

# **APPENDIX G**

## **Section 2**

Outfall 001 - January 18, 2010

Test America Analytical Laboratory Report

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## LABORATORY REPORT

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

Project: Quarterly Outfall 001

Sampled: 01/18/10  
Received: 01/18/10  
Revised: 04/02/10 14:09

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(s) of Custody, 14 pages, are included and are an integral part of this report.  
This entire report was reviewed and approved for release.*

### CASE NARRATIVE

**SAMPLE RECEIPT:** Samples were received intact, at 4°C, on ice and with chain of custody documentation.

**HOLDING TIMES:** All samples were analyzed within prescribed holding times and/or in accordance with the TestAmerica Sample Acceptance Policy unless otherwise noted in the report.

**PRESERVATION:** Samples requiring preservation were verified prior to sample analysis.

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

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

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

**ADDITIONAL INFORMATION:** Final revised report to provide corrected units and .pdf data file for Radchem.

#### LABORATORY ID

ITA1329-01  
ITA1329-02

#### CLIENT ID

Outfall 001 (Grab)  
Trip Blanks

#### MATRIX

Water  
Water

Reviewed By:



**TestAmerica Irvine**

Kathleen A. Robb For Heather Clark  
Project Manager

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

Project ID: Quarterly Outfall 001

Report Number: ITA1329

Sampled: 01/18/10  
 Received: 01/18/10

## PURGEABLES BY GC/MS (EPA 624)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ITA1329-01 (Outfall 001 (Grab) - Water)</b>									
<b>Reporting Units: ug/l</b>									
Benzene	EPA 624	10A2207	0.28	0.50	ND	1	01/22/10	01/24/10	
Carbon tetrachloride	EPA 624	10A2207	0.28	0.50	ND	1	01/22/10	01/24/10	
Chloroform	EPA 624	10A2207	0.33	0.50	ND	1	01/22/10	01/24/10	
1,1-Dichloroethane	EPA 624	10A2207	0.40	0.50	ND	1	01/22/10	01/24/10	
1,2-Dichloroethane	EPA 624	10A2207	0.28	0.50	ND	1	01/22/10	01/24/10	
1,1-Dichloroethene	EPA 624	10A2207	0.42	0.50	ND	1	01/22/10	01/24/10	
1,2-Dichloro-1,1,2-trifluoroethane	EPA 624	10A2207	1.1	2.0	ND	1	01/22/10	01/24/10	
Ethylbenzene	EPA 624	10A2207	0.25	0.50	ND	1	01/22/10	01/24/10	
Tetrachloroethene	EPA 624	10A2207	0.32	0.50	ND	1	01/22/10	01/24/10	
Toluene	EPA 624	10A2207	0.36	0.50	ND	1	01/22/10	01/24/10	
1,1,1-Trichloroethane	EPA 624	10A2207	0.30	0.50	ND	1	01/22/10	01/24/10	
1,1,2-Trichloroethane	EPA 624	10A2207	0.30	0.50	ND	1	01/22/10	01/24/10	
Trichloroethene	EPA 624	10A2207	0.26	0.50	ND	1	01/22/10	01/24/10	
Trichlorofluoromethane	EPA 624	10A2207	0.34	0.50	ND	1	01/22/10	01/24/10	
Trichlorotrifluoroethane (Freon 113)	EPA 624	10A2207	0.50	5.0	ND	1	01/22/10	01/24/10	
Vinyl chloride	EPA 624	10A2207	0.40	0.50	ND	1	01/22/10	01/24/10	M2
Xylenes, Total	EPA 624	10A2207	0.90	1.5	ND	1	01/22/10	01/24/10	
Cyclohexane	EPA 624	10A2207	0.40	1.0	ND	1	01/22/10	01/24/10	
<i>Surrogate: 4-Bromofluorobenzene (80-120%)</i>					98 %				
<i>Surrogate: Dibromofluoromethane (80-120%)</i>					100 %				
<i>Surrogate: Toluene-d8 (80-120%)</i>					104 %				

**TestAmerica Irvine**

Kathleen A. Robb For Heather Clark  
 Project Manager

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 Received: 01/18/10

## PURGEABLES BY GC/MS (EPA 624)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ITA1329-02 (Trip Blanks - Water)</b>									
<b>Reporting Units: ug/l</b>									
Benzene	EPA 624	10A2207	0.28	0.50	ND	1	01/22/10	01/24/10	
Carbon tetrachloride	EPA 624	10A2207	0.28	0.50	ND	1	01/22/10	01/24/10	
Chloroform	EPA 624	10A2207	0.33	0.50	ND	1	01/22/10	01/24/10	
1,1-Dichloroethane	EPA 624	10A2207	0.40	0.50	ND	1	01/22/10	01/24/10	
1,2-Dichloroethane	EPA 624	10A2207	0.28	0.50	ND	1	01/22/10	01/24/10	
1,1-Dichloroethene	EPA 624	10A2207	0.42	0.50	ND	1	01/22/10	01/24/10	
1,2-Dichloro-1,1,2-trifluoroethane	EPA 624	10A2207	1.1	2.0	ND	1	01/22/10	01/24/10	
Ethylbenzene	EPA 624	10A2207	0.25	0.50	ND	1	01/22/10	01/24/10	
Tetrachloroethene	EPA 624	10A2207	0.32	0.50	ND	1	01/22/10	01/24/10	
Toluene	EPA 624	10A2207	0.36	0.50	ND	1	01/22/10	01/24/10	
1,1,1-Trichloroethane	EPA 624	10A2207	0.30	0.50	ND	1	01/22/10	01/24/10	
1,1,2-Trichloroethane	EPA 624	10A2207	0.30	0.50	ND	1	01/22/10	01/24/10	
Trichloroethene	EPA 624	10A2207	0.26	0.50	ND	1	01/22/10	01/24/10	
Trichlorofluoromethane	EPA 624	10A2207	0.34	0.50	ND	1	01/22/10	01/24/10	
Trichlorotrifluoroethane (Freon 113)	EPA 624	10A2207	0.50	5.0	ND	1	01/22/10	01/24/10	
Vinyl chloride	EPA 624	10A2207	0.40	0.50	ND	1	01/22/10	01/24/10	
Xylenes, Total	EPA 624	10A2207	0.90	1.5	ND	1	01/22/10	01/24/10	
Cyclohexane	EPA 624	10A2207	0.40	1.0	ND	1	01/22/10	01/24/10	
<i>Surrogate: 4-Bromofluorobenzene (80-120%)</i>					98 %				
<i>Surrogate: Dibromofluoromethane (80-120%)</i>					98 %				
<i>Surrogate: Toluene-d8 (80-120%)</i>					107 %				

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

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ITA1329-01 (Outfall 001 (Grab) - Water)</b>									
<b>Reporting Units: ug/l</b>									
Bis(2-ethylhexyl)phthalate	EPA 625	10A1840	1.6	4.8	ND	0.952	01/20/10	01/22/10	
2,4-Dinitrotoluene	EPA 625	10A1840	0.19	8.6	ND	0.952	01/20/10	01/22/10	
N-Nitrosodimethylamine	EPA 625	10A1840	0.095	7.6	ND	0.952	01/20/10	01/22/10	
Pentachlorophenol	EPA 625	10A1840	0.095	7.6	ND	0.952	01/20/10	01/22/10	
2,4,6-Trichlorophenol	EPA 625	10A1840	0.095	5.7	ND	0.952	01/20/10	01/22/10	
<i>Surrogate: 2,4,6-Tribromophenol (40-120%)</i>					94 %				
<i>Surrogate: 2-Fluorobiphenyl (50-120%)</i>					76 %				
<i>Surrogate: 2-Fluorophenol (30-120%)</i>					64 %				
<i>Surrogate: Nitrobenzene-d5 (45-120%)</i>					76 %				
<i>Surrogate: Phenol-d6 (35-120%)</i>					72 %				
<i>Surrogate: Terphenyl-d14 (50-125%)</i>					96 %				

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## ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ITA1329-01 (Outfall 001 (Grab) - Water)</b>									
Reporting Units: ug/l									
alpha-BHC	EPA 608	10A1612	0.0024	0.0094	ND	0.943	01/19/10	01/20/10	
Surrogate: Decachlorobiphenyl (45-120%)					83 %				
Surrogate: Tetrachloro-m-xylene (35-115%)					68 %				

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## HEXANE EXTRACTABLE MATERIAL

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ITA1329-01 (Outfall 001 (Grab) - Water)</b>									
<b>Reporting Units: mg/l</b>									
Hexane Extractable Material (Oil & Grease)	EPA 1664A	10A1674	1.3	4.8	ND	1	01/19/10	01/19/10	

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## METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ITA1329-01 (Outfall 001 (Grab) - Water)</b>									
Reporting Units: mg/l									
<b>Iron</b>	EPA 200.7	10A1650	0.030	0.080	<b>23</b>	2	01/19/10	01/19/10	
<b>Sample ID: ITA1329-01 (Outfall 001 (Grab) - Water)</b>									
Reporting Units: ug/l									
Mercury	EPA 245.1	10A1677	0.10	0.20	ND	1	01/19/10	01/19/10	
<b>Manganese</b>	EPA 200.7	10A1650	14	40	<b>400</b>	2	01/19/10	01/19/10	
Cadmium	EPA 200.8	10A1651	0.50	5.0	ND	5	01/19/10	01/19/10	RL1
<b>Zinc</b>	EPA 200.7	10A1650	12	40	<b>76</b>	2	01/19/10	01/19/10	
<b>Copper</b>	EPA 200.8	10A1651	2.5	10	<b>12</b>	5	01/19/10	01/19/10	
<b>Lead</b>	EPA 200.8	10A1651	1.0	5.0	<b>13</b>	5	01/19/10	01/19/10	
Selenium	EPA 200.8	10A1651	2.5	10	ND	5	01/19/10	01/19/10	RL1

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## DISSOLVED METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ITA1329-01 (Outfall 001 (Grab) - Water)</b>									
Reporting Units: mg/l									
<b>Iron</b>	EPA 200.7-Diss	10A2107	0.015	0.040	<b>1.1</b>	1	01/22/10	01/27/10	
<b>Sample ID: ITA1329-01 (Outfall 001 (Grab) - Water)</b>									
Reporting Units: ug/l									
Mercury	EPA 245.1-Diss	10A2023	0.10	0.20	ND	1	01/21/10	01/21/10	C
<b>Manganese</b>	EPA 200.7-Diss	10A2107	7.0	20	<b>16</b>	1	01/22/10	01/27/10	J
Cadmium	EPA 200.8-Diss	10A2106	0.10	1.0	ND	1	01/22/10	01/25/10	
Zinc	EPA 200.7-Diss	10A2107	6.0	20	ND	1	01/22/10	01/27/10	
<b>Copper</b>	EPA 200.8-Diss	10A2106	0.50	2.0	<b>2.5</b>	1	01/22/10	01/25/10	
<b>Lead</b>	EPA 200.8-Diss	10A2106	0.20	1.0	<b>0.51</b>	1	01/22/10	01/27/10	J
Selenium	EPA 200.8-Diss	10A2106	0.50	2.0	ND	1	01/22/10	01/25/10	

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## INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ITA1329-01 (Outfall 001 (Grab) - Water)</b>									
Reporting Units: mg/l									
Ammonia-N (Distilled)	SM4500NH3-C	10A1730	0.50	0.50	ND	1	01/19/10	01/20/10	
<b>Biochemical Oxygen Demand</b>	SM5210B	10A1693	0.50	2.0	<b>3.8</b>	1	01/19/10	01/24/10	
<b>Chloride</b>	EPA 300.0	10A1543	0.25	0.50	<b>1.6</b>	1	01/18/10	01/18/10	
<b>Nitrate-N</b>	EPA 300.0	10A1543	0.060	0.11	<b>0.59</b>	1	01/18/10	01/18/10	
Nitrite-N	EPA 300.0	10A1543	0.090	0.15	ND	1	01/18/10	01/18/10	
<b>Nitrate/Nitrite-N</b>	EPA 300.0	10A1543	0.15	0.26	<b>0.59</b>	1	01/18/10	01/18/10	
<b>Sulfate</b>	EPA 300.0	10A1543	0.20	0.50	<b>3.8</b>	1	01/18/10	01/18/10	
Surfactants (MBAS)	SM5540-C	10A1736	0.025	0.10	ND	1	01/19/10	01/19/10	M2
<b>Total Dissolved Solids</b>	SM2540C	10A1629	1.0	10	<b>170</b>	1	01/19/10	01/19/10	
<b>Total Suspended Solids</b>	SM 2540D	10A2035	2.0	20	<b>450</b>	1	01/21/10	01/21/10	

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## INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ITA1329-01 (Outfall 001 (Grab) - Water)</b>									
<b>Reporting Units: ml/l</b>									
Total Settleable Solids	SM2540F	10A1659	0.10	0.10	ND	1	01/19/10	01/19/10	

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## INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ITA1329-01 (Outfall 001 (Grab) - Water)</b>									
Reporting Units: NTU									
Turbidity	EPA 180.1	10A1657	4.0	100	<b>650</b>	100	01/19/10	01/19/10	

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## INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ITA1329-01 (Outfall 001 (Grab) - Water)</b>									
Reporting Units: ug/l									
Perchlorate	EPA 314.0	10A1636	0.90	4.0	ND	1	01/19/10	01/19/10	
Total Cyanide	SM4500CN-E	10A1691	2.2	5.0	ND	1	01/19/10	01/19/10	

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## INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ITA1329-01 (Outfall 001 (Grab) - Water)</b>									
Reporting Units: umhos/cm									
Specific Conductance	EPA 120.1	10A1624	1.0	1.0	55	1	01/19/10	01/19/10	

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## ASTM 5174-91

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ITA1329-01 (Outfall 001 (Grab) - Water)</b>									
Reporting Units: pCi/L									
<b>Total Uranium</b>	ASTM 5174-91	35029	0.21	0.693	<b>0.455</b>	1	02/04/10	02/08/10	Jb

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## EPA 900.0 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ITA1329-01 (Outfall 001 (Grab) - Water)</b>									
Reporting Units: pCi/L									
Gross Alpha	EPA 900.0 MOD	25415	1.2	3	7.3	1	01/25/10	01/29/10	
Gross Beta	EPA 900.0 MOD	25415	1.6	4	9	1	01/25/10	01/29/10	

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## EPA 901.1 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ITA1329-01 (Outfall 001 (Grab) - Water)</b>									
<b>Reporting Units: pCi/L</b>									
Cesium 137	EPA 901.1 MOD	21221	16	20	-2.2	1	01/21/10	02/02/10	U
Potassium 40	EPA 901.1 MOD	21221	260	NA	-90	1	01/21/10	02/02/10	U

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Received: 01/18/10

## EPA 903.0 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ITA1329-01 (Outfall 001 (Grab) - Water)</b>									
Reporting Units: pCi/L									
Radium (226)	EPA 903.0 MOD	21255	0.25	1	0.1	1	01/21/10	02/08/10	U

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Arcadia, CA 91007  
Attention: Bronwyn Kelly

Project ID: Quarterly Outfall 001

Report Number: ITA1329

Sampled: 01/18/10

Received: 01/18/10

## EPA 904 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ITA1329-01 (Outfall 001 (Grab) - Water)</b>									
Reporting Units: pCi/L									
<b>Radium 228</b>	EPA 904 MOD	21256	0.67	1	<b>0.4</b>	1	01/21/10	02/08/10	U

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Sampled: 01/18/10

Received: 01/18/10

## EPA 905 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ITA1329-01 (Outfall 001 (Grab) - Water)</b>									
Reporting Units: pCi/L									
<b>Strontium 90</b>	EPA 905 MOD	21257	0.5	3	<b>0.29</b>	1	01/21/10	02/04/10	U

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Report Number: ITA1329

Sampled: 01/18/10

Received: 01/18/10

## EPA 906.0 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ITA1329-01 (Outfall 001 (Grab) - Water)</b>									
Reporting Units: pCi/L									
Tritium	EPA 906.0 MOD	28080	140	500	64	1	01/28/10	01/29/10	U

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 Attention: Bronwyn Kelly

Project ID: Quarterly Outfall 001

Report Number: ITA1329

Sampled: 01/18/10  
 Received: 01/18/10

## EPA-5 1613B

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ITA1329-01 (Outfall 001 (Grab) - Water)</b>									
Reporting Units: ug/L									
1,2,3,4,6,7,8-HpCDD	EPA-5 1613B	26267	0.000012	0.000048	<b>0.00012</b>	0.95	01/26/10	02/02/10	B
1,2,3,4,6,7,8-HpCDF	EPA-5 1613B	26267	0.0000058	0.000048	<b>2.7e-005</b>	0.95	01/26/10	02/02/10	J, B
2,3,7,8-TCDF	EPA-5 1613B	26267	0.0000023	0.0000095	<b>2.6e-006</b>	0.95	01/26/10	02/02/10	J, Q
1,2,3,4,7,8,9-HpCDF	EPA-5 1613B	26267	0.0000092	0.000048	ND	0.95	01/26/10	02/02/10	
1,2,3,4,7,8-HxCDD	EPA-5 1613B	26267	0.0000078	0.000048	<b>6.8e-006</b>	0.95	01/26/10	02/02/10	J, Q, B
1,2,3,4,7,8-HxCDF	EPA-5 1613B	26267	0.0000049	0.000048	<b>6.8e-006</b>	0.95	01/26/10	02/02/10	J
1,2,3,6,7,8-HxCDD	EPA-5 1613B	26267	0.0000066	0.000048	<b>6.6e-006</b>	0.95	01/26/10	02/02/10	J, Q, B
1,2,3,6,7,8-HxCDF	EPA-5 1613B	26267	0.0000045	0.000048	<b>3.8e-006</b>	0.95	01/26/10	02/02/10	J, Q, B
1,2,3,7,8,9-HxCDD	EPA-5 1613B	26267	0.0000057	0.000048	<b>8.1e-006</b>	0.95	01/26/10	02/02/10	J, Q, B
1,2,3,7,8,9-HxCDF	EPA-5 1613B	26267	0.0000043	0.000048	<b>4.3e-006</b>	0.95	01/26/10	02/02/10	J, B
1,2,3,7,8-PeCDD	EPA-5 1613B	26267	0.0000098	0.000048	ND	0.95	01/26/10	02/02/10	
1,2,3,7,8-PeCDF	EPA-5 1613B	26267	0.0000051	0.000048	ND	0.95	01/26/10	02/02/10	
2,3,4,6,7,8-HxCDF	EPA-5 1613B	26267	0.000004	0.000048	<b>6.3e-006</b>	0.95	01/26/10	02/02/10	J, B
2,3,4,7,8-PeCDF	EPA-5 1613B	26267	0.0000061	0.000048	ND	0.95	01/26/10	02/02/10	
2,3,7,8-TCDD	EPA-5 1613B	26267	0.0000033	0.0000095	ND	0.95	01/26/10	02/02/10	
OCDD	EPA-5 1613B	26267	0.000022	0.000095	<b>0.0013</b>	0.95	01/26/10	02/02/10	B
OCDF	EPA-5 1613B	26267	0.000013	0.000095	<b>8.4e-005</b>	0.95	01/26/10	02/02/10	J, B
Total HpCDD	EPA-5 1613B	26267	0.000012	0.000048	<b>0.00024</b>	0.95	01/26/10	02/02/10	B
Total HpCDF	EPA-5 1613B	26267	0.0000058	0.000048	<b>6.7e-005</b>	0.95	01/26/10	02/02/10	J, B
Total HxCDD	EPA-5 1613B	26267	0.0000057	0.000048	<b>2.1e-005</b>	0.95	01/26/10	02/02/10	J, Q, B
Total HxCDF	EPA-5 1613B	26267	0.000004	0.000048	<b>2.1e-005</b>	0.95	01/26/10	02/02/10	J, Q, B
Total PeCDD	EPA-5 1613B	26267	0.0000098	0.000048	ND	0.95	01/26/10	02/02/10	
Total PeCDF	EPA-5 1613B	26267	0.000004	0.000048	ND	0.95	01/26/10	02/02/10	
Total TCDD	EPA-5 1613B	26267	0.0000033	0.0000095	ND	0.95	01/26/10	02/02/10	
Total TCDF	EPA-5 1613B	26267	0.0000023	0.0000095	<b>2.6e-006</b>	0.95	01/26/10	02/02/10	J, Q

Surrogate: 13C-2,3,7,8-TCDF (24-169%)	54 %
Surrogate: 37Cl4-2,3,7,8-TCDD (35-197%)	96 %
Surrogate: 13C-1,2,3,4,6,7,8-HpCDD (23-140%)	58 %
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF (28-143%)	67 %
Surrogate: 13C-1,2,3,4,7,8,9-HpCDF (26-138%)	60 %
Surrogate: 13C-1,2,3,4,7,8-HxCDD (32-141%)	52 %
Surrogate: 13C-1,2,3,4,7,8-HxCDF (26-152%)	51 %
Surrogate: 13C-1,2,3,6,7,8-HxCDD (28-130%)	63 %
Surrogate: 13C-1,2,3,6,7,8-HxCDF (26-123%)	55 %
Surrogate: 13C-1,2,3,7,8,9-HxCDF (29-147%)	59 %
Surrogate: 13C-1,2,3,7,8-PeCDD (25-181%)	48 %
Surrogate: 13C-1,2,3,7,8-PeCDF (24-185%)	50 %
Surrogate: 13C-2,3,4,6,7,8-HxCDF (28-136%)	60 %
Surrogate: 13C-2,3,4,7,8-PeCDF (21-178%)	50 %
Surrogate: 13C-2,3,7,8-TCDD (25-164%)	54 %
Surrogate: 13C-OCDD (17-157%)	53 %

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Attention: Bronwyn Kelly

Project ID: Quarterly Outfall 001

Report Number: ITA1329

Sampled: 01/18/10  
Received: 01/18/10

## EPA-5 1613B

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: ITA1329-01RE1 (Outfall 001 (Grab) - Water) - cont.</b>									
Reporting Units: ug/L									
2,3,7,8-TCDF	EPA-5 1613B	26267	0.0000029	0.0000095	ND	1	01/26/10	02/02/10	
Surrogate: 13C-2,3,7,8-TCDF (24-169%)					54 %				
Surrogate: 37Cl4-2,3,7,8-TCDD (35-197%)					100 %				

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Report Number: ITA1329

Sampled: 01/18/10

Received: 01/18/10

## 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 001 (Grab) (ITA1329-01) - Water</b>					
EPA 180.1	2	01/18/2010 15:00	01/18/2010 19:00	01/19/2010 13:30	01/19/2010 13:30
EPA 300.0	2	01/18/2010 15:00	01/18/2010 19:00	01/18/2010 16:00	01/18/2010 22:29
Filtration	1	01/18/2010 15:00	01/18/2010 19:00	01/19/2010 14:30	01/19/2010 14:30
SM2540F	2	01/18/2010 15:00	01/18/2010 19:00	01/19/2010 10:30	01/19/2010 10:30
SM5210B	2	01/18/2010 15:00	01/18/2010 19:00	01/19/2010 13:30	01/24/2010 08:30
SM5540-C	2	01/18/2010 15:00	01/18/2010 19:00	01/19/2010 20:17	01/19/2010 21:13

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Attention: Bronwyn Kelly

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Report Number: ITA1329

Sampled: 01/18/10  
Received: 01/18/10

## METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 10A2207 Extracted: 01/22/10</b>											
<b>Blank Analyzed: 01/24/2010 (10A2207-BLK1)</b>											
Benzene	ND	0.50	0.28	ug/l							
Carbon tetrachloride	ND	0.50	0.28	ug/l							
Chloroform	ND	0.50	0.33	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							
1,2-Dichloro-1,1,2-trifluoroethane	ND	2.0	1.1	ug/l							
Ethylbenzene	ND	0.50	0.25	ug/l							
Tetrachloroethene	ND	0.50	0.32	ug/l							
Toluene	ND	0.50	0.36	ug/l							
1,1,1-Trichloroethane	ND	0.50	0.30	ug/l							
1,1,2-Trichloroethane	ND	0.50	0.30	ug/l							
Trichloroethene	ND	0.50	0.26	ug/l							
Trichlorofluoromethane	ND	0.50	0.34	ug/l							
Trichlorotrifluoroethane (Freon 113)	ND	5.0	0.50	ug/l							
Vinyl chloride	ND	0.50	0.40	ug/l							
Xylenes, Total	ND	1.5	0.90	ug/l							
Cyclohexane	ND	1.0	0.40	ug/l							
Surrogate: 4-Bromofluorobenzene	24.3			ug/l	25.0		97	80-120			
Surrogate: Dibromofluoromethane	24.4			ug/l	25.0		97	80-120			
Surrogate: Toluene-d8	26.3			ug/l	25.0		105	80-120			

### LCS Analyzed: 01/24/2010 (10A2207-BS1)

Benzene	24.6	0.50	0.28	ug/l	25.0		98	70-120			
Carbon tetrachloride	25.1	0.50	0.28	ug/l	25.0		100	65-140			
Chloroform	23.9	0.50	0.33	ug/l	25.0		96	70-130			
1,1-Dichloroethane	23.9	0.50	0.40	ug/l	25.0		95	70-125			
1,2-Dichloroethane	25.0	0.50	0.28	ug/l	25.0		100	60-140			
1,1-Dichloroethene	24.4	0.50	0.42	ug/l	25.0		97	70-125			
Ethylbenzene	25.9	0.50	0.25	ug/l	25.0		103	75-125			
Tetrachloroethene	24.9	0.50	0.32	ug/l	25.0		100	70-125			
Toluene	25.5	0.50	0.36	ug/l	25.0		102	70-120			
1,1,1-Trichloroethane	23.9	0.50	0.30	ug/l	25.0		96	65-135			
1,1,2-Trichloroethane	26.1	0.50	0.30	ug/l	25.0		104	70-125			
Trichloroethene	25.2	0.50	0.26	ug/l	25.0		101	70-125			
Trichlorofluoromethane	25.1	0.50	0.34	ug/l	25.0		100	65-145			

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Attention: Bronwyn Kelly

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Report Number: ITA1329

Sampled: 01/18/10  
Received: 01/18/10

## METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 10A2207 Extracted: 01/22/10</b>											
<b>LCS Analyzed: 01/24/2010 (10A2207-BS1)</b>											
Vinyl chloride	20.7	0.50	0.40	ug/l	25.0		83	55-135			
Xylenes, Total	80.4	1.5	0.90	ug/l	75.0		107	70-125			
Surrogate: 4-Bromofluorobenzene	26.2			ug/l	25.0		105	80-120			
Surrogate: Dibromofluoromethane	25.3			ug/l	25.0		101	80-120			
Surrogate: Toluene-d8	26.6			ug/l	25.0		107	80-120			
<b>Matrix Spike Analyzed: 01/24/2010 (10A2207-MS1) Source: ITA1329-01</b>											
Benzene	20.7	0.50	0.28	ug/l	25.0	ND	83	65-125			
Carbon tetrachloride	20.6	0.50	0.28	ug/l	25.0	ND	83	65-140			
Chloroform	20.8	0.50	0.33	ug/l	25.0	ND	83	65-135			
1,1-Dichloroethane	20.1	0.50	0.40	ug/l	25.0	ND	80	65-130			
1,2-Dichloroethane	21.6	0.50	0.28	ug/l	25.0	ND	86	60-140			
1,1-Dichloroethane	17.5	0.50	0.42	ug/l	25.0	ND	70	60-130			
Ethylbenzene	23.1	0.50	0.25	ug/l	25.0	ND	93	65-130			
Tetrachloroethene	22.1	0.50	0.32	ug/l	25.0	ND	88	65-130			
Toluene	22.3	0.50	0.36	ug/l	25.0	ND	89	70-125			
1,1,1-Trichloroethane	20.4	0.50	0.30	ug/l	25.0	ND	81	65-140			
1,1,2-Trichloroethane	22.7	0.50	0.30	ug/l	25.0	ND	91	65-130			
Trichloroethene	21.3	0.50	0.26	ug/l	25.0	ND	85	65-125			
Trichlorofluoromethane	17.3	0.50	0.34	ug/l	25.0	ND	69	60-145			
Vinyl chloride	9.75	0.50	0.40	ug/l	25.0	ND	39	45-140			M2
Xylenes, Total	71.3	1.5	0.90	ug/l	75.0	ND	95	60-130			
Surrogate: 4-Bromofluorobenzene	26.1			ug/l	25.0		104	80-120			
Surrogate: Dibromofluoromethane	25.4			ug/l	25.0		102	80-120			
Surrogate: Toluene-d8	26.7			ug/l	25.0		107	80-120			
<b>Matrix Spike Dup Analyzed: 01/24/2010 (10A2207-MSD1) Source: ITA1329-01</b>											
Benzene	21.6	0.50	0.28	ug/l	25.0	ND	87	65-125	5	20	
Carbon tetrachloride	21.6	0.50	0.28	ug/l	25.0	ND	87	65-140	5	25	
Chloroform	22.3	0.50	0.33	ug/l	25.0	ND	89	65-135	7	20	
1,1-Dichloroethane	20.9	0.50	0.40	ug/l	25.0	ND	84	65-130	4	20	
1,2-Dichloroethane	23.5	0.50	0.28	ug/l	25.0	ND	94	60-140	9	20	
1,1-Dichloroethane	18.6	0.50	0.42	ug/l	25.0	ND	75	60-130	6	20	
Ethylbenzene	24.0	0.50	0.25	ug/l	25.0	ND	96	65-130	4	20	
Tetrachloroethene	22.9	0.50	0.32	ug/l	25.0	ND	92	65-130	4	20	
Toluene	23.6	0.50	0.36	ug/l	25.0	ND	94	70-125	6	20	

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Project Manager

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 Attention: Bronwyn Kelly

Project ID: Quarterly Outfall 001

Report Number: ITA1329

Sampled: 01/18/10  
 Received: 01/18/10

## METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 10A2207 Extracted: 01/22/10</b>											
<b>Matrix Spike Dup Analyzed: 01/24/2010 (10A2207-MSD1)</b>						<b>Source: ITA1329-01</b>					
1,1,1-Trichloroethane	21.2	0.50	0.30	ug/l	25.0	ND	85	65-140	4	20	
1,1,2-Trichloroethane	24.9	0.50	0.30	ug/l	25.0	ND	99	65-130	9	25	
Trichloroethene	22.6	0.50	0.26	ug/l	25.0	ND	90	65-125	6	20	
Trichlorofluoromethane	18.5	0.50	0.34	ug/l	25.0	ND	74	60-145	6	25	
Vinyl chloride	10.1	0.50	0.40	ug/l	25.0	ND	40	45-140	3	30	M2
Xylenes, Total	74.6	1.5	0.90	ug/l	75.0	ND	99	60-130	4	20	
Surrogate: 4-Bromofluorobenzene	26.0			ug/l	25.0		104	80-120			
Surrogate: Dibromofluoromethane	25.5			ug/l	25.0		102	80-120			
Surrogate: Toluene-d8	26.7			ug/l	25.0		107	80-120			

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 Project Manager

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Attention: Bronwyn Kelly

Project ID: Quarterly Outfall 001

Report Number: ITA1329

Sampled: 01/18/10  
Received: 01/18/10

## METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 10A1840 Extracted: 01/20/10</b>											
<b>Blank Analyzed: 01/22/2010 (10A1840-BLK1)</b>											
Bis(2-ethylhexyl)phthalate	ND	5.0	1.7	ug/l							
2,4-Dinitrotoluene	ND	9.0	0.20	ug/l							
N-Nitrosodimethylamine	0.520	8.0	0.10	ug/l							J
Pentachlorophenol	ND	8.0	0.10	ug/l							
2,4,6-Trichlorophenol	ND	6.0	0.10	ug/l							
Surrogate: 2,4,6-Tribromophenol	18.6			ug/l	20.0		93	40-120			
Surrogate: 2-Fluorobiphenyl	8.42			ug/l	10.0		84	50-120			
Surrogate: 2-Fluorophenol	15.2			ug/l	20.0		76	30-120			
Surrogate: Nitrobenzene-d5	8.50			ug/l	10.0		85	45-120			
Surrogate: Phenol-d6	15.9			ug/l	20.0		79	35-120			
Surrogate: Terphenyl-d14	10.5			ug/l	10.0		105	50-125			
<b>LCS Analyzed: 01/22/2010 (10A1840-BS1)</b>											
Bis(2-ethylhexyl)phthalate	11.6	5.0	1.7	ug/l	10.0		116	65-130			
2,4-Dinitrotoluene	8.42	9.0	0.20	ug/l	10.0		84	65-120			J
N-Nitrosodimethylamine	7.60	8.0	0.10	ug/l	10.0		76	45-120			J
Pentachlorophenol	8.78	8.0	0.10	ug/l	10.0		88	50-120			
2,4,6-Trichlorophenol	8.54	6.0	0.10	ug/l	10.0		85	55-120			
Surrogate: 2,4,6-Tribromophenol	18.5			ug/l	20.0		92	40-120			
Surrogate: 2-Fluorobiphenyl	8.06			ug/l	10.0		81	50-120			
Surrogate: 2-Fluorophenol	12.3			ug/l	20.0		61	30-120			
Surrogate: Nitrobenzene-d5	7.60			ug/l	10.0		76	45-120			
Surrogate: Phenol-d6	13.9			ug/l	20.0		69	35-120			
Surrogate: Terphenyl-d14	9.84			ug/l	10.0		98	50-125			
<b>LCS Dup Analyzed: 01/22/2010 (10A1840-BSD1)</b>											
Bis(2-ethylhexyl)phthalate	10.4	5.0	1.7	ug/l	10.0		104	65-130	11	20	
2,4-Dinitrotoluene	7.76	9.0	0.20	ug/l	10.0		78	65-120	8	20	J
N-Nitrosodimethylamine	7.70	8.0	0.10	ug/l	10.0		77	45-120	1	20	J
Pentachlorophenol	8.30	8.0	0.10	ug/l	10.0		83	50-120	6	25	
2,4,6-Trichlorophenol	8.00	6.0	0.10	ug/l	10.0		80	55-120	7	30	
Surrogate: 2,4,6-Tribromophenol	17.2			ug/l	20.0		86	40-120			
Surrogate: 2-Fluorobiphenyl	7.54			ug/l	10.0		75	50-120			
Surrogate: 2-Fluorophenol	12.7			ug/l	20.0		63	30-120			
Surrogate: Nitrobenzene-d5	7.32			ug/l	10.0		73	45-120			
Surrogate: Phenol-d6	14.1			ug/l	20.0		71	35-120			

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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 Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 10A1840 Extracted: 01/20/10</b>											
<b>LCS Dup Analyzed: 01/22/2010 (10A1840-BSD1)</b>											
Surrogate: Terphenyl-d14	8.56			ug/l	10.0		86	50-125			

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## METHOD BLANK/QC DATA

### ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 10A1612 Extracted: 01/19/10</b>											
<b>Blank Analyzed: 01/20/2010 (10A1612-BLK1)</b>											
alpha-BHC	ND	0.010	0.0025	ug/l							
Surrogate: Decachlorobiphenyl	0.430			ug/l	0.500		86	45-120			
Surrogate: Tetrachloro-m-xylene	0.379			ug/l	0.500		76	35-115			
<b>LCS Analyzed: 01/20/2010 (10A1612-BS1)</b>											
alpha-BHC	0.394	0.010	0.0025	ug/l	0.500		79	45-115			MNR1
Surrogate: Decachlorobiphenyl	0.444			ug/l	0.500		89	45-120			
Surrogate: Tetrachloro-m-xylene	0.386			ug/l	0.500		77	35-115			
<b>LCS Dup Analyzed: 01/20/2010 (10A1612-BSD1)</b>											
alpha-BHC	0.394	0.010	0.0025	ug/l	0.500		79	45-115	0.03	30	
Surrogate: Decachlorobiphenyl	0.447			ug/l	0.500		89	45-120			
Surrogate: Tetrachloro-m-xylene	0.387			ug/l	0.500		77	35-115			

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## METHOD BLANK/QC DATA

### HEXANE EXTRACTABLE MATERIAL

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 10A1674 Extracted: 01/19/10</b>											
<b>Blank Analyzed: 01/19/2010 (10A1674-BLK1)</b>											
Hexane Extractable Material (Oil & Grease)	ND	5.0	1.4	mg/l							
<b>LCS Analyzed: 01/19/2010 (10A1674-BS1)</b>											
Hexane Extractable Material (Oil & Grease)	19.3	5.0	1.4	mg/l	20.0		96	78-114			MNR1
<b>LCS Dup Analyzed: 01/19/2010 (10A1674-BSD1)</b>											
Hexane Extractable Material (Oil & Grease)	19.1	5.0	1.4	mg/l	20.0		96	78-114	1	11	

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## METHOD BLANK/QC DATA

### METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 10A1650 Extracted: 01/19/10</b>											
<b>Blank Analyzed: 01/19/2010 (10A1650-BLK1)</b>											
Iron	ND	0.040	0.015	mg/l							
Manganese	ND	20	7.0	ug/l							
Zinc	ND	20	6.0	ug/l							
<b>LCS Analyzed: 01/19/2010 (10A1650-BS1)</b>											
Iron	0.506	0.040	0.015	mg/l	0.500		101	85-115			
Manganese	499	20	7.0	ug/l	500		100	85-115			
Zinc	495	20	6.0	ug/l	500		99	85-115			
<b>Matrix Spike Analyzed: 01/19/2010 (10A1650-MS1) Source: ITA1325-01</b>											
Iron	4.75	0.040	0.015	mg/l	0.500	4.61	28	70-130			MHA
Manganese	633	20	7.0	ug/l	500	162	94	70-130			
Zinc	499	20	6.0	ug/l	500	31.9	93	70-130			
<b>Matrix Spike Dup Analyzed: 01/19/2010 (10A1650-MSD1) Source: ITA1325-01</b>											
Iron	5.00	0.040	0.015	mg/l	0.500	4.61	77	70-130	5	20	MHA
Manganese	651	20	7.0	ug/l	500	162	98	70-130	3	20	
Zinc	516	20	6.0	ug/l	500	31.9	97	70-130	3	20	
<b>Batch: 10A1651 Extracted: 01/19/10</b>											
<b>Blank Analyzed: 01/19/2010 (10A1651-BLK1)</b>											
Cadmium	ND	1.0	0.10	ug/l							
Copper	ND	2.0	0.50	ug/l							
Lead	ND	1.0	0.20	ug/l							
Selenium	ND	2.0	0.50	ug/l							

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## METHOD BLANK/QC DATA

### METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b><u>Batch: 10A1651 Extracted: 01/19/10</u></b>											
<b>LCS Analyzed: 01/19/2010 (10A1651-BS1)</b>											
Cadmium	81.2	1.0	0.10	ug/l	80.0		101	85-115			
Copper	78.1	2.0	0.50	ug/l	80.0		98	85-115			
Lead	80.5	1.0	0.20	ug/l	80.0		101	85-115			
Selenium	82.9	2.0	0.50	ug/l	80.0		104	85-115			
<b>Matrix Spike Analyzed: 01/19/2010 (10A1651-MS1) Source: ITA1325-01</b>											
Cadmium	79.1	1.0	0.10	ug/l	80.0	0.157	99	70-130			
Copper	79.1	2.0	0.50	ug/l	80.0	6.81	90	70-130			
Lead	78.5	1.0	0.20	ug/l	80.0	3.41	94	70-130			
Selenium	83.9	2.0	0.50	ug/l	80.0	0.825	104	70-130			
<b>Matrix Spike Dup Analyzed: 01/19/2010 (10A1651-MSD1) Source: ITA1325-01</b>											
Cadmium	80.1	1.0	0.10	ug/l	80.0	0.157	100	70-130	1	20	
Copper	80.1	2.0	0.50	ug/l	80.0	6.81	92	70-130	1	20	
Lead	81.3	1.0	0.20	ug/l	80.0	3.41	97	70-130	4	20	
Selenium	86.6	2.0	0.50	ug/l	80.0	0.825	107	70-130	3	20	
<b><u>Batch: 10A1677 Extracted: 01/19/10</u></b>											
<b>Blank Analyzed: 01/19/2010 (10A1677-BLK1)</b>											
Mercury	ND	0.20	0.10	ug/l							
<b>LCS Analyzed: 01/19/2010 (10A1677-BS1)</b>											
Mercury	8.18	0.20	0.10	ug/l	8.00		102	85-115			
<b>Matrix Spike Analyzed: 01/19/2010 (10A1677-MS1) Source: ITA1326-01</b>											
Mercury	8.19	0.20	0.10	ug/l	8.00	ND	102	70-130			

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## METHOD BLANK/QC DATA

### METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 10A1677 Extracted: 01/19/10</b>											
<b>Matrix Spike Dup Analyzed: 01/19/2010 (10A1677-MSD1)</b>						<b>Source: ITA1326-01</b>					
Mercury	8.18	0.20	0.10	ug/l	8.00	ND	102	70-130	0.1	20	

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## METHOD BLANK/QC DATA

### DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b><u>Batch: 10A2023 Extracted: 01/21/10</u></b>											
<b>Blank Analyzed: 01/21/2010 (10A2023-BLK1)</b>											
Mercury	ND	0.20	0.10	ug/l							
<b>LCS Analyzed: 01/21/2010 (10A2023-BS1)</b>											
Mercury	8.84	0.20	0.10	ug/l	8.00		110	85-115			
<b>Matrix Spike Analyzed: 01/21/2010 (10A2023-MS1) Source: ITA1481-02</b>											
Mercury	8.85	0.20	0.10	ug/l	8.00	ND	111	70-130			
<b>Matrix Spike Dup Analyzed: 01/21/2010 (10A2023-MSD1) Source: ITA1481-02</b>											
Mercury	8.92	0.20	0.10	ug/l	8.00	ND	111	70-130	0.8	20	
<b><u>Batch: 10A2106 Extracted: 01/22/10</u></b>											
<b>Blank Analyzed: 01/25/2010 (10A2106-BLK1)</b>											
Cadmium	ND	1.0	0.10	ug/l							
Copper	ND	2.0	0.50	ug/l							
Lead	ND	1.0	0.20	ug/l							
Selenium	ND	2.0	0.50	ug/l							
<b>LCS Analyzed: 01/25/2010 (10A2106-BS1)</b>											
Cadmium	78.4	1.0	0.10	ug/l	80.0		98	85-115			
Copper	80.7	2.0	0.50	ug/l	80.0		101	85-115			
Lead	83.0	1.0	0.20	ug/l	80.0		104	85-115			
Selenium	78.8	2.0	0.50	ug/l	80.0		98	85-115			
<b>Matrix Spike Analyzed: 01/25/2010 (10A2106-MS1) Source: ITA1328-01</b>											
Cadmium	81.9	1.0	0.10	ug/l	80.0	ND	102	70-130			
Copper	86.8	2.0	0.50	ug/l	80.0	2.76	105	70-130			
Lead	84.9	1.0	0.20	ug/l	80.0	0.620	105	70-130			
Selenium	82.3	2.0	0.50	ug/l	80.0	ND	103	70-130			

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## METHOD BLANK/QC DATA

### DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 10A2106 Extracted: 01/22/10</b>											
<b>Matrix Spike Dup Analyzed: 01/25/2010-01/27/2010 (10A2106-MSD1)</b>						<b>Source: ITA1328-01</b>					
Cadmium	74.6	1.0	0.10	ug/l	80.0	ND	93	70-130	9	20	
Copper	79.9	2.0	0.50	ug/l	80.0	2.76	96	70-130	8	20	
Lead	77.9	1.0	0.20	ug/l	80.0	0.620	97	70-130	9	20	
Selenium	74.9	2.0	0.50	ug/l	80.0	ND	94	70-130	9	20	
<b>Batch: 10A2107 Extracted: 01/22/10</b>											
<b>Blank Analyzed: 01/27/2010 (10A2107-BLK1)</b>											
Iron	ND	0.040	0.015	mg/l							
Manganese	ND	20	7.0	ug/l							
Zinc	10.7	20	6.0	ug/l							J
<b>LCS Analyzed: 01/27/2010 (10A2107-BS1)</b>											
Iron	0.477	0.040	0.015	mg/l	0.500		95	85-115			
Manganese	492	20	7.0	ug/l	500		98	85-115			
Zinc	481	20	6.0	ug/l	500		96	85-115			
<b>Matrix Spike Analyzed: 01/27/2010 (10A2107-MS1)</b>						<b>Source: ITA1329-01</b>					
Iron	1.70	0.040	0.015	mg/l	0.500	1.14	112	70-130			
Manganese	505	20	7.0	ug/l	500	15.6	98	70-130			
Zinc	482	20	6.0	ug/l	500	ND	96	70-130			
<b>Matrix Spike Dup Analyzed: 01/27/2010 (10A2107-MSD1)</b>						<b>Source: ITA1329-01</b>					
Iron	1.75	0.040	0.015	mg/l	0.500	1.14	121	70-130	3	20	
Manganese	514	20	7.0	ug/l	500	15.6	100	70-130	2	20	
Zinc	492	20	6.0	ug/l	500	ND	98	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: 10A1543 Extracted: 01/18/10</b>											
<b>Blank Analyzed: 01/18/2010 (10A1543-BLK1)</b>											
Chloride	ND	0.50	0.25	mg/l							
Nitrate-N	ND	0.11	0.060	mg/l							
Nitrite-N	ND	0.15	0.090	mg/l							
Nitrate/Nitrite-N	ND	0.26	0.15	mg/l							
Sulfate	ND	0.50	0.20	mg/l							
<b>LCS Analyzed: 01/18/2010 (10A1543-BS1)</b>											
Chloride	4.85	0.50	0.25	mg/l	5.00		97	90-110			
Nitrate-N	1.09	0.11	0.060	mg/l	1.13		96	90-110			
Nitrite-N	1.50	0.15	0.090	mg/l	1.52		98	90-110			
Sulfate	9.91	0.50	0.20	mg/l	10.0		99	90-110			
<b>Matrix Spike Analyzed: 01/18/2010 (10A1543-MS1) Source: ITA1246-02</b>											
Chloride	8.13	0.50	0.25	mg/l	5.00	3.08	101	80-120			
Nitrate-N	1.91	0.11	0.060	mg/l	1.13	0.702	107	80-120			
Nitrite-N	1.61	0.15	0.090	mg/l	1.52	0.122	98	80-120			
Sulfate	15.6	0.50	0.20	mg/l	10.0	5.22	104	80-120			
<b>Matrix Spike Analyzed: 01/18/2010 (10A1543-MS2) Source: ITA1327-01</b>											
Chloride	155	10	5.0	mg/l	50.0	109	93	80-120			
Nitrate-N	21.4	2.2	1.2	mg/l	11.3	9.74	103	80-120			
Nitrite-N	17.1	3.0	1.8	mg/l	15.2	ND	113	80-120			
Sulfate	256	10	4.0	mg/l	100	160	96	80-120			
<b>Matrix Spike Dup Analyzed: 01/18/2010 (10A1543-MSD1) Source: ITA1246-02</b>											
Chloride	8.26	0.50	0.25	mg/l	5.00	3.08	104	80-120	2	20	
Nitrate-N	1.95	0.11	0.060	mg/l	1.13	0.702	111	80-120	2	20	
Nitrite-N	1.65	0.15	0.090	mg/l	1.52	0.122	100	80-120	2	20	
Sulfate	15.9	0.50	0.20	mg/l	10.0	5.22	107	80-120	2	20	

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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: 10A1624 Extracted: 01/19/10</u></b>											
<b>Blank Analyzed: 01/19/2010 (10A1624-BLK1)</b>											
Specific Conductance	ND	1.0	1.0	umhos/cm							
<b>LCS Analyzed: 01/19/2010 (10A1624-BS1)</b>											
Specific Conductance	1420	1.0	1.0	umhos/cm	1410		101	90-110			
<b>Duplicate Analyzed: 01/19/2010 (10A1624-DUP1)</b>											
						<b>Source: ITA1293-03</b>					
Specific Conductance	112	1.0	1.0	umhos/cm		111			0.09	5	
<b><u>Batch: 10A1629 Extracted: 01/19/10</u></b>											
<b>Blank Analyzed: 01/19/2010 (10A1629-BLK1)</b>											
Total Dissolved Solids	ND	10	1.0	mg/l							
<b>LCS Analyzed: 01/19/2010 (10A1629-BS1)</b>											
Total Dissolved Solids	1000	10	1.0	mg/l	1000		100	90-110			
<b>Duplicate Analyzed: 01/19/2010 (10A1629-DUP1)</b>											
						<b>Source: ITA1307-01</b>					
Total Dissolved Solids	12.0	10	1.0	mg/l		12.0			0	10	
<b><u>Batch: 10A1636 Extracted: 01/19/10</u></b>											
<b>Blank Analyzed: 01/19/2010 (10A1636-BLK1)</b>											
Perchlorate	ND	4.0	0.90	ug/l							
<b>LCS Analyzed: 01/19/2010 (10A1636-BS1)</b>											
Perchlorate	25.1	4.0	0.90	ug/l	25.0		101	85-115			

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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: 10A1636 Extracted: 01/19/10</u></b>											
<b>Matrix Spike Analyzed: 01/19/2010 (10A1636-MS1)</b>						<b>Source: ITA1329-01</b>					
Perchlorate	29.5	4.0	0.90	ug/l	25.0	ND	118	80-120			
<b>Matrix Spike Dup Analyzed: 01/19/2010 (10A1636-MSD1)</b>						<b>Source: ITA1329-01</b>					
Perchlorate	28.7	4.0	0.90	ug/l	25.0	ND	115	80-120	2	20	
<b><u>Batch: 10A1657 Extracted: 01/19/10</u></b>											
<b>Blank Analyzed: 01/19/2010 (10A1657-BLK1)</b>											
Turbidity	ND	1.0	0.040	NTU							
<b>Duplicate Analyzed: 01/19/2010 (10A1657-DUP1)</b>						<b>Source: ITA1274-01</b>					
Turbidity	0.800	1.0	0.040	NTU		0.810			1	20	J
<b>Duplicate Analyzed: 01/19/2010 (10A1657-DUP2)</b>						<b>Source: ITA1333-01</b>					
Turbidity	20.5	1.0	0.040	NTU		20.7			1	20	
<b><u>Batch: 10A1691 Extracted: 01/19/10</u></b>											
<b>Blank Analyzed: 01/19/2010 (10A1691-BLK1)</b>											
Total Cyanide	ND	5.0	2.2	ug/l							
<b>LCS Analyzed: 01/19/2010 (10A1691-BS1)</b>											
Total Cyanide	198	5.0	2.2	ug/l	200		99	90-110			
<b>Matrix Spike Analyzed: 01/19/2010 (10A1691-MS1)</b>						<b>Source: ITA1331-01</b>					
Total Cyanide	201	5.0	2.2	ug/l	200	ND	101	70-115			

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Project ID: Quarterly Outfall 001

Report Number: ITA1329

Sampled: 01/18/10  
Received: 01/18/10

## 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: 10A1691 Extracted: 01/19/10</u></b>											
<b>Matrix Spike Dup Analyzed: 01/19/2010 (10A1691-MSD1)</b>						<b>Source: ITA1331-01</b>					
Total Cyanide	203	5.0	2.2	ug/l	200	ND	102	70-115	1	15	
<b><u>Batch: 10A1693 Extracted: 01/19/10</u></b>											
<b>Blank Analyzed: 01/24/2010 (10A1693-BLK1)</b>											
Biochemical Oxygen Demand	ND	2.0	0.50	mg/l							
<b>LCS Analyzed: 01/24/2010 (10A1693-BS1)</b>											
Biochemical Oxygen Demand	214	100	25	mg/l	198		108	85-115			
<b>LCS Dup Analyzed: 01/24/2010 (10A1693-BSD1)</b>											
Biochemical Oxygen Demand	198	100	25	mg/l	198		100	85-115	8	20	
<b><u>Batch: 10A1730 Extracted: 01/19/10</u></b>											
<b>Blank Analyzed: 01/20/2010 (10A1730-BLK1)</b>											
Ammonia-N (Distilled)	ND	0.50	0.50	mg/l							
<b>LCS Analyzed: 01/20/2010 (10A1730-BS1)</b>											
Ammonia-N (Distilled)	10.4	0.50	0.50	mg/l	10.0		104	80-115			
<b>Matrix Spike Analyzed: 01/20/2010 (10A1730-MS1)</b>						<b>Source: ITA1289-05</b>					
Ammonia-N (Distilled)	10.4	0.50	0.50	mg/l	10.0	ND	104	70-120			
<b>Matrix Spike Dup Analyzed: 01/20/2010 (10A1730-MSD1)</b>						<b>Source: ITA1289-05</b>					
Ammonia-N (Distilled)	10.4	0.50	0.50	mg/l	10.0	ND	104	70-120	0	15	

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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: 10A1736 Extracted: 01/19/10</u></b>											
<b>Blank Analyzed: 01/19/2010 (10A1736-BLK1)</b>											
Surfactants (MBAS)	ND	0.10	0.025	mg/l							
<b>LCS Analyzed: 01/19/2010 (10A1736-BS1)</b>											
Surfactants (MBAS)	0.262	0.10	0.025	mg/l	0.250		105	90-110			
<b>Matrix Spike Analyzed: 01/19/2010 (10A1736-MS1)</b>											
						<b>Source: ITA1329-01</b>					
Surfactants (MBAS)	0.0544	0.10	0.025	mg/l	0.250	ND	22	50-125			M2, J
<b>Matrix Spike Dup Analyzed: 01/19/2010 (10A1736-MSD1)</b>											
						<b>Source: ITA1329-01</b>					
Surfactants (MBAS)	0.0512	0.10	0.025	mg/l	0.250	ND	20	50-125	6	20	M2, J
<b><u>Batch: 10A2035 Extracted: 01/21/10</u></b>											
<b>Blank Analyzed: 01/21/2010 (10A2035-BLK1)</b>											
Total Suspended Solids	ND	10	1.0	mg/l							
<b>LCS Analyzed: 01/21/2010 (10A2035-BS1)</b>											
Total Suspended Solids	1020	10	1.0	mg/l	1000		102	85-115			
<b>Duplicate Analyzed: 01/21/2010 (10A2035-DUP1)</b>											
						<b>Source: ITA1595-01</b>					
Total Suspended Solids	18.0	10	1.0	mg/l		18.0			0	10	

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## METHOD BLANK/QC DATA

### ASTM 5174-91

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 35029 Extracted: 02/04/10</b>											
<b>Matrix Spike Dup Analyzed: 02/08/2010 (F0A200486001D)</b>						<b>Source: F0A200486001</b>					
Total Uranium	29.2	0.7	0.2	pCi/L	27.7	-0.0334	105	62-150	2	20	
<b>Matrix Spike Analyzed: 02/08/2010 (F0A200486001S)</b>						<b>Source: F0A200486001</b>					
Total Uranium	28.8	0.7	0.2	pCi/L	27.7	-0.0334	104	62-150			
<b>Blank Analyzed: 02/08/2010 (F0B040000029B)</b>						<b>Source:</b>					
Total Uranium	-0.0623	0.693	0.21	pCi/L				-			U
<b>LCS Analyzed: 02/08/2010 (F0B040000029C)</b>						<b>Source:</b>					
Total Uranium	29.2	0.7	0.2	pCi/L	27.7		105	90-120			

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## METHOD BLANK/QC DATA

### EPA 900.0 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 25415 Extracted: 01/25/10</b>											
<b>Matrix Spike Analyzed: 01/29/2010 (F0A200486001S)</b>						<b>Source: F0A200486001</b>					
Gross Alpha	6.9	3	1	pCi/L	49.4	0.98	12	35-150			a
Gross Beta	10	4	1.6	pCi/L	68.1	0.83	14	54-150			a
<b>Duplicate Analyzed: 01/29/2010 (F0A200486001X)</b>						<b>Source: F0A200486001</b>					
Gross Alpha	0.71	3	1.4	pCi/L		0.98		-			Jb
Gross Beta	1.6	4	1.6	pCi/L		0.83		-			Jb
<b>Blank Analyzed: 01/29/2010 (F0A250000415B)</b>						<b>Source:</b>					
Gross Alpha	-0.03	3	0.71	pCi/L				-			U
Gross Beta	-0.26	4	1.5	pCi/L				-			U
<b>LCS Analyzed: 01/29/2010 (F0A250000415C)</b>						<b>Source:</b>					
Gross Alpha	45.4	3	0.9	pCi/L	49.4		92	62-134			
Gross Beta	73.4	4	1.6	pCi/L	68.1		108	58-133			

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## METHOD BLANK/QC DATA

### EPA 901.1 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 21221 Extracted: 01/21/10</b>											
<b>Duplicate Analyzed: 02/02/2010 (F0A200486001X)</b>						<b>Source: F0A200486001</b>					
Cesium 137	0.1	20	18	pCi/L		1.9	-				U
Potassium 40	-90	NA	300	pCi/L		-100	-				U
<b>Blank Analyzed: 02/02/2010 (F0A210000221B)</b>						<b>Source:</b>					
Cesium 137	2.8	20	11	pCi/L			-				U
Potassium 40	-100	NA	200	pCi/L			-				U
<b>LCS Analyzed: 02/02/2010 (F0A210000221C)</b>						<b>Source:</b>					
Americium 241	139000	NA	500	pCi/L	141000		99	87-110			
Cobalt 60	86100	NA	200	pCi/L	87900		98	89-110			
Cesium 137	52900	20	200	pCi/L	53100		100	90-110			

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## METHOD BLANK/QC DATA

### EPA 903.0 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 21255 Extracted: 01/21/10</b>											
<b>Blank Analyzed: 02/08/2010 (F0A210000255B)</b>						<b>Source:</b>					
Radium (226)	0.014	1	0.13	pCi/L				-			U
<b>LCS Analyzed: 02/08/2010 (F0A210000255C)</b>						<b>Source:</b>					
Radium (226)	10.6	1	0.1	pCi/L	11.3		94	68-136			
<b>LCS Dup Analyzed: 02/08/2010 (F0A210000255L)</b>						<b>Source:</b>					
Radium (226)	10.9	1	0.1	pCi/L	11.3		97	68-136	3	40	

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## METHOD BLANK/QC DATA

### EPA 904 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 21256 Extracted: 01/21/10</b>											
<b>Blank Analyzed: 02/08/2010 (F0A210000256B)</b>						<b>Source:</b>					
Radium 228	-0.19	1	0.45	pCi/L				-			U
<b>LCS Analyzed: 02/08/2010 (F0A210000256C)</b>						<b>Source:</b>					
Radium 228	6.7	1	0.45	pCi/L	6.45		104	60-142			
<b>LCS Dup Analyzed: 02/08/2010 (F0A210000256L)</b>						<b>Source:</b>					
Radium 228	7.41	1	0.42	pCi/L	6.45		115	60-142	10	40	

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## METHOD BLANK/QC DATA

### EPA 905 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 21257 Extracted: 01/21/10</b>											
<b>Blank Analyzed: 02/04/2010 (F0A210000257B)</b>											
Strontium 90	0.16	3	0.51	pCi/L				-			U
<b>LCS Analyzed: 02/04/2010 (F0A210000257C)</b>											
Strontium 90	7.62	3	0.53	pCi/L	6.81		112	80-130			
<b>LCS Dup Analyzed: 02/04/2010 (F0A210000257L)</b>											
Strontium 90	6.42	3	0.46	pCi/L	6.81		94	80-130	17	40	

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## METHOD BLANK/QC DATA

### EPA 906.0 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 28080 Extracted: 01/28/10</b>											
<b>Duplicate Analyzed: 01/29/2010 (F0A200486001X)</b>						<b>Source: F0A200486001</b>					
Tritium	-49	500	140	pCi/L		99		-			U
<b>Matrix Spike Analyzed: 01/29/2010 (F0A200494001S)</b>						<b>Source: ITA1329-01</b>					
Tritium	4350	500	140	pCi/L	4540	64	94	62-147			
<b>Blank Analyzed: 01/28/2010 (F0A280000080B)</b>						<b>Source:</b>					
Tritium	250	500	140	pCi/L				-			Jb
<b>LCS Analyzed: 01/28/2010 (F0A280000080C)</b>						<b>Source:</b>					
Tritium	4680	500	140	pCi/L	4540		103	85-112			

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## METHOD BLANK/QC DATA

### EPA-5 1613B

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
<b>Batch: 26267 Extracted: 01/26/10</b>											
<b>Blank Analyzed: 02/02/2010 (G0A260000267B)</b>						<b>Source:</b>					
1,2,3,4,6,7,8-HpCDD	7.9e-006	0.00005	0.0000056	ug/L				-			J
1,2,3,4,6,7,8-HpCDF	6.9e-006	0.00005	0.0000044	ug/L				-			J
2,3,7,8-TCDF	ND	0.00001	0.000002	ug/L				-			
1,2,3,4,7,8,9-HpCDF	ND	0.00005	0.0000071	ug/L				-			
1,2,3,4,7,8-HxCDD	4.6e-006	0.00005	0.0000048	ug/L				-			J
1,2,3,4,7,8-HxCDF	ND	0.00005	0.0000039	ug/L				-			
1,2,3,6,7,8-HxCDD	6.5e-006	0.00005	0.0000041	ug/L				-			J
1,2,3,6,7,8-HxCDF	5.7e-006	0.00005	0.0000034	ug/L				-			J
1,2,3,7,8,9-HxCDD	2.7e-006	0.00005	0.0000033	ug/L				-			J, Q
1,2,3,7,8,9-HxCDF	2.2e-006	0.00005	0.0000036	ug/L				-			J, Q
1,2,3,7,8-PeCDD	ND	0.00005	0.0000067	ug/L				-			
1,2,3,7,8-PeCDF	ND	0.00005	0.0000038	ug/L				-			
2,3,4,6,7,8-HxCDF	6e-006	0.00005	0.0000031	ug/L				-			J, Q
2,3,4,7,8-PeCDF	ND	0.00005	0.0000042	ug/L				-			
2,3,7,8-TCDD	ND	0.00001	0.0000027	ug/L				-			
OCDD	2e-005	0.0001	0.0000089	ug/L				-			J, Q
OCDF	1.6e-005	0.0001	0.0000089	ug/L				-			J
Total HpCDD	7.9e-006	0.00005	0.0000056	ug/L				-			J
Total HpCDF	6.9e-006	0.00005	0.0000044	ug/L				-			J
Total HxCDD	1.4e-005	0.00005	0.0000035	ug/L				-			J, Q
Total HxCDF	1.4e-005	0.00005	0.0000031	ug/L				-			J, Q
Total PeCDD	ND	0.00005	0.0000067	ug/L				-			
Total PeCDF	ND	0.00005	0.0000026	ug/L				-			
Total TCDD	ND	0.00001	0.0000027	ug/L				-			
Total TCDF	ND	0.00001	0.000002	ug/L				-			
Surrogate: 13C-2,3,7,8-TCDF	0.0012			ug/L	0.002		60	24-169			
Surrogate: 37Cl4-2,3,7,8-TCDD	0.00077			ug/L	0.0008		96	35-197			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDD	0.0018			ug/L	0.002		91	23-140			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF	0.0021			ug/L	0.002		104	28-143			
Surrogate: 13C-1,2,3,4,7,8,9-HpCDF	0.0019			ug/L	0.002		93	26-138			
Surrogate: 13C-1,2,3,4,7,8-HxCDD	0.0017			ug/L	0.002		83	32-141			
Surrogate: 13C-1,2,3,4,7,8-HxCDF	0.0015			ug/L	0.002		77	26-152			
Surrogate: 13C-1,2,3,6,7,8-HxCDD	0.0018			ug/L	0.002		88	28-130			
Surrogate: 13C-1,2,3,6,7,8-HxCDF	0.0017			ug/L	0.002		85	26-123			
Surrogate: 13C-1,2,3,7,8,9-HxCDF	0.0017			ug/L	0.002		85	29-147			

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## METHOD BLANK/QC DATA

### EPA-5 1613B

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 26267 Extracted: 01/26/10</b>											
<b>Blank Analyzed: 02/02/2010 (G0A260000267B)</b>						<b>Source:</b>					
Surrogate: 13C-1,2,3,7,8-PeCDD	0.0013			ug/L	0.002		65	25-181			
Surrogate: 13C-1,2,3,7,8-PeCDF	0.0013			ug/L	0.002		66	24-185			
Surrogate: 13C-2,3,4,6,7,8-HxCDF	0.0019			ug/L	0.002		93	28-136			
Surrogate: 13C-2,3,4,7,8-PeCDF	0.0014			ug/L	0.002		69	21-178			
Surrogate: 13C-2,3,7,8-TCDD	0.0012			ug/L	0.002		61	25-164			
Surrogate: 13C-OCDD	0.0036			ug/L	0.004		89	17-157			
<b>LCS Analyzed: 02/02/2010 (G0A260000267C)</b>						<b>Source:</b>					
1,2,3,4,6,7,8-HpCDD	0.00102	0.00005	0.0000092	ug/L	0.001		102	70-140			
1,2,3,4,6,7,8-HpCDF	0.00108	0.00005	0.0000073	ug/L	0.001		108	82-122			
2,3,7,8-TCDF	0.0002	0.00001	0.0000027	ug/L	0.0002		100	75-158			
1,2,3,4,7,8,9-HpCDF	0.00111	0.00005	0.0000012	ug/L	0.001		111	78-138			
1,2,3,4,7,8-HxCDD	0.00103	0.00005	0.0000078	ug/L	0.001		103	70-164			
1,2,3,4,7,8-HxCDF	0.00114	0.00005	0.0000051	ug/L	0.001		114	72-134			
1,2,3,6,7,8-HxCDD	0.000964	0.00005	0.0000063	ug/L	0.001		96	76-134			
1,2,3,6,7,8-HxCDF	0.00102	0.00005	0.0000045	ug/L	0.001		102	84-130			
1,2,3,7,8,9-HxCDD	0.000912	0.00005	0.0000055	ug/L	0.001		91	64-162			
1,2,3,7,8,9-HxCDF	0.00102	0.00005	0.0000046	ug/L	0.001		102	78-130			
1,2,3,7,8-PeCDD	0.000999	0.00005	0.0000085	ug/L	0.001		100	70-142			
1,2,3,7,8-PeCDF	0.00104	0.00005	0.0000054	ug/L	0.001		104	80-134			
2,3,4,6,7,8-HxCDF	0.00104	0.00005	0.0000004	ug/L	0.001		104	70-156			
2,3,4,7,8-PeCDF	0.00106	0.00005	0.0000006	ug/L	0.001		106	68-160			
2,3,7,8-TCDD	0.000175	0.00001	0.0000038	ug/L	0.0002		88	67-158			
OCDD	0.002	0.0001	0.0000021	ug/L	0.002		100	78-144			
OCDF	0.00214	0.0001	0.0000001	ug/L	0.002		107	63-170			
Surrogate: 13C-2,3,7,8-TCDF	0.00112			ug/L	0.002		56	24-169			
Surrogate: 37Cl4-2,3,7,8-TCDD	0.000752			ug/L	0.0008		94	35-197			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDD	0.00169			ug/L	0.002		84	23-140			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF	0.00191			ug/L	0.002		96	28-143			
Surrogate: 13C-1,2,3,4,7,8,9-HpCDF	0.00165			ug/L	0.002		83	26-138			
Surrogate: 13C-1,2,3,4,7,8-HxCDD	0.00133			ug/L	0.002		66	32-141			
Surrogate: 13C-1,2,3,4,7,8-HxCDF	0.00139			ug/L	0.002		69	26-152			
Surrogate: 13C-1,2,3,6,7,8-HxCDD	0.00175			ug/L	0.002		88	28-130			
Surrogate: 13C-1,2,3,6,7,8-HxCDF	0.00162			ug/L	0.002		81	26-123			
Surrogate: 13C-1,2,3,7,8,9-HxCDF	0.00161			ug/L	0.002		80	29-147			
Surrogate: 13C-1,2,3,7,8-PeCDD	0.00124			ug/L	0.002		62	25-181			

**TestAmerica Irvine**

Kathleen A. Robb For Heather Clark  
 Project Manager

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

Project ID: Quarterly Outfall 001

Report Number: ITA1329

Sampled: 01/18/10

Received: 01/18/10

## METHOD BLANK/QC DATA

### EPA-5 1613B

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 26267 Extracted: 01/26/10</b>											
<b>LCS Analyzed: 02/02/2010 (G0A260000267C)</b>											
Surrogate: 13C-1,2,3,7,8-PeCDF	0.00123			ug/L	0.002		62	24-185			
Surrogate: 13C-2,3,4,6,7,8-HxCDF	0.00171			ug/L	0.002		86	28-136			
Surrogate: 13C-2,3,4,7,8-PeCDF	0.00127			ug/L	0.002		63	21-178			
Surrogate: 13C-2,3,7,8-TCDD	0.00116			ug/L	0.002		58	25-164			
Surrogate: 13C-OCDD	0.00318			ug/L	0.004		80	17-157			

**TestAmerica Irvine**

Kathleen A. Robb For Heather Clark  
 Project Manager

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

Project ID: Quarterly Outfall 001

Report Number: ITA1329

Sampled: 01/18/10  
Received: 01/18/10

## 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
ITA1329-01	1664-HEM	Hexane Extractable Material (Oil & Greas	mg/l	0	4.8	10
ITA1329-01	608-Pest Boeing 001/002 Q (LL)	alpha-BHC	ug/l	0.0019	0.0094	0.01
ITA1329-01	624-Boeing 001/002Q (Fr113+X+Fr1,1-Dichloroethene		ug/l	0	0.50	3.2
ITA1329-01	624-Boeing 001/002Q (Fr113+X+FrTrichloroethene		ug/l	0	0.50	5
ITA1329-01	625-Boeing 001/002 Q-LL	2,4,6-Trichlorophenol	ug/l	0	5.7	6.5
ITA1329-01	625-Boeing 001/002 Q-LL	2,4-Dinitrotoluene	ug/l	0	8.6	9.1
ITA1329-01	625-Boeing 001/002 Q-LL	Bis(2-ethylhexyl)phthalate	ug/l	0.25	4.8	4
ITA1329-01	625-Boeing 001/002 Q-LL	N-Nitrosodimethylamine	ug/l	0	7.6	8.1
ITA1329-01	625-Boeing 001/002 Q-LL	Pentachlorophenol	ug/l	0	7.6	8.2
ITA1329-01	Ammonia-N, Titr 4500NH3-C (w/di:Ammonia-N (Distilled)		mg/l	0.28	0.50	2
ITA1329-01	BOD - SM5210B	Biochemical Oxygen Demand	mg/l	3.82	2.0	20
ITA1329-01	Cadmium-200.8	Cadmium	ug/l	0.22	5.0	2
ITA1329-01	Chloride - 300.0	Chloride	mg/l	1.56	0.50	150
<b>ITA1329-01</b>	<b>Copper-200.8</b>	<b>Copper</b>	<b>ug/l</b>	<b>12</b>	<b>10</b>	<b>7.1</b>
ITA1329-01	Cyanide, Total-4500CN-E (5ppb)	Total Cyanide	ug/l	0	5.0	4.3
<b>ITA1329-01</b>	<b>Iron-200.7</b>	<b>Iron</b>	<b>mg/l</b>	<b>23</b>	<b>0.080</b>	<b>0.3</b>
<b>ITA1329-01</b>	<b>Lead-200.8</b>	<b>Lead</b>	<b>ug/l</b>	<b>13</b>	<b>5.0</b>	<b>2.6</b>
<b>ITA1329-01</b>	<b>Manganese-200.7</b>	<b>Manganese</b>	<b>ug/l</b>	<b>403</b>	<b>40</b>	<b>50</b>
ITA1329-01	MBAS - SM5540-C	Surfactants (MBAS)	mg/l	0	0.10	0.5
ITA1329-01	Nitrate-N, 300.0	Nitrate-N	mg/l	0.59	0.11	8
ITA1329-01	Nitrite-N, 300.0	Nitrite-N	mg/l	0	0.15	1
ITA1329-01	Nitrogen, NO3+NO2 -N EPA 300.0	Nitrate/Nitrite-N	mg/l	0.59	0.26	8
ITA1329-01	Perchlorate 314.0 - Default	Perchlorate	ug/l	0	4.0	6
ITA1329-01	Selenium-200.8	Selenium	ug/l	1.01	10	4.1
ITA1329-01	Settleable Solids - SM2540F	Total Settleable Solids	ml/l	0	0.10	0.1
ITA1329-01	Sulfate-300.0	Sulfate	mg/l	3.83	0.50	300
ITA1329-01	TDS - SM2540C	Total Dissolved Solids	mg/l	171	10	950
<b>ITA1329-01</b>	<b>TSS - SM2540D</b>	<b>Total Suspended Solids</b>	<b>mg/l</b>	<b>452</b>	<b>20</b>	<b>15</b>
<b>ITA1329-01</b>	<b>Zinc-200.7</b>	<b>Zinc</b>	<b>ug/l</b>	<b>76</b>	<b>40</b>	<b>54</b>

## 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

Kathleen A. Robb For Heather Clark  
Project Manager

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

Project ID: Quarterly Outfall 001

Report Number: ITA1329

Sampled: 01/18/10  
Received: 01/18/10

## 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
ITA1329-02	624-Boeing 001/002Q (Fr113+X+Fr1,1-Dichloroethene		ug/l	0	0.50	3.2
ITA1329-02	624-Boeing 001/002Q (Fr113+X+FrTrichloroethene		ug/l	0	0.50	5

### TestAmerica Irvine

Kathleen A. Robb For Heather Clark  
Project Manager

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

Project ID: Quarterly Outfall 001

Report Number: ITA1329

Sampled: 01/18/10  
Received: 01/18/10

## DATA QUALIFIERS AND DEFINITIONS

- a** Spiked analyte outside of stated QC limits.
- B** Method blank contamination. The associated method blank contains the target analyte at a reportable level.
- C** Calibration Verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
- J** Estimated result. Result is less than the reporting limit.
- Jb** Result is greater than sample detection limit but less than stated reporting limit.
- M2** The MS and/or MSD were below 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.
- Q** Estimated maximum possible concentration (EMPC).
- RL1** Reporting limit raised due to sample matrix effects.
- U** Result is less than the sample detection limit.
- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- RPD** Relative Percent Difference

### TestAmerica Irvine

Kathleen A. Robb For Heather Clark  
Project Manager

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

Project ID: Quarterly Outfall 001

Report Number: ITA1329

Sampled: 01/18/10  
Received: 01/18/10

## Certification Summary

### TestAmerica Irvine

Method	Matrix	Nelac	California
EDD + Level 4	Water	N/A	N/A
EPA 120.1	Water	X	X
EPA 1664A	Water	X	X
EPA 180.1	Water	X	X
EPA 200.7-Diss	Water	X	X
EPA 200.7	Water	X	X
EPA 200.8-Diss	Water	X	X
EPA 200.8	Water	X	X
EPA 245.1-Diss	Water	X	X
EPA 245.1	Water	X	X
EPA 300.0	Water	X	X
EPA 314.0	Water	X	X
EPA 608	Water	X	X
EPA 624	Water	X	X
EPA 625	Water	X	X
Filtration	Water	N/A	N/A
SM 2540D	Water	X	X
SM2540C	Water	X	
SM2540F	Water	X	X
SM4500CN-E	Water	X	X
SM4500NH3-C	Water	X	X
SM5210B	Water	X	X
SM5540-C	Water	X	X

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

### Subcontracted Laboratories

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

4350 Transport Street, Unit 107 - Ventura, CA 93003

Analysis Performed: Bioassay-7 dy Chrnrc  
Samples: ITA1329-01

Analysis Performed: Level 4 Data Package  
Samples: ITA1329-01

### TestAmerica Irvine

Kathleen A. Robb For Heather Clark  
Project Manager

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

Project ID: Quarterly Outfall 001

Report Number: ITA1329

Sampled: 01/18/10  
Received: 01/18/10

## TestAmerica St. Louis

13715 Rider Trail North - Earth City, MO 63045

Method Performed: ASTM 5174-91  
Samples: ITA1329-01

Method Performed: EPA 900.0 MOD  
Samples: ITA1329-01

Method Performed: EPA 901.1 MOD  
Samples: ITA1329-01

Method Performed: EPA 903.0 MOD  
Samples: ITA1329-01

Method Performed: EPA 904 MOD  
Samples: ITA1329-01

Method Performed: EPA 905 MOD  
Samples: ITA1329-01

Method Performed: EPA 906.0 MOD  
Samples: ITA1329-01

## TestAmerica West Sacramento

880 Riverside Parkway - West Sacramento, CA 95605

Method Performed: EPA-5 1613B  
Samples: ITA1329-01, ITA1329-01RE1

## TestAmerica Irvine

Kathleen A. Robb For Heather Clark  
Project Manager

ITA1329

Client Name/Address:		Project:		ANALYSIS REQUIRED										Field readings:				
MWH-Arcadia 618 Michillinda Ave, Suite 200 Arcadia, CA 91007		Boeing-SSFL NPDES Quarterly Outfall 001 GRAB		Phone Number: (626) 568-6691		Fax Number: (626) 568-6515		Settleable Solids		Oil & Grease (1664-HEM)		Cyanide (total recoverable)		Conductivity		Total Residual Chlorine		Log in and include in report Temp and pH
Test America Contact: Joseph Doak				Project Manager: Bronwyn Kelly Mayam Chel Emily Afkano														Temp = 54.9°F
				Sampler: Emily Afkano														pH = 7.5
				Test America Contact: Joseph Doak														Time of readings = 1500
Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #	VOCS 624 + xylenes + Freon 113	Settleable Solids	Oil & Grease (1664-HEM)	Cyanide (total recoverable)	Conductivity	Total Residual Chlorine						Comments
Outfall 001	W	VOAs	5	1/18/10 1500	HCl	1A, 1B, 1C, 1D, 1E	X											
Outfall 001	W	1L Poly	1		None	2		X										
Outfall 001	W	1L Amber	2		HCl	3A, 3B			X									
Outfall 001	W	500 mL Poly	1		NaOH	4				X								
Outfall 001	W	500 mL Poly	2		None	5A, 5B					X							
Trip Blanks	W	VOAs	3		HCl	6A, 6B, 6C	X											
Outfall 001	W	150 mL Poly	1		None	7												
<i>Ch. 9000 1/18/10</i>																		
<i>NEW</i>																		

COC Page 2 of 2 will list the composite samples for Outfall 001 for this storm event.

These Samples are the Grab Portion of Outfall 001 for this storm event. Composite samples will follow and are to be added to this work order.

Relinquished By <i>Joseph Doak</i>	Date/Time 1/18/10 16:00	Received By <i>John Dwyer</i>	Date/Time 1-18-10 16:00
Relinquished By <i>John Dwyer</i>	Date/Time 1-18-10 19:00	Received By <i>John Dwyer</i>	Date/Time 1/18/10 19:00
Relinquished By <i>John Dwyer</i>	Date/Time 1-18-10 19:00	Received By <i>John Dwyer</i>	Date/Time 1/18/10 19:00

Turn-around time: (Check)  
 24 Hour: \_\_\_ 72 Hour: \_\_\_ 10 Day: \_\_\_  
 48 Hour: \_\_\_ 5 Day: \_\_\_ Normal:  X

Sample Integrity: (Check)  
 Intact: \_\_\_ On Ice:  X

Data Requirements: (Check)  
 No Level IV: \_\_\_ All Level IV: \_\_\_ NPDES Level IV:  X

4.4

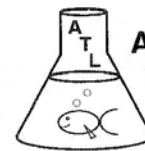
Client Name/Address: MWH-Arcadia 618 Michillinda Ave, Suite 200 Arcadia, CA 91007		Project: Boeing-SSFL NPDES Quarterly Outfall 001 COMPOSITE GRAB						
Test America Contact: Joseph Doak		Phone Number: (626) 568-6691 Fax Number: (626) 568-6515						
Project Manager: Bronwyn Kelly <i>Meghan Ouel</i> Sampler: <i>Emily Antero</i>		Total Recoverable Metals: Cu, Pb, Hg, Cd, Se, Zn, Mn, Fe X						
Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #	ANALYSIS REQUIRED	Comments
Outfall 001	W	1L Poly	1	1/18/10 15:00	HNO <sub>3</sub>	8A	Alpha BHC (608) + Pesticides + PP Ammonia-N (350.2) Turbidity, TDS, TSS Nitrate-N, Nitrite-N Cl <sup>-</sup> , SO <sub>4</sub> , NO <sub>3</sub> +NO <sub>2</sub> -N, Perchlorate Surfactants (MBAS) BOD <sub>5</sub> (20 degrees C) TCDD (and all congeners) Se, Zn, Mn, Fe	24 TAT - Mn and Fe exceeded 2/19/09 24 TAT
Outfall 001 Dup	W	1L Poly	1		HNO <sub>3</sub>	8B		
Outfall 001	W	1L Amber	2		None	9A, 9B		
Outfall 001	W	1L Poly	1		None	10		
Outfall 001	W	500 mL Poly	2		None	11A, 11B		
Outfall 001	W	500 mL Poly	2		None	12A, 12B		
Outfall 001	W	500 mL Poly	1		None	13		
Outfall 001	W	500 mL Poly	2		None	14A, 14B		
Outfall 001	W	500 mL Poly	1		H <sub>2</sub> SO <sub>4</sub>	15		
Outfall 001	W	1L Amber	2		None	16A, 16B		
Outfall 001	W	1L Amber	2		None	17A, 17B		
Outfall 001	W	2.5 Gal Cube	1		None	18A		
Outfall 001	W	500 mL Amber	1		None	18B		
Outfall 001	W	1 Gal Cube	1		None	19		
Outfall 001	W	1L Poly	1		None	20		
Relinquished By: <i>Joseph Doak</i> Date/Time: 1/18/10 16:00 Relinquished By: <i>Joseph Doak</i> Date/Time: 1-18-10 19:00 Relinquished By: <i>Joseph Doak</i> Date/Time: 1-18-10 19:00							Turn-around time: (Check) 10 Day: <input checked="" type="checkbox"/> Normal: <input checked="" type="checkbox"/> 24 Hour: <input type="checkbox"/> 48 Hour: <input type="checkbox"/> 72 Hour: <input type="checkbox"/> 5 Day: <input type="checkbox"/>	
Relinquished By: <i>Joseph Doak</i> Date/Time: 1/18/10 16:00 Relinquished By: <i>Joseph Doak</i> Date/Time: 1-18-10 19:00 Relinquished By: <i>Joseph Doak</i> Date/Time: 1-18-10 19:00							Sample Integrity: (Check) Intact: <input checked="" type="checkbox"/> On Ice: <input type="checkbox"/> Data Requirements: (Check) No Level IV: <input type="checkbox"/> All Level IV: <input checked="" type="checkbox"/>	
Relinquished By: <i>Joseph Doak</i> Date/Time: 1/18/10 16:00 Relinquished By: <i>Joseph Doak</i> Date/Time: 1-18-10 19:00 Relinquished By: <i>Joseph Doak</i> Date/Time: 1-18-10 19:00							NPDES Level IV: <input checked="" type="checkbox"/>	

01/18/10 6:40

1/18/10

4.4

# LABORATORY REPORT



**Aquatic  
Testing  
Laboratories**

*"dedicated to providing quality aquatic toxicity testing"*

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

**Date:** January 27, 2010

**Client:** TestAmerica, Irvine  
17461 Derian Ave., Suite 100  
Irvine, CA 92614  
Attn: Joseph Doak

**Laboratory No.:** A-10011902-001  
**Sample I.D.:** ITA1329-01 (Outfall 001)

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

Date Sampled: 01/18/10  
Date Received: 01/19/10  
Temp. Received: 2.1°C  
Chlorine (TRC): 0.0 mg/l  
Date Tested: 01/19/10 to 01/26/10

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

## Result Summary:

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

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

  
Joseph A. LeMay  
Laboratory Director



**CERIODAPHNIA CHRONIC BIOASSAY  
EPA METHOD 1002.0**



Lab No.: A-10011902-001  
Client/ID: Test America - ITA1329-01 (Outfall 001)

Date Tested: 01/19/10 to 01/26/10

**TEST SUMMARY**

Test type: Daily static-renewal.	Endpoints: Survival and Reproduction.
Species: <i>Ceriodaphnia dubia</i> .	Source: In-laboratory culture.
Age: < 24 hrs; all released within 8 hrs.	Food: .1 ml YTC, algae per day.
Test vessel size: 30 ml.	Test solution volume: 15 ml.
Number of test organisms per vessel: 1.	Number of replicates: 10.
Temperature: 25 +/- 1°C.	Photoperiod: 16/8 hrs. light/dark cycle.
Dilution water: Mod. hard reconstituted (MHRW).	Test duration: 7 days.
QA/QC Batch No.: RT-100119.	Statistics: ToxCalc computer program.

**RESULTS SUMMARY**

Sample Concentration	Percent Survival	Mean Number of Young Per Female
Control	100%	25.4
100% Sample	100%	27.7
* Sample not statistically significantly less than Control.		

**CHRONIC TOXICITY**

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

**QA/QC TEST ACCEPTABILITY**

Parameter	Result
Control survival ≥80%	Pass (100% survival)
≥15 young per surviving control female	Pass (25.4 young)
≥60% surviving controls had 3 broods	Pass (100% with 3 broods)
PMSD <47% for reproduction; if >47% and no toxicity at IWC, the test must be repeated	Pass (PMSD = 8.3%)
Statistically significantly different concentrations relative difference > 13%	Pass (no concentration significantly different)
Concentration response relationship acceptable	Pass (no significant response at concentration tested)

**Ceriodaphnia Survival and Reproduction Test-7 Day Survival**

Start Date: 1/19/2010 14:00 Test ID: 10011902c Sample ID: ITA1329-01  
 End Date: 1/26/2010 14:00 Lab ID: CAATL-Aquatic Testing Labs Sample Type: EFF2-Industrial  
 Sample Date: 1/18/2010 15:00 Protocol: FWCH EPA Test Species: CD-Ceriodaphnia dubia  
 Comments:

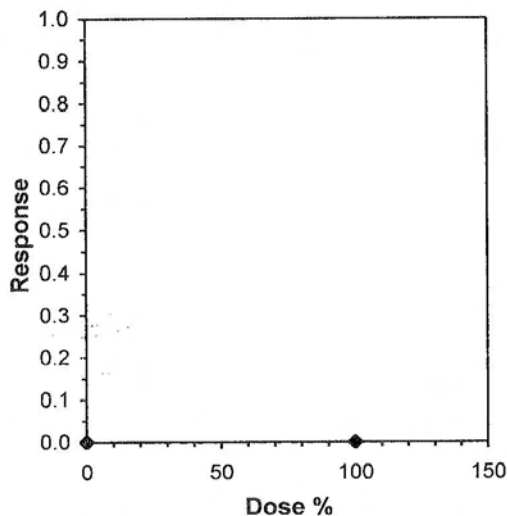
Conc-%	1	2	3	4	5	6	7	8	9	10
D-Control	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

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

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

**Linear Interpolation (200 Resamples)**

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



**Ceriodaphnia Survival and Reproduction Test-Reproduction**

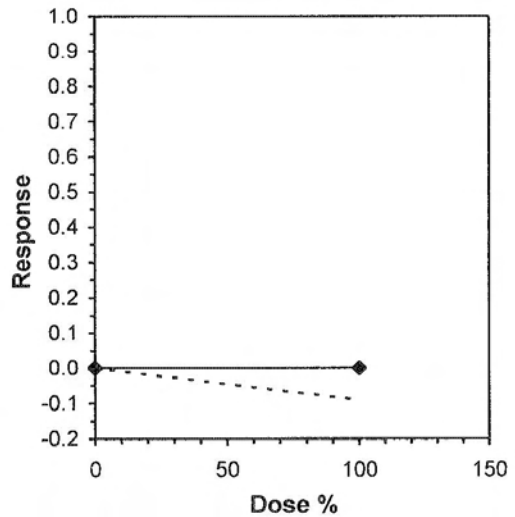
Start Date: 1/19/2010 14:00 Test ID: 10011902c Sample ID: ITA1329-01  
 End Date: 1/26/2010 14:00 Lab ID: CAATL-Aquatic Testing Labs Sample Type: EFF2-Industrial  
 Sample Date: 1/18/2010 15:00 Protocol: FWCH EPA Test Species: CD-Ceriodaphnia dubia  
 Comments:

Conc-%	1	2	3	4	5	6	7	8	9	10
D-Control	26.000	29.000	25.000	28.000	25.000	22.000	22.000	27.000	24.000	26.000
100	25.000	29.000	21.000	29.000	26.000	30.000	32.000	29.000	28.000	28.000

Conc-%	Mean	N-Mean	Transform: Untransformed					N	t-Stat	1-Tailed Critical	MSD	Isotonic	
			Mean	Min	Max	CV%	Mean					N-Mean	
D-Control	25.400	1.0000	25.400	22.000	29.000	9.130	10				26.550	1.0000	
100	27.700	1.0906	27.700	21.000	32.000	11.036	10	-1.896	1.734	2.104	26.550	1.0000	

Auxiliary Tests	Statistic	Critical	Skew	Kurt		
Shapiro-Wilk's Test indicates normal distribution ( $p > 0.05$ )	0.95741	0.905	-0.7614	0.83786		
F-Test indicates equal variances ( $p = 0.42$ )	1.7376	6.54109				
Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs D-Control	2.10403	0.08284	26.45	7.36111	0.07419	1, 18

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



**CERIODAPHNIA DUBIA CHRONIC BIOASSAY**  
**EPA METHOD 1002.0 Raw Data Sheet**



Lab No.: A-10011902-001

Client ID: TestAmerica - ITA1329-01 001

Start Date: 01/19/2010

		DAY 1		DAY 2		DAY 3		DAY 4		DAY 5		DAY 6		DAY 7	
		0 hr	24hr	0 hr	24hr	0 hr	24hr	0 hr	24hr	0 hr	24hr	0 hr	24hr	0 hr	24hr
Analyst Initials:		Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
Time of Readings:		1400	1500	1500	1430	1430	1400	1400	1500	1500	1300	1300	1430	1430	1400
Control	DO	9.1	8.2	8.1	8.0	9.0	8.4	9.3	8.1	8.3	8.2	8.3	8.2	8.2	8.3
	pH	7.8	7.9	8.0	7.8	7.7	7.8	7.7	7.9	7.7	7.7	7.6	7.7	7.7	7.6
	Temp	25.3	24.7	25.4	24.6	25.0	24.3	25.4	24.4	25.7	24.3	24.4	24.2	25.2	24.4
100%	DO	9.0	7.5	8.7	7.4	9.4	7.5	9.9	7.6	8.8	8.5	9.0	7.6	9.7	8.2
	pH	7.6	7.3	7.4	7.2	6.8	7.5	7.3	6.9	6.7	7.4	7.4	7.6	7.2	7.1
	Temp	24.7	25.0	25.0	24.9	24.4	24.4	24.5	24.6	24.5	24.3	24.4	24.2	24.8	24.6

Additional Parameters		Control	100% Sample
Conductivity (umohms)		345	64
Alkalinity (mg/l CaCO <sub>3</sub> )		72	17
Hardness (mg/l CaCO <sub>3</sub> )		92	21
Ammonia (mg/l NH <sub>3</sub> -N)		<0.1	0.4

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

Sample	Day	Number of Young Produced										Total Live Young	No. Live Adults	Analyst Initials
		A	B	C	D	E	F	G	H	I	J			
Control	1	0	0	0	0	0	0	0	0	0	0	0	10	Rm
	2	0	0	0	0	0	0	0	0	0	0	0	10	Rm
	3	0	0	0	0	4	0	0	0	2	0	6	10	Rm
	4	4	5	4	3	7	3	4	3	0	4	37	10	Rm
	5	10	9	7	7	0	0	0	8	8	9	58	10	Rm
	6	12	0	14	18	14	7	8	16	14	0	103	10	Rm
	7	13	15	13	0	0	12	10	0	0	13	50	10	Rm
	Total	26	29	25	28	25	22	22	27	24	24	254	10	Rm
100%	1	0	0	0	0	0	0	0	0	0	0	0	10	Rm
	2	0	0	0	0	0	0	0	0	0	0	0	10	Rm
	3	0	0	0	0	4	5	0	5	4	4	22	10	Rm
	4	4	5	4	5	7	8	5	7	8	7	60	10	Rm
	5	9	10	7	8	0	0	9	0	0	0	43	10	Rm
	6	0	0	10	16	15	17	18	17	16	17	126	10	Rm
	7	12	14	0	0	10	0	12	18	22	16	432	10	Rm
	Total	25	29	21	29	26	30	32	29	28	28	249	10	Rm

Circled fourth brood not used in statistical analysis.

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

2779

SUBCONTRACT ORDER

TestAmerica Irvine

ITA1329

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: 21 °C Ice: Y N

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

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


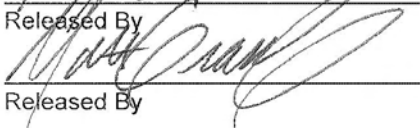
Sample ID: ITA1329-01 (Outfall 001 (Grab) - Water)

Sampled: 01/18/10 15:00

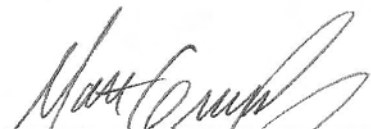
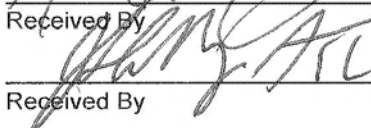
Bioassay-7 dy Chrn	N/A	01/20/10 03:00	Cerio, EPA/821-R02-013, Sub to Aquatic testing Excel EDD email to pm, Include Std logs for Lvl IV
EDD + Level 4	N/A	02/15/10 15:00	

Containers Supplied:

1 gal Poly (AE)

  
 Released By \_\_\_\_\_  
  
 Released By \_\_\_\_\_

1-19-10 7:30  
 Date/Time \_\_\_\_\_  
 1-19-10/10:50  
 Date/Time \_\_\_\_\_

  
 Received By \_\_\_\_\_  
  
 Received By \_\_\_\_\_

1-19-10/7:30  
 Date/Time \_\_\_\_\_  
 1-19-10 10:50  
 Date/Time \_\_\_\_\_



***REFERENCE  
TOXICANT  
DATA***

**CERIODAPHNIA CHRONIC BIOASSAY**  
**EPA METHOD 1002.0**  
**REFERENCE TOXICANT - NaCl**



QA/QC Batch No.: RT-100119

Date Tested: 01/19/10 to 01/26/10

**TEST SUMMARY**

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

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

**RESULTS SUMMARY**

Sample Concentration	Percent Survival		Mean Number of Young Per Female	
Control	100%		23.4	
0.25 g/l	100%		25.0	
0.5 g/l	100%		24.3	
1.0 g/l	100%		13.7	*
2.0 g/l	100%		2.7	*
4.0 g/l	0%	*	0	**

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

**CHRONIC TOXICITY**

Survival LC50	2.8 g/l
Reproduction IC25	0.79 g/l

**QA/QC TEST ACCEPTABILITY**

Parameter	Result
Control survival ≥80%	Pass (100% Survival)
≥15 young per surviving control female	Pass (23.4 young)
≥60% surviving controls had 3 broods	Pass (100% with 3 broods)
PMSD < 47% for reproduction	Pass (PMSD = 9.5%)
Stat. sig. diff. conc. relative difference > 13%	Pass (Stat. sig. diff. conc. Relative difference = 41.5%)
Concentration response relationship acceptable	Pass (Response curve normal)

**Ceriodaphnia Survival and Reproduction Test-7 Day Survival**

Start Date: 1/19/2010 14:00    Test ID: RT100119c    Sample ID: REF-Ref Toxicant  
 End Date: 1/26/2010 14:00    Lab ID: CAATL-Aquatic Testing Labs    Sample Type: NACL-Sodium chloride  
 Sample Date: 1/19/2010    Protocol: FWCH EPA    Test Species: CD-Ceriodaphnia dubia  
 Comments:

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

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

**Hypothesis Test (1-tail, 0.05)**    NOEC    LOEC    ChV    TU

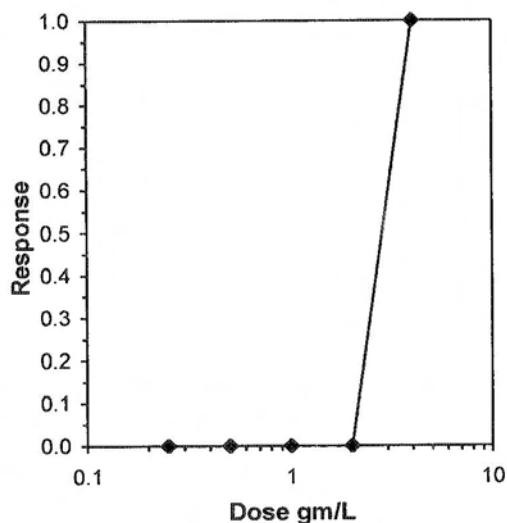
Fisher's Exact Test    2    4    2.82843

Treatments vs D-Control

**Graphical Method**

Trim Level    EC50  
 0.0%    2.8284

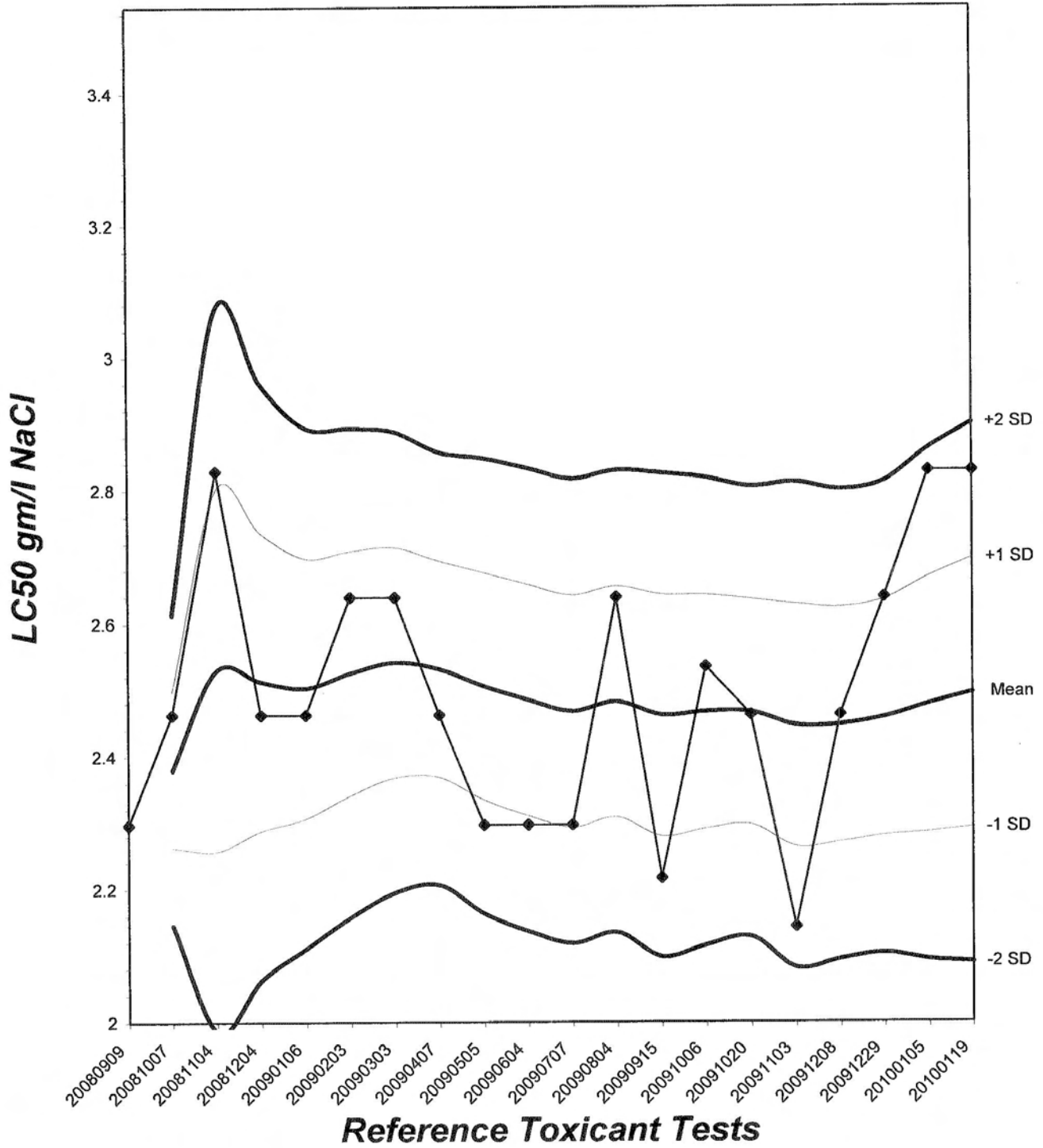
2.8284





# Ceriodaphnia Chronic Survival Laboratory Control Chart

CV% = 8.13



**Ceriodaphnia Survival and Reproduction Test-Reproduction**

Start Date: 1/19/2010 14:00 Test ID: RT100119c Sample ID: REF-Ref Toxicant  
 End Date: 1/26/2010 14:00 Lab ID: CAATL-Aquatic Testing Labs Sample Type: NACL-Sodium chloride  
 Sample Date: 1/19/2010 Protocol: FWCH EPA Test Species: CD-Ceriodaphnia dubia

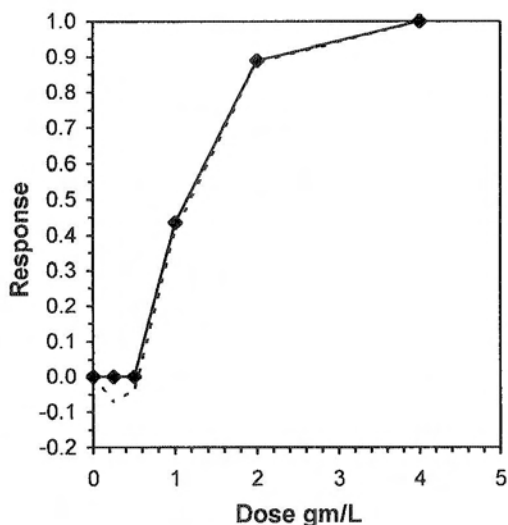
Comments:

Conc-gm/L	1	2	3	4	5	6	7	8	9	10
D-Control	23.000	25.000	21.000	24.000	23.000	25.000	25.000	21.000	22.000	25.000
0.25	23.000	26.000	27.000	24.000	24.000	25.000	27.000	22.000	28.000	24.000
0.5	22.000	26.000	25.000	26.000	24.000	22.000	26.000	23.000	25.000	24.000
1	17.000	14.000	10.000	14.000	14.000	12.000	8.000	20.000	13.000	15.000
2	0.000	2.000	3.000	5.000	3.000	3.000	7.000	0.000	2.000	2.000
4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Conc-gm/L	Transform: Untransformed							t-Stat	1-Tailed Critical	MSD	Isotonic	
	Mean	N-Mean	Mean	Min	Max	CV%	N				Mean	N-Mean
D-Control	23.400	1.0000	23.400	21.000	25.000	7.037	10				24.233	1.0000
0.25	25.000	1.0684	25.000	22.000	28.000	7.775	10	-1.608	2.223	2.212	24.233	1.0000
0.5	24.300	1.0385	24.300	22.000	26.000	6.449	10	-0.905	2.223	2.212	24.233	1.0000
*1	13.700	0.5855	13.700	8.000	20.000	24.585	10	9.750	2.223	2.212	13.700	0.5653
*2	2.700	0.1154	2.700	0.000	7.000	78.178	10	20.807	2.223	2.212	2.700	0.1114
4	0.000	0.0000	0.000	0.000	0.000	0.000	10				0.000	0.0000

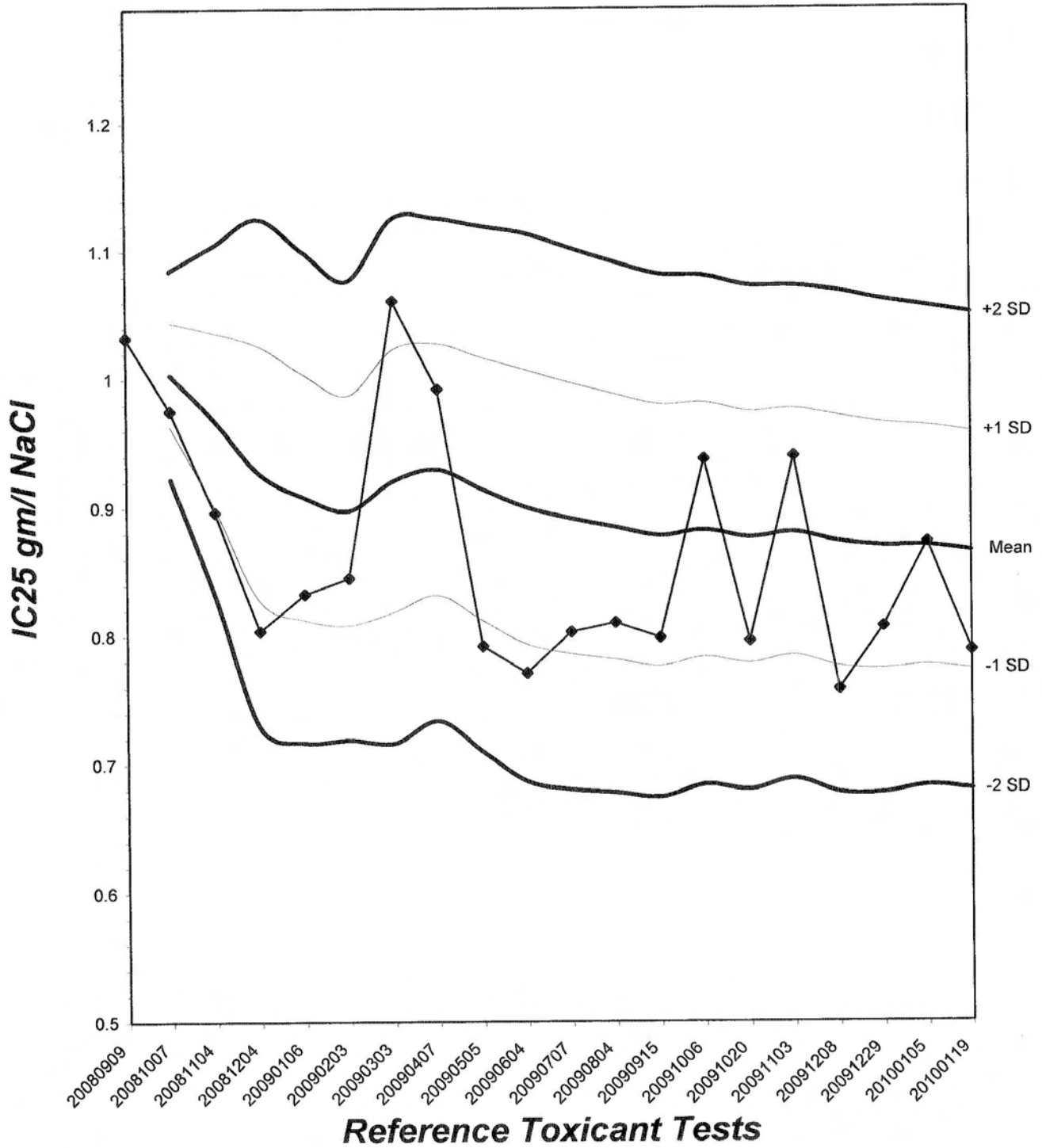
Auxiliary Tests	Statistic	Critical	Skew	Kurt						
Shapiro-Wilk's Test indicates normal distribution ( $p > 0.05$ )	0.98781	0.947	0.1743	1.07344						
Bartlett's Test indicates equal variances ( $p = 0.12$ )	7.30799	13.2767								
Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test	0.5	1	0.70711		2.21194	0.09453	925.67	4.94889	2.0E-27	4, 45

Linear Interpolation (200 Resamples)					
Point	gm/L	SD	95% CL		Skew
IC05	0.5575	0.0143	0.5110	0.5655	-2.0775
IC10	0.6150	0.0146	0.5755	0.6311	-0.4724
IC15	0.6725	0.0178	0.6297	0.6978	0.1744
IC20	0.7301	0.0222	0.6808	0.7720	0.4277
IC25	0.7876	0.0272	0.7293	0.8440	0.5197
IC40	0.9601	0.0466	0.8758	1.0814	0.8653
IC50	1.1439	0.0763	0.9761	1.2715	-0.1589



# Ceriodaphnia Chronic Reproduction Laboratory Control Chart

CV% = 10.7



# CERIODAPHNIA DUBIA CHRONIC BIOASSAY

## Reference Toxicant - NaCl

### Reproduction and Survival Raw Data Sheet



QA/QC No.: RT-100119

Start Date: 01/19/2010

Sample	Day	Number of Young Produced										Total Live Young	No. Live Adults	Analyst Initials
		A	B	C	D	E	F	G	H	I	J			
Control	1	0	0	0	0	0	0	0	0	0	0	0	10	[Signature]
	2	0	0	0	0	0	0	0	0	0	0	0	10	
	3	0	0	0	0	0	0	0	0	0	0	0	10	
	4	3	4	3	5	3	4	4	3	3	4	36	10	
	5	6	9	0	0	0	0	8	7	9	8	47	10	
	6	14	0	8	7	8	7	13	0	0	0	57	10	
	7	0	17	10	12	12	14	0	11	10	13	94	10	
	Total	23	25	21	24	23	25	25	21	22	25	234	10	
0.25 g/l	1	0	0	0	0	0	0	0	0	0	0	10	[Signature]	
	2	0	0	0	0	0	0	0	0	0	0	10		
	3	0	0	0	0	0	0	0	4	0	4	10		
	4	3	4	5	5	3	4	4	3	0	4	35		10
	5	8	0	0	0	0	7	8	7	9	8	47		10
	6	0	8	10	7	8	0	0	0	15	0	48		10
	7	12	14	12	12	13	14	15	12	0	12	116		10
	Total	23	26	27	24	24	25	27	22	28	24	226		10
0.5 g/l	1	0	0	0	0	0	0	0	0	0	0	10	[Signature]	
	2	0	0	0	0	0	0	0	0	0	0	10		
	3	0	0	0	0	0	0	0	0	0	0	10		
	4	3	4	5	4	3	3	4	3	3	4	36		10
	5	7	8	0	0	0	0	0	8	9	9	41		10
	6	0	14	7	8	9	9	10	12	0	0	69		10
	7	12	0	13	14	12	10	12	0	13	11	97		10
	Total	22	26	25	26	24	22	26	23	25	24	243		10

Circled fourth brood not used in statistical analysis.

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

# CERIODAPHNIA DUBIA CHRONIC BIOASSAY

## Reference Toxicant - NaCl

### Reproduction and Survival Raw Data Sheet



QA/QC No.: RT-100119

Start Date: 01/19/2010

Sample	Day	Number of Young Produced										Total Live Young	No. Live Adults	Analyst Initials
		A	B	C	D	E	F	G	H	I	J			
1.0 g/l	1	0	0	0	0	0	0	0	0	0	0	0	10	R
	2	0	0	0	0	0	0	0	0	0	0	0	10	
	3	0	0	0	0	0	0	0	3	0	2	5	10	
	4	3	2	4	3	3	2	3	0	4	0	24	10	
	5	6	0	0	0	0	0	0	7	0	6	19	10	
	6	0	5	6	4	3	4	5	0	0	0	27	10	
	7	8	7	0	7	8	6	0	10	9	7	62	10	
	Total	17	14	10	14	14	12	8	20	13	15	137	10	
2.0 g/l	1	0	0	0	0	0	0	0	0	0	0	10	R	
	2	0	0	0	0	0	0	0	0	0	0	10		
	3	0	0	0	0	0	0	0	0	0	0	10		
	4	0	0	0	0	0	0	0	0	0	0	10		
	5	0	2	3	2	0	3	0	0	0	2	12		10
	6	0	0	0	0	3	0	3	0	0	0	6		10
	7	0	0	0	3	0	0	4	0	2	0	9		10
	Total	0	2	3	5	3	3	7	0	2	2	22		10
4.0 g/l	1	X	X	X	X	X	X	X	X	X	0	0	R	
	2	-	-	-	-	-	-	-	-	-	-	-		
	3	-	-	-	-	-	-	-	-	-	-	-		
	4	-	-	-	-	-	-	-	-	-	-	-		
	5	-	-	-	-	-	-	-	-	-	-	-		
	6	-	-	-	-	-	-	-	-	-	-	-		
	7	-	-	-	-	-	-	-	-	-	-	-		
	Total	0	0	0	0	0	0	0	0	0	0	0		0

Circled fourth brood not used in statistical analysis.

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

# CERIODAPHNIA DUBIA CHRONIC BIOASSAY

## Reference Toxicant - NaCl Water Chemistries Raw Data Sheet



QA/QC No.: RT-100119

Start Date: 01/19/2010

		DAY 1		DAY 2		DAY 3		DAY 4		DAY 5		DAY 6		DAY 7	
		Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final
Analyst Initials:		Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Jr	Rm	Rm	Rm	Rm
Time of Readings:		1400	1400	1400	1430	1430	1330	1330	1500	1500	1330	8:0	1400	1400	1400
Control	DO	9.1	8.3	8.0	8.1	9.0	8.0	9.3	8.0	8.3	8.0	8.3	8.2	8.2	8.0
	pH	7.8	8.0	8.0	7.8	7.7	7.9	7.7	7.9	7.7	8.0	7.6	8.0	7.7	7.6
	Temp	25.3	25.3	25.4	25.0	25.0	25.0	25.4	24.8	25.7	24.7	25.0	24.4	24.9	24.2
0.25 g/l	DO	9.1	8.3	8.0	8.0	9.0	8.0	9.2	8.0	8.3	8.1	8.5	8.0	8.2	8.2
	pH	7.8	8.0	8.0	7.8	7.7	7.9	7.7	7.9	7.7	8.0	7.7	8.0	7.9	7.9
	Temp	25.3	25.4	25.4	25.1	25.0	25.1	25.4	25.1	25.7	24.2	25.2	24.7	25.0	24.3
0.5 g/l	DO	9.0	8.2	8.0	8.0	8.9	8.1	9.2	8.0	8.3	8.2	8.5	8.3	8.3	8.3
	pH	7.7	8.0	8.0	7.8	7.7	7.9	7.7	7.9	7.7	8.1	7.8	8.0	7.9	8.0
	Temp	25.3	25.4	25.5	25.2	25.0	25.1	25.4	25.3	25.7	24.3	25.5	24.5	24.9	24.5
1.0 g/l	DO	9.0	8.3	8.0	8.0	8.7	8.1	9.3	8.0	8.3	8.1	8.6	8.1	8.3	8.3
	pH	7.7	8.1	8.0	7.8	7.7	7.9	7.7	7.9	7.7	8.0	7.9	7.9	7.8	7.9
	Temp	25.3	25.5	25.5	25.1	25.1	25.1	25.5	25.3	25.8	24.5	24.8	24.7	25.0	24.3
2.0 g/l	DO	8.9	8.3	7.9	8.1	8.5	8.3	9.3	8.0	8.2	8.1	8.6	8.0	8.2	8.2
	pH	7.7	8.1	8.0	7.8	7.7	7.9	7.7	7.9	7.6	7.5	7.7	7.9	7.8	7.9
	Temp	25.2	25.5	25.6	25.1	25.1	25.2	25.5	25.3	25.9	24.2	24.7	24.2	25.1	24.5
4.0 g/l	DO	8.7	8.4	-	-	-	-	-	-	-	-	-	-	-	-
	pH	7.7	8.1	-	-	-	-	-	-	-	-	-	-	-	-
	Temp	25.2	25.5	-	-	-	-	-	-	-	-	-	-	-	-

Dissolved Oxygen (DO) readings are in mg/l O<sub>2</sub>; Temperature (Temp) readings are in °C.

Additional Parameters	Control			High Concentration		
	Day 1	Day 3	Day 5	Day 1	Day 3	Day 5
Conductivity (µS)	345	340	330	6800	3710	3650
Alkalinity (mg/l CaCO <sub>3</sub> )	72	72	74	72	73	74
Hardness (mg/l CaCO <sub>3</sub> )	92	93	89	92	92	90

### Source of Neonates

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



# *Test Temperature Chart*

*Test No: RT-100122*

*Date Tested: 01/19/10 to 01/26/10*

*Acceptable Range: 25 +/- 1°C*

