APPENDIX G

Section 20

Outfall 004, January 5, 2008

Test America Analytical Laboratory Report

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

LABORATORY REPORT

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

Project: Routine Outfall 004

Sampled: 01/05/08
Received: 01/05/08
Issued: 02/25/08 09:01

NELAP #01108CA California ELAP#1197 CSDLAC #10256

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

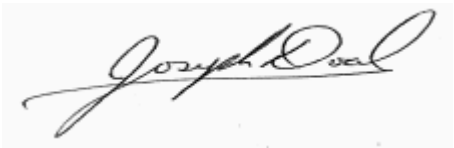
SAMPLE CROSS REFERENCE

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

ADDITIONAL INFORMATION: This is a final report to include all subcontract data.

LABORATORY ID	CLIENT ID	MATRIX
IRA0393-01	Outfall 004	Water

Reviewed By:



TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA0393

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

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA0393-01 (Outfall 004 - Water)									
Reporting Units: ug/l									
Antimony	EPA 200.8	8A07054	0.20	2.0	**0.60**	1	01/07/08	01/08/08	Ja
Cadmium	EPA 200.8	8A07054	0.11	1.0	ND	1	01/07/08	01/08/08	
Copper	EPA 200.8	8A07054	0.75	2.0	**3.6**	1	01/07/08	01/08/08	
Lead	EPA 200.8	8A07054	0.30	1.0	**1.2**	1	01/07/08	01/08/08	
Thallium	EPA 200.8	8A07054	0.20	1.0	ND	1	01/07/08	01/08/08	

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA0393

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

DISSOLVED METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA0393-01 (Outfall 004 - Water) - cont.									
Reporting Units: ug/l									
Antimony	EPA 200.8-Diss	8A08129	0.20	2.0	**0.57**	1	01/08/08	01/08/08	Ja
Cadmium	EPA 200.8-Diss	8A08129	0.11	1.0	ND	1	01/08/08	01/08/08	
Copper	EPA 200.8-Diss	8A08129	0.75	2.0	**2.2**	1	01/08/08	01/08/08	
Lead	EPA 200.8-Diss	8A08129	0.30	1.0	ND	1	01/08/08	01/08/08	
Thallium	EPA 200.8-Diss	8A08129	0.20	1.0	ND	1	01/08/08	01/08/08	

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA0393

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

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA0393-01 (Outfall 004 - Water) - cont.									
Reporting Units: mg/l									
Hexane Extractable Material (Oil & Grease)	EPA 1664A	8A07065	1.3	4.8	ND	1	01/07/08	01/07/08	
Chloride	EPA 300.0	8A06026	2.5	5.0	**53**	10	01/06/08	01/06/08	
Nitrate/Nitrite-N	EPA 300.0	8A06026	0.15	0.26	**1.7**	1	01/06/08	01/06/08	
Sulfate	EPA 300.0	8A06026	0.20	0.50	**38**	1	01/06/08	01/06/08	
Total Dissolved Solids	SM2540C	8A08083	10	10	**310**	1	01/08/08	01/08/08	

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA0393

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

Metals by EPA 200 Series Methods

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA0393-01 (Outfall 004 - Water) - cont.									
Reporting Units: ug/l									
Mercury, Dissolved	EPA 245.1	W8A0148	0.050	0.20	**0.054**	1	01/08/08	01/09/08	J
Mercury, Total	EPA 245.1	W8A0148	0.050	0.20	**0.092**	1	01/08/08	01/09/08	J

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004

Report Number: IRA0393

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

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: Outfall 004 (IRA0393-01) - Water					
EPA 300.0	2	01/05/2008 11:25	01/05/2008 19:00	01/06/2008 07:00	01/06/2008 09:54

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA0393

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

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8A07054 Extracted: 01/07/08											
Blank Analyzed: 01/07/2008-01/08/2008 (8A07054-BLK1)											
Antimony	ND	2.0	0.20	ug/l							
Cadmium	ND	1.0	0.11	ug/l							
Copper	ND	2.0	0.75	ug/l							
Lead	ND	1.0	0.30	ug/l							
Thallium	ND	1.0	0.20	ug/l							
LCS Analyzed: 01/07/2008-01/08/2008 (8A07054-BS1)											
Antimony	88.8	2.0	0.20	ug/l	80.0		111	85-115			
Cadmium	89.4	1.0	0.11	ug/l	80.0		112	85-115			
Copper	89.2	2.0	0.75	ug/l	80.0		112	85-115			
Lead	88.5	1.0	0.30	ug/l	80.0		111	85-115			
Thallium	86.1	1.0	0.20	ug/l	80.0		108	85-115			
Matrix Spike Analyzed: 01/07/2008-01/08/2008 (8A07054-MS1)						**Source: IRA0401-01**					
Antimony	89.1	2.0	0.20	ug/l	80.0	1.27	110	70-130			
Cadmium	84.7	1.0	0.11	ug/l	80.0	0.935	105	70-130			
Copper	83.7	2.0	0.75	ug/l	80.0	3.32	101	70-130			
Lead	83.6	1.0	0.30	ug/l	80.0	0.923	103	70-130			
Thallium	88.7	1.0	0.20	ug/l	80.0	ND	111	70-130			
Matrix Spike Analyzed: 01/07/2008-01/08/2008 (8A07054-MS2)						**Source: IRA0399-01**					
Antimony	85.0	2.0	0.20	ug/l	80.0	1.00	105	70-130			
Cadmium	85.6	1.0	0.11	ug/l	80.0	ND	107	70-130			
Copper	88.1	2.0	0.75	ug/l	80.0	5.80	103	70-130			
Lead	82.6	1.0	0.30	ug/l	80.0	2.27	100	70-130			
Thallium	86.9	1.0	0.20	ug/l	80.0	ND	109	70-130			
Matrix Spike Dup Analyzed: 01/07/2008-01/08/2008 (8A07054-MSD1)						**Source: IRA0401-01**					
Antimony	87.9	2.0	0.20	ug/l	80.0	1.27	108	70-130	1	20	
Cadmium	84.2	1.0	0.11	ug/l	80.0	0.935	104	70-130	1	20	
Copper	83.2	2.0	0.75	ug/l	80.0	3.32	100	70-130	1	20	
Lead	83.1	1.0	0.30	ug/l	80.0	0.923	103	70-130	1	20	
Thallium	88.4	1.0	0.20	ug/l	80.0	ND	110	70-130	0	20	

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA0393

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

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8A08129 Extracted: 01/08/08											
Blank Analyzed: 01/08/2008 (8A08129-BLK1)											
Antimony	ND	2.0	0.20	ug/l							
Cadmium	ND	1.0	0.11	ug/l							
Copper	ND	2.0	0.75	ug/l							
Lead	ND	1.0	0.30	ug/l							
Thallium	ND	1.0	0.20	ug/l							
LCS Analyzed: 01/08/2008 (8A08129-BS1)											
Antimony	78.0	2.0	0.20	ug/l	80.0		98	85-115			
Cadmium	79.9	1.0	0.11	ug/l	80.0		100	85-115			
Copper	76.8	2.0	0.75	ug/l	80.0		96	85-115			
Lead	85.3	1.0	0.30	ug/l	80.0		107	85-115			
Thallium	86.4	1.0	0.20	ug/l	80.0		108	85-115			
Matrix Spike Analyzed: 01/08/2008 (8A08129-MS1)						**Source: IRA0393-01**					
Antimony	79.2	2.0	0.20	ug/l	80.0	0.570	98	70-130			
Cadmium	76.6	1.0	0.11	ug/l	80.0	ND	96	70-130			
Copper	76.2	2.0	0.75	ug/l	80.0	2.23	92	70-130			
Lead	83.2	1.0	0.30	ug/l	80.0	ND	104	70-130			
Thallium	84.3	1.0	0.20	ug/l	80.0	ND	105	70-130			
Matrix Spike Dup Analyzed: 01/08/2008 (8A08129-MSD1)						**Source: IRA0393-01**					
Antimony	79.1	2.0	0.20	ug/l	80.0	0.570	98	70-130	0	20	
Cadmium	76.4	1.0	0.11	ug/l	80.0	ND	96	70-130	0	20	
Copper	76.0	2.0	0.75	ug/l	80.0	2.23	92	70-130	0	20	
Lead	82.9	1.0	0.30	ug/l	80.0	ND	104	70-130	0	20	
Thallium	83.6	1.0	0.20	ug/l	80.0	ND	104	70-130	1	20	

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA0393

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

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8A06026 Extracted: 01/06/08											
Blank Analyzed: 01/06/2008 (8A06026-BLK1)											
Chloride	ND	0.50	0.25	mg/l							
Nitrate/Nitrite-N	ND	0.26	0.15	mg/l							
Sulfate	0.320	0.50	0.20	mg/l							*Ja*
LCS Analyzed: 01/06/2008 (8A06026-BS1)											
Chloride	4.53	0.50	0.25	mg/l	5.00		91	90-110			
Sulfate	9.97	0.50	0.20	mg/l	10.0		100	90-110			
Matrix Spike Analyzed: 01/06/2008 (8A06026-MS1)						**Source: IRA0399-01**					
Chloride	12.9	0.50	0.25	mg/l	5.00	7.84	101	80-120			
Sulfate	22.3	0.50	0.20	mg/l	10.0	12.0	103	80-120			
Matrix Spike Dup Analyzed: 01/06/2008 (8A06026-MSD1)						**Source: IRA0399-01**					
Chloride	12.6	0.50	0.25	mg/l	5.00	7.84	94	80-120	3	20	
Sulfate	21.6	0.50	0.20	mg/l	10.0	12.0	96	80-120	3	20	
Batch: 8A07065 Extracted: 01/07/08											
Blank Analyzed: 01/07/2008 (8A07065-BLK1)											
Hexane Extractable Material (Oil & Grease)	ND	5.0	1.4	mg/l							
LCS Analyzed: 01/07/2008 (8A07065-BS1)											**MNR1**
Hexane Extractable Material (Oil & Grease)	17.9	5.0	1.4	mg/l	20.2		89	78-114			
LCS Dup Analyzed: 01/07/2008 (8A07065-BSD1)											
Hexane Extractable Material (Oil & Grease)	18.6	5.0	1.4	mg/l	20.2		92	78-114	4	11	

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA0393

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

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8A08083 Extracted: 01/08/08											
Blank Analyzed: 01/08/2008 (8A08083-BLK1)											
Total Dissolved Solids	ND	10	10	mg/l							
LCS Analyzed: 01/08/2008 (8A08083-BS1)											
Total Dissolved Solids	992	10	10	mg/l	1000		99	90-110			
Duplicate Analyzed: 01/08/2008 (8A08083-DUP1)						**Source: IRA0479-01**					
Total Dissolved Solids	1930	10	10	mg/l		1940			0	10	

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004

Report Number: IRA0393

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

METHOD BLANK/QC DATA

Metals by EPA 200 Series Methods

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: W8A0148 Extracted: 01/08/08											
Blank Analyzed: 01/09/2008 (W8A0148-BLK1)											
Mercury, Dissolved	ND	0.20	0.050	ug/l							
Mercury, Total	ND	0.20	0.050	ug/l							
LCS Analyzed: 01/09/2008 (W8A0148-BS1)											
Mercury, Dissolved	0.965	0.20	0.050	ug/l	1.00		96	85-115			
Mercury, Total	0.965	0.20	0.050	ug/l	1.00		96	85-115			
Matrix Spike Analyzed: 01/09/2008 (W8A0148-MS1)						**Source: 7120722-01**					
Mercury, Dissolved	1.97	0.40	0.10	ug/l	2.00	ND	98	70-130			
Mercury, Total	1.97	0.40	0.10	ug/l	2.00	ND	98	70-130			
Matrix Spike Analyzed: 01/09/2008 (W8A0148-MS2)						**Source: 7120722-03**					
Mercury, Dissolved	1.88	0.40	0.10	ug/l	2.00	ND	94	70-130			
Mercury, Total	1.88	0.40	0.10	ug/l	2.00	ND	94	70-130			
Matrix Spike Dup Analyzed: 01/09/2008 (W8A0148-MSD1)						**Source: 7120722-01**					
Mercury, Dissolved	1.92	0.40	0.10	ug/l	2.00	ND	96	70-130	2	20	
Mercury, Total	1.92	0.40	0.10	ug/l	2.00	ND	96	70-130	2	20	
Matrix Spike Dup Analyzed: 01/09/2008 (W8A0148-MSD2)						**Source: 7120722-03**					
Mercury, Dissolved	1.96	0.40	0.10	ug/l	2.00	ND	98	70-130	4	20	
Mercury, Total	1.96	0.40	0.10	ug/l	2.00	ND	98	70-130	4	20	

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA0393

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

DATA QUALIFIERS AND DEFINITIONS

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
Ja	Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). The user of this data should be aware that this data is of limited reliability.
MNR1	There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike/Blank Spike Duplicate.
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
RPD	Relative Percent Difference

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004

Report Number: IRA0393

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

Certification Summary

TestAmerica Irvine

Method	Matrix	Nelac	California
EDD + Level 4	Water		
EPA 1664A	Water		
EPA 200.8-Diss	Water	X	X
EPA 200.8	Water	X	X
EPA 300.0	Water	X	X
SM2540C	Water	X	

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

Subcontracted Laboratories

Aquatic Testing Laboratories-SUB *California Cert #1775*
4350 Transport Street, Unit 107 - Ventura, CA 93003

Analysis Performed: Bioassay-7 dy Chrnic
Samples: IRA0393-01

Eberline Services - SUB
2030 Wright Avenue - Richmond, CA 94804

Analysis Performed: Gamma Spec
Samples: IRA0393-01

Analysis Performed: Gross Alpha
Samples: IRA0393-01

Analysis Performed: Gross Beta
Samples: IRA0393-01

Analysis Performed: Radium, Combined
Samples: IRA0393-01

Analysis Performed: Strontium 90
Samples: IRA0393-01

Analysis Performed: Tritium
Samples: IRA0393-01

Analysis Performed: Uranium, Combined
Samples: IRA0393-01

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA0393

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

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: IRA0393-01

Weck Laboratories, Inc

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

Method Performed: EPA 245.1
Samples: IRA0393-01

TestAmerica Irvine

Joseph Doak
Project Manager

Test America Version 12/20/07 — CHAIN OF CUSTODY FORM

IRA0393 IRA0393

Client Name/Address:
MWH-Arcadia
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Test America Contact: Joseph Doak

Project:
Boeing-SSFL NPDES
Routine Outfall 004
Stormwater at SRE-1

Project Manager: Bronwyn Kelly

Sampler: Mariscal, J / Barroso, R

Phone Number:
(626) 568-6691
Fax Number:
(626) 568-6515

ANALYSIS REQUIRED

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #	Total Recoverable Metals: Sb, Cd, Cu, Pb, Hg, Tl	TCDD (and all congeners)	Oil & Grease (1664-HEM)	Cl⁻, SO_4, NO_3+NO_2-N	TDS	Gross Alpha(900.0), Gross Beta(900.0), Tritium (H-3) (906.0), Sr-90 (905.0), Total Combined Radium 226 (903.0 or 903.1) & Radium 228 (904.0), Uranium (908.0), K-40, CS-137 (901.0 or 901.1)	**Chronic Toxicity**	Total Dissolved Metals: Sb, Cd, Cu, Pb, Hg, Tl	Comments
Outfall 004	W	1L Poly	1	1-5-08 1125	HNO_3	1A	X								
Outfall 004-Dup	W	1L Poly	1	↓	HNO_3	1B	X								
Outfall 004	W	1L Amber	2	↓	None	2A, 2B		X							
Outfall 004	W	1L Amber	2	↓	HCl	3A, 3B			X						
Outfall 004	W	500 ml Poly	2	↓	None	4A, 4B				X					
Outfall 004	W	500 ml Poly	1	↓	None	5					X				
Outfall 004	W	2.5 Gal Cube 500 ml Amber	1 1	↓	None None	6A 6B						X			Unfiltered and unpreserved analysis
Outfall 004	W	1 Gal Poly	1	↓	None	7							X		**Only test if second rain event of the year**
Outfall 004	W	1L Poly	1	1-5-08 1125	None	8								X	Filter w/in 24hrs of receipt at lab

Field readings:
Temp = [illegible]
pH = 7.9
Time of readings = 11:25

AO 1/5/08 20:00

Relinquished By	Date/Time:	Received By	Date/Time:
Ruben Barroso	1-5-08 1535	[signature] TA-I	1/05/08 1535
[signature]	1/05/08 1900	Anyela Orosco	1/5/08 19:00

Turn around Time: (check)
24 Hours ____ 5 Days ____
48 Hours ____ 10 Days ____
72 Hours ____ Normal X

Sample Integrity: (check)
Intact X On Ice: 3°C

LABORATORY REPORT

Aquatic Testing Laboratories

"dedicated to providing quality aquatic toxicity testing"

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

Date: January 13, 2008

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

Laboratory No.: A-08010503
Sample I.D.: IRA0393-01 (Outfall 004)

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:	01/05/08
Date Received:	01/05/08
Temp. Received:	6°C
Chlorine (TRC):	0.0 mg/l
Date Tested:	01/06/08 to 01/12/08

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:

	NOEC	TUc
Ceriodaphnia Survival:	100%	1.0
Ceriodaphnia Reproduction:	100%	1.0

Quality Control: Reviewed and approved by:

Joseph A. LeMay
Laboratory Director

CERIODAPHNIA CHRONIC BIOASSAY
EPA METHOD 1002.0

Aquatic Testing Laboratories

Lab No.: A-08010503-001
Client/ID: Test America – Outfall 004

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

TEST SUMMARY

Test type: Daily static-renewal.
Species: *Ceriodaphnia dubia*.
Age: < 24 hrs; all released within 8 hrs.
Test vessel size: 30 ml.
Number of test organisms per vessel: 1.
Temperature: 25 +/- 1°C.
Dilution water: Mod. hard reconstituted (MHRW).
QA/QC Batch No.: RT-080106.

Endpoints: Survival and Reproduction.
Source: In-laboratory culture.
Food: .1 ml YTC, algae per day.
Test solution volume: 15 ml.
Number of replicates: 10.
Photoperiod: 16/8 hrs. light/dark cycle.
Test duration: 6 days.
Statistics: ToxCalc computer program.

RESULTS SUMMARY

Sample Concentration	Percent Survival	Mean Number of Young Per Female
Control	100%	19.4
100% Sample	100%	21.2
* 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 (19.4 young)
≥60% surviving controls had 3 broods	Pass (80% with 3 broods)
PMSD <47% for reproduction; if >47% and no toxicity at IWC, the test must be repeated	Pass (PMSD = 20.0%)
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-Survival Day 6

Start Date:	1/6/2008 13:00	Test ID:	8010503c	Sample ID:	Outfall 004
End Date:	1/12/2008 13:00	Lab ID:	CAATL-Aquatic Testing Labs	Sample Type:	EFF2-Industrial
Sample Date:	1/5/2008 11:25	Protocol:	FWCH 4TH-EPA-821-R-02-0	Test Species:	CD-Ceriodaphnia dubia
Comments:					

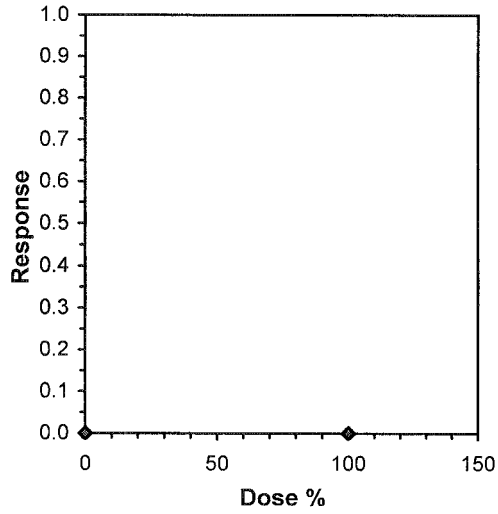
Conc-%	1	2	3	4	5	6	7	8	9	10
D-Control	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Conc-%	Mean	N-Mean	Resp	Not Resp	Total	N	Fisher's Exact P	1-Tailed Critical	Isotonic Mean	Isotonic 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:	1/6/2008 13:00	Test ID:	8010503c	Sample ID:	Outfall 004
End Date:	1/12/2008 13:00	Lab ID:	CAATL-Aquatic Testing Labs	Sample Type:	EFF2-Industrial
Sample Date:	1/5/2008 11:25	Protocol:	FWCH 4TH-EPA-821-R-02-0	Test Species:	CD-Ceriodaphnia dubia

Comments:

Conc-%	1	2	3	4	5	6	7	8	9	10
D-Control	24.000	17.000	19.000	11.000	20.000	16.000	20.000	19.000	25.000	23.000
100	24.000	11.000	21.000	27.000	12.000	27.000	27.000	20.000	21.000	22.000

			Transform: Untransformed					Rank	1-Tailed	Isotonic	
Conc-%	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical	Mean	N-Mean
D-Control	19.400	1.0000	19.400	11.000	25.000	21.350	10			20.300	1.0000
100	21.200	1.0928	21.200	11.000	27.000	27.215	10	122.00	82.00	20.300	1.0000

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.05)	0.8974	0.905	-0.7809	0.02774
F-Test indicates equal variances (p = 0.34)	1.94041	6.54109		

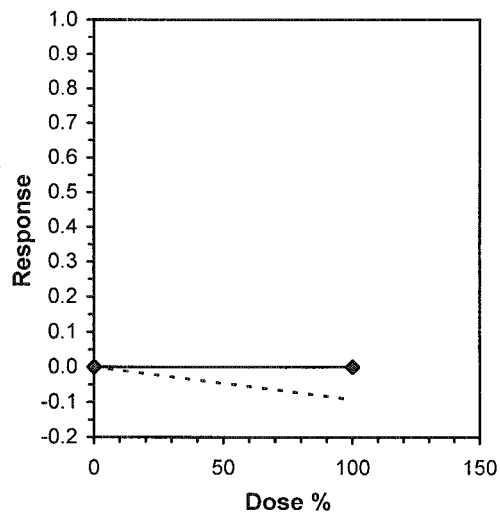
Hypothesis Test (1-tail, 0.05)

Wilcoxon Two-Sample Test indicates no significant differences

Treatments vs D-Control

Linear Interpolation (200 Resamples)

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



CERIODAPHNIA DUBIA CHRONIC BIOASSAY
EPA METHOD 1002.0 Raw Data Sheet

Aquatic Testing Laboratories

Lab No.: A-08010503
Client ID: TestAmerica - Outfall 004

Start Date: 01/06/2008

		DAY 1		DAY 2		DAY 3		DAY 4		DAY 5		DAY 6		DAY 7	
		0 hr	24hr	0 hr	24hr	0 hr	24hr	0 hr	24hr	0 hr	24hr	0 hr	24hr	0 hr	24hr
Analyst Initials:														—	—
Time of Readings:		1340	1400	1400	1340	1340	1330	1330	1340	1300	1340	1300	1340	—	—
Control	DO	7.5	7.7	7.3	8.0	7.2	7.7	7.2	7.5	7.8	8.0	7.8	8.0	—	—
	pH	7.5	7.4	7.4	7.2	7.5	7.3	7.2	7.4	7.4	7.4	7.4	7.5	—	—
	Temp	24.2	25.1	25.5	25.0	24.2	24.9	24.6	24.7	24.6	24.6	24.4	25.1	—	—
100%	DO	9.7	10.4	9.5	7.9	9.6	8.0	10.4	7.6	10.4	8.1	10.6	8.0	—	—
	pH	7.6	6.9	7.5	7.4	7.5	7.4	7.4	7.5	7.4	7.5	7.5	7.5	—	—
	Temp	25.1	25.0	25.4	25.1	24.8	24.6	24.9	24.0	24.5	24.9	25.0	25.0	—	—

Additional Parameters	Control	100% Sample
Conductivity (umohms)	350	415
Alkalinity (mg/l $CaCO_3$)	66	72
Hardness (mg/l $CaCO_3$)	98	56
Ammonia (mg/l NH_3-N)	<0.1	0.3

Source of Neonates

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

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	
	2	0	0	0	0	0	0	0	0	0	0	0	10	
	3	3	2	0	0	0	0	3	0	3	0	11	10	
	4	0	0	3	4	3	4	0	2	0	2	18	10	
	5	8	6	6	7	7	0	6	7	9	8	64	10	
	6	13	9	10	0	10	12	11	10	13	13	101	10	
	7	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	24	17	19	11	20	16	20	19	25	23	194	10	
100%	1	0	0	0	0	0	0	0	0	0	0	0	10	
	2	0	0	0	0	0	0	0	0	0	0	0	10	
	3	0	0	3	0	0	0	3	0	2	0	8	10	
	4	3	4	0	4	3	3	0	3	0	2	22	10	
	5	9	7	8	10	9	9	8	7	8	8	83	10	
	6	12	0	10	13	0	15	16	10	11	12	99	10	
	7	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	24	11	21	27	12	27	27	20	21	22	212	10	

Circled fourth brood not used in statistical analysis.
7th day only used if <60% of the surviving control females have produced their third brood.

Test America Version 12/20/07

CHAIN OF CUSTODY FORM

Client Name/Address:
MWH-Arcadia
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Test America Contact: Joseph Doak

Project:
Boeing-SSFL NPDES
Routine Outfall 004
Stormwater at SRE-1

Project Manager: Bronwyn Kelly

Sampler: Mariscal, J. Barroso, R.

Phone Number:
(626) 568-6691
Fax Number:
(626) 568-6515

ANALYSIS REQUIRED

Field readings:
Temp = 11cel. = 51.8°
pH = 7.9
Time of readings = 11:25

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #	Total Recoverable Metals: Sb, Cd, Cu, Pb, Hg, Tl	TCDD (and all congeners)	Oil & Grease (1664-HEM)	Cl^-, SO_4, NO_3+NO_2-N	TDS	Gross Alpha(900.0), Gross Beta(900.0), Tritium (H-3) (906.0), Sr-90 (905.0), Total Combined Radium 226 (903.0 or 903.1) & Radium 228 (904.0), Uranium (908.0), K-40, CS-137 (901.0 or 901.1)	**Chronic Toxicity**	Total Dissolved Metals: Sb, Cd, Cu, Pb, Hg, Tl	**Comments**
Outfall 004	W	1L Poly	1	1-5-08 1125	HNO_3	1A	X								
Outfall 004-Dup	W	1L Poly	1	↓	HNO_3	1B	X								
Outfall 004	W	1L Amber	2	↓	None	2A, 2B		X							
Outfall 004	W	1L Amber	2	↓	HCl	3A, 3B			X						
Outfall 004	W	500 ml Poly	2	↓	None	4A, 4B				X					
Outfall 004	W	500 ml Poly	1	↓	None	5					X				
Outfall 004	W	2.5 Gal Cube 500 ml Amber	1 1	↓	None None	6A 6B						X			Unfiltered and unpreserved analysis
Outfall 004	W	1 Gal Poly	1	↓	None	7							X		**Only test if second rain event of the year**
Outfall 004	W	1L Poly	1	1-5-08 1125	None	8								X	Filter w/in 24hrs of receipt at lab

Relinquished By	Date/Time:	Received By	Date/Time:
Ruben Barrera	1-5-08 1535	[signature] TAI	~~01/05~~ 1/05/08 1535
[signature] TAI	01/05/08 1700	[signature]	1-5-08 1700

Turn around Time: (check)
24 Hours ______ 5 Days ______
48 Hours ______ 10 Days ______
72 Hours ______ Normal X

Sample Integrity: (check)
Intact ______ On Ice: ______

CONTRACT ORDER

TestAmerica Irvine

IRA0393

SENDING LABORATORY:

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

RECEIVING LABORATORY:

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

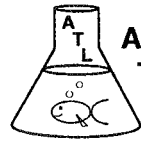
Analysis	Units	Due	Expires	Comments
Sample ID: IRA0393-01	**Water**		Sampled: **01/05/08 00:00**	
Bioassay-7 dy Chmic	N/A	01/16/08	01/06/08 12:00	Cerio, EPA/821-R02-013, Sub to AqTox Labs
Containers Supplied:				
1 gal Poly (M)				

Released By Date/Time

Released By Date/Time

Received By Date/Time 1-5-08 17:00

Received By Date/Time



Aquatic
Testing
Laboratories

REFERENCE TOXICANT DATA

CERIODAPHNIA CHRONIC BIOASSAY
EPA METHOD 1002.0
REFERENCE TOXICANT - NaCl

Aquatic Testing Laboratories

QA/QC Batch No.: RT-080106

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

TEST SUMMARY

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

Endpoints: Survival and Reproduction.
Source: In-laboratory culture.
Food: .1 ml YTC, algae per day.
Test solution volume: 20 ml.
Number of replicates: 10.
Photoperiod: 16/8 hrs. light/dark cycle.
Test duration: 6 days.
Statistics: ToxCalc computer program.

RESULTS SUMMARY

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

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

CHRONIC TOXICITY

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

QA/QC TEST ACCEPTABILITY

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

Ceriodaphnia Survival and Reproduction Test-Survival Day 6

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

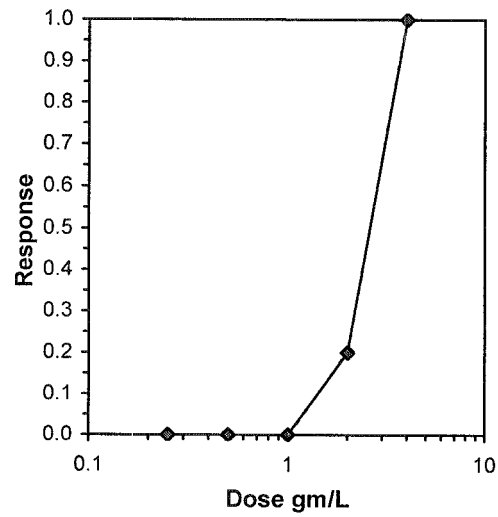
Conc-gm/L	1	2	3	4	5	6	7	8	9	10
D-Control	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.25	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.5	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000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

Conc-gm/L	Mean	N-Mean	Resp	Not Resp	Total	N	Fisher's Exact P	1-Tailed Critical	Number Resp	Total Number
D-Control	1.0000	1.0000	0	10	10	10			0	10
0.25	1.0000	1.0000	0	10	10	10	1.0000	0.0500	0	10
0.5	1.0000	1.0000	0	10	10	10	1.0000	0.0500	0	10
1	1.0000	1.0000	0	10	10	10	1.0000	0.0500	0	10
2	0.8000	0.8000	2	8	10	10	0.2368	0.0500	2	10
4	0.0000	0.0000	10	0	10	10			10	10

Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU
Fisher's Exact Test	2	4	2.82843	
Treatments vs D-Control				

Trimmed Spearman-Karber

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



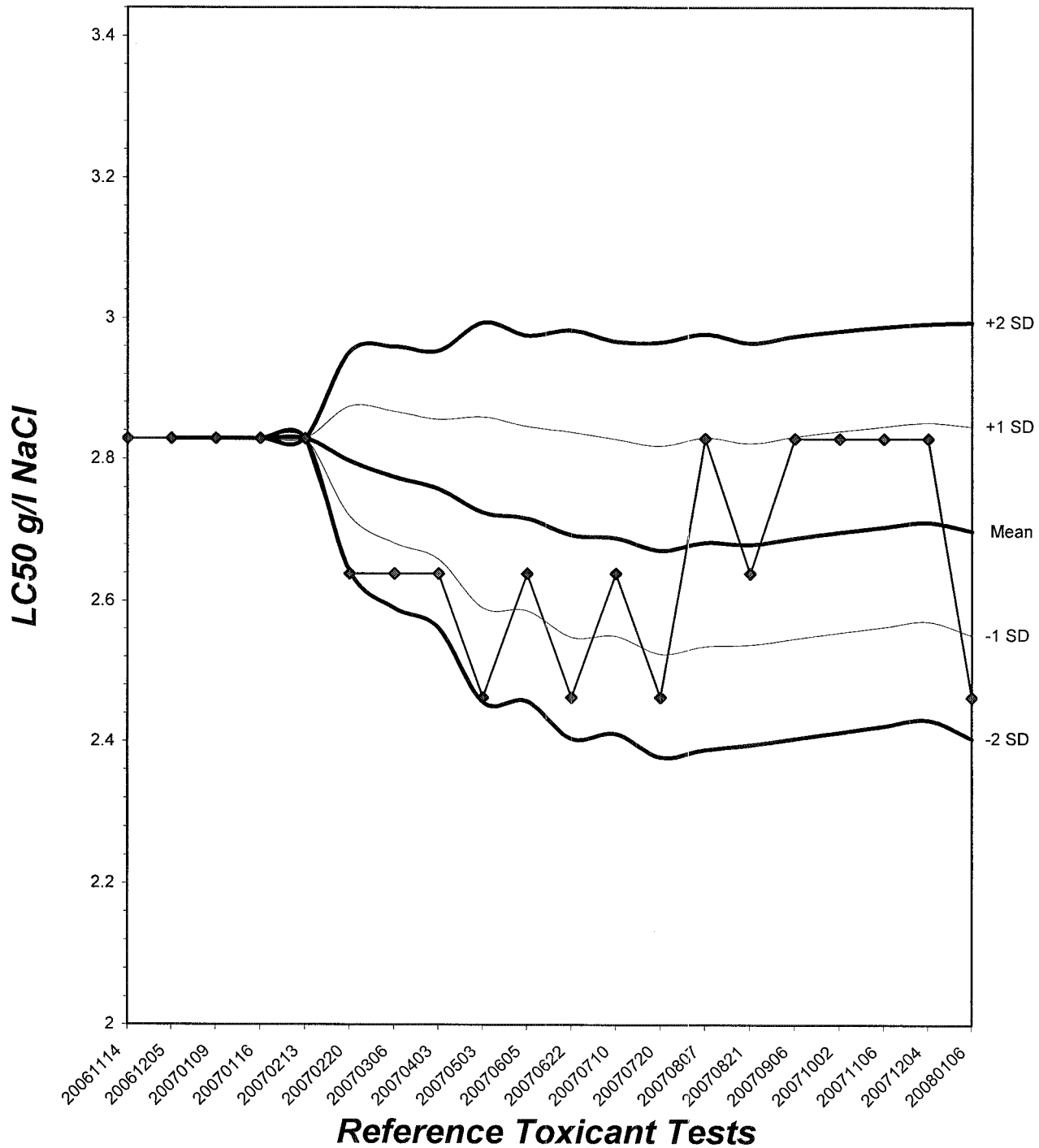
ToxCalc v5.0.23

Reviewed by:

NPDES - 922

Ceriodaphnia dubia Chronic Survival Laboratory Control Chart

CV% = 5.46



Ceriodaphnia Survival and Reproduction Test-Reproduction

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

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

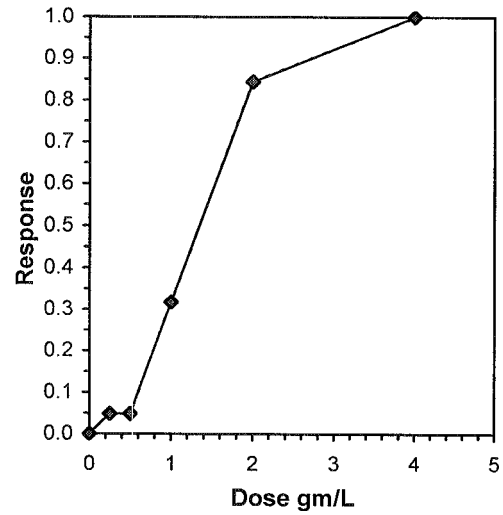
			Transform: Untransformed					Rank	1-Tailed	Isotonic	
Conc-gm/L	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical	Mean	N-Mean
D-Control	20.500	1.0000	20.500	11.000	25.000	18.432	10			20.500	1.0000
0.25	19.500	0.9512	19.500	9.000	25.000	26.177	10	102.00	76.00	19.500	0.9512
0.5	19.500	0.9512	19.500	12.000	22.000	16.617	10	94.50	76.00	19.500	0.9512
*1	14.000	0.6829	14.000	8.000	19.000	32.819	10	62.50	76.00	14.000	0.6829
*2	3.200	0.1561	3.200	0.000	8.000	76.263	10	55.00	76.00	3.200	0.1561
4	0.000	0.0000	0.000	0.000	0.000	0.000	10			0.000	0.0000

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.05)	0.91281	0.947	-0.9793	0.67912
Bartlett's Test indicates equal variances (p = 0.25)	5.39	13.2767		

Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU
Steel's Many-One Rank Test	0.5	1	0.70711	
Treatments vs D-Control				

Linear Interpolation (200 Resamples)

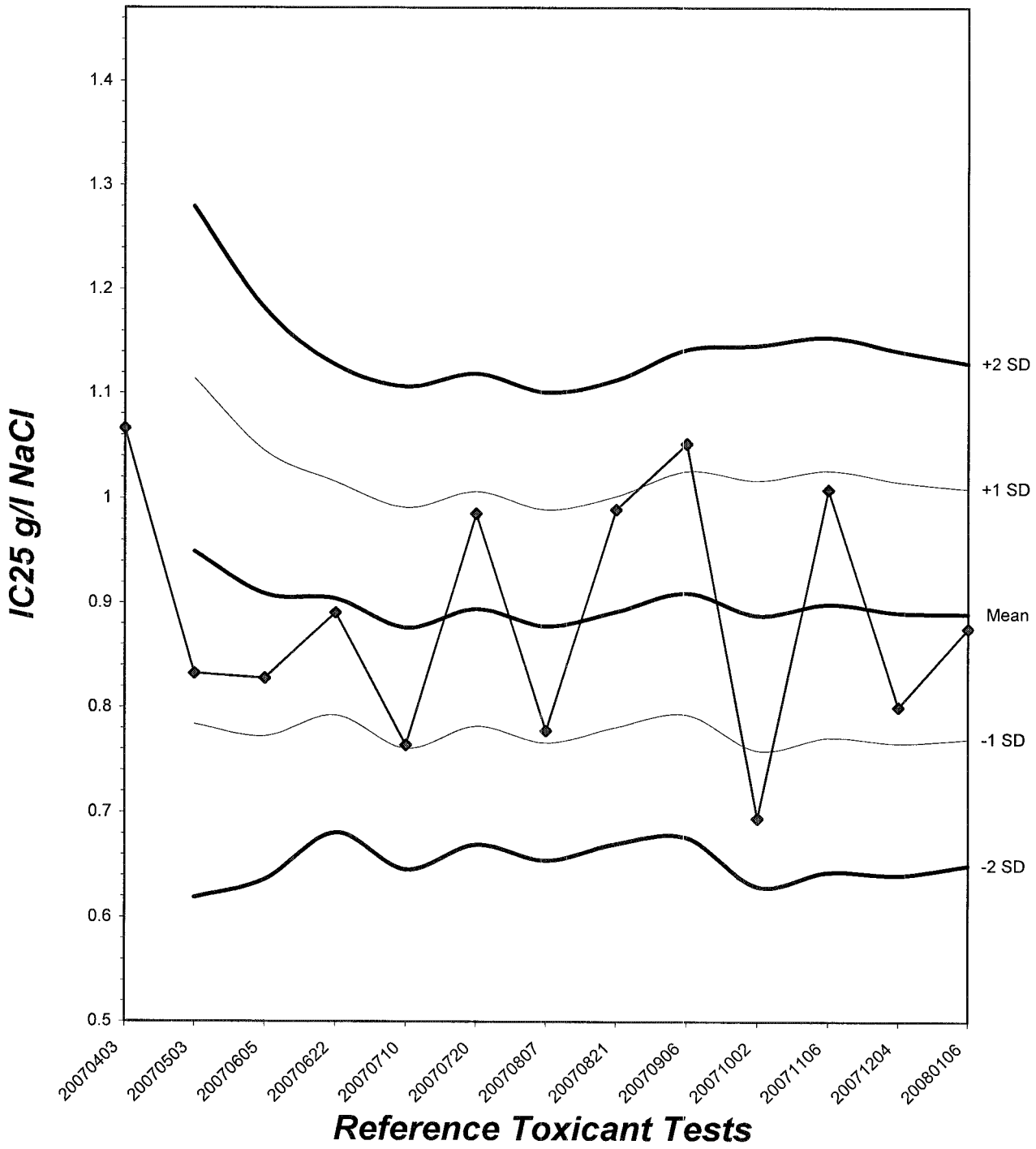
Point	gm/L	SD	95% CL		Skew
IC05	0.5023	0.1876	0.0809	0.6178	-0.0659
IC10	0.5955	0.1768	0.1617	0.7497	-0.5184
IC15	0.6886	0.1424	0.2426	0.9253	-0.5389
IC20	0.7818	0.1259	0.4995	1.0352	0.2728
IC25	0.8750	0.1224	0.6413	1.1094	0.3153
IC40	1.1574	0.1139	0.9216	1.3331	-0.0890
IC50	1.3472	0.0972	1.1197	1.4847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



Reviewed by: _____

Ceriodaphnia dubia Chronic Reproduction Laboratory Control Chart

CV% = 13.5



CERIODAPHNIA DUBIA CHRONIC BIOASSAY
Reference Toxicant - NaCl
Reproduction and Survival Raw Data Sheet

Aquatic Testing Laboratories

QA/QC No.: RT-080106

Start Date: 01/06/2008

Sample	Day	Number of Young Produced										Total Live Young	No. Live Adults	Analyst Initials
		A	B	C	D	E	F	G	H	I	J			
Control	1	0	0	0	0	0	0	0	0	0	0	0	10	
	2	0	0	0	0	0	0	0	0	0	0	0	10	
	3	0	0	2	0	0	0	3	0	3	0	8	10	
	4	4	3	0	4	3	2	0	2	0	3	21	10	
	5	9	8	7	7	6	7	6	7	6	7	70	10	
	6	10	0	12	10	14	11	10	13	11	15	106	10	
	7	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	23	11	21	21	23	20	19	22	20	25	205	10	
0.25 g/l	1	0	0	0	0	0	0	0	0	0	0	0	10	
	2	0	0	0	0	0	0	0	0	0	0	0	10	
	3	0	3	0	3	0	2	0	0	3	0	11	10	
	4	4	0	2	0	3	6	4	2	0	3	24	10	
	5	8	8	7	5	6	0	7	6	7	8	62	10	
	6	0	13	10	14	0	12	10	13	12	14	98	10	
	7	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	12	24	19	22	9	20	21	21	22	25	195	10	
0.5 g/l	1	0	0	0	0	0	0	0	0	0	0	0	10	
	2	0	0	0	0	0	0	0	0	0	0	0	10	
	3	2	0	2	0	0	0	3	2	0	0	9	10	
	4	0	3	0	3	4	3	0	0	3	3	19	10	
	5	9	6	7	7	0	9	8	7	7	6	66	10	
	6	10	10	12	12	12	0	11	12	12	10	101	10	
	7	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	21	19	21	22	16	12	22	21	22	19	195	10	

Circled fourth brood not used in statistical analysis.
7th day only used if <60% of the surviving control females have produced their third brood.

CERIODAPHNIA DUBIA CHRONIC BIOASSAY
Reference Toxicant - NaCl
Reproduction and Survival Raw Data Sheet

Aquatic Testing Laboratories

QA/QC No.: RT-080106

Start Date: 01/06/2008

Sample	Day	Number of Young Produced										Total Live Young	No. Live Adults	Analyst Initials
		A	B	C	D	E	F	G	H	I	J			
1.0 g/l	1	0	0	0	0	0	0	0	0	0	0	0	10	
	2	0	0	0	0	0	0	0	0	0	0	0	10	
	3	0	0	0	0	0	3	0	0	2	0	5	10	
	4	3	2	2	3	0	0	3	2	0	2	17	10	
	5	5	7	7	4	5	7	5	4	7	6	57	10	
	6	11	0	0	12	9	0	8	11	10	0	61	10	
	7	–	–	–	–	–	–	–	–	–	–	–	–	–
	Total	19	9	9	19	14	10	16	17	19	8	140	10	
2.0 g/l	1	0	0	0	0	0	0	0	0	X	0	0	9	
	2	0	0	0	0	0	0	0	0	–	0	0	9	
	3	0	0	0	0	0	0	0	0	–	0	0	9	
	4	2	0	2	3	0	0	0	2	–	0	9	9	
	5	3	0	0	2	2	3	3	0	–	0	13	9	
	6	3	2	0	0	2	0	0	3	–	X	10	8	
	7	–	–	–	–	–	–	–	–	–	–	–	–	–
	Total	8	2	2	5	4	3	3	5	0	0	32	8	
4.0 g/l	1	X	X	X	X	X	X	X	X	X	X	0	0	
	2	–	–	–	–	–	–	–	–	–	–	–	–	–
	3	–	–	–	–	–	–	–	–	–	–	–	–	–
	4	–	–	–	–	–	–	–	–	–	–	–	–	–
	5	–	–	–	–	–	–	–	–	–	–	–	–	–
	6	–	–	–	–	–	–	–	–	–	–	–	–	–
	7	–	–	–	–	–	–	–	–	–	–	–	–	–
	Total	0	0	0	0	0	0	0	0	0	0	0	0	

Circled fourth brood not used in statistical analysis.
7th day only used if <60% of the surviving control females have produced their third brood.

CERIODAPHNIA DUBIA CHRONIC BIOASSAY
Reference Toxicant - NaCl
Water Chemistries Raw Data Sheet

Aquatic Testing Laboratories

QA/QC No.: RT-080106

Start Date: 01/06/2008

		DAY 1		DAY 2		DAY 3		DAY 4		DAY 5		DAY 6		DAY 7	
		Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final
Analyst Initials:														—	—
Time of Readings:		1330	1330	1330	1330	1330	1230	1230	1300	1330	1330	1330	1330	—	—
Control	DO	7.6	7.2	7.4	7.7	7.4	7.6	7.4	7.5	8.2	7.8	7.9	7.7	—	—
	pH	7.6	7.4	7.4	7.3	7.3	7.2	7.2	7.7	7.5	7.6	7.9	7.6	—	—
	Temp	24.3	25.1	25.4	24.8	24.1	24.5	24.9	25.1	24.4	25.0	24.6	25.1	—	—
0.25 g/l	DO	7.5	7.3	7.5	7.5	7.5	7.7	7.3	7.4	8.2	7.8	7.9	7.7	—	—
	pH	7.5	7.3	7.4	7.4	7.4	7.2	7.3	7.4	7.6	7.5	7.6	7.7	—	—
	Temp	24.4	25.2	25.3	24.5	24.2	24.5	24.7	25.0	24.4	25.1	24.6	25.1	—	—
0.5 g/l	DO	7.4	7.2	7.4	7.6	7.4	7.5	7.4	7.6	8.5	7.6	8.0	7.8	—	—
	pH	7.5	7.3	7.4	7.4	7.4	7.2	7.3	7.5	7.6	7.5	7.7	7.7	—	—
	Temp	24.3	25.1	25.3	24.5	24.1	25.2	24.6	24.5	24.4	24.5	24.4	24.5	—	—
1.0 g/l	DO	7.5	7.2	7.6	7.7	7.3	7.8	7.4	7.4	8.4	7.8	7.7	7.7	—	—
	pH	7.5	7.3	7.6	7.5	7.4	7.2	7.3	7.5	7.6	7.6	7.5	7.6	—	—
	Temp	24.4	25.2	25.1	24.7	24.2	25.2	24.6	25.0	24.4	24.5	24.6	25.0	—	—
2.0 g/l	DO	7.4	7.4	7.6	7.5	7.4	7.8	7.2	7.6	8.2	7.6	7.6	7.7	—	—
	pH	7.5	7.4	7.6	7.6	7.4	7.3	7.2	7.6	7.5	7.6	7.9	7.6	—	—
	Temp	24.5	25.1	25.0	24.6	24.2	25.3	24.8	25.2	24.4	24.8	24.6	25.1	—	—
4.0 g/l	DO	7.5	7.8	—	—	—	—	—	—	—	—	—	—	—	—
	pH	7.6	7.8	—	—	—	—	—	—	—	—	—	—	—	—
	Temp	24.3	24.6	—	—	—	—	—	—	—	—	—	—	—	—

Dissolved Oxygen (DO) readings are in mg/l O_2; Temperature (Temp) readings are in °C.

Additional Parameters	Control			High Concentration		
	Day 1	Day 3	Day 5	Day 1	Day 3	Day 5
Conductivity (µS)	350	348	305	6400	3100	3210
Alkalinity (mg/l $CaCO_3$)	66	65	63	65	66	64
Hardness (mg/l $CaCO_3$)	98	97	98	98	97	98

Source of Neonates

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

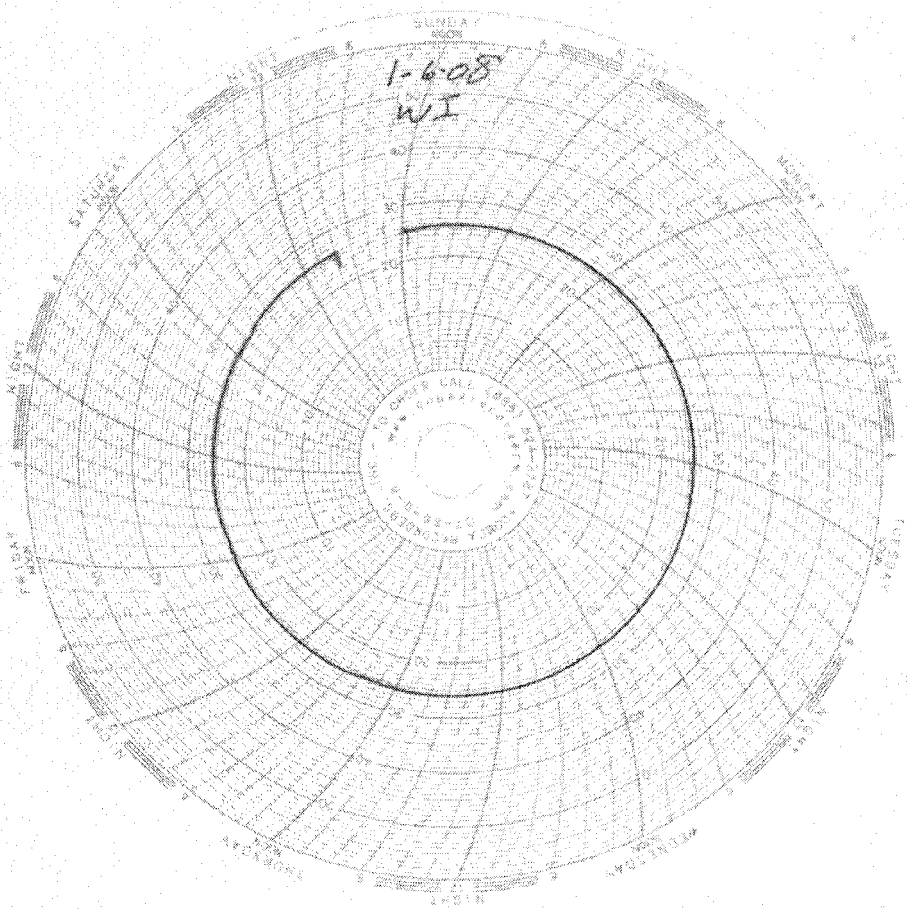
Aquatic Testing Laboratories

Laboratory Temperature Chart

QA/QC Batch No: RT-080106

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

Acceptable Range: 25+/- 1°C



EBERLINE
SERVICES

February 20, 2008

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

Reference: Test America Project Nos. IRA0393, IRA0398, IRA0399, IRA0400, IRA0906
Eberline Services NELAP Cert #01120CA
Eberline Services Reports R801023-8676, R801024-8677, R801025-8678
R801029-8679, R801048-8680

Dear Mr. Doak:

Enclosed are results from the analyses of five water samples. Four of the samples were received at Eberline Services on January 8, and one on January 12, 2008. The samples were analyzed according to the accompanying Test America Subcontract Order Forms, the requested analyses were: gross alpha/gross beta (EPA 900.0), tritium (H-3, EPA906.0), Sr-90 (EPA905.0), Ra-226 (EPA903.1), Ra-228 (EPA 904.0), total uranium (ASTM D-5174), and gamma spectroscopy (EPA901.1, K-40 and Cs-137). Batch quality control samples consisted of LCS's, blank analyses, duplicate analyses, and matrix spike analyses (gross alpha/gross beta, H-3, Ra-226, Total-U only). All QC sample results were within the limits defined in Eberline Services Quality Control Procedures Manual.

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

Regards,

Melissa Mannion

Melissa Mannion
Senior Program Manager

MCM/njv

Enclosure: Reports/CoC's
Invoices

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

Eberline Services

ANALYSIS RESULTS

SDG 8676 | Client TA IRVINE
Work Order R801023-01 | Contract PR0JECT# IRA0393
Received Date 01/08/08 | Matrix WATER

Client Sample ID	Lab Sample ID	Collected	Analyzed	Nuclide	Results ± 2σ	Units	MDA
IRA0393-01	8676-001	01/05/08	01/21/08	GrossAlpha	0.784 ± 2.0	pCi/L	2.8
			01/21/08	Gross Beta	62.4 ± 2.4	pCi/L	2.1
			01/23/08	Ra-228	0.135 ± 0.17	pCi/L	0.44
			02/01/08	K-40 (G)	62.0 ± 8.4	pCi/L	5.3
			02/01/08	Cs-137 (G)	U	pCi/L	0.54
			01/23/08	H-3	-15.1 ± 88	pCi/L	150
			01/25/08	Ra-226	0.081 ± 0.44	pCi/L	0.81
			01/28/08	Sr-90	0.063 ± 0.44	pCi/L	1.0
			02/15/08	Total U	2.58 ± 0.29	pCi/L	0.021

Certified by
Report Date 02/19/08

Eberline Services

QC RESULTS

SDG 8676 Client TA IRVINE
Work Order R801023-01 Contract PROJECT# IRA0393
Received Date 01/08/08 Matrix WATER

Lab Sample ID	Nuclide	Results	Units	Amount Added	MDA	Evaluation
LCS						
8676-002	GrossAlpha	13.0 ± 0.93	pCi/Smpl	10.1	0.43	129% recovery
	Gross Beta	9.21 ± 0.38	pCi/Smpl	9.41	0.29	98% recovery
	Ra-228	7.16 ± 0.54	pCi/Smpl	7.97	0.85	90% recovery
	Co-60 (G)	220 ± 17	pCi/Smpl	228	11	96% recovery
	Cs-137 (G)	256 ± 14	pCi/Smpl	236	9.8	108% recovery
	H-3	189 ± 14	pCi/Smpl	203	15	93% recovery
	Ra-226	4.87 ± 0.23	pCi/Smpl	4.46	0.083	109% recovery
	Sr-90	8.90 ± 0.73	pCi/Smpl	9.40	0.33	95% recovery
	Total U	1.05 ± 0.12	pCi/Smpl	1.13	0.004	93% recovery
BLANK						
8676-003	GrossAlpha	0.067 ± 0.16	pCi/Smpl	NA	0.27	<MDA
	Gross Beta	-0.079 ± 0.26	pCi/Smpl	NA	0.44	<MDA
	Ra-228	-0.491 ± 0.26	pCi/Smpl	NA	0.79	<MDA
	K-40 (G)	U	pCi/Smpl	NA	220	<MDA
	Cs-137 (G)	U	pCi/Smpl	NA	8.0	<MDA
	H-3	-1.49 ± 8.7	pCi/Smpl	NA	15	<MDA
	Ra-226	-0.012 ± 0.035	pCi/Smpl	NA	0.083	<MDA
	Sr-90	-0.030 ± 0.18	pCi/Smpl	NA	0.45	<MDA
	Total U	0.00E 00 ± 1.8E-04	pCi/Smpl	NA	4.2E-04	<MDA

DUPLICATES				ORIGINALS					
Sample ID	Nuclide	Results ± 2σ	MDA	Sample ID	Results ± 2σ	MDA	RPD	3σ (Tot)	Eval
8676-004	GrossAlpha	-0.027 ± 1.1	1.9	8676-001	0.784 ± 2.0	2.8	-	0	satis.
	Gross Beta	62.4 ± 2.4	2.4		62.4 ± 2.4	2.1	0	43	satis.
	K-40 (G)	U	32		62.0 ± 8.4	5.3	64	108	satis.
	Cs-137 (G)	U	1.1		U	0.54	-	0	satis.
	H-3	-71.6 ± 86	150		-15.1 ± 88	150	-	0	satis.
	Ra-226	-0.062 ± 0.36	0.71		0.081 ± 0.44	0.81	-	0	satis.
	Sr-90	-0.067 ± 0.35	0.86		0.063 ± 0.44	1.0	-	0	satis.
	Total U	2.58 ± 0.29	0.021		2.58 ± 0.29	0.021	0	31	satis.

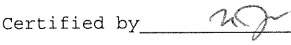
SPIKED SAMPLE				ORIGINAL SAMPLE				
Sample ID	Nuclide	Results ± 2σ	MDA	Sample ID	Results ± 2σ	MDA	Added	%Recv

Certified by
Report Date 02/19/08

Eberline Services

SDG 8676 | Client TA IRVINE
Work Order R801023-01 | Contract PR0JECT# IRA0393
Received Date 01/08/08 | Matrix WATER

8676-005	GrossAlpha	154 ± 8.1	2.8	8676-001	0.784 ± 2.0	2.8	115	133
	Gross Beta	161 ± 3.3	1.5		62.4 ± 2.4	2.1	102	97
	H-3	15700 ± 510	260		-15.1 ± 88	150	16100	98
	Ra-226	116 ± 4.3	0.75		0.081 ± 0.44	0.81	112	103
	Total U	111 ± 14	2.1		2.58 ± 0.29	0.021	113	96

Certified by 
Report Date 02/19/08

SUBCONTRACT ORDER

TestAmerica Irvine

8674

IRA0393

SENDING LABORATORY:

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

RECEIVING LABORATORY:

Eberline Services - SUB
2030 Wright Avenue
Richmond, CA 94804
Phone :(510) 235-2633
Fax: (510) 235-0438
Project Location: California
Receipt Temperature: 4.5 °C Ice: (Y) / N

Analysis	Units	Due	Expires	Comments
Sample ID: IRA0393-01	**Water**		Sampled: **01/05/08 11:25**	**ph=7.9. temp=51.8**
Gamma Spec-O	mg/kg	01/16/08	01/04/09 11:25	Out to Eberline, K-40 and CS-137 only
Gross Alpha-O	pCi/L	01/16/08	07/03/08 11:25	Out to Eberline
Gross Beta-O	pCi/L	01/16/08	07/03/08 11:25	Out to Eberline
Level 4 Data Package - Out	N/A	01/16/08	02/02/08 11:25	
Radium, Combined-O	pCi/L	01/16/08	01/04/09 11:25	Out to Eberline
Strontium 90-O	pCi/L	01/16/08	01/04/09 11:25	Out to Eberline
Tritium-O	pCi/L	01/16/08	01/04/09 11:25	Out to Eberline
Uranium, Combined-O	pCi/L	01/16/08	01/04/09 11:25	Out to Eberline

Containers Supplied:

2.5 gal Poly (K) 500 mL Amber (L)

Released By	Date/Time	Received By	Date/Time
	1/7/08 17:00	FedEx	1/7/08 1700
Released By	Date/Time	Received By	Date/Time
			01/08/08 09:30

NPDES - 934

Vista
Analytical Laboratory

January 23, 2008

Vista Project I.D.: 30120

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

Dear Mr. Doak,

Enclosed are the results for the one aqueous sample received at Vista Analytical Laboratory on January 08, 2008 under your Project Name "IRA0393". This sample was extracted and analyzed using EPA Method 1613 for tetra-through-octa chlorinated dioxins and furans. A standard turnaround time was provided for this work.

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

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

Sincerely,

Martha M. Maier
Laboratory Director

ACCREDITED IN ACCORDANCE WITH nelac

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

Section I: Sample Inventory Report

Date Received: **1/8/2008**

Vista Lab. ID	Client Sample ID
30120-001	IRA0393-01

SECTION II

Method Blank **EPA Method 1613**

Matrix:	Aqueous	QC Batch No.:	9886	Lab Sample:	0-MB001
Sample Size:	1.00 L	Date Extracted:	17-Jan-08	Date Analyzed DB-5:	19-Jan-08
				Date Analyzed DB-225:	NA

Analyte	Conc. (ug/L)	DL [a]	EMPC [b]	Qualifiers
2,3,7,8-TCDD	ND	0.00000111		
1,2,3,7,8-PeCDD	ND	0.00000171		
1,2,3,4,7,8-HxCDD	ND	0.00000174		
1,2,3,6,7,8-HxCDD	ND	0.00000184		
1,2,3,7,8,9-HxCDD	ND	0.00000172		
1,2,3,4,6,7,8-HpCDD	ND	0.00000243		
OCDD	ND	0.00000780		
2,3,7,8-TCDF	ND	0.00000116		
1,2,3,7,8-PeCDF	ND	0.00000159		
2,3,4,7,8-PeCDF	ND	0.00000156		
1,2,3,4,7,8-HxCDF	ND	0.000000815		
1,2,3,6,7,8-HxCDF	ND	0.000000832		
2,3,4,6,7,8-HxCDF	ND	0.000000894		
1,2,3,7,8,9-HxCDF	ND	0.00000120		
1,2,3,4,6,7,8-HpCDF	ND	0.000000977		
1,2,3,4,7,8,9-HpCDF	ND	0.00000133		
OCDF	ND	0.00000313		

	Labeled Standard	%R	LCL-UCL [d]	Qualifiers
IS	13C-2,3,7,8-TCDD	85.7	25 - 164	
	13C-1,2,3,7,8-PeCDD	76.8	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	75.3	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	75.1	28 - 130	
	13C-1,2,3,4,6,7,8-HpCDD	87.8	23 - 140	
	13C-OCDD	70.8	17 - 157	
	13C-2,3,7,8-TCDF	83.6	24 - 169	
	13C-1,2,3,7,8-PeCDF	72.8	24 - 185	
	13C-2,3,4,7,8-PeCDF	75.3	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	72.9	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	73.2	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	76.3	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	79.4	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	88.5	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	86.1	26 - 138	
	13C-OCDF	72.3	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	105	35 - 197	

Totals		
Total TCDD	ND	0.00000111
Total PeCDD	ND	0.00000373
Total HxCDD	ND	0.00000177
Total HpCDD	ND	0.00000314
Total TCDF	ND	0.00000116
Total PeCDF	ND	0.00000157
Total HxCDF	ND	0.000000928
Total HpCDF	ND	0.00000114

Footnotes

a. Sample specific estimated detection limit.

b. Estimated maximum possible concentration.

c. Method detection limit.

d. Lower control limit - upper control limit.

Analyst: MAS

Approved By: Martha M. Maier 23-Jan-2008 08:34

OPR Results **EPA Method 1613**

Matrix:	Aqueous	QC Batch No.:	9886	Lab Sample:	0-OPR001		
Sample Size:	1.00 L	Date Extracted:	17-Jan-08	Date Analyzed DB-5:	19-Jan-08	Date Analyzed DB-225:	NA

Analyte	Spike Conc.	Conc. (ng/mL)	OPR Limits		Labeled Standard	%R	LCL-UCL	Qualifier
2,3,7,8-TCDD	10.0	10.4	6.7 - 15.8	**IS**	13C-2,3,7,8-TCDD	76.2	25 - 164	
1,2,3,7,8-PeCDD	50.0	52.4	35 - 71		13C-1,2,3,7,8-PeCDD	68.3	25 - 181	
1,2,3,4,7,8-HxCDD	50.0	52.8	35 - 82		13C-1,2,3,4,7,8-HxCDD	66.2	32 - 141	
1,2,3,6,7,8-HxCDD	50.0	51.4	38 - 67		13C-1,2,3,6,7,8-HxCDD	66.8	28 - 130	
1,2,3,7,8,9-HxCDD	50.0	52.3	32 - 81		13C-1,2,3,4,6,7,8-HpCDD	87.2	23 - 140	
1,2,3,4,6,7,8-HpCDD	50.0	51.7	35 - 70		13C-OCDD	70.1	17 - 157	
OCDD	100	103	78 - 144		13C-2,3,7,8-TCDF	74.1	24 - 169	
2,3,7,8-TCDF	10.0	9.71	7.5 - 15.8		13C-1,2,3,7,8-PeCDF	64.3	24 - 185	
1,2,3,7,8-PeCDF	50.0	50.9	40 - 67		13C-2,3,4,7,8-PeCDF	67.4	21 - 178	
2,3,4,7,8-PeCDF	50.0	51.2	34 - 80		13C-1,2,3,4,7,8-HxCDF	62.5	26 - 152	
1,2,3,4,7,8-HxCDF	50.0	51.5	36 - 67		13C-1,2,3,6,7,8-HxCDF	63.5	26 - 123	
1,2,3,6,7,8-HxCDF	50.0	52.2	42 - 65		13C-2,3,4,6,7,8-HxCDF	66.6	28 - 136	
2,3,4,6,7,8-HxCDF	50.0	52.3	35 - 78		13C-1,2,3,7,8,9-HxCDF	69.3	29 - 147	
1,2,3,7,8,9-HxCDF	50.0	51.7	39 - 65		13C-1,2,3,4,6,7,8-HpCDF	76.7	28 - 143	
1,2,3,4,6,7,8-HpCDF	50.0	50.6	41 - 61		13C-1,2,3,4,7,8,9-HpCDF	85.4	26 - 138	
1,2,3,4,7,8,9-HpCDF	50.0	51.2	39 - 69		13C-OCDF	71.9	17 - 157	
OCDF	100	104	63 - 170	**CRS**	37Cl-2,3,7,8-TCDD	84.4	35 - 197	

Analyst: MAS Approved By: Martha M. Maier 23-Jan-2008 08:34

Sample ID: **IRA0393-01** **EPA Method 1613**

Client Data		Sample Data		Laboratory Data			
Name:	Test America-Irvine, CA	Matrix:	Aqueous	Lab Sample:	30120-001	Date Received:	8-Jan-08
Project:	IRA0393	Sample Size:	1.00 L	QC Batch No.:	9886	Date Extracted:	17-Jan-08
Date Collected:	5-Jan-08			Date Analyzed DB-5:	19-Jan-08	Date Analyzed DB-225:	NA
Time Collected:	1125						

Analyte	Conc. (ug/L)	DL [a]	EMPC [b]	Qualifiers
2,3,7,8-TCDD	ND	0.00000104		
1,2,3,7,8-PeCDD	ND	0.00000201		
1,2,3,4,7,8-HxCDD	ND	0.00000184		
1,2,3,6,7,8-HxCDD	ND	0.00000363		
1,2,3,7,8,9-HxCDD	ND	0.00000177		
1,2,3,4,6,7,8-HpCDD	0.0000562			
OCDD	0.000908			
2,3,7,8-TCDF	ND	0.00000123		
1,2,3,7,8-PeCDF	ND	0.00000181		
2,3,4,7,8-PeCDF	ND	0.00000176		
1,2,3,4,7,8-HxCDF	ND	0.00000108		
1,2,3,6,7,8-HxCDF	ND	0.00000117		
2,3,4,6,7,8-HxCDF	ND	0.00000122		
1,2,3,7,8,9-HxCDF	ND	0.00000163		
1,2,3,4,6,7,8-HpCDF	0.00000763			J
1,2,3,4,7,8,9-HpCDF	ND	0.00000180		
OCDF	0.0000227			J

Labeled Standard		%R	LCL-UCL [d]	Qualifiers
IS	13C-2,3,7,8-TCDD	78.8	25 - 164	
	13C-1,2,3,7,8-PeCDD	72.0	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	69.8	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	68.1	28 - 130	
	13C-1,2,3,4,6,7,8-HpCDD	81.1	23 - 140	
	13C-OCDD	66.9	17 - 157	
	13C-2,3,7,8-TCDF	75.1	24 - 169	
	13C-1,2,3,7,8-PeCDF	66.2	24 - 185	
	13C-2,3,4,7,8-PeCDF	69.5	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	65.8	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	67.2	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	68.9	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	74.3	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	78.7	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	77.3	26 - 138	
	13C-OCDF	65.8	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	86.8	35 - 197	

Totals

Total TCDD	ND	0.00000156	
Total PeCDD	ND	0.00000348	
Total HxCDD	0.00000205		0.00000484
Total HpCDD	0.000105		
Total TCDF	ND	0.00000123	
Total PeCDF	ND	0.00000321	
Total HxCDF	0.00000395		0.00000546
Total HpCDF	0.0000326		

Footnotes

a. Sample specific estimated detection limit.

b. Estimated maximum possible concentration.

c. Method detection limit.

d. Lower control limit - upper control limit.

Analyst: MAS

Approved By: Martha M. Maier 23-Jan-2008 08:34

APPENDIX

DATA QUALIFIERS & ABBREVIATIONS

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

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

CERTIFICATIONS

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

SUBCONTRACT ORDER

TestAmerica Irvine

IRA0393 30120

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: 1.6°C

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

Analysis	Units	Due	Expires	Comments
Sample ID: IRA0393-01	**Water**		Sampled: **01/05/08 ~~00:00~~** 11:25 dw	
1613-Dioxin-HR-Alta	ug/l	01/16/08	01/12/08 00:00	J flags,17 congeners,no TEQ,ug/L,sub=Vista

Containers Supplied:
1 L Amber (C) 1 L Amber (D)

Released By 1/7/08 1700 Date/Time

Received By Fedex 1/7/08 1200 Date/Time

Released By Date/Time

Received By Bobbie L Benedict 1/8/08 1019 Date/Time

SAMPLE LOG-IN CHECKLIST

Vista Analytical Laboratory

Vista Project #: 30120 TAT Standard

Samples Arrival:	**Date/Time** 1/8/08 0909	**Initials:** JBB	**Location:** WR-2 **Shelf/Rack:** N/A
Logged In:	**Date/Time** 1/8/08 1143	**Initials:** JBB	**Location:** WR-2 **Shelf/Rack:** C3

Delivered By:	(FedEx)	UPS	Cal	DHL	Hand Delivered	Other
Preservation:	(Ice)	Blue Ice	Dry Ice	None		
Temp °C 1.6°C	**Time:** 0929	**Thermometer ID:** IR-1				

	YES	NO	NA
Adequate Sample Volume Received?	✓		
Holding Time Acceptable?	✓		
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?	✓		
Shipping Documentation Present?	✓		
Airbill / Trk # 7926 2674 3476	✓		
Sample Container Intact?	✓		
Sample Custody Seals Intact?			✓
Chain of Custody / Sample Documentation Present?	✓		
COC Anomaly/Sample Acceptance Form completed?		✓	

If Chlorinated or Drinking Water Samples, Acceptable Preservation?					✓
$Na_2S_2O_3$ Preservation Documented?	COC	Sample Container	(None)		
Shipping Container	Vista	(Client)	Retain	(Return)	Dispose

Comments:

SUBCONTRACT ORDER

TestAmerica Irvine

IRA0393 80107168

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:

Weck Laboratories, Inc-SUB
14859 E. Clark Avenue
City of Industry, CA 91745
Phone :(626) 336-2139
Fax: (626) 336-2634
Project Location: California
Receipt Temperature: 3.1 °C Ice: (Y) / N

Analysis	Units	Due	Expires	Comments
Sample ID: IRA0393-01	**Water**		Sampled: **01/05/08 ~~00:00~~** 1125	
Level 4 + EDD-OUT	N/A	01/16/08	02/02/08 00:00	
Level 4 Data Package - Wec	N/A	01/16/08	02/02/08 00:00	Out to weck
Mercury - 245.1, Diss -OUT	mg/l	01/16/08	02/02/08 00:00	Boeing, J flags/ Out to Weck
Mercury - 245.1-OUT	mg/l	01/16/08	02/02/08 00:00	Boeing, permit, J flags/ Out to Weck

Containers Supplied:
125 mL Poly w/HNO3 (N) 125 mL Poly (O)

Released By	Date/Time	Received By	Date/Time
	1/7/08 0900	TAI	1/7/08 0900
Released By	Date/Time	Received By	Date/Time
TAI	1/7/08 1420	Jaime Gomez	1/7/08 1420

Weck Laboratories, Inc.
Analytical Laboratory Services - Since 1964

14859 E. Clark Ave., Industry, CA 91745
Phone 626.336.2139 Fax 626.336.2634
info@wecklabs.com www.wecklabs.com

CERTIFICATE OF ANALYSIS

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

Phone: (949) 261-1022
Fax: (949) 260-3297

Report Date: 01/10/08 08:44
Received Date: 01/07/08 14:20
Turn Around: 7 days

Work Order #: 8010768

Client Project: IRA0393

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

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

Dear Joseph Doak :

Enclosed are the results of analyses for samples received 01/07/08 14:20 with the Chain of Custody document. The samples were received in good condition. The samples were received at 3.1 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Reviewed by:

Kim G Tu

Project Manager

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

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

Report ID: 8010768
Project ID: IRA0393

Date Received: 01/07/08 14:20
Date Reported: 01/10/08 08:44

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Sampled by:	Sample Comments	Laboratory	Matrix	Date Sampled
IRA0393-01	Client		8010768-01	Water	01/05/08 11:25

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

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

Report ID: 8010768
Project ID: IRA0393

Date Received: 01/07/08 14:20
Date Reported: 01/10/08 08:44

IRA0393-01 8010768-01 (Water) Date Sampled: 01/05/08 11:25

Metals by EPA 200 Series Methods

Analyte	Result	MDL	Units	Reporting Limit	Dilution Factor	Method	Batch Number	Date Prepared	Date Analyzed		Data Qualifiers
Mercury, Dissolved	**0.054**	0.050	ug/l	0.20	1	EPA 245.1	W8A0148	01/08/08	01/09/08	jlp	J
Mercury, Total	**0.092**	0.050	ug/l	0.20	1	EPA 245.1	W8A0148	01/08/08	01/09/08	jlp	J

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

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

Report ID: 8010768
Project ID: IRA0393

Date Received: 01/07/08 14:20
Date Reported: 01/10/08 08:44

QUALITY CONTROL SECTION

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

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

Report ID: 8010768
Project ID: IRA0393

Date Received: 01/07/08 14:20
Date Reported: 01/10/08 08:44

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch W8A0148 - EPA 245.1										
Blank (W8A0148-BLK1)				Analyzed: 01/09/08						
Mercury, Dissolved	ND	0.20	ug/l							
Mercury, Total	ND	0.20	ug/l							
LCS (W8A0148-BS1)				Analyzed: 01/09/08						
Mercury, Dissolved	0.965	0.20	ug/l	1.00		96	85-115			
Mercury, Total	0.965	0.20	ug/l	1.00		96	85-115			
Matrix Spike (W8A0148-MS1)	**Source: 7120722-01**			Analyzed: 01/09/08						
Mercury, Dissolved	1.97	0.40	ug/l	2.00	ND	98	70-130			
Mercury, Total	1.97	0.40	ug/l	2.00	ND	98	70-130			
Matrix Spike (W8A0148-MS2)	**Source: 7120722-03**			Analyzed: 01/09/08						
Mercury, Dissolved	1.88	0.40	ug/l	2.00	ND	94	70-130			
Mercury, Total	1.88	0.40	ug/l	2.00	ND	94	70-130			
Matrix Spike Dup (W8A0148-MSD1)	**Source: 7120722-01**			Analyzed: 01/09/08						
Mercury, Dissolved	1.92	0.40	ug/l	2.00	ND	96	70-130	2	20	
Mercury, Total	1.92	0.40	ug/l	2.00	ND	96	70-130	2	20	
Matrix Spike Dup (W8A0148-MSD2)	**Source: 7120722-03**			Analyzed: 01/09/08						
Mercury, Dissolved	1.96	0.40	ug/l	2.00	ND	98	70-130	4	20	
Mercury, Total	1.96	0.40	ug/l	2.00	ND	98	70-130	4	20	

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

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

Report ID: 8010768
Project ID: IRA0393

Date Received: 01/07/08 14:20
Date Reported: 01/10/08 08:44

Notes and Definitions

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

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

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

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

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

Weck Laboratories, Inc
Kim G Tu, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

APPENDIX G

Section 21

Outfall 004, January 24, 2008

MEC^{X} Data Validation Reports

DATA VALIDATION REPORT

Boeing SSFL NPDES

SAMPLE DELIVERY GROUP: IRA2350

Prepared by

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

I. INTRODUCTION

Task Order Title:	Boeing SSFL NPDES
Contract Task Order:	1261.100D.00
Sample Delivery Group:	IRA2350
Project Manager:	B. Kelly
Matrix:	Soil
QC Level:	IV
No. of Samples:	1
No. of Reanalyses/Dilutions:	0
Laboratory:	TestAmerica-Irvine

Table 1. Sample Identification

Client ID	Laboratory ID	Sub-Laboratory ID	Matrix	Collected	Method
Outfall 004	IRA2350-01	30202-001, 8012535-01	Water	01/24/08 0900	200.8, 245.1, 900.0, 901.1, 903.0, 904.0, 905.0, 906.0, 1613, ASTM D-5174

II. Sample Management

No anomalies were observed regarding sample management. The sample in this SDG was received at TestAmerica-Irvine and Vista within the temperature limits of 4°C ±2°C. The sample was received above the temperature limit at Weck; however, mercury is not considered volatile. The sample was received above the temperature limit at Eberline; however, radiological samples are not required to be chilled. According to the case narrative for this SDG, the sample was received intact at all laboratories. The COCs were appropriately signed and dated by field and/or laboratory personnel. As the sample was couriered to TestAmerica-Irvine, custody seals were not required. Custody seals were intact upon arrival at Eberline and Vista. No custody seals were present upon receipt at Weck. If necessary, the client ID was added to the sample result summary by the reviewer.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
DNQ	The reported result is above the method detection limit but is less than the reporting limit.	The reported result is above the method detection limit but is less than the reporting limit.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD 1613—Dioxin/Furans

Reviewed By: K. Shadowlight
Date Reviewed: March 1, 2008

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

- Holding Times: Extraction and analytical holding times were met. The water sample was extracted and analyzed within one year of collection.

- Instrument Performance: Instrument performance criteria were met. Following are findings associated with instrument performance.

    - GC Column Performance: A Windows Defining Mix (WDM) containing the first and last eluting congeners of each descriptor and isomer specificity compounds was not analyzed prior to the initial calibration sequence or at the beginning of each analytical sequence; however, the first and last eluting congeners and isomer specificity compounds were added to the midpoint of the initial calibration and to the continuing calibration standards. The GC column performance in the calibrations was acceptable, with the height of the valley between the closely eluting isomers and 2,3,7,8-TCDD reported as less than 25%.

    - Mass Spectrometer Performance: The mass spectrometer performance was acceptable with the static resolving power greater than 10,000.

- Calibration: Calibration criteria were met.

    - Initial Calibration: Initial calibration criteria were met. The initial calibration was acceptable with %RSDs $\leq$20% for the 16 native compounds (calibration by isotope dilution) and $\leq$35% for the one native and all labeled compounds (calibration by internal standard). The relative retention times and ion abundance ratios were within the Method 1613 QC limits for all standards.

    - Continuing Calibration: Calibration verification (VER) consisted of a mid-level standard (CS3) analyzed at the beginning of each analytical sequence. The VERs were acceptable with the concentrations within the acceptance criteria listed in Table 6 of EPA Method 1613. The ion abundance ratios and relative retention times were within the method QC limits.

- Blanks: The method blank had no target compound detects above the EDL.

- Blank Spikes and Laboratory Control Samples: Recoveries were within the acceptance criteria listed in Table 6 of Method 1613.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.

    - Field Duplicates: There were no field duplicate samples identified for this SDG.

- Internal Standards Performance: The labeled standard recoveries were within the acceptance criteria listed in Table 7 of Method 1613.

- Compound Identification: Compound identification was verified. The laboratory analyzed for polychlorinated dioxins/furans by EPA Method 1613.

- Compound Quantification and Reported Detection Limits: Compound quantitation was verified by recalculating any sample detects and a representative number of blank spike concentrations. The laboratory calculated and reported compound-specific detection limits. Any detects below the laboratory lower calibration level were qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES permit. Any EMPC value was qualified as an estimated nondetect, "UJ." Nondetects are valid to the estimated detection limit (EDL).

B. EPA METHODS 200.8, 245.1—Metals and Mercury

Reviewed By: P. Meeks
Date Reviewed: March 4, 2008

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

- Holding Times: The analytical holding times, 6 months for metals and 28 days for mercury, were met.

- Tuning: The mass calibration and resolution checks criteria were met. All tuning solution %RSDs were ≤5%, and all masses of interest were calibrated to ≤ 0.1 amu and ≤0.9 amu at 10% peak height.

- Calibration: Calibration criteria were met. Mercury initial calibration r^2 values were ≥0.995 and all initial and continuing calibration recoveries were within 90-110% for the ICP-MS

metals and 85-115% for mercury. The cadmium 0.2 ppb check standard was recovered above the control limit at 139%; however, total cadmium was not detected in the sample. All remaining check standard recoveries were within the control limits of 70-130%

- Blanks: There were no applicable detects in the method blanks or CCBs.

- Interference Check Samples: ICSA/B analyses were performed in association with the metals analyses. Recoveries were within the method-established control limits. Most analytes were reported in the 6020 ICSA solution; however, the reviewer was not able to ascertain if the detection was indicative of matrix interference.

- Blank Spikes and Laboratory Control Samples: The recoveries were within laboratory-established QC limits.

- Laboratory Duplicates: No laboratory duplicate analyses were performed.

- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were performed on the dissolved aliquot of the sample in this SDG. All recoveries and RPDs were within the laboratory-established control limits. Evaluation of the mercury method accuracy was based on LCS results.

- Serial Dilution: No serial dilution analyses were performed.

- Internal Standards Performance: All sample internal standard intensities were within 30-120% of the internal standard intensities measured in the initial calibration. The bracketing CCV and CCB internal standard intensities were within 80-120% of the internal standard intensities measured in the initial calibration.

- Sample Result Verification: Calculations were verified and the sample results reported on the sample result summary were verified against the raw data. No transcription errors or calculation errors were noted. Detects reported below the reporting limit were qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES permit. Reported nondetects are valid to the MDL.

  The reviewer noted that antimony was detected at a slightly higher concentration in the dissolved metals sample fraction. The difference between the antimony results is within the sensitivity limits of the analytical instrument and, therefore, the reviewer considered the two results to be equivalent.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

  - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.

- Field Duplicates: There were no field duplicate samples identified for this SDG.

C. VARIOUS EPA METHODS — Radionuclides

Reviewed By: P. Meeks
Date Reviewed: March 3, 2008

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

- Holding Times: The tritium sample was analyzed within 180 days of collection. Aliquots for gross alpha, gross beta, radium-226, radium-228, strontium-90, and gamma spectroscopy were prepared within the five-day analytical holding time for unpreserved samples. The aliquot for total uranium was prepared within five days of collection.

- Calibration: The laboratory calibration information included the standard certificates and applicable preparation/dilutions logs for NIST-traceability.

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

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

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

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

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

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

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

- Blank Spikes and Laboratory Control Samples: The recoveries were within laboratory-established control limits.

- Laboratory Duplicates: N0 laboratory duplicate analyses were performed on the sample in this SDG for radium-228.

- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed for the sample in this SDG. Method accuracy was evaluated based on the LCS results.

- Sample Result Verification: An EPA Level IV review was performed for the sample in this data package. The sample results and MDAs reported on the sample result form were verified against the raw data and no calculation or transcription errors were noted. Reported nondetects are valid to the MDA.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.

    - Field Duplicates: There were no field duplicate samples identified for this SDG.

Sample ID: IRA2350-01 Outfall 004 **EPA Method 1613**

Client Data		Sample Data		Laboratory Data			
Name:	Test America-Irvine, CA	Matrix:	Aqueous	Lab Sample:	30202-001	Date Received:	26-Jan-08
Project:	IRA2350	Sample Size:	1.00 L	QC Batch No.:	9917	Date Extracted:	31-Jan-08
Date Collected:	24-Jan-08			Date Analyzed DB-5:	6-Feb-08	Date Analyzed DB-225:	NA
Time Collected:	0900						

Analyte	Conc. (ug/L)	DL [a]	EMPC[b]	Qualifiers
2,3,7,8-TCDD	ND	0.00000106		
1,2,3,7,8-PeCDD	ND	0.000000729		
1,2,3,4,7,8-HxCDD	ND	0.00000201		
1,2,3,6,7,8-HxCDD	ND	0.00000317		
1,2,3,7,8,9-HxCDD	ND	0.00000199		
1,2,3,4,6,7,8-HpCDD	0.0000275			
OCDD	0.000507			
2,3,7,8-TCDF	ND	0.000000881		
1,2,3,7,8-PeCDF	ND	0.00000111		
2,3,4,7,8-PeCDF	ND	0.00000118		
1,2,3,4,7,8-HxCDF	ND	0.000000835		
1,2,3,6,7,8-HxCDF	ND	0.000000930		
2,3,4,6,7,8-HxCDF	ND	0.00000108		
1,2,3,7,8,9-HxCDF	ND	0.00000134		
1,2,3,4,6,7,8-HpCDF	ND	0.00000553		
1,2,3,4,7,8,9-HpCDF	ND	0.00000140		
OCDF	0.0000119			J

Labeled Standard		%R	LCL-UCL[d]	Qualifiers
IS	13C-2,3,7,8-TCDD	94.4	25 - 164	
	13C-1,2,3,7,8-PeCDD	88.5	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	90.6	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	88.7	28 - 130	
	13C-1,2,3,4,6,7,8-HpCDD	93.2	23 - 140	
	13C-OCDD	87.1	17 - 157	
	13C-2,3,7,8-TCDF	92.4	24 - 169	
	13C-1,2,3,7,8-PeCDF	87.5	24 - 185	
	13C-2,3,4,7,8-PeCDF	79.9	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	96.4	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	86.5	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	83.8	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	89.5	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	83.8	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	88.2	26 - 138	
	13C-OCDF	93.0	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	99.8	35 - 197	

Totals			
Total TCDD	ND	0.00000106	
Total PeCDD	ND	0.00000138	
Total HxCDD	ND	0.00000472	
Total HpCDD	0.0000597		
Total TCDF	ND	0.000000881	
Total PeCDF	ND	0.00000114	
Total HxCDF	0.000000917	0.00000243	
Total HpCDF	ND	0.0000123	

Footnotes

a. Sample specific estimated detection limit.

b. Estimated maximum possible concentration.

c. Method detection limit.

d. Lower control limit - upper control limit.

Analyst: MAS

Approved By: William J. Luksemburg 08-Feb-2008 13:08

Level IV

NPDES - 964

Project 30202

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA2350

Sampled: 01/24/08
Received: 01/24/08

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA2350-01 (Outfall 004 - Water)									
Reporting Units: ug/l									
Antimony J/DNQ	EPA 200.8	8A25068	0.20	2.0	**0.55**	1	01/25/08	01/25/08	Ja
Cadmium U	EPA 200.8	8A25068	0.11	1.0	ND	1	01/25/08	01/25/08	
Copper	EPA 200.8	8A25068	0.75	2.0	**2.6**	1	01/25/08	01/25/08	
Lead	EPA 200.8	8A25068	0.30	1.0	**1.0**	1	01/25/08	01/25/08	
Thallium U	EPA 200.8	8A25068	0.20	1.0	ND	1	01/25/08	01/25/08	

LEVEL IV

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA2350

Sampled: 01/24/08
Received: 01/24/08

DISSOLVED METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA2350-01 (Outfall 004 - Water) - cont.									
Reporting Units: ug/l									
Antimony J/DNQ	EPA 200.8-Diss	8B01111	0.20	2.0	**0.60**	1	02/01/08	02/01/08	Ja
Cadmium U	EPA 200.8-Diss	8B01111	0.11	1.0	ND	1	02/01/08	02/01/08	
Copper J/DNQ	EPA 200.8-Diss	8B01111	0.75	2.0	**1.3**	1	02/01/08	02/01/08	Ja
Lead U	EPA 200.8-Diss	8B01111	0.30	1.0	ND	1	02/01/08	02/01/08	
Thallium ↓	EPA 200.8-Diss	8B01111	0.20	1.0	ND	1	02/01/08	02/01/08	

LEVEL IV

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA2350

Sampled: 01/24/08
Received: 01/24/08

Metals by EPA 200 Series Methods

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA2350-01 (Outfall 004 - Water) - cont.									
Reporting Units: ug/l									
Mercury, Dissolved U	EPA 245.1	W8A1076	0.050	0.20	ND	1	01/30/08	01/31/08	
Mercury, Total J/DNQ	EPA 245.1	W8A1076	0.050	0.20	**0.096**	1	01/30/08	01/31/08	J

LEVEL IV

TestAmerica Irvine

Joseph Doak
Project Manager

Eberline Services

ANALYSIS RESULTS

SDG 8684	Client TA IRVINE
Work Order R801162-01	Contract PROJECT# IRA2350
Received Date 01/26/08	Matrix WATER

Client Sample ID	Lab Sample ID	Collected	Analyzed	Nuclide	Results ± 2σ	Units	MDA	
Outfall 004 IRA2350-01	8684-001	01/24/08	02/06/08	GrossAlpha	0.959 ± 0.78	pCi/L	0.85	J/R
			02/06/08	Gross Beta	30.4 ± 1.2	pCi/L	0.91	
			02/04/08	Ra-228	0.096 ± 0.16	pCi/L	0.42	U
			01/31/08	K-40 (G)	U	pCi/L	35	
			01/31/08	Cs-137 (G)	U	pCi/L	1.2	
			02/15/08	H-3	-4.16 ± 96	pCi/L	160	
			02/11/08	Ra-226	-0.110 ± 0.41	pCi/L	0.87	
			02/07/08	Sr-90	0.007 ± 0.36	pCi/L	0.83	
			02/19/08	Total U	0.367 ± 0.041	pCi/L	0.022	

LEVEL IV

Certified by _____

Report Date 02/22/08

Page 1

APPENDIX G

Section 22

Outfall 004, January 24, 2008

Test America Analytical Laboratory Report

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

LABORATORY REPORT

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

Project: Routine Outfall 004

Sampled: 01/24/08
Received: 01/24/08
Issued: 02/26/08 12:07

NELAP #01108CA California ELAP#1197 CSDLAC #10256

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

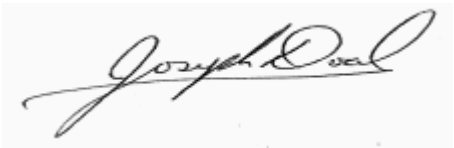
SAMPLE CROSS REFERENCE

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

ADDITIONAL INFORMATION: This is a final report to include all subcontract data.

LABORATORY ID	CLIENT ID	MATRIX
IRA2350-01	Outfall 004	Water

Reviewed By:



TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA2350

Sampled: 01/24/08
Received: 01/24/08

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA2350-01 (Outfall 004 - Water)									
Reporting Units: ug/l									
Antimony	EPA 200.8	8A25068	0.20	2.0	**0.55**	1	01/25/08	01/25/08	Ja
Cadmium	EPA 200.8	8A25068	0.11	1.0	ND	1	01/25/08	01/25/08	
Copper	EPA 200.8	8A25068	0.75	2.0	**2.6**	1	01/25/08	01/25/08	
Lead	EPA 200.8	8A25068	0.30	1.0	**1.0**	1	01/25/08	01/25/08	
Thallium	EPA 200.8	8A25068	0.20	1.0	ND	1	01/25/08	01/25/08	

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA2350

Sampled: 01/24/08
Received: 01/24/08

DISSOLVED METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA2350-01 (Outfall 004 - Water) - cont.									
Reporting Units: ug/l									
Antimony	EPA 200.8-Diss	8B01111	0.20	2.0	**0.60**	1	02/01/08	02/01/08	Ja
Cadmium	EPA 200.8-Diss	8B01111	0.11	1.0	ND	1	02/01/08	02/01/08	
Copper	EPA 200.8-Diss	8B01111	0.75	2.0	**1.3**	1	02/01/08	02/01/08	Ja
Lead	EPA 200.8-Diss	8B01111	0.30	1.0	ND	1	02/01/08	02/01/08	
Thallium	EPA 200.8-Diss	8B01111	0.20	1.0	ND	1	02/01/08	02/01/08	

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA2350

Sampled: 01/24/08
Received: 01/24/08

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA2350-01 (Outfall 004 - Water) - cont.									
Reporting Units: mg/l									
Hexane Extractable Material (Oil & Grease)	EPA 1664A	8A31085	1.3	4.8	ND	1	01/31/08	01/31/08	
Chloride	EPA 300.0	8A24034	0.25	0.50	**26**	1	01/24/08	01/24/08	
Nitrate/Nitrite-N	EPA 300.0	8A24034	0.15	0.26	**0.55**	1	01/24/08	01/24/08	
Sulfate	EPA 300.0	8A24034	0.20	0.50	**20**	1	01/24/08	01/24/08	
Total Dissolved Solids	SM2540C	8A25141	10	10	**170**	1	01/25/08	01/25/08	

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA2350

Sampled: 01/24/08
Received: 01/24/08

Metals by EPA 200 Series Methods

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRA2350-01 (Outfall 004 - Water) - cont.									
Reporting Units: ug/l									
Mercury, Dissolved	EPA 245.1	W8A1076	0.050	0.20	ND	1	01/30/08	01/31/08	
Mercury, Total	EPA 245.1	W8A1076	0.050	0.20	**0.096**	1	01/30/08	01/31/08	J

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA2350

Sampled: 01/24/08
Received: 01/24/08

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: Outfall 004 (IRA2350-01) - Water					
EPA 300.0	2	01/24/2008 09:00	01/24/2008 18:15	01/24/2008 19:00	01/24/2008 20:12

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA2350

Sampled: 01/24/08
Received: 01/24/08

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8A25068 Extracted: 01/25/08											
Blank Analyzed: 01/25/2008 (8A25068-BLK1)											
Antimony	ND	2.0	0.20	ug/l							
Cadmium	ND	1.0	0.11	ug/l							
Copper	ND	2.0	0.75	ug/l							
Lead	ND	1.0	0.30	ug/l							
Thallium	ND	1.0	0.20	ug/l							
LCS Analyzed: 01/25/2008 (8A25068-BS1)											
Antimony	84.5	2.0	0.20	ug/l	80.0		106	85-115			
Cadmium	84.8	1.0	0.11	ug/l	80.0		106	85-115			
Copper	86.4	2.0	0.75	ug/l	80.0		108	85-115			
Lead	85.0	1.0	0.30	ug/l	80.0		106	85-115			
Thallium	82.7	1.0	0.20	ug/l	80.0		103	85-115			
Matrix Spike Analyzed: 01/25/2008 (8A25068-MS1)						**Source: IRA2276-02**					
Antimony	82.3	2.0	0.20	ug/l	80.0	ND	103	70-130			
Cadmium	82.0	1.0	0.11	ug/l	80.0	ND	102	70-130			
Copper	83.4	2.0	0.75	ug/l	80.0	ND	104	70-130			
Lead	81.0	1.0	0.30	ug/l	80.0	ND	101	70-130			
Thallium	80.4	1.0	0.20	ug/l	80.0	ND	101	70-130			
Matrix Spike Analyzed: 01/25/2008 (8A25068-MS2)						**Source: IRA2349-01**					
Antimony	82.9	2.0	0.20	ug/l	80.0	0.445	103	70-130			
Cadmium	82.9	1.0	0.11	ug/l	80.0	0.119	104	70-130			
Copper	86.6	2.0	0.75	ug/l	80.0	1.92	106	70-130			
Lead	77.5	1.0	0.30	ug/l	80.0	1.14	95	70-130			
Thallium	77.7	1.0	0.20	ug/l	80.0	ND	97	70-130			
Matrix Spike Dup Analyzed: 01/25/2008 (8A25068-MSD1)						**Source: IRA2276-02**					
Antimony	82.2	2.0	0.20	ug/l	80.0	ND	103	70-130	0	20	
Cadmium	82.6	1.0	0.11	ug/l	80.0	ND	103	70-130	1	20	
Copper	83.7	2.0	0.75	ug/l	80.0	ND	105	70-130	0	20	
Lead	81.7	1.0	0.30	ug/l	80.0	ND	102	70-130	1	20	
Thallium	81.7	1.0	0.20	ug/l	80.0	ND	102	70-130	2	20	

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA2350

Sampled: 01/24/08
Received: 01/24/08

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8B01111 Extracted: 02/01/08											
Blank Analyzed: 02/01/2008 (8B01111-BLK1)											
Antimony	ND	2.0	0.20	ug/l							
Cadmium	ND	1.0	0.11	ug/l							
Copper	ND	2.0	0.75	ug/l							
Lead	ND	1.0	0.30	ug/l							
Thallium	ND	1.0	0.20	ug/l							
LCS Analyzed: 02/01/2008 (8B01111-BS1)											
Antimony	84.5	2.0	0.20	ug/l	80.0		106	85-115			
Cadmium	87.6	1.0	0.11	ug/l	80.0		110	85-115			
Copper	79.7	2.0	0.75	ug/l	80.0		100	85-115			
Lead	84.6	1.0	0.30	ug/l	80.0		106	85-115			
Thallium	86.0	1.0	0.20	ug/l	80.0		107	85-115			
Matrix Spike Analyzed: 02/01/2008 (8B01111-MS1)						**Source: IRA2350-01**					
Antimony	86.7	2.0	0.20	ug/l	80.0	0.598	108	70-130			
Cadmium	84.3	1.0	0.11	ug/l	80.0	ND	105	70-130			
Copper	78.2	2.0	0.75	ug/l	80.0	1.31	96	70-130			
Lead	81.5	1.0	0.30	ug/l	80.0	ND	102	70-130			
Thallium	81.8	1.0	0.20	ug/l	80.0	ND	102	70-130			
Matrix Spike Dup Analyzed: 02/01/2008 (8B01111-MSD1)						**Source: IRA2350-01**					
Antimony	88.7	2.0	0.20	ug/l	80.0	0.598	110	70-130	2	20	
Cadmium	86.8	1.0	0.11	ug/l	80.0	ND	109	70-130	3	20	
Copper	77.4	2.0	0.75	ug/l	80.0	1.31	95	70-130	1	20	
Lead	82.4	1.0	0.30	ug/l	80.0	ND	103	70-130	1	20	
Thallium	82.8	1.0	0.20	ug/l	80.0	ND	104	70-130	1	20	

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA2350

Sampled: 01/24/08
Received: 01/24/08

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8A24034 Extracted: 01/24/08											
Blank Analyzed: 01/24/2008 (8A24034-BLK1)											
Chloride	ND	0.50	0.25	mg/l							
Nitrate/Nitrite-N	ND	0.26	0.15	mg/l							
Sulfate	ND	0.50	0.20	mg/l							
LCS Analyzed: 01/24/2008 (8A24034-BS1)											
Chloride	4.86	0.50	0.25	mg/l	5.00		97	90-110			*M-3*
Sulfate	9.69	0.50	0.20	mg/l	10.0		97	90-110			
Matrix Spike Analyzed: 01/24/2008 (8A24034-MS1)						**Source: IRA2329-01**					
Sulfate	107	1.0	0.40	mg/l	10.0	97.2	98	80-120			
Matrix Spike Analyzed: 01/25/2008 (8A24034-MS2)						**Source: IRA2354-09**					
Sulfate	16.9	0.50	0.20	mg/l	10.0	6.59	103	80-120			
Matrix Spike Dup Analyzed: 01/24/2008 (8A24034-MSD1)						**Source: IRA2329-01**					
Sulfate	106	1.0	0.40	mg/l	10.0	97.2	84	80-120	1	20	
Batch: 8A25141 Extracted: 01/25/08											
Blank Analyzed: 01/25/2008 (8A25141-BLK1)											
Total Dissolved Solids	ND	10	10	mg/l							
LCS Analyzed: 01/25/2008 (8A25141-BS1)											
Total Dissolved Solids	1000	10	10	mg/l	1000		100	90-110			
Duplicate Analyzed: 01/25/2008 (8A25141-DUP1)						**Source: IRA2124-05**					
Total Dissolved Solids	1920	10	10	mg/l		1920			0	10	

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA2350

Sampled: 01/24/08
Received: 01/24/08

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8A31085 Extracted: 01/31/08											
Blank Analyzed: 01/31/2008 (8A31085-BLK1)											
Hexane Extractable Material (Oil & Grease)	ND	5.0	1.4	mg/l							
LCS Analyzed: 01/31/2008 (8A31085-BS1)											**MNR1**
Hexane Extractable Material (Oil & Grease)	19.8	5.0	1.4	mg/l	20.2		98	78-114			
LCS Dup Analyzed: 01/31/2008 (8A31085-BSD1)											
Hexane Extractable Material (Oil & Grease)	19.4	5.0	1.4	mg/l	20.2		96	78-114	2	11	

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA2350

Sampled: 01/24/08
Received: 01/24/08

METHOD BLANK/QC DATA

Metals by EPA 200 Series Methods

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: W8A1076 Extracted: 01/30/08											
Blank Analyzed: 01/31/2008 (W8A1076-BLK1)											
Mercury, Dissolved	ND	0.20	0.050	ug/l							
Mercury, Total	ND	0.20	0.050	ug/l							
LCS Analyzed: 01/31/2008 (W8A1076-BS1)											
Mercury, Dissolved	0.913	0.20	0.050	ug/l	1.00		91	85-115			
Mercury, Total	0.913	0.20	0.050	ug/l	1.00		91	85-115			
Matrix Spike Analyzed: 01/31/2008 (W8A1076-MS1)						**Source: 8012935-01**					
Mercury, Dissolved	0.971	0.20	0.050	ug/l	1.00	0.0450	93	70-130			
Mercury, Total	0.971	0.20	0.050	ug/l	1.00	0.0450	93	70-130			
Matrix Spike Analyzed: 01/31/2008 (W8A1076-MS2)						**Source: 8012939-01**					
Mercury, Dissolved	2.01	0.20	0.050	ug/l	1.00	1.18	83	70-130			
Mercury, Total	2.01	0.20	0.050	ug/l	1.00	1.18	83	70-130			
Matrix Spike Dup Analyzed: 01/31/2008 (W8A1076-MSD1)						**Source: 8012935-01**					
Mercury, Dissolved	0.957	0.20	0.050	ug/l	1.00	0.0450	91	70-130	1	20	
Mercury, Total	0.957	0.20	0.050	ug/l	1.00	0.0450	91	70-130	1	20	
Matrix Spike Dup Analyzed: 01/31/2008 (W8A1076-MSD2)						**Source: 8012939-01**					
Mercury, Dissolved	1.99	0.20	0.050	ug/l	1.00	1.18	81	70-130	1	20	
Mercury, Total	1.99	0.20	0.050	ug/l	1.00	1.18	81	70-130	1	20	

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA2350

Sampled: 01/24/08
Received: 01/24/08

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
IRA2350-01	1664-HEM	Hexane Extractable Material (Oil & Greas	mg/l	0.57	4.8	15
IRA2350-01	Antimony-200.8	Antimony	ug/l	0.55	2.0	6
IRA2350-01	Cadmium-200.8	Cadmium	ug/l	0.055	1.0	4
IRA2350-01	Chloride - 300.0	Chloride	mg/l	26	0.50	150
IRA2350-01	Copper-200.8	Copper	ug/l	2.57	2.0	14
IRA2350-01	Hg_w 245.1	Mercury, Total	ug/l	0.096	0.20	0.13
IRA2350-01	Lead-200.8	Lead	ug/l	1.00	1.0	5.2
IRA2350-01	Nitrogen, NO3+NO2 -N	Nitrate/Nitrite-N	mg/l	0.55	0.26	10
IRA2350-01	Sulfate-300.0	Sulfate	mg/l	20	0.50	250
IRA2350-01	TDS - SM 2540C	Total Dissolved Solids	mg/l	166	10	850
IRA2350-01	Thallium-200.8	Thallium	ug/l	0.013	1.0	2

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA2350

Sampled: 01/24/08
Received: 01/24/08

DATA QUALIFIERS AND DEFINITIONS

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
Ja	Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). The user of this data should be aware that this data is of limited reliability.
M-3	Results exceeded the linear range in the MS/MSD and therefore are not available for reporting. The batch was accepted based on acceptable recovery in the Blank Spike (LCS).
MNR1	There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike/Blank Spike Duplicate.
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
RPD	Relative Percent Difference

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA2350

Sampled: 01/24/08
Received: 01/24/08

Certification Summary

TestAmerica Irvine

Method	Matrix	Nelac	California
EDD + Level 4	Water		
EPA 1664A	Water		
EPA 200.8-Diss	Water	X	X
EPA 200.8	Water	X	X
EPA 300.0	Water	X	X
SM2540C	Water	X	

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

Subcontracted Laboratories

Aquatic Testing Laboratories-SUB *California Cert #1775*
4350 Transport Street, Unit 107 - Ventura, CA 93003

Analysis Performed: Bioassay-7 dy Chrnic
Samples: IRA2350-01

Eberline Services - SUB
2030 Wright Avenue - Richmond, CA 94804

Analysis Performed: Gamma Spec
Samples: IRA2350-01

Analysis Performed: Gross Alpha
Samples: IRA2350-01

Analysis Performed: Gross Beta
Samples: IRA2350-01

Analysis Performed: Radium, Combined
Samples: IRA2350-01

Analysis Performed: Strontium 90
Samples: IRA2350-01

Analysis Performed: Tritium
Samples: IRA2350-01

Analysis Performed: Uranium, Combined
Samples: IRA2350-01

TestAmerica Irvine

Joseph Doak
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

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

Project ID: Routine Outfall 004
Report Number: IRA2350

Sampled: 01/24/08
Received: 01/24/08

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: IRA2350-01

Weck Laboratories, Inc

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

Method Performed: EPA 245.1
Samples: IRA2350-01

TestAmerica Irvine

Joseph Doak
Project Manager

Test America Version 12/20/07

IRA 2350

CHAIN OF CUSTODY FORM

IRA 2350

Client Name/Address	Project:	ANALYSIS REQUIRED
MWH-Arcadia 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Test America Contact: Joseph Doak	Boeing-SSFL NPDES **Routine Outfall 004** Stormwater at SRE-1	
Project Manager: Bronwyn Kelly Sampler: MARISCAL, J. BARROSO, R.	Phone Number: (626) 568-6691 Fax Number: (626) 568-6515	

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #	Total Recoverable Metals: Sb, Cd, Cu, Pb, Hg, Tl	TCDD (and all congeners)	Oil & Grease (1664-HEM)	Cl, SO_4, NO_3+NO_2-N	TDS	Gross Alpha(900.0), Gross Beta(900.0), Tritium (H-3) (906.0), Sr-90 (905.0), Total Combined Radium 226 (903.0 or 903.1) & Radium 228 (904.0), Uranium (908.0), K-40, CS-137 (901.0 or 901.1)	**Chronic Toxicity**	Total Dissolved Metals Sb, Cd, Cu, Pb, Hg, Tl	Comments
Outfall 004	W	1L Poly	1	1-24-08 0900	HNO_3	1A	X								Field readings: Temp = 47.8 pH = 8.2 Time of readings = 0900
Outfall 004-Dup	W	1L Poly	1		HNO_3	1B	X								
Outfall 004	W	1L Amber	2		None	2A, 2B		X							
Outfall 004	W	1L Amber	2		HCl	3A, 3B			X						
Outfall 004	W	500 ml Poly	2		None	4A, 4B				X					
Outfall 004	W	500 ml Poly	1		None	5					X				
Outfall 004	W	2.5 Gal Cube 500 ml Amber	1 1		None None	6A 6B						X			Unfiltered and unpreserved analysis
Outfall 004	W	1 Gal Poly	1		None	7							X		**Only test if first and second rain event of the year**
Outfall 004	W	1L Poly	1	1-24-08 0900	None	8								X	Filter w/in 24hrs of receipt at lab

Relinquished By	Date/Time:	Received By	Date/Time:
Robert Barroso	1-24-08 1555	TAI	1/24/08 1555
Relinquished By	Date/Time:	Received By	Date/Time:
TAI	1/24/08 1815		1/24/08 1815
Relinquished By	Date/Time:	Received By	Date/Time:

Turn around Time: (check)
24 Hours _____ 5 Days _____
48 Hours _____ 10 Days _____
72 Hours _____ Normal X

Sample Integrity: (check)
Intact _____ On Ice: X

A-O 2400 1/24/08

7-015.0

NPDES - 985

LABORATORY REPORT

Aquatic Testing Laboratories
"dedicated to providing quality aquatic toxicity testing"
4350 Transport Street, Unit 107
Ventura, CA 93003
(805) 650-0546 FAX (805) 650-0756
CA DOHS ELAP Cert. No.: 1775

Date: February 1, 2008

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

Laboratory No.: A-08012504-001
Sample ID.: IRA2350-01 (Outfall 004)

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

Date Sampled:	01/24/08
Date Received:	01/25/08
Temp. Received:	1°C
Chlorine (TRC):	0.0 mg/l
Date Tested:	01/25/08 to 02/01/08

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:

Chronic:	**NOEC**	**TUc**
Ceriodaphnia Survival:	100%	1.0
Ceriodaphnia Reproduction:	100%	1.0

Quality Control: Reviewed and approved by:

Joseph A. LeMay
Laboratory Director

CERIODAPHNIA CHRONIC BIOASSAY
EPA METHOD 1002.0

Aquatic Testing Laboratories

Lab No.: A-08012504-001
Client/ID: Test America – Outfall 004

Date Tested: 01/25/08 to 02/01/08

TEST SUMMARY

Test type: Daily static-renewal.
Species: *Ceriodaphnia dubia*.
Age: < 24 hrs; all released within 8 hrs.
Test vessel size: 30 ml.
Number of test organisms per vessel: 1.
Temperature: 25 +/- 1°C.
Dilution water: Mod. hard reconstituted (MHRW).
QA/QC Batch No.: RT-080106.

Endpoints: Survival and Reproduction.
Source: In-laboratory culture.
Food: .1 ml YTC, algae per day.
Test solution volume: 15 ml.
Number of replicates: 10.
Photoperiod: 16/8 hrs. light/dark cycle.
Test duration: 7 days.
Statistics: ToxCalc computer program.

RESULTS SUMMARY

Sample Concentration	Percent Survival	Mean Number of Young Per Female
Control	100%	24.8
100% Sample	100%	28.6
Sample not statistically significantly less than Control for either endpoint.		

CHRONIC TOXICITY

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

QA/QC TEST ACCEPTABILITY

Parameter	Result
Control survival ≥80%	Pass (100% survival)
≥15 young per surviving control female	Pass (24.8 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 = 8.0%)
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:	1/25/2008 14:00	Test ID:	8012504	Sample ID:	Outfall 004
End Date:	2/1/2008 13:00	Lab ID:	CAATL-Aquatic Testing Labs	Sample Type:	EFF2-Industrial
Sample Date:	1/24/2008 09:00	Protocol:	FWCH 4TH-EPA-821-R-02-0	Test Species:	CD-Ceriodaphnia dubia

Comments:

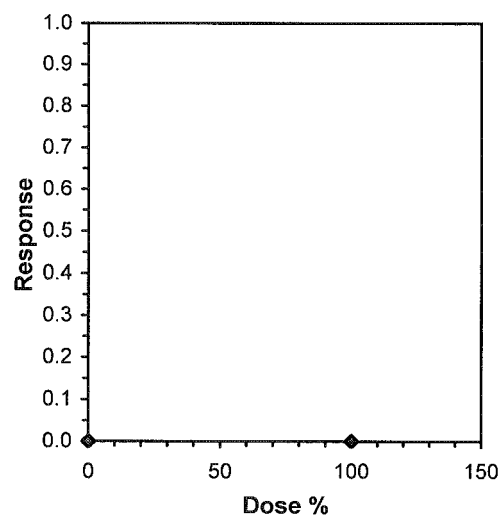
Conc-%	1	2	3	4	5	6	7	8	9	10
D-Control	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Conc-%	Mean	N-Mean	Resp	Not Resp	Total	N	Fisher's Exact P	1-Tailed Critical	Isotonic Mean	Isotonic 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:	1/25/2008 14:00	Test ID:	8012504	Sample ID:	Outfall 004
End Date:	2/1/2008 13:00	Lab ID:	CAATL-Aquatic Testing Labs	Sample Type:	EFF2-Industrial
Sample Date:	1/24/2008 09:00	Protocol:	FWCH 4TH-EPA-821-R-02-0	Test Species:	CD-Ceriodaphnia dubia

Comments:

Conc-%	1	2	3	4	5	6	7	8	9	10
D-Control	27.000	27.000	26.000	22.000	27.000	25.000	22.000	23.000	25.000	24.000
100	35.000	31.000	27.000	31.000	26.000	26.000	29.000	26.000	26.000	29.000

			Transform: Untransformed					Rank	1-Tailed	Isotonic	
Conc-%	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical	Mean	N-Mean
D-Control	24.800	1.0000	24.800	22.000	27.000	8.020	10			26.700	1.0000
100	28.600	1.1532	28.600	26.000	35.000	10.580	10	139.50	82.00	26.700	1.0000

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.05)	0.89117	0.905	0.75176	0.46819
F-Test indicates equal variances (p = 0.23)	2.31461	6.54109		

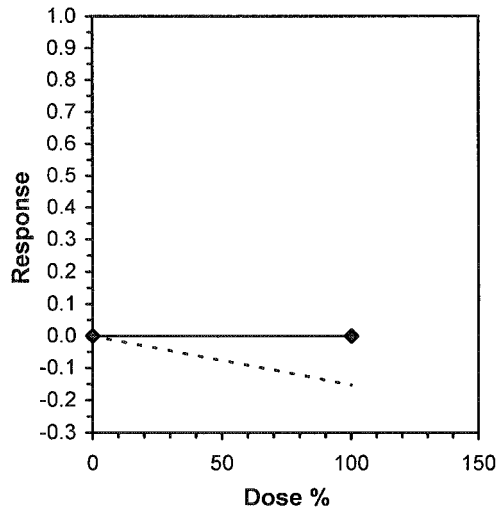
Hypothesis Test (1-tail, 0.05)

Wilcoxon Two-Sample Test indicates no significant differences

Treatments vs D-Control

Linear Interpolation (200 Resamples)

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



CERIODAPHNIA DUBIA CHRONIC BIOASSAY
EPA METHOD 1002.0 Raw Data Sheet

Aquatic Testing Laboratories

Lab No.: A-08012504-001
Client ID: TestAmerica - IRA2350-01 (Outfall 004)
Start Date: 01/25/2008

		DAY 1		DAY 2		DAY 3		DAY 4		DAY 5		DAY 6		DAY 7	
		0 hr	24hr	0 hr	24hr	0 hr	24hr	0 hr	24hr	0 hr	24hr	0 hr	24hr	0 hr	24hr
Analyst Initials:															
Time of Readings:		1400	1500	1500	1320	1300	1520	1520	1500	1500	1500	1500	1500	1500	1320
Control	DO	8.0	8.4	7.9	7.6	7.7	7.7	7.9	7.8	8.9	8.0	8.1	8.4	8.2	8.2
	pH	7.8	8.0	7.7	7.6	7.4	7.6	7.8	8.0	8.0	7.7	7.8	7.6	7.7	7.8
	Temp	25.3	24.3	25.4	24.6	25.1	24.6	24.7	24.6	24.2	25.0	24.6	24.4	25.1	24.7
100%	DO	11.2	8.9	10.7	7.9	4.9	2.8	10.4	7.8	10.0	8.2	10.8	8.7	9.9	8.2
	pH	8.1	7.8	7.9	7.8	7.7	7.8	7.9	7.5	7.9	7.5	7.8	7.4	7.7	7.8
	Temp	24.5	24.4	24.8	24.6	24.7	24.6	25.2	24.8	24.4	25.0	24.7	24.5	24.6	24.2

Additional Parameters	Control	100% Sample
Conductivity (umohms)	290	241
Alkalinity (mg/l $CaCO_3$)	66	60
Hardness (mg/l $CaCO_3$)	98	40
Ammonia (mg/l NH_3-N)	<0.2	0.4

Source of Neonates										
Replicate:	A	B	C	D	E	F	G	H	I	J
Brood ID:	A1	B1	C2	D3	E3	H3	A4	D4	F6	G5

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	
	2	0	0	0	0	0	0	0	0	0	0	0	10	
	3	0	4	0	0	3	0	0	0	0	4	11	10	
	4	4	8	5	4	0	3	4	5	5	0	38	10	
	5	7	0	9	7	8	7	6	7	8	9	68	10	
	6	0	15	0	0	16	15	0	0	0	0	46	10	
	7	16	0	12	11	0	0	12	11	12	11	85	10	
	Total	27	27	26	22	27	25	22	23	25	24	248	10	
100%	1	0	0	0	0	0	0	0	0	0	0	0	10	
	2	0	0	0	0	0	0	0	0	0	0	0	10	
	3	0	3	0	0	4	0	0	0	0	0	7	10	
	4	5	0	5	4	0	4	4	5	5	3	35	10	
	5	14	11	10	12	10	7	13	10	9	12	108	10	
	6	0	0	0	0	12	15	0	0	0	0	27	10	
	7	16	17	12	15	0	0	12	11	12	14	109	10	
	Total	35	31	27	31	26	26	29	26	26	29	286	10	

Circled fourth brood not used in statistical analysis.
7th day only used if <60% of the surviving control females have produced their third brood.

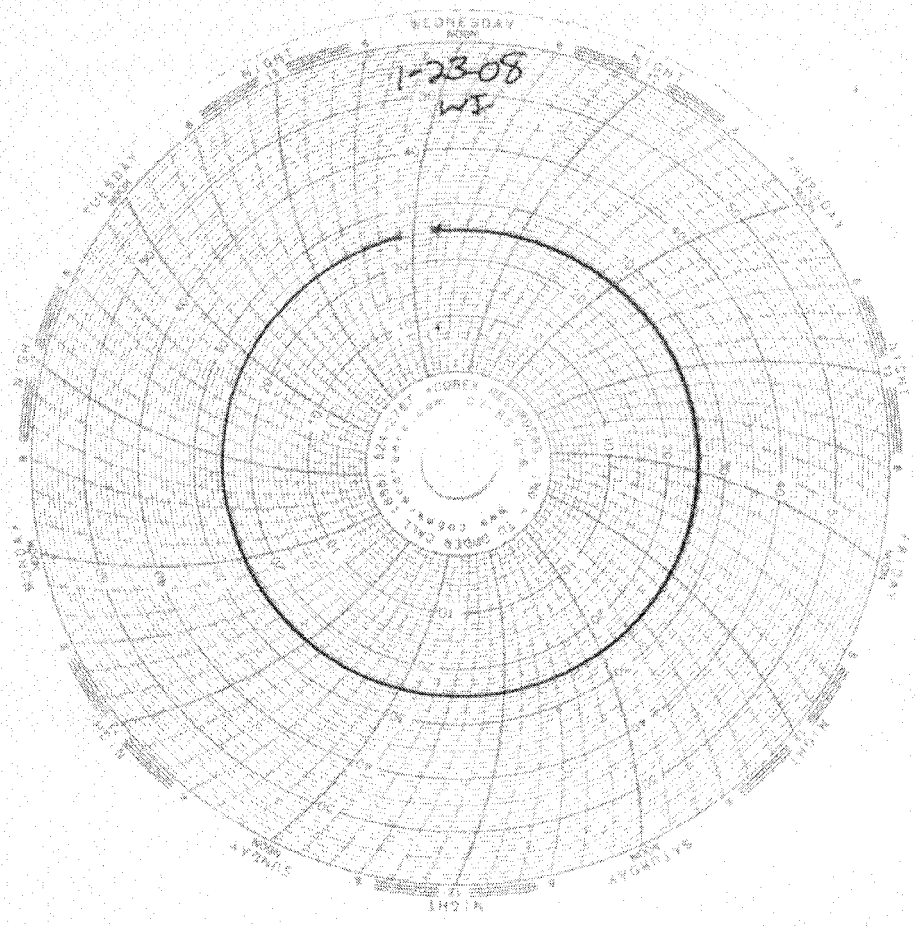
Aquatic Testing Laboratories

Laboratory Temperature Chart

QA/QC Batch No: A-08012504

Date Tested: 01/25/08 to 02/01/08

Acceptable Range: 25+/- 1°C



SUBCONTRACT ORDER

TestAmerica Irvine

IRA2350

SENDING LABORATORY:

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

RECEIVING LABORATORY:

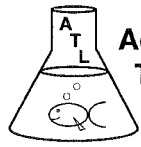
Aquatic Testing Laboratories-SUB
4350 Transport Street, Unit 107
Ventura, CA 93003
Phone :(805) 650-0546
Fax: (805) 650-0756
Project Location: California
Receipt Temperature: 1.0 °C Ice: (Y) / N

Analysis	Units	Due	Expires	Comments
Sample ID: IRA2350-01	**Water**		Sampled: **01/24/08 09:00**	**ph=8.2. temp=47.8**
Bioassay-7 dy Chrnic	N/A	02/04/08	01/25/08 21:00	Cerio, EPA/821-R02-013, Sub to AqTox Labs

Containers Supplied:
1 gal Poly (M)

Released By	1/25/08 0805 Date/Time	Received By TMZ	1/25/08 0805 Date/Time
Released By TMZ	1/25/08 1130 Date/Time	Received By	1-25-08 1130 Date/Time

NPDES - 992



Aquatic
Testing
Laboratories

REFERENCE TOXICANT DATA

CERIODAPHNIA CHRONIC BIOASSAY
EPA METHOD 1002.0
REFERENCE TOXICANT - NaCl

Aquatic Testing Laboratories

QA/QC Batch No.: RT-080106

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

TEST SUMMARY

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

Endpoints: Survival and Reproduction.
Source: In-laboratory culture.
Food: .1 ml YTC, algae per day.
Test solution volume: 20 ml.
Number of replicates: 10.
Photoperiod: 16/8 hrs. light/dark cycle.
Test duration: 6 days.
Statistics: ToxCalc computer program.

RESULTS SUMMARY

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

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

CHRONIC TOXICITY

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

QA/QC TEST ACCEPTABILITY

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

Ceriodaphnia Survival and Reproduction Test-Survival Day 6

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

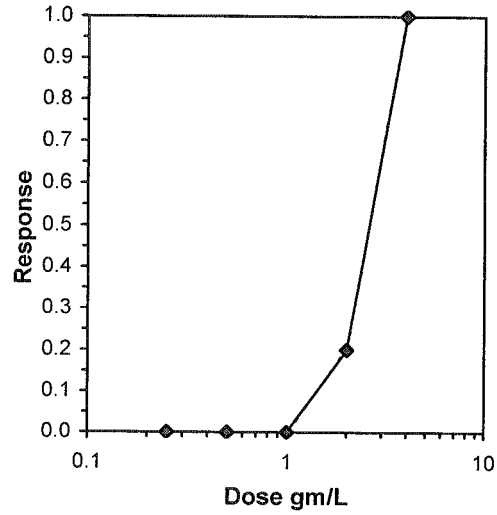
Conc-gm/L	1	2	3	4	5	6	7	8	9	10
D-Control	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.25	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.5	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000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

Conc-gm/L	Mean	N-Mean	Resp	Not Resp	Total	N	Fisher's Exact P	1-Tailed Critical	Number Resp	Total Number
D-Control	1.0000	1.0000	0	10	10	10			0	10
0.25	1.0000	1.0000	0	10	10	10	1.0000	0.0500	0	10
0.5	1.0000	1.0000	0	10	10	10	1.0000	0.0500	0	10
1	1.0000	1.0000	0	10	10	10	1.0000	0.0500	0	10
2	0.8000	0.8000	2	8	10	10	0.2368	0.0500	2	10
4	0.0000	0.0000	10	0	10	10			10	10

Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU
Fisher's Exact Test	2	4	2.82843	
Treatments vs D-Control				

Trimmed Spearman-Karber

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



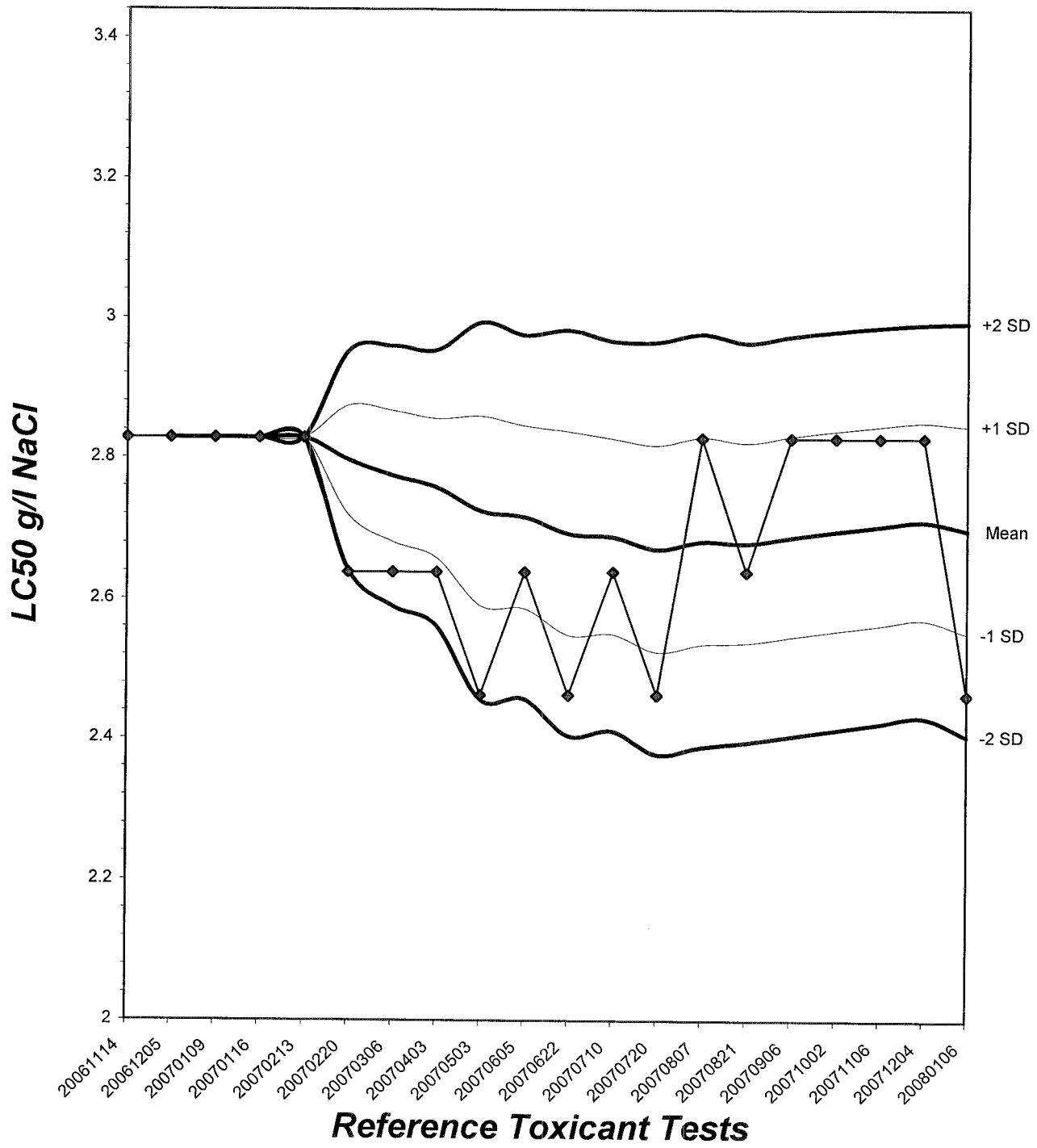
ToxCalc v5.0.23

Reviewed by:

NPDES - 995

Ceriodaphnia dubia Chronic Survival Laboratory Control Chart

CV% = 5.46



Ceriodaphnia Survival and Reproduction Test-Reproduction

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

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

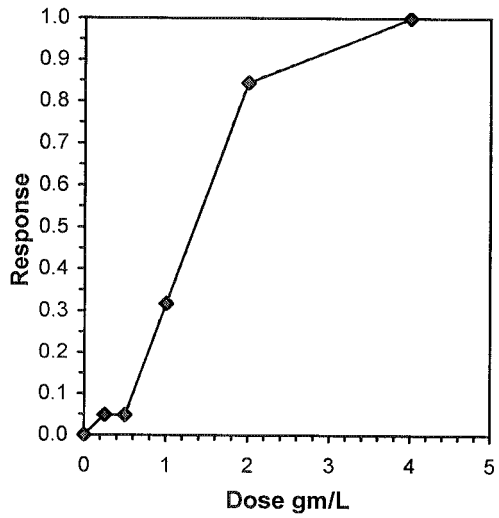
			Transform: Untransformed					Rank	1-Tailed	Isotonic	
Conc-gm/L	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical	Mean	N-Mean
D-Control	20.500	1.0000	20.500	11.000	25.000	18.432	10			20.500	1.0000
0.25	19.500	0.9512	19.500	9.000	25.000	26.177	10	102.00	76.00	19.500	0.9512
0.5	19.500	0.9512	19.500	12.000	22.000	16.617	10	94.50	76.00	19.500	0.9512
*1	14.000	0.6829	14.000	8.000	19.000	32.819	10	62.50	76.00	14.000	0.6829
*2	3.200	0.1561	3.200	0.000	8.000	76.263	10	55.00	76.00	3.200	0.1561
4	0.000	0.0000	0.000	0.000	0.000	0.000	10			0.000	0.0000

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.05)	0.91281	0.947	-0.9793	0.67912
Bartlett's Test indicates equal variances (p = 0.25)	5.39	13.2767		

Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU
Steel's Many-One Rank Test	0.5	1	0.70711	
Treatments vs D-Control				

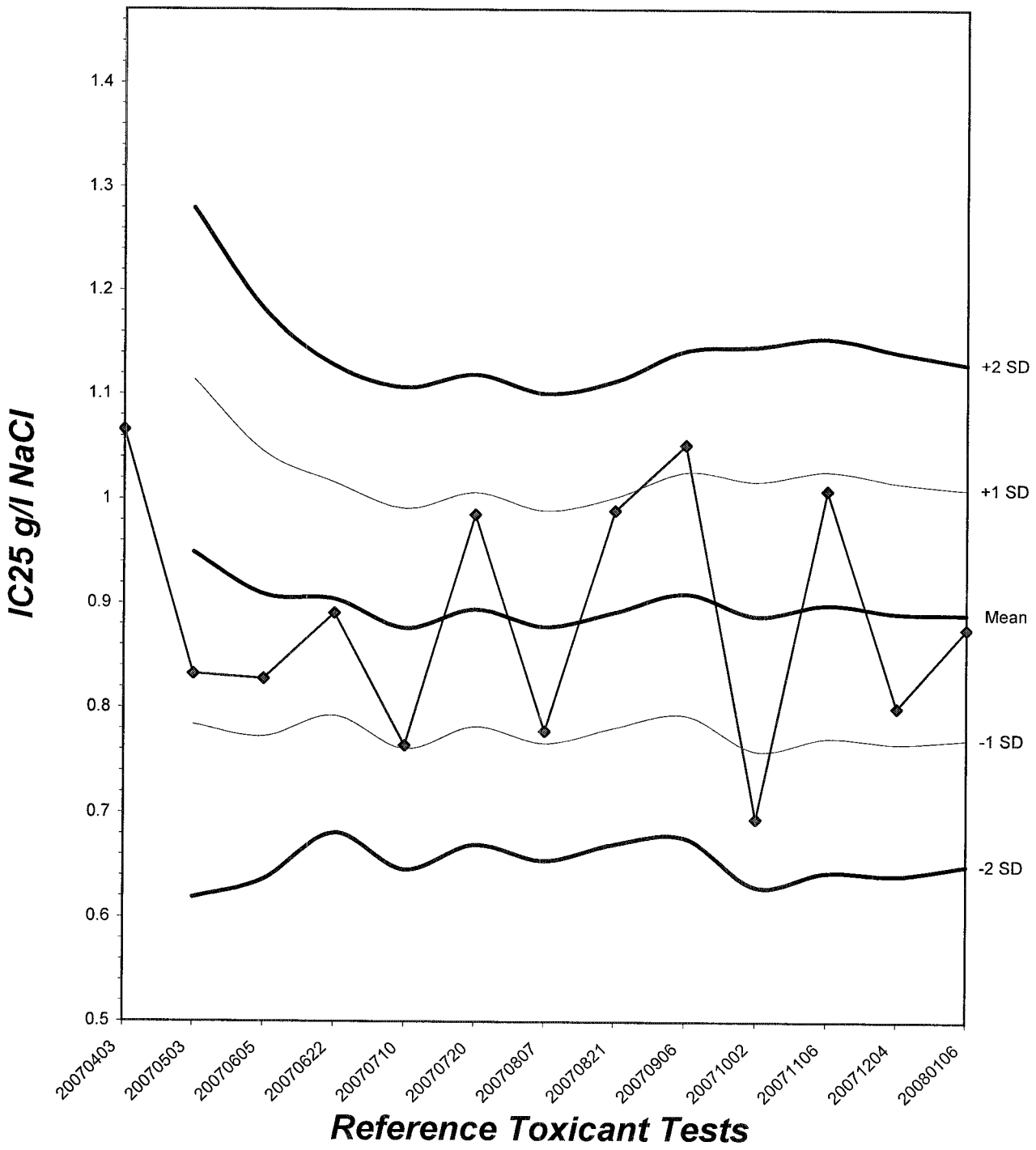
Linear Interpolation (200 Resamples)

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



Ceriodaphnia dubia Chronic Reproduction Laboratory Control Chart

CV% = 13.5



CERIODAPHNIA DUBIA CHRONIC BIOASSAY
Reference Toxicant - NaCl
Reproduction and Survival Raw Data Sheet

Aquatic Testing Laboratories

QA/QC No.: RT-080106

Start Date: 01/06/2008

Sample	Day	Number of Young Produced										Total Live Young	No. Live Adults	Analyst Initials
		A	B	C	D	E	F	G	H	I	J			
Control	1	0	0	0	0	0	0	0	0	0	0	0	10	
	2	0	0	0	0	0	0	0	0	0	0	0	10	
	3	0	0	2	0	0	0	3	0	3	0	8	10	
	4	4	3	0	4	3	2	0	2	0	3	21	10	
	5	9	8	7	7	6	7	6	7	6	7	70	10	
	6	10	0	12	10	14	11	10	13	11	15	106	10	
	7	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	23	11	21	21	23	20	19	22	20	25	205	10	
0.25 g/l	1	0	0	0	0	0	0	0	0	0	0	0	10	
	2	0	0	0	0	0	0	0	0	0	0	0	10	
	3	0	3	0	3	0	2	0	0	3	0	11	10	
	4	4	0	2	0	3	6	4	2	0	3	24	10	
	5	8	8	7	5	6	0	7	6	7	8	62	10	
	6	0	13	10	14	0	12	10	13	12	14	98	10	
	7	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	12	24	19	22	9	20	21	21	22	25	195	10	
0.5 g/l	1	0	0	0	0	0	0	0	0	0	0	0	10	
	2	0	0	0	0	0	0	0	0	0	0	0	10	
	3	2	0	2	0	0	0	3	2	0	0	9	10	
	4	0	3	0	3	4	3	0	0	3	3	19	10	
	5	9	6	7	7	0	9	8	7	7	6	66	10	
	6	10	10	12	12	12	0	11	12	12	10	101	10	
	7	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	21	19	21	22	16	12	22	21	22	19	195	10	

Circled fourth brood not used in statistical analysis.
7th day only used if <60% of the surviving control females have produced their third brood.

CERIODAPHNIA DUBIA CHRONIC BIOASSAY
Reference Toxicant - NaCl
Reproduction and Survival Raw Data Sheet

Aquatic Testing Laboratories

QA/QC No.: RT-080106

Start Date: 01/06/2008

Sample	Day	Number of Young Produced										Total Live Young	No. Live Adults	Analyst Initials
		A	B	C	D	E	F	G	H	I	J			
1.0 g/l	1	0	0	0	0	0	0	0	0	0	0	0	10	
	2	0	0	0	0	0	0	0	0	0	0	0	10	
	3	0	0	0	0	0	3	0	0	2	0	5	10	
	4	3	2	2	3	0	0	3	2	0	2	17	10	
	5	5	7	7	4	5	7	5	4	7	6	57	10	
	6	11	0	0	12	9	0	8	11	10	0	61	10	
	7	–	–	–	–	–	–	–	–	–	–	–	–	–
	Total	19	9	9	19	14	10	16	17	19	8	140	10	
2.0 g/l	1	0	0	0	0	0	0	0	0	X	0	0	9	
	2	0	0	0	0	0	0	0	0	–	0	0	9	
	3	0	0	0	0	0	0	0	0	–	0	0	9	
	4	2	0	2	3	0	0	0	2	–	0	9	9	
	5	3	0	0	2	2	3	3	0	–	0	13	9	
	6	3	2	0	0	2	0	0	3	–	X	10	8	
	7	–	–	–	–	–	–	–	–	–	–	–	–	–
	Total	8	2	2	5	4	3	3	5	0	0	32	8	
4.0 g/l	1	X	X	X	X	X	X	X	X	X	X	0	0	
	2	–	–	–	–	–	–	–	–	–	–	–	–	–
	3	–	–	–	–	–	–	–	–	–	–	–	–	–
	4	–	–	–	–	–	–	–	–	–	–	–	–	–
	5	–	–	–	–	–	–	–	–	–	–	–	–	–
	6	–	–	–	–	–	–	–	–	–	–	–	–	–
	7	–	–	–	–	–	–	–	–	–	–	–	–	–
	Total	0	0	0	0	0	0	0	0	0	0	0	0	

Circled fourth brood not used in statistical analysis.
7th day only used if <60% of the surviving control females have produced their third brood.

CERIODAPHNIA DUBIA CHRONIC BIOASSAY
Reference Toxicant - NaCl
Water Chemistries Raw Data Sheet

Aquatic Testing Laboratories

QA/QC No.: RT-080106

Start Date: 01/06/2008

		DAY 1		DAY 2		DAY 3		DAY 4		DAY 5		DAY 6		DAY 7	
		Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final
Analyst Initials:														—	—
Time of Readings:		1330	1330	1330	1330	1330	1230	1230	1300	1300	1300	1300	1300	—	—
Control	DO	7.6	7.2	7.4	7.7	7.4	7.6	7.4	7.5	8.2	7.8	7.9	7.7	—	—
	pH	7.6	7.4	7.4	7.3	7.3	7.2	7.2	7.7	7.5	7.6	7.9	7.6	—	—
	Temp	24.3	25.1	25.4	24.8	24.1	24.5	24.9	25.1	24.4	25.0	24.6	25.1	—	—
0.25 g/l	DO	7.5	7.3	7.5	7.5	7.5	7.7	7.3	7.4	8.2	7.8	7.9	7.7	—	—
	pH	7.5	7.3	7.4	7.4	7.4	7.2	7.3	7.4	7.6	7.5	7.6	7.7	—	—
	Temp	24.4	25.2	25.3	24.9	24.2	24.5	24.7	25.0	24.4	25.1	24.6	25.1	—	—
0.5 g/l	DO	7.4	7.2	7.4	7.6	7.4	7.5	7.4	7.6	8.5	7.6	8.0	7.8	—	—
	pH	7.5	7.3	7.4	7.4	7.4	7.2	7.3	7.5	7.6	7.5	7.7	7.7	—	—
	Temp	24.3	25.1	25.3	24.9	24.1	25.2	24.6	24.9	24.4	24.9	24.4	24.9	—	—
1.0 g/l	DO	7.5	7.2	7.6	7.7	7.3	7.8	7.4	7.4	8.4	7.8	7.7	7.7	—	—
	pH	7.5	7.3	7.6	7.5	7.4	7.2	7.3	7.5	7.6	7.6	7.4	7.6	—	—
	Temp	24.4	25.2	25.1	24.7	24.2	25.2	24.6	25.0	24.4	24.9	24.6	25.0	—	—
2.0 g/l	DO	7.4	7.4	7.6	7.5	7.4	7.8	7.2	7.6	8.2	7.6	7.6	7.7	—	—
	pH	7.5	7.4	7.6	7.6	7.4	7.3	7.2	7.6	7.5	7.6	7.9	7.6	—	—
	Temp	24.5	25.1	25.0	24.6	24.2	25.3	24.8	25.2	24.4	24.8	24.6	25.1	—	—
4.0 g/l	DO	7.5	7.8	—	—	—	—	—	—	—	—	—	—	—	—
	pH	7.6	7.8	—	—	—	—	—	—	—	—	—	—	—	—
	Temp	24.3	24.6	—	—	—	—	—	—	—	—	—	—	—	—

Dissolved Oxygen (DO) readings are in mg/l O_2; Temperature (Temp) readings are in °C.

Additional Parameters	Control			High Concentration		
	Day 1	Day 3	Day 5	Day 1	Day 3	Day 5
Conductivity (µS)	350	348	305	6400	3100	3210
Alkalinity (mg/l $CaCO_3$)	66	65	63	65	66	64
Hardness (mg/l $CaCO_3$)	98	92	98	98	92	98

Source of Neonates

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

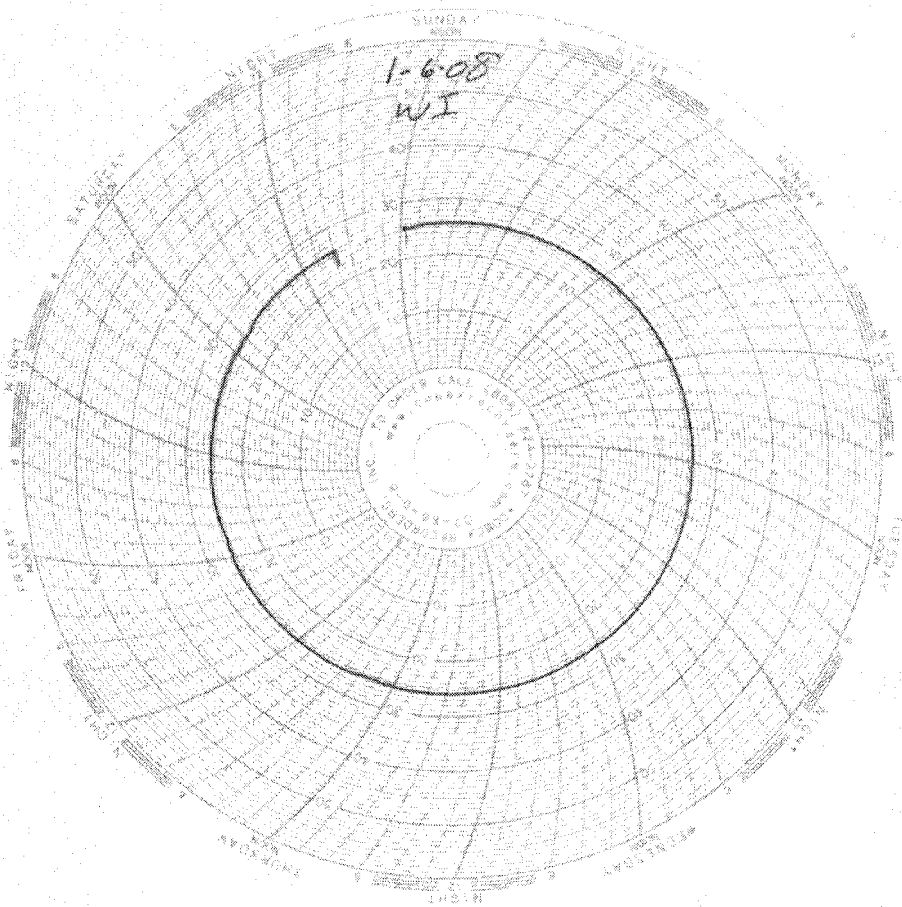
Aquatic Testing Laboratories

Laboratory Temperature Chart

QA/QC Batch No: RT-080106

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

Acceptable Range: 25+/- 1°C



EBERLINE
SERVICES

February 22, 2008

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

Reference: Eberline Services NELAP Cert #01120CA
Test America Project Nos. IRA1233, IRA2025, IRA2352, IRA2350, IRA2349, IRA2156
Eberline Services Reports R801067-8681, R801142-8682, R801161-8683 R801162-8684, R801163-8685, R801164-8686

Dear Mr. Doak:

Enclosed are results from the analyses of six water samples. One sample was received on January 16, one on January 24, three on January 26, and one on January 28, 2008. The samples were analyzed according to the accompanying Test America Subcontract Order Forms, the requested analyses were: gross alpha/gross beta (EPA 900.0), tritium (H-3, EPA906.0), Sr-90 (EPA905.0), Ra-226 (EPA903.1), Ra-228 (EPA 904.0), total uranium (ASTM D-5174), and gamma spectroscopy (EPA901.1, K-40 and Cs-137 only). Batch quality control samples consisted of LCS's, blank analyses, duplicate analyses, and matrix spike analyses (gross alpha/gross beta, H-3, Ra-226, Total-U only). All QC sample results were within the limits defined in Eberline Services Quality Control Procedures Manual.

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

Regards,

Melissa Mannion
Senior Program Manager

MCM/njv

Enclosure: *Reports/CoC's*
Invoices

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

Eberline Services

ANALYSIS RESULTS

SDG 8684 | Client TA IRVINE
Work Order R801162-01 | Contract PR0JECT# IRA2350
Received Date 01/26/08 | Matrix WATER

Client Sample ID	Lab Sample ID	Collected	Analyzed	Nuclide	Results ± 2σ	Units	MDA
IRA2350-01	8684-001	01/24/08	02/06/08	GrossAlpha	0.959 ± 0.78	pCi/L	0.85
			02/06/08	Gross Beta	30.4 ± 1.2	pCi/L	0.91
			02/04/08	Ra-228	0.096 ± 0.16	pCi/L	0.42
			01/31/08	K-40 (G)	U	pCi/L	35
			01/31/08	Cs-137 (G)	U	pCi/L	1.2
			02/15/08	H-3	-4.16 ± 96	pCi/L	160
			02/11/08	Ra-226	-0.110 ± 0.41	pCi/L	0.87
			02/07/08	Sr-90	0.007 ± 0.36	pCi/L	0.83
			02/19/08	Total U	0.367 ± 0.041	pCi/L	0.022

Certified by
Report Date 02/22/08

Eberline Services

QC RESULTS

SDG 8684 | Client TA IRVINE
Work Order R801162-01 | Contract PR0JECT# IRA2350
Received Date 01/26/08 | Matrix WATER

Lab Sample ID	Nuclide	Results	Units	Amount Added	MDA	Evaluation
LCS						
8682-002	GrossAlpha	10.6 ± 0.84	pCi/Smpl	10.1	0.29	105% recovery
	Gross Beta	9.49 ± 0.38	pCi/Smpl	9.39	0.29	101% recovery
	Ra-228	8.69 ± 0.54	pCi/Smpl	8.73	0.75	100% recovery
	Co-60 (G)	223 ± 11	pCi/Smpl	226	7.0	99% recovery
	Cs-137 (G)	253 ± 11	pCi/Smpl	236	8.1	107% recovery
	Am-241 (G)	215 ± 37	pCi/Smpl	252	47	85% recovery
	H-3	228 ± 14	pCi/Smpl	240	16	95% recovery
	Ra-226	5.92 ± 0.27	pCi/Smpl	5.58	0.085	106% recovery
	Sr-90	9.45 ± 0.73	pCi/Smpl	9.40	0.32	101% recovery
	Total U	1.06 ± 0.12	pCi/Smpl	1.13	0.004	94% recovery
BLANK						
8682-003	GrossAlpha	0.006 ± 0.13	pCi/Smpl	NA	0.25	<MDA
	Gross Beta	-0.090 ± 0.27	pCi/Smpl	NA	0.44	<MDA
	Ra-228	-0.089 ± 0.33	pCi/Smpl	NA	0.78	<MDA
	K-40 (G)	U	pCi/Smpl	NA	190	<MDA
	Cs-137 (G)	U	pCi/Smpl	NA	7.4	<MDA
	H-3	-4.88 ± 9.0	pCi/Smpl	NA	15	<MDA
	Ra-226	-0.014 ± 0.026	pCi/Smpl	NA	0.071	<MDA
	Sr-90	0.078 ± 0.24	pCi/Smpl	NA	0.54	<MDA
	Total U	0.00E 00 ± 1.9E-04	pCi/Smpl	NA	4.4E-04	<MDA

DUPLICATES				ORIGINALS					
Sample ID	Nuclide	Results ± 2σ	MDA	Sample ID	Results ± 2σ	MDA	RPD	3σ (Tot)	Eval
8682-004	GrossAlpha	3.13 ± 2.1	2.2	8682-001	2.52 ± 2.0	2.4	22	160	satis.
	Gross Beta	42.1 ± 2.3	2.1		42.3 ± 2.4	2.4	0	44	satis.
	Ra-228	0.070 ± 0.15	0.42		0.145 ± 0.17	0.44	-	0	satis.

Certified by
Report Date 02/22/08

Eberline Services

SDG 8684 Client TA IRVINE
Work Order R801162-01 Contract PR0JECT# IRA2350
Received Date 01/26/08 Matrix WATER

K-40	(G)	42.6 ± 18	9.6	36.0 ± 19	13	17	102	satis.
Cs-137	(G)	U	0.92	U	1.1	-	0	satis.
Tl-208	(G)	U	1.2	U		200	302	satis.
Pb-210	(G)	U	230	U		200	302	satis.
Bi-212	(G)	U	7.7	U		200	302	satis.
Pb-212	(G)	U	1.6	U		200	302	satis.
Bi-214	(G)	U	2.1	U		200	301	satis.
Pb-214	(G)	U	2.2	U		200	302	satis.
Ra-226	(G)	U	18	U		200	302	satis.
Ac-228	(G)	U	5.0	U		200	302	satis.
Th-234	(G)	U	31	U		200	302	satis.
U-235	(G)	U	6.5	U		200	302	satis.
U-238	(G)	U	130	U		200	302	satis.
Am-241	(G)	U	6.7	U		200	302	satis.
H-3		-73.7 ± 92	160	-62.4 ± 94	160	-	0	satis.
Ra-226		0.111 ± 0.44	0.80	-0.149 ± 0.46	0.96	-	0	satis.
Sr-90		-0.108 ± 0.44	1.1	0.032 ± 0.30	0.58	-	0	satis.
Total U		2.88 ± 0.32	0.022	2.75 ± 0.30	0.022	5	30	satis.

SPIKED SAMPLE / ORIGINAL SAMPLE

Sample ID	Nuclide	Results ± 2σ	MDA	Sample ID	Results ± 2σ	MDA	Added	%Recv
8682-005	GrossAlpha	225 ± 12	2.5	8682-001	2.52 ± 2.0	2.4	163	136
	Gross Beta	192 ± 4.5	2.4		42.3 ± 2.4	2.4	145	103
	H-3	15800 ± 310	160		-62.4 ± 94	160	16000	99
	Ra-226	124 ± 4.7	0.94		-0.149 ± 0.46	0.96	112	111
	Total U	120 ± 15	2.2		2.75 ± 0.30	0.022	113	104

Certified by
Report Date 02/22/08

SUBCONTRACT ORDER

TestAmerica Irvine 8684

IRA2350

SENDING LABORATORY:

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

RECEIVING LABORATORY:

Eberline Services - SUB
2030 Wright Avenue
Richmond, CA 94804
Phone :(510) 235-2633
Fax: (510) 235-0438
Project Location: California
Receipt Temperature: 8 °C Ice: (Y) / N

Analysis	Units	Due	Expires	Comments
Sample ID: IRA2350-01	**Water**		Sampled: **01/24/08 09:00**	**ph=8.2. temp=47.8**
Gamma Spec-O	mg/kg	02/04/08	01/23/09 09:00	Out to Eberline, K-40 and CS-137 only
Gross Alpha-O	pCi/L	02/04/08	07/22/08 09:00	Out to Eberline
Gross Beta-O	pCi/L	02/04/08	07/22/08 09:00	Out to Eberline
Level 4 Data Package - Out	N/A	02/04/08	02/21/08 09:00	
Radium, Combined-O	pCi/L	02/04/08	01/23/09 09:00	Out to Eberline
Strontium 90-O	pCi/L	02/04/08	01/23/09 09:00	Out to Eberline
Tritium-O	pCi/L	02/04/08	01/23/09 09:00	Out to Eberline
Uranium, Combined-O	pCi/L	02/04/08	01/23/09 09:00	Out to Eberline

Containers Supplied:

2.5 gal Poly (K) 500 mL Amber (L)

[signature]	1/25/08 17:00	Fed Ex	1/25/08 17:00
Released By	Date/Time	Received By	Date/Time
		[signature]	01/26/08 11:00
Released By	Date/Time	Received By	Date/Time

NPDES - 1007

Vista
Analytical Laboratory

February 09, 2008

Vista Project I.D.: 30202

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

Dear Mr. Doak,

Enclosed are the results for the one aqueous sample received at Vista Analytical Laboratory on January 26, 2008 under your Project Name "IRA2350". This sample was extracted and analyzed using EPA Method 1613 for tetra-through-octa chlorinated dioxins and furans. A standard turnaround time was provided for this work.

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

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

Sincerely,

Martha M. Maier
Laboratory Director

ACCREDITED IN ACCORDANCE WITH nelac

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

Section I: Sample Inventory Report

Date Received: **1/26/2008**

Vista Lab. ID	Client Sample ID
30202-001	IRA2350-01

SECTION II

Method Blank **EPA Method 1613**

Matrix:	Aqueous	QC Batch No.:	9917	Lab Sample:	0-MB001
Sample Size:	1.00 L	Date Extracted:	31-Jan-08	Date Analyzed DB-5:	6-Feb-08
				Date Analyzed DB-225:	NA

Analyte	Conc. (ug/L)	DL [a]	EMPC [b]	Qualifiers
2,3,7,8-TCDD	ND	0.000000997		
1,2,3,7,8-PeCDD	ND	0.000000625		
1,2,3,4,7,8-HxCDD	ND	0.00000147		
1,2,3,6,7,8-HxCDD	ND	0.00000149		
1,2,3,7,8,9-HxCDD	ND	0.00000142		
1,2,3,4,6,7,8-HpCDD	ND	0.00000144		
OCDD	ND	0.00000845		
2,3,7,8-TCDF	ND	0.000000679		
1,2,3,7,8-PeCDF	ND	0.000000815		
2,3,4,7,8-PeCDF	ND	0.000000838		
1,2,3,4,7,8-HxCDF	ND	0.000000635		
1,2,3,6,7,8-HxCDF	ND	0.000000689		
2,3,4,6,7,8-HxCDF	ND	0.000000752		
1,2,3,7,8,9-HxCDF	ND	0.000000910		
1,2,3,4,6,7,8-HpCDF	ND	0.00000116		
1,2,3,4,7,8,9-HpCDF	ND	0.00000122		
OCDF	ND	0.00000291		

Labeled Standard		%R	LCL-UCL [d]	Qualifiers
IS	13C-2,3,7,8-TCDD	93.4	25 - 164	
	13C-1,2,3,7,8-PeCDD	84.1	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	92.1	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	91.6	28 - 130	
	13C-1,2,3,4,6,7,8-HpCDD	94.6	23 - 140	
	13C-OCDD	78.5	17 - 157	
	13C-2,3,7,8-TCDF	92.5	24 - 169	
	13C-1,2,3,7,8-PeCDF	79.3	24 - 185	
	13C-2,3,4,7,8-PeCDF	77.4	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	93.1	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	88.7	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	87.8	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	97.5	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	85.2	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	90.7	26 - 138	
	13C-OCDF	87.0	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	94.5	35 - 197	

Totals		
Total TCDD	ND	0.000000997
Total PeCDD	ND	0.00000191
Total HxCDD	ND	0.00000146
Total HpCDD	ND	0.00000353
Total TCDF	ND	0.000000679
Total PeCDF	ND	0.000000826
Total HxCDF	ND	0.000000742
Total HpCDF	ND	0.00000118

Footnotes

a. Sample specific estimated detection limit.

b. Estimated maximum possible concentration.

c. Method detection limit.

d. Lower control limit - upper control limit.

Analyst: MAS

Approved By: William J. Luksemburg 08-Feb-2008 13:08

OPR Results **EPA Method 1613**

Matrix:	Aqueous	QC Batch No.:	9917	Lab Sample:	0-OPR001		
Sample Size:	1.00 L	Date Extracted:	31-Jan-08	Date Analyzed DB-5:	6-Feb-08	Date Analyzed DB-225:	NA

Analyte	Spike Conc.	Conc. (ng/mL)	OPR Limits		Labeled Standard	%R	LCL-UCL	Qualifier
2,3,7,8-TCDD	10.0	10.4	6.7 - 15.8	IS	13C-2,3,7,8-TCDD	91.2	25 - 164	
1,2,3,7,8-PeCDD	50.0	48.9	35 - 71		13C-1,2,3,7,8-PeCDD	83.6	25 - 181	
1,2,3,4,7,8-HxCDD	50.0	49.4	35 - 82		13C-1,2,3,4,7,8-HxCDD	89.8	32 - 141	
1,2,3,6,7,8-HxCDD	50.0	50.2	38 - 67		13C-1,2,3,6,7,8-HxCDD	86.1	28 - 130	
1,2,3,7,8,9-HxCDD	50.0	49.0	32 - 81		13C-1,2,3,4,6,7,8-HpCDD	88.4	23 - 140	
1,2,3,4,6,7,8-HpCDD	50.0	49.9	35 - 70		13C-OCDD	75.3	17 - 157	
OCDD	100	102	78 - 144		13C-2,3,7,8-TCDF	88.0	24 - 169	
2,3,7,8-TCDF	10.0	9.69	7.5 - 15.8		13C-1,2,3,7,8-PeCDF	76.4	24 - 185	
1,2,3,7,8-PeCDF	50.0	50.2	40 - 67		13C-2,3,4,7,8-PeCDF	74.3	21 - 178	
2,3,4,7,8-PeCDF	50.0	52.2	34 - 80		13C-1,2,3,4,7,8-HxCDF	87.1	26 - 152	
1,2,3,4,7,8-HxCDF	50.0	49.9	36 - 67		13C-1,2,3,6,7,8-HxCDF	83.7	26 - 123	
1,2,3,6,7,8-HxCDF	50.0	50.4	42 - 65		13C-2,3,4,6,7,8-HxCDF	84.8	28 - 136	
2,3,4,6,7,8-HxCDF	50.0	50.8	35 - 78		13C-1,2,3,7,8,9-HxCDF	87.0	29 - 147	
1,2,3,7,8,9-HxCDF	50.0	50.0	39 - 65		13C-1,2,3,4,6,7,8-HpCDF	80.8	28 - 143	
1,2,3,4,6,7,8-HpCDF	50.0	51.1	41 - 61		13C-1,2,3,4,7,8,9-HpCDF	87.0	26 - 138	
1,2,3,4,7,8,9-HpCDF	50.0	50.1	39 - 69		13C-OCDF	80.9	17 - 157	
OCDF	100	100	63 - 170	CRS	37Cl-2,3,7,8-TCDD	92.1	35 - 197	

Analyst: MAS

Approved By: William J. Luksemburg 08-Feb-2008 13:08

Sample ID: **IRA2350-01** **EPA Method 1613**

Client Data		Sample Data		Laboratory Data			
Name:	Test America-Irvine, CA	Matrix:	Aqueous	Lab Sample:	30202-001	Date Received:	26-Jan-08
Project:	IRA2350	Sample Size:	1.00 L	QC Batch No.:	9917	Date Extracted:	31-Jan-08
Date Collected:	24-Jan-08			Date Analyzed DB-5:	6-Feb-08	Date Analyzed DB-225:	NA
Time Collected:	0900						

Analyte	Conc. (ug/L)	DL [a]	EMPC [b]	Qualifiers
2,3,7,8-TCDD	ND	0.00000106		
1,2,3,7,8-PeCDD	ND	0.000000729		
1,2,3,4,7,8-HxCDD	ND	0.00000201		
1,2,3,6,7,8-HxCDD	ND	0.00000317		
1,2,3,7,8,9-HxCDD	ND	0.00000199		
1,2,3,4,6,7,8-HpCDD	0.0000275			
OCDD	0.000507			
2,3,7,8-TCDF	ND	0.000000881		
1,2,3,7,8-PeCDF	ND	0.00000111		
2,3,4,7,8-PeCDF	ND	0.00000118		
1,2,3,4,7,8-HxCDF	ND	0.000000835		
1,2,3,6,7,8-HxCDF	ND	0.000000930		
2,3,4,6,7,8-HxCDF	ND	0.00000108		
1,2,3,7,8,9-HxCDF	ND	0.00000134		
1,2,3,4,6,7,8-HpCDF	ND	0.00000553		
1,2,3,4,7,8,9-HpCDF	ND	0.00000140		
OCDF	0.0000119			J

	Labeled Standard	%R	LCL-UCL [d]	Qualifiers
IS	13C-2,3,7,8-TCDD	94.4	25 - 164	
	13C-1,2,3,7,8-PeCDD	88.5	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	90.6	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	88.7	28 - 130	
	13C-1,2,3,4,6,7,8-HpCDD	93.2	23 - 140	
	13C-OCDD	87.1	17 - 157	
	13C-2,3,7,8-TCDF	92.4	24 - 169	
	13C-1,2,3,7,8-PeCDF	87.5	24 - 185	
	13C-2,3,4,7,8-PeCDF	79.9	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	96.4	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	86.5	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	83.8	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	89.5	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	83.8	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	88.2	26 - 138	
	13C-OCDF	93.0	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	99.8	35 - 197	

Totals

Total TCDD	ND	0.00000106	
Total PeCDD	ND	0.00000138	
Total HxCDD	ND	0.00000472	
Total HpCDD	0.0000597		
Total TCDF	ND	0.000000881	
Total PeCDF	ND	0.00000114	
Total HxCDF	0.000000917		0.00000243
Total HpCDF	ND		0.0000123

Footnotes

a. Sample specific estimated detection limit.

b. Estimated maximum possible concentration.

c. Method detection limit.

d. Lower control limit - upper control limit.

Analyst: MAS

Approved By: William J. Luksemburg 08-Feb-2008 13:08

APPENDIX

DATA QUALIFIERS & ABBREVIATIONS

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

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

CERTIFICATIONS

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

SUBCONTRACT ORDER

TestAmerica Irvine

IRA2350 30202

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: 4.1°C

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

Analysis	Units	Due	Expires	Comments
Sample ID: IRA2350-01	**Water**		Sampled: **01/24/08 09:00**	**ph=8.2. temp=47.8**
1613-Dioxin-HR-Alta	ug/l	02/04/08	01/31/08 09:00	J flags,17 congeners,no TEQ,ug/L,sub=Vista
Level 4 + EDD-OUT	N/A	02/04/08	02/21/08 09:00	
Containers Supplied:				
1 L Amber (C)	1 L Amber (D)			

Released By	1/25/08 17:00 Date/Time	FedEx Received By	1/25/08 17:00 Date/Time
Released By	Date/Time	Received By	1/28/08 1000 Date/Time

SAMPLE LOG-IN CHECKLIST

Vista Analytical Laboratory

Vista Project #: 30202 TAT unspecified

Samples Arrival:	**Date/Time** 1/26/08 0944	**Initials:** FEB	**Location:** WR-2 **Shelf/Rack:** N1A
Logged In:	**Date/Time** 1/28/08 1004	**Initials:** BJB	**Location:** WR-2 **Shelf/Rack:** B-2

Delivered By:	(FedEx)	UPS	Cal	DHL	Hand Delivered	Other
Preservation:	(Ice)	Blue Ice	Dry Ice	None		
Temp °C 4.1	**Time:** 0947	**Thermometer ID:** IR-1				

	YES	NO	NA
Adequate Sample Volume Received?	✓		
Holding Time Acceptable?	✓		
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?	✓		
Shipping Documentation Present?	✓		
Airbill / Trk # 7909 2519 0739	✓		
Sample Container Intact?	✓		
Sample Custody Seals Intact?			✓
Chain of Custody / Sample Documentation Present?	✓		
COC Anomaly/Sample Acceptance Form completed?		✓	
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓

$Na_2S_2O_3$ Preservation Documented?	COC	Sample Container	(None)		
Shipping Container	Vista	(Client)	Retain	(Return)	Dispose

Comments:

SUBCONTRACT ORDER

TestAmerica Irvine

IRA2350

8012535

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:

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

Analysis	Units	Due	Expires	Comments
Sample ID: IRA2350-01	**Water**		Sampled: **01/24/08 09:00**	**ph=8.2. temp=47.8**
Level 4 Data Package - Wec	N/A	02/04/08	02/21/08 09:00	Out to weck
Mercury - 245.1, Diss -OUT	mg/l	02/04/08	02/21/08 09:00	Boeing, J flags/ Out to Weck
Mercury - 245.1-OUT	mg/l	02/04/08	02/21/08 09:00	Boeing, permit, J flags/ Out to Weck

Containers Supplied:

125 mL Poly w/HNO3 (N) 125 mL Poly (O)

Released By	Date/Time	Received By	Date/Time
1/25/08 0820		0820	
Released By	Date/Time	Received By	Date/Time
1/25/08 1007		01/25/08	

Weck Laboratories, Inc.
Analytical Laboratory Services - Since 1964

14859 E. Clark Ave., Industry, CA 91745
Phone 626.336.2139 Fax 626.336.2634
info@wecklabs.com www.wecklabs.com

CERTIFICATE OF ANALYSIS

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

Phone: (949) 261-1022
Fax: (949) 260-3297

Report Date: 02/04/08 10:44
Received Date: 01/25/08 08:20
Turn Around: Normal

Work Order #: 8012535

Client Project: IRA2350

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

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

Dear Joseph Doak :

Enclosed are the results of analyses for samples received 01/25/08 08:20 with the Chain of Custody document. The samples were received in good condition. The samples were received at 7.3 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Reviewed by:

Kim G Tu

Project Manager

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

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

Report ID: 8012535
Project ID: IRA2350

Date Received: 01/25/08 08:20
Date Reported: 02/04/08 10:44

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Sampled by:	Sample Comments	Laboratory	Matrix	Date Sampled
IRA2350-01	Client		8012535-01	Water	01/24/08 09:00

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

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

Report ID: 8012535
Project ID: IRA2350

Date Received: 01/25/08 08:20
Date Reported: 02/04/08 10:44

IRA2350-01 8012535-01 (Water) Date Sampled: 01/24/08 09:00

Metals by EPA 200 Series Methods

Analyte	Result	MDL	Units	Reporting Limit	Dilution Factor	Method	Batch Number	Date Prepared	Date Analyzed		Data Qualifiers
Mercury, Dissolved	ND	0.050	ug/l	0.20	1	EPA 245.1	W8A1076	01/30/08	01/31/08	jlp	
Mercury, Total	**0.096**	0.050	ug/l	0.20	1	EPA 245.1	W8A1076	01/30/08	01/31/08	jlp	J

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

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

Report ID: 8012535
Project ID: IRA2350

Date Received: 01/25/08 08:20
Date Reported: 02/04/08 10:44

QUALITY CONTROL SECTION

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

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

Report ID: 8012535
Project ID: IRA2350

Date Received: 01/25/08 08:20
Date Reported: 02/04/08 10:44

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch W8A1076 - EPA 245.1										
Blank (W8A1076-BLK1)				Analyzed: 01/31/08						
Mercury, Dissolved	ND	0.20	ug/l							
Mercury, Total	ND	0.20	ug/l							
LCS (W8A1076-BS1)				Analyzed: 01/31/08						
Mercury, Dissolved	0.913	0.20	ug/l	1.00		91	85-115			
Mercury, Total	0.913	0.20	ug/l	1.00		91	85-115			
Matrix Spike (W8A1076-MS1)		**Source: 8012935-01**		Analyzed: 01/31/08						
Mercury, Dissolved	0.971	0.20	ug/l	1.00	0.0450	93	70-130			
Mercury, Total	0.971	0.20	ug/l	1.00	0.0450	93	70-130			
Matrix Spike (W8A1076-MS2)		**Source: 8012939-01**		Analyzed: 01/31/08						
Mercury, Dissolved	2.01	0.20	ug/l	1.00	1.18	83	70-130			
Mercury, Total	2.01	0.20	ug/l	1.00	1.18	83	70-130			
Matrix Spike Dup (W8A1076-MSD1)		**Source: 8012935-01**		Analyzed: 01/31/08						
Mercury, Dissolved	0.957	0.20	ug/l	1.00	0.0450	91	70-130	1	20	
Mercury, Total	0.957	0.20	ug/l	1.00	0.0450	91	70-130	1	20	
Matrix Spike Dup (W8A1076-MSD2)		**Source: 8012939-01**		Analyzed: 01/31/08						
Mercury, Dissolved	1.99	0.20	ug/l	1.00	1.18	81	70-130	1	20	
Mercury, Total	1.99	0.20	ug/l	1.00	1.18	81	70-130	1	20	

Weck Laboratories, Inc
Kim G Tu, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

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

Report ID: 8012535
Project ID: IRA2350

Date Received: 01/25/08 08:20
Date Reported: 02/04/08 10:44

Notes and Definitions

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

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

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

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

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