

APPENDIX G

Section 25

Outfall 009, 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 009

Sampled: 02/06/09
Received: 02/06/09
Issued: 03/11/09 11:24

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	CLIENT ID	MATRIX
ISB0723-01	Outfall 009	Water
ISB0723-02	Trip Blank	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 009

Report Number: ISB0723

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
Sample ID: ISB0723-01 (Outfall 009 - Water)					Sampled: 02/06/09				
Reporting Units: ug/l									
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>					82 %				
<i>Surrogate: Dibromofluoromethane (80-120%)</i>					94 %				
<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 009

Report Number: ISB0723

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
Sample ID: ISB0723-02 (Trip Blank - Water)					Sampled: 02/06/09				
Reporting Units: ug/l									
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>					93 %				

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Project Manager

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 009

Report Number: ISB0723

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
Sample ID: ISB0723-01 (Outfall 009 - Water)					Sampled: 02/06/09				
Reporting Units: ug/l									
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>					82 %				
<i>Surrogate: Dibromofluoromethane (80-120%)</i>					94 %				
<i>Surrogate: Toluene-d8 (80-120%)</i>					94 %				
Sample ID: ISB0723-02 (Trip Blank - Water)					Sampled: 02/06/09				
Reporting Units: ug/l									
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>					93 %				

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 009

Report Number: ISB0723

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
Sample ID: ISB0723-01 (Outfall 009 - Water)					Sampled: 02/06/09				
Reporting Units: ug/l									
Acenaphthene	EPA 625	9B11088	2.8	9.4	ND	0.943	02/11/09	02/16/09	
Acenaphthylene	EPA 625	9B11088	2.8	9.4	ND	0.943	02/11/09	02/16/09	
Aniline	EPA 625	9B11088	3.3	9.4	ND	0.943	02/11/09	02/16/09	
Anthracene	EPA 625	9B11088	2.4	9.4	ND	0.943	02/11/09	02/16/09	
Benzidine	EPA 625	9B11088	9.4	19	ND	0.943	02/11/09	02/16/09	
Benzo(a)anthracene	EPA 625	9B11088	2.4	9.4	ND	0.943	02/11/09	02/16/09	
Benzo(a)pyrene	EPA 625	9B11088	2.8	9.4	ND	0.943	02/11/09	02/16/09	
Benzo(b)fluoranthene	EPA 625	9B11088	1.9	9.4	ND	0.943	02/11/09	02/16/09	
Benzo(g,h,i)perylene	EPA 625	9B11088	3.8	9.4	ND	0.943	02/11/09	02/16/09	
Benzo(k)fluoranthene	EPA 625	9B11088	2.4	9.4	ND	0.943	02/11/09	02/16/09	
Benzoic acid	EPA 625	9B11088	9.4	19	ND	0.943	02/11/09	02/16/09	
Benzyl alcohol	EPA 625	9B11088	3.3	19	ND	0.943	02/11/09	02/16/09	
4-Bromophenyl phenyl ether	EPA 625	9B11088	2.8	9.4	ND	0.943	02/11/09	02/16/09	
Butyl benzyl phthalate	EPA 625	9B11088	3.8	19	ND	0.943	02/11/09	02/16/09	
4-Chloro-3-methylphenol	EPA 625	9B11088	2.4	19	ND	0.943	02/11/09	02/16/09	
4-Chloroaniline	EPA 625	9B11088	1.9	9.4	ND	0.943	02/11/09	02/16/09	
Bis(2-chloroethoxy)methane	EPA 625	9B11088	2.8	9.4	ND	0.943	02/11/09	02/16/09	
Bis(2-chloroethyl)ether	EPA 625	9B11088	2.8	9.4	ND	0.943	02/11/09	02/16/09	
Bis(2-chloroisopropyl)ether	EPA 625	9B11088	2.4	9.4	ND	0.943	02/11/09	02/16/09	
2-Chloronaphthalene	EPA 625	9B11088	2.8	9.4	ND	0.943	02/11/09	02/16/09	
2-Chlorophenol	EPA 625	9B11088	2.8	9.4	ND	0.943	02/11/09	02/16/09	
4-Chlorophenyl phenyl ether	EPA 625	9B11088	2.4	9.4	ND	0.943	02/11/09	02/16/09	
Chrysene	EPA 625	9B11088	2.4	9.4	ND	0.943	02/11/09	02/16/09	
Dibenz(a,h)anthracene	EPA 625	9B11088	2.8	19	ND	0.943	02/11/09	02/16/09	
Dibenzofuran	EPA 625	9B11088	3.8	9.4	ND	0.943	02/11/09	02/16/09	
Di-n-butyl phthalate	EPA 625	9B11088	2.8	19	ND	0.943	02/11/09	02/16/09	
1,2-Dichlorobenzene	EPA 625	9B11088	2.8	9.4	ND	0.943	02/11/09	02/16/09	
1,3-Dichlorobenzene	EPA 625	9B11088	2.8	9.4	ND	0.943	02/11/09	02/16/09	
1,4-Dichlorobenzene	EPA 625	9B11088	2.4	9.4	ND	0.943	02/11/09	02/16/09	
3,3'-Dichlorobenzidine	EPA 625	9B11088	7.1	19	ND	0.943	02/11/09	02/16/09	
2,4-Dichlorophenol	EPA 625	9B11088	3.3	9.4	ND	0.943	02/11/09	02/16/09	
Diethyl phthalate	EPA 625	9B11088	3.3	9.4	ND	0.943	02/11/09	02/16/09	
2,4-Dimethylphenol	EPA 625	9B11088	3.3	19	ND	0.943	02/11/09	02/16/09	
Dimethyl phthalate	EPA 625	9B11088	2.4	9.4	ND	0.943	02/11/09	02/16/09	
4,6-Dinitro-2-methylphenol	EPA 625	9B11088	3.8	19	ND	0.943	02/11/09	02/16/09	
2,4-Dinitrophenol	EPA 625	9B11088	7.5	19	ND	0.943	02/11/09	02/16/09	
2,4-Dinitrotoluene	EPA 625	9B11088	3.3	9.4	ND	0.943	02/11/09	02/16/09	
2,6-Dinitrotoluene	EPA 625	9B11088	1.9	9.4	ND	0.943	02/11/09	02/16/09	
Di-n-octyl phthalate	EPA 625	9B11088	3.3	19	ND	0.943	02/11/09	02/16/09	
1,2-Diphenylhydrazine/Azobenzene	EPA 625	9B11088	2.4	19	ND	0.943	02/11/09	02/16/09	
Bis(2-ethylhexyl)phthalate	EPA 625	9B11088	3.8	47	ND	0.943	02/11/09	02/16/09	

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 Project Manager

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 009

Report Number: ISB0723

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
Sample ID: ISB0723-01 (Outfall 009 - Water) - cont.					Sampled: 02/06/09				
Reporting Units: ug/l									
Fluoranthene	EPA 625	9B11088	2.8	9.4	ND	0.943	02/11/09	02/16/09	
Fluorene	EPA 625	9B11088	2.8	9.4	ND	0.943	02/11/09	02/16/09	
Hexachlorobenzene	EPA 625	9B11088	2.8	9.4	ND	0.943	02/11/09	02/16/09	
Hexachlorobutadiene	EPA 625	9B11088	3.8	9.4	ND	0.943	02/11/09	02/16/09	
Hexachlorocyclopentadiene	EPA 625	9B11088	4.7	19	ND	0.943	02/11/09	02/16/09	
Hexachloroethane	EPA 625	9B11088	3.3	9.4	ND	0.943	02/11/09	02/16/09	
Indeno(1,2,3-cd)pyrene	EPA 625	9B11088	3.3	19	ND	0.943	02/11/09	02/16/09	
Isophorone	EPA 625	9B11088	2.8	9.4	ND	0.943	02/11/09	02/16/09	
2-Methylnaphthalene	EPA 625	9B11088	1.9	9.4	ND	0.943	02/11/09	02/16/09	
2-Methylphenol	EPA 625	9B11088	2.8	9.4	ND	0.943	02/11/09	02/16/09	
4-Methylphenol	EPA 625	9B11088	2.8	9.4	ND	0.943	02/11/09	02/16/09	
Naphthalene	EPA 625	9B11088	2.8	9.4	ND	0.943	02/11/09	02/16/09	
2-Nitroaniline	EPA 625	9B11088	1.9	19	ND	0.943	02/11/09	02/16/09	
3-Nitroaniline	EPA 625	9B11088	2.8	19	ND	0.943	02/11/09	02/16/09	
4-Nitroaniline	EPA 625	9B11088	3.8	19	ND	0.943	02/11/09	02/16/09	
Nitrobenzene	EPA 625	9B11088	2.8	19	ND	0.943	02/11/09	02/16/09	
2-Nitrophenol	EPA 625	9B11088	3.3	9.4	ND	0.943	02/11/09	02/16/09	
4-Nitrophenol	EPA 625	9B11088	5.2	19	ND	0.943	02/11/09	02/16/09	
N-Nitroso-di-n-propylamine	EPA 625	9B11088	3.3	9.4	ND	0.943	02/11/09	02/16/09	
N-Nitrosodimethylamine	EPA 625	9B11088	2.4	19	ND	0.943	02/11/09	02/16/09	
N-Nitrosodiphenylamine	EPA 625	9B11088	1.9	9.4	ND	0.943	02/11/09	02/16/09	
Pentachlorophenol	EPA 625	9B11088	3.3	19	ND	0.943	02/11/09	02/16/09	
Phenanthrene	EPA 625	9B11088	3.3	9.4	ND	0.943	02/11/09	02/16/09	
Phenol	EPA 625	9B11088	1.9	9.4	ND	0.943	02/11/09	02/16/09	
Pyrene	EPA 625	9B11088	3.8	9.4	ND	0.943	02/11/09	02/16/09	
1,2,4-Trichlorobenzene	EPA 625	9B11088	2.4	9.4	ND	0.943	02/11/09	02/16/09	
2,4,5-Trichlorophenol	EPA 625	9B11088	2.8	19	ND	0.943	02/11/09	02/16/09	
2,4,6-Trichlorophenol	EPA 625	9B11088	4.2	19	ND	0.943	02/11/09	02/16/09	
Surrogate: 2,4,6-Tribromophenol (40-120%)					79 %				
Surrogate: 2-Fluorobiphenyl (50-120%)					71 %				
Surrogate: 2-Fluorophenol (30-120%)					59 %				
Surrogate: Nitrobenzene-d5 (45-120%)					72 %				
Surrogate: Phenol-d6 (35-120%)					67 %				
Surrogate: Terphenyl-d14 (50-125%)					93 %				

TestAmerica Irvine

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 Project Manager

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Project ID: Annual Outfall 009

Report Number: ISB0723

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
Sample ID: ISB0723-01 (Outfall 009 - Water) - cont.					Sampled: 02/06/09				
Reporting Units: ug/l									
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>					74 %				
<i>Surrogate: Tetrachloro-m-xylene (35-115%)</i>					69 %				

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 009

Report Number: ISB0723

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
Sample ID: ISB0723-01 (Outfall 009 - Water) - cont.					Sampled: 02/06/09				
Reporting Units: ug/l									
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>					<i>101 %</i>				

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Attention: Bronwyn Kelly

Project ID: Annual Outfall 009

Report Number: ISB0723

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
Sample ID: ISB0723-01 (Outfall 009 - Water) - cont.					Sampled: 02/06/09				
Reporting Units: mg/l									
Hexane Extractable Material (Oil & Grease)	EPA 1664A	9B12121	1.3	4.8	ND	1	02/12/09	02/12/09	

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ISB0723 <Page 9 of 55>
NPDES - 1868

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Attention: Bronwyn Kelly

Project ID: Annual Outfall 009

Report Number: ISB0723

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
Sample ID: ISB0723-01 (Outfall 009 - Water) - cont.					Sampled: 02/06/09				
Reporting Units: mg/l									
Hardness as CaCO3	SM2340B	[CALC]	N/A	0.33	26	1	02/09/09	02/14/09	
Boron	EPA 200.7	9B09073	0.020	0.050	0.034	1	02/09/09	02/16/09	Ja
Calcium	EPA 200.7	9B09073	0.050	0.10	6.4	1	02/09/09	02/14/09	
Iron	EPA 200.7	9B09073	0.015	0.040	3.2	1	02/09/09	02/14/09	
Magnesium	EPA 200.7	9B09073	0.012	0.020	2.3	1	02/09/09	02/14/09	

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ISB0723 <Page 10 of 55>
NPDES - 1869

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 009

Report Number: ISB0723

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
Sample ID: ISB0723-01 (Outfall 009 - Water) - cont.					Sampled: 02/06/09				
Reporting Units: ug/l									
Aluminum	EPA 200.7	9B09073	40	50	2600	1	02/09/09	02/16/09	
Arsenic	EPA 200.7	9B09073	7.0	10	ND	1	02/09/09	02/14/09	
Antimony	EPA 200.8	9B09075	0.20	2.0	1.0	1	02/09/09	02/10/09	Ja
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	5.0	1	02/09/09	02/14/09	
Nickel	EPA 200.7	9B09073	2.0	10	5.0	1	02/09/09	02/14/09	Ja
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	0.18	1	02/09/09	02/10/09	Ja
Vanadium	EPA 200.7	9B09073	3.0	10	6.8	1	02/09/09	02/14/09	Ja
Zinc	EPA 200.7	9B09073	6.0	20	22	1	02/09/09	02/14/09	
Copper	EPA 200.8	9B09075	0.75	2.0	6.5	1	02/09/09	02/10/09	
Lead	EPA 200.8	9B09075	0.30	1.0	7.5	1	02/09/09	02/10/09	
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 009

Report Number: ISB0723

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
Sample ID: ISB0723-01 (Outfall 009 - Water) - cont.					Sampled: 02/06/09				
Reporting Units: mg/l									
Hardness as CaCO3	SM2340B-Diss	[CALC]	N/A	0.33	21	1	02/09/09	02/11/09	
Boron	EPA 200.7-Diss	9B09083	0.020	0.050	0.026	1	02/09/09	02/11/09	Ja
Calcium	EPA 200.7-Diss	9B09083	0.050	0.10	5.7	1	02/09/09	02/11/09	
Iron	EPA 200.7-Diss	9B09083	0.015	0.040	0.43	1	02/09/09	02/11/09	
Magnesium	EPA 200.7-Diss	9B09083	0.012	0.020	1.7	1	02/09/09	02/11/09	

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Project ID: Annual Outfall 009

Report Number: ISB0723

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
Sample ID: ISB0723-01 (Outfall 009 - Water) - cont.					Sampled: 02/06/09				
Reporting Units: ug/l									
Aluminum	EPA 200.7-Diss	9B09083	40	50	350	1	02/09/09	02/11/09	
Arsenic	EPA 200.7-Diss	9B09083	7.0	10	ND	1	02/09/09	02/11/09	
Antimony	EPA 200.8-Diss	9B12130	0.20	2.0	0.96	1	02/12/09	02/13/09	Ja
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	6.3	1	02/09/09	02/11/09	Ja
Copper	EPA 200.8-Diss	9B12130	0.75	2.0	3.9	1	02/12/09	02/13/09	
Lead	EPA 200.8-Diss	9B12130	0.30	1.0	1.4	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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Project ID: Annual Outfall 009

Report Number: ISB0723

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
Sample ID: ISB0723-01 (Outfall 009 - Water) - cont.					Sampled: 02/06/09				
Reporting Units: mg/l									
Chloride	EPA 300.0	9B06069	0.25	0.50	5.0	1	02/06/09	02/07/09	
Total Cyanide	SM4500-CN-C,E	9B09095	0.0022	0.0050	ND	1	02/09/09	02/09/09	
Dissolved Oxygen	SM4500-O G	9B09093	1.0	1.0	8.5	1	02/09/09	02/09/09	HFT
Fluoride	SM 4500-F-C	9B16034	0.020	0.10	0.17	1	02/16/09	02/16/09	B
Nitrate/Nitrite-N	EPA 300.0	9B06069	0.15	0.26	0.68	1	02/06/09	02/07/09	
Sulfate	EPA 300.0	9B06069	0.20	0.50	5.1	1	02/06/09	02/07/09	
Total Dissolved Solids	SM2540C	9B11043	10	10	72	1	02/11/09	02/11/09	
Total Suspended Solids	SM 2540D	9B12141	1.0	10	27	1	02/12/09	02/12/09	

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Project ID: Annual Outfall 009

Report Number: ISB0723

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
Sample ID: ISB0723-01 (Outfall 009 - Water) - cont.					Sampled: 02/06/09				
Reporting Units: NTU									
Turbidity	SM2130B	9B10064	0.080	2.0	55	2	02/10/09	02/10/09	H-1

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ISB0723 <Page 15 of 55>
NPDES - 1874

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Attention: Bronwyn Kelly

Project ID: Annual Outfall 009

Report Number: ISB0723

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
Sample ID: ISB0723-01 (Outfall 009 - Water) - cont.					Sampled: 02/06/09				
Reporting Units: ug/l									
Perchlorate	EPA 314.0	9B13054	0.90	4.0	ND	1	02/13/09	02/13/09	

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ISB0723 <Page 16 of 55>
NPDES - 1875

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 009

Report Number: ISB0723

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
Sample ID: ISB0723-01 (Outfall 009 - Water) - cont.					Sampled: 02/06/09				RL1
Reporting Units: ug/l									
Chlorpyrifos	EPA 525.2	C9B0701	0.21	2.0	ND	1.98	02/07/09	02/07/09	
Diazinon	EPA 525.2	C9B0701	0.48	0.50	ND	1.98	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>116 %</i>				
<i>Surrogate: Perylene-d12 (70-130%)</i>					<i>98 %</i>				

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Attention: Bronwyn Kelly

Project ID: Annual Outfall 009

Report Number: ISB0723

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
Sample ID: ISB0723-01 (Outfall 009 - Water) - cont.					Sampled: 02/06/09				
Reporting Units: ug/L									
Mercury	MCAWW 245.1	9043305	0.027	0.2	0.071	1	02/12/09	02/12/09	J, Ba

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ISB0723 <Page 18 of 55>
NPDES - 1877

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Attention: Bronwyn Kelly

Project ID: Annual Outfall 009

Report Number: ISB0723

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
Sample ID: ISB0723-01 (Outfall 009 - Water) - cont.					Sampled: 02/06/09				
Reporting Units: ug/L									
Mercury	MCAWW 245.1-DISS	9043330	0.027	0.2	0.06	1	02/12/09	02/12/09	J, Ba

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NPDES - 1878

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 009

Report Number: ISB0723

Sampled: 02/06/09

Received: 02/06/09

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: Outfall 009 (ISB0723-01) - Water					
EPA 300.0	2	02/06/2009 14:10	02/06/2009 17:35	02/06/2009 20:00	02/07/2009 01:14
EPA 525.2	1	02/06/2009 14:10	02/06/2009 17:35	02/07/2009 07:30	02/07/2009 14:13
EPA 624	3	02/06/2009 14:10	02/06/2009 17:35	02/07/2009 00:00	02/07/2009 16:12
Filtration	1	02/06/2009 14:10	02/06/2009 17:35	02/06/2009 21:59	02/06/2009 22:02
SM2130B	2	02/06/2009 14:10	02/06/2009 17:35	02/10/2009 09:50	02/10/2009 10:35
SM4500-O G	1	02/06/2009 14:10	02/06/2009 17:35	02/09/2009 14:30	02/09/2009 15:15
Sample ID: Trip Blank (ISB0723-02) - Water					
EPA 624	3	02/06/2009 15:00	02/06/2009 17:35	02/07/2009 00:00	02/07/2009 16:43

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 009

Report Number: ISB0723

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
Batch: 9B07011 Extracted: 02/07/09											
Blank Analyzed: 02/07/2009 (9B07011-BLK1)											
Benzene	ND	0.50	0.28	ug/l							
Bromodichloromethane	ND	0.50	0.30	ug/l							
Bromoform	ND	0.50	0.40	ug/l							
Bromomethane	ND	1.0	0.42	ug/l							
Carbon tetrachloride	ND	0.50	0.28	ug/l							
Chlorobenzene	ND	0.50	0.36	ug/l							
Chloroethane	ND	1.0	0.40	ug/l							
Chloroform	ND	0.50	0.33	ug/l							
Chloromethane	ND	0.50	0.40	ug/l							
Dibromochloromethane	ND	0.50	0.40	ug/l							
1,2-Dichlorobenzene	ND	0.50	0.32	ug/l							
1,3-Dichlorobenzene	ND	0.50	0.35	ug/l							
1,4-Dichlorobenzene	ND	0.50	0.37	ug/l							
1,1-Dichloroethane	ND	0.50	0.40	ug/l							
1,2-Dichloroethane	ND	0.50	0.28	ug/l							
1,1-Dichloroethene	ND	0.50	0.42	ug/l							
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			

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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 009

Report Number: ISB0723

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
Batch: 9B07011 Extracted: 02/07/09											
LCS Analyzed: 02/07/2009 (9B07011-BS1)											
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			

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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 009

Report Number: ISB0723

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
Batch: 9B07011 Extracted: 02/07/09											
Matrix Spike Analyzed: 02/07/2009 (9B07011-MS1)						Source: ISA2844-05					
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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MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 009

Report Number: ISB0723

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
Batch: 9B07011 Extracted: 02/07/09											
Matrix Spike Dup Analyzed: 02/07/2009 (9B07011-MSD1)						Source: ISA2844-05					
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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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 009

Report Number: ISB0723

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
Batch: 9B07011 Extracted: 02/07/09											
Blank Analyzed: 02/07/2009 (9B07011-BLK1)											
Acrolein	ND	5.0	4.0	ug/l							
Acrylonitrile	ND	2.0	0.70	ug/l							
2-Chloroethyl vinyl ether	ND	5.0	1.8	ug/l							
Surrogate: 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			
LCS Analyzed: 02/07/2009 (9B07011-BS1)											
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			
Matrix Spike Analyzed: 02/07/2009 (9B07011-MS1) Source: ISA2844-05											
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			
Matrix Spike Dup Analyzed: 02/07/2009 (9B07011-MSD1) Source: ISA2844-05											
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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Project ID: Annual Outfall 009

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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	RPD Limit	Data Qualifiers
Batch: 9B11088 Extracted: 02/11/09											
Blank Analyzed: 02/16/2009 (9B11088-BLK1)											
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 009

Report Number: ISB0723

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
Batch: 9B11088 Extracted: 02/11/09											
Blank Analyzed: 02/16/2009 (9B11088-BLK1)											
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	164			ug/l	200		82	40-120			

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Report Number: ISB0723

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
Batch: 9B11088 Extracted: 02/11/09											
Blank Analyzed: 02/16/2009 (9B11088-BLK1)											
Surrogate: 2-Fluorobiphenyl	80.1			ug/l	100		80	50-120			
Surrogate: 2-Fluorophenol	140			ug/l	200		70	30-120			
Surrogate: Nitrobenzene-d5	76.6			ug/l	100		77	45-120			
Surrogate: Phenol-d6	138			ug/l	200		69	35-120			
Surrogate: Terphenyl-d14	93.7			ug/l	100		94	50-125			
LCS Analyzed: 02/16/2009 (9B11088-BS1)											
Acenaphthene	81.7	10	3.0	ug/l	100		82	60-120			MNR1
Acenaphthylene	87.6	10	3.0	ug/l	100		88	60-120			
Aniline	69.0	10	3.5	ug/l	100		69	35-120			
Anthracene	89.8	10	2.5	ug/l	100		90	65-120			
Benzidine	99.0	20	10	ug/l	100		99	30-160			
Benzo(a)anthracene	89.2	10	2.5	ug/l	100		89	65-120			
Benzo(a)pyrene	96.3	10	3.0	ug/l	100		96	55-130			
Benzo(b)fluoranthene	90.8	10	2.0	ug/l	100		91	55-125			
Benzo(g,h,i)perylene	93.3	10	4.0	ug/l	100		93	45-135			
Benzo(k)fluoranthene	92.7	10	2.5	ug/l	100		93	50-125			
Benzoic acid	74.4	20	10	ug/l	100		74	25-120			
Benzyl alcohol	79.3	20	3.5	ug/l	100		79	50-120			
4-Bromophenyl phenyl ether	88.6	10	3.0	ug/l	100		89	60-120			
Butyl benzyl phthalate	92.4	20	4.0	ug/l	100		92	55-130			
4-Chloro-3-methylphenol	84.6	20	2.5	ug/l	100		85	60-120			
4-Chloroaniline	86.3	10	2.0	ug/l	100		86	55-120			
Bis(2-chloroethoxy)methane	83.2	10	3.0	ug/l	100		83	55-120			
Bis(2-chloroethyl)ether	74.8	10	3.0	ug/l	100		75	50-120			
Bis(2-chloroisopropyl)ether	78.4	10	2.5	ug/l	100		78	45-120			
2-Chloronaphthalene	84.9	10	3.0	ug/l	100		85	60-120			
2-Chlorophenol	73.4	10	3.0	ug/l	100		73	45-120			
4-Chlorophenyl phenyl ether	86.2	10	2.5	ug/l	100		86	65-120			
Chrysene	90.2	10	2.5	ug/l	100		90	65-120			
Dibenz(a,h)anthracene	101	20	3.0	ug/l	100		101	50-135			
Dibenzofuran	88.2	10	4.0	ug/l	100		88	65-120			
Di-n-butyl phthalate	92.8	20	3.0	ug/l	100		93	60-125			
1,2-Dichlorobenzene	67.6	10	3.0	ug/l	100		68	40-120			
1,3-Dichlorobenzene	63.2	10	3.0	ug/l	100		63	35-120			
1,4-Dichlorobenzene	64.6	10	2.5	ug/l	100		65	35-120			

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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 009

Report Number: ISB0723

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
Batch: 9B11088 Extracted: 02/11/09											
LCS Analyzed: 02/16/2009 (9B11088-BS1)											MNR1
3,3'-Dichlorobenzidine	86.2	20	7.5	ug/l	100		86	45-135			
2,4-Dichlorophenol	81.7	10	3.5	ug/l	100		82	55-120			
Diethyl phthalate	91.0	10	3.5	ug/l	100		91	55-120			
2,4-Dimethylphenol	66.9	20	3.5	ug/l	100		67	40-120			
Dimethyl phthalate	87.9	10	2.5	ug/l	100		88	30-120			
4,6-Dinitro-2-methylphenol	82.3	20	4.0	ug/l	100		82	45-120			
2,4-Dinitrophenol	82.0	20	8.0	ug/l	100		82	40-120			
2,4-Dinitrotoluene	92.1	10	3.5	ug/l	100		92	65-120			
2,6-Dinitrotoluene	89.9	10	2.0	ug/l	100		90	65-120			
Di-n-octyl phthalate	108	20	3.5	ug/l	100		108	65-135			
1,2-Diphenylhydrazine/Azobenzene	85.1	20	2.5	ug/l	100		85	60-120			
Bis(2-ethylhexyl)phthalate	95.0	50	4.0	ug/l	100		95	65-130			
Fluoranthene	92.6	10	3.0	ug/l	100		93	60-120			
Fluorene	88.2	10	3.0	ug/l	100		88	65-120			
Hexachlorobenzene	88.9	10	3.0	ug/l	100		89	60-120			
Hexachlorobutadiene	77.6	10	4.0	ug/l	100		78	40-120			
Hexachlorocyclopentadiene	54.0	20	5.0	ug/l	100		54	25-120			
Hexachloroethane	63.6	10	3.5	ug/l	100		64	35-120			
Indeno(1,2,3-cd)pyrene	104	20	3.5	ug/l	100		104	45-135			
Isophorone	83.5	10	3.0	ug/l	100		83	50-120			
2-Methylnaphthalene	84.0	10	2.0	ug/l	100		84	55-120			
2-Methylphenol	74.0	10	3.0	ug/l	100		74	50-120			
4-Methylphenol	70.7	10	3.0	ug/l	100		71	50-120			
Naphthalene	78.8	10	3.0	ug/l	100		79	55-120			
2-Nitroaniline	92.2	20	2.0	ug/l	100		92	65-120			
3-Nitroaniline	93.9	20	3.0	ug/l	100		94	60-120			
4-Nitroaniline	94.8	20	4.0	ug/l	100		95	55-125			
Nitrobenzene	81.4	20	3.0	ug/l	100		81	55-120			
2-Nitrophenol	86.2	10	3.5	ug/l	100		86	50-120			
4-Nitrophenol	92.9	20	5.5	ug/l	100		93	45-120			
N-Nitroso-di-n-propylamine	80.0	10	3.5	ug/l	100		80	45-120			
N-Nitrosodimethylamine	74.7	20	2.5	ug/l	100		75	45-120			
N-Nitrosodiphenylamine	86.3	10	2.0	ug/l	100		86	60-120			
Pentachlorophenol	79.4	20	3.5	ug/l	100		79	50-120			
Phenanthrene	88.7	10	3.5	ug/l	100		89	65-120			

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 Project Manager

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

Project ID: Annual Outfall 009

Report Number: ISB0723

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
Batch: 9B11088 Extracted: 02/11/09											
LCS Analyzed: 02/16/2009 (9B11088-BS1)											
Phenol	77.3	10	2.0	ug/l	100		77	40-120			MNR1
Pyrene	92.3	10	4.0	ug/l	100		92	55-125			
1,2,4-Trichlorobenzene	76.6	10	2.5	ug/l	100		77	45-120			
2,4,5-Trichlorophenol	88.3	20	3.0	ug/l	100		88	55-120			
2,4,6-Trichlorophenol	89.2	20	4.5	ug/l	100		89	55-120			
Surrogate: 2,4,6-Tribromophenol	168			ug/l	200		84	40-120			
Surrogate: 2-Fluorobiphenyl	86.1			ug/l	100		86	50-120			
Surrogate: 2-Fluorophenol	133			ug/l	200		66	30-120			
Surrogate: Nitrobenzene-d5	81.3			ug/l	100		81	45-120			
Surrogate: Phenol-d6	145			ug/l	200		73	35-120			
Surrogate: Terphenyl-d14	94.4			ug/l	100		94	50-125			
LCS Dup Analyzed: 02/16/2009 (9B11088-BSD1)											
Acenaphthene	73.8	10	3.0	ug/l	100		74	60-120	10	20	
Acenaphthylene	77.7	10	3.0	ug/l	100		78	60-120	12	20	
Aniline	68.9	10	3.5	ug/l	100		69	35-120	0	30	
Anthracene	81.6	10	2.5	ug/l	100		82	65-120	10	20	
Benzidine	112	20	10	ug/l	100		112	30-160	12	35	
Benzo(a)anthracene	81.7	10	2.5	ug/l	100		82	65-120	9	20	
Benzo(a)pyrene	87.5	10	3.0	ug/l	100		87	55-130	10	25	
Benzo(b)fluoranthene	81.6	10	2.0	ug/l	100		82	55-125	11	25	
Benzo(g,h,i)perylene	88.6	10	4.0	ug/l	100		89	45-135	5	25	
Benzo(k)fluoranthene	86.6	10	2.5	ug/l	100		87	50-125	7	20	
Benzoic acid	65.9	20	10	ug/l	100		66	25-120	12	30	
Benzyl alcohol	72.1	20	3.5	ug/l	100		72	50-120	9	20	
4-Bromophenyl phenyl ether	81.0	10	3.0	ug/l	100		81	60-120	9	25	
Butyl benzyl phthalate	83.7	20	4.0	ug/l	100		84	55-130	10	20	
4-Chloro-3-methylphenol	77.1	20	2.5	ug/l	100		77	60-120	9	25	
4-Chloroaniline	77.5	10	2.0	ug/l	100		77	55-120	11	25	
Bis(2-chloroethoxy)methane	73.1	10	3.0	ug/l	100		73	55-120	13	20	
Bis(2-chloroethyl)ether	68.2	10	3.0	ug/l	100		68	50-120	9	20	
Bis(2-chloroisopropyl)ether	71.3	10	2.5	ug/l	100		71	45-120	10	20	
2-Chloronaphthalene	74.6	10	3.0	ug/l	100		75	60-120	13	20	
2-Chlorophenol	66.2	10	3.0	ug/l	100		66	45-120	10	25	
4-Chlorophenyl phenyl ether	78.3	10	2.5	ug/l	100		78	65-120	10	20	
Chrysene	81.6	10	2.5	ug/l	100		82	65-120	10	20	

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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 009

Report Number: ISB0723

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
Batch: 9B11088 Extracted: 02/11/09											
LCS Dup Analyzed: 02/16/2009 (9B11088-BSD1)											
Dibenz(a,h)anthracene	91.4	20	3.0	ug/l	100		91	50-135	10	25	
Dibenzofuran	79.6	10	4.0	ug/l	100		80	65-120	10	20	
Di-n-butyl phthalate	83.1	20	3.0	ug/l	100		83	60-125	11	20	
1,2-Dichlorobenzene	61.3	10	3.0	ug/l	100		61	40-120	10	25	
1,3-Dichlorobenzene	57.9	10	3.0	ug/l	100		58	35-120	9	25	
1,4-Dichlorobenzene	59.3	10	2.5	ug/l	100		59	35-120	9	25	
3,3'-Dichlorobenzidine	82.0	20	7.5	ug/l	100		82	45-135	5	25	
2,4-Dichlorophenol	72.7	10	3.5	ug/l	100		73	55-120	12	20	
Diethyl phthalate	84.4	10	3.5	ug/l	100		84	55-120	8	30	
2,4-Dimethylphenol	58.0	20	3.5	ug/l	100		58	40-120	14	25	
Dimethyl phthalate	80.2	10	2.5	ug/l	100		80	30-120	9	30	
4,6-Dinitro-2-methylphenol	76.9	20	4.0	ug/l	100		77	45-120	7	25	
2,4-Dinitrophenol	75.4	20	8.0	ug/l	100		75	40-120	8	25	
2,4-Dinitrotoluene	84.5	10	3.5	ug/l	100		85	65-120	9	20	
2,6-Dinitrotoluene	82.8	10	2.0	ug/l	100		83	65-120	8	20	
Di-n-octyl phthalate	96.8	20	3.5	ug/l	100		97	65-135	11	20	
1,2-Diphenylhydrazine/Azobenzene	77.6	20	2.5	ug/l	100		78	60-120	9	25	
Bis(2-ethylhexyl)phthalate	86.7	50	4.0	ug/l	100		87	65-130	9	20	
Fluoranthene	84.5	10	3.0	ug/l	100		84	60-120	9	20	
Fluorene	80.9	10	3.0	ug/l	100		81	65-120	9	20	
Hexachlorobenzene	80.2	10	3.0	ug/l	100		80	60-120	10	20	
Hexachlorobutadiene	64.2	10	4.0	ug/l	100		64	40-120	19	25	
Hexachlorocyclopentadiene	43.8	20	5.0	ug/l	100		44	25-120	21	30	
Hexachloroethane	58.0	10	3.5	ug/l	100		58	35-120	9	25	
Indeno(1,2,3-cd)pyrene	91.9	20	3.5	ug/l	100		92	45-135	12	25	
Isophorone	76.2	10	3.0	ug/l	100		76	50-120	9	20	
2-Methylnaphthalene	74.6	10	2.0	ug/l	100		75	55-120	12	20	
2-Methylphenol	66.2	10	3.0	ug/l	100		66	50-120	11	20	
4-Methylphenol	64.2	10	3.0	ug/l	100		64	50-120	10	20	
Naphthalene	68.3	10	3.0	ug/l	100		68	55-120	14	20	
2-Nitroaniline	85.2	20	2.0	ug/l	100		85	65-120	8	20	
3-Nitroaniline	85.8	20	3.0	ug/l	100		86	60-120	9	25	
4-Nitroaniline	88.9	20	4.0	ug/l	100		89	55-125	6	20	
Nitrobenzene	70.4	20	3.0	ug/l	100		70	55-120	15	25	
2-Nitrophenol	74.7	10	3.5	ug/l	100		75	50-120	14	25	

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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 009

Report Number: ISB0723

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
Batch: 9B11088 Extracted: 02/11/09											
LCS Dup Analyzed: 02/16/2009 (9B11088-BSD1)											
4-Nitrophenol	87.3	20	5.5	ug/l	100		87	45-120	6	30	
N-Nitroso-di-n-propylamine	73.9	10	3.5	ug/l	100		74	45-120	8	20	
N-Nitrosodimethylamine	65.4	20	2.5	ug/l	100		65	45-120	13	20	
N-Nitrosodiphenylamine	77.4	10	2.0	ug/l	100		77	60-120	11	20	
Pentachlorophenol	71.7	20	3.5	ug/l	100		72	50-120	10	25	
Phenanthrene	80.8	10	3.5	ug/l	100		81	65-120	9	20	
Phenol	70.7	10	2.0	ug/l	100		71	40-120	9	25	
Pyrene	84.9	10	4.0	ug/l	100		85	55-125	8	25	
1,2,4-Trichlorobenzene	64.4	10	2.5	ug/l	100		64	45-120	17	20	
2,4,5-Trichlorophenol	78.2	20	3.0	ug/l	100		78	55-120	12	30	
2,4,6-Trichlorophenol	79.2	20	4.5	ug/l	100		79	55-120	12	30	
Surrogate: 2,4,6-Tribromophenol	150			ug/l	200		75	40-120			
Surrogate: 2-Fluorobiphenyl	74.4			ug/l	100		74	50-120			
Surrogate: 2-Fluorophenol	119			ug/l	200		60	30-120			
Surrogate: Nitrobenzene-d5	70.0			ug/l	100		70	45-120			
Surrogate: Phenol-d6	128			ug/l	200		64	35-120			
Surrogate: Terphenyl-d14	84.6			ug/l	100		85	50-125			

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 009

Report Number: ISB0723

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
Batch: 9B12048 Extracted: 02/12/09											
Blank Analyzed: 02/12/2009 (9B12048-BLK1)											
4,4'-DDD	ND	0.0050	0.0020	ug/l							
4,4'-DDE	ND	0.0050	0.0030	ug/l							
4,4'-DDT	ND	0.010	0.0040	ug/l							
Aldrin	ND	0.0050	0.0015	ug/l							
alpha-BHC	ND	0.0050	0.0025	ug/l							
beta-BHC	ND	0.010	0.0040	ug/l							
delta-BHC	ND	0.0050	0.0035	ug/l							
Dieldrin	ND	0.0050	0.0020	ug/l							
Endosulfan I	ND	0.0050	0.0020	ug/l							
Endosulfan II	ND	0.0050	0.0030	ug/l							
Endosulfan sulfate	ND	0.010	0.0030	ug/l							
Endrin	ND	0.0050	0.0020	ug/l							
Endrin aldehyde	ND	0.010	0.0020	ug/l							
Endrin ketone	ND	0.010	0.0030	ug/l							
gamma-BHC (Lindane)	ND	0.020	0.0030	ug/l							
Heptachlor	ND	0.010	0.0030	ug/l							
Heptachlor epoxide	ND	0.0050	0.0025	ug/l							
Methoxychlor	ND	0.0050	0.0035	ug/l							
Chlordane	ND	0.10	0.040	ug/l							
Toxaphene	ND	0.50	0.25	ug/l							
Surrogate: Decachlorobiphenyl	0.416			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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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 009

Report Number: ISB0723

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
Batch: 9B12048 Extracted: 02/12/09											
LCS Analyzed: 02/12/2009 (9B12048-BS1)											
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			
LCS Dup Analyzed: 02/12/2009 (9B12048-BSD1)											
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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MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 009

Report Number: ISB0723

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
Batch: 9B12048 Extracted: 02/12/09											
Blank Analyzed: 02/12/2009 (9B12048-BLK1)											
Aroclor 1016	ND	0.50	0.25	ug/l							
Aroclor 1221	ND	0.50	0.25	ug/l							
Aroclor 1232	ND	0.50	0.25	ug/l							
Aroclor 1242	ND	0.50	0.25	ug/l							
Aroclor 1248	ND	0.50	0.25	ug/l							
Aroclor 1254	ND	0.50	0.25	ug/l							
Aroclor 1260	ND	0.50	0.25	ug/l							
Surrogate: Decachlorobiphenyl	0.530			ug/l	0.500		106	45-120			
LCS Analyzed: 02/12/2009 (9B12048-BS2)											
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			
LCS Dup Analyzed: 02/13/2009 (9B12048-BSD2)											
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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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
Batch: 9B12121 Extracted: 02/12/09											
Blank Analyzed: 02/12/2009 (9B12121-BLK1)											
Hexane Extractable Material (Oil & Grease)	ND	5.0	1.4	mg/l							
LCS Analyzed: 02/12/2009 (9B12121-BS1)											
Hexane Extractable Material (Oil & Grease)	18.2	5.0	1.4	mg/l	20.0		91	78-114			MNR1
LCS Dup Analyzed: 02/12/2009 (9B12121-BSD1)											
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
Batch: 9B09073 Extracted: 02/09/09										
Blank Analyzed: 02/14/2009-02/16/2009 (9B09073-BLK1)										
Aluminum	ND	50	40	ug/l						
Arsenic	7.21	10	7.0	ug/l						Ja
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						Ja
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
Batch: 9B09073 Extracted: 02/09/09											
Matrix Spike Analyzed: 02/14/2009-02/16/2009 (9B09073-MS1)						Source: ISB0733-01					
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			
Matrix Spike Analyzed: 02/14/2009-02/16/2009 (9B09073-MS2)						Source: ISB0719-01					
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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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 009

Report Number: ISB0723

Sampled: 02/06/09

Received: 02/06/09

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 9B09073 Extracted: 02/09/09											
Matrix Spike Dup Analyzed: 02/14/2009-02/16/2009 (9B09073-MSD1)						Source: ISB0733-01					
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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 618 Michillinda Avenue, Suite 200
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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 009

Report Number: ISB0723

Sampled: 02/06/09
 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
Batch: 9B09075 Extracted: 02/09/09											
Matrix Spike Analyzed: 02/10/2009 (9B09075-MS1)						Source: ISB0733-01					
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			
Matrix Spike Analyzed: 02/10/2009 (9B09075-MS2)						Source: ISB0719-01					
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			
Matrix Spike Dup Analyzed: 02/10/2009 (9B09075-MSD1)						Source: ISB0733-01					
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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Sampled: 02/06/09
 Received: 02/06/09

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
Batch: 9B09083 Extracted: 02/09/09											
Blank Analyzed: 02/11/2009 (9B09083-BLK1)											
Aluminum	ND	50	40	ug/l							
Arsenic	ND	10	7.0	ug/l							
Beryllium	ND	2.0	0.90	ug/l							
Boron	ND	0.050	0.020	mg/l							
Calcium	ND	0.10	0.050	mg/l							
Chromium	ND	5.0	2.0	ug/l							
Iron	ND	0.040	0.015	mg/l							
Magnesium	ND	0.020	0.012	mg/l							
Nickel	ND	10	2.0	ug/l							
Selenium	ND	10	8.0	ug/l							
Silver	ND	10	6.0	ug/l							
Vanadium	ND	10	3.0	ug/l							
Zinc	ND	20	6.0	ug/l							
LCS Analyzed: 02/11/2009 (9B09083-BS1)											
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
Batch: 9B09083 Extracted: 02/09/09											
Matrix Spike Analyzed: 02/11/2009 (9B09083-MS1)						Source: ISB0173-01					
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			
Matrix Spike Analyzed: 02/11/2009 (9B09083-MS2)						Source: ISB0825-01					
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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Report Number: ISB0723

Sampled: 02/06/09

Received: 02/06/09

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 9B09083 Extracted: 02/09/09											
Matrix Spike Dup Analyzed: 02/11/2009 (9B09083-MSD1)						Source: ISB0173-01					
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			

TestAmerica Irvine

Joseph Doak
 Project Manager

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

Project ID: Annual Outfall 009

Report Number: ISB0723

Sampled: 02/06/09

Received: 02/06/09

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 9B12130 Extracted: 02/12/09											
Matrix Spike Analyzed: 02/13/2009 (9B12130-MS1)						Source: ISB0566-01					
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			
Matrix Spike Dup Analyzed: 02/13/2009 (9B12130-MSD1)						Source: ISB0566-01					
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	

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Received: 02/06/09

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Data Qualifiers
Batch: 9B06069 Extracted: 02/06/09											
Blank Analyzed: 02/06/2009 (9B06069-BLK1)											
Chloride	ND	0.50	0.25	mg/l							
Nitrate/Nitrite-N	ND	0.26	0.15	mg/l							
Sulfate	ND	0.50	0.20	mg/l							
LCS Analyzed: 02/06/2009 (9B06069-BS1)											
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			
Matrix Spike Analyzed: 02/06/2009 (9B06069-MS1) Source: ISB0573-01											
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
Matrix Spike Dup Analyzed: 02/06/2009 (9B06069-MSD1) Source: ISB0573-01											
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
Batch: 9B09093 Extracted: 02/09/09											
Duplicate Analyzed: 02/09/2009 (9B09093-DUP1) Source: ISB0723-01											
Dissolved Oxygen	8.42	1.0	1.0	mg/l		8.48			1	20	HFT
Batch: 9B09095 Extracted: 02/09/09											
Blank Analyzed: 02/09/2009 (9B09095-BLK1)											
Total Cyanide	ND	0.0050	0.0022	mg/l							

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Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Annual Outfall 009

Report Number: ISB0723

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
<u>Batch: 9B09095 Extracted: 02/09/09</u>											
LCS Analyzed: 02/09/2009 (9B09095-BS1)											
Total Cyanide	0.193	0.0050	0.0022	mg/l	0.200		97	90-110			
Matrix Spike Analyzed: 02/09/2009 (9B09095-MS1) Source: ISB0752-01											
Total Cyanide	0.201	0.0050	0.0022	mg/l	0.200	0.00601	97	70-115			
Matrix Spike Dup Analyzed: 02/09/2009 (9B09095-MSD1) Source: ISB0752-01											
Total Cyanide	0.201	0.0050	0.0022	mg/l	0.200	0.00601	97	70-115	0	15	
<u>Batch: 9B10064 Extracted: 02/10/09</u>											
Blank Analyzed: 02/10/2009 (9B10064-BLK1)											
Turbidity	ND	1.0	0.040	NTU							
Duplicate Analyzed: 02/10/2009 (9B10064-DUP1) Source: ISB0923-01											
Turbidity	7.33	1.0	0.040	NTU		7.27			1	20	
<u>Batch: 9B11043 Extracted: 02/11/09</u>											
Blank Analyzed: 02/11/2009 (9B11043-BLK1)											
Total Dissolved Solids	ND	10	10	mg/l							
LCS Analyzed: 02/11/2009 (9B11043-BS1)											
Total Dissolved Solids	1010	10	10	mg/l	1000		101	90-110			
Duplicate Analyzed: 02/11/2009 (9B11043-DUP1) Source: ISB1079-01											
Total Dissolved Solids	1970	10	10	mg/l		1990			1	10	

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 009

Report Number: ISB0723

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	Limit	RPD	RPD Limit	Data Qualifiers
<u>Batch: 9B12141 Extracted: 02/12/09</u>											
Blank Analyzed: 02/12/2009 (9B12141-BLK1)											
Total Suspended Solids	ND	10	1.0	mg/l							
LCS Analyzed: 02/12/2009 (9B12141-BS1)											
Total Suspended Solids	998	10	1.0	mg/l	1000		100	85-115			
Duplicate Analyzed: 02/12/2009 (9B12141-DUP1)											
Total Suspended Solids	102	10	1.0	mg/l		Source: ISB0702-01 106			4	10	
<u>Batch: 9B13054 Extracted: 02/13/09</u>											
Blank Analyzed: 02/13/2009 (9B13054-BLK1)											
Perchlorate	ND	4.0	0.90	ug/l							
LCS Analyzed: 02/13/2009 (9B13054-BS1)											
Perchlorate	26.6	4.0	0.90	ug/l	25.0		106	85-115			
Matrix Spike Analyzed: 02/13/2009 (9B13054-MS1)											
Perchlorate	31.2	4.0	0.90	ug/l	25.0	Source: ISB1195-02 3.82	109	80-120			
Matrix Spike Dup Analyzed: 02/13/2009 (9B13054-MSD1)											
Perchlorate	31.7	4.0	0.90	ug/l	25.0	Source: ISB1195-02 3.82	111	80-120	2	20	
<u>Batch: 9B16034 Extracted: 02/16/09</u>											
Blank Analyzed: 02/16/2009 (9B16034-BLK1)											
Fluoride	0.0343	0.10	0.020	mg/l							Ja

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Report Number: ISB0723

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 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
Batch: 9B16034 Extracted: 02/16/09											
LCS Analyzed: 02/16/2009 (9B16034-BS1)											
Fluoride	1.00	0.10	0.020	mg/l	1.00		100	90-110			
Matrix Spike Analyzed: 02/16/2009 (9B16034-MS1)											
						Source: ISB0462-01					
Fluoride	1.36	0.10	0.020	mg/l	1.00	0.344	102	80-120			
Matrix Spike Dup Analyzed: 02/16/2009 (9B16034-MSD1)											
						Source: ISB0462-01					
Fluoride	1.38	0.10	0.020	mg/l	1.00	0.344	103	80-120	1	20	

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METHOD BLANK/QC DATA

ORGANIC COMPOUNDS BY GC/MS (EPA 525.2)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: C9B0701 Extracted: 02/07/09											
Blank Analyzed: 02/07/2009 (C9B0701-BLK1)											
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			
LCS Analyzed: 02/07/2009 (C9B0701-BS1)											
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			
LCS Dup Analyzed: 02/07/2009 (C9B0701-BSD1)											
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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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
Batch: 9043305 Extracted: 02/12/09											
Matrix Spike Dup Analyzed: 02/12/2009 (D9B100241001D)						Source: D9B100241001					
Mercury	4.61	0.2	0.027	ug/L	5	0.064	91	90-110	3	10	
Matrix Spike Analyzed: 02/12/2009 (D9B100241001S)						Source: D9B100241001					
Mercury	4.75	0.2	0.027	ug/L	5	0.064	94	90-110	3	10	
Blank Analyzed: 02/12/2009 (D9B120000305B)						Source:					
Mercury	0.036	0.2	0.027	ug/L				-			J
LCS Analyzed: 02/12/2009 (D9B120000305C)						Source:					
Mercury	4.77	0.2	0.027	ug/L	5		95	90-110			

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Report Number: ISB0723

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
Batch: 9043330 Extracted: 02/12/09											
Matrix Spike Dup Analyzed: 02/12/2009 (D9B100241001D)						Source: D9B100241001					
Mercury	4.78	0.2	0.027	ug/L	5	0.036	95	90-110	1	10	
Matrix Spike Analyzed: 02/12/2009 (D9B100241001S)						Source: D9B100241001					
Mercury	4.81	0.2	0.027	ug/L	5	0.036	96	90-110	1	10	
Blank Analyzed: 02/12/2009 (D9B120000330B)						Source:					
Mercury	0.039	0.2	0.027	ug/L				-			J
LCS Analyzed: 02/12/2009 (D9B120000330C)						Source:					
Mercury	4.9	0.2	0.027	ug/L	5		98	90-110			

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Report Number: ISB0723

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
ISB0723-01	1664-HEM	Hexane Extractable Material (Oil & Greas	mg/l	0.095	4.8	15
ISB0723-01	Antimony-200.8	Antimony	ug/l	1.05	2.0	6
ISB0723-01	Boron-200.7	Boron	mg/l	0.034	0.050	1
ISB0723-01	Cadmium-200.8	Cadmium	ug/l	0.18	1.0	4
ISB0723-01	Chloride - 300.0	Chloride	mg/l	4.99	0.50	150
ISB0723-01	Copper-200.8	Copper	ug/l	6.51	2.0	14
ISB0723-01	Fluoride SM4500F,C	Fluoride	mg/l	0.17	0.10	1.6
ISB0723-01	Lead-200.8	Lead	ug/l	7.49	1.0	5.2
ISB0723-01	Nickel-200.7	Nickel	ug/l	4.95	10	100
ISB0723-01	Nitrogen, NO3+NO2 -N	Nitrate/Nitrite-N	mg/l	0.68	0.26	10
ISB0723-01	Perchlorate 314.0-DEFAULT	Perchlorate	ug/l	0	4.0	6
ISB0723-01	Sulfate-300.0	Sulfate	mg/l	5.11	0.50	250
ISB0723-01	TDS - SM2540C	Total Dissolved Solids	mg/l	72	10	850
ISB0723-01	Thallium-200.8	Thallium	ug/l	0.011	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
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Attention: Bronwyn Kelly

Project ID: Annual Outfall 009

Report Number: ISB0723

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.
- H-1** Sample analysis performed past the method-specified holding time per client's approval.
- HFT** The holding time for this test is immediate. It was analyzed in the laboratory as soon as possible after receipt.
- J** Estimated Result: Result is less than RL and greater than or equal to the MDL.
- Ja** Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). The user of this data should be aware that this data is of limited reliability.
- 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.
- 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.
- RL1** Reporting limit raised due to sample matrix effects.
- 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.

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Project Manager

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ISB0723 <Page 53 of 55>
NPDES - 1912

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

Project ID: Annual Outfall 009

Report Number: ISB0723

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
SM2130B	Water	X	X
SM2340B-Diss	Water		
SM2340B	Water	X	X
SM2540C	Water	X	
SM4500-CN-C,E	Water	X	X
SM4500-O G	Water	X	X

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

Subcontracted Laboratories

Aquatic Testing Laboratories-SUB *California Cert #1775*

4350 Transport Street, Unit 107 - Ventura, CA 93003

Analysis Performed: Bioassay-Acute 96hr
 Samples: ISB0723-01

EMS Laboratories *California Cert #1119*

117 W. Bellevue Drive - Pasadena, CA 91105

Analysis Performed: Asbestos-TEM (100.2 - DW)
 Samples: ISB0723-01

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: ISB0723-01

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Project ID: Annual Outfall 009

Report Number: ISB0723

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

TestAmerica Denver

4955 Yarrow Street - Arvada, CO 80002

Method Performed: MCAWW 245.1
Samples: ISB0723-01

Method Performed: MCAWW 245.1-DISS
Samples: ISB0723-01

TestAmerica St. Louis

13715 Rider Trail North - Earth City, MO 63045

Analysis Performed: Gamma Spec
Samples: ISB0723-01

Analysis Performed: Gross Alpha
Samples: ISB0723-01

Analysis Performed: Gross Beta
Samples: ISB0723-01

Analysis Performed: Radium, Combined
Samples: ISB0723-01

Analysis Performed: Strontium 90
Samples: ISB0723-01

Analysis Performed: Tritium
Samples: ISB0723-01

Analysis Performed: Uranium, Combined
Samples: ISB0723-01

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: ISB0723-01

TestAmerica Irvine

Joseph Doak
Project Manager

ISB0723

CHAIN OF CUSTODY FORM

Test America Version 12/20/07

Client Name/Address:		Project:		ANALYSIS REQUIRED		Field readings:	
MWH-Arcadia 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007		Boeing-SSFL NPDES Annual Outfall 009 Stormwater at WS-13		Total Recoverable Metals: Sb, Cd, Cu, Pb, Hg, B, V, Ti, Fe, Al, Ni, + PP, Hardness as Ca CO ₃		Temp = 51.0 pH = 8.0 Time of readings =	
Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #	Comments
Outfall 009	W	1L Poly	1	2/6/09	HNO ₃	1A	
Outfall 009-Dup	W	1L Poly	1	2/6/09	HNO ₃	1B	
Outfall 009	W	1L Amber	2	2/6/09	None	2A, 2B	
Outfall 009	W	1L Amber	2		HCl	3A, 3B	
Outfall 009	W	500 ml Poly	2		None	4A, 4B	
Outfall 009	W	500 ml Poly	2		None	5A, 5B	
Outfall 009	W	VOAs	3		HCl	6A, 6B, 6C	
Outfall 009	W	VOAs	3		None	7A, 7B, 7C	
Outfall 009	W	1L Amber	2		None	8A, 8B	
Outfall 009	W	2.5 Gal Cube 500 ml Amber	1		None	9A	
Outfall 009	W	1L Amber	2		None	9B	
Outfall 009	W	1 Gal Poly	2		None	10A, 10B	
Outfall 009	W	500ml Poly	1		NaOH	11A, 11B	
Outfall 009	W	1L Poly	1		None	12	
Outfall 009	W	1L Poly	1		None	13	
Outfall 009	W	1L Poly	1		None	14	
Trip Blanks	W	VOAs	3		HCl	15A, 15B, 15C	
Trip Blanks	W	VOAs	3		None	16A, 16B, 16C	
Relinquished By	W			2-6-09			
Relinquished By	W			2/6/09			
Relinquished By	W			2/6/09			

LABORATORY REPORT



"dedicated to providing quality aquatic toxicity testing"

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

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

Laboratory No.: A-09020705-001
Sample ID.: ISB0723-01 (Outfall 009)

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

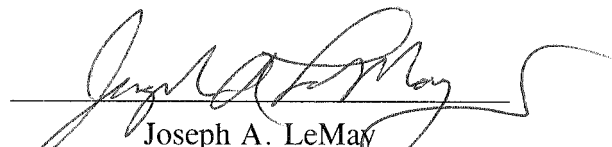
Sample Analysis: The following analyses were performed on your sample:
Fathead Minnow 96hr Percent Survival Bioassay (EPA Method 2000.0).

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

NPDES - 1916

FATHEAD MINNOW PERCENT SURVIVAL TEST
EPA Method 2000.0



Lab No.: A-09020705-001

Client/ID: TestAmerica - ISB0723-01 (Outfall 009)

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	9.9	6.1	0	0	
24 Hr	Control	20.1	8.3	7.6	0	0	R 1400
	100%	19.4	8.2	7.1	0	0	
48 Hr	Control	19.4	7.2	7.3	0	0	R 1500
	100%	19.4	6.1	6.8	0	0	
Renewal	Control	19.8	8.1	7.5	0	0	R 1500
	100%	19.5	8.8	6.5	0	0	
72 Hr	Control	19.1	8.1	7.5	0	0	R 1300
	100%	19.0	4.4	6.5	0	0	
96 Hr	Control	19.1	7.3	7.2	0	0	R 1500
	100%	19.0	5.3	6.6	0	0	

Comments:

Sample as received: Chlorine: 0.0 mg/l; pH: 6.1; Conductivity: 90 umho; Temp: 1.0°C;

DO: 9.9 mg/l; Alkalinity: 18 mg/l; Hardness: 24 mg/l; NH₃-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 O₂.

RESULTS

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

SUBCONTRACT ORDER

TestAmerica Irvine

ISB0723

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: °C Ice: (Y) / N

Analysis	Units	Due	Expires	Comments
Sample ID: ISB0723-01	Water		Sampled: 02/06/09 14:10	
Bioassay-Acute 96hr	% Survival	02/17/09	02/08/09 02:10	FH minnow, EPA/821-R02-012, Sub to AqTox Labs
Level 4 Data Package	N/A	02/17/09	03/06/09 14:10	
<i>Containers Supplied:</i>				
1 gal Poly (W)	1 gal Poly (X) (W)			outfall 009

[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>Rm</u>			<u>Rm</u>					<u>Rm</u>				
	°C	DO	pH	°C	DO	pH	# Dead		°C	DO	pH	# Dead	
A							B	A				B	
Control	<u>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>Rm</u>			<u>Rm</u>					<u>Rm</u>				
	°C	DO	pH	°C	DO	pH	# Dead		°C	DO	pH	# Dead	
A							B	A				B	
Control	<u>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

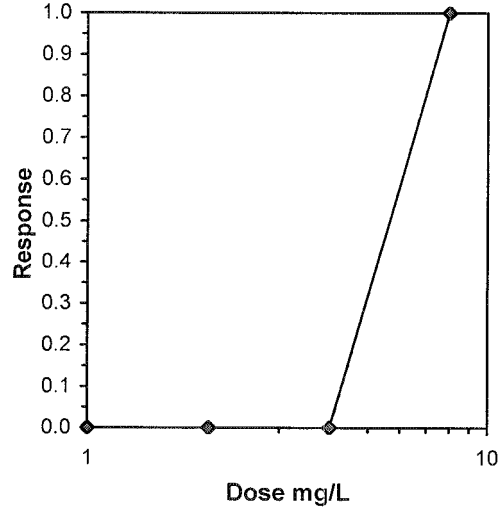
Skew

Kurt

Graphical Method

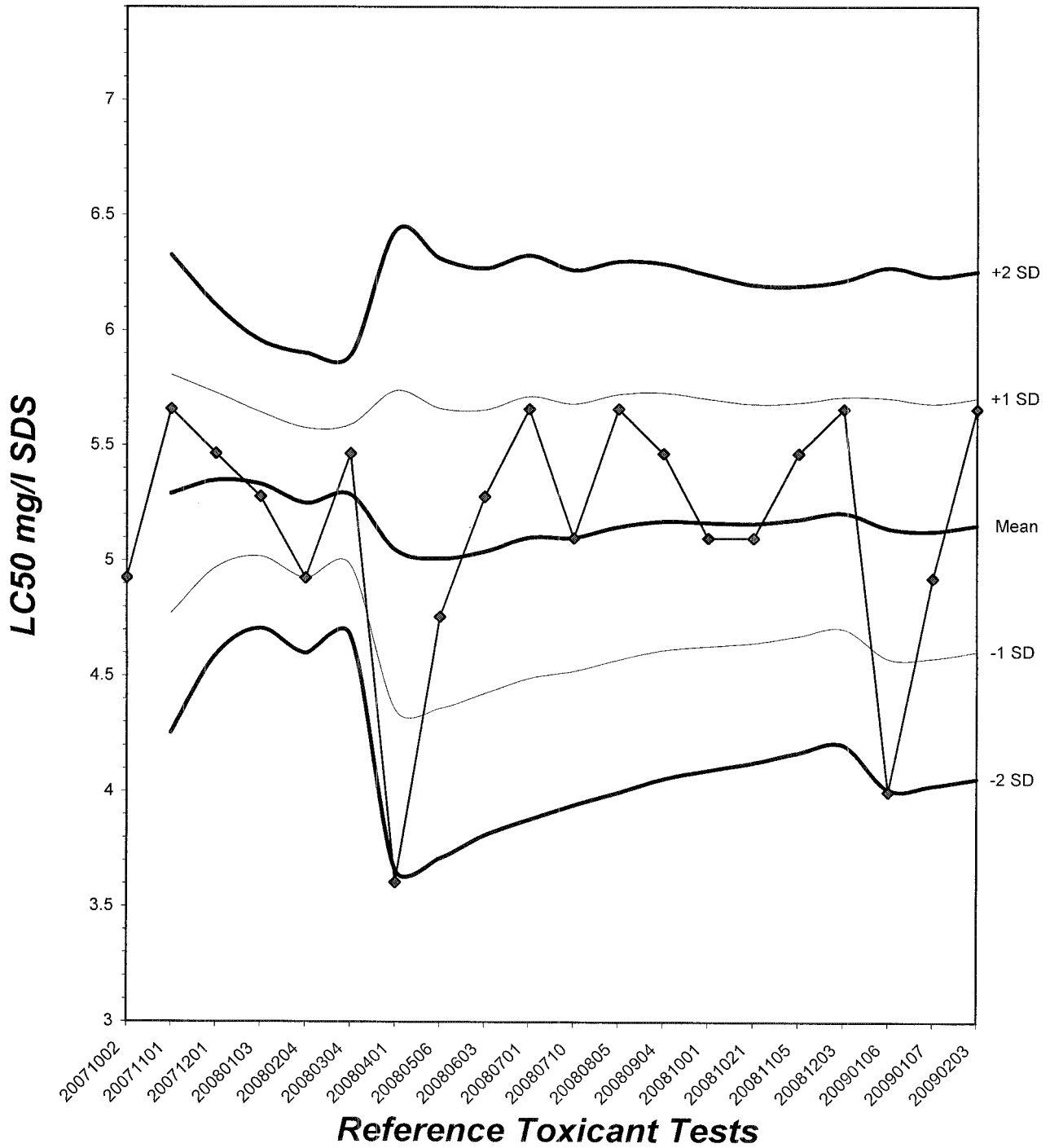
Trim Level EC50
 0.0% 5.6569

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 NH₃-N

DO: 8.6 mg/l

Alkalinity: 70 mg/l

Hardness: 92 mg/l

READINGS RECORDED BY: _____

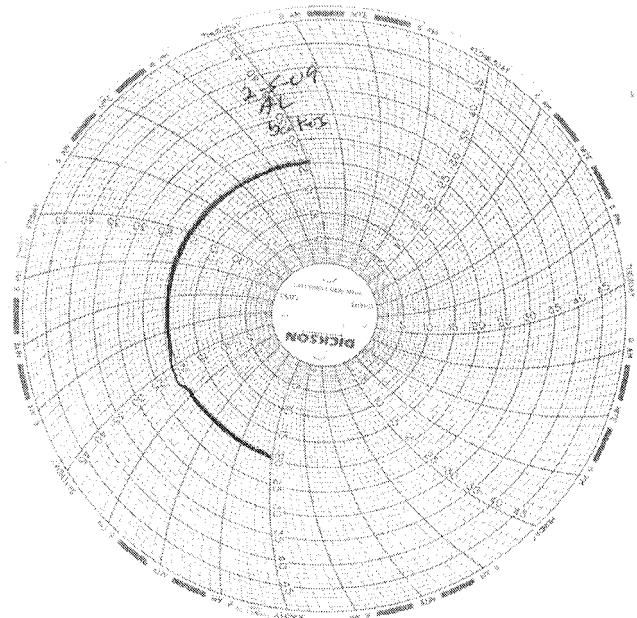
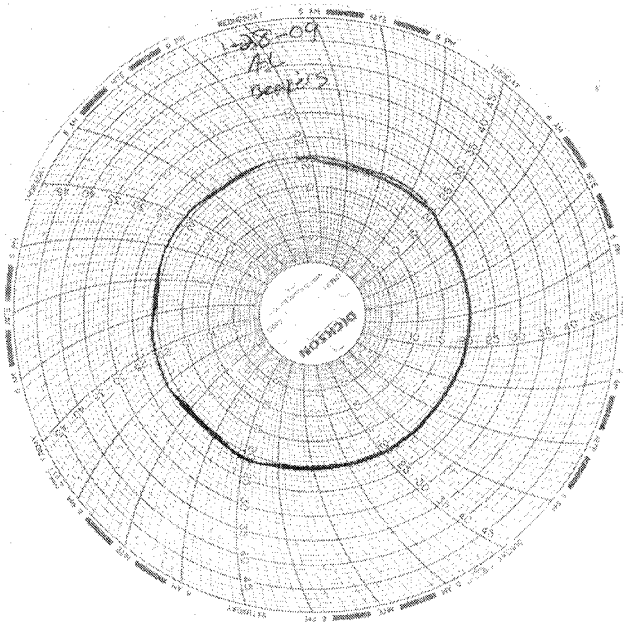
DATE: 2-7-09

Test Temperature Chart

Test No: *RT-090203*

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

Acceptable Range: *20 +/- 1°C*



SUBCONTRACT ORDER

TestAmerica Irvine

ISB0723

127043

SENDING LABORATORY:

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

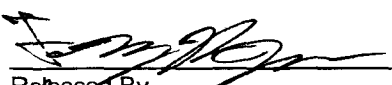

RECEIVING LABORATORY:


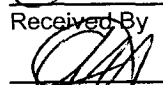
EMS Laboratories
117 W. Bellevue Drive
Pasadena, CA 91105
Phone :(626) 568-4065
Fax: (626) 796-5282
Project Location: CA - CALIFORNIA
Receipt Temperature: °C Ice: Y / N

Analysis	Units	Due	Expires	Comments
----------	-------	-----	---------	----------

Sample ID: ISB0723-01	Water		Sampled: 02/06/09 14:10	
Asbestos-TEM (100.2 - DW)	Present/Not Pr	02/17/09	02/08/09 14:10	Boeing, permit, J flags, Out to EMS

Containers Supplied:
1 L Poly (AA)


 Released By _____ Date/Time 02/09/09 0700

 Released By _____ Date/Time 02/09/09 1055


 Received By _____ Date/Time 02/09/09 0700

 Received By _____ Date/Time 02/09/09 1055

DATE: February 17, 2009
CLIENT: TestAmerica, Irvine
17461 Derian Ave., Ste 100
Irvine, CA 92614
ATTENTION: Joseph Doak
REFERENCE: ISB0723
REPORT NO: 127043
SUBJECT: ANALYSIS OF WATER SAMPLE FOR ASBESTOS BY TEM
ACCREDITED: California Department of Health Services (ELAP-1119)

The water was UV-ozone treated to remove any microbial contamination as prescribed by the method since the sample arrived after the 48-hour holding time.

The date and times of collection, receipt, ozonation, filtration, and analysis are as follows:

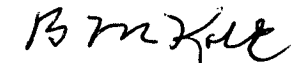
SAMPLE NO.: ISB0723-01
COLLECTED: 2/6/09 at 1410
RECEIVED: 2/9/09 at 1055
OZONATED: 2/9/09 at 1110-1410
FILTERED: 2/9/09 at 1427
ANALYZED: 2/17/09

The sample was analyzed for fibers $>10\mu\text{m}$ in length to conform with the drinking water document, EPA 600 94 134, 100.2. This regulation calls for an MCL (maximum contaminant level) of 7 MFL and an analytical sensitivity level of 0.2 MFL.

No asbestos structures $>10\mu\text{m}$ in length were detected. The analytical sensitivity of 0.2 MFL was not reached due to the turbidity of the sample. We were only able to filter, prepare and analyze 1ml.

The results of the analyses and the detection limits are summarized on the following pages.

Respectfully submitted,
EMS LABORATORIES, INC.



B. M. Kolk
Laboratory Director

BMK/ah

NOTE: The results of the analysis are based upon the samples submitted to the laboratory. No representation is made regarding the sampling area other than that implied by the analytical results for the immediate vicinity of the samples analyzed as calculated from the data presented with those samples.

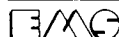
This report, from a NIST laboratory through NVLAP, must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government.

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

Any deviation or exclusion from the test method is noted in this cover letter.

NPDES - 1926

~~Unless otherwise noted in this cover letter, the samples were received properly packaged, clearly identified and~~



EMS LABORATORIES

117 West Bellevue Drive / Pasadena CA 91105-2503 / 626-568-4065

ANALYSIS OF WATER BY TEM (EPA-600 R 94 134) EPA 100.2

LAB NO: 127043
 CLIENT: Test America
 2/17/2009

Laboratory I.D.	Client I.D.	FILTER MEDIA DATA			No. of G.O.	Analyzed Area, mm ²	Sample Volume (ml)
		Type	Diameter mm	Effective Area mm ²			
127043-1	ISB0723-01*	PC	47	1017	10	0.093	1

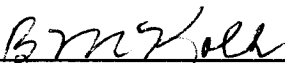
* FOR FIBERS > 10um ONLY

ANALYTICAL RESULTS

Laboratory I.D.	Client I.D.	No. of Asbestos Str.			Detection Limit (MFL)	CONCENTRATION (MFL)		
		All Sizes	5-9.9um	>10um		All Sizes	5-9.9um	>10um
127043-1	ISB0723-01*	-	-	N.D.	11	-	-	N.D.

* FOR FIBERS > 10um ONLY

The analysis was carried out to the approved TEM method. This laboratory is in compliance with the quality specified by the method.



 Authorized Signature

PC - Polycarbonate
MCE - Mixed cellulose ester
G.O. - Grid Openings
Str - Structures
MFL - Millions of fibers per liter

TEM-7A (2009Rev.)

**Analysis of Water by Transmission Electron Microscopy
(EPA-600 R 94 134) EPA 100.2**

EMS No. 127043 **Client** Test America
Sample No. ISB0723-01 **Date Analyzed** 2/17/2009

Fibers > 10 µm in length (chrysotile)	<u>BDL*</u>	MFL
Mass (chrysotile)	<u>0</u>	ug/L
More/Less than 5 Fibers in Sample (chrysotile)	<u>LESS</u>	
Poisson 95% Confidence Interval	<u>0 to 40</u>	MFL
Detection Limit	<u>11</u>	MFL

* BDL : Below Detection Limit; MFL: Million Fibers per Liter

Particle Size Distribution (Chrysotile)

Particle Length - Microns							
O - 0.49	0.50 - 0.99	1.00 - 1.49	1.50 - 1.99	2.00 - 2.49	2.5 - 4.99	5.00 - 9.99	10 & UP
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Particle Width - Microns							
O - .04	.05 - .09	.1 - .14	.15 - .19	.2 - .24	.25 - .49	.50 - .99	1 & UP
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Aspect Ratio L/W							
0 - 9.9	10 - 19.9	20 - 29.9	30 - 39.9	40 - 49.9	50 - 99	100 - 199	200 & UP
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

TEM 7B (1994)

**Analysis of Water by Transmission Electron Microscopy
(EPA-600/4-83-043)**

EMS No. 127043 **Date Analyzed** 2/17/2009
Client Test America
Sample No. EMS BLANK

Fibers (chrysotile)	<u>ND</u>	MFL
> 5 Micron length (chrysotile)	<u>ND</u>	MFL
Mass (chrysotile)	<u>0</u>	ug/L
More/Less than 5 Fibers in Sample (chrysotile)	<u>LESS</u>	
Sensitivity Level	<u>0.01</u>	MFL

Particle Size Distribution (Chrysotile)

Particle Length - Microns

0 - 0.49	0.50 - 0.99	1.00 - 1.49	1.50 - 1.99	2.00 - 2.49	2.5 & UP
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

Particle Width - Microns

0 - .04	.05 - .09	.1 - .14	.15 - .19	.2 - .24	.25 & UP
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

Aspect Ratio L/W

0 - 9.9	10 - 19.9	20 - 29.9	30 - 39.9	40 - 49.9	50 & UP
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

MWH-Pasadena / Boeing

Lot D9B100262

Project ISB0723

Joseph Doak
17461 Derian Avenue
Suite 100
Irvine, CA 92614

TestAmerica Laboratories, Inc.

Laura T. Griego
for 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 D9B100262

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

D9B100262

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
ISB0723-01 02/06/09 14:10 001				
Mercury - DISSOLVED	0.060 J,B	0.20	ug/L	MCAWW 245.1
Mercury	0.071 J,B	0.20	ug/L	MCAWW 245.1

METHODS SUMMARY

D9B100262

<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

D9B100262

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

References:

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

SAMPLE SUMMARY

D9B100262

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
K61RN	001	ISB0723-01	02/06/09	14:10

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

D9B100262

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

Metals CLP-Like Forms

Lot ID: D9B100262

Client: TA Irvine

Method: 245.1

Associated Samples: -001

Batch: 9043305

Total Metals Analysis
COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: TestAmerica Irvine SDG No.: D9B100262
Lab Code: _____ Case No.: _____ SAS No.: _____
SOW No.: _____

Sample ID. Lab Sample No.
ISB0723-01 D9B100262-001

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

Lab Name:	<u>TESTAMERICA DENVER</u>	Client Sample ID:	<u>ISB0723-01</u>
Lot/SDG Number:	<u>D9B100262</u>	Lab Sample ID:	<u>D9B100262-001</u>
Matrix:	<u>WATER</u>	Lab WorkOrder:	<u>K61RN</u>
% Moisture:	<u>N/A</u>	Date/Time Collected:	<u>02/06/09 14:10</u>
Basis:	<u>Wet</u>	Date/Time Received:	<u>02/10/09 09:00</u>
Analysis Method:	<u>245.1</u>	Date Leached:	
Unit:	<u>ug/L</u>	Date/Time Extracted:	<u>02/12/09 15:10</u>
QC Batch ID:	<u>9043305</u>	Date/Time Analyzed:	<u>02/12/09 18:35</u>
Sample Aliquot:	<u>10 mL</u>	Instrument ID:	<u>023</u>
Dilution Factor:	<u>1</u>		

CAS No.	Analyte	Conc.	MDL	RL	Q
7439-97-6	Mercury	0.071	0.027	0.20	JB

Total Metals Analysis

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: TestAmerica Irvine

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9B100262

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

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: TestAmerica Irvine

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9B100262

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			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.: D9B100262

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: D9B100262
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.: D9B100262

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	0.036	B	CV

Comments:

TestAmerica Irvine

Total Metals Analysis Data Sheet

Lab Name: TESTAMERICA DENVER
Lot/SDG Number: D9B100262
Matrix: WATER
% Moisture: N/A
Basis: Wet
Analysis Method: 245.1
Unit: ug/L
QC Batch ID: 9043305
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 18:10
Instrument ID: 023

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: D9B100262
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: D9B100262
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.: D9B100262

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.: D9B100262

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
ISB0723-01	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:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Dissolved Metals

CLP-Like Forms

Lot ID: D9B100262

Client: TA Irvine

Method: 245.1

Associated Samples: -001

Batch: 9043330

Dissolved Metals Analysis
COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: TestAmerica Irvine

SDG No.: D9B100262

Lab Code: _____ Case No.: _____

SAS No.: _____

SOW No.: _____

Sample ID.
ISB0723-01

Lab Sample No.
D9B100262-001

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

Dissolved Metals Analysis Data Sheet

Lab Name:	<u>TESTAMERICA DENVER</u>	Client Sample ID:	<u>ISB0723-01</u>
Lot/SDG Number:	<u>D9B100262</u>	Lab Sample ID:	<u>D9B100262-001</u>
Matrix:	<u>WATER</u>	Lab WorkOrder:	<u>K61RN</u>
% Moisture:	<u>N/A</u>	Date/Time Collected:	<u>02/06/09 14:10</u>
Basis:	<u>Wet</u>	Date/Time Received:	<u>02/10/09 09:00</u>
Analysis Method:	<u>245.1</u>	Date Leached:	
Unit:	<u>ug/L</u>	Date/Time Extracted:	<u>02/12/09 15:10</u>
QC Batch ID:	<u>9043330</u>	Date/Time Analyzed:	<u>02/12/09 19:15</u>
Sample Aliquot:	<u>10 mL</u>	Instrument ID:	<u>023</u>
Dilution Factor:	<u>1</u>		

CAS No.	Analyte	Conc.	MDL	RL	Q
7439-97-6	Mercury	0.060	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.: D9B100262

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.: D9B100262

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.: D9B100262

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: D9B100262
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.: D9B100262

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.: D9B100262

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: D9B100262
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	J B	4.81		96		90 - 110

TestAmerica Irvine

Dissolved Metals Analysis Data Sheet

Lab Name: TESTAMERICA DENVER
Lot/SDG Number: D9B100262
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: D9B100262
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.: D9B100262

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.: D9B100262

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
ISB0723-01	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.: D9B100262

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	N A	T L	V Z	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	
ISB0723-01	1.00	19:15																										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 #: D9B100262 Date/Time Received: 2/10/9 0900

Company Name & Sampling Site: TA Irvine

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

Quote #: 72743

Special Instructions:

Time Zone: EDT/EST • CDT/CST • MDT/MST • PDT/PST • 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 ≤ 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±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?

Initials

TestAmerica Denver
Sample Receiving Checklist

Lot # D9B100262

Login Checks:

Initials
AB

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

AB

- 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).

1-1²
DR2
8/2/10/09

SUBCONTRACT ORDER

TestAmerica Irvine

ISB0723


SENDING LABORATORY:

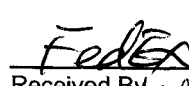
TestAmerica Irvine
17461 Derian Avenue, Suite 100
Irvine, CA 92614
Phone: (949) 261-1022
Fax: (949) 260-3297
Project Manager: Joseph Doak
Client: MWH-Pasadena/Boeing

RECEIVING LABORATORY:

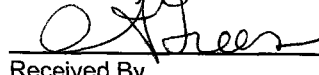
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: (303) 736-0100
Fax: (303) 431-7171
Project Location: CA - CALIFORNIA
Receipt Temperature: _____°C Ice: Y / N

Analysis	Units	Due	Expires	Interlab Price	Surch	Comments
Sample ID: ISB0723-01 Water Sampled: 02/06/09 14:10						
EDD + Level 4	N/A	02/17/09	03/06/09 14:10	\$0.00	0%	
Mercury - 245.1, Diss -OUT	ug/l	02/17/09	03/06/09 14:10	\$36.00	0%	Boeing, J flags, sub to Denver
Mercury - 245.1-OUT	ug/l	02/17/09	03/06/09 14:10	\$36.00	0%	Boeing, J flags, sub to Denver
<i>Containers Supplied:</i>						
125 mL Poly (AB)	1 L Poly w/HNO3 (B)					

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

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

Released By: _____
TestAmerica Date/Time

 _____
Received By Date/Time: 2/10/09 09:00

Metals

Supporting Documentation

Sample Sequence, Instrument Printouts

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Lot ID: D9B100262

Client: TA-Frvine-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 Fisdale 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>
D9B100262	1	HG	K61RN1AC	20090212	M2451DS	9043330	090212AA	023
D9B100262	1	HG	K61RN1AA	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 ₃	JT Baker	G25032		0.25
H ₂ SO ₄	Fisher	E49F06		0.5
HCl	JT Baker	G36024		used by instrument
10% SnCl ₂	Fisher	G20637	STD-0827-09	added by instrument
NaCl / NH ₂ OH	Fisher	G28617	STD-0688-09	0.6
	Fisher	G06476		
KMnO ₄	Fisher	G10662	STD-0826-09	1.5
K ₂ S ₂ O ₈	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	SDG:	10 mL
D9B120000 Water	K64MV	C 2	SDG:	10 mL
D9B100241 Water	K61L8 Total	3	Due Date: 02/16/09 SDG:	10 mL
D9B100241 Water	K61L8 Total	S 4	Due Date: 02/16/09 SDG:	10 mL
D9B100241 Water	K61L8 Total	D 5	Due Date: 02/16/09 SDG:	10 mL
D9B100246 Water	K61MV Total	6	Due Date: 02/16/09 SDG:	10 mL
D9B100249 Water	K61NK Total	7	Due Date: 02/16/09 SDG:	10 mL
D9B100255 Water	K61PL Total	8	Due Date: 02/16/09 SDG:	10 mL
D9B100257 Water	K61P6 Total	9	Due Date: 02/16/09 SDG:	10 mL
D9B100260 Water	K61Q2 Total	10	Due Date: 02/16/09 SDG:	10 mL
D9B100262 Water	K61RN Total	11	Due Date: 02/16/09 SDG:	10 mL
D9B100267 Water	K61VL Total	12	Due Date: 02/16/09 SDG:	10 mL
D9B100268 Water	K61V5 Total	13	Due Date: 02/16/09 SDG:	10 mL

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 ₃	JT Baker	G25032		0.25
H ₂ SO ₄	Fisher	E49F06		0.5
HCl	JT Baker	G36024		used by instrument
10% SnCl ₂	Fisher	G20637	STD-0827-09	added by instrument
NaCl / NH ₂ OH	Fisher	G28617	STD-0688-09	0.6
	Fisher	G06476		
KMnO ₄	Fisher	G10662	STD-0826-09	1.5
K ₂ S ₂ O ₈	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 - Boiling

I certify that all information above is correct and complete.

Signature: Clis Giordano

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	K64PQ	B 1	Due Date: SDG:	<u>10 mL</u>
D9B120000 Water	K64PQ	C 2	Due Date: SDG:	<u>10 mL</u>
D9B100241 Water	K61L8 Dissolved	3	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100241 Water	K61L8 Dissolved	S 4	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100241 Water	K61L8 Dissolved	D 5	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100246 Water	K61MV Dissolved	6	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100249 Water	K61NK Dissolved	7	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100255 Water	K61PL Dissolved	8	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100257 Water	K61P6 Dissolved	9	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100260 Water	K61Q2 Dissolved	10	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100262 Water	K61RN Dissolved	11	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100267 Water	K61VL Dissolved	12	Due Date: 02/16/09 SDG:	<u>10 mL</u>
D9B100268 Water	K61V5 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	K61L8S	D9B100241-1 = 5.00	9043305	AQUEOUS	4.63	1.0	4.63	ppb		02/12/09 18:15		<input type="checkbox"/>
19	K61L8D	D9B100241-1 = 5.00	9043305	AQUEOUS	4.65	1.0	4.65	ppb		02/12/09 18:17		<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	K61TBS	D9B100247-1 = 5.00	9043330	AQUEOUS	4.75	1.0	4.75	ppb		02/12/09 18:58	<i>NA Confirms above</i>	<input type="checkbox"/>
38	K61TBD	D9B100247-1 = 5.00	9043330	AQUEOUS	4.94	1.0	4.94	ppb		02/12/09 19:01	<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	K61TKS	D9B100263-1 = 5.00	9043318	AQUEOUS	5.07	1.0	5.07	ppb		02/12/09 19:38	<i>NA Confirms above</i>	<input type="checkbox"/>
55	K61TKD	D9B100263-1 = 5.00	9043318	AQUEOUS	5.14	1.0	5.14	ppb		02/12/09 19:40	<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

052113/09

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
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	K6XKVB	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	CCV	= 5.00			5.88	1.0	5.88 ppb	117.6%		02/13/09 00:19		<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	CCB	= 5.00			0.01	1.0	0.01 ppb			02/13/09 09:26		<input type="checkbox"/>

NA 02/13/09

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

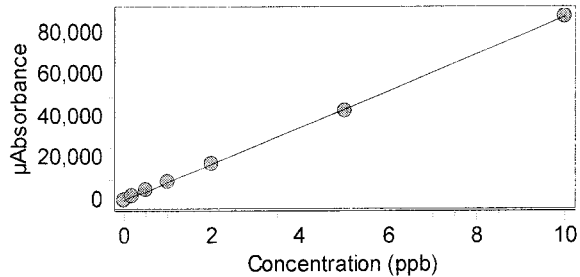
Calibration

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.	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
K61L8S	UNK	02/12/09 06:15:08 pm	4.628	40399	1.46		1.00	1.00
<i>MA, confirms above CS 2/13/09</i>								
K61L8D	UNK	02/12/09 06:17:26 pm	4.653	40618	1.29		1.00	1.00
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
K61L8S	UNK	02/12/09 06:58:58 pm	4.748	41458	0.71		1.00	1.00
<i>NA, CONFIRMS ABOVE CD 2/13/09</i>								
K61L8D	UNK	02/12/09 07:01:16 pm	4.835	42222	0.55		1.00	1.00
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
K61TKS	UNK	02/12/09 07:38:00 pm	5.066	44245	0.94		1.00	1.00
<i>NA, Confirms above Co 2/13/09</i>								
K61KTD	UNK	02/12/09 07:40:27 pm	5.141	44899	0.88		1.00	1.00
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
 us 2/13/09

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. ODF	Vol. ODF
K6R0F	UNK	02/12/09 10:33:41 pm	0.047	215	1.13		1.00	1.00
CCV	CCV	02/12/09 10:36:01 pm	5.605 ✓	48976	1.05		1.00	1.00
% Recovery 112.11 ✓								
CCB	CCB	02/12/09 10:38:18 pm	0.018	-37	7.83		1.00	1.00
K6R1Q	UNK	02/12/09 10:40:37 pm	0.052	258	0.84		1.00	1.00
K6R1X	UNK	02/12/09 10:42:57 pm	0.047	219	1.26		1.00	1.00
K6R13	UNK	02/12/09 10:45:16 pm	0.050	245	1.45		1.00	1.00
K6R14	UNK	02/12/09 10:47:35 pm	0.060	336	0.59		1.00	1.00
K6R16	UNK	02/12/09 10:49:53 pm	0.042	177	1.26		1.00	1.00
K6R19	UNK	02/12/09 10:52:12 pm	0.042	174	1.64		1.00	1.00
K6R2A	UNK	02/12/09 10:54:31 pm	0.050	243	1.39		1.00	1.00
K6V8R	UNK	02/12/09 10:56:50 pm	0.053	270	0.39		1.00	1.00
K6V84	UNK	02/12/09 10:59:08 pm	0.041	164	1.07		1.00	1.00
K6V86	UNK	02/12/09 11:01:27 pm	0.044	192	1.58		1.00	1.00
CCV	CCV	02/12/09 11:03:47 pm	5.561 ✓	48584	1.00		1.00	1.00
% Recovery 111.21 ✓								
CCB	CCB	02/12/09 11:06:04 pm	0.019 ✓	-31	5.15		1.00	1.00
K6V87	UNK	02/12/09 11:08:23 pm	0.049	238	2.29		1.00	1.00
K6XKVB	UNK	02/12/09 11:10:43 pm	0.053 ✓	274	0.46		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 % Recovery 111.62 ✓	CCV	02/12/09 11:31:36 pm	5.581 ✓	48762	0.82		1.00	1.00 1.00
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 % Recovery 111.80 ✓	CCV	02/12/09 11:52:28 pm	5.590 ✓	48842	1.04		1.00	1.00
CCB	CCB	02/12/09 11:54:46 pm	0.016 ✓	-50	12.87		1.00	1.00
K6XKNB	UNK	02/12/09 11:57:05 pm	0.047 ✓	216	1.02		1.00	1.00
K6XKNC	UNK	02/12/09 11:59:25 pm	5.536 ✓	48370	0.89		1.00	1.00
K6QHH	UNK	02/13/09 12:01:44 am	0.039	147	4.71		1.00	1.00
K6QHHS	UNK	02/13/09 12:04:04 am	5.474 ✓	47820	0.57		1.00	1.00
K6QHHD	UNK	02/13/09 12:06:23 am	5.578 ✓	48736	1.03		1.00	1.00
K6QHN	UNK	02/13/09 12:08:43 am	0.040	156	1.18		1.00	1.00
CCV % Recovery 111.12 ✓	CCV	02/13/09 12:11:03 am	5.556 ✓	48544	1.79		1.00	1.00
CCB	CCB	02/13/09 12:13:20 am	0.017 ✓	-48	6.00		1.00	1.00
CCV % Recovery 117.57	CCV	02/13/09 08:19:07 am	5.878	51370	1.14		1.00	1.00
CCB	CCB	02/13/09 08:21:24 am	0.011	-99	7.49		1.00	1.00
K6XKJC	UNK	02/13/09 08:23:44 am	5.732	50091	1.07		1.00	1.00
CCV % Recovery 116.17	CCV	02/13/09 08:26:04 am	5.809	50759	0.92		1.00	1.00
CCB	CCB	02/13/09 08:28:21 am	0.011	-99	4.93		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 #: F9B100172

Joseph Doak

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

TESTAMERICA LABORATORIES, INC.

for: 
Sherryl Adam
Project Manager

March 10, 2009

NPDES - 2001

Case Narrative
LOT NUMBER: F9B100172

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

F9B100172

<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

F9B100172

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
K603N	001	ISB0723-01	02/06/09	14:10

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: ISB0723-01

Radiochemistry

Lab Sample ID: F9B100172-001
 Work Order: K603N
 Matrix: WATER

Date Collected: 02/06/09 1410
 Date Received: 02/10/09 0900

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	mdc	Prep Date	Analysis Date
Gamma Cs-137 & Hits by EPA 901.1 MOD				pCi/L		Batch # 9042113	Yld %
Cesium 137	0.3	U	7.3	20.0	14	02/11/09	02/26/09
Potassium 40	-80	U	510		270	02/11/09	02/26/09
Gross Alpha/Beta EPA 900				pCi/L		Batch # 9043152	Yld %
Gross Alpha	0.96	U	0.80	3.00	1.2	02/12/09	02/16/09
Gross Beta	0.73	U	0.67	4.00	1.0	02/12/09	02/16/09
Radium 226 by EPA 903.0 MOD				pCi/L		Batch # 9041370	Yld % 63
Radium (226)	0.18	U	0.16	1.00	0.23	02/10/09	03/06/09
Radium 228 by GFPC EPA 904 MOD				pCi/L		Batch # 9041371	Yld % 62
Radium 228	0.24	U	0.33	1.00	0.55	02/10/09	03/06/09
TRITIUM (Distill) by EPA 906.0 MOD				pCi/L		Batch # 9059104	Yld %
Tritium	10	U	190	500	340	02/28/09	03/06/09
SR-90 BY GFPC EPA-905 MOD				pCi/L		Batch # 9041372	Yld % 54
Strontium 90	0.36	U	0.41	3.00	0.66	02/10/09	02/26/09
Total Uranium by KPA ASTM 5174-91				pCi/L		Batch # 9041382	Yld %
Total Uranium	0.228	U	0.027	1.35	0.42	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.

U Result is less than the sample detection limit.

METHOD BLANK REPORT

Radiochemistry

Client Lot ID: F9B100172
 Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	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: F9B100172
Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 σ+/-)	MDC	% Yld	% Rec	Lab Sample ID QC Control Limits
Total Uranium by KPA ASTM 5174-91							
Total Uranium	27.1	29.5	3.5	0.2		109	F9B100000-382C (90 - 118)
	Batch #:	9041382				Analysis Date:	03/08/09
Total Uranium by KPA ASTM 5174-91							
Total Uranium	5.42	5.76	0.60	0.21		106	F9B100000-382C (90 - 118)
	Batch #:	9041382				Analysis Date:	03/08/09
Gamma Cs-137 & Hits by EPA 901.1 MOD							
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
Gross Alpha/Beta EPA 900							
Gross Beta	67.6	71.1	6.0	1.4		105	F9B120000-152C (73 - 122)
	Batch #:	9043152				Analysis Date:	02/17/09
Gross Alpha/Beta EPA 900							
Gross Alpha	49.4	55.2	6.0	1.1		112	F9B120000-152C (73 - 136)
	Batch #:	9043152				Analysis Date:	02/17/09
TRITIUM (Distill) by EPA 906.0 MOD							
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

Results are reported before rounding to avoid round-off error in calculated results

Laboratory Control Sample/LCS Duplicate Report

Radiochemistry

Client Lot ID: F9B100172
 Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 σ +/-)	% Yld	% Rec	Lab Sample ID	
						QC Control Limits	Precision
Radium 226 by EPA	903.0 MOD	pCi/L	903.0 MOD			F9B100000-370C	
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		
Radium 228 by GFPC EPA	904 MOD	pCi/L	904 MOD			F9B100000-371C	
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		
SR-90 BY GFPC EPA	905 MOD	pCi/L	905 MOD			F9B100000-372C	
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: F9B100172
 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 # F9B100172 - Case 0720 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	
Gross Alpha/Beta EPA 900			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				
Gross Alpha/Beta EPA 900			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				
TRITIUM (Distill) by EPA 906.0 MOD			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.

Call 315

SUBCONTRACT ORDER

TestAmerica Irvine

ISB0723

SENDING LABORATORY:

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

RECEIVING LABORATORY:

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

Analysis	Units	Due	Expires	Interlab Price	Surch	Comments
Sample ID: ISB0723-01 Water						
Sampled: 02/06/09 14:10						
Gamma Spec-O	mg/kg	02/17/09	02/06/10 14:10	\$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 14:10	\$100.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Gross Beta-O	pCi/L	02/17/09	08/05/09 14:10	\$100.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Level 4 Data Package - Out	N/A	02/17/09	03/06/09 14:10	\$0.00	0%	
Radium, Combined-O	pCi/L	02/17/09	02/06/10 14:10	\$238.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Strontium 90-O	pCi/L	02/17/09	02/06/10 14:10	\$155.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Tritium-O	pCi/L	02/17/09	02/06/10 14:10	\$80.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Uranium, Combined-O	pCi/L	02/17/09	02/06/10 14:10	\$120.00	0%	Out St Louis, Boeing permit, DO NOT FILTER!

Containers Supplied:

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

[Signature] 2/9/09 17:00
 Released By Date/Time

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

Sue 02.10.09 09:00 NPDES - 2012

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

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>	6. _____	1. <u>2</u>	6. _____
2. <u>1048</u>	7. _____	2. <u>2</u>	7. _____
3. <u>1081</u>	8. _____	3. <u>2</u>	8. _____
4. _____	9. _____	4. _____	9. _____
5. _____	10. _____	5. _____	10. _____

*Numbered shipping lines correspond to Numbered Sample Temp lines

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

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

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

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

Notes: ISB0752
0534
0723
0717

Corrective Action:

Client Contact Name: _____
 Sample(s) processed "as is"
 Sample(s) on hold until: _____
Project Management Review: Sheryl 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.: 31402

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 "ISB0723". This work was authorized under your Purchase Order No. 2293717. This sample was extracted and analyzed using EPA Method 1613 for tetra-through-octa chlorinated dioxins and furans. A standard turnaround time was provided for this work.

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

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

Sincerely,



Martha M. Maier
Laboratory Director



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



Section I: Sample Inventory Report

Date Received: 2/10/2009

Vista Lab. ID

Client Sample ID

31402-001

ISB0723-01

SECTION II

Method Blank **EPA Method 1613**

Matrix: Aqueous	QC Batch No.: 1876	Lab Sample: 0-MB001						
Sample Size: 1.00 L	Date Extracted: 11-Feb-09	Date Analyzed DB-5: 13-Feb-09						
Date Analyzed DB-225: NA		Date Analyzed DB-225: NA						
Analyte	Conc. (ug/L)	DL^a	EMPC^b	Qualifiers	Labeled Standard	%R	LCL-UCL^d	Qualifiers
2,3,7,8-TCDD	ND	0.00000408			IS 13C-2,3,7,8-TCDD	94.1	25 - 164	
1,2,3,7,8-PeCDD	ND	0.00000973			13C-1,2,3,7,8-PeCDD	88.4	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.00000759			13C-1,2,3,4,7,8-HxCDD	95.7	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.00000746			13C-1,2,3,6,7,8-HxCDD	88.6	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.00000725			13C-1,2,3,4,6,7,8-HpCDD	102	23 - 140	
1,2,3,4,6,7,8-HpCDD	ND	0.0000155			13C-OCDD	97.3	17 - 157	
OCDD	ND	0.0000128			13C-2,3,7,8-TCDF	104	24 - 169	
2,3,7,8-TCDF	ND	0.00000401			13C-1,2,3,7,8-PeCDF	87.5	24 - 185	
1,2,3,7,8-PeCDF	ND	0.00000404			13C-2,3,4,7,8-PeCDF	85.8	21 - 178	
2,3,4,7,8-PeCDF	ND	0.00000419			13C-1,2,3,4,7,8-HxCDF	91.9	26 - 152	
1,2,3,4,7,8-HxCDF	ND	0.00000475			13C-1,2,3,6,7,8-HxCDF	91.7	26 - 123	
1,2,3,6,7,8-HxCDF	ND	0.00000430			13C-2,3,4,6,7,8-HxCDF	114	28 - 136	
2,3,4,6,7,8-HxCDF	ND	0.00000400			13C-1,2,3,7,8,9-HxCDF	94.0	29 - 147	
1,2,3,7,8,9-HxCDF	ND	0.00000717			13C-1,2,3,4,6,7,8-HpCDF	91.5	28 - 143	
1,2,3,4,6,7,8-HpCDF	ND	0.00000975			13C-1,2,3,4,7,8,9-HpCDF	96.4	26 - 138	
1,2,3,4,7,8,9-HpCDF	ND	0.0000107			13C-OCDF	92.5	17 - 157	
OCDF	ND	0.0000112			CRS 37Cl-2,3,7,8-TCDD	85.7	35 - 197	
Totals					Footnotes			
Total TCDD	ND	0.00000408			a. Sample specific estimated detection limit.			
Total PeCDD	ND	0.00000973			b. Estimated maximum possible concentration.			
Total HxCDD	ND	0.00000743			c. Method detection limit.			
Total HpCDD	ND	0.0000155			d. Lower control limit - upper control limit.			
Total TCDF	ND	0.00000401						
Total PeCDF	ND	0.00000412						
Total HxCDF	ND	0.00000506						
Total HpCDF	ND	0.0000102						

Analyst: JMH

Approved By: Martha M. Maier 20-Feb-2009 10:12

EPA Method 1613						
OPR Results		Lab Sample: 0-OPR001				
Matrix: Aqueous	QC Batch No.: 1876	Date Analyzed DB-5: 13-Feb-09 Date Analyzed DB-225: NA				
Sample Size: 1.00 L	Date Extracted: 11-Feb-09					
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	IS 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	CRS 37Cl-2,3,7,8-TCDD	89.7	35 - 197

Analyst: JMH

Approved By: Martha M. Maier 20-Feb-2009 10:12

Sample ID: ISB0723-01		EPA Method 1613					
Client Data		Sample Data		Laboratory Data			
Name:	Test America-Irvine, CA	Matrix:	Aqueous	Lab Sample:	31402-001		
Project:	ISB0723	Sample Size:	1.05 L	QC Batch No.:	1876		
Date Collected:	6-Feb-09			Date Analyzed DB-5:	13-Feb-09		
Time Collected:	1410			Date Analyzed DB-225:	NA		
Date Received:				Date Analyzed DB-225:	NA		
Date Extracted:				Date Analyzed DB-225:	NA		
Analyte	Conc. (ug/L)	DL ^a	EMPC ^b	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	ND	0.000000455		IS 13C-2,3,7,8-TCDD	87.4	25 - 164	
1,2,3,7,8-PeCDD	ND	0.00000123		13C-1,2,3,7,8-PeCDD	79.2	25 - 181	
1,2,3,4,7,8-HxCDD	0.00000263		J	13C-1,2,3,4,7,8-HxCDD	81.0	32 - 141	
1,2,3,6,7,8-HxCDD	0.00000447		J	13C-1,2,3,6,7,8-HxCDD	78.1	28 - 130	
1,2,3,7,8,9-HxCDD	0.00000350		J	13C-1,2,3,4,6,7,8-HpCDD	93.3	23 - 140	
1,2,3,4,6,7,8-HpCDD	0.0000877			13C-OCDD	82.3	17 - 157	
OCDD	0.000778			13C-2,3,7,8-TCDF	95.8	24 - 169	
2,3,7,8-TCDF	ND	0.00000592		13C-1,2,3,7,8-PeCDF	79.7	24 - 185	
1,2,3,7,8-PeCDF	ND	0.00000677		13C-2,3,4,7,8-PeCDF	78.9	21 - 178	
2,3,4,7,8-PeCDF	ND	0.00000671		13C-1,2,3,4,7,8-HxCDF	85.0	26 - 152	
1,2,3,4,7,8-HxCDF	ND	0.00000881		13C-1,2,3,6,7,8-HxCDF	75.3	26 - 123	
1,2,3,6,7,8-HxCDF	ND	0.00000901		13C-2,3,4,6,7,8-HxCDF	98.4	28 - 136	
2,3,4,6,7,8-HxCDF	ND	0.00000816		13C-1,2,3,7,8,9-HxCDF	84.3	29 - 147	
1,2,3,7,8,9-HxCDF	ND	0.00000132		13C-1,2,3,4,6,7,8-HpCDF	81.4	28 - 143	
1,2,3,4,6,7,8-HpCDF	0.0000177		J	13C-1,2,3,4,7,8,9-HpCDF	86.3	26 - 138	
1,2,3,4,7,8,9-HpCDF	ND	0.00000255		13C-OCDF	83.9	17 - 157	
OCDF	0.0000357		J	CRS 37Cl-2,3,7,8-TCDD	86.7	35 - 197	
Totals							
Total TCDD	ND	0.000000455					
Total PeCDD	ND	0.00000123					
Total HxCDD	0.0000280						
Total HpCDD	0.000198						
Total TCDF	ND	0.00000592					
Total PeCDF	0.00000317						
Total HxCDF	0.0000181						
Total HpCDF	0.0000421						
Footnotes							
a. Sample specific estimated detection limit.							
b. Estimated maximum possible concentration.							
c. Method detection limit.							
d. Lower control limit - upper control limit.							

Analyst: JMH

Approved By: Martha M. Maier 20-Feb-2009 10:12

APPENDIX

DATA QUALIFIERS & ABBREVIATIONS

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

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

CERTIFICATIONS

Accrediting Authority	Certificate Number
State of Alaska, DEC	CA413-2008
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

31402

TestAmerica Irvine

ISB0723

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: ISB0723-01	Water		Sampled: 02/06/09 14:10	
1613-Dioxin-HR-Alta	ug/l	02/17/09	02/13/09 14:10	J flags, 17 congeners, no TEQ, ug/L, sub=Vista
Level 4 + EDD-OUT	N/A	02/17/09	03/06/09 14:10	Excel EDD email to pm, Include Std logs for Lvl IV
<i>Containers Supplied:</i>				
1 L Amber (C)		1 L Amber (D)		

[Signature] 2/9/09 17:00
Released By Date/Time

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

Project 31402
Released By Date/Time

[Signature] 2/10/09 NPDES 2023
Received By Date/Time Page 1 of 18

SAMPLE LOG-IN CHECKLIST



Vista Project #: 31402 TAT unspecified

Samples Arrival:	Date/Time 2/10/09 0900	Initials: VAB	Location: WR-2
			Shelf/Rack: N/A
Logged In:	Date/Time 2/10/09 1118	Initials: C	Location: WR-2
			Shelf/Rack: C-4
Delivered By:	<input checked="" type="radio"/> FedEx	<input type="radio"/> UPS	<input type="radio"/> Cal
		<input type="radio"/> DHL	<input type="radio"/> Hand Delivered
	<input type="radio"/> Other		
Preservation:	<input checked="" type="radio"/> Ice	<input type="radio"/> Blue Ice	<input type="radio"/> Dry Ice
		<input type="radio"/> None	
Temp °C	1.7	Time: 0905	Thermometer ID: IR-1

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

Comments: