	88	55-120	5	25	
2-Nitrophenol	78.1	19	6.6	ug/l	94.3	ND	83	50-120	5	25	
4-Nitrophenol	80.6	38	10	ug/l	94.3	ND	85	45-120	4	30	
N-Nitroso-di-n-propylamine	76.3	19	6.6	ug/l	94.3	ND	81	45-120	3	25	
N-Nitrosodimethylamine	73.7	38	4.7	ug/l	94.3	ND	78	45-120	6	25	
N-Nitrosodiphenylamine	80.0	19	3.8	ug/l	94.3	ND	85	60-120	0	25	
Pentachlorophenol	75.9	38	6.6	ug/l	94.3	ND	80	50-120	3	25	
Phenanthrene	85.4	19	6.6	ug/l	94.3	ND	91	65-120	2	25	
Phenol	71.1	19	3.8	ug/l	94.3	ND	75	40-120	6	25	
Pyrene	85.2	19	7.5	ug/l	94.3	ND	90	55-125	2	25	
1,2,4-Trichlorobenzene	75.4	19	4.7	ug/l	94.3	ND	80	45-120	3	20	
2,4,5-Trichlorophenol	82.3	38	5.7	ug/l	94.3	ND	87	55-120	3	30	
2,4,6-Trichlorophenol	83.4	38	8.5	ug/l	94.3	ND	88	55-120	5	30	
Surrogate: 2,4,6-Tribromophenol	163			ug/l	189		87	40-120			
Surrogate: 2-Fluorobiphenyl	81.1			ug/l	94.3		86	50-120			
Surrogate: 2-Fluorophenol	85.1			ug/l	189		45	30-120			
Surrogate: Nitrobenzene-d5	77.1			ug/l	94.3		82	45-120			
Surrogate: Phenol-d6	138			ug/l	189		73	35-120			
Surrogate: Terphenyl-d14	81.7			ug/l	94.3		87	50-125			

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Project Manager

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 Arcadia, CA 91007  
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: ISB0719

Sampled: 02/06/09  
 Received: 02/06/09

## METHOD BLANK/QC DATA

### ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
<b>Batch: 9B12048 Extracted: 02/12/09</b>											
<b>Blank Analyzed: 02/12/2009 (9B12048-BLK1)</b>											
4,4'-DDD	ND	0.0050	0.0020	ug/l							
4,4'-DDE	ND	0.0050	0.0030	ug/l							
4,4'-DDT	ND	0.010	0.0040	ug/l							
Aldrin	ND	0.0050	0.0015	ug/l							
alpha-BHC	ND	0.0050	0.0025	ug/l							
beta-BHC	ND	0.010	0.0040	ug/l							
delta-BHC	ND	0.0050	0.0035	ug/l							
Dieldrin	ND	0.0050	0.0020	ug/l							
Endosulfan I	ND	0.0050	0.0020	ug/l							
Endosulfan II	ND	0.0050	0.0030	ug/l							
Endosulfan sulfate	ND	0.010	0.0030	ug/l							
Endrin	ND	0.0050	0.0020	ug/l							
Endrin aldehyde	ND	0.010	0.0020	ug/l							
Endrin ketone	ND	0.010	0.0030	ug/l							
gamma-BHC (Lindane)	ND	0.020	0.0030	ug/l							
Heptachlor	ND	0.010	0.0030	ug/l							
Heptachlor epoxide	ND	0.0050	0.0025	ug/l							
Methoxychlor	ND	0.0050	0.0035	ug/l							
Chlordane	ND	0.10	0.040	ug/l							
Toxaphene	ND	0.50	0.25	ug/l							
Surrogate: Decachlorobiphenyl	0.416			ug/l	0.500		83	45-120			
Surrogate: Tetrachloro-m-xylene	0.423			ug/l	0.500		85	35-115			

### LCS Analyzed: 02/12/2009 (9B12048-BS1)

MNR1

4,4'-DDD	0.459	0.0050	0.0020	ug/l	0.500		92	55-120			
4,4'-DDE	0.444	0.0050	0.0030	ug/l	0.500		89	50-120			
4,4'-DDT	0.460	0.010	0.0040	ug/l	0.500		92	55-120			
Aldrin	0.411	0.0050	0.0015	ug/l	0.500		82	40-115			
alpha-BHC	0.393	0.0050	0.0025	ug/l	0.500		79	45-115			
beta-BHC	0.440	0.010	0.0040	ug/l	0.500		88	55-115			
delta-BHC	0.456	0.0050	0.0035	ug/l	0.500		91	55-115			
Dieldrin	0.487	0.0050	0.0020	ug/l	0.500		97	55-115			
Endosulfan I	0.458	0.0050	0.0020	ug/l	0.500		92	55-115			
Endosulfan II	0.474	0.0050	0.0030	ug/l	0.500		95	55-120			
Endosulfan sulfate	0.481	0.010	0.0030	ug/l	0.500		96	60-120			
Endrin	0.460	0.0050	0.0020	ug/l	0.500		92	55-115			

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Sampled: 02/06/09  
 Received: 02/06/09

## 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
<b>Batch: 9B12048 Extracted: 02/12/09</b>											
<b>LCS Analyzed: 02/12/2009 (9B12048-BS1)</b>											
Endrin aldehyde	0.419	0.010	0.0020	ug/l	0.500		84	50-120			MNR1
Endrin ketone	0.452	0.010	0.0030	ug/l	0.500		90	55-120			
gamma-BHC (Lindane)	0.400	0.020	0.0030	ug/l	0.500		80	45-115			
Heptachlor	0.433	0.010	0.0030	ug/l	0.500		87	45-115			
Heptachlor epoxide	0.464	0.0050	0.0025	ug/l	0.500		93	55-115			
Methoxychlor	0.447	0.0050	0.0035	ug/l	0.500		89	60-120			
Surrogate: Decachlorobiphenyl	0.384			ug/l	0.500		77	45-120			
Surrogate: Tetrachloro-m-xylene	0.364			ug/l	0.500		73	35-115			
<b>LCS Dup Analyzed: 02/12/2009 (9B12048-BSD1)</b>											
4,4'-DDD	0.466	0.0050	0.0020	ug/l	0.500		93	55-120	2	30	
4,4'-DDE	0.457	0.0050	0.0030	ug/l	0.500		91	50-120	3	30	
4,4'-DDT	0.469	0.010	0.0040	ug/l	0.500		94	55-120	2	30	
Aldrin	0.430	0.0050	0.0015	ug/l	0.500		86	40-115	5	30	
alpha-BHC	0.421	0.0050	0.0025	ug/l	0.500		84	45-115	7	30	
beta-BHC	0.456	0.010	0.0040	ug/l	0.500		91	55-115	4	30	
delta-BHC	0.462	0.0050	0.0035	ug/l	0.500		92	55-115	1	30	
Dieldrin	0.497	0.0050	0.0020	ug/l	0.500		99	55-115	2	30	
Endosulfan I	0.471	0.0050	0.0020	ug/l	0.500		94	55-115	3	30	
Endosulfan II	0.482	0.0050	0.0030	ug/l	0.500		96	55-120	2	30	
Endosulfan sulfate	0.482	0.010	0.0030	ug/l	0.500		96	60-120	0	30	
Endrin	0.471	0.0050	0.0020	ug/l	0.500		94	55-115	2	30	
Endrin aldehyde	0.426	0.010	0.0020	ug/l	0.500		85	50-120	2	30	
Endrin ketone	0.448	0.010	0.0030	ug/l	0.500		90	55-120	1	30	
gamma-BHC (Lindane)	0.422	0.020	0.0030	ug/l	0.500		84	45-115	5	30	
Heptachlor	0.453	0.010	0.0030	ug/l	0.500		91	45-115	5	30	
Heptachlor epoxide	0.481	0.0050	0.0025	ug/l	0.500		96	55-115	4	30	
Methoxychlor	0.449	0.0050	0.0035	ug/l	0.500		90	60-120	0	30	
Surrogate: Decachlorobiphenyl	0.382			ug/l	0.500		76	45-120			
Surrogate: Tetrachloro-m-xylene	0.377			ug/l	0.500		75	35-115			

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: ISB0719

Sampled: 02/06/09  
 Received: 02/06/09

## METHOD BLANK/QC DATA

### TOTAL PCBS (EPA 608)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Data Qualifiers
<b>Batch: 9B12048 Extracted: 02/12/09</b>											
<b>Blank Analyzed: 02/12/2009 (9B12048-BLK1)</b>											
Aroclor 1016	ND	0.50	0.25	ug/l							
Aroclor 1221	ND	0.50	0.25	ug/l							
Aroclor 1232	ND	0.50	0.25	ug/l							
Aroclor 1242	ND	0.50	0.25	ug/l							
Aroclor 1248	ND	0.50	0.25	ug/l							
Aroclor 1254	ND	0.50	0.25	ug/l							
Aroclor 1260	ND	0.50	0.25	ug/l							
Surrogate: Decachlorobiphenyl	0.530			ug/l	0.500		106	45-120			
<b>LCS Analyzed: 02/12/2009 (9B12048-BS2)</b>											
Aroclor 1016	3.96	0.50	0.25	ug/l	4.00		99	50-115			MNR1
Aroclor 1260	4.16	0.50	0.25	ug/l	4.00		104	60-120			
Surrogate: Decachlorobiphenyl	0.540			ug/l	0.500		108	45-120			
<b>LCS Dup Analyzed: 02/13/2009 (9B12048-BSD2)</b>											
Aroclor 1016	3.95	0.50	0.25	ug/l	4.00		99	50-115	0	30	
Aroclor 1260	4.00	0.50	0.25	ug/l	4.00		100	60-120	4	25	
Surrogate: Decachlorobiphenyl	0.517			ug/l	0.500		103	45-120			

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: ISB0719

Sampled: 02/06/09  
 Received: 02/06/09

## METHOD BLANK/QC DATA

### HEXANE EXTRACTABLE MATERIAL

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 9B12121 Extracted: 02/12/09</b>											
<b>Blank Analyzed: 02/12/2009 (9B12121-BLK1)</b>											
Hexane Extractable Material (Oil & Grease)	ND	5.0	1.4	mg/l							
<b>LCS Analyzed: 02/12/2009 (9B12121-BS1)</b>											
Hexane Extractable Material (Oil & Grease)	18.2	5.0	1.4	mg/l	20.0		91	78-114			MNR1
<b>LCS Dup Analyzed: 02/12/2009 (9B12121-BSD1)</b>											
Hexane Extractable Material (Oil & Grease)	18.8	5.0	1.4	mg/l	20.0		94	78-114	3	11	

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## METHOD BLANK/QC DATA

### METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	RPD Limits	RPD RPD	Data Qualifiers
<b>Batch: 9B09073 Extracted: 02/09/09</b>										
<b>Blank Analyzed: 02/14/2009-02/16/2009 (9B09073-BLK1)</b>										
Aluminum	ND	50	40	ug/l						
Arsenic	7.21	10	7.0	ug/l						J
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	0.0162	0.040	0.015	mg/l						J
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: 02/14/2009-02/16/2009 (9B09073-BS1)

Aluminum	464	50	40	ug/l	500		93	85-115		
Arsenic	515	10	7.0	ug/l	500		103	85-115		
Beryllium	494	2.0	0.90	ug/l	500		99	85-115		
Boron	0.507	0.050	0.020	mg/l	0.500		101	85-115		
Calcium	2.45	0.10	0.050	mg/l	2.50		98	85-115		
Chromium	480	5.0	2.0	ug/l	500		96	85-115		
Iron	0.483	0.040	0.015	mg/l	0.500		97	85-115		
Magnesium	2.47	0.020	0.012	mg/l	2.50		99	85-115		
Nickel	486	10	2.0	ug/l	500		97	85-115		
Selenium	468	10	8.0	ug/l	500		94	85-115		
Silver	251	10	6.0	ug/l	250		100	85-115		
Vanadium	484	10	3.0	ug/l	500		97	85-115		
Zinc	488	20	6.0	ug/l	500		98	85-115		

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## METHOD BLANK/QC DATA

### METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 9B09073 Extracted: 02/09/09</b>											
<b>Matrix Spike Analyzed: 02/14/2009-02/16/2009 (9B09073-MS1)</b>						<b>Source: ISB0733-01</b>					
Aluminum	1020	50	40	ug/l	500	355	133	70-130			MI
Arsenic	523	10	7.0	ug/l	500	ND	105	70-130			
Beryllium	502	2.0	0.90	ug/l	500	ND	100	70-130			
Boron	0.525	0.050	0.020	mg/l	0.500	ND	105	70-130			
Calcium	31.7	0.10	0.050	mg/l	2.50	29.5	85	70-130			MHA
Chromium	489	5.0	2.0	ug/l	500	ND	98	70-130			
Iron	0.892	0.040	0.015	mg/l	0.500	0.385	101	70-130			
Magnesium	7.66	0.020	0.012	mg/l	2.50	5.19	99	70-130			
Nickel	493	10	2.0	ug/l	500	ND	99	70-130			
Selenium	474	10	8.0	ug/l	500	ND	95	70-130			
Silver	255	10	6.0	ug/l	250	ND	102	70-130			
Vanadium	491	10	3.0	ug/l	500	ND	98	70-130			
Zinc	492	20	6.0	ug/l	500	ND	98	70-130			
<b>Matrix Spike Analyzed: 02/14/2009-02/16/2009 (9B09073-MS2)</b>						<b>Source: ISB0719-01</b>					
Aluminum	1890	50	40	ug/l	500	921	195	70-130			MI
Arsenic	521	10	7.0	ug/l	500	8.61	103	70-130			
Beryllium	495	2.0	0.90	ug/l	500	ND	99	70-130			
Boron	0.568	0.050	0.020	mg/l	0.500	0.0645	101	70-130			
Calcium	8.94	0.10	0.050	mg/l	2.50	6.51	97	70-130			
Chromium	481	5.0	2.0	ug/l	500	ND	96	70-130			
Iron	1.36	0.040	0.015	mg/l	0.500	0.797	112	70-130			
Magnesium	3.96	0.020	0.012	mg/l	2.50	1.42	101	70-130			
Nickel	487	10	2.0	ug/l	500	2.23	97	70-130			
Selenium	467	10	8.0	ug/l	500	ND	93	70-130			
Silver	251	10	6.0	ug/l	250	ND	100	70-130			
Vanadium	487	10	3.0	ug/l	500	ND	97	70-130			
Zinc	489	20	6.0	ug/l	500	ND	98	70-130			

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## METHOD BLANK/QC DATA

### METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 9B09073 Extracted: 02/09/09</b>											
<b>Matrix Spike Dup Analyzed: 02/14/2009-02/16/2009 (9B09073-MSD1)</b>						<b>Source: ISB0733-01</b>					
Aluminum	1000	50	40	ug/l	500	355	129	70-130	2	20	
Arsenic	528	10	7.0	ug/l	500	ND	106	70-130	1	20	
Beryllium	504	2.0	0.90	ug/l	500	ND	101	70-130	0	20	
Boron	0.525	0.050	0.020	mg/l	0.500	ND	105	70-130	0	20	
Calcium	31.7	0.10	0.050	mg/l	2.50	29.5	84	70-130	0	20	MHA
Chromium	490	5.0	2.0	ug/l	500	ND	98	70-130	0	20	
Iron	0.898	0.040	0.015	mg/l	0.500	0.385	103	70-130	1	20	
Magnesium	7.66	0.020	0.012	mg/l	2.50	5.19	99	70-130	0	20	
Nickel	494	10	2.0	ug/l	500	ND	99	70-130	0	20	
Selenium	478	10	8.0	ug/l	500	ND	96	70-130	1	20	
Silver	257	10	6.0	ug/l	250	ND	103	70-130	1	20	
Vanadium	493	10	3.0	ug/l	500	ND	99	70-130	0	20	
Zinc	491	20	6.0	ug/l	500	ND	98	70-130	0	20	

**Batch: 9B09075 Extracted: 02/09/09**

**Blank Analyzed: 02/10/2009 (9B09075-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: 02/10/2009 (9B09075-BS1)**

Antimony	81.1	2.0	0.20	ug/l	80.0		101	85-115			
Cadmium	81.4	1.0	0.11	ug/l	80.0		102	85-115			
Copper	82.3	2.0	0.75	ug/l	80.0		103	85-115			
Lead	81.7	1.0	0.30	ug/l	80.0		102	85-115			
Thallium	78.4	1.0	0.20	ug/l	80.0		98	85-115			

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Received: 02/06/09

## METHOD BLANK/QC DATA

### METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 9B09075 Extracted: 02/09/09</b>											
<b>Matrix Spike Analyzed: 02/10/2009 (9B09075-MS1)</b>						<b>Source: ISB0733-01</b>					
Antimony	79.7	2.0	0.20	ug/l	80.0	0.490	99	70-130			
Cadmium	78.2	1.0	0.11	ug/l	80.0	ND	98	70-130			
Copper	82.2	2.0	0.75	ug/l	80.0	1.11	101	70-130			
Lead	78.9	1.0	0.30	ug/l	80.0	ND	99	70-130			
Thallium	75.9	1.0	0.20	ug/l	80.0	ND	95	70-130			
<b>Matrix Spike Analyzed: 02/10/2009 (9B09075-MS2)</b>						<b>Source: ISB0719-01</b>					
Antimony	76.8	2.0	0.20	ug/l	80.0	0.584	95	70-130			
Cadmium	77.2	1.0	0.11	ug/l	80.0	ND	96	70-130			
Copper	81.7	2.0	0.75	ug/l	80.0	2.10	99	70-130			
Lead	78.8	1.0	0.30	ug/l	80.0	0.736	98	70-130			
Thallium	74.6	1.0	0.20	ug/l	80.0	ND	93	70-130			
<b>Matrix Spike Dup Analyzed: 02/10/2009 (9B09075-MSD1)</b>						<b>Source: ISB0733-01</b>					
Antimony	79.7	2.0	0.20	ug/l	80.0	0.490	99	70-130	0	20	
Cadmium	78.1	1.0	0.11	ug/l	80.0	ND	98	70-130	0	20	
Copper	82.2	2.0	0.75	ug/l	80.0	1.11	101	70-130	0	20	
Lead	79.0	1.0	0.30	ug/l	80.0	ND	99	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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## 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
<b>Batch: 9B09083 Extracted: 02/09/09</b>											
<b>Blank Analyzed: 02/11/2009 (9B09083-BLK1)</b>											
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							
<b>LCS Analyzed: 02/11/2009 (9B09083-BS1)</b>											
Aluminum	442	50	40	ug/l	500		88	85-115			
Arsenic	480	10	7.0	ug/l	500		96	85-115			
Beryllium	472	2.0	0.90	ug/l	500		94	85-115			
Boron	0.473	0.050	0.020	mg/l	0.500		95	85-115			
Calcium	2.35	0.10	0.050	mg/l	2.50		94	85-115			
Chromium	478	5.0	2.0	ug/l	500		96	85-115			
Iron	0.454	0.040	0.015	mg/l	0.500		91	85-115			
Magnesium	2.39	0.020	0.012	mg/l	2.50		96	85-115			
Nickel	473	10	2.0	ug/l	500		95	85-115			
Selenium	446	10	8.0	ug/l	500		89	85-115			
Silver	250	10	6.0	ug/l	250		100	85-115			
Vanadium	486	10	3.0	ug/l	500		97	85-115			
Zinc	466	20	6.0	ug/l	500		93	85-115			

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## METHOD BLANK/QC DATA

### DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
<b>Batch: 9B09083 Extracted: 02/09/09</b>											
<b>Matrix Spike Analyzed: 02/11/2009 (9B09083-MS1)</b>						<b>Source: ISB0173-01</b>					
Aluminum	451	50	40	ug/l	500	ND	90	70-130			
Arsenic	481	10	7.0	ug/l	500	ND	96	70-130			
Beryllium	477	2.0	0.90	ug/l	500	ND	95	70-130			
Boron	0.499	0.050	0.020	mg/l	0.500	0.0277	94	70-130			
Calcium	65.4	0.10	0.050	mg/l	2.50	62.2	125	70-130			MHA
Chromium	476	5.0	2.0	ug/l	500	ND	95	70-130			
Iron	0.443	0.040	0.015	mg/l	0.500	ND	89	70-130			
Magnesium	21.4	0.020	0.012	mg/l	2.50	18.8	105	70-130			MHA
Nickel	468	10	2.0	ug/l	500	ND	94	70-130			
Selenium	448	10	8.0	ug/l	500	ND	90	70-130			
Silver	254	10	6.0	ug/l	250	ND	101	70-130			
Vanadium	489	10	3.0	ug/l	500	ND	98	70-130			
Zinc	482	20	6.0	ug/l	500	13.0	94	70-130			
<b>Matrix Spike Analyzed: 02/11/2009 (9B09083-MS2)</b>						<b>Source: ISB0825-01</b>					
Aluminum	496	50	40	ug/l	500	ND	99	70-130			
Arsenic	504	10	7.0	ug/l	500	12.4	98	70-130			
Beryllium	476	2.0	0.90	ug/l	500	ND	95	70-130			
Boron	0.577	0.050	0.020	mg/l	0.500	0.114	93	70-130			
Calcium	10.7	0.10	0.050	mg/l	2.50	8.30	96	70-130			
Chromium	479	5.0	2.0	ug/l	500	2.40	95	70-130			
Iron	0.482	0.040	0.015	mg/l	0.500	ND	96	70-130			
Magnesium	3.79	0.020	0.012	mg/l	2.50	1.37	97	70-130			
Nickel	475	10	2.0	ug/l	500	ND	95	70-130			
Selenium	455	10	8.0	ug/l	500	ND	91	70-130			
Silver	251	10	6.0	ug/l	250	ND	100	70-130			
Vanadium	492	10	3.0	ug/l	500	7.61	97	70-130			
Zinc	494	20	6.0	ug/l	500	25.0	94	70-130			

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## METHOD BLANK/QC DATA

### DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 9B09083 Extracted: 02/09/09</b>											
<b>Matrix Spike Dup Analyzed: 02/11/2009 (9B09083-MSD1)</b>						<b>Source: ISB0173-01</b>					
Aluminum	465	50	40	ug/l	500	ND	93	70-130	3	20	
Arsenic	492	10	7.0	ug/l	500	ND	98	70-130	2	20	
Beryllium	483	2.0	0.90	ug/l	500	ND	97	70-130	1	20	
Boron	0.512	0.050	0.020	mg/l	0.500	0.0277	97	70-130	3	20	
Calcium	68.3	0.10	0.050	mg/l	2.50	62.2	241	70-130	4	20	MHA
Chromium	484	5.0	2.0	ug/l	500	ND	97	70-130	2	20	
Iron	0.450	0.040	0.015	mg/l	0.500	ND	90	70-130	2	20	
Magnesium	22.5	0.020	0.012	mg/l	2.50	18.8	147	70-130	5	20	MHA
Nickel	479	10	2.0	ug/l	500	ND	96	70-130	2	20	
Selenium	465	10	8.0	ug/l	500	ND	93	70-130	4	20	
Silver	254	10	6.0	ug/l	250	ND	102	70-130	0	20	
Vanadium	492	10	3.0	ug/l	500	ND	98	70-130	1	20	
Zinc	489	20	6.0	ug/l	500	13.0	95	70-130	1	20	

**Batch: 9B12130 Extracted: 02/12/09**

**Blank Analyzed: 02/13/2009 (9B12130-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: 02/13/2009 (9B12130-BS1)**

Antimony	75.7	2.0	0.20	ug/l	80.0		95	85-115			
Cadmium	76.5	1.0	0.11	ug/l	80.0		96	85-115			
Copper	79.0	2.0	0.75	ug/l	80.0		99	85-115			
Lead	77.5	1.0	0.30	ug/l	80.0		97	85-115			
Thallium	79.2	1.0	0.20	ug/l	80.0		99	85-115			

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## METHOD BLANK/QC DATA

### DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 9B12130 Extracted: 02/12/09</b>											
<b>Matrix Spike Analyzed: 02/13/2009 (9B12130-MS1)</b>						<b>Source: ISB0566-01</b>					
Antimony	78.9	2.0	0.20	ug/l	80.0	0.373	98	70-130			
Cadmium	75.5	1.0	0.11	ug/l	80.0	ND	94	70-130			
Copper	79.0	2.0	0.75	ug/l	80.0	1.76	97	70-130			
Lead	75.1	1.0	0.30	ug/l	80.0	ND	94	70-130			
Thallium	77.0	1.0	0.20	ug/l	80.0	ND	96	70-130			
<b>Matrix Spike Dup Analyzed: 02/13/2009 (9B12130-MSD1)</b>						<b>Source: ISB0566-01</b>					
Antimony	78.5	2.0	0.20	ug/l	80.0	0.373	98	70-130	0	20	
Cadmium	74.9	1.0	0.11	ug/l	80.0	ND	94	70-130	1	20	
Copper	79.6	2.0	0.75	ug/l	80.0	1.76	97	70-130	1	20	
Lead	74.4	1.0	0.30	ug/l	80.0	ND	93	70-130	1	20	
Thallium	75.8	1.0	0.20	ug/l	80.0	ND	95	70-130	2	20	

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 006

Report Number: ISB0719

Sampled: 02/06/09  
 Received: 02/06/09

## METHOD BLANK/QC DATA

### INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 9B06069 Extracted: 02/06/09</b>											
<b>Blank Analyzed: 02/06/2009 (9B06069-BLK1)</b>											
Chloride	ND	0.50	0.25	mg/l							
Nitrate/Nitrite-N	ND	0.26	0.15	mg/l							
Sulfate	ND	0.50	0.20	mg/l							
<b>LCS Analyzed: 02/06/2009 (9B06069-BS1)</b>											
Chloride	4.64	0.50	0.25	mg/l	5.00		93	90-110			
Sulfate	9.98	0.50	0.20	mg/l	10.0		100	90-110			
<b>Matrix Spike Analyzed: 02/06/2009 (9B06069-MS1) Source: ISB0573-01</b>											
Chloride	905	25	12	mg/l	50.0	865	81	80-120			MHA
Sulfate	1550	25	10	mg/l	100	1450	98	80-120			MHA
<b>Matrix Spike Dup Analyzed: 02/06/2009 (9B06069-MSD1) Source: ISB0573-01</b>											
Chloride	889	25	12	mg/l	50.0	865	50	80-120	2	20	MHA
Sulfate	1520	25	10	mg/l	100	1450	75	80-120	2	20	MHA
<b>Batch: 9B09095 Extracted: 02/09/09</b>											
<b>Blank Analyzed: 02/09/2009 (9B09095-BLK1)</b>											
Total Cyanide	ND	0.0050	0.0022	mg/l							
<b>LCS Analyzed: 02/09/2009 (9B09095-BS1)</b>											
Total Cyanide	0.193	0.0050	0.0022	mg/l	0.200		97	90-110			
<b>Matrix Spike Analyzed: 02/09/2009 (9B09095-MS1) Source: ISB0752-01</b>											
Total Cyanide	0.201	0.0050	0.0022	mg/l	0.200	0.00601	97	70-115			

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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 006

Report Number: ISB0719

Sampled: 02/06/09  
Received: 02/06/09

## METHOD BLANK/QC DATA

### INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b><u>Batch: 9B09095 Extracted: 02/09/09</u></b>											
<b>Matrix Spike Dup Analyzed: 02/09/2009 (9B09095-MSD1)</b>						<b>Source: ISB0752-01</b>					
Total Cyanide	0.201	0.0050	0.0022	mg/l	0.200	0.00601	97	70-115	0	15	
<b><u>Batch: 9B11043 Extracted: 02/11/09</u></b>											
<b>Blank Analyzed: 02/11/2009 (9B11043-BLK1)</b>											
Total Dissolved Solids	ND	10	10	mg/l							
<b>LCS Analyzed: 02/11/2009 (9B11043-BS1)</b>											
Total Dissolved Solids	1010	10	10	mg/l	1000		101	90-110			
<b>Duplicate Analyzed: 02/11/2009 (9B11043-DUP1)</b>						<b>Source: ISB1079-01</b>					
Total Dissolved Solids	1970	10	10	mg/l		1990			1	10	
<b><u>Batch: 9B12141 Extracted: 02/12/09</u></b>											
<b>Blank Analyzed: 02/12/2009 (9B12141-BLK1)</b>											
Total Suspended Solids	ND	10	1.0	mg/l							
<b>LCS Analyzed: 02/12/2009 (9B12141-BS1)</b>											
Total Suspended Solids	998	10	1.0	mg/l	1000		100	85-115			
<b>Duplicate Analyzed: 02/12/2009 (9B12141-DUP1)</b>						<b>Source: ISB0702-01</b>					
Total Suspended Solids	102	10	1.0	mg/l		106			4	10	
<b><u>Batch: 9B13054 Extracted: 02/13/09</u></b>											
<b>Blank Analyzed: 02/13/2009 (9B13054-BLK1)</b>											
Perchlorate	ND	4.0	0.90	ug/l							

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

Project ID: Annual Outfall 006

Report Number: ISB0719

Sampled: 02/06/09  
 Received: 02/06/09

## METHOD BLANK/QC DATA

### INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b><u>Batch: 9B13054 Extracted: 02/13/09</u></b>											
<b>LCS Analyzed: 02/13/2009 (9B13054-BS1)</b>											
Perchlorate	26.6	4.0	0.90	ug/l	25.0		106	85-115			
<b>Matrix Spike Analyzed: 02/13/2009 (9B13054-MS1)</b>											
Perchlorate	31.2	4.0	0.90	ug/l	25.0	3.82	109	80-120			
<b>Matrix Spike Dup Analyzed: 02/13/2009 (9B13054-MSD1)</b>											
Perchlorate	31.7	4.0	0.90	ug/l	25.0	3.82	111	80-120	2	20	
<b><u>Batch: 9B16034 Extracted: 02/16/09</u></b>											
<b>Blank Analyzed: 02/16/2009 (9B16034-BLK1)</b>											
Fluoride	0.0343	0.10	0.020	mg/l							J
<b>LCS Analyzed: 02/16/2009 (9B16034-BS1)</b>											
Fluoride	1.00	0.10	0.020	mg/l	1.00		100	90-110			
<b>Matrix Spike Analyzed: 02/16/2009 (9B16034-MS1)</b>											
Fluoride	1.36	0.10	0.020	mg/l	1.00	0.344	102	80-120			
<b>Matrix Spike Dup Analyzed: 02/16/2009 (9B16034-MSD1)</b>											
Fluoride	1.38	0.10	0.020	mg/l	1.00	0.344	103	80-120	1	20	

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: ISB0719

Sampled: 02/06/09

Received: 02/06/09

## METHOD BLANK/QC DATA

### ORGANIC COMPOUNDS BY GC/MS (EPA 525.2)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: C9B0701 Extracted: 02/07/09</b>											
<b>Blank Analyzed: 02/07/2009 (C9B0701-BLK1)</b>											
Chlorpyrifos	ND	1.0	0.10	ug/l							
Diazinon	ND	0.25	0.24	ug/l							
Surrogate: 1,3-Dimethyl-2-nitrobenzene	4.99			ug/l	5.00		100	70-130			
Surrogate: Triphenylphosphate	4.60			ug/l	5.00		92	70-130			
Surrogate: Perylene-d12	4.02			ug/l	5.00		80	70-130			
<b>LCS Analyzed: 02/07/2009 (C9B0701-BS1)</b>											
Chlorpyrifos	5.37	1.0	0.10	ug/l	5.00		107	70-130			MNR1
Diazinon	5.21	0.25	0.24	ug/l	5.00		104	70-130			
Surrogate: 1,3-Dimethyl-2-nitrobenzene	4.91			ug/l	5.00		98	70-130			
Surrogate: Triphenylphosphate	5.04			ug/l	5.00		101	70-130			
Surrogate: Perylene-d12	4.63			ug/l	5.00		93	70-130			
<b>LCS Dup Analyzed: 02/07/2009 (C9B0701-BSD1)</b>											
Chlorpyrifos	5.62	1.0	0.10	ug/l	5.00		112	70-130	5	10	
Diazinon	5.34	0.25	0.24	ug/l	5.00		107	70-130	3	39	
Surrogate: 1,3-Dimethyl-2-nitrobenzene	5.03			ug/l	5.00		101	70-130			
Surrogate: Triphenylphosphate	5.13			ug/l	5.00		103	70-130			
Surrogate: Perylene-d12	4.54			ug/l	5.00		91	70-130			

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: ISB0719

Sampled: 02/06/09  
 Received: 02/06/09

## METHOD BLANK/QC DATA

### MCAWW 245.1

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 9043305 Extracted: 02/12/09</b>											
<b>Matrix Spike Dup Analyzed: 02/12/2009 (D9B100241001D)</b>						<b>Source: D9B100241001</b>					
Mercury	4.61	0.2	0.027	ug/L	5	0.064	91	90-110	3	10	
<b>Matrix Spike Analyzed: 02/12/2009 (D9B100241001S)</b>						<b>Source: D9B100241001</b>					
Mercury	4.75	0.2	0.027	ug/L	5	0.064	94	90-110	3	10	
<b>Blank Analyzed: 02/12/2009 (D9B120000305B)</b>						<b>Source:</b>					
Mercury	0.036	0.2	0.027	ug/L				-			J
<b>LCS Analyzed: 02/12/2009 (D9B120000305C)</b>						<b>Source:</b>					
Mercury	4.77	0.2	0.027	ug/L	5		95	90-110			

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MWH-Pasadena/Boeing  
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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: ISB0719

Sampled: 02/06/09  
 Received: 02/06/09

## METHOD BLANK/QC DATA

### MCAWW 245.1-DISS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 9043330 Extracted: 02/12/09</b>											
<b>Matrix Spike Dup Analyzed: 02/12/2009 (D9B100241001D)</b>						<b>Source: D9B100241001</b>					
Mercury	4.78	0.2	0.027	ug/L	5	0.036	95	90-110	1	10	
<b>Matrix Spike Analyzed: 02/12/2009 (D9B100241001S)</b>						<b>Source: D9B100241001</b>					
Mercury	4.81	0.2	0.027	ug/L	5	0.036	96	90-110	1	10	
<b>Blank Analyzed: 02/12/2009 (D9B120000330B)</b>						<b>Source:</b>					
Mercury	0.039	0.2	0.027	ug/L				-			J
<b>LCS Analyzed: 02/12/2009 (D9B120000330C)</b>						<b>Source:</b>					
Mercury	4.9	0.2	0.027	ug/L	5		98	90-110			

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MWH-Pasadena/Boeing  
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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: ISB0719

Sampled: 02/06/09

Received: 02/06/09

## 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
ISB0719-01	1664-HEM	Hexane Extractable Material (Oil & Greas	mg/l	0.095	4.8	15
ISB0719-01	Antimony-200.8	Antimony	ug/l	0.58	2.0	6
ISB0719-01	Boron-200.7	Boron	mg/l	0.064	0.050	1
ISB0719-01	Cadmium-200.8	Cadmium	ug/l	0.076	1.0	4
ISB0719-01	Chloride - 300.0	Chloride	mg/l	12	0.50	150
ISB0719-01	Copper-200.8	Copper	ug/l	2.10	2.0	14
ISB0719-01	Fluoride SM4500F,C	Fluoride	mg/l	0.27	0.10	1.6
ISB0719-01	Lead-200.8	Lead	ug/l	0.74	1.0	5.2
ISB0719-01	Nickel-200.7	Nickel	ug/l	2.23	10	100
ISB0719-01	Nitrogen, NO3+NO2 -N	Nitrate/Nitrite-N	mg/l	4.61	0.26	10
ISB0719-01	Perchlorate 314.0-DEFAULT	Perchlorate	ug/l	0	4.0	6
ISB0719-01	Sulfate-300.0	Sulfate	mg/l	8.57	0.50	250
ISB0719-01	TDS - SM2540C	Total Dissolved Solids	mg/l	138	10	850
ISB0719-01	Thallium-200.8	Thallium	ug/l	0.16	1.0	2

## Compliance Check

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

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 006

Report Number: ISB0719

Sampled: 02/06/09  
Received: 02/06/09

## DATA QUALIFIERS AND DEFINITIONS

- B** Analyte was detected in the associated Method Blank.
- Ba** The analyte was found in the associated blank, as well as in the sample.
- C** Calibration Verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
- J** Estimated Result: Result is less than RL and greater than or equal to the MDL.
- L** Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above the acceptance limits. Analyte not detected, data not impacted.
- 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).
- M7** The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).
- MHA** Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
- MNR1** There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike/Blank Spike Duplicate.
- R-2** The RPD exceeded the acceptance limit.
- 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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**ISB0719 <Page 55 of 57>**  
**NPDES - 1218**

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

Project ID: Annual Outfall 006

Report Number: ISB0719

Sampled: 02/06/09  
 Received: 02/06/09

## Certification Summary

### TestAmerica Irvine

Method	Matrix	Nelac	California
EPA 1664A	Water	X	X
EPA 200.7-Diss	Water	X	X
EPA 200.7	Water	X	X
EPA 200.8-Diss	Water	X	X
EPA 200.8	Water	X	X
EPA 300.0	Water	X	X
EPA 314.0	Water	X	X
EPA 608	Water	X	X
EPA 624	Water	X	X
EPA 625	Water	X	X
Filtration	Water	N/A	N/A
SM 2540D	Water	X	X
SM 4500-F-C	Water	X	X
SM2340B-Diss	Water		
SM2340B	Water	X	X
SM2540C	Water	X	
SM4500-CN-C,E	Water	X	X

*Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at [www.testamericainc.com](http://www.testamericainc.com)*

### Subcontracted Laboratories

#### Aquatic Testing Laboratories-SUB *California Cert #1775*

4350 Transport Street, Unit 107 - Ventura, CA 93003

Analysis Performed: Bioassay-Acute 96hr  
 Samples: ISB0719-01

#### 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: ISB0719-01

#### TestAmerica Denver

4955 Yarrow Street - Arvada, CO 80002

Method Performed: MCAWW 245.1  
 Samples: ISB0719-01

Method Performed: MCAWW 245.1-DISS  
 Samples: ISB0719-01

### 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 006

Report Number: ISB0719

Sampled: 02/06/09  
Received: 02/06/09

## TestAmerica St. Louis

13715 Rider Trail North - Earth City, MO 63045

Analysis Performed: Gamma Spec  
Samples: ISB0719-01

Analysis Performed: Gross Alpha  
Samples: ISB0719-01

Analysis Performed: Gross Beta  
Samples: ISB0719-01

Analysis Performed: Radium, Combined  
Samples: ISB0719-01

Analysis Performed: Strontium 90  
Samples: ISB0719-01

Analysis Performed: Tritium  
Samples: ISB0719-01

Analysis Performed: Uranium, Combined  
Samples: ISB0719-01

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

1104 Windfield Way - El Dorado Hills, CA 95762

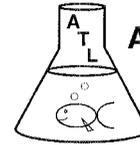
Analysis Performed: 1613-Dioxin-HR-Alta  
Samples: ISB0719-01

## TestAmerica Irvine

Joseph Doak  
Project Manager



# 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 12, 2009  
**Client:** Test America – Irvine  
17461 Derian Ave., Suite 100  
Irvine, CA 92614  
Attn: Joseph Doak

**Laboratory No.:** A-09020704-001  
**Sample ID.:** ISB0719-01 (Outfall 006)

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

Date Sampled: 02/06/09  
Date Received: 02/07/09  
Temp. Received: 1.0°C  
Chlorine (TRC): 0.0 mg/l  
Date Tested: 02/07/09 to 02/11/09

**Sample Analysis:** The following analyses were performed on your sample:  
Fathead Minnow 96hr Percent Survival Bioassay (EPA Method 2000.0).

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

## Result Summary:

<u>Test ID.</u>	<u>Results</u>
Fathead Minnow	100% Survival (TUa = 0.0)

**Quality Control:** Reviewed and approved by:

  
Joseph A. LeMay  
Laboratory Director

**FATHEAD MINNOW PERCENT SURVIVAL TEST**  
**EPA Method 2000.0**



Lab No.: A-09020704-001

Client/ID: TestAmerica - ISB0719-01 (Outfall 006)

Start Date: 02/07/2009

**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-090203.

**TEST DATA**

		°C	DO	pH	# Dead		Analyst & Time of Readings
					A	B	
INITIAL	Control	20.7	8.8	7.7	0	0	R 1500
	100%	19.9	8.8	5.9	0	0	
24 Hr	Control	20.1	8.3	7.6	0	0	Z 1400
	100%	19.4	8.3	7.2	0	0	
48 Hr	Control	19.4	7.2	7.3	0	0	Z 1500
	100%	19.4	6.4	7.0	0	0	
Renewal	Control	19.8	8.1	7.5	0	0	Z 1500
	100%	19.7	8.5	6.8	0	0	
72 Hr	Control	19.1	8.1	7.5	0	0	R 1300
	100%	19.0	7.0	6.9	0	0	
96 Hr	Control	19.1	7.3	7.2	0	0	R 1500
	100%	19.0	7.1	6.9	0	0	

**Comments:**

Sample as received: Chlorine: 0.0 mg/l; pH: 5.9; Conductivity: 150 umho; Temp: 1.0°C;

DO: 8.8 mg/l; Alkalinity: 20 mg/l; Hardness: 22 mg/l; NH<sub>3</sub>-N: 0.4 mg/l.

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

Control: Alkalinity: 60 mg/l; Hardness: 93 mg/l; Conductivity: 300 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 O<sub>2</sub>.

**RESULTS**

Percent Survival In: Control: 100 %    100% Sample: 100 %

**SUBCONTRACT ORDER**

TestAmerica Irvine

**ISB0719**

**SENDING LABORATORY:**

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

**RECEIVING LABORATORY:**

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

Analysis	Units	Due	Expires	Comments
<b>Sample ID: ISB0719-01</b>				
	<b>Water</b>		<b>Sampled: 02/06/09 10:50</b>	
Bioassay-Acute 96hr	% Survival	02/17/09	02/07/09 22:50	FH minnow, EPA/821-R02-012, Sub to AqTox Labs
Level 4 Data Package - Out	N/A	02/17/09	03/06/09 10:50	
<i>Containers Supplied:</i>				
1 gal Poly (W)	1 gal Poly (X)			<i>Outfall colb</i>

*[Signature]*      2-7-09 8:10  
 Released By      Date/Time  
*[Signature]*      2-7-09 12:25  
 Released By      Date/Time

*[Signature]*      2-7-09 8:10  
 Received By      Date/Time  
*[Signature]*      2-7-09 12:25  
 Received By      Date/Time



***REFERENCE  
TOXICANT  
DATA***

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



QA/QC Batch No.: RT-090203

**TEST SUMMARY**

Species: *Pimephales promelas*.

Age: 14 days old.

Regulations: NPDES.

Test chamber volume: 250 ml.

Feeding: Prior to renewal at 48 hrs.

Temperature: 20 +/- 1°C.

Number of replicates: 2.

Dilution water: MHSF.

Source: In-lab culture.

Test type: Static-Renewal.

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

Endpoints: LC50 at 96 hrs.

Test chamber: 600 ml beakers.

Aeration: None.

Number of organisms per chamber: 10.

Photoperiod: 16/8 hrs light/dark.

**TEST DATA**

Date/Time:	INITIAL			24 Hr					48 Hr				
	<u>2-3-09 1430</u>			<u>2-4-09 1400</u>					<u>2-5-09 1330</u>				
	<u>Rn</u>			<u>Rn</u>					<u>Rn</u>				
	°C	DO	pH	°C	DO	pH	# Dead		°C	DO	pH	# Dead	
A							B	A				B	
Control	<u>20.7</u>	<u>8.6</u>	<u>7.7</u>	<u>20.2</u>	<u>8.0</u>	<u>7.5</u>	<u>0</u>	<u>0</u>	<u>20.0</u>	<u>7.5</u>	<u>7.9</u>	<u>0</u>	<u>0</u>
1.0 mg/l	<u>20.7</u>	<u>8.6</u>	<u>7.7</u>	<u>20.2</u>	<u>7.8</u>	<u>7.5</u>	<u>0</u>	<u>0</u>	<u>20.0</u>	<u>7.8</u>	<u>7.7</u>	<u>0</u>	<u>0</u>
2.0 mg/l	<u>20.7</u>	<u>8.7</u>	<u>7.7</u>	<u>20.2</u>	<u>7.5</u>	<u>7.4</u>	<u>0</u>	<u>0</u>	<u>20.1</u>	<u>8.0</u>	<u>7.6</u>	<u>0</u>	<u>0</u>
4.0 mg/l	<u>20.7</u>	<u>8.7</u>	<u>7.8</u>	<u>20.2</u>	<u>7.3</u>	<u>7.3</u>	<u>0</u>	<u>0</u>	<u>20.1</u>	<u>7.8</u>	<u>7.6</u>	<u>0</u>	<u>0</u>
8.0 mg/l	<u>20.7</u>	<u>8.7</u>	<u>7.8</u>	<u>20.1</u>	<u>5.9</u>	<u>7.2</u>	<u>10</u>	<u>10</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>

Date/Time:	RENEWAL			72 Hr					96 Hr				
	<u>2-5-09 1330</u>			<u>2-6-09 1300</u>					<u>2-7-09 1400</u>				
	<u>Rn</u>			<u>Rn</u>					<u>Rn</u>				
	°C	DO	pH	°C	DO	pH	# Dead		°C	DO	pH	# Dead	
A							B	A				B	
Control	<u>20.8</u>	<u>8.8</u>	<u>7.7</u>	<u>20.1</u>	<u>6.6</u>	<u>7.5</u>	<u>0</u>	<u>0</u>	<u>19.6</u>	<u>6.0</u>	<u>7.4</u>	<u>0</u>	<u>0</u>
1.0 mg/l	<u>20.8</u>	<u>8.8</u>	<u>7.7</u>	<u>20.2</u>	<u>6.9</u>	<u>7.5</u>	<u>0</u>	<u>0</u>	<u>19.5</u>	<u>6.2</u>	<u>7.4</u>	<u>0</u>	<u>0</u>
2.0 mg/l	<u>20.8</u>	<u>8.8</u>	<u>7.8</u>	<u>20.1</u>	<u>6.7</u>	<u>7.5</u>	<u>0</u>	<u>0</u>	<u>19.5</u>	<u>6.1</u>	<u>7.3</u>	<u>0</u>	<u>0</u>
4.0 mg/l	<u>20.8</u>	<u>8.9</u>	<u>7.8</u>	<u>20.2</u>	<u>6.9</u>	<u>7.5</u>	<u>0</u>	<u>0</u>	<u>19.5</u>	<u>6.3</u>	<u>7.3</u>	<u>0</u>	<u>0</u>
8.0 mg/l	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>

Comments: Control: Alkalinity: 70 mg/l; Hardness: 92 mg/l; Conductivity: 312 umho.

SDS: Alkalinity: 71 mg/l; Hardness: 93 mg/l; Conductivity: 318 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: 2/3/2009 14:30    Test ID: RT-090203    Sample ID: REF-Ref Toxicant  
 End Date: 2/7/2009 14:00    Lab ID: CAATL-Aquatic Testing Labs    Sample Type: SDS-Sodium dodecyl sulfate  
 Sample Date: 2/3/2009    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	1.0000	1.0000
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	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2	0	20	
8	0.0000	0.0000	0.1588	0.1588	0.1588	0.000	2	20	20	

**Auxiliary Tests**

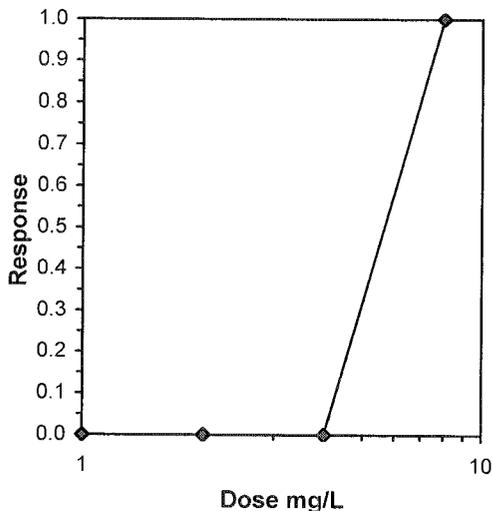
Normality of the data set cannot be confirmed  
 Equality of variance cannot be confirmed

Statistic      Critical      Skew      Kurt

**Graphical Method**

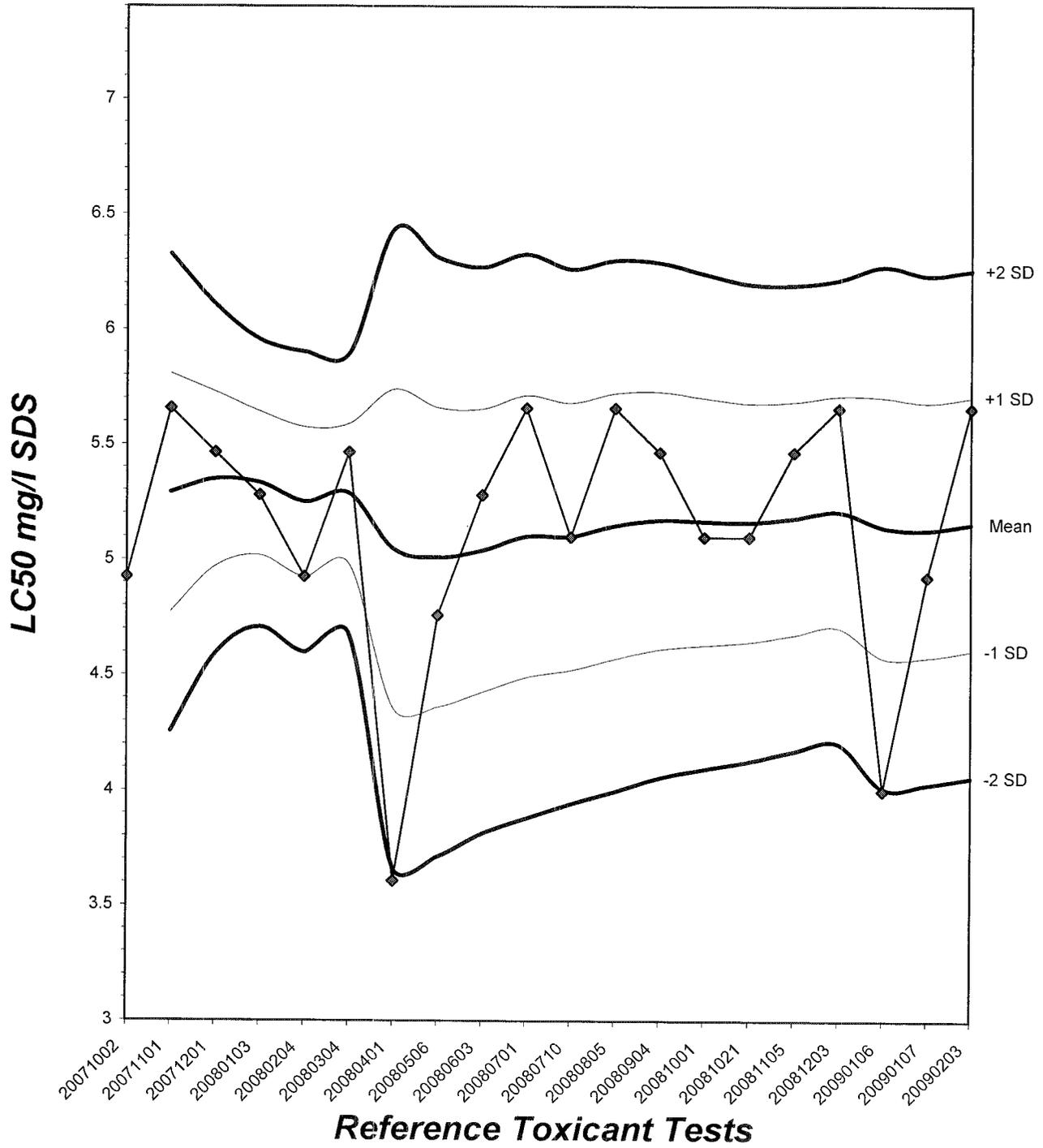
Trim Level    EC50  
 0.0%    5.6569

5.6569



# Fathead Minnow Acute Laboratory Control Chart

CV% = 10.7



# TEST ORGANISM LOG



## FATHEAD MINNOW - LARVAL (*Pimephales promelas*)

QA/QC BATCH NO.: RT-090203

SOURCE: In-Lab Culture

DATE HATCHED: 1-20-09

APPROXIMATE QUANTITY: 400

GENERAL APPEARANCE: good

# MORTALITIES 48 HOURS PRIOR TO  
TO USE IN TESTING: 0

DATE USED IN LAB: 2-13-09

AVERAGE FISH WEIGHT: 0.006 gm

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

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

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

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

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

### ACCLIMATION WATER QUALITY:

Temp.: 20.7 °C

pH: 7.7

Ammonia: 401 mg/l NH<sub>3</sub>-N

DO: 8.6 mg/l

Alkalinity: 70 mg/l

Hardness: 92 mg/l

READINGS RECORDED BY: \_\_\_\_\_

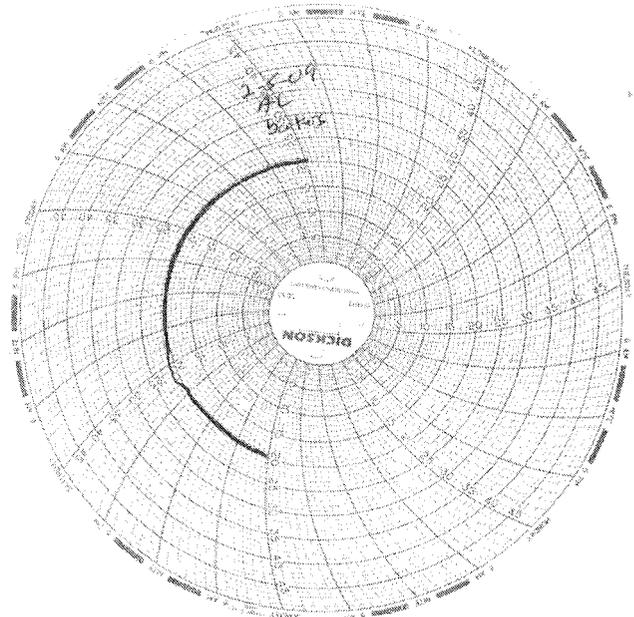
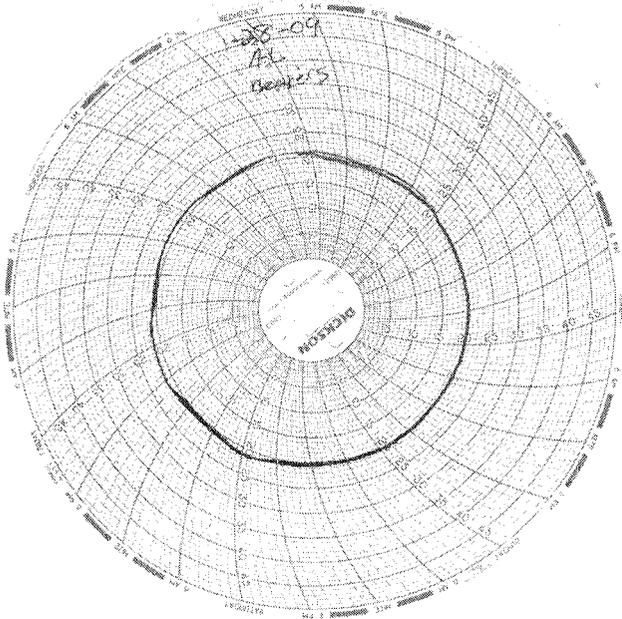
DATE: 2-7-09

# Test Temperature Chart

Test No: RT-090203

Date Tested: 02/03/09 to 02/07/09

Acceptable Range:  $20 \pm 1^{\circ}\text{C}$



## **ANALYTICAL REPORT**

**MWH-Pasadena / Boeing**

Lot D9B100246

Project ISB0719

Joseph Doak  
17461 Derian Avenue  
Suite 100  
Irvine, CA 92614

TestAmerica Laboratories, Inc.



DiLea Griego  
Project Manager

February 17, 2009

## Case Narrative

Enclosed is the report for one sample received at TestAmerica Laboratories, Inc. – Denver laboratory on February 10, 2009. The results included in this report relate only to the samples in this report and have been reviewed for compliance with the laboratory QA/QC plan and meet all requirements of NELAC. All data have been found to be compliant with laboratory protocol, with the exception of any items noted below.

This report may include reporting limits (RLs) less than the Denver laboratory's standard reporting limits. The reported sample results and associated reporting limits are being used specifically to meet the needs of this project. Note that data are not normally reported to these levels without qualification because they are inherently less reliable and potentially less defensible than required by the latest industry standards.

Dilution factors and footnotes have been provided to assist in the interpretation of the results. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at concentrations above the linear calibration curve, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Laboratories, Inc. utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameters listed on the analytical methods summary page in accordance with the methods indicated. A summary of quality control parameters is provided below.

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## Quality Control Summary for Lot D9B100246

### Sample Receiving

The cooler temperature for the sample received on February 10, 2009 at the Denver laboratory was 1.1°C.

### Total Mercury –Method 245.1

A low level of Mercury is present in the method blank associated with QC batch 9043305. Because the concentration in the method blank is not present at a level greater than the reporting limit, corrective action is deemed unnecessary. Associated results in the analytical report have been flagged "B". Usability of the sample data is not compromised.

No other anomalies were observed.

### Dissolved Mercury –Method 245.1

A low level of Mercury is present in the method blank associated with QC batch 9043330. Because the concentration in the method blank is not present at a level greater than the reporting limit, corrective action is deemed unnecessary. Associated results in the analytical report have been flagged "B". Usability of the sample data is not compromised.

No other anomalies were observed.

## Quality Control Definitions of Qualifiers

Qualifier	Definition
U	Result is less than the method detection limit (MDL).
B	Organics: Method blank contamination. The associated method blank contains the target analyte at a reportable level. Inorganics: Estimated result. Result is less than the RL
J	Organics: Estimated result. Result is less than RL Inorganics: Method blank contamination. The associated method blank contains the target analyte at a reportable level.
E	Estimated result. Result concentrations exceed the calibration range.
p	Relative Percent Difference (RPD) is outside control limits.
*	Surrogate or Relative Percent Difference (RPD) is outside control limits.
DIL	The concentration is estimated or not reported due to dilution.
COL	More than 40% difference between the primary and confirmation detector results. The lower of the two results is reported.
CHI	More than 40% difference between the primary and confirmation detector results. The higher of the two results is reported.
L	Serial dilution of a digestate in the analytical batch indicates that physical and chemical interferences are present.
a	Spiked analyte recovery is outside stated control limits.
N	Spiked analyte recovery is outside stated control limits.
NC	The recovery and/or RPD were not calculated.
MSB	The recovery and/or RPD were not calculated because the sample amount was greater than four times the spike amount.

# EXECUTIVE SUMMARY - Detection Highlights

D9B100246

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
ISB0719-01 02/06/09 10:50 001				
Mercury - DISSOLVED	0.041 J,B	0.20	ug/L	MCAWW 245.1
Mercury	0.047 J,B	0.20	ug/L	MCAWW 245.1

# METHODS SUMMARY

D9B100246

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Dissolved Mercury (CVAA)	MCAWW 245.1	MCAWW 245.1
Mercury (Manual Cold Vapor Technique)	MCAWW 245.1	MCAWW 245.1

## References:

MCAWW "Methods for Chemical Analysis of Water and Wastes",  
EPA-600/4-79-020, March 1983 and subsequent revisions.

# METHOD / ANALYST SUMMARY

D9B100246

<u>ANALYTICAL METHOD</u>	<u>ANALYST</u>	<u>ANALYST ID</u>
MCAWW 245.1	Christopher Gridale	9582

## References:

MCAWW "Methods for Chemical Analysis of Water and Wastes",  
EPA-600/4-79-020, March 1983 and subsequent revisions.

# SAMPLE SUMMARY

D9B100246

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT</u>	<u>SAMPLE ID</u>	<u>SAMPLED</u>	<u>SAMP</u>
				<u>DATE</u>	<u>TIME</u>
K61MV	001	ISB0719-01		02/06/09	10:50

**NOTE (S) :**

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

# QC DATA ASSOCIATION SUMMARY

D9B100246

## Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	WATER	MCAWW 245.1		9043305	9043172
	WATER	MCAWW 245.1		9043330	9043187

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## Total Metals

CLP-Like Forms

Lot ID:     D9B100246    

Client:     TestAmerica-Irvine    

Method:     245.1    

Associated Samples:     -001    

Batch:     9043305

Total Metals Analysis  
COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: TestAmerica Irvine SDG No.: D9B100246  
Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_  
SOW No.: \_\_\_\_\_

Sample ID. Lab Sample No.  
ISB0719-01 D9B100246-001

Were ICP interelement corrections applied? Yes/No YES  
Were ICP background corrections applied? Yes/No YES  
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Janice Collins Name: Janice Collins  
Date: 2/16/09 Title: Metals Analyst

## TestAmerica Irvine

### Total Metals Analysis Data Sheet

<b>Lab Name:</b>	<u>TESTAMERICA DENVER</u>	<b>Client Sample ID:</b>	<u>ISB0719-01</u>
<b>Lot/SDG Number:</b>	<u>D9B100246</u>	<b>Lab Sample ID:</b>	<u>D9B100246-001</u>
<b>Matrix:</b>	<u>WATER</u>	<b>Lab WorkOrder:</b>	<u>K61MV</u>
<b>% Moisture:</b>	<u>N/A</u>	<b>Date/Time Collected:</b>	<u>02/06/09 10:50</u>
<b>Basis:</b>	<u>Wet</u>	<b>Date/Time Received:</b>	<u>02/10/09 09:00</u>
<b>Analysis Method:</b>	<u>245.1</u>	<b>Date Leached:</b>	
<b>Unit:</b>	<u>ug/L</u>	<b>Date/Time Extracted:</b>	<u>02/12/09 15:10</u>
<b>QC Batch ID:</b>	<u>9043305</u>	<b>Date/Time Analyzed:</b>	<u>02/12/09 18:19</u>
<b>Sample Aliquot:</b>	<u>10 mL</u>	<b>Instrument ID:</b>	<u>023</u>
<b>Dilution Factor:</b>	<u>1</u>		

CAS No.	Analyte	Conc.	MDL	RL	Q
7439-97-6	Mercury	0.047	0.027	0.20	J B

Total Metals Analysis

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: TestAmerica Irvine

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG NO.: D9B100246

Initial Calibration Source: Inorganic Ventures

Continuing Calibration Source: Ultra Scientific

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury	7.000	6.914	98.8	5.000	4.934	98.7	4.986	99.7	CV

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

**Total Metals Analysis**  
**-2B-**  
**CRDL STANDARD FOR AA AND ICP**

Contract: TestAmerica Irvine

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: D9B100246

AA CRDL Standard Source: Ultra Scientific

ICP CRDL Standard Source: \_\_\_\_\_

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	Initial			Final	
				True	Found	%R	Found	%R
Mercury	0.200	0.21300	106.5					

Comments:

## TestAmerica Irvine

### Total Metals Analysis Data Sheet

**Lab Name:** TESTAMERICA DENVER  
**Lot/SDG Number:** D9B100246  
**Matrix:** WATER  
**% Moisture:**  
**Basis:** Wet  
**Analysis Method:** 245.1  
**Unit:** ug/L  
**QC Batch ID:** 9043305  
**Sample Aliquot:** 10 mL  
**Dilution Factor:** 1

**Client Sample ID:**  
**Lab Sample ID:** D9B120000-305B  
**Lab WorkOrder:** K64MV  
**Date/Time Collected:**  
**Date/Time Received:**  
**Date Leached:**  
**Date/Time Extracted:** 02/12/09 15:10  
**Date/Time Analyzed:** 02/12/09 18:03  
**Instrument ID:** 023

CAS No.	Analyte	Conc.	MDL	RL	Q
7439-97-6	Mercury	0.036	0.027	0.20	J

**Total Metals Analysis**

-3-

**BLANKS**

Contract: TestAmerica Irvine

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG NO.: D9B100246

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	Continuing Calibration Blank (ug/L)						Preparation Blank		M	
		C	1	C	2	C	3	C	C		
Mercury	0.027	U	0.027	U	0.027	U			0.036	B	CV

Comments:

## TestAmerica Irvine

### Total Metals Analysis Data Sheet

<b>Lab Name:</b>	<u>TESTAMERICA DENVER</u>	<b>Client Sample ID:</b>	<u>LAB MS/MSD</u>
<b>Lot/SDG Number:</b>	<u>D9B100246</u>	<b>MS Lab Sample ID:</b>	<u>D9B100241-001S</u>
<b>Matrix:</b>	<u>WATER</u>	<b>MS Lab WorkOrder:</b>	<u>K61L8</u>
<b>% Moisture:</b>	<u>N/A</u>	<b>Date/Time Collected:</b>	<u>02/07/09 08:50</u>
<b>Basis:</b>	<u>Wet</u>	<b>Date/Time Received:</b>	<u>02/10/09 09:00</u>
<b>Analysis Method:</b>	<u>245.1</u>	<b>Date Leached:</b>	
<b>Unit:</b>	<u>ug/L</u>	<b>Date/Time Extracted:</b>	<u>02/12/09 15:10</u>
<b>QC Batch ID:</b>	<u>9043305</u>	<b>Date/Time Analyzed:</b>	<u>02/12/09 18:10</u>
<b>MS Sample Aliquot:</b>	<u>10 mL</u>	<b>Instrument ID:</b>	<u>023</u>
<b>MS Dilution Factor:</b>	<u>1</u>		

Analyte	Spike Amount	Sample Result	C	MS Result	C	% Rec	Q	QC Limit
Mercury	5.00	0.064	J B	4.75		94		90 - 110

## TestAmerica Irvine

### Total Metals Analysis Data Sheet

**Lab Name:** TESTAMERICA DENVER  
**Lot/SDG Number:** D9B100246  
**Matrix:** WATER  
**% Moisture:** N/A  
**Basis:** Wet  
**Analysis Method:** 245.1  
**Unit:** ug/L  
**QC Batch ID:** 9043305  
**MSD Sample Aliquot:** 10 mL  
**MSD Dilution Factor:** 1

**Client Sample ID:** LAB MS/MSD  
**MSD Lab Sample ID:** D9B100241-001D  
**MSD Lab WorkOrder:** K61L8  
**Date/Time Collected:** 02/07/09 08:50  
**Date/Time Received:** 02/10/09 09:00  
**Date Leached:**   
**Date/Time Extracted:** 02/12/09 15:10  
**Date/Time Analyzed:** 02/12/09 18:12  
**Instrument ID:** 023

Analyte	Spike Amount	Sample Result	C	MSD Result	C	% Rec	Q	RPD	Q	QC Limits	
										% Rec	RPD
Mercury	5.00	0.064	JB	4.61		91		3.0		90 - 110	10

## TestAmerica Irvine

### Total Metals Analysis Data Sheet

**Lab Name:** TESTAMERICA DENVER  
**Lot/SDG Number:** D9B100246  
**Matrix:** WATER  
**% Moisture:** N/A  
**Basis:** Wet  
**Analysis Method:** 245.1  
**Unit:** ug/L  
**QC Batch ID:** 9043305  
**Sample Aliquot:** 10 mL  
**Dilution Factor:** 1

**Client Sample ID:**  
**Lab Sample ID:** D9B120000-305C  
**Lab WorkOrder:** K64MV  
**Date/Time Collected:**  
**Date/Time Received:**  
**Date Leached:**  
**Date/Time Extracted:** 02/12/09 15:10  
**Date/Time Analyzed:** 02/12/09 18:05  
**Instrument ID:** 023

Analyte	True	Found	%Rec	Q	Limits
Mercury	5.00	4.77	95		90 - 110

Total Metals Analysis

-10-

DETECTION LIMITS

Contract: TestAmerica Irvine

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG NO.: D9B100246

ICP ID Number: \_\_\_\_\_ Date: 12/26/2008

Flame AA ID Number: Cetac M7500 Hg

Furnace AA ID Number: \_\_\_\_\_

Analyte	Wave-length (nm)	Back-ground	PQL (ug/L)	MDL (ug/L)	M
Mercury	253.70		0.20	0.027	CV

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total Metals Analysis

-13-

PREPARATION LOG

Contract: TestAmerica Irvine

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG NO.: D9B100246

Method: CV Prep Method: \_\_\_\_\_

Sample ID	Preparation Date	Initial Volume	Final Volume (mL)
INTRA-LAB QC	2/12/2009	10.0	10.0
LAB MS/MSD MS	2/12/2009	10.0	10.0
LAB MS/MSD MSD	2/12/2009	10.0	10.0
ISB0719-01	2/12/2009	10.0	10.0
MB9043305	2/12/2009	10.0	10.0
Check Sample	2/12/2009	10.0	10.0

Comments:

Total Metals Analysis

-14-

ANALYSIS RUN LOG

Contract: TestAmerica Irvine  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: D9B100246  
 Instrument ID Number: Cetac M7500 Hg Method: CV  
 Start Date: 2/12/2009 End Date: 2/12/2009

Sample ID.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K I	S E	A G	N A	T A	V L	Z L	C N	C N			
Cal Blank	1.00	17:29																											X		
Std1	1.00	17:31																											X		
Std2	1.00	17:33																											X		
Std3	1.00	17:36																											X		
Std4	1.00	17:38																											X		
Std5	1.00	17:40																											X		
Std6	1.00	17:43																											X		
ICB	1.00	17:52																											X		
ICV	1.00	17:54																											X		
RL	1.00	17:56																											X		
CCV	1.00	17:59																											X		
CCB	1.00	18:01																											X		
MB9043305	1.00	18:03																											X		
Check Sample	1.00	18:05																											X		
INTRA-LAB QC	1.00	18:08																											X		
LAB MS/MSD MS	1.00	18:10																											X		
LAB MS/MSD MSD	1.00	18:12																											X		
ISB0719-01	1.00	18:19																											X		
CCV	1.00	18:26																											X		
CCB	1.00	18:28																											X		

\* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14.

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## Dissolved Metals

CLP-Like Forms

Lot ID: D9B100246

Client: TestAmerica-Irvine

Method: 245.1

Associated Samples: -001

Batch: 9043330

Dissolved Metals Analysis  
COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: TestAmerica Irvine SDG No.: D9B100246  
Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_  
SOW No.: \_\_\_\_\_

Sample ID. Lab Sample No.  
ISB0719-01 D9B100246-001

Were ICP interelement corrections applied? Yes/No YES  
Were ICP background corrections applied? Yes/No YES  
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Janice Collins Name: Janice Collins  
Date: 3/16/09 Title: Metals Analyst

## TestAmerica Irvine

### Dissolved Metals Analysis Data Sheet

**Lab Name:** TESTAMERICA DENVER  
**Lot/SDG Number:** D9B100246  
**Matrix:** WATER  
**% Moisture:** N/A  
**Basis:** Wet  
**Analysis Method:** 245.1  
**Unit:** ug/L  
**QC Batch ID:** 9043330  
**Sample Aliquot:** 10 mL  
**Dilution Factor:** 1

**Client Sample ID:** ISB0719-01  
**Lab Sample ID:** D9B100246-001  
**Lab WorkOrder:** K61MV  
**Date/Time Collected:** 02/06/09 10:50  
**Date/Time Received:** 02/10/09 09:00  
**Date Leached:**  
**Date/Time Extracted:** 02/12/09 15:10  
**Date/Time Analyzed:** 02/12/09 19:03  
**Instrument ID:** 023

CAS No.	Analyte	Conc.	MDL	RL	Q
7439-97-6	Mercury	0.041	0.027	0.20	JB

**Dissolved Metals Analysis**  
 -2A-  
**INITIAL AND CONTINUING CALIBRATION VERIFICATION**

Contract: TestAmerica Irvine

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG NO.: D9B100246

Initial Calibration Source: Inorganic Ventures

Continuing Calibration Source: Ultra Scientific

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury	7.000	6.914	98.8	5.000	4.934	98.7	4.986	99.7	CV

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

Dissolved Metals Analysis  
-2A-  
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: TestAmerica Irvine

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG NO.: D9B100246

Initial Calibration Source: Inorganic Ventures

Continuing Calibration Source: Ultra Scientific

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury				5.000	4.966	99.3	4.983	99.7	CV

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

**Dissolved Metals Analysis**  
**-2B-**  
**CRDL STANDARD FOR AA AND ICP**

Contract: TestAmerica Irvine

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: D9B100246

AA CRDL Standard Source: Ultra Scientific

ICP CRDL Standard Source: \_\_\_\_\_

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	Initial		Final		
				True	Found	%R	Found	%R
Mercury	0.200	0.21300	106.5					

Comments:

## TestAmerica Irvine

### Dissolved Metals Analysis Data Sheet

**Lab Name:** TESTAMERICA DENVER  
**Lot/SDG Number:** D9B100246  
**Matrix:** WATER  
**% Moisture:**  
**Basis:** Wet  
**Analysis Method:** 245.1  
**Unit:** ug/L  
**QC Batch ID:** 9043330  
**Sample Aliquot:** 10 mL  
**Dilution Factor:** 1

**Client Sample ID:**  
**Lab Sample ID:** D9B120000-330B  
**Lab WorkOrder:** K64PQ  
**Date/Time Collected:**  
**Date/Time Received:**  
**Date Leached:**  
**Date/Time Extracted:** 02/12/09 15:10  
**Date/Time Analyzed:** 02/12/09 18:42  
**Instrument ID:** 023

CAS No.	Analyte	Conc.	MDL	RL	Q
7439-97-6	Mercury	0.039	0.027	0.20	J

**Dissolved Metals Analysis**

-3-

**BLANKS**

Contract: TestAmerica Irvine

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG NO.: D9B100246

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	Continuing Calibration Blank (ug/L)						Preparation Blank	M		
		C	1	C	2	C	3			C	C
Mercury	0.027	U	0.027	U	0.027	U	0.027	U	0.039	B	CV

Comments:

**Dissolved Metals Analysis**

-3-

**BLANKS**

Contract: TestAmerica Irvine

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG NO.: D9B100246

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L)						Preparation Blank	C	M
			1	C	2	C	3	C			
Mercury			0.027	U							CV

Comments:

## TestAmerica Irvine

### Dissolved Metals Analysis Data Sheet

**Lab Name:** TESTAMERICA DENVER  
**Lot/SDG Number:** D9B100246  
**Matrix:** WATER  
**% Moisture:** N/A  
**Basis:** Wet  
**Analysis Method:** 245.1  
**Unit:** ug/L  
**QC Batch ID:** 9043330  
**MS Sample Aliquot:** 10 mL  
**MS Dilution Factor:** 1

**Client Sample ID:** LAB MS/MSD  
**MS Lab Sample ID:** D9B100241-001S  
**MS Lab WorkOrder:** K61L8  
**Date/Time Collected:** 02/07/09 08:50  
**Date/Time Received:** 02/10/09 09:00  
**Date Leached:**  
**Date/Time Extracted:** 02/12/09 15:10  
**Date/Time Analyzed:** 02/12/09 18:49  
**Instrument ID:** 023

Analyte	Spike Amount	Sample Result	C	MS Result	C	% Rec	Q	QC Limit
Mercury	5.00	0.036	JB	4.81		96		90 - 110

## TestAmerica Irvine

### Dissolved Metals Analysis Data Sheet

**Lab Name:** TESTAMERICA DENVER  
**Lot/SDG Number:** D9B100246  
**Matrix:** WATER  
**% Moisture:** N/A  
**Basis:** Wet  
**Analysis Method:** 245.1  
**Unit:** ug/L  
**QC Batch ID:** 9043330  
**MSD Sample Aliquot:** 10 mL  
**MSD Dilution Factor:** 1

**Client Sample ID:** LAB MS/MSD  
**MSD Lab Sample ID:** D9B100241-001D  
**MSD Lab WorkOrder:** K61L8  
**Date/Time Collected:** 02/07/09 08:50  
**Date/Time Received:** 02/10/09 09:00  
**Date Leached:**  
**Date/Time Extracted:** 02/12/09 15:10  
**Date/Time Analyzed:** 02/12/09 18:52  
**Instrument ID:** 023

Analyte	Spike Amount	Sample Result	C	MSD Result	C	% Rec	Q	RPD	Q	QC Limits	
										% Rec	RPD
Mercury	5.00	0.036	JB	4.78		95		0.77		90 - 110	10

## TestAmerica Irvine

### Dissolved Metals Analysis Data Sheet

**Lab Name:** TESTAMERICA DENVER  
**Lot/SDG Number:** D9B100246  
**Matrix:** WATER  
**% Moisture:** N/A  
**Basis:** Wet  
**Analysis Method:** 245.1  
**Unit:** ug/L  
**QC Batch ID:** 9043330  
**Sample Aliquot:** 10 mL  
**Dilution Factor:** 1

**Client Sample ID:**  
**Lab Sample ID:** D9B120000-330C  
**Lab WorkOrder:** K64PQ  
**Date/Time Collected:**  
**Date/Time Received:**  
**Date Leached:**  
**Date/Time Extracted:** 02/12/09 15:10  
**Date/Time Analyzed:** 02/12/09 18:45  
**Instrument ID:** 023

Analyte	True	Found	%Rec	Q	Limits
Mercury	5.00	4.90	98		90 - 110

Dissolved Metals Analysis

-10-

DETECTION LIMITS

Contract: TestAmerica Irvine

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG NO.: D9B100246

ICP ID Number: \_\_\_\_\_ Date: 12/26/2008

Flame AA ID Number: Cetac M7500 Hg

Furnace AA ID Number: \_\_\_\_\_

Analyte	Wave-length (nm)	Back-ground	PQL (ug/L)	MDL (ug/L)	M
Mercury	253.70		0.20	0.027	CV

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Dissolved Metals Analysis

-13-

PREPARATION LOG

Contract: TestAmerica Irvine

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG NO.: D9B100246

Method: CV Prep Method: \_\_\_\_\_

Sample ID	Preparation Date	Initial Volume	Final Volume (mL)
INTRA-LAB QC	2/12/2009	10.0	10.0
LAB MS/MSD MS	2/12/2009	10.0	10.0
LAB MS/MSD MSD	2/12/2009	10.0	10.0
ISB0719-01	2/12/2009	10.0	10.0
MB9043330	2/12/2009	10.0	10.0
Check Sample	2/12/2009	10.0	10.0

Comments:

Dissolved Metals Analysis

-14-

ANALYSIS RUN LOG

Contract: TestAmerica Irvine

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: D9B100246

Instrument ID Number: Cetac M7500 Hg Method: CV

Start Date: 2/12/2009 End Date: 2/12/2009

Sample ID.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	A L	N T	T V	Z N	C N				
Cal Blank	1.00	17:29																										X			
Std1	1.00	17:31																										X			
Std2	1.00	17:33																										X			
Std3	1.00	17:36																										X			
Std4	1.00	17:38																										X			
Std5	1.00	17:40																										X			
Std6	1.00	17:43																										X			
ICB	1.00	17:52																										X			
ICV	1.00	17:54																										X			
RL	1.00	17:56																										X			
CCV	1.00	17:59																										X			
CCB	1.00	18:01																										X			
CCV	1.00	18:26																										X			
CCB	1.00	18:28																										X			
MB9043330	1.00	18:42																										X			
Check Sample	1.00	18:45																										X			
INTRA-LAB QC	1.00	18:47																										X			
LAB MS/MSD MS	1.00	18:49																										X			
LAB MS/MSD MSD	1.00	18:52																										X			
CCV	1.00	18:54																										X			
CCB	1.00	18:56																										X			
ISB0719-01	1.00	19:03																										X			
CCV	1.00	19:22																										X			
CCB	1.00	19:24																										X			

\* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

TestAmerica Denver  
Sample Receiving Checklist

Lot #: D9B100246 Date/Time Received: 2/10/9 0900

Company Name & Sampling Site: TA Irvine

PM to Complete This Section: *Yes* *No*      *Yes* *No*  
Residual chlorine check required:        Quarantined:

Quote #: 72743

Special Instructions:

Time Zone:  
• EDT/EST • CDT/CST • MDT/MST • PDT/PS7 • OTHER

Unpacking Checks:

Cooler #(s): 1

Temperatures (°C): 1.1

N/A Yes No

- 1. Cooler seals intact? (N/A if hand delivered) If no, document on CUR.
- 2. Coolers scanned for radiation. Is the reading  $\leq$  to background levels? Yes:  No:
- 3. Chain of custody present? If no, document on CUR.
- 4. Bottles broken and/or are leaking? If yes, document on CUR.
- 5. Multiphasic samples obvious? If yes, document on CUR.
- 6. Proper container & preservatives used? (ref. Attachment D of SOP# DV-QA-0003) If no, document on CUR.
- 7. pH of all samples checked and meet requirements? If no, document on CUR.
- 8. Sufficient volume provided for all analysis requested? (ref. Attachment D of SOP# DV-QA-0003) If no, document on CUR, and contact PM before proceeding.
- 9. Did chain of custody agree with labels ID and samples received? If no, document on CUR.
- 10. Were VOA samples without headspace? If no, document on CUR.
- 11. Were VOA vials preserved? Preservative  HCl  4 $\pm$ 2°C  Sodium Thiosulfate  Ascorbic Acid
- 12. Did samples require preservation with sodium thiosulfate?
- 13. If yes to #11, did the samples contain residual chlorine? If yes, document on CUR.
- 14. Sediment present in dissolved/filtered bottles? If yes, document on CUR.
- 15. Is sufficient volume provided for client requested MS, MSD or matrix duplicates? If no, document on CUR, and contact PM before proceeding.
- 16. Receipt date(s) > 48 hours past the collection date(s)? If yes, notify PA/PM.
- 17. Are analyses with short holding times requested?
- 18. Was a quick Turn Around (TAT) requested?

TestAmerica Denver  
Sample Receiving Checklist

Lot # D9B100246

Login Checks:

Initials  
AC

N/A Yes No

- 19. Sufficient volume provided for all analysis requested? (ref. Attachment D of SOP# DV-QA-0003) If no, document on CUR, and contact PM before proceeding.
- 20. Is sufficient volume provided for client requested MS, MSD or matrix duplicates? If no, document on CUR, and contact PM before proceeding.
- 21. Did the chain of custody includes "received by" and "relinquished" by signatures, dates, and times?
- 22. Were special log in instructions read and followed?
- 23. Were AFCEE metals logged for refrigerated storage?
- 24. Were tests logged checked against the COC? Which samples were confirmed? All
- 25. Was a Rush form completed for quick TAT?
- 26. Was a Short Hold form completed for any short holds?
- 27. Were special archiving instructions indicated in the General Comments? If so, what were they?

Labeling and Storage Checks:

Initials

DB

- 28. Was the subcontract COC signed and sent with samples to bottle prep?
- 29. Were sample labels double-checked by a second person?
- 30. Were sample bottles and COC double checked for dissolved/filtered metals by a second person?
- 31. Did the sample ID, Date, and Time from label match what was logged?
- 32. Were stickers for special archiving instructions affixed to each box? See #27
- 33. Were AFCEE metals stored refrigerated?

Document any problems or discrepancies and the actions taken to resolve them on a Condition Upon Receipt Anomaly Report (CUR).

1.16C  
2002  
2/10/09

**SUBCONTRACT ORDER**

**TestAmerica Irvine  
ISB0719**

**SENDING LABORATORY:**

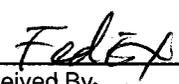
TestAmerica Irvine  
17461 Derian Avenue, Suite 100  
Irvine, CA 92614  
Phone: (949) 261-1022  
Fax: (949) 260-3297  
Project Manager: Joseph Doak  
Client: MWH-Pasadena/Boeing

**RECEIVING LABORATORY:**

TestAmerica Denver  
4955 Yarrow Street  
Arvada, CO 80002  
Phone : (303) 736-0100  
Fax: (303) 431-7171  
Project Location: CA - CALIFORNIA  
Receipt Temperature: \_\_\_\_\_ °C      Ice: Y / N

Analysis	Units	Due	Expires	Interlab Price Surch	Comments
<b>Sample ID: ISB0719-01      Water      Sampled: 02/06/09 10:50</b>					
EDD + Level 4	N/A	02/17/09	03/06/09 10:50	\$0.00	0%
Mercury - 245.1, Diss -OUT	ug/l	02/17/09	03/06/09 10:50	\$36.00	0% Boeing, J flags, sub to Denver
Mercury - 245.1-OUT	ug/l	02/17/09	03/06/09 10:50	\$36.00	0% Boeing, J flags, sub to Denver
<i>Containers Supplied:</i>					
125 mL Poly (AA)	1 L Poly w/HNO3 (B)				

 \_\_\_\_\_  
Released By      2/9/09 17:00  
Date/Time

 \_\_\_\_\_  
Received By      2/9/09 17:00  
Date/Time

Released By: \_\_\_\_\_  
TestAmerica      Date/Time

 \_\_\_\_\_  
Received By      2/10/09 0900  
Date/Time      Page 1 of 1  
NPDES - 1269      39

# Metals

## Supporting Documentation

Sample Sequence, Instrument Printouts

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Lot ID: D9B100246

Client: TA-Irvine-Boeing

Batch(es) #: 9043305 + 9043330

Associated Samples: 1

*I certify that, to the best of my knowledge, the attached package represents a complete and accurate copy of the original data.*

Signature/Date: Christopher Frisdale 2/13/09

# *Metals Raw Data RoadMap*

<i>LotID</i>		<i>Metal</i>	<i>WorkOrder</i>	<i>Anal Date</i>	<i>TestDesc</i>	<i>Batch</i>	<i>File Id</i>	<i>Instr</i>
D9B100246	1	HG	K61MV1AC	20090212	M2451DS	9043330	090212AA	023
D9B100246	1	HG	K61MV1AA	20090212	M2451_L	9043305	090212AA	023

**METALS  
PREPARATION LOGS  
CVAA**

**TestAmerica**

**THE LEADER IN ENVIRONMENTAL TESTING**

**SUPPLEMENTAL METALS PREP SHEET**

(Used in conjunction with METALS PREP LOG/BATCH SUMMARY)



THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Denver

**Hg PREP & ANALYSIS - WATERS**

SOP: DEN-MT-0015 QC Batch #: 9043305

Prep Date: 02/12/09	Prep By: CGG	Analysis Date: 02/12/09	Analyst: CGG
---------------------	--------------	-------------------------	--------------

Balance ID: H53865	Thermometer ID: MT 4025
--------------------	-------------------------

Digestion Cycles	Start Time	Temp °C	End Time	Temp °C
	15:10	93	17:10	94

Purple color persists or black ppt present:  Yes  No If "No", explain in Comments below.

**Digestion Tube Lot # :**

For dissolved mercury only, were samples filtered in the lab?  Yes  No

One or more samples were filtered prior to analysis at the instrument.  Yes  No

If "yes", then the method blank and the LCS were also filtered in the same manner using the same type of filter.

Analyst(s) Initials: CG

**Reagents Used**

Reagent	Manufacturer	Lot #	Standards Log #	Vol (mL)
HNO <sub>3</sub>	JT Baker	G25032		0.25
H <sub>2</sub> SO <sub>4</sub>	Fisher	E49F06		0.5
HCl	JT Baker	G36024		used by instrument
10% SnCl <sub>2</sub>	Fisher	G20637	STD-0827-09	added by instrument
NaCl / NH <sub>2</sub> OH	Fisher	G28617	STD-0688-09	0.6
	Fisher	G06476		
KMnO <sub>4</sub>	Fisher	G10662	STD-0826-09	1.5
K <sub>2</sub> S <sub>2</sub> O <sub>8</sub>	Fisher	083661	STD-0351-09	0.8

**Parent Calibration Stock Standards**

	Lot #	Verification #	Exp. Date
Second Source	A2-HG02056	STD-2364-08	06/01/09
Primary Calibration	H00091	STD-1683-08	05/01/09

**Standards Preparation**

Final digestate volume = 10 ml

Standards	Final Conc	Parent Standard	Standards Log #	Vol (mL)	Pipette
Cal Working	10 mg/L	Primary Cal	See Attached Standards Log Printouts	1.00	7
Daily Cal Working	100 ug/L	Cal Working		1.00	7
ICAL 0.2	0.2 ug/L	Daily Cal Working		0.2	7
ICAL 0.5	0.5 ug/L	Daily Cal Working		0.5	7
ICAL 1	1.0 ug/L	Daily Cal Working		1.0	7
ICAL 2	2.0 ug/L	Daily Cal Working		2.0	7
ICAL 5	5.0 ug/L	Daily Cal Working		5.0	24
ICAL 10	10 ug/L	Daily Cal Working		10.0	24
CCV	5 ug/L	Daily Cal Working		5.0	7
ICV Intermed	700 ug/L	ICV Stock		0.70	7
ICV Daily Working	7.0 ug/L	ICV Intermed		1.00	7
LCS	5 ug/L	Daily Cal Working		0.5	7
MS/MSD	5 ug/L	Daily Cal Working		0.5	7
RL	0.2 ug/L	Daily Cal Working		0.2	7

**Second Source ICV Intermediate Stock Standard Prep**

Standards Log #: STD-0647-09

NOTE: Details for each reagent & standard prep are documented in the attached Standards Preparation Logbook Record.

Comments *Total - 245.1 - Boeing*

I certify that all information above is correct and complete.

Signature: Cris Strode

Date: 2/13/09

REVIEWED BY: DB

Date: 2/16/09

# TestAmerica Laboratories, Inc. Metals Prep Log/ Batch Summary

Prep Date: ~~02/12/09~~ CS 2/12/09  
Due Date: 02/16/09

Lot	Work Order		Due Date:	Initial Weight/Volume
D9B120000 Water	K64MV	B 1	Due Date: SDG:	<u>10 mL</u>
D9B120000 Water	K64MV	C 2	Due Date: SDG:	<u>10 mL</u>
D9B100241 Water	K61L8 Total	3	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100241 Water	K61L8 Total	S 4	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100241 Water	K61L8 Total	D 5	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100246 Water	K61MV Total	6	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100249 Water	K61NK Total	7	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100255 Water	K61PL Total	8	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100257 Water	K61P6 Total	9	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100260 Water	K61Q2 Total	10	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100262 Water	K61RN Total	11	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100267 Water	K61VL Total	12	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100268 Water	K61V5 Total	13	Due Date: 02/16/09 SDG:	<u>10 mL</u>

**Comments:**

B-BLANK; C-CHECK SAMPLE; L-CHECK SAMPLE DUPLICATE; P-SERIAL DILUTION; S-MATRIX SPIKE SAMPLE; D-MATRIX SPIKE DUPLICATE SAMPLE

CS 2/12/09

Start	15:10	93°C
End	17:10	94°C

**SUPPLEMENTAL METALS PREP SHEET**

(Used in conjunction with METALS PREP LOG/BATCH SUMMARY)



THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Denver

**Hg PREP & ANALYSIS - WATERS**

SOP: DEN-MT-0015 QC Batch #: 9043330

Prep Date: 02/12/09	Prep By: CGG	Analysis Date: 02/12/09	Analyst: CGG
---------------------	--------------	-------------------------	--------------

Balance ID: H53865	Thermometer ID: MT 4025
--------------------	-------------------------

Digestion Cycles	Start Time	Temp °C	End Time	Temp °C
	15:10	93	17:10	94

Purple color persists or black ppt present:  Yes  No If "No", explain in Comments below.

**Digestion Tube Lot # :**

For dissolved mercury only, were samples filtered in the lab?  Yes  No

One or more samples were filtered prior to analysis at the instrument.  Yes  No

If "yes", then the method blank and the LCS were also filtered in the same manner using the same type of filter.

Analyst(s) Initials:

**Reagents Used**

Reagent	Manufacturer	Lot #	Standards Log #	Vol (mL)
HNO <sub>3</sub>	JT Baker	G25032		0.25
H <sub>2</sub> SO <sub>4</sub>	Fisher	E49F06		0.5
HCl	JT Baker	G36024		used by instrument
10% SnCl <sub>2</sub>	Fisher	G20637	STD-0827-09	added by instrument
NaCl / NH <sub>2</sub> OH	Fisher	G28617	STD-0688-09	0.6
	Fisher	G06476		
KMnO <sub>4</sub>	Fisher	G10662	STD-0826-09	1.5
K <sub>2</sub> S <sub>2</sub> O <sub>8</sub>	Fisher	083661	STD-0351-09	0.8

**Parent Calibration Stock Standards**

	Lot #	Verification #	Exp. Date
Second Source	A2-HG02056	STD-2364-08	06/01/09
Primary Calibration	H00091	STD-1683-08	05/01/09

**Standards Preparation**

Final digestate volume = 10 ml

Standards	Final Conc	Parent Standard	Standards Log #	Vol (mL)	Pipette
Cal Working	10 mg/L	Primary Cal	See Attached Standards Log Printouts	1.00	7
Daily Cal Working	100 ug/L	Cal Working		1.00	7
ICAL 0.2	0.2 ug/L	Daily Cal Working		0.2	7
ICAL 0.5	0.5 ug/L	Daily Cal Working		0.5	7
ICAL 1	1.0 ug/L	Daily Cal Working		1.0	7
ICAL 2	2.0 ug/L	Daily Cal Working		2.0	7
ICAL 5	5.0 ug/L	Daily Cal Working		5.0	24
ICAL 10	10 ug/L	Daily Cal Working		10.0	24
CCV	5 ug/L	Daily Cal Working		5.0	7
ICV Intermed	700 ug/L	ICV Stock		0.70	7
ICV Daily Working	7.0 ug/L	ICV Intermed		1.00	7
LCS	5 ug/L	Daily Cal Working		0.5	7
MS/MSD	5 ug/L	Daily Cal Working		0.5	7
RL	0.2 ug/L	Daily Cal Working		0.2	7

**Second Source ICV Intermediate Stock Standard Prep**

Standards Log #: STD-0647-09

NOTE: Details for each reagent & standard prep are documented in the attached Standards Preparation Logbook Record.

Comments Dissolved - 245.1 - Boeing

I certify that all information above is correct and complete.

Signature: Clis Giudice

Date: 2/13/09

REVIEWED BY: DB

Date: 2/16/09

TestAmerica Laboratories, Inc.  
Metals Prep Log/ Batch Summary

UD

Prep Date: 02/12/09 UD  
Due Date: 02/16/09

<u>Lot</u>	<u>Work Order</u>			<u>Initial Weight/Volume</u>
D9B120000 Water	<b>K64PQ</b>	B 1	Due Date: SDG:	<u>10 mL</u>
D9B120000 Water	<b>K64PQ</b>	C 2	Due Date: SDG:	<u>10 mL</u>
D9B100241 Water	<b>K61L8</b> Dissolved	3	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100241 Water	<b>K61L8</b> Dissolved	S 4	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100241 Water	<b>K61L8</b> Dissolved	D 5	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100246 Water	<b>K61MV</b> Dissolved	6	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100249 Water	<b>K61NK</b> Dissolved	7	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100255 Water	<b>K61PL</b> Dissolved	8	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100257 Water	<b>K61P6</b> Dissolved	9	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100260 Water	<b>K61Q2</b> Dissolved	10	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100262 Water	<b>K61RN</b> Dissolved	11	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100267 Water	<b>K61VL</b> Dissolved	12	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100268 Water	<b>K61V5</b> Dissolved	13	Due Date: 02/16/09 SDG:	<u>10 mL</u>

**Comments:**

B-BLANK; C-CHECK SAMPLE; L-CHECK SAMPLE DUPLICATE; P-SERIAL DILUTION; S-MATRIX SPIKE SAMPLE; D-MATRIX SPIKE DUPLICATE SAMPLE

**METALS  
SAMPLE DATA  
CVAA**

**TestAmerica**



**THE LEADER IN ENVIRONMENTAL TESTING**

# TestAmerica Denver

## Standards Preparation Logbook Record

Feb-13-2009

Logbook: \\Densvr06\StdsLog\metals.std

### STD1683-08, 1000 mg/L Hg Calibration Stock Standard (Ultra)

Analyst: grisdalec

Vendor: Ultra Scientific (Metals) Lot No.: H00091 Vendor's Expiration Date: 05-01-2009  
Solvent: 2% HN03  
Date Prep./Opened: 04-03-2008 Date Received: 03-31-2008  
Date Expires(1): 04-03-2009 (1 Year)  
Date Expires(2): 05-01-2009 (None)  
Date Verified: 12-31--4714 by 0 (Verification ID: -)

<u>Component</u>	<u>Initial Conc (%)</u>	<u>Final Conc (%)</u>
Mercuric Nitrate	100.00	100.00

### STD2364-08, Hg Inorganic Ventures ICV 100ppm Std

Analyst: grisdalec

Vendor: Inorganic Ventures Lot No.: A2-HG02056 Vendor's Expiration Date: 06-01-2009  
Solvent: 3.3%HCl  
Date Prep./Opened: 05-01-2008 Date Received: 05-02-2007  
Date Expires(1): 05-01-2009 (1 Year)  
Date Expires(2): 06-01-2009 (None)  
Date Verified: 12-31--4714 by 0 (Verification ID: -)

<u>Component</u>	<u>Initial Conc (mg/L)</u>	<u>Final Conc (mg/L)</u>
Hg	100.00	100.00

### STD0437-09, 10 mg/L Hg Calibration Std

Analyst: wellsd

Solvent: 1% HN03 Lot No.: G02058 Volume (ml): 100.00  
Date Prep./Opened: 01-26-2009  
Date Expires(1): 02-26-2009 (1 Month)  
Date Expires(2): 02-26-2009 (1 Month)  
Date Verified: 12-31--4714 by - (Verification ID: 0)

Parent Std No.: STD1683-08, 1000 mg/L Hg Calibration Stock Standard (Ultra) Aliquot Amount (ml): 1.0000  
Parent Date Expires(1): 04-03-2009 Parent Date Expires(2): 05-01-2009

<u>Component</u>	<u>Initial Conc (%)</u>	<u>Final Conc (mg/L)</u>
Mercuric Nitrate	100.00	10,000

STD0647-09, Hg Inorganic Ventures ICV 700ppb

Analyst: GRISDALEC

Solvent: 1% HNO3 Lot No.: G02058 Volume (ml): 100.00  
 Date Prep./Opened: 02-04-2009  
 Date Expires(1): 02-18-2009 (2 Weeks)  
 Date Expires(2): 06-01-2009 (None)  
 Date Verified: 12-31--4714 by - (Verification ID: 0)

Parent Std No.: STD2364-08, Hg Inorganic Ventures ICV 100ppm Std Aliquot Amount (ml): 0.7000  
 Parent Date Expires(1): 05-01-2009 Parent Date Expires(2): 06-01-2009

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Hg	100.00	700.00

STD0856-09, 100 ppb Hg Calibration Std

Analyst: GRISDALEC

Solvent: 1% HN03 Lot No.: G17027 Volume (ml): 100.00  
 Date Prep./Opened: 02-12-2009  
 Date Expires(1): 02-13-2009 (1 Day)  
 Date Expires(2): 05-01-2009 (None)  
 Date Verified: 12-31--4714 by - (Verification ID: 0)

Parent Std No.: STD0437-09, 10 mg/L Hg Calibration Std Aliquot Amount (ml): 1.0000  
 Parent Date Expires(1): 02-26-2009 Parent Date Expires(2): 02-26-2009

Component	Initial Conc (mg/L)	Final Conc (ug/ml)
Mercuric Nitrate	10,000	100.00

STD0857-09, Blank Daily Hg Calibration Std

Analyst: GRISDALEC

Vendor: Baker Lot No.: G17027  
 Solvent: 1% HN03  
 Date Prep./Opened: 02-12-2009  
 Date Expires(1): 08-12-2009 (6 Months)  
 Date Expires(2): 02-12-2010 (1 Year)  
 Date Verified: 12-31--4714 by 0 (Verification ID: -)

Component	Initial Conc (%)	Final Conc (%)
Nitric Acid	1.0000	1.0000

STD0858-09, 0.2 ppb Daily Hg Calibration Std

Analyst: GRISDALEC

Solvent: 1% HN03 Lot No.: G17027 Volume (ml): 100.00  
 Date Prep./Opened: 02-12-2009  
 Date Expires(1): 02-13-2009 (1 Day)  
 Date Expires(2): 05-01-2009 (None)  
 Date Verified: 12-31--4714 by - (Verification ID: 0)

Parent Std No.: STD0856-09, 100 ppb Hg Calibration Std Aliquot Amount (ml): 0.2000  
 Parent Date Expires(1): 02-13-2009 Parent Date Expires(2): 05-01-2009  

<u>Component</u>	<u>Initial Conc (ug/ml)</u>	<u>Final Conc (ug/ml)</u>
Mercuric Nitrate	100.00	0.2000

STD0859-09, 0.5 ppb Daily Hg Calibration Std Analyst: GRISDALEC

Solvent: 1% HN03 Lot No.: G17027 Volume (ml): 100.00  
 Date Prep./Opened: 02-12-2009  
 Date Expires(1): 02-13-2009 (1 Day)  
 Date Expires(2): 05-01-2009 (None)  
 Date Verified: 12-31--4714 by - (Verification ID: 0)

Parent Std No.: STD0856-09, 100 ppb Hg Calibration Std Aliquot Amount (ml): 0.5000  
 Parent Date Expires(1): 02-13-2009 Parent Date Expires(2): 05-01-2009  

<u>Component</u>	<u>Initial Conc (ug/ml)</u>	<u>Final Conc (ug/ml)</u>
Mercuric Nitrate	100.00	0.5000

STD0860-09, 1.0 ppb Daily Hg Calibration Std Analyst: GRISDALEC

Solvent: 1% HN03 Lot No.: G17027 Volume (ml): 100.00  
 Date Prep./Opened: 02-12-2009  
 Date Expires(1): 02-13-2009 (1 Day)  
 Date Expires(2): 05-01-2009 (None)  
 Date Verified: 12-31--4714 by - (Verification ID: 0)

Parent Std No.: STD0856-09, 100 ppb Hg Calibration Std Aliquot Amount (ml): 1.0000  
 Parent Date Expires(1): 02-13-2009 Parent Date Expires(2): 05-01-2009  

<u>Component</u>	<u>Initial Conc (ug/ml)</u>	<u>Final Conc (ug/ml)</u>
Mercuric Nitrate	100.00	1.0000

STD0861-09, 2.0 ppb Daily Hg Calibration Std Analyst: GRISDALEC

Solvent: 1% HN03 Lot No.: G17027 Volume (ml): 100.00  
 Date Prep./Opened: 02-12-2009  
 Date Expires(1): 02-13-2009 (1 Day)  
 Date Expires(2): 05-01-2009 (None)  
 Date Verified: 12-31--4714 by - (Verification ID: 0)

Parent Std No.: STD0856-09, 100 ppb Hg Calibration Std Aliquot Amount (ml): 2.0000  
 Parent Date Expires(1): 02-13-2009 Parent Date Expires(2): 05-01-2009  

<u>Component</u>	<u>Initial Conc (ug/ml)</u>	<u>Final Conc (ug/ml)</u>
Mercuric Nitrate	100.00	2.0000

STD0862-09, 5.0 ppb Daily Hg Calibration Std

Analyst: GRISDALEC

Solvent: 1% HN03 Lot No.: G17027  
Date Prep./Opened: 02-12-2009  
Date Expires(1): 02-13-2009 (1 Day)  
Date Expires(2): 05-01-2009 (None)  
Date Verified: 12-31--4714 by - (Verification ID: 0)

Volume (ml): 100.00

Parent Std No.: STD0856-09, 100 ppb Hg Calibration Std  
Parent Date Expires(1): 02-13-2009 Parent Date Expires(2): 05-01-2009

Aliquot Amount (ml): 5.0000

Component	Initial Conc (ug/ml)	Final Conc (ug/ml)
Mercuric Nitrate	100.00	5.0000

STD0863-09, 10.0 ppb Daily Hg Calibration Std

Analyst: GRISDALEC

Solvent: 1% HN03 Lot No.: G17027  
Date Prep./Opened: 02-12-2009  
Date Expires(1): 02-13-2009 (1 Day)  
Date Expires(2): 05-01-2009 (None)  
Date Verified: 12-31--4714 by - (Verification ID: 0)

Volume (ml): 100.00  
Date Consumed: 12-06-2006

Parent Std No.: STD0856-09, 100 ppb Hg Calibration Std  
Parent Date Expires(1): 02-13-2009 Parent Date Expires(2): 05-01-2009

Aliquot Amount (ml): 10.000

Component	Initial Conc (ug/ml)	Final Conc (ug/ml)
Mercuric Nitrate	100.00	10.000

STD0864-09, Hg Daily ICV 7ppb Calibration Std

Analyst: GRISDALEC

Solvent: 1% HNO3 Lot No.: G17027  
Date Prep./Opened: 02-12-2009  
Date Expires(1): 02-13-2009 (1 Day)  
Date Expires(2): 06-01-2009 (None)  
Date Verified: 12-31--4714 by - (Verification ID: 0)

Volume (ml): 100.00

Parent Std No.: STD0647-09, Hg Inorganic Ventures ICV 700ppb  
Parent Date Expires(1): 02-18-2009 Parent Date Expires(2): 06-01-2009

Aliquot Amount (ml): 1.0000

Component	Initial Conc (ug/L)	Final Conc (ug/L)
Hg	700.00	7.0000

Reviewed By:

Christopher Grisdale 2/13/09

Denver

RUN SUMMARY

Method: CVHG - Mercury (Cold Vapor Mercury)

Instrument: A (023)

Reported: 02/13/09 09:53:37

Sequence: 090212AA Date: 02/12/09 17:29

Analyst: CGG

ICV: \_\_\_\_\_

CAL/CCV: \_\_\_\_\_

#	Sample ID	Lot No.	Batch	Matrix	Raw	DF	Result	Units	%R	Analyzed Date	Comment	Q
1	Cal Blank				0.00	1.0	0.00	ppb		02/12/09 17:29		<input type="checkbox"/>
2	Std1	= 0.200			0.20	1.0	0.20	ppb	100.0%	02/12/09 17:31		<input type="checkbox"/>
3	Std2	= 0.500			0.50	1.0	0.50	ppb	100.0%	02/12/09 17:33		<input type="checkbox"/>
4	Std3	= 1.00			1.00	1.0	1.00	ppb	100.0%	02/12/09 17:36		<input type="checkbox"/>
5	Std4	= 2.00			2.00	1.0	2.00	ppb	100.0%	02/12/09 17:38		<input type="checkbox"/>
6	Std5	= 5.00			5.00	1.0	5.00	ppb	100.0%	02/12/09 17:40		<input type="checkbox"/>
7	Std6	= 10.0			10.00	1.0	10.00	ppb	100.0%	02/12/09 17:43		<input type="checkbox"/>
8	ICB				0.01	1.0	0.01	ppb		02/12/09 17:52		<input type="checkbox"/>
9	ICV	= 7.00			6.91	1.0	6.91	ppb	98.8%	02/12/09 17:54		<input type="checkbox"/>
10	RL	= 0.200			0.21	1.0	0.21	ppb		02/12/09 17:56		<input type="checkbox"/>
11	CCV	= 5.00			4.93	1.0	4.93	ppb	98.7%	02/12/09 17:59		<input type="checkbox"/>
12	CCB				0.01	1.0	0.01	ppb		02/12/09 18:01		<input type="checkbox"/>
13	K64MVB	D9B120000	9043305		0.04	1.0	0.04	ppb		02/12/09 18:03		<input type="checkbox"/>
14	K64MVC	D9B120000 = 5.00	9043305		4.77	1.0	4.77	ppb	95.4%	02/12/09 18:05		<input type="checkbox"/>
15	K61L8	D9B100241-1	9043305	AQUEOUS	0.06	1.0	0.06	ppb		02/12/09 18:08		<input type="checkbox"/>
16	K61L8S	D9B100241-1 = 5.00	9043305	AQUEOUS	4.75	1.0	4.75	ppb		02/12/09 18:10		<input type="checkbox"/>
17	K61L8D	D9B100241-1 = 5.00	9043305	AQUEOUS	4.61	1.0	4.61	ppb		02/12/09 18:12		<input type="checkbox"/>
18	<del>K61L8S</del>	<del>D9B100241-1 = 5.00</del>	<del>9043305</del>	<del>AQUEOUS</del>	<del>4.63</del>	<del>1.0</del>	<del>4.63</del>	<del>ppb</del>		<del>02/12/09 18:15</del>		<input type="checkbox"/>
19	<del>K61L8D</del>	<del>D9B100241-1 = 5.00</del>	<del>9043305</del>	<del>AQUEOUS</del>	<del>4.65</del>	<del>1.0</del>	<del>4.65</del>	<del>ppb</del>		<del>02/12/09 18:17</del>		<input type="checkbox"/>
20	K61MV	D9B100246-1	9043305	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 18:19		<input type="checkbox"/>
21	K61NK	D9B100249-1	9043305	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 18:22		<input type="checkbox"/>
22	K61PL	D9B100255-1	9043305	AQUEOUS	0.04	1.0	0.04	ppb		02/12/09 18:24		<input type="checkbox"/>
23	CCV	= 5.00			4.99	1.0	4.99	ppb	99.7%	02/12/09 18:26		<input type="checkbox"/>
24	CCB				0.02	1.0	0.02	ppb		02/12/09 18:28		<input type="checkbox"/>
25	K61P6	D9B100257-1	9043305	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 18:31		<input type="checkbox"/>
26	K61Q2	D9B100260-1	9043305	AQUEOUS	0.06	1.0	0.06	ppb		02/12/09 18:33		<input type="checkbox"/>
27	K61RN	D9B100262-1	9043305	AQUEOUS	0.07	1.0	0.07	ppb		02/12/09 18:35		<input type="checkbox"/>
28	K61VL	D9B100267-1	9043305	AQUEOUS	0.12	1.0	0.12	ppb		02/12/09 18:38		<input type="checkbox"/>
29	K61V5	D9B100268-1	9043305	AQUEOUS	0.10	1.0	0.10	ppb		02/12/09 18:40		<input type="checkbox"/>
30	K64PQBF	D9B120000	9043330		0.04	1.0	0.04	ppb		02/12/09 18:42		<input type="checkbox"/>
31	K64PQCF	D9B120000 = 5.00	9043330		4.90	1.0	4.90	ppb	98.0%	02/12/09 18:45		<input type="checkbox"/>
32	K61L8F	D9B100241-1	9043330	AQUEOUS	0.04	1.0	0.04	ppb		02/12/09 18:47		<input type="checkbox"/>
33	K61L8SF	D9B100241-1 = 5.00	9043330	AQUEOUS	4.81	1.0	4.81	ppb		02/12/09 18:49		<input type="checkbox"/>
34	K61L8DF	D9B100241-1 = 5.00	9043330	AQUEOUS	4.78	1.0	4.78	ppb		02/12/09 18:52		<input type="checkbox"/>

NA confirms above  
CO 2/13/09

✓ 02/21/09

Denver

RUN SUMMARY

Method: CV/HG - Mercury (Cold Vapor Mercury)

Instrument: A (023)

Reported: 02/13/09 09:53:37

Sequence: 090212AA Date: 02/12/09 17:29

Analyst: CGG

ICV: \_\_\_\_\_

CAL/CCV: \_\_\_\_\_

#	Sample ID	Lot No.	Batch	Matrix	Raw	DF	Result	Units	%R	Analyzed Date	Comment	Q
35	CCV	= 5.00			4.97	1.0	4.97	ppb	99.3%	02/12/09 18:54		<input type="checkbox"/>
36	CCB				0.01	1.0	0.01	ppb		02/12/09 18:56		<input type="checkbox"/>
37	<del>K6T6SF</del>	<del>D9B100247-1 = 5.00</del>	<del>9043330</del>	<del>AQUEOUS</del>	<del>4.75</del>	<del>1.0</del>	<del>4.75</del>	<del>ppb</del>		<del>02/12/09 18:58</del>	<i>NA Confirms above</i>	<input type="checkbox"/>
38	<del>K6T6BT</del>	<del>D9B100247-1 = 5.00</del>	<del>9043330</del>	<del>AQUEOUS</del>	<del>4.94</del>	<del>1.0</del>	<del>4.94</del>	<del>ppb</del>		<del>02/12/09 19:01</del>	<i>CS 2/13/09</i>	<input type="checkbox"/>
39	K61MVF	D9B100246-1	9043330	AQUEOUS	0.04	1.0	0.04	ppb		02/12/09 19:03		<input type="checkbox"/>
40	K61NKF	D9B100249-1	9043330	AQUEOUS	0.06	1.0	0.06	ppb		02/12/09 19:05		<input type="checkbox"/>
41	K61PLF	D9B100255-1	9043330	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 19:08		<input type="checkbox"/>
42	K61P6F	D9B100257-1	9043330	AQUEOUS	0.04	1.0	0.04	ppb		02/12/09 19:10		<input type="checkbox"/>
43	K61Q2F	D9B100260-1	9043330	AQUEOUS	0.04	1.0	0.04	ppb		02/12/09 19:12		<input type="checkbox"/>
44	K61RNF	D9B100262-1	9043330	AQUEOUS	0.06	1.0	0.06	ppb		02/12/09 19:15		<input type="checkbox"/>
45	K61VLF	D9B100267-1	9043330	AQUEOUS	0.06	1.0	0.06	ppb		02/12/09 19:17		<input type="checkbox"/>
46	K61V5F	D9B100268-1	9043330	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 19:19		<input type="checkbox"/>
47	CCV	= 5.00			4.98	1.0	4.98	ppb	99.7%	02/12/09 19:22		<input type="checkbox"/>
48	CCB				0.02	1.0	0.02	ppb		02/12/09 19:24		<input type="checkbox"/>
49	K64NTB	D9B120000	9043318		0.03	1.0	0.03	ppb		02/12/09 19:26		<input type="checkbox"/>
50	K64NTC	D9B120000 = 5.00	9043318		4.92	1.0	4.92	ppb	98.3%	02/12/09 19:28		<input type="checkbox"/>
51	K61TK	D9B100263-1	9043318	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 19:31		<input type="checkbox"/>
52	K61TKS	D9B100263-1 = 5.00	9043318	AQUEOUS	5.12	1.0	5.12	ppb		02/12/09 19:33		<input type="checkbox"/>
53	K61TKD	D9B100263-1 = 5.00	9043318	AQUEOUS	5.10	1.0	5.10	ppb		02/12/09 19:35		<input type="checkbox"/>
54	<del>K61TKS</del>	<del>D9B100263-1 = 5.00</del>	<del>9043318</del>	<del>AQUEOUS</del>	<del>5.07</del>	<del>1.0</del>	<del>5.07</del>	<del>ppb</del>		<del>02/12/09 19:38</del>	<i>NA Confirms above</i>	<input type="checkbox"/>
55	<del>K61TKD</del>	<del>D9B100263-1 = 5.00</del>	<del>9043318</del>	<del>AQUEOUS</del>	<del>5.14</del>	<del>1.0</del>	<del>5.14</del>	<del>ppb</del>		<del>02/12/09 19:40</del>	<i>CS 2/13/09</i>	<input type="checkbox"/>
56	K60WV	D9B100142-4	9043318	AQUEOUS	0.04	1.0	0.04	ppb		02/12/09 19:42		<input type="checkbox"/>
57	K6006	D9B100155-6	9043318	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 19:45		<input type="checkbox"/>
58	K6XKRB	D9B090000	9040253		0.04	1.0	0.04	ppb		02/12/09 19:47		<input type="checkbox"/>
59	CCV	= 5.00			5.00	1.0	5.00	ppb	100.0%	02/12/09 19:49		<input type="checkbox"/>
60	CCB				0.02	1.0	0.02	ppb		02/12/09 19:52		<input type="checkbox"/>
61	K6XKRC	D9B090000 = 5.00	9040253		4.97	1.0	4.97	ppb	99.5%	02/12/09 19:54		<input type="checkbox"/>
62	K6XKRL	D9B090000 = 5.00	9040253		4.88	1.0	4.88	ppb	97.5%	02/12/09 19:56		<input type="checkbox"/>
63	K6RA4	D9B050201-10	9040253	AQUEOUS	0.03	1.0	0.03	ppb		02/12/09 19:58		<input type="checkbox"/>
64	K6RJM	D9B050215-23	9040253	AQUEOUS	0.03	1.0	0.03	ppb		02/12/09 20:01		<input type="checkbox"/>
65	K6TF5	D9B050330-13	9040253	AQUEOUS	0.04	1.0	0.04	ppb		02/12/09 20:03		<input type="checkbox"/>
66	K6V6FBT	D9B060000	9043229		0.05	1.0	0.05	ppb		02/12/09 20:05		<input type="checkbox"/>
67	K6AEQCT	D9B120000 = 5.00	9043229		5.09	1.0	5.09	ppb	101.8%	02/12/09 20:08		<input type="checkbox"/>
68	K6RP2T	D9B050263-1	9043229	LEACHATE	0.25	1.0	0.25	ppb		02/12/09 20:10		<input type="checkbox"/>

*CS 2/13/09*

Denver

RUN SUMMARY

Method: CVHG - Mercury (Cold Vapor Mercury)

Instrument: A (023)

Reported: 02/13/09 09:53:37

Sequence: 090212AA Date: 02/12/09 17:29

Analyst: CGG

ICV: \_\_\_\_\_

CALCV: \_\_\_\_\_

#	Sample ID	Lot No.	Batch	Matrix	Raw	DF	Result	Units	%R	Analyzed Date	Comment	Q
69	K6RP2P5T	D9B050263	9043229	LEACHATE	0.09	5.0	0.09	ppb		02/12/09 20:12		<input type="checkbox"/>
70	K6RP8T	D9B050263-2	9043229	LEACHATE	0.47	1.0	0.47	ppb		02/12/09 20:15		<input type="checkbox"/>
71	CCV	= 5.00			4.95	1.0	4.95	ppb	99.0%	02/12/09 20:17		<input type="checkbox"/>
72	CCB				0.02	1.0	0.02	ppb		02/12/09 20:19		<input type="checkbox"/>
73	K6K3WB	D9B020000	9043288		0.05	1.0	0.05	ppb		02/12/09 20:21		<input type="checkbox"/>
74	K6LQCT	D9B120000 = 5.00	9043288		5.11	1.0	5.11	ppb	102.2%	02/12/09 20:24		<input type="checkbox"/>
75	K6PJ8T	D9B040182-1	9043288	LEACHATE	0.02	1.0	0.02	ppb		02/12/09 20:26		<input type="checkbox"/>
76	K6PJ8P5T	D9B040182	9043288	LEACHATE	0.05	5.0	0.05	ppb		02/12/09 20:28		<input type="checkbox"/>
77	K6PKAT	D9B040182-2	9043288	LEACHATE	0.06	1.0	0.06	ppb		02/12/09 20:31		<input type="checkbox"/>
78	K6V6CBT	D9B060000	9043228		0.06	1.0	0.06	ppb		02/12/09 20:33		<input type="checkbox"/>
79	K64EKC	D9B120000 = 5.00	9043228		5.34	1.0	5.34	ppb	106.9%	02/12/09 20:35		<input type="checkbox"/>
80	K6Q8WT	D9B050200-1	9043228	LEACHATE	0.04	1.0	0.04	ppb		02/12/09 20:38		<input type="checkbox"/>
81	K6Q8WST	D9B050200-1 = 5.00	9043228	LEACHATE	5.34	1.0	5.34	ppb		02/12/09 20:40		<input type="checkbox"/>
82	K6Q8WDT	D9B050200-1 = 5.00	9043228	LEACHATE	5.54	1.0	5.54	ppb		02/12/09 20:42		<input type="checkbox"/>
83	CCV	= 5.00			5.71	1.0	5.71	ppb	114.2%	02/12/09 20:45		<input type="checkbox"/>
84	CCB				0.02	1.0	0.02	ppb		02/12/09 20:47		<input type="checkbox"/>
85	K6Q9HT	D9B050200-2	9043228	LEACHATE	0.04	1.0	0.04	ppb		02/12/09 20:49		<input type="checkbox"/>
86	K6Q9JT	D9B050200-3	9043228	LEACHATE	0.05	1.0	0.05	ppb		02/12/09 20:51		<input type="checkbox"/>
87	K6Q9KT	D9B050200-4	9043228	LEACHATE	0.04	1.0	0.04	ppb		02/12/09 20:54		<input type="checkbox"/>
88	K6XJ3B	D9B090000	9040246		0.05	1.0	0.05	ppb		02/12/09 20:56		<input type="checkbox"/>
89	K6XJ3C	D9B090000 = 5.00	9040246		5.58	1.0	5.58	ppb	111.7%	02/12/09 20:58	LC5 > 111% limit	<input type="checkbox"/>
90	K6N90	D9B040148-1	9040246	AQUEOUS	0.04	1.0	0.04	ppb		02/12/09 21:01		<input type="checkbox"/>
91	K6N90S	D9B040148-1 = 5.00	9040246	AQUEOUS	4.70	1.0	4.70	ppb		02/12/09 21:03	samples < RL so	<input type="checkbox"/>
92	K6N90D	D9B040148-1 = 5.00	9040246	AQUEOUS	4.90	1.0	4.90	ppb		02/12/09 21:05	see NCM.	<input type="checkbox"/>
93	K6N95	D9B040148-2	9040246	AQUEOUS	0.09	1.0	0.09	ppb		02/12/09 21:08		<input type="checkbox"/>
94	K6N96	D9B040148-3	9040246	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 21:10	052115109	<input type="checkbox"/>
95	CCV	= 5.00			5.45	1.0	5.45	ppb	109.1%	02/12/09 21:12		<input type="checkbox"/>
96	CCB				0.02	1.0	0.02	ppb		02/12/09 21:15		<input type="checkbox"/>
97	K6N97	D9B040148-4	9040246	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 21:17		<input type="checkbox"/>
98	K6N98	D9B040148-5	9040246	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 21:19		<input type="checkbox"/>
99	K6N99	D9B040148-6	9040246	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 21:21		<input type="checkbox"/>
100	K6PAA	D9B040148-7	9040246	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 21:24		<input type="checkbox"/>
101	K6PAC	D9B040148-8	9040246	AQUEOUS	0.03	1.0	0.03	ppb		02/12/09 21:26		<input type="checkbox"/>
102	K6PAD	D9B040148-9	9040246	AQUEOUS	0.04	1.0	0.04	ppb		02/12/09 21:28		<input type="checkbox"/>

05 2113109

Denver

RUN SUMMARY

Method: CVHG - Mercury (Cold Vapor Mercury)

Instrument: A (023)

Reported: 02/13/09 09:53:37

Sequence: 090212AA Date: 02/12/09 17:29

Analyst: CGG

ICV: \_\_\_\_\_

CALCCV: \_\_\_\_\_

#	Sample ID	Lot No.	Batch	Matrix	Raw	DF	Result	Units	%R	Analyzed Date	Q
103	K6PAE	D9B040148-10	9040246	AQUEOUS	0.06	1.0	0.06	ppb		02/12/09 21:31	<input type="checkbox"/>
104	K6PAF	D9B040148-11	9040246	AQUEOUS	0.06	1.0	0.06	ppb		02/12/09 21:33	<input type="checkbox"/>
105	K6PAH	D9B040148-12	9040246	AQUEOUS	0.07	1.0	0.07	ppb		02/12/09 21:35	<input type="checkbox"/>
106	K6PAK	D9B040148-13	9040246	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 21:38	<input type="checkbox"/>
107	CCV	= 5.00			5.65	1.0	5.65	ppb	113.0%	02/12/09 21:40	<input type="checkbox"/>
108	CCB				0.02	1.0	0.02	ppb		02/12/09 21:42	<input type="checkbox"/>
109	K6PAM	D9B040148-14	9040246	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 21:45	<input type="checkbox"/>
110	K6PAP	D9B040148-15	9040246	AQUEOUS	0.04	1.0	0.04	ppb		02/12/09 21:47	<input type="checkbox"/>
111	K6PAQ	D9B040148-16	9040246	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 21:49	<input type="checkbox"/>
112	K6PAR	D9B040148-17	9040246	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 21:52	<input type="checkbox"/>
113	K6RD6	D9B050213-1	9040246	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 21:54	<input type="checkbox"/>
114	K6RD9	D9B050213-2	9040246	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 21:56	<input type="checkbox"/>
115	K6VAF	D9B060183-1	9040246	AQUEOUS	0.06	1.0	0.06	ppb		02/12/09 21:58	<input type="checkbox"/>
116	K6XJUB	D9B090000	9040250		0.05	1.0	0.05	ppb		02/12/09 22:01	<input type="checkbox"/>
117	K6XJUC	D9B090000 = 5.00	9040250		5.59	1.0	5.59	ppb	111.8%	02/12/09 22:03	<input type="checkbox"/>
118	K6RCT	D9B050209-1	9040250	AQUEOUS	0.04	1.0	0.04	ppb		02/12/09 22:05	<input type="checkbox"/>
119	CCV	= 5.00			5.59	1.0	5.59	ppb	111.9%	02/12/09 22:08	<input type="checkbox"/>
120	CCB				0.02	1.0	0.02	ppb		02/12/09 22:10	<input type="checkbox"/>
121	K6RCTS	D9B050209-1 = 5.00	9040250	AQUEOUS	5.37	1.0	5.37	ppb		02/12/09 22:12	<input type="checkbox"/>
122	K6RCTD	D9B050209-1 = 5.00	9040250	AQUEOUS	5.43	1.0	5.43	ppb		02/12/09 22:15	<input type="checkbox"/>
123	K6RC0	D9B050209-2	9040250	AQUEOUS	0.04	1.0	0.04	ppb		02/12/09 22:17	<input type="checkbox"/>
124	K6RC1	D9B050209-3	9040250	AQUEOUS	0.04	1.0	0.04	ppb		02/12/09 22:19	<input type="checkbox"/>
125	K6RC2	D9B050209-4	9040250	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 22:22	<input type="checkbox"/>
126	K6RC3	D9B050209-5	9040250	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 22:24	<input type="checkbox"/>
127	K6RC4	D9B050209-6	9040250	AQUEOUS	0.06	1.0	0.06	ppb		02/12/09 22:26	<input type="checkbox"/>
128	K6RC5	D9B050209-7	9040250	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 22:29	<input type="checkbox"/>
129	K6RC7	D9B050209-8	9040250	AQUEOUS	0.06	1.0	0.06	ppb		02/12/09 22:31	<input type="checkbox"/>
130	K6R0F	D9B050291-1	9040250	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 22:33	<input type="checkbox"/>
131	CCV	= 5.00			5.61	1.0	5.61	ppb	112.1%	02/12/09 22:36	<input type="checkbox"/>
132	CCB				0.02	1.0	0.02	ppb		02/12/09 22:38	<input type="checkbox"/>
133	K6R1Q	D9B050291-2	9040250	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 22:40	<input type="checkbox"/>
134	K6R1X	D9B050291-3	9040250	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 22:42	<input type="checkbox"/>
135	K6R13	D9B050291-4	9040250	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 22:45	<input type="checkbox"/>
136	K6R14	D9B050291-5	9040250	AQUEOUS	0.06	1.0	0.06	ppb		02/12/09 22:47	<input type="checkbox"/>

*LCs > 111% dimf*

*samples < RL 50*

*see NEM*

*05 2/13/09*

*052113109*

Denver

RUN SUMMARY

Method: CVHG - Mercury (Cold Vapor Mercury)

Instrument: A (023)

Reported: 02/13/09 09:53:37

Sequence: 090212AA Date: 02/12/09 17:29

Analyst: CGG

ICV:

CAL/CCV:

#	Sample ID	Lot No.	Batch	Matrix	Raw	DF	Result	Units	%R	Analyzed Date	Comment	Q
137	K6R16	D9B050291-6	9040250	AQUEOUS	0.04	1.0	0.04	ppb		02/12/09 22:49		<input type="checkbox"/>
138	K6R19	D9B050291-7	9040250	AQUEOUS	0.04	1.0	0.04	ppb		02/12/09 22:52		<input type="checkbox"/>
139	K6R2A	D9B050291-8	9040250	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 22:54		<input type="checkbox"/>
140	K6V8R	D9B060305-1	9040250	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 22:56		<input type="checkbox"/>
141	K6V84	D9B060305-2	9040250	AQUEOUS	0.04	1.0	0.04	ppb		02/12/09 22:59		<input type="checkbox"/>
142	K6V86	D9B060305-3	9040250	AQUEOUS	0.04	1.0	0.04	ppb		02/12/09 23:01		<input type="checkbox"/>
143	CCV	= 5.00			5.56	1.0	5.56	ppb	111.2%	02/12/09 23:03		<input type="checkbox"/>
144	CCB				0.02	1.0	0.02	ppb		02/12/09 23:06		<input type="checkbox"/>
145	K6V87	D9B060305-4	9040250	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 23:08		<input type="checkbox"/>
146	K6XKV8	D9B090000	9040259		0.05	1.0	0.05	ppb		02/12/09 23:10		<input type="checkbox"/>
147	K6XKVC	D9B090000 = 5.00	9040259		5.50	1.0	5.50	ppb	109.9%	02/12/09 23:13		<input type="checkbox"/>
148	K6VA6	D9B060185-1	9040259	AQUEOUS	0.04	1.0	0.04	ppb		02/12/09 23:15		<input type="checkbox"/>
149	K6VCG	D9B060185-2	9040259	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 23:17		<input type="checkbox"/>
150	K6VCJ	D9B060185-3	9040259	AQUEOUS	0.04	1.0	0.04	ppb		02/12/09 23:20		<input type="checkbox"/>
151	K6VCK	D9B060185-4	9040259	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 23:22		<input type="checkbox"/>
152	K6VCM	D9B060185-5	9040259	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 23:24		<input type="checkbox"/>
153	K6VCN	D9B060185-6	9040259	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 23:26		<input type="checkbox"/>
154	K6VCR	D9B060185-7	9040259	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 23:29		<input type="checkbox"/>
155	CCV	= 5.00			5.58	1.0	5.58	ppb	111.6%	02/12/09 23:31		<input type="checkbox"/>
156	CCB				0.02	1.0	0.02	ppb		02/12/09 23:33		<input type="checkbox"/>
157	K6VCW	D9B060185-8	9040259	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 23:36		<input type="checkbox"/>
158	K6VC0	D9B060185-9	9040259	AQUEOUS	0.05	1.0	0.05	ppb		02/12/09 23:38		<input type="checkbox"/>
159	K6VC3	D9B060185-10	9040259	AQUEOUS	0.04	1.0	0.04	ppb		02/12/09 23:40		<input type="checkbox"/>
160	K6VC3P5	D9B060185	9040259	AQUEOUS	0.05	5.0	0.05	ppb		02/12/09 23:43		<input type="checkbox"/>
161	K6VC3S	D9B060185-10 = 5.00	9040259	AQUEOUS	5.39	1.0	5.39	ppb		02/12/09 23:45		<input type="checkbox"/>
162	K6VC3D	D9B060185-10 = 5.00	9040259	AQUEOUS	5.40	1.0	5.40	ppb		02/12/09 23:47		<input type="checkbox"/>
163	K6VC6	D9B060185-11	9040259	AQUEOUS	0.06	1.0	0.06	ppb		02/12/09 23:50		<input type="checkbox"/>
164	CCV	= 5.00			5.59	1.0	5.59	ppb	111.8%	02/12/09 23:52		<input type="checkbox"/>
165	CCB				0.02	1.0	0.02	ppb		02/12/09 23:54		<input type="checkbox"/>
166	K6XKNB	D9B090000	9040251		0.05	1.0	0.05	ppb		02/12/09 23:57		<input type="checkbox"/>
167	K6XKNC	D9B090000 = 5.00	9040251		5.54	1.0	5.54	ppb	110.7%	02/12/09 23:59		<input type="checkbox"/>
168	K6QHH	H9B050103-4	9040251	AQUEOUS	0.04	1.0	0.04	ppb		02/13/09 00:01		<input type="checkbox"/>
169	K6QHHS	H9B050103-4 = 5.00	9040251	AQUEOUS	5.47	1.0	5.47	ppb		02/13/09 00:04		<input type="checkbox"/>
170	K6QHHD	H9B050103-4 = 5.00	9040251	AQUEOUS	5.58	1.0	5.58	ppb		02/13/09 00:06		<input type="checkbox"/>

For 2/13/09

Denver

RUN SUMMARY

Method: CVHG - Mercury (Cold Vapor Mercury)

Instrument: A (023)

Reported: 02/13/09 09:53:37

Sequence: 090212AA

Date: 02/12/09 17:29

Analyst: CGG

ICV: \_\_\_\_\_

CAL/CCV: \_\_\_\_\_

#	Sample ID	Lot No.	Batch	Matrix	Raw	DF	Result	Units	%R	Analyzed Date	Comment	Q
171	K6QHJN	H9B050103-9	9040251	AQUEOUS	0.04	1.0	0.04	ppb		02/13/09 00:08		<input type="checkbox"/>
172	CCV	= 5.00			5.56	1.0	5.56	ppb	111.1%	02/13/09 00:11		<input type="checkbox"/>
173	CCB				0.02	1.0	0.02	ppb		02/13/09 00:13		<input type="checkbox"/>
174	<del>CCV</del>	<del>= 5.00</del>			<del>5.88</del>	<del>1.0</del>	<del>5.88</del>	<del>ppb</del>	<del>117.6%</del>	<del>02/13/09 00:19</del>		<input type="checkbox"/>
175	CCB				0.01	1.0	0.01	ppb		02/13/09 08:21		<input type="checkbox"/>
176	K6XKJC	D9B090000 = 5.00	9040250		5.73	1.0	5.73	ppb	114.6%	02/13/09 08:23	NA	<input type="checkbox"/>
177	CCV	= 5.00			5.81	1.0	5.81	ppb	116.2%	02/13/09 08:26		<input type="checkbox"/>
178	<del>CCB</del>	<del>= 5.00</del>			<del>0.01</del>	<del>1.0</del>	<del>0.01</del>	<del>ppb</del>		<del>02/13/09 09:26</del>		<input type="checkbox"/>

Jos 2/13/09

# CETAC Hg Analysis Report

Analyst: gridalec

Worksheet file: C:\Program Files\QuickTrace\Worksheets\090212AA.wsz

Date Started: 2/12/2009 3:07:15 PM

Comment:

## Results

Sample Name	Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags	Wt.	Vol. ODF
Cal Blank	STD	02/12/09 05:29:18 pm	0.000	-171 ✓	1.49		1.00	1.00
Std1	STD	02/12/09 05:31:36 pm	0.200	1703 ✓	0.22		1.00	1.00
Std2	STD	02/12/09 05:33:54 pm	0.500	4286 ✓	0.57		1.00	1.00
Std3	STD	02/12/09 05:36:13 pm	1.000	8662 ✓	0.37		1.00	1.00
Std4	STD	02/12/09 05:38:32 pm	2.000	17335 ✓	0.58		1.00	1.00
Std5	STD	02/12/09 05:40:52 pm	5.000	43039 ✓	0.79		1.00	1.00
Std6	STD	02/12/09 05:43:13 pm	10.000	87825 ✓	0.58		1.00	1.00

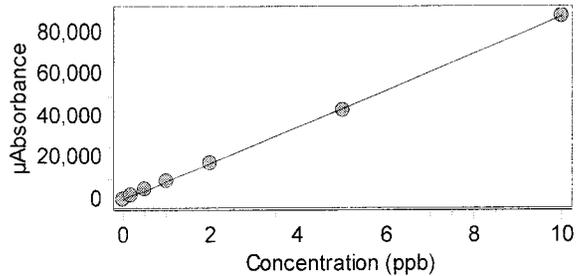
### Calibration

Equation:  $A = -193.346 + 8771.764C$

R2: 0.99992 ✓

SEE: 322.1000

Flags:



ICB	ICB	02/12/09 05:52:06 pm	0.012 ✓	-92	9.12		1.00	1.00
ICV	ICV	02/12/09 05:54:27 pm	6.914 ✓	60458	0.97		1.00	1.00
% Recovery			98.78 ✓					
RL	CRDL	02/12/09 05:56:45 pm	0.213 ✓	1672	0.36		1.00	1.00
% Recovery			106.31 ✓					

Sample Name	Type	Date/Time	Conc (ppb)	μAbs	%RSD	Flags	Wt. ODF	Vol. ODF
CCV	CCV	02/12/09 05:59:04 pm	4.934 ✓	43087	1.28		1.00	1.00
% Recovery		98.68 ✓					1.00	
CCB	CCB	02/12/09 06:01:22 pm	0.011 ✓	-93	5.09		1.00	1.00
K64MVB	UNK	02/12/09 06:03:39 pm	0.036 ✓	118	24.79 s		1.00	1.00
K64MVC	UNK	02/12/09 06:05:56 pm	4.769 ✓	41637	1.18		1.00	1.00
K61L8	UNK	02/12/09 06:08:14 pm	0.064	366	3.78		1.00	1.00
K61L8S	UNK	02/12/09 06:10:32 pm	4.754 ✓	41506	2.02		1.00	1.00
K61L8D	UNK	02/12/09 06:12:50 pm	4.612 ✓	40265	1.26		1.00	1.00
<del>K61L8S</del>	<del>UNK</del>	<del>02/12/09 06:15:08 pm</del>	<del>4.628</del>	<del>40399</del>	<del>1.46</del>		<del>1.00</del>	<del>1.00</del>
<i>MA, confirms above CS 2/13/09</i>								
<del>K61L8D</del>	<del>UNK</del>	<del>02/12/09 06:17:26 pm</del>	<del>4.653</del>	<del>40618</del>	<del>1.29</del>		<del>1.00</del>	<del>1.00</del>
K61MV	UNK	02/12/09 06:19:44 pm	0.047	221	2.46		1.00	1.00
K61NK	UNK	02/12/09 06:22:03 pm	0.054	279	4.23		1.00	1.00
K61PL	UNK	02/12/09 06:24:22 pm	0.035	116	6.45 s		1.00	1.00
CCV	CCV	02/12/09 06:26:42 pm	4.986 ✓	43545	0.71		1.00	1.00
% Recovery		99.73 ✓					1.00	
CCB	CCB	02/12/09 06:28:59 pm	0.016 ✓	-57	7.50		1.00	1.00
K61P6	UNK	02/12/09 06:31:19 pm	0.055	292	7.70 s		1.00	1.00
K61Q2	UNK	02/12/09 06:33:38 pm	0.062	351	3.49		1.00	1.00
K61RN	UNK	02/12/09 06:35:58 pm	0.071	426	0.62		1.00	1.00

Sample Name	Type	Date/Time	Conc (ppb)	μAbs	%RSD	Flags	Wt.	Vol. ODF
K61VL	UNK	02/12/09 06:38:18 pm	0.123	883	0.99		1.00	1.00
K61V5	UNK	02/12/09 06:40:35 pm	0.103	706	0.47		1.00	1.00
K64PQB	UNK	02/12/09 06:42:52 pm	0.039 ✓	146	0.74		1.00	1.00
K64PQC	UNK	02/12/09 06:45:09 pm	4.901 ✓	42799	0.77		1.00	1.00
K61L8	UNK	02/12/09 06:47:27 pm	0.036	125	1.40		1.00	1.00
K61L8S	UNK	02/12/09 06:49:45 pm	4.812 ✓	42017	0.99		1.00	1.00
K61L8D	UNK	02/12/09 06:52:03 pm	4.775 ✓	41690	0.90		1.00	1.00
CCV	CCV	02/12/09 06:54:23 pm	4.966 ✓	43370	0.90		1.00	1.00
% Recovery		99.33 ✓						
CCB	CCB	02/12/09 06:56:40 pm	0.013 ✓	-78	6.42		1.00	1.00
<del>K61L8S</del>	<del>UNK</del>	<del>02/12/09 06:58:58 pm</del>	<del>4.748</del>	<del>41458</del>	<del>0.71</del>		<del>1.00</del>	<del>1.00</del>
<i>NA, CONFIRMS ABOVE CD 2/13/09</i>								
<del>K61L8D</del>	<del>UNK</del>	<del>02/12/09 07:01:16 pm</del>	<del>4.835</del>	<del>42222</del>	<del>0.55</del>		<del>1.00</del>	<del>1.00</del>
K61MV	UNK	02/12/09 07:03:34 pm	0.041	163	5.03 s		1.00	1.00
K61NK	UNK	02/12/09 07:05:53 pm	0.063	360	2.18		1.00	1.00
K61PL	UNK	02/12/09 07:08:12 pm	0.046	211	1.91		1.00	1.00
K61P6	UNK	02/12/09 07:10:31 pm	0.044	196	1.31		1.00	1.00
K61Q2	UNK	02/12/09 07:12:51 pm	0.041	167	0.81		1.00	1.00
K61RN	UNK	02/12/09 07:15:11 pm	0.060	334	0.44		1.00	1.00

Sample Name	Type	Date/Time	Conc (ppb)	μAbs	%RSD	Flags	Wt.	Vol. ODF
K61VL	UNK	02/12/09 07:17:27 pm	0.065	381	0.73		1.00	1.00
K61V5	UNK	02/12/09 07:19:44 pm	0.054	277	0.78		1.00	1.00
CCV % Recovery 99.65 ✓	CCV	02/12/09 07:22:04 pm	4.983 ✓	43513	0.84		1.00	1.00
CCB	CCB	02/12/09 07:24:21 pm	0.016 ✓	-57	5.96		1.00	1.00
K64NTB	UNK	02/12/09 07:26:39 pm	0.031 ✓	76	3.50		1.00	1.00
K64NTC	UNK	02/12/09 07:28:56 pm	4.916 ✓	42931	0.91		1.00	1.00
K61TK	UNK	02/12/09 07:31:14 pm	0.049	239	1.00		1.00	1.00
K61TKS	UNK	02/12/09 07:33:32 pm	5.117 ✓	44691	1.16		1.00	1.00
K61KTD	UNK	02/12/09 07:35:51 pm	5.104 ✓	44578	0.96		1.00	1.00
<del>K61TKS</del>	<del>UNK</del>	<del>02/12/09 07:38:00 pm</del>	<del>5.066</del>	<del>44245</del>	<del>0.94</del>		<del>1.00</del>	<del>1.00</del>
<i>NA, Confirms above Co 2/13/09</i>								
<del>K61KTD</del>	<del>UNK</del>	<del>02/12/09 07:40:27 pm</del>	<del>5.141</del>	<del>44899</del>	<del>0.88</del>		<del>1.00</del>	<del>1.00</del>
K60WV	UNK	02/12/09 07:42:46 pm	0.042	178	1.14		1.00	1.00
K6006	UNK	02/12/09 07:45:05 pm	0.049	237	1.25		1.00	1.00
K6XKRB	UNK	02/12/09 07:47:24 pm	0.041 ✓	166	1.73		1.00	1.00
CCV % Recovery 100.01 ✓	CCV	02/12/09 07:49:44 pm	5.000 ✓	43670	0.81		1.00	1.00
CCB	CCB	02/12/09 07:52:01 pm	0.017 ✓	-48	8.70		1.00	1.00
K6XKRC	UNK	02/12/09 07:54:21 pm	4.973 ✓	43431	0.77		1.00	1.00

Sample Name	Type	Date/Time	Conc (ppb)	μAbs	%RSD	Flags	Wt.	Vol. ODF
K6XKRL	UNK	02/12/09 07:56:41 pm	4.877 ✓	42585	1.28		1.00	1.00 1.00
K6RA4	UNK	02/12/09 07:58:58 pm	0.031	76	6.00		1.00	1.00 1.00
K6RJM	UNK	02/12/09 08:01:15 pm	0.034	101	3.79		1.00	1.00 1.00
K6TF5	UNK	02/12/09 08:03:32 pm	0.043	182	1.20		1.00	1.00 1.00
K6V6FB	UNK	02/12/09 08:05:50 pm	0.050 ✓	247	2.45		1.00	1.00 1.00
K64EQC	UNK	02/12/09 08:08:08 pm	5.091 ✓	44463	0.21		1.00	1.00 1.00
K6RP2	UNK	02/12/09 08:10:26 pm	0.248 —	1986	0.62		1.00	1.00 1.00
K6RP2P5	UNK	02/12/09 08:12:44 pm	0.090 —	598	0.21		1.00	1.00 1.00
K6RP8	UNK	02/12/09 08:15:03 pm	0.471	3935	0.59		1.00	1.00 1.00
CCV	CCV	02/12/09 08:17:23 pm	4.950 ✓	43231	1.57		1.00	1.00 1.00
% Recovery		99.01 ✓						
CCB	CCB	02/12/09 08:19:40 pm	0.018 ✓	-36	7.90		1.00	1.00 1.00
K6K3WB	UNK	02/12/09 08:21:59 pm	0.049 ✓	237	1.02		1.00	1.00 1.00
K64LQC	UNK	02/12/09 08:24:18 pm	5.108 ✓	44609	1.03		1.00	1.00 1.00
K6PJ8	UNK	02/12/09 08:26:38 pm	0.023 —	11	18.75		1.00	1.00 1.00
K6PJ8P5	UNK	02/12/09 08:28:58 pm	0.046 —	213	0.98		1.00	1.00 1.00
K6PKA	UNK	02/12/09 08:31:15 pm	0.062	349	2.02		1.00	1.00 1.00
K6V6CB	UNK	02/12/09 08:33:33 pm	0.061 ✓	343	0.77		1.00	1.00 1.00

Sample Name	Type	Date/Time	Conc (ppb)	μAbs	%RSD	Flags	Wt.	Vol. ODF
K64EKC	UNK	02/12/09 08:35:50 pm	5.344 ✓	46685	0.95		1.00	1.00 1.00
K6Q8W	UNK	02/12/09 08:38:08 pm	0.042 ✓	174	4.44		1.00	1.00 1.00
K6Q8WS	UNK	02/12/09 08:40:26 pm	5.341 ✓	46654	0.91		1.00	1.00 1.00
K6Q8WD	UNK	02/12/09 08:42:44 pm	5.536 ✓	48366	1.04		1.00	1.00 1.00
CCV % Recovery 114.16 ✓	CCV	02/12/09 08:45:04 pm	5.708 ✓	49877	0.66		1.00	1.00 1.00
CCB	CCB	02/12/09 08:47:21 pm	0.018 ✓	-32	8.64		1.00	1.00 1.00
K6Q9H	UNK	02/12/09 08:49:39 pm	0.043	183	0.90		1.00	1.00 1.00
K6Q9J	UNK	02/12/09 08:51:58 pm	0.053	271	1.23		1.00	1.00 1.00
K6Q9K	UNK	02/12/09 08:54:17 pm	0.044	191	0.76		1.00	1.00 1.00
K6XJ3B	UNK	02/12/09 08:56:36 pm	0.048 ✓	231	0.42		1.00	1.00 1.00
K6XJ3C	UNK	02/12/09 08:58:56 pm	5.583 ✓	48782	0.88		1.00	1.00 1.00
K6N90	UNK	02/12/09 09:01:16 pm	0.037	132	4.43		1.00	1.00 1.00
K6N90S	UNK	02/12/09 09:03:34 pm	4.702 ✓	41055	1.08		1.00	1.00 1.00
K6N90D	UNK	02/12/09 09:05:52 pm	4.903 ✓	42812	1.01		1.00	1.00 1.00
K6N95	UNK	02/12/09 09:08:10 pm	0.093	619	3.53		1.00	1.00 1.00
K6N96	UNK	02/12/09 09:10:28 pm	0.046	209	2.24		1.00	1.00 1.00
CCV % Recovery 109.07 ✓	CCV	02/12/09 09:12:48 pm	5.453 ✓	47642	0.27		1.00	1.00 1.00

111.66% rec.  
111.66% see NCM  
02/21/09

Sample Name	Type	Date/Time	Conc (ppb)	μAbs	%RSD	Flags	Wt.	Vol. ODF
CCB	CCB	02/12/09 09:15:05 pm	0.017 ✓	-41	6.46		1.00	1.00 1.00
K6N97	UNK	02/12/09 09:17:23 pm	0.047	216	0.73		1.00	1.00 1.00
K6N98	UNK	02/12/09 09:19:41 pm	0.049	235	1.87		1.00	1.00 1.00
K6N99	UNK	02/12/09 09:21:59 pm	0.045	197	1.15		1.00	1.00 1.00
K6PAA	UNK	02/12/09 09:24:18 pm	0.050	247	1.63		1.00	1.00 1.00
K6PAC	UNK	02/12/09 09:26:37 pm	0.034	106	2.64		1.00	1.00 1.00
K6PAD	UNK	02/12/09 09:28:56 pm	0.041	169	3.12		1.00	1.00 1.00
K6PAE	UNK	02/12/09 09:31:16 pm	0.059	321	1.25		1.00	1.00 1.00
K6PAF	UNK	02/12/09 09:33:36 pm	0.057	306	1.39		1.00	1.00 1.00
K6PAH	UNK	02/12/09 09:35:54 pm	0.067	398	2.35		1.00	1.00 1.00
K6PAK	UNK	02/12/09 09:38:12 pm	0.055	285	3.34		1.00	1.00 1.00
CCV	CCV	02/12/09 09:40:32 pm	5.649 ✓	49358	0.82		1.00	1.00 1.00
% Recovery		112.98 ✓						
CCB	CCB	02/12/09 09:42:49 pm	0.016 ✓	-51	12.43		1.00	1.00 1.00
K6PAM	UNK	02/12/09 09:45:07 pm	0.045	206	1.59		1.00	1.00 1.00
K6PAP	UNK	02/12/09 09:47:26 pm	0.044	189	1.18		1.00	1.00 1.00
K6PAQ	UNK	02/12/09 09:49:44 pm	0.050	246	0.53		1.00	1.00 1.00
K6PAR	UNK	02/12/09 09:52:02 pm	0.049	235	1.08		1.00	1.00 1.00

Sample Name	Type	Date/Time	Conc (ppb)	μAbs	%RSD	Flags	Wt.	Vol. ODF
K6RD6	UNK	02/12/09 09:54:21 pm	0.047	223	0.43		1.00	1.00 1.00
K6RD9	UNK	02/12/09 09:56:39 pm	0.052	261	1.68		1.00	1.00 1.00
K6VAF	UNK	02/12/09 09:58:58 pm	0.058	314	0.97		1.00	1.00 1.00
K6XKJB	UNK	02/12/09 10:01:18 pm	0.053 ✓	274	0.78		1.00	1.00 1.00
K6XKJC	UNK	02/12/09 10:03:37 pm	5.591 ✓	48853	0.86		1.00	1.00 1.00
K6RCT	UNK	02/12/09 10:05:57 pm	0.044	196	0.41		1.00	1.00 1.00
CCV	CCV	02/12/09 10:08:17 pm	5.594 ✓	48878	0.84		1.00	1.00 1.00
% Recovery		111.88 ✓						
CCB	CCB	02/12/09 10:10:34 pm	0.017 ✓	-44	13.84		1.00	1.00 1.00
K6RCTS	UNK	02/12/09 10:12:53 pm	5.374 ✓	46945	0.12		1.00	1.00 1.00
K6RCTD	UNK	02/12/09 10:15:11 pm	5.428 ✓	47424	1.68		1.00	1.00 1.00
K6RC0	UNK	02/12/09 10:17:30 pm	0.040	161	1.12		1.00	1.00 1.00
K6RC1	UNK	02/12/09 10:19:48 pm	0.044	190	1.42		1.00	1.00 1.00
K6RC2	UNK	02/12/09 10:22:07 pm	0.047	221	1.67		1.00	1.00 1.00
K6RC3	UNK	02/12/09 10:24:25 pm	0.048	227	0.82		1.00	1.00 1.00
K6RC4	UNK	02/12/09 10:26:44 pm	0.057	307	1.46		1.00	1.00 1.00
K6RC5	UNK	02/12/09 10:29:02 pm	0.053	274	1.41		1.00	1.00 1.00
K6RC7	UNK	02/12/09 10:31:21 pm	0.059	322	0.68		1.00	1.00 1.00

Sample Name	Type	Date/Time	Conc (ppb)	μAbs	%RSD	Flags	Wt.	Vol. ODF
K6R0F	UNK	02/12/09 10:33:41 pm	0.047	215	1.13		1.00	1.00 1.00
CCV % Recovery 112.11 ✓	CCV	02/12/09 10:36:01 pm	5.605 ✓	48976	1.05		1.00	1.00 1.00
CCB	CCB	02/12/09 10:38:18 pm	0.018	-37	7.83		1.00	1.00 1.00
K6R1Q	UNK	02/12/09 10:40:37 pm	0.052	258	0.84		1.00	1.00 1.00
K6R1X	UNK	02/12/09 10:42:57 pm	0.047	219	1.26		1.00	1.00 1.00
K6R13	UNK	02/12/09 10:45:16 pm	0.050	245	1.45		1.00	1.00 1.00
K6R14	UNK	02/12/09 10:47:35 pm	0.060	336	0.59		1.00	1.00 1.00
K6R16	UNK	02/12/09 10:49:53 pm	0.042	177	1.26		1.00	1.00 1.00
K6R19	UNK	02/12/09 10:52:12 pm	0.042	174	1.64		1.00	1.00 1.00
K6R2A	UNK	02/12/09 10:54:31 pm	0.050	243	1.39		1.00	1.00 1.00
K6V8R	UNK	02/12/09 10:56:50 pm	0.053	270	0.39		1.00	1.00 1.00
K6V84	UNK	02/12/09 10:59:08 pm	0.041	164	1.07		1.00	1.00 1.00
K6V86	UNK	02/12/09 11:01:27 pm	0.044	192	1.58		1.00	1.00 1.00
CCV % Recovery 111.21 ✓	CCV	02/12/09 11:03:47 pm	5.561 ✓	48584	1.00		1.00	1.00 1.00
CCB	CCB	02/12/09 11:06:04 pm	0.019 ✓	-31	5.15		1.00	1.00 1.00
K6V87	UNK	02/12/09 11:08:23 pm	0.049	238	2.29		1.00	1.00 1.00
K6XKVB	UNK	02/12/09 11:10:43 pm	0.053 ✓	274	0.46		1.00	1.00 1.00

Sample Name	Type	Date/Time	Conc (ppb)	μAbs	%RSD	Flags	Wt.	Vol. ODF
K6XKVC	UNK	02/12/09 11:13:02 pm	5.497 ✓	48029	0.37		1.00	1.00 1.00
K6VA6	UNK	02/12/09 11:15:22 pm	0.038	143	4.19		1.00	1.00 1.00
K6VCG	UNK	02/12/09 11:17:41 pm	0.051	257	1.41		1.00	1.00 1.00
K6VCJ	UNK	02/12/09 11:20:00 pm	0.044	190	0.96		1.00	1.00 1.00
K6VCK	UNK	02/12/09 11:22:19 pm	0.049	239	0.48		1.00	1.00 1.00
K6VCM	UNK	02/12/09 11:24:38 pm	0.047	216	1.33		1.00	1.00 1.00
K6VCN	UNK	02/12/09 11:26:57 pm	0.051	257	2.42		1.00	1.00 1.00
K6VCR	UNK	02/12/09 11:29:16 pm	0.047	220	1.07		1.00	1.00 1.00
CCV	CCV	02/12/09 11:31:36 pm	5.581 ✓	48762	0.82		1.00	1.00 1.00
% Recovery 111.62 ✓								
CCB	CCB	02/12/09 11:33:53 pm	0.018 ✓	-37	13.44		1.00	1.00 1.00
K6VCW	UNK	02/12/09 11:36:12 pm	0.046	209	1.68		1.00	1.00 1.00
K6VC0	UNK	02/12/09 11:38:31 pm	0.045	203	1.77		1.00	1.00 1.00
K6VC3	UNK	02/12/09 11:40:50 pm	0.043 ✓	181	0.69		1.00	1.00 1.00
K6VC3P5	UNK	02/12/09 11:43:10 pm	0.047 ✓	222	0.87		1.00	1.00 1.00
K6VC3S	UNK	02/12/09 11:45:29 pm	5.390 ✓	47090	0.98		1.00	1.00 1.00
K6VC3D	UNK	02/12/09 11:47:49 pm	5.397 ✓	47148	0.94		1.00	1.00 1.00
K6VC6	UNK	02/12/09 11:50:09 pm	0.060	334	1.18		1.00	1.00 1.00

Sample Name	Type	Date/Time	Conc (ppb)	μAbs	%RSD	Flags	Wt.	Vol.	ODF
CCV	CCV	02/12/09 11:52:28 pm	5.590 ✓	48842	1.04		1.00	1.00	
% Recovery		111.80 ✓							1.00
CCB	CCB	02/12/09 11:54:46 pm	0.016 ✓	-50	12.87		1.00	1.00	1.00
K6XKNB	UNK	02/12/09 11:57:05 pm	0.047 ✓	216	1.02		1.00	1.00	1.00
K6XKNC	UNK	02/12/09 11:59:25 pm	5.536 ✓	48370	0.89		1.00	1.00	1.00
K6QHH	UNK	02/13/09 12:01:44 am	0.039	147	4.71		1.00	1.00	1.00
K6QHHS	UNK	02/13/09 12:04:04 am	5.474 ✓	47820	0.57		1.00	1.00	1.00
K6QHHD	UNK	02/13/09 12:06:23 am	5.578 ✓	48736	1.03		1.00	1.00	1.00
K6QHN	UNK	02/13/09 12:08:43 am	0.040	156	1.18		1.00	1.00	1.00
CCV	CCV	02/13/09 12:11:03 am	5.556 ✓	48544	1.79		1.00	1.00	1.00
% Recovery		111.12 ✓							1.00
CCB	CCB	02/13/09 12:13:20 am	0.017 ✓	-48	6.00		1.00	1.00	1.00
CCV	CCV	02/13/09 08:19:07 am	5.678	51370	1.14		1.00	1.00	1.00
% Recovery		117.57							1.00
CCB	CCB	02/13/09 08:21:24 am	0.011	-99	7.49		1.00	1.00	1.00
K6XKJC	UNK	02/13/09 08:23:44 am	5.732	50091	1.07		1.00	1.00	1.00
CCV	CCV	02/13/09 08:26:04 am	5.809	50759	0.92		1.00	1.00	1.00
% Recovery		116.17							1.00
CCB	CCB	02/13/09 08:28:21 am	0.011	-99	4.93		1.00	1.00	1.00

*NA cy 2/13/09*

# Analysis Parameters

## Instrument

### Conditions

Gas flow (mL/min)	Sample Uptake (s)	Rinse (s)	Read delay (s)	Replicates (#)	Replicate time (s)	Pump speed (%)	Wavelength (nm)
100	40.00	90.00	50.00	4	1.50	50	253.65

### Instrumental Zero

Zero before first sample: No

Zero periodically: Yes

Before each calibration.

### Baseline Correction

#1 Start time (s)	#1 End time (s)	#2 Start time (s)	#2 End time (s)
25.00	29.00		

### Standby Mode

Enabled: Yes

Standby Options: pump slow

### Autodilution

Enabled: No

Condition:

Tube # range:

If no autodilution tubes remaining

## Calibration

### Settings

Algorithm	Through blank	Weighted fit	Cal. Type	Racalibration rate	Reslope rate	Reslope standard
Linear	No	No	Normal	0	0	N/A

### Limits

Calibration slope		Reslope		Coeff. of Determination
Lower (%)	Upper (%)	Lower (%)	Upper (%)	
20	150	75	125	0.99500

Error action: Flag and continue

## QC

GLP Override: Yes

## QC Tests

**CCB**

Concentration  
(ppb)  
0.2000

Failure flag: Q

Error action for manually inserted QC: Stop analysis

**ICB**

Concentration  
(ppb)  
0.2000

Failure flag: Z

Error action for manually inserted QC: Stop analysis

**CCV**

Concentration (ppb)	Low Limit %	High Limit %
5.0000	80.0000	120.0000

Failure flag: Q

Error action for manually inserted QC: Stop analysis

**ICV**

Concentration (ppb)	Low Limit %	High Limit %
7.0000	90.0000	110.0000

Failure flag: Q

Error action for manually inserted QC: Stop analysis

**CRDL**

Concentration (ppb)	Low Limit %	High Limit %
0.2000	70.0000	130.0000

Failure flag: Y

Error action for manually inserted QC: Stop analysis

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

**ANALYTICAL REPORT**

PROJECT NO. BOEING NPDES

SSFL MWH-Pasadena/Boeing

Lot #: F9B100170

Joseph Doak

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

TESTAMERICA LABORATORIES, INC.

*for:*   
Sherryl Adam  
Project Manager

March 10, 2009

Case Narrative  
LOT NUMBER: F9B100170

This report contains the analytical results for the sample received under chain of custody by TestAmerica St. Louis on February 10, 2009. This sample is associated with your SSFL MWH-Pasadena/Boeing project.

The analytical results included in this report meet all applicable quality control procedure requirements.

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

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

**Observations/Nonconformances**

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

There are no observations or nonconformances associated with the analysis in this lot.

**METHODS SUMMARY**

F9B100170

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

**References:**

ASTM Annual Book Of ASTM Standards.

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

**SAMPLE SUMMARY**

F9B100170

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
K603K	001	ISB0719-01	02/06/09	10:50

**NOTE (S) :**

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

## TestAmerica Irvine

Client Sample ID: ISB0719-01

## Radiochemistry

Lab Sample ID: F9B100170-001  
 Work Order: K603K  
 Matrix: WATER

Date Collected: 02/06/09 1050  
 Date Received: 02/10/09 0900

Parameter	Result	Qual	Total Uncert. (2 $\sigma$ +/-)	RL	mdc	Prep Date	Analysis Date
<b>Gamma Cs-137 &amp; Hits by EPA 901.1 MOD</b>				pCi/L		Batch # 9042113	Yld %
Cesium 137	-0.4	U	6.5	20.0	13	02/11/09	02/26/09
Potassium 40	-50	U	230		250	02/11/09	02/26/09
<b>Gross Alpha/Beta EPA 900</b>				pCi/L		Batch # 9043152	Yld %
Gross Alpha	1.3	U	1.0	3.0	1.5	02/12/09	02/16/09
Gross Beta	3.01	J	0.90	4.00	1.1	02/12/09	02/16/09
<b>Radium 226 by EPA 903.0 MOD</b>				pCi/L		Batch # 9041370	Yld % 56
Radium (226)	0.09	U	0.15	1.00	0.26	02/10/09	03/06/09
<b>Radium 228 by GFPC EPA 904 MOD</b>				pCi/L		Batch # 9041371	Yld % 55
Radium 228	0.23	U	0.37	1.00	0.62	02/10/09	03/06/09
<b>TRITIUM (Distill) by EPA 906.0 MOD</b>				pCi/L		Batch # 9059104	Yld %
Tritium	-120	U	180	500	340	02/28/09	03/06/09
<b>SR-90 BY GFPC EPA-905 MOD</b>				pCi/L		Batch # 9041372	Yld % 44
Strontium 90	0.77	U	0.53	3.00	0.82	02/10/09	02/26/09
<b>Total Uranium by KPA ASTM 5174-91</b>				pCi/L		Batch # 9041382	Yld %
Total Uranium	0.130	U	0.014	0.677	0.21	02/10/09	03/08/09

## NOTE (S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC.

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

U Result is less than the sample detection limit.

## METHOD BLANK REPORT

## Radiochemistry

Client Lot ID: F9B100170  
 Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 $\sigma$ +/-)	RL	MDC	Prep Date	Lab Sample ID Analysis Date
Radium 226 by EPA 903.0 MOD			pCi/L	Batch #	9041370	Yld %	98 F9B100000-370B
Radium (226)	0.037	U	0.092	1.00	0.17	02/10/09	03/06/09
Radium 228 by GFPC EPA 904 MOD			pCi/L	Batch #	9041371	Yld %	98 F9B100000-371B
Radium 228	0.13	U	0.24	1.00	0.41	02/10/09	03/06/09
SR-90 BY GFPC EPA-905 MOD			pCi/L	Batch #	9041372	Yld %	72 F9B100000-372B
Strontium 90	0.42	U	0.30	3.00	0.47	02/10/09	02/26/09
Total Uranium by KPA ASTM 5174-91			pCi/L	Batch #	9041382	Yld %	F9B100000-382B
Total Uranium	-0.0103	U	0.0012	0.677	0.21	02/10/09	03/08/09
Gamma Cs-137 & Hits by EPA 901.1 MOD			pCi/L	Batch #	9042113	Yld %	F9B110000-113B
Cesium 137	-0.003	U	7.5	20.0	14	02/11/09	02/26/09
Potassium 40	-40	U	160		240	02/11/09	02/26/09
Gross Alpha/Beta EPA 900			pCi/L	Batch #	9043152	Yld %	F9B120000-152B
Gross Alpha	0.45	U	0.46	2.00	0.69	02/12/09	02/17/09
Gross Beta	0.36	U	0.90	4.00	1.5	02/12/09	02/17/09
TRITIUM (Distill) by EPA 906.0 MOD			pCi/L	Batch #	9059104	Yld %	F9B280000-104B
Tritium	2	U	190	500	330	02/28/09	03/05/09

## NOTE (S)

Data are incomplete without the case narrative.

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

U Result is less than the sample detection limit.

## Laboratory Control Sample Report

## Radiochemistry

Client Lot ID: F9B100170

Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 $\sigma$ +/-)	MDC	% Yld	% Rec	Lab Sample ID QC Control Limits
<b>Total Uranium by KPA ASTM 5174-91</b>							
Total Uranium	27.1	29.5	3.5	0.2		109	F9B100000-382C (90 - 118)
	Batch #:	9041382				Analysis Date:	03/08/09
<b>Total Uranium by KPA ASTM 5174-91</b>							
Total Uranium	5.42	5.76	0.60	0.21		106	F9B100000-382C (90 - 118)
	Batch #:	9041382				Analysis Date:	03/08/09
<b>Gamma Cs-137 &amp; Hits by EPA 901.1 MOD</b>							
Americium 241	141000	138000	11000	500		98	F9B110000-113C (90 - 110)
Cesium 137	53100	51800	3000	200		98	(90 - 110)
Cobalt 60	87900	84600	4800	200		96	(90 - 110)
	Batch #:	9042113				Analysis Date:	02/26/09
<b>Gross Alpha/Beta EPA 900</b>							
Gross Beta	67.6	71.1	6.0	1.4		105	F9B120000-152C (73 - 122)
	Batch #:	9043152				Analysis Date:	02/17/09
<b>Gross Alpha/Beta EPA 900</b>							
Gross Alpha	49.4	55.2	6.0	1.1		112	F9B120000-152C (73 - 136)
	Batch #:	9043152				Analysis Date:	02/17/09
<b>TRITIUM (Distill) by EPA 906.0 MOD</b>							
Tritium	4780	4340	490	340		91	F9B280000-104C (77 - 110)
	Batch #:	9059104				Analysis Date:	03/05/09

## NOTE(S)

MDC is determined by instrument performance only

9041382 and 9043152 before rounding to avoid round-off error in calculated results

Laboratory Control Sample/LCS Duplicate Report

Radiochemistry

Client Lot ID: F9B100170  
 Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 $\sigma$ +/-)	% Yld	% Rec	Lab Sample ID	
						QC Control Limits	Precision
<b>Radium 226 by EPA 903.0 MOD</b>							<b>F9B100000-370C</b>
Radium (226)	11.3	12.2	1.2	96	108	(52 - 150)	
Spk 2	11.3	11.6	1.2	97	103	(52 - 150)	5 %RPD
	Batch #:	9041370		Analysis Date:	03/06/09		
<b>Radium 228 by GFPC EPA 904 MOD</b>							<b>F9B100000-371C</b>
Radium 228	7.22	8.03	0.89	92	111	(64 - 140)	
Spk 2	7.22	7.84	0.87	93	109	(64 - 140)	2 %RPD
	Batch #:	9041371		Analysis Date:	03/06/09		
<b>SR-90 BY GFPC EPA-905 MOD</b>							<b>F9B100000-372C</b>
Strontium 90	6.97	8.07	0.90	70	116	(78 - 146)	
Spk 2	6.97	8.03	0.90	68	115	(78 - 146)	0.6 %RPD
	Batch #:	9041372		Analysis Date:	02/26/09		

NOTE(S)

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

DUPLICATE EVALUATION REPORT

Radiochemistry

Client Lot ID: F9B100170  
 Matrix: WATER

Date Sampled: 02/06/09  
 Date Received: 02/10/09

Parameter	SAMPLE Result	Total Uncert. (2σ+/-)	% Yld	DUPLICATE Result	Total Uncert. (2σ+/-)	% Yld	QC Sample ID Precision
Gamma Cs-137 & Hits by EPA 901.1 MOD			pCi/L	901.1 MOD			F9B100164-001
Cesium 137	0.0 U	7.5		-0.5 U	8.4		200 %RPD
Potassium 40	-100 U	1900		-40 U	250		96 %RPD
	Batch #:	9042113 (Sample)		9042113 (Duplicate)			
Gross Alpha/Beta EPA 900			pCi/L	900.0 MOD			F9B100164-001
Gross Alpha	0.77 U	0.96		0.48 U	0.93		47 %RPD
Gross Beta	4.8	1.0		4.10	0.96		16 %RPD
	Batch #:	9043152 (Sample)		9043152 (Duplicate)			
TRITIUM (Distill) by EPA 906.0 MOD			pCi/L	906.0 MOD			F9B100164-001
Tritium	-80 U	180		90 U	200		2030 %RPD
	Batch #:	9059104 (Sample)		9059104 (Duplicate)			

NOTE (S)

Data are incomplete without the case narrative.  
 Calculations are performed before rounding to avoid round-off error in calculated results

U Result is less than the sample detection limit.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE REPORT

Radiochemistry

Client Lot ID: F9B100164  
 Matrix: WATER

Date Sampled: 02/06/09 1300  
 Date Received: 02/10/09 0900

Parameter	Spike Amount	SPIKE Result	Total Uncert. (2σ +/-)	Spike Yld	SAMPLE Result	Total Uncert. (2σ +/-)	QC Sample ID		QC Control Limits
							% Yld	%Rec	
Total Uranium by KPA ASTM 5			pCi/L	5174-91		F9B100164-001			
Total Uranium	27.1	30.8	3.6		0.266 J	0.029		112	(90 - 121)
	Spk2 27.1	30.0	3.6		0.266 J	0.029		110	(90 - 121)
						Precision:		3	%RPD
Batch #:		9041382	Analysis date:		03/08/09				

NOTE (S)

Data are incomplete without the case narrative.

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

Lot # F9B100170 ISD0719  
 Result is greater than sample detection limit but less than stated reporting limit.

**MATRIX SPIKE REPORT**

**Radiochemistry**

Client Lot Id: F9B100164  
 Matrix: WATER

Date Sampled: 02/06/09  
 Date Received: 02/10/09

Parameter	Spike Amount	Spike Result	Total Uncert. (2σ+/-)	Spike Yld.	Sample Result	Total Uncert. (2σ+/-)	QC Sample ID		QC Control Limits
							%YLD	%REC	
<b>Gross Alpha/Beta EPA 900</b>			pCi/L	900.0 MOD			F9B100164-001		
Gross Alpha	49.4	45.4	5.8	0.77	0.96		90		(44 - 150)
	Batch #:	9043152		Analysis Date:	02/16/09				
<b>Gross Alpha/Beta EPA 900</b>			pCi/L	900.0 MOD			F9B100164-001		
Gross Beta	67.6	75.7	6.4	4.8	1.0		105		(66 - 147)
	Batch #:	9043152		Analysis Date:	02/16/09				
<b>TRITIUM (Distill) by EPA 906.0 MOD</b>			pCi/L	906.0 MOD			F9B100167-001		
Tritium	4780	3840	460	20	190		80		(47 - 150)
	Batch #:	9059104		Analysis Date:	03/06/09				

**NOTE (S)**

Data are incomplete without the case narrative.  
 Calculations are performed before rounding to avoid round-off errors in calculated results.

**SUBCONTRACT ORDER**

*out 3/5*

**TestAmerica Irvine  
ISB0719**

**SENDING LABORATORY:**

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

**RECEIVING LABORATORY:**

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

Analysis	Units	Due	Expires	Interlab Price	Surch	Comments
<b>Sample ID: ISB0719-01      Water</b>						
Sampled: 02/06/09 10:50						
Gamma Spec-O	mg/kg	02/17/09	02/06/10 10:50	\$250.00	0%	Out St Louis, k-40 and cs-137 only, DO NOT FILTER!
Gross Alpha-O	pCi/L	02/17/09	08/05/09 10:50	\$100.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Gross Beta-O	pCi/L	02/17/09	08/05/09 10:50	\$100.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Level 4 Data Package	N/A	02/17/09	03/06/09 10:50	\$0.00	0%	
Radium, Combined-O	pCi/L	02/17/09	02/06/10 10:50	\$238.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Strontium 90-O	pCi/L	02/17/09	02/06/10 10:50	\$155.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Tritium-O	pCi/L	02/17/09	02/06/10 10:50	\$80.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Uranium, Combined-O	pCi/L	02/17/09	02/06/10 10:50	\$120.00	0%	Out St Louis, Boeing permit, DO NOT FILTER!

**Containers Supplied:**

2.5 gal Poly (S)      500 mL Amber (T)

*[Signature]*      2/09/09 17:00  
Released By      Date/Time

*Feder*      2/09/09 17:00  
Received By      Date/Time  
*Sue Miller*      02.09.09 09:00



THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): F9B100158 F9B100172  
60  
64  
67  
70  
- 315 -

**CONDITION UPON RECEIPT FORM**

Client: TA Irvine

Quote No: 77635, 61594

COC/RFA No: below

Initiated By: JV

Date: 02-09-09 Time: 0900  
10 SN 02/10/09

Shipping Information

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

Shipping # (s):*	Sample Temperature (s):**
1. <u>7963 2682 0979</u>	1. <u>2</u>
2. <u>1048</u>	2. <u>2</u>
3. <u>1081</u>	3. <u>2</u>
4. _____	4. _____
5. _____	5. _____
6. _____	6. _____
7. _____	7. _____
8. _____	8. _____
9. _____	9. _____
10. _____	10. _____

\*Numbered shipping lines correspond to Numbered Sample Temp lines

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

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

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

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

Notes: ISB0752  
0534  
0723  
0717

Corrective Action:

Client Contact Name: \_\_\_\_\_  
 Sample(s) processed "as is"  
 Sample(s) on hold until: \_\_\_\_\_  
 Project Management Review: Sherry A. Adams

Informed by: \_\_\_\_\_  
 If released, notify: \_\_\_\_\_  
 Date: 2-11-09

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

February 20, 2009

**Vista Project I.D.: 31401**

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 10, 2009 under your Project Name "ISB0719". This work was authorized under your Purchase Order No. 2293716. 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](mailto: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 NEELAC 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: 2/10/2009**

<u>Vista Lab. ID</u>	<u>Client Sample ID</u>
31401-001	ISB0719-01

**SECTION II**

Method Blank					EPA Method 1613				
Matrix:	Aqueous	QC Batch No.:	1876	Lab Sample:	0-MB001	Date Analyzed DB-5:	13-Feb-09	Date Analyzed DB-225:	NA
Sample Size:	1.00 L	Date Extracted:	11-Feb-09						
Analyte	Conc. (ug/L)	DL <sup>a</sup>	EMPC <sup>b</sup>	Qualifiers	Labeled Standard	%R	LCL-UCL <sup>d</sup>	Qualifiers	
2,3,7,8-TCDD	ND	0.000000408			<b>IS</b> 13C-2,3,7,8-TCDD	94.1	25 - 164		
1,2,3,7,8-PeCDD	ND	0.000000973			13C-1,2,3,7,8-PeCDD	88.4	25 - 181		
1,2,3,4,7,8-HxCDD	ND	0.000000759			13C-1,2,3,4,7,8-HxCDD	95.7	32 - 141		
1,2,3,6,7,8-HxCDD	ND	0.000000746			13C-1,2,3,6,7,8-HxCDD	88.6	28 - 130		
1,2,3,7,8,9-HxCDD	ND	0.000000725			13C-1,2,3,4,6,7,8-HpCDD	102	23 - 140		
1,2,3,4,6,7,8-HpCDD	ND	0.00000155			13C-OCDD	97.3	17 - 157		
OCDD	ND	0.00000128			13C-2,3,7,8-TCDF	104	24 - 169		
2,3,7,8-TCDF	ND	0.000000401			13C-1,2,3,7,8-PeCDF	87.5	24 - 185		
1,2,3,7,8-PeCDF	ND	0.000000404			13C-2,3,4,7,8-PeCDF	85.8	21 - 178		
2,3,4,7,8-PeCDF	ND	0.000000419			13C-1,2,3,4,7,8-HxCDF	91.9	26 - 152		
1,2,3,4,7,8-HxCDF	ND	0.000000475			13C-1,2,3,6,7,8-HxCDF	91.7	26 - 123		
1,2,3,6,7,8-HxCDF	ND	0.000000430			13C-2,3,4,6,7,8-HxCDF	114	28 - 136		
2,3,4,6,7,8-HxCDF	ND	0.000000400			13C-1,2,3,7,8,9-HxCDF	94.0	29 - 147		
1,2,3,7,8,9-HxCDF	ND	0.000000717			13C-1,2,3,4,6,7,8-HpCDF	91.5	28 - 143		
1,2,3,4,6,7,8-HpCDF	ND	0.000000975			13C-1,2,3,4,7,8,9-HpCDF	96.4	26 - 138		
1,2,3,4,7,8,9-HpCDF	ND	0.00000107			13C-OCDF	92.5	17 - 157		
OCDF	ND	0.00000112			<b>CRS</b> 37Cl-2,3,7,8-TCDD	85.7	35 - 197		
Totals					Footnotes				
Total TCDD	ND	0.000000408			a. Sample specific estimated detection limit.				
Total PeCDD	ND	0.000000973			b. Estimated maximum possible concentration.				
Total HxCDD	ND	0.000000743			c. Method detection limit.				
Total HpCDD	ND	0.00000155			d. Lower control limit - upper control limit.				
Total TCDF	ND	0.000000401							
Total PeCDF	ND	0.000000412							
Total HxCDF	ND	0.000000506							
Total HpCDF	ND	0.00000102							

Analyst: JMH

Approved By: Martha M. Maier 20-Feb-2009 10:08

OPR Results				EPA Method 1613			
Matrix:	Aqueous	QC Batch No.:	1876	Lab Sample:	0-OPR001		
Sample Size:	1.00 L	Date Extracted:	11-Feb-09	Date Analyzed DB-5:	13-Feb-09	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	10.1	6.7 - 15.8	<b>IS</b> 13C-2,3,7,8-TCDD	91.9	25 - 164	
1,2,3,7,8-PeCDD	50.0	50.2	35 - 71	13C-1,2,3,7,8-PeCDD	79.9	25 - 181	
1,2,3,4,7,8-HxCDD	50.0	52.0	35 - 82	13C-1,2,3,4,7,8-HxCDD	85.3	32 - 141	
1,2,3,6,7,8-HxCDD	50.0	50.1	38 - 67	13C-1,2,3,6,7,8-HxCDD	80.2	28 - 130	
1,2,3,7,8,9-HxCDD	50.0	50.0	32 - 81	13C-1,2,3,4,6,7,8-HpCDD	92.4	23 - 140	
1,2,3,4,6,7,8-HpCDD	50.0	50.1	35 - 70	13C-OCDD	84.1	17 - 157	
OCDD	100	99.3	78 - 144	13C-2,3,7,8-TCDF	102	24 - 169	
2,3,7,8-TCDF	10.0	9.62	7.5 - 15.8	13C-1,2,3,7,8-PeCDF	79.5	24 - 185	
1,2,3,7,8-PeCDF	50.0	49.1	40 - 67	13C-2,3,4,7,8-PeCDF	79.2	21 - 178	
2,3,4,7,8-PeCDF	50.0	48.6	34 - 80	13C-1,2,3,4,7,8-HxCDF	84.6	26 - 152	
1,2,3,4,7,8-HxCDF	50.0	48.9	36 - 67	13C-1,2,3,6,7,8-HxCDF	84.2	26 - 123	
1,2,3,6,7,8-HxCDF	50.0	48.8	42 - 65	13C-2,3,4,6,7,8-HxCDF	106	28 - 136	
2,3,4,6,7,8-HxCDF	50.0	49.2	35 - 78	13C-1,2,3,7,8,9-HxCDF	81.2	29 - 147	
1,2,3,7,8,9-HxCDF	50.0	50.7	39 - 65	13C-1,2,3,4,6,7,8-HpCDF	80.7	28 - 143	
1,2,3,4,6,7,8-HpCDF	50.0	49.8	41 - 61	13C-1,2,3,4,7,8,9-HpCDF	88.8	26 - 138	
1,2,3,4,7,8,9-HpCDF	50.0	50.7	39 - 69	13C-OCDF	80.0	17 - 157	
OCDF	100	98.8	63 - 170	<b>CRS</b> 37Cl-2,3,7,8-TCDD	89.7	35 - 197	

Analyst: JMH

Approved By: Martha M. Maier 20-Feb-2009 10:08

Sample ID: ISB0719-01				EPA Method 1613				
Client Data		Sample Data		Laboratory Data				
Name:	Test America-Irvine, CA	Matrix:	Aqueous	Lab Sample:	31401-001	Date Received:	10-Feb-09	
Project:	ISB0719	Sample Size:	1.05 L	QC Batch No.:	1876	Date Extracted:	11-Feb-09	
Date Collected:	6-Feb-09			Date Analyzed DB-5:	13-Feb-09	Date Analyzed DB-225:	NA	
Time Collected:	1050							
Analyte	Conc. (ug/L)	DL <sup>a</sup>	EMPC <sup>b</sup>	Qualifiers	Labeled Standard	%R	LCL-UCL <sup>d</sup>	Qualifiers
2,3,7,8-TCDD	ND	0.000000436			<u>IS</u> 13C-2,3,7,8-TCDD	88.2	25 - 164	
1,2,3,7,8-PeCDD	ND	0.00000123			13C-1,2,3,7,8-PeCDD	78.3	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.00000137			13C-1,2,3,4,7,8-HxCDD	82.6	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.00000143			13C-1,2,3,6,7,8-HxCDD	75.7	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.00000135			13C-1,2,3,4,6,7,8-HpCDD	90.5	23 - 140	
1,2,3,4,6,7,8-HpCDD	ND	0.00000227			13C-OCDD	82.1	17 - 157	
OCDD	0.0000210			J	13C-2,3,7,8-TCDF	95.2	24 - 169	
2,3,7,8-TCDF	ND	0.000000492			13C-1,2,3,7,8-PeCDF	78.1	24 - 185	
1,2,3,7,8-PeCDF	ND	0.000000506			13C-2,3,4,7,8-PeCDF	78.4	21 - 178	
2,3,4,7,8-PeCDF	ND	0.000000496			13C-1,2,3,4,7,8-HxCDF	84.1	26 - 152	
1,2,3,4,7,8-HxCDF	ND	0.000000698			13C-1,2,3,6,7,8-HxCDF	77.5	26 - 123	
1,2,3,6,7,8-HxCDF	ND	0.000000685			13C-2,3,4,6,7,8-HxCDF	97.9	28 - 136	
2,3,4,6,7,8-HxCDF	ND	0.000000631			13C-1,2,3,7,8,9-HxCDF	79.5	29 - 147	
1,2,3,7,8,9-HxCDF	ND	0.00000116			13C-1,2,3,4,6,7,8-HpCDF	79.8	28 - 143	
1,2,3,4,6,7,8-HpCDF	ND	0.00000118			13C-1,2,3,4,7,8,9-HpCDF	86.7	26 - 138	
1,2,3,4,7,8,9-HpCDF	ND	0.00000138			13C-OCDF	82.7	17 - 157	
OCDF	ND	0.00000133			<u>CRS</u> 37Cl-2,3,7,8-TCDD	90.6	35 - 197	
Totals				Footnotes				
Total TCDD	ND	0.000000436			a. Sample specific estimated detection limit.			
Total PeCDD	ND	0.00000123			b. Estimated maximum possible concentration.			
Total HxCDD	ND	0.00000138			c. Method detection limit.			
Total HpCDD	ND	0.00000227			d. Lower control limit - upper control limit.			
Total TCDF	ND	0.000000492						
Total PeCDF	ND	0.000000501						
Total HxCDF	ND	0.000000794						
Total HpCDF	ND	0.00000128						

Analyst: JMH

Approved By: Martha M. Maier 20-Feb-2009 10:08

**APPENDIX**

## DATA QUALIFIERS & ABBREVIATIONS

NPDES - 1321

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

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

## CERTIFICATIONS

NPDES - 1322

Accrediting Authority	Certificate Number
State of Alaska, DEC	CA413-2008
State of Arizona	AZ0639
State of Arkansas, DEQ	08-043-0
State of Arkansas, DOH	Reciprocity through CA
State of California – NELAP Primary AA	02102CA
State of Colorado	N/A
State of Connecticut	PH-0182
State of Florida, DEP	E87777
State of Indiana Department of Health	C-CA-02
Commonwealth of Kentucky	90063
State of Louisiana, Health and Hospitals	LA08000
State of Louisiana, DEQ	01977
State of Maine	2008024
State of Michigan	9932
State of Mississippi	Reciprocity through CA
Naval Facilities Engineering Service Center	NFESC413
State of Nevada	CA004132007A
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	CA200001-006
State of Pennsylvania	68-00490
State of South Carolina	87002001
State of Tennessee	TN02996
State of Texas	T104704189-08-TX
U.S. Army Corps of Engineers	N/A
State of Utah	CA16400
Commonwealth of Virginia	00013
State of Washington	C1285
State of Wisconsin	998036160
State of Wyoming	8TMS-Q

**SUBCONTRACT ORDER**

TestAmerica Irvine  
ISB0719

SHD 1

**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: CA - CALIFORNIA  
Receipt Temperature: 17 °C

Ice:  Y  N

Analysis	Units	Due	Expires	Comments
Sample ID: ISB0719-01      Water      Sampled: 02/06/09 10:50				
1613-Dioxin-HR-Atla	ug/l	02/17/09	02/13/09 10:50	J flags, 17 congeners, no TEQ, ug/L, sub=Vista
Level 4 + EDD-OUT	N/A	02/17/09	03/06/09 10:50	Excel EDD email to pm, include Std logs for LVI IV
Containers Supplied: 1 L Amber (C)      1 L Amber (D)				

Released By:  2/9/09 17:00  
Date/Time

Received By:  2/9/09 17:00  
Date/Time

Project 31401  
Data/Time

Received By:  2/10/09 11:18  
Date/Time

# SAMPLE LOG-IN CHECKLIST



Vista Project #: 31401 TAT unspecified

Samples Arrival:	Date/Time <u>2/10/09</u>	Initials: <u>WAB</u>	Location: Shelf/Rack: <u>WR-2 N/A</u>
Logged In:	Date/Time <u>2/10/09</u>	Initials: <u>CV</u>	Location: Shelf/Rack: <u>C-4</u>
Delivered By:	<u>FedEx</u>	UPS	Cal
Preservation:	<u>Ice</u>	Blue Ice	DHL
Temp °C	<u>1.7</u>	Time: <u>0905</u>	Hand Delivered
		Thermometer ID: <u>IR-1</u>	Other

	YES	NO	NA
Adequate Sample Volume Received? ( <u>A + B bottles</u> )	<input checked="" type="checkbox"/>		
Holding Time Acceptable?	<input checked="" type="checkbox"/>		
Shipping Container(s) Intact?	<input checked="" type="checkbox"/>		
Shipping Custody Seals Intact?	<input checked="" type="checkbox"/>		
Shipping Documentation Present?	<input checked="" type="checkbox"/>		
Airbill	Trk # <u>7973 2316 6990</u>		
Sample Container Intact?	<input checked="" type="checkbox"/>		
Sample Custody Seals Intact?	<input checked="" type="checkbox"/>		
Chain of Custody / Sample Documentation Present?	<input checked="" type="checkbox"/>		
COC Anomaly/Sample Acceptance Form completed?	<input checked="" type="checkbox"/>		
If Chlorinated or Drinking Water Samples, Acceptable Preservation?	<input checked="" type="checkbox"/>		
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> Preservation Documented?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> None
Shipping Container	<input type="checkbox"/> Vista	<input checked="" type="checkbox"/> Client	<input type="checkbox"/> Retain <input checked="" type="checkbox"/> Return <input type="checkbox"/> Dispose

Comments: