

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

Project ID: Routine Outfall 013

Report Number: IRL1721

Sampled: 12/15/08

Received: 12/15/08

## SHORT HOLD TIME DETAIL REPORT

	<b>Hold Time (in days)</b>	<b>Date/Time Sampled</b>	<b>Date/Time Received</b>	<b>Date/Time Extracted</b>	<b>Date/Time Analyzed</b>
<b>Sample ID: Outfall 013 (IRL1721-01) - Water</b>					
EPA 180.1	2	12/15/2008 10:58	12/15/2008 18:15	12/16/2008 15:00	12/16/2008 18:35
EPA 300.0	2	12/15/2008 10:58	12/15/2008 18:15	12/16/2008 13:00	12/16/2008 16:08
<i>Nitrite-N</i>				12/15/2008 23:15	12/16/2008 02:09
Filtration	1	12/15/2008 10:58	12/15/2008 18:15	12/16/2008 13:30	12/16/2008 13:30
SM2540F	2	12/15/2008 10:58	12/15/2008 18:15	12/16/2008 17:25	12/16/2008 17:25
SM5210B	2	12/15/2008 10:58	12/15/2008 18:15	12/16/2008 16:00	12/21/2008 10:00

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Joseph Doak  
Project Manager

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Report Number: IRL1721

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 Received: 12/15/08

## METHOD BLANK/QC DATA

### EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 8L18053 Extracted: 12/18/08</b>											
<b>Blank Analyzed: 12/18/2008 (8L18053-BLK1)</b>											
DRO (C13 - C28)	ND	0.10	0.050	mg/l							
EFH (C10 - C28)	ND	0.10	0.050	mg/l							
Surrogate: n-Octacosane	0.161			mg/l	0.200		80	40-125			
<b>LCS Analyzed: 12/18/2008 (8L18053-BS1)</b>											
EFH (C10 - C28)	0.573	0.10	0.050	mg/l	1.00		57	40-115			MNR1
Surrogate: n-Octacosane	0.131			mg/l	0.200		65	40-125			
<b>LCS Dup Analyzed: 12/18/2008 (8L18053-BSD1)</b>											
EFH (C10 - C28)	0.642	0.10	0.050	mg/l	1.00		64	40-115	11	25	
Surrogate: n-Octacosane	0.145			mg/l	0.200		72	40-125			

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## METHOD BLANK/QC DATA

### VOLATILE FUEL HYDROCARBONS (EPA 5030/8015)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 8L18037 Extracted: 12/18/08</b>											
<b>Blank Analyzed: 12/18/2008 (8L18037-BLK1)</b>											
GRO (C4 - C12)	ND	0.050	0.030	mg/l							
Surrogate: 4-BFB (FID)	0.00905			mg/l	0.0100		90	65-140			
<b>LCS Analyzed: 12/18/2008 (8L18037-BS1)</b>											
GRO (C4 - C12)	0.765	0.050	0.030	mg/l	0.800		96	80-120			
Surrogate: 4-BFB (FID)	0.0139			mg/l	0.0100		139	65-140			
<b>Matrix Spike Analyzed: 12/18/2008 (8L18037-MS1) Source: IRL1721-01</b>											
GRO (C4 - C12)	0.292	0.050	0.030	mg/l	0.220	ND	133	65-140			
Surrogate: 4-BFB (FID)	0.00998			mg/l	0.0100		100	65-140			
<b>Matrix Spike Analyzed: 12/18/2008 (8L18037-MS2) Source: IRL1958-01</b>											
GRO (C4 - C12)	0.197	0.050	0.030	mg/l	0.220	ND	90	65-140			
Surrogate: 4-BFB (FID)	0.0105			mg/l	0.0100		105	65-140			
<b>Matrix Spike Dup Analyzed: 12/18/2008 (8L18037-MSD1) Source: IRL1721-01</b>											
GRO (C4 - C12)	0.325	0.050	0.030	mg/l	0.220	ND	148	65-140	11	20	MI
Surrogate: 4-BFB (FID)	0.0101			mg/l	0.0100		101	65-140			
<b>Matrix Spike Dup Analyzed: 12/18/2008 (8L18037-MSD2) Source: IRL1958-01</b>											
GRO (C4 - C12)	0.197	0.050	0.030	mg/l	0.220	ND	90	65-140	0	20	
Surrogate: 4-BFB (FID)	0.0103			mg/l	0.0100		103	65-140			

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## METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 8L17008 Extracted: 12/17/08</b>											
<b>Blank Analyzed: 12/17/2008 (8L17008-BLK1)</b>											
1,2-Dibromoethane (EDB)	ND	0.50	0.40	ug/l							
1,2,3-Trichloropropane	ND	1.0	0.40	ug/l							
Di-isopropyl Ether (DIPE)	ND	0.50	0.25	ug/l							
Methyl-tert-butyl Ether (MTBE)	ND	0.50	0.32	ug/l							
tert-Butanol (TBA)	ND	10	6.5	ug/l							
Surrogate: 4-Bromofluorobenzene	23.8			ug/l	25.0		95	80-120			
Surrogate: Dibromofluoromethane	24.0			ug/l	25.0		96	80-120			
Surrogate: Toluene-d8	25.5			ug/l	25.0		102	80-120			
<b>LCS Analyzed: 12/17/2008 (8L17008-BS1)</b>											
1,2-Dibromoethane (EDB)	25.8	0.50	0.40	ug/l	25.0		103	75-125			
1,2,3-Trichloropropane	27.2	1.0	0.40	ug/l	25.0		109	60-130			
Di-isopropyl Ether (DIPE)	23.7	0.50	0.25	ug/l	25.0		95	60-135			
Methyl-tert-butyl Ether (MTBE)	24.3	0.50	0.32	ug/l	25.0		97	60-135			
tert-Butanol (TBA)	142	10	6.5	ug/l	125		114	70-135			
Surrogate: 4-Bromofluorobenzene	24.2			ug/l	25.0		97	80-120			
Surrogate: Dibromofluoromethane	24.6			ug/l	25.0		98	80-120			
Surrogate: Toluene-d8	25.3			ug/l	25.0		101	80-120			
<b>Matrix Spike Analyzed: 12/17/2008 (8L17008-MS1)</b>					<b>Source: IRL1632-01</b>						
1,2-Dibromoethane (EDB)	27.4	0.50	0.40	ug/l	25.0	ND	110	70-130			
1,2,3-Trichloropropane	29.6	1.0	0.40	ug/l	25.0	ND	118	55-135			
Di-isopropyl Ether (DIPE)	24.2	0.50	0.25	ug/l	25.0	ND	97	60-140			
Methyl-tert-butyl Ether (MTBE)	44.2	0.50	0.32	ug/l	25.0	18.3	104	55-145			
tert-Butanol (TBA)	232	10	6.5	ug/l	125	91.0	113	65-140			
Surrogate: 4-Bromofluorobenzene	24.3			ug/l	25.0		97	80-120			
Surrogate: Dibromofluoromethane	24.6			ug/l	25.0		98	80-120			
Surrogate: Toluene-d8	25.8			ug/l	25.0		103	80-120			

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 8L17008 Extracted: 12/17/08</b>											
<b>Matrix Spike Dup Analyzed: 12/17/2008 (8L17008-MSD1)</b>						<b>Source: IRL1632-01</b>					
1,2-Dibromoethane (EDB)	26.9	0.50	0.40	ug/l	25.0	ND	108	70-130	2	25	
1,2,3-Trichloropropane	28.5	1.0	0.40	ug/l	25.0	ND	114	55-135	4	30	
Di-isopropyl Ether (DIPE)	23.8	0.50	0.25	ug/l	25.0	ND	95	60-140	2	25	
Methyl-tert-butyl Ether (MTBE)	43.6	0.50	0.32	ug/l	25.0	18.3	101	55-145	1	25	
tert-Butanol (TBA)	233	10	6.5	ug/l	125	91.0	113	65-140	0	25	
Surrogate: 4-Bromofluorobenzene	24.4			ug/l	25.0		98	80-120			
Surrogate: Dibromofluoromethane	24.1			ug/l	25.0		96	80-120			
Surrogate: Toluene-d8	25.8			ug/l	25.0		103	80-120			

### Batch: 8L18001 Extracted: 12/18/08

#### Blank Analyzed: 12/18/2008 (8L18001-BLK1)

1,2-Dibromoethane (EDB)	ND	0.50	0.40	ug/l							
1,2,3-Trichloropropane	ND	1.0	0.40	ug/l							
Di-isopropyl Ether (DIPE)	ND	0.50	0.25	ug/l							
Methyl-tert-butyl Ether (MTBE)	ND	0.50	0.32	ug/l							
tert-Butanol (TBA)	ND	10	6.5	ug/l							
Surrogate: 4-Bromofluorobenzene	22.0			ug/l	25.0		88	80-120			
Surrogate: Dibromofluoromethane	21.8			ug/l	25.0		87	80-120			
Surrogate: Toluene-d8	23.7			ug/l	25.0		95	80-120			

#### LCS Analyzed: 12/18/2008 (8L18001-BS1)

1,2-Dibromoethane (EDB)	24.6	0.50	0.40	ug/l	25.0		99	75-125			
1,2,3-Trichloropropane	23.1	1.0	0.40	ug/l	25.0		92	60-130			
Di-isopropyl Ether (DIPE)	22.0	0.50	0.25	ug/l	25.0		88	60-135			
Methyl-tert-butyl Ether (MTBE)	20.9	0.50	0.32	ug/l	25.0		84	60-135			
tert-Butanol (TBA)	134	10	6.5	ug/l	125		107	70-135			
Surrogate: 4-Bromofluorobenzene	21.8			ug/l	25.0		87	80-120			
Surrogate: Dibromofluoromethane	21.7			ug/l	25.0		87	80-120			
Surrogate: Toluene-d8	23.9			ug/l	25.0		96	80-120			

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 8L18001 Extracted: 12/18/08</b>											
<b>Matrix Spike Analyzed: 12/18/2008 (8L18001-MS1)</b>						<b>Source: IRL1721-01</b>					
1,2-Dibromoethane (EDB)	25.3	0.50	0.40	ug/l	25.0	ND	101	70-130			
1,2,3-Trichloropropane	23.4	1.0	0.40	ug/l	25.0	ND	94	55-135			
Di-isopropyl Ether (DIPE)	22.6	0.50	0.25	ug/l	25.0	ND	90	60-140			
Methyl-tert-butyl Ether (MTBE)	21.8	0.50	0.32	ug/l	25.0	ND	87	55-145			
tert-Butanol (TBA)	136	10	6.5	ug/l	125	ND	109	65-140			
Surrogate: 4-Bromofluorobenzene	22.1			ug/l	25.0		88	80-120			
Surrogate: Dibromofluoromethane	21.2			ug/l	25.0		85	80-120			
Surrogate: Toluene-d8	23.8			ug/l	25.0		95	80-120			
<b>Matrix Spike Dup Analyzed: 12/18/2008 (8L18001-MSD1)</b>						<b>Source: IRL1721-01</b>					
1,2-Dibromoethane (EDB)	24.5	0.50	0.40	ug/l	25.0	ND	98	70-130	3	25	
1,2,3-Trichloropropane	23.4	1.0	0.40	ug/l	25.0	ND	94	55-135	0	30	
Di-isopropyl Ether (DIPE)	21.7	0.50	0.25	ug/l	25.0	ND	87	60-140	4	25	
Methyl-tert-butyl Ether (MTBE)	21.5	0.50	0.32	ug/l	25.0	ND	86	55-145	2	25	
tert-Butanol (TBA)	127	10	6.5	ug/l	125	ND	102	65-140	7	25	
Surrogate: 4-Bromofluorobenzene	22.1			ug/l	25.0		88	80-120			
Surrogate: Dibromofluoromethane	21.6			ug/l	25.0		86	80-120			
Surrogate: Toluene-d8	23.9			ug/l	25.0		96	80-120			

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## METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 8L16019 Extracted: 12/16/08</b>											
<b>Blank Analyzed: 12/16/2008 (8L16019-BLK1)</b>											
1,4-Dioxane	ND	2.0	1.0	ug/l							
Surrogate: Dibromofluoromethane	1.11			ug/l	1.00		111	80-120			
<b>LCS Analyzed: 12/16/2008 (8L16019-BS1)</b>											
1,4-Dioxane	8.69	2.0	1.0	ug/l	10.0		87	70-125			
Surrogate: Dibromofluoromethane	1.13			ug/l	1.00		113	80-120			
<b>Matrix Spike Analyzed: 12/16/2008 (8L16019-MS1) Source: IRL1525-13</b>											
1,4-Dioxane	9.02	2.0	1.0	ug/l	10.0	ND	90	70-130			
Surrogate: Dibromofluoromethane	1.09			ug/l	1.00		109	80-120			
<b>Matrix Spike Dup Analyzed: 12/16/2008 (8L16019-MSD1) Source: IRL1525-13</b>											
1,4-Dioxane	8.97	2.0	1.0	ug/l	10.0	ND	90	70-130	1	30	
Surrogate: Dibromofluoromethane	1.11			ug/l	1.00		111	80-120			

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## METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 8L18083 Extracted: 12/18/08</b>											
<b>Blank Analyzed: 12/20/2008 (8L18083-BLK1)</b>											
Naphthalene	ND	10	3.0	ug/l							
N-Nitrosodimethylamine	ND	20	2.5	ug/l							
Surrogate: 2,4,6-Tribromophenol	166			ug/l	200		83	40-120			
Surrogate: 2-Fluorobiphenyl	72.6			ug/l	100		73	50-120			
Surrogate: 2-Fluorophenol	127			ug/l	200		63	30-120			
Surrogate: Nitrobenzene-d5	74.8			ug/l	100		75	45-120			
Surrogate: Phenol-d6	134			ug/l	200		67	35-120			
Surrogate: Terphenyl-d14	93.8			ug/l	100		94	50-125			
<b>LCS Analyzed: 12/20/2008 (8L18083-BS1)</b>											
Naphthalene	77.1	10	3.0	ug/l	100		77	55-120			MNR1
N-Nitrosodimethylamine	74.7	20	2.5	ug/l	100		75	45-120			
Surrogate: 2,4,6-Tribromophenol	176			ug/l	200		88	40-120			
Surrogate: 2-Fluorobiphenyl	77.0			ug/l	100		77	50-120			
Surrogate: 2-Fluorophenol	122			ug/l	200		61	30-120			
Surrogate: Nitrobenzene-d5	78.3			ug/l	100		78	45-120			
Surrogate: Phenol-d6	141			ug/l	200		71	35-120			
Surrogate: Terphenyl-d14	90.3			ug/l	100		90	50-125			
<b>LCS Dup Analyzed: 12/20/2008 (8L18083-BSD1)</b>											
Naphthalene	77.8	10	3.0	ug/l	100		78	55-120	1	20	
N-Nitrosodimethylamine	70.9	20	2.5	ug/l	100		71	45-120	5	20	
Surrogate: 2,4,6-Tribromophenol	163			ug/l	200		82	40-120			
Surrogate: 2-Fluorobiphenyl	77.2			ug/l	100		77	50-120			
Surrogate: 2-Fluorophenol	105			ug/l	200		53	30-120			
Surrogate: Nitrobenzene-d5	79.4			ug/l	100		79	45-120			
Surrogate: Phenol-d6	116			ug/l	200		58	35-120			
Surrogate: Terphenyl-d14	90.6			ug/l	100		91	50-125			

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## METHOD BLANK/QC DATA

### METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Data Qualifiers
<b>Batch: 8L16092 Extracted: 12/16/08</b>											
<b>Blank Analyzed: 12/17/2008 (8L16092-BLK1)</b>											
Cadmium	ND	1.0	0.11	ug/l							
Copper	ND	2.0	0.75	ug/l							
Lead	ND	1.0	0.30	ug/l							
Selenium	ND	2.0	0.30	ug/l							
Zinc	ND	20	2.5	ug/l							
<b>LCS Analyzed: 12/17/2008 (8L16092-BS1)</b>											
Cadmium	81.2	1.0	0.11	ug/l	80.0		101	85-115			
Copper	78.8	2.0	0.75	ug/l	80.0		99	85-115			
Lead	79.1	1.0	0.30	ug/l	80.0		99	85-115			
Selenium	80.0	2.0	0.30	ug/l	80.0		100	85-115			
Zinc	81.4	20	2.5	ug/l	80.0		102	85-115			
<b>Matrix Spike Analyzed: 12/17/2008 (8L16092-MS1) Source: IRL1721-01</b>											
Cadmium	79.8	1.0	0.11	ug/l	80.0	2.50	97	70-130			
Copper	81.9	2.0	0.75	ug/l	80.0	4.87	96	70-130			
Lead	81.9	1.0	0.30	ug/l	80.0	2.16	100	70-130			
Selenium	73.9	2.0	0.30	ug/l	80.0	ND	92	70-130			
Zinc	153	20	2.5	ug/l	80.0	79.2	93	70-130			
<b>Matrix Spike Analyzed: 12/17/2008 (8L16092-MS2) Source: IRL1706-01</b>											
Cadmium	81.1	1.0	0.11	ug/l	80.0	ND	101	70-130			
Copper	78.8	2.0	0.75	ug/l	80.0	0.930	97	70-130			
Lead	82.0	1.0	0.30	ug/l	80.0	ND	102	70-130			
Selenium	76.1	2.0	0.30	ug/l	80.0	ND	95	70-130			
Zinc	82.1	20	2.5	ug/l	80.0	7.51	93	70-130			
<b>Matrix Spike Dup Analyzed: 12/17/2008 (8L16092-MSD1) Source: IRL1721-01</b>											
Cadmium	82.8	1.0	0.11	ug/l	80.0	2.50	100	70-130	4	20	
Copper	84.2	2.0	0.75	ug/l	80.0	4.87	99	70-130	3	20	
Lead	86.4	1.0	0.30	ug/l	80.0	2.16	105	70-130	5	20	
Selenium	77.2	2.0	0.30	ug/l	80.0	ND	97	70-130	4	20	
Zinc	156	20	2.5	ug/l	80.0	79.2	96	70-130	2	20	

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Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 8L16094 Extracted: 12/16/08</b>											
<b>Blank Analyzed: 12/18/2008 (8L16094-BLK1)</b>											
Boron	ND	0.050	0.020	mg/l							
<b>LCS Analyzed: 12/18/2008 (8L16094-BS1)</b>											
Boron	0.462	0.050	0.020	mg/l	0.500		92	85-115			
<b>Matrix Spike Analyzed: 12/18/2008 (8L16094-MS1)</b>											
						<b>Source: IRL1721-01</b>					
Boron	0.473	0.050	0.020	mg/l	0.500	ND	95	70-130			
<b>Matrix Spike Dup Analyzed: 12/18/2008 (8L16094-MSD1)</b>											
						<b>Source: IRL1721-01</b>					
Boron	0.488	0.050	0.020	mg/l	0.500	ND	98	70-130	3	20	

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 Attention: Bronwyn Kelly

Project ID: Routine Outfall 013

Report Number: IRL1721

Sampled: 12/15/08  
 Received: 12/15/08

## METHOD BLANK/QC DATA

### DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 8L17121 Extracted: 12/17/08</b>											
<b>Blank Analyzed: 12/18/2008 (8L17121-BLK1)</b>											
Cadmium	ND	1.0	0.11	ug/l							
Copper	1.97	2.0	0.75	ug/l							J
Lead	ND	1.0	0.30	ug/l							
Selenium	ND	2.0	0.30	ug/l							
Zinc	3.99	20	2.5	ug/l							J
<b>LCS Analyzed: 12/18/2008 (8L17121-BS1)</b>											
Cadmium	81.0	1.0	0.11	ug/l	80.0		101	85-115			
Copper	81.1	2.0	0.75	ug/l	80.0		101	85-115			
Lead	85.0	1.0	0.30	ug/l	80.0		106	85-115			
Selenium	75.2	2.0	0.30	ug/l	80.0		94	85-115			
Zinc	81.6	20	2.5	ug/l	80.0		102	85-115			
<b>Matrix Spike Analyzed: 12/18/2008 (8L17121-MS1) Source: IRL1362-01</b>											
Cadmium	74.4	1.0	0.11	ug/l	80.0	ND	93	70-130			
Copper	72.4	2.0	0.75	ug/l	80.0	1.31	89	70-130			
Lead	75.0	1.0	0.30	ug/l	80.0	ND	94	70-130			
Selenium	70.2	2.0	0.30	ug/l	80.0	0.662	87	70-130			
Zinc	72.1	20	2.5	ug/l	80.0	ND	90	70-130			
<b>Matrix Spike Dup Analyzed: 12/18/2008 (8L17121-MSD1) Source: IRL1362-01</b>											
Cadmium	82.4	1.0	0.11	ug/l	80.0	ND	103	70-130	10	20	
Copper	79.1	2.0	0.75	ug/l	80.0	1.31	97	70-130	9	20	
Lead	81.5	1.0	0.30	ug/l	80.0	ND	102	70-130	8	20	
Selenium	76.6	2.0	0.30	ug/l	80.0	0.662	95	70-130	9	20	
Zinc	79.1	20	2.5	ug/l	80.0	ND	99	70-130	9	20	

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## METHOD BLANK/QC DATA

### DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 8L18090 Extracted: 12/18/08</b>											
<b>Blank Analyzed: 12/18/2008 (8L18090-BLK1)</b>											
Boron	ND	0.050	0.020	mg/l							
<b>LCS Analyzed: 12/18/2008 (8L18090-BS1)</b>											
Boron	0.471	0.050	0.020	mg/l	0.500		94	85-115			
<b>Matrix Spike Analyzed: 12/18/2008 (8L18090-MS1)</b>											
Boron	0.527	0.050	0.020	mg/l	0.500	0.0616	93	70-130			
<b>Matrix Spike Analyzed: 12/18/2008 (8L18090-MS2)</b>											
Boron	0.472	0.050	0.020	mg/l	0.500	ND	94	70-130			
<b>Matrix Spike Dup Analyzed: 12/18/2008 (8L18090-MSD1)</b>											
Boron	0.536	0.050	0.020	mg/l	0.500	0.0616	95	70-130	2	20	

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## METHOD BLANK/QC DATA

### INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Data Qualifiers
<b>Batch: 8L15075 Extracted: 12/15/08</b>											
<b>Blank Analyzed: 12/15/2008 (8L15075-BLK1)</b>											
Chloride	ND	0.50	0.25	mg/l							
Nitrite-N	ND	0.15	0.090	mg/l							
Sulfate	ND	0.50	0.20	mg/l							
<b>LCS Analyzed: 12/15/2008 (8L15075-BS1)</b>											
Chloride	4.94	0.50	0.25	mg/l	5.00		99	90-110			
Nitrite-N	1.37	0.15	0.090	mg/l	1.52		90	90-110			
Sulfate	10.1	0.50	0.20	mg/l	10.0		101	90-110			
<b>Matrix Spike Analyzed: 12/15/2008 (8L15075-MS1)</b>											
						<b>Source: IRL1621-01</b>					
Chloride	116	20	10	mg/l	50.0	71.2	89	80-120			
Nitrite-N	13.8	6.0	3.6	mg/l	15.2	ND	91	80-120			
Sulfate	845	20	8.0	mg/l	100	757	88	80-120			MHA
<b>Matrix Spike Analyzed: 12/15/2008 (8L15075-MS2)</b>											
						<b>Source: IRL1706-01</b>					
Chloride	5.40	0.50	0.25	mg/l	5.00	0.625	95	80-120			
Nitrite-N	1.42	0.15	0.090	mg/l	1.52	ND	94	80-120			
Sulfate	14.0	0.50	0.20	mg/l	10.0	4.57	95	80-120			
<b>Matrix Spike Dup Analyzed: 12/15/2008 (8L15075-MSD1)</b>											
						<b>Source: IRL1621-01</b>					
Chloride	111	20	10	mg/l	50.0	71.2	80	80-120	4	20	
Nitrite-N	13.2	6.0	3.6	mg/l	15.2	ND	87	80-120	4	20	
Sulfate	834	20	8.0	mg/l	100	757	77	80-120	1	20	MHA
<b>Batch: 8L16052 Extracted: 12/16/08</b>											
<b>Blank Analyzed: 12/16/2008 (8L16052-BLK1)</b>											
Total Dissolved Solids	ND	10	10	mg/l							

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## METHOD BLANK/QC DATA

### INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 8L16052 Extracted: 12/16/08</b>											
<b>LCS Analyzed: 12/16/2008 (8L16052-BS1)</b>											
Total Dissolved Solids	996	10	10	mg/l	1000		100	90-110			
<b>Duplicate Analyzed: 12/16/2008 (8L16052-DUP1)</b>											
Total Dissolved Solids	569	10	10	mg/l		577			1	10	
<b>Source: IRL1707-01</b>											
<b>Batch: 8L16072 Extracted: 12/16/08</b>											
<b>Blank Analyzed: 12/21/2008 (8L16072-BLK1)</b>											
Biochemical Oxygen Demand	ND	2.0	0.50	mg/l							
<b>LCS Analyzed: 12/21/2008 (8L16072-BS1)</b>											
Biochemical Oxygen Demand	190	100	25	mg/l	198		96	85-115			
<b>LCS Dup Analyzed: 12/21/2008 (8L16072-BSD1)</b>											
Biochemical Oxygen Demand	195	100	25	mg/l	198		98	85-115	3	20	
<b>Batch: 8L16086 Extracted: 12/16/08</b>											
<b>Blank Analyzed: 12/16/2008 (8L16086-BLK1)</b>											
Nitrate-N	ND	0.11	0.060	mg/l							
Nitrate/Nitrite-N	ND	0.26	0.15	mg/l							
<b>LCS Analyzed: 12/16/2008 (8L16086-BS1)</b>											
Nitrate-N	1.20	0.11	0.060	mg/l	1.13		106	90-110			
<b>Matrix Spike Analyzed: 12/16/2008 (8L16086-MS1)</b>											
Nitrate-N	4.02	0.55	0.30	mg/l	1.13	2.70	116	80-120			
<b>Source: IRL1814-01</b>											

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## METHOD BLANK/QC DATA

### INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b><u>Batch: 8L16086 Extracted: 12/16/08</u></b>											
<b>Matrix Spike Analyzed: 12/16/2008 (8L16086-MS2)</b>						<b>Source: IRL1778-01</b>					
Nitrate-N	12.4	2.2	1.2	mg/l	11.3	0.386	107	80-120			
<b>Matrix Spike Dup Analyzed: 12/16/2008 (8L16086-MSD1)</b>						<b>Source: IRL1814-01</b>					
Nitrate-N	4.08	0.55	0.30	mg/l	1.13	2.70	122	80-120	1	20	MI
<b><u>Batch: 8L16102 Extracted: 12/16/08</u></b>											
<b>Blank Analyzed: 12/16/2008 (8L16102-BLK1)</b>											
Fluoride	0.0336	0.10	0.020	mg/l							J
<b>LCS Analyzed: 12/16/2008 (8L16102-BS1)</b>											
Fluoride	1.02	0.10	0.020	mg/l	1.00		102	90-110			
<b>Matrix Spike Analyzed: 12/16/2008 (8L16102-MS1)</b>						<b>Source: IRL1509-01</b>					
Fluoride	1.42	0.10	0.020	mg/l	1.00	0.426	99	80-120			
<b>Matrix Spike Dup Analyzed: 12/16/2008 (8L16102-MSD1)</b>						<b>Source: IRL1509-01</b>					
Fluoride	1.43	0.10	0.020	mg/l	1.00	0.426	101	80-120	1	20	
<b><u>Batch: 8L16135 Extracted: 12/16/08</u></b>											
<b>Blank Analyzed: 12/16/2008 (8L16135-BLK1)</b>											
Ammonia-N (Distilled)	ND	0.50	0.50	mg/l							
<b>LCS Analyzed: 12/16/2008 (8L16135-BS1)</b>											
Ammonia-N (Distilled)	10.1	0.50	0.50	mg/l	10.0		101	80-115			

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## METHOD BLANK/QC DATA

### INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b><u>Batch: 8L16135 Extracted: 12/16/08</u></b>											
<b>Matrix Spike Analyzed: 12/16/2008 (8L16135-MS1)</b>						<b>Source: IRL1172-01</b>					
Ammonia-N (Distilled)	10.4	0.50	0.50	mg/l	10.0	0.560	98	70-120			
<b>Matrix Spike Dup Analyzed: 12/16/2008 (8L16135-MSD1)</b>						<b>Source: IRL1172-01</b>					
Ammonia-N (Distilled)	10.4	0.50	0.50	mg/l	10.0	0.560	98	70-120	0	15	
<b><u>Batch: 8L16147 Extracted: 12/16/08</u></b>											
<b>Blank Analyzed: 12/16/2008 (8L16147-BLK1)</b>											
Turbidity	0.0900	1.0	0.040	NTU							J
<b>Duplicate Analyzed: 12/16/2008 (8L16147-DUP1)</b>						<b>Source: IRL1689-01</b>					
Turbidity	240	20	0.80	NTU		256			6	20	
<b>Duplicate Analyzed: 12/16/2008 (8L16147-DUP2)</b>						<b>Source: IRL1815-01</b>					
Turbidity	0.290	1.0	0.040	NTU		0.270			7	20	J
<b><u>Batch: 8L18054 Extracted: 12/18/08</u></b>											
<b>Blank Analyzed: 12/18/2008 (8L18054-BLK1)</b>											
Perchlorate	ND	4.0	0.90	ug/l							
<b>LCS Analyzed: 12/18/2008 (8L18054-BS1)</b>											
Perchlorate	25.5	4.0	0.90	ug/l	25.0		102	85-115			
<b>Matrix Spike Analyzed: 12/18/2008 (8L18054-MS1)</b>						<b>Source: IRL2103-01</b>					
Perchlorate	27.8	4.0	0.90	ug/l	25.0	3.43	98	80-120			

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## METHOD BLANK/QC DATA

### INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 8L18054 Extracted: 12/18/08</b>											
<b>Matrix Spike Dup Analyzed: 12/18/2008 (8L18054-MSD1)</b>						<b>Source: IRL2103-01</b>					
Perchlorate	29.1	4.0	0.90	ug/l	25.0	3.43	103	80-120	5	20	
<b>Batch: 8L18110 Extracted: 12/18/08</b>											
<b>Blank Analyzed: 12/18/2008 (8L18110-BLK1)</b>											
Total Suspended Solids	ND	10	1.0	mg/l							
<b>LCS Analyzed: 12/18/2008 (8L18110-BS1)</b>											
Total Suspended Solids	1000	10	1.0	mg/l	1000		100	85-115			
<b>Duplicate Analyzed: 12/18/2008 (8L18110-DUP1)</b>						<b>Source: IRL2253-01</b>					
Total Suspended Solids	18.0	10	1.0	mg/l		18.0			0	10	
<b>Batch: 8L19123 Extracted: 12/19/08</b>											
<b>Blank Analyzed: 12/19/2008 (8L19123-BLK1)</b>											
Hexane Extractable Material (Oil & Grease)	3.50	5.0	1.4	mg/l							J
<b>LCS Analyzed: 12/19/2008 (8L19123-BS1)</b>											
Hexane Extractable Material (Oil & Grease)	21.4	5.0	1.4	mg/l	20.2		106	78-114			MNR1
<b>LCS Dup Analyzed: 12/19/2008 (8L19123-BSD1)</b>											
Hexane Extractable Material (Oil & Grease)	21.9	5.0	1.4	mg/l	20.2		108	78-114	2	11	

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## METHOD BLANK/QC DATA

### DIOXIN (EPA 1613)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
<b>Batch: 1770 Extracted: 12/17/08</b>											
<b>Blank Analyzed: 12/18/2008 (MB001)</b>						<b>Source:</b>					
2,3,7,8-TCDD	ND	0.0000500	0.0000095	ug/L				50-150		25	
1,2,3,7,8-PeCDD	ND	0.0000250	0.0000025	ug/L				50-150		25	
1,2,3,4,7,8-HxCDD	ND	0.0000250	0.00000182	ug/L				50-150		25	
1,2,3,6,7,8-HxCDD	ND	0.0000250	0.00000171	ug/L				50-150		25	
1,2,3,7,8,9-HxCDD	ND	0.0000250	0.00000164	ug/L				50-150		25	
1,2,3,4,6,7,8-HpCDD	ND	0.0000250	0.00000279	ug/L				50-150		25	
OCDD	ND	0.0000500	0.0000043	ug/L				50-150		25	
2,3,7,8-TCDF	ND	0.0000500	0.00000887	ug/L				50-150		25	
1,2,3,7,8-PeCDF	ND	0.0000250	0.00000118	ug/L				50-150		25	
2,3,4,7,8-PeCDF	ND	0.0000250	0.00000107	ug/L				50-150		25	
1,2,3,4,7,8-HxCDF	ND	0.0000250	0.00000051	ug/L				50-150		25	
1,2,3,6,7,8-HxCDF	ND	0.0000250	0.00000059	ug/L				50-150		25	
2,3,4,6,7,8-HxCDF	ND	0.0000250	0.00000069	ug/L				50-150		25	
1,2,3,7,8,9-HxCDF	ND	0.0000250	0.00000105	ug/L				50-150		25	
1,2,3,4,6,7,8-HpCDF	ND	0.0000250	0.00000153	ug/L				50-150		25	
1,2,3,4,7,8,9-HpCDF	ND	0.0000250	0.00000182	ug/L				50-150		25	
OCDF	ND	0.0000500	0.00000159	ug/L				50-150		25	
Total TCDD	ND	0.00000500	0.00000958	ug/L				50-150		25	
Total PeCDD	ND	0.0000250	0.0000025	ug/L				50-150		25	
Total HxCDD	ND	0.0000250	0.00000164	ug/L				50-150		25	
Total HpCDD	ND	0.0000250	0.00000279	ug/L				50-150		25	
Total TCDF	ND	0.00000500	0.00000887	ug/L				50-150		25	
Total PeCDF	ND	0.0000250	0.00000107	ug/L				50-150		25	
Total HxCDF	ND	0.0000250	0.000000512	ug/L				50-150		25	
Total HpCDF	ND	0.0000250	0.00000153	ug/L				50-150		25	
Surrogate: 13C-2,3,7,8-TCDD	0.00188			ug/L	2000		94	50-150			
Surrogate: 13C-1,2,3,7,8-PeCDD	0.00202			ug/L	2000		101	50-150			
Surrogate: 13C-1,2,3,4,7,8-HxCDD	0.00169			ug/L	2000		84	50-150			
Surrogate: 13C-1,2,3,6,7,8-HxCDD	0.00191			ug/L	2000		96	50-150			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDD	0.00179			ug/L	2000		90	50-150			
Surrogate: 13C-OCDD	0.00297			ug/L	4000		74	50-150			
Surrogate: 13C-2,3,7,8-TCDF	0.00186			ug/L	2000		93	50-150			
Surrogate: 13C-1,2,3,7,8-PeCDF	0.00180			ug/L	2000		90	50-150			
Surrogate: 13C-2,3,4,7,8-PeCDF	0.00194			ug/L	2000		97	50-150			
Surrogate: 13C-1,2,3,4,7,8-HxCDF	0.00182			ug/L	2000		91	50-150			

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## METHOD BLANK/QC DATA

### DIOXIN (EPA 1613)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 1770 Extracted: 12/17/08</b>											
<b>Blank Analyzed: 12/18/2008 (MB001)</b>											
<b>Source:</b>											
Surrogate: 13C-1,2,3,6,7,8-HxCDF	0.00172			ug/L	2000		86	50-150			
Surrogate: 13C-2,3,4,6,7,8-HxCDF	0.00174			ug/L	2000		87	50-150			
Surrogate: 13C-1,2,3,7,8,9-HxCDF	0.00180			ug/L	2000		90	50-150			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF	0.00160			ug/L	2000		80	50-150			
Surrogate: 13C-1,2,3,4,7,8,9-HpCDF	0.00166			ug/L	2000		83	50-150			
Surrogate: 13C-OCDF	0.00312			ug/L	4000		78	50-150			
Surrogate: 37Cl-2,3,7,8-TCDD	0.000760			ug/L	800		95	50-150			
<b>LCS Analyzed: 12/18/2008 (OPR001)</b>											
<b>Source:</b>											
2,3,7,8-TCDD	8.63	5.00	0.840	ug/L	10		86	50-150		25	
1,2,3,7,8-PeCDD	47.8	25.0	1.59	ug/L	50		96	50-150		25	
1,2,3,4,7,8-HxCDD	46.8	25.0	1.18	ug/L	50		94	50-150		25	
1,2,3,6,7,8-HxCDD	46.3	25.0	1.69	ug/L	50		93	50-150		25	
1,2,3,7,8,9-HxCDD	45.7	25.0	1.18	ug/L	50		91	50-150		25	
1,2,3,4,6,7,8-HpCDD	46.3	25.0	2.01	ug/L	50		93	50-150		25	
OCDD	95.6	50.0	2.45	ug/L	100		96	50-150		25	
2,3,7,8-TCDF	8.58	5.00	0.970	ug/L	10		86	50-150		25	
1,2,3,7,8-PeCDF	46.7	25.0	1.09	ug/L	50		93	50-150		25	
2,3,4,7,8-PeCDF	48.7	25.0	1.48	ug/L	50		97	50-150		25	
1,2,3,4,7,8-HxCDF	45.2	25.0	1.06	ug/L	50		90	50-150		25	
1,2,3,6,7,8-HxCDF	47.5	25.0	0.730	ug/L	50		95	50-150		25	
2,3,4,6,7,8-HxCDF	45.7	25.0	1.26	ug/L	50		91	50-150		25	
1,2,3,7,8,9-HxCDF	46.6	25.0	0.940	ug/L	50		93	50-150		25	
1,2,3,4,6,7,8-HpCDF	45.0	25.0	1.70	ug/L	50		90	50-150		25	
1,2,3,4,7,8,9-HpCDF	44.9	25.0	0.960	ug/L	50		90	50-150		25	
OCDF	89.5	50.0	3.66	ug/L	100		90	50-150		25	
Surrogate: 13C-2,3,7,8-TCDD	89.2			ug/L	100		89	50-150			
Surrogate: 13C-1,2,3,7,8-PeCDD	96.7			ug/L	100		97	50-150			
Surrogate: 13C-1,2,3,4,7,8-HxCDD	77.1			ug/L	100		77	50-150			
Surrogate: 13C-1,2,3,6,7,8-HxCDD	91.1			ug/L	100		91	50-150			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDD	84.0			ug/L	100		84	50-150			
Surrogate: 13C-OCDD	136			ug/L	200		68	50-150			
Surrogate: 13C-2,3,7,8-TCDF	88.6			ug/L	100		89	50-150			
Surrogate: 13C-1,2,3,7,8-PeCDF	88.4			ug/L	100		88	50-150			
Surrogate: 13C-2,3,4,7,8-PeCDF	91.1			ug/L	100		91	50-150			
Surrogate: 13C-1,2,3,4,7,8-HxCDF	88.6			ug/L	100		89	50-150			

**TestAmerica Irvine**

Joseph Doak  
 Project Manager

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

Project ID: Routine Outfall 013

Report Number: IRL1721

Sampled: 12/15/08  
 Received: 12/15/08

## METHOD BLANK/QC DATA

### DIOXIN (EPA 1613)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 1770 Extracted: 12/17/08</b>											
<b>LCS Analyzed: 12/18/2008 (OPR001)</b>											
Surrogate: 13C-1,2,3,6,7,8-HxCDF	81.1			ug/L	100		81	50-150			
Surrogate: 13C-2,3,4,6,7,8-HxCDF	81.0			ug/L	100		81	50-150			
Surrogate: 13C-1,2,3,7,8,9-HxCDF	83.5			ug/L	100		84	50-150			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF	74.7			ug/L	100		75	50-150			
Surrogate: 13C-1,2,3,4,7,8,9-HpCDF	79.5			ug/L	100		80	50-150			
Surrogate: 13C-OCDF	146			ug/L	200		73	50-150			
Surrogate: 37Cl-2,3,7,8-TCDD	33.6			ug/L	40		84	50-150			

TestAmerica Irvine

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 Attention: Bronwyn Kelly

Project ID: Routine Outfall 013

Report Number: IRL1721

Sampled: 12/15/08

Received: 12/15/08

## METHOD BLANK/QC DATA

### MCAWW 245.1

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 8353495 Extracted: 12/18/08</b>											
<b>Matrix Spike Dup Analyzed: 12/18/2008 (D8L170200001D)</b>						<b>Source: IRL1721-01</b>					
Mercury	4.64	0.2	0.027	ug/L	5	ND	93	90-110	9	10	
<b>Matrix Spike Analyzed: 12/18/2008 (D8L170200001S)</b>						<b>Source: IRL1721-01</b>					
Mercury	4.24	0.2	0.027	ug/L	5	ND	85	90-110	9	10	N
<b>Blank Analyzed: 12/18/2008 (D8L180000495B)</b>						<b>Source:</b>					
Mercury	ND	0.2	0.027	ug/L				-			
<b>LCS Analyzed: 12/18/2008 (D8L180000495C)</b>						<b>Source:</b>					
Mercury	4.59	0.2	0.027	ug/L	5		92	90-110			

TestAmerica Irvine

Joseph Doak  
 Project Manager

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

Project ID: Routine Outfall 013

Report Number: IRL1721

Sampled: 12/15/08  
 Received: 12/15/08

## METHOD BLANK/QC DATA

### MCAWW 245.1-Diss

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 8353517 Extracted: 12/18/08</b>											
<b>Matrix Spike Dup Analyzed: 12/18/2008 (D8L170200001D)</b>						<b>Source: IRL1721-01</b>					
Mercury-diss	4.37	0.2	0.027	ug/L	5	ND	87	90-110	9	10	N
<b>Matrix Spike Analyzed: 12/18/2008 (D8L170200001S)</b>						<b>Source: IRL1721-01</b>					
Mercury-diss	4.8	0.2	0.027	ug/L	5	ND	96	90-110	9	10	
<b>Blank Analyzed: 12/18/2008 (D8L180000517B)</b>						<b>Source:</b>					
Mercury-diss	ND	0.2	0.027	ug/L				-			
<b>LCS Analyzed: 12/18/2008 (D8L180000517C)</b>						<b>Source:</b>					
Mercury-diss	4.63	0.2	0.027	ug/L	5		93	90-110			

TestAmerica Irvine

Joseph Doak  
 Project Manager

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

Project ID: Routine Outfall 013

Report Number: IRL1721

Sampled: 12/15/08  
Received: 12/15/08

## Compliance Check

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

LabNumber	Analysis	Analyte	Units	Result	MRL	Compliance Limit
IRL1721-01	1664-HEM	Hexane Extractable Material (Oil & Greas	mg/l	3.32	4.7	15
IRL1721-01	624-Boeing 012/013/014 DT, LOW	1,2-Dibromoethane (EDB)	ug/l	0	0.50	50
IRL1721-01	624-Boeing 012/013/014 DT, LOW	tert-Butanol (TBA)	ug/l	0	10	12
IRL1721-01	625-Boeing 012/013/014 DT	Naphthalene	ug/l	0	9.7	21
IRL1721-01	8015B-DRO(C13-C28)-LowRL	DRO (C13 - C28)	mg/l	0.055	0.094	0.1
IRL1721-01	8015B-GRO(C4-C12)	GRO (C4 - C12)	mg/l	0.022	0.050	0.1
IRL1721-01	8260B-SIM 1,4-Dioxane	1,4-Dioxane	ug/l	0	2.0	3
IRL1721-01	Ammonia-N, Titr (4500NH3-C) w/d	Ammonia-N (Distilled)	mg/l	1.40	0.50	10
IRL1721-01	Boron-200.7	Boron	mg/l	0.015	0.050	1
IRL1721-01	Cadmium-200.8	Cadmium	ug/l	2.50	1.0	3.1
IRL1721-01	Chloride - 300.0	Chloride	mg/l	16	0.50	150
IRL1721-01	Copper-200.8	Copper	ug/l	4.87	2.0	14
IRL1721-01	Fluoride-4500FC	Fluoride	mg/l	0.17	0.10	1.6
IRL1721-01	Lead-200.8	Lead	ug/l	2.16	1.0	5.2
IRL1721-01	Nitrate-N, 300.0	Nitrate-N	mg/l	2.12	0.11	8
IRL1721-01	Nitrite-N, 300.0	Nitrite-N	mg/l	0	0.15	1
IRL1721-01	Nitrogen, NO3+NO2 -N	Nitrate/Nitrite-N	mg/l	2.12	0.26	8
IRL1721-01	Perchlorate 314.0-DEFAULT	Perchlorate	ug/l	0.79	4.0	6
IRL1721-01	Selenium-200.8	Selenium	ug/l	0.22	2.0	5
IRL1721-01	Sett. Solids - SM2540F	Total Settleable Solids	ml/l	0.100	0.10	0.3
IRL1721-01	Sulfate-300.0	Sulfate	mg/l	8.41	0.50	300
IRL1721-01	TDS - SM 2540C	Total Dissolved Solids	mg/l	91	10	950
IRL1721-01	TSS - SM2540D	Total Suspended Solids	mg/l	1.00	10	45
IRL1721-01	Zinc-200.8	Zinc	ug/l	79	20	160

## Compliance Check

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

LabNumber	Analysis	Analyte	Units	Result	MRL	Compliance Limit
IRL1721-02	624-Boeing 012/013/014 DT, LOW	1,2-Dibromoethane (EDB)	ug/l	0	0.50	50
IRL1721-02	624-Boeing 012/013/014 DT, LOW	tert-Butanol (TBA)	ug/l	0	10	12

### TestAmerica Irvine

Joseph Doak  
Project Manager

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

Project ID: Routine Outfall 013

Report Number: IRL1721

Sampled: 12/15/08  
Received: 12/15/08

## DATA QUALIFIERS AND DEFINITIONS

- B** Analyte was detected in the associated Method Blank.
- J** Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). The user of this data should be aware that this data is of limited reliability.
- Ja** The amount detected is below the Lower Calibration Limit of the instrument
- M1** The MS and/or MSD were above the acceptance limits due to sample matrix interference. 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.
- N** Spike sample recovery is outside control limits.
- pH** pH = 5
- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- RPD** Relative Percent Difference

## ADDITIONAL COMMENTS

**For GRO (C4-C12):**

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

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

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

**TestAmerica Irvine**

Joseph Doak  
Project Manager

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**IRL1721 <Page 37 of 39>**

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

Project ID: Routine Outfall 013

Report Number: IRL1721

Sampled: 12/15/08  
 Received: 12/15/08

## Certification Summary

### TestAmerica Irvine

Method	Matrix	Nelac	California
EPA 1664A	Water	X	X
EPA 180.1	Water	X	X
EPA 200.7-Diss	Water	X	X
EPA 200.7	Water	X	X
EPA 200.8-Diss	Water	X	X
EPA 200.8	Water	X	X
EPA 300.0	Water	X	X
EPA 314.0	Water	X	X
EPA 624	Water	X	X
EPA 625	Water	X	X
EPA 8015B	Water	X	X
EPA 8260B-SIM	Water	X	X
Filtration	Water	N/A	N/A
SM 2540D	Water	X	X
SM 4500-F-C	Water	X	X
SM2540C	Water	X	
SM2540F	Water	X	X
SM4500NH3-C	Water		
SM5210B	Water	X	

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

### Subcontracted Laboratories

#### Alta Analytical Perspectives

2714 Exchange Drive - Wilmington, NC 28405

Method Performed: 1613-Dioxin-HR Alta  
 Samples: IRL1721-01

#### TestAmerica Denver

4955 Yarrow Street - Arvada, CO 80002

Method Performed: MCAWW 245.1  
 Samples: IRL1721-01

Method Performed: MCAWW 245.1-Diss  
 Samples: IRL1721-01

### TestAmerica Irvine

Joseph Doak  
 Project Manager

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

Project ID: Routine Outfall 013

Report Number: IRL1721

Sampled: 12/15/08

Received: 12/15/08

**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: IRL1721-01

**TestAmerica Irvine**

Joseph Doak  
Project Manager

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**IRL1721 <Page 39 of 39>**

CHAIN OF CUSTODY FORM

Client Name/Address: <b>MWH-Arcadia</b> 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007		Project: <b>Boeing-SSFL NPDES          Routine Outfall 013          Bravo Test Stand</b>		ANALYSIS REQUIRED Oil & Grease (1664-HEM) <input type="checkbox"/> 8015 Mod Gas (C6-C12) <input type="checkbox"/> 8015 Mod diesel/jet fuel (C13-C28) <input type="checkbox"/> Total Rec. Petroleum Hydrocarbons (TPH) <input type="checkbox"/> 1,4-Dioxane (8260B) <input type="checkbox"/> BOD <sub>5</sub> (20 degrees C) <input type="checkbox"/> 625 (Naphthalene +NDMA analysis) <input type="checkbox"/> Ammonia-N (350.2) <input type="checkbox"/> Cl <sup>-</sup> , SO <sub>4</sub> <sup>-2</sup> , F <sup>-</sup> , NO <sub>3</sub> <sup>-</sup> +NO <sub>2</sub> <sup>-</sup> , Perchlorate <input type="checkbox"/> Nitrate-N, Nitrite-N <input type="checkbox"/>										Field readings: Temp = <u>7.83</u> <u>51.0</u> pH = <u>7.83</u> Time of readings = <u>1:58</u>					
Test America Contact: Joseph Doak Project Manager: Bronwyn Kelly Sampler: <u>Pollock</u>		Phone Number: (626) 568-6691 Fax Number: (626) 568-6515		Date/Time: <u>12/15/08</u>										Turn around Time: (check) 24 Hours <input type="checkbox"/> 5 Days <input type="checkbox"/> 48 Hours <input type="checkbox"/> 10 Days <input type="checkbox"/> 72 Hours <input type="checkbox"/> Normal <input type="checkbox"/>					
Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #	Oil & Grease (1664-HEM)	8015 Mod Gas (C6-C12)	8015 Mod diesel/jet fuel (C13-C28)	Total Rec. Petroleum Hydrocarbons (TPH)	1,4-Dioxane (8260B)	BOD <sub>5</sub> (20 degrees C)	625 (Naphthalene +NDMA analysis)	Ammonia-N (350.2)	Cl <sup>-</sup> , SO <sub>4</sub> <sup>-2</sup> , F <sup>-</sup> , NO <sub>3</sub> <sup>-</sup> +NO <sub>2</sub> <sup>-</sup> , Perchlorate	Nitrate-N, Nitrite-N	Field readings:		
Outfall 013	W	1L Amber	1	<u>12/15/08</u>	HCl	1A	X												
Outfall 013 Dup	W	1L Amber	1		HCl	1B	X												
Outfall 013	W	VOAs	1		HCl	2A		X											
Outfall 013 Dup	W	VOAs	2		HCl	2B, 2C		X											
Outfall 013	W	1L Amber	1		None	3A			X										
Outfall 013 Dup	W	1L Amber	1		None	3B			X										
Outfall 013 Dup	W	1L Amber	1		None	4A													
Outfall 013 Dup	W	1L Amber	1		HCl	4B													
Outfall 013	W	VOAs	1		HCl	5A				X									
Outfall 013 Dup	W	VOAs	2		HCl	5B, 5C				X									
Outfall 013	W	1L Poly	1		None	6				X									
Outfall 013	W	1L Amber	1		None	7A							X						
Outfall 013 Dup	W	1L Amber	1		None	7B							X						
Outfall 013	W	500 ml Poly	1		H <sub>2</sub> SO <sub>4</sub>	8								X					
Outfall 013	W	500 ml Poly	2		None	9A, 9B													
Outfall 013	W	500 ml Poly	1		None	10													
Relinquished By	Signature		Date/Time:	Date/Time: <u>12/15/08 1815</u>										Date/Time: <u>12/15/08 1815</u>		Date/Time: <u>12/15/08 1815</u>		Date/Time: <u>12/15/08 1815</u>	
Relinquished By	Signature		Date/Time:	Date/Time: <u>12/15/08 1815</u>										Date/Time: <u>12/15/08 1815</u>		Date/Time: <u>12/15/08 1815</u>		Date/Time: <u>12/15/08 1815</u>	
Relinquished By	Signature		Date/Time:	Date/Time: <u>12/15/08 1815</u>										Date/Time: <u>12/15/08 1815</u>		Date/Time: <u>12/15/08 1815</u>		Date/Time: <u>12/15/08 1815</u>	

EW EW

DN 2330

CHAIN OF CUSTODY FORM

IRL 1721

Client Name/Address: MWH-Arcadia 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007		Project: Boeing-SSFL NPDES Routine Outfall 013 Bravo Test Stand		Phone Number: (626) 568-6691 Fax Number: (626) 568-6515		ANALYSIS REQUIRED		Comments	
Test America Contact: Joseph Doak Project Manager: Bronwyn Kelly		Settleable Solids		624 (EDB, 1,2,3-TCF, MTBE, DIFE, TBA)		Total Recoverable Metals, Cd, Se, Zn, B, Cu, Pb, Hg			TCDD (and all congeners)
Sampler:		Turbidity, TDS, TSS		Total Dissolved Metals, Cd, Se, Zn, B, Cu, Pb, Hg					
Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #			
Outfall 013	W	500 ml Poly	2	12-15-08 10:58	None	11A, 11B	X		
Outfall 013	W	1L Poly	1		None	12	X		
Outfall 013	W	VOAs	1		HCl	13A	X		
Outfall 013 Dup	W	VOAs	2		HCl	13B, 13C	X		
Outfall 013	W	1L Poly	2		HNO <sub>3</sub>	14A, 14B	X		
Outfall 013	W	1L Poly	1		None	15	X		
Outfall 013	W	1L Amber	2		None	16A, 16B	X		
Trip Blanks	W	VOAs	3		HCl	17A, 17B, 17C	X		
Relinquished By									
Relinquished By									
Relinquished By									
Turn around Time: (check)	24 Hours	48 Hours	72 Hours	Normal	Sample Integrity: (check)	Intact	On Ice:	32	

## **ANALYTICAL REPORT**

MWH-Pasadena / Boeing

Lot D8L170200

Project IRL1721

Joseph Doak  
17461 Derian Avenue  
Suite 100  
Irvine, CA 92614

TestAmerica Laboratories, Inc.

  
Danielle Fougere  
Project Manager

December 22, 2008

## Case Narrative

Enclosed is the report for one sample received at TestAmerica Laboratories, Inc. – Denver laboratory on December 17, 2008. 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 D8L170200

### Sample Receiving

The cooler temperature for the dissolved sample volume received on December 17, 2008 at the Denver laboratory was 2.6°C. The cooler temperature for the total sample volume received on December 18, 2008 at the Denver laboratory was 12.6°C, which is fine for metals analysis. All sample containers were received in acceptable condition.

### Total Mercury –Method 245.1

Matrix spike analyses for QC batch 8353495 were performed on sample IRL1721-01, and were outside control limits.

No other anomalies were observed.

### Dissolved Mercury –Method 245.1

Matrix spike analyses for QC batch 8353517 were performed on sample IRL1721-01, and were outside control limits.

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.

TO  
IRI  
2.6  
12/17/8

**SUBCONTRACT ORDER**

**TestAmerica Irvine**

**IRL1721**

**SENDING LABORATORY:**

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

**RECEIVING LABORATORY:**

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

Analysis	Units	Due	Expires	Interlab Price Surch	Comments
<b>Sample ID: IRL1721-01      Water      Sampled: 12/15/08 10:58</b>					
Level 4 Data Package - Out	N/A	12/22/08	01/12/09 10:58	\$0.00 25%	Boeing
Mercury - 245.1, Diss -OUT	ug/l	12/22/08	01/12/09 10:58	\$36.00 25%	Out to Denver Level 4 Boeing, permit, J flags
Mercury - 245.1-OUT	ug/l	12/22/08	01/12/09 10:58	\$36.00 25%	Out to Denver Level 4 Boeing, permit, J flags
<i>Containers Supplied:</i> 125 mL Poly (AA)					

Released By

Date/Time

12/16/08 17:00

Received By

Date/Time

12/16/08 17:00

1332

Test America  
Released By

Date/Time

Received By

Date/Time

12/17/08 09:15

SUBCONTRACT ORDER

TestAmerica Irvine

IRL1721

12.16 NOTICE  
12.2 PM  
12/18/07

**SENDING LABORATORY:**

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

**RECEIVING LABORATORY:**

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

Analysis	Units	Due	Expires	Interlab Price	Surch	Comments
<b>Sample ID: IRL1721-01</b>						
	<b>Water</b>	<b>Sampled: 12/15/08 10:58</b>				
Level 4 Data Package - Out	N/A	12/22/08	01/12/09 10:58	\$0.00	25%	Boeing
Mercury - 245.1, Diss -OUT	ug/l	12/22/08	01/12/09 10:58	\$36.00	25%	Out to Denver Level 4 Boeing, permit, J flags
Mercury - 245.1-OUT	ug/l	12/22/08	01/12/09 10:58	\$36.00	25%	Out to Denver Level 4 Boeing, permit, J flags
<i>Containers Supplied:</i>						
125 mL Poly (AA) 						

 12/17/08 17:00

Released By

Date/Time

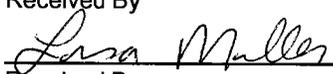
FedEx 12/17/08 17:00

Received By

Date/Time

TestAmerica

Date/Time

 12/18/08 09:00

Received By

Date/Time

TestAmerica Denver  
Sample Receiving Checklist

Lot #: D8L170200 Date/Time Received: 12/17/08 0945  
 Company Name & Sampling Site: TA Irvine

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

Quote #: 72743

Special Instructions:

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

Unpacking Checks:

Cooler #(s): 1

Temperatures (°C): 2.6 12.4

N/A Yes No

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

*Initials*  
AC

TestAmerica Denver  
Sample Receiving Checklist

Lot # D8L170200

Login Checks:

Initials

AB

N/A Yes No

19. Sufficient volume provided for all analysis requested? (ref. Attachment D of SOP# DV-QA-0003) document on CUR, and contact PM before proceeding. If no,
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? 1
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).

# EXECUTIVE SUMMARY - Detection Highlights

D8L170200

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
<b>NO DETECTABLE PARAMETERS</b>				

# METHODS SUMMARY

D8L170200

<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

D8L170200

<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

D8L170200

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
K4VTJ	001	IRL1721-01	12/15/08	10:58

**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

D8L170200

## 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		8353495	8353297
	WATER	MCAWW 245.1		8353517	8353310

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## Total Metals

Lot ID: D8L170200

Client: TestAmerica Irvine

Method: 245.1

Associated Samples: 001

Batch: 8353495

TOTAL Metals  
COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: TestAmerica Irvine

SDG No.: D8L170200

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SOW No.: \_\_\_\_\_

<u>Sample ID.</u>	<u>Lab Sample No.</u>
<u>IRL1721-01</u>	<u>D8L170200-001</u>
<u>IRL1721-01 MS</u>	<u>D8L170200-001S</u>
<u>IRL1721-01 MSD</u>	<u>D8L170200-001SD</u>

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: *Yongming Ding*

Name: Yongming Ding

Date: 12/20/2008

Title: Analyst V

1342

## TestAmerica Irvine

### Total Metals Analysis Data Sheet

**Lab Name:** TESTAMERICA DENVER  
**Lot/SDG Number:** D8L170200  
**Matrix:** WATER  
**% Moisture:** N/A  
**Basis:** Wet  
**Analysis Method:** 245.1  
**Unit:** ug/L  
**QC Batch ID:** 8353495  
**Sample Aliquot:** 10 mL  
**Dilution Factor:** 1

**Client Sample ID:** IRL1721-01  
**Lab Sample ID:** D8L170200-001  
**Lab WorkOrder:** K4VTJ  
**Date/Time Collected:** 12/15/08 10:58  
**Date/Time Received:** 12/17/08 09:45  
**Date Leached:**  
**Date/Time Extracted:** 12/18/08 16:30  
**Date/Time Analyzed:** 12/18/08 21:18  
**Instrument ID:** 023

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

**TOTAL Metals**

-2A-

**INITIAL AND CONTINUING CALIBRATION VERIFICATION**

Contract: TestAmerica Irvine

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG NO.: D8L170200

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	6.732	96.2	5.000	5.033	100.7	4.765	95.3	CV

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

**TOTAL Metals**

-2A-

**INITIAL AND CONTINUING CALIBRATION VERIFICATION**

Contract: TestAmerica Irvine

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG NO.: D8L170200

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	5.070	101.4			CV

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

**TOTAL Metals**  
**-2B-**  
**CRDL STANDARD FOR AA AND ICP**

Contract: TestAmerica Irvine

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: D8L170200

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	0.16800	84.0					

Comments:

## TestAmerica Irvine

### Total Metals Analysis Data Sheet

**Lab Name:** TESTAMERICA DENVER  
**Lot/SDG Number:** D8L170200  
**Matrix:** WATER  
**% Moisture:**  
**Basis:** Wet  
**Analysis Method:** 245.1  
**Unit:** ug/L  
**QC Batch ID:** 8353495  
**Sample Aliquot:** 10 mL  
**Dilution Factor:** 1

**Client Sample ID:**  
**Lab Sample ID:** D8L180000-495B  
**Lab WorkOrder:** K40NQ  
**Date/Time Collected:**  
**Date/Time Received:**  
**Date Leached:**  
**Date/Time Extracted:** 12/18/08 16:30  
**Date/Time Analyzed:** 12/18/08 21:13  
**Instrument ID:** 023

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

**TOTAL Metals**

-3-

**BLANKS**

Contract: TestAmerica Irvine

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG NO.: D8L170200

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
		1	2	3					
Mercury	-0.030	0.027	0.027	0.027	0.027	0.027	0.027	CV	

Comments:

## TestAmerica Irvine

### Total Metals Analysis Data Sheet

**Lab Name:** TESTAMERICA DENVER  
**Lot/SDG Number:** D8L170200  
**Matrix:** WATER  
**% Moisture:** N/A  
**Basis:** Wet  
**Analysis Method:** 245.1  
**Unit:** ug/L  
**QC Batch ID:** 8353495  
**MS Sample Aliquot:** 10 mL  
**MS Dilution Factor:** 1

**Client Sample ID:** IRL1721-01  
**MS Lab Sample ID:** D8L170200-001S  
**MS Lab WorkOrder:** K4VTJ  
**Date/Time Collected:** 12/15/08 10:58  
**Date/Time Received:** 12/17/08 09:45  
**Date Leached:**  
**Date/Time Extracted:** 12/18/08 16:30  
**Date/Time Analyzed:** 12/18/08 21:25  
**Instrument ID:** 023

Analyte	Spike Amount	Sample Result	C	MS Result	C	% Rec	Q	QC Limit
Mercury	5.00	0.027	U	4.24		85	N	90 - 110

## TestAmerica Irvine

### Total Metals Analysis Data Sheet

**Lab Name:** TESTAMERICA DENVER  
**Lot/SDG Number:** D8L170200  
**Matrix:** WATER  
**% Moisture:** N/A  
**Basis:** Wet  
**Analysis Method:** 245.1  
**Unit:** ug/L  
**QC Batch ID:** 8353495  
**MSD Sample Aliquot:** 10 mL  
**MSD Dilution Factor:** 1

**Client Sample ID:** IRL1721-01  
**MSD Lab Sample ID:** D8L170200-001D  
**MSD Lab WorkOrder:** K4VTJ  
**Date/Time Collected:** 12/15/08 10:58  
**Date/Time Received:** 12/17/08 09:45  
**Date Leached:**  
**Date/Time Extracted:** 12/18/08 16:30  
**Date/Time Analyzed:** 12/18/08 21:27  
**Instrument ID:** 023

Analyte	Spike Amount	Sample Result	C	MSD Result	C	% Rec	Q	RPD	Q	QC Limits	
										% Rec	RPD
Mercury	5.00	0.027	U	4.64		93		9.0		90 - 110	10