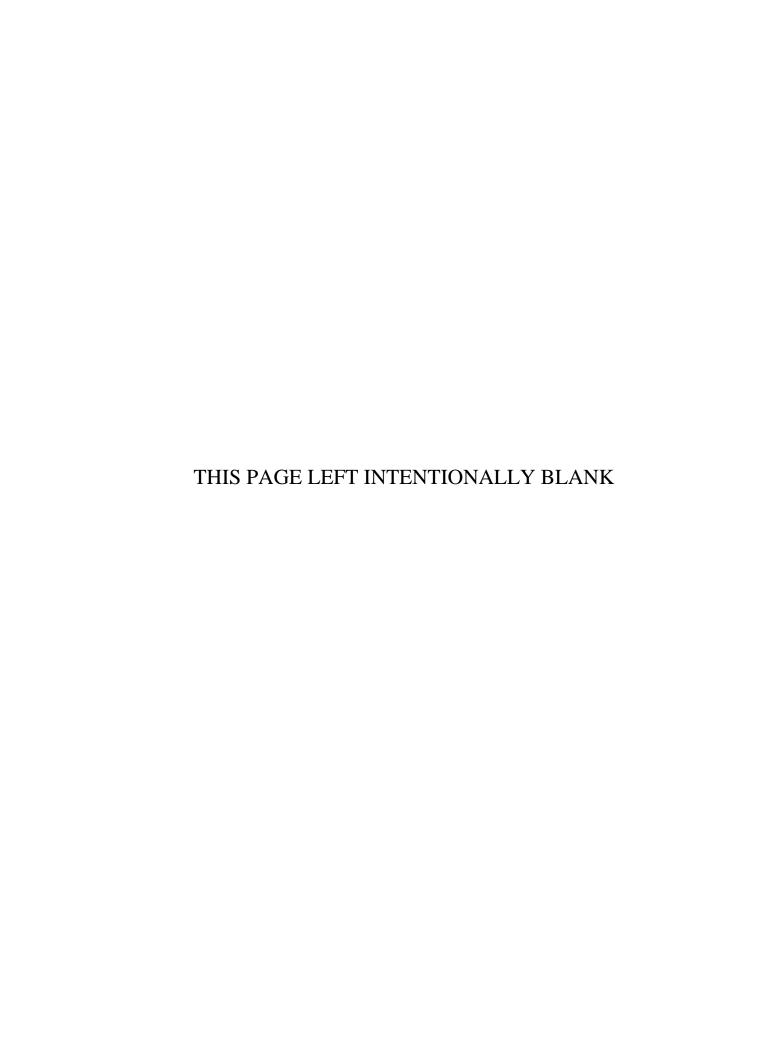
APPENDIX G

Section 62

Outfall 018 - BMP Effectiveness January 18- 29, 2010 Test America Analytical Laboratory Report





LABORATORY REPORT

Prepared For: MWH-Pasadena/Boeing Project: BMP Effectiveness

618 Michillinda Avenue, Suite 200 Monitoring Program

Arcadia, CA 91007

Attention: Bronwyn Kelly Sampled: 01/18/10-01/21/10

Received: 01/22/10 Issued: 02/02/10 06:22

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

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

This entire report was reviewed and approved for release.

CASE NARRATIVE

SAMPLE RECEIPT: Samples were received intact, at 3°C, on ice and with chain of custody documentation.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the TestAmerica

Sample Acceptance Policy unless otherwise noted in the report.

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

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

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

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

LABORATORY ID	CLIENT ID	MATRIX
ITA1965-01	018 EFF-1	Water
ITA1965-02	018 EFF-2	Water
ITA1965-03	018 EFF-3	Water
ITA1965-04	018 EFF-4	Water
ITA1965-05	018 EFF-5	Water
ITA1965-06	018 EFF-6	Water

Reviewed By:

TestAmerica Irvine

Debby Wilson For Joseph Doak Project Manager

Debby Wilson

Sampled: 01/18/10-01/21/10



MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: BMP Effectiveness

Monitoring Program

Report Number: ITA1965

Received: 01/22/10

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITA1965-01 (018 EFF-1 - Ware Reporting Units: g/cc	ater)				Sample	ed: 01/18/	10		
Density	Displacement	10A2425	N/A	NA	1.0	1	01/26/10	01/26/10	
Sample ID: ITA1965-02 (018 EFF-2 - Ware Reporting Units: g/cc	ater)				Sample	ed: 01/19/	10		
Density Cincil green	Displacement	10A2425	N/A	NA	1.0	1	01/26/10	01/26/10	
Sample ID: ITA1965-03 (018 EFF-3 - Water Reporting Units: g/cc	ater)				Sample	ed: 01/20/	10		
Density	Displacement	10A2425	N/A	NA	1.0	1	01/26/10	01/26/10	
Sample ID: ITA1965-04 (018 EFF-4 - W	ater)				Sample	ed: 01/20/	10		
Reporting Units: g/cc Density	Displacement	10A2425	N/A	NA	1.0	1	01/26/10	01/26/10	
Sample ID: ITA1965-05 (018 EFF-5 - Ware Reporting Units: g/cc	,				Sample	ed: 01/21/	10		
Density	Displacement	10A2425	N/A	NA	0.99	1	01/26/10	01/26/10	
Sample ID: ITA1965-06 (018 EFF-6 - Wa	ater)				Sample	ed: 01/21/	10		
Reporting Units: g/cc Density	Displacement	10A2425	N/A	NA	0.99	1	01/26/10	01/26/10	
Sample ID: ITA1965-01 (018 EFF-1 - Water Reporting Units: mg/l	ater)				Sample	ed: 01/18/	10		
Sediment	ASTM D3977	10A2468	10	10	ND	1	01/26/10	01/29/10	
Sample ID: ITA1965-02 (018 EFF-2 - Water Reporting Units: mg/l	ater)				Sample	ed: 01/19/	10		
Sediment	ASTM D3977	10A2468	10	10	26	1	01/26/10	01/29/10	
Sample ID: ITA1965-03 (018 EFF-3 - Water Reporting Units: mg/l	ater)				Sample	ed: 01/20/	10		
Sediment	ASTM D3977	10A2468	10	10	20	1	01/26/10	01/29/10	
Sample ID: ITA1965-04 (018 EFF-4 - Wa	ater)				Sample	ed: 01/20/	10		
Reporting Units: mg/l Sediment	ASTM D3977	10A2468	10	10	18	1	01/26/10	01/29/10	

TestAmerica Irvine



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

Project ID: BMP Effectiveness

Monitoring Program Sampled: 01/18/10-01/21/10

Report Number: ITA1965 Received: 01/22/10

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

MWH-Pasadena/Boeing

Arcadia, CA 91007

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITA1965-05 (018 EFF-5 -			Sample	ed: 01/21/1	10				
Reporting Units: mg/l Sediment	ASTM D3977	10A2468	10	10	14	1	01/26/10	01/29/10	
Sample ID: ITA1965-06 (018 EFF-6 -	Water)				Sample	ed: 01/21/1	10		
Reporting Units: mg/l Sediment	ASTM D3977	10A2468	10	10	ND	1	01/26/10	01/29/10	
Scament	ASTM D3711	10/12/100	10	10	ND	1	01/20/10	01/2//10	



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

Project ID: BMP Effectiveness

Monitoring Program Sampled: 01/18/10-01/21/10

Report Number: ITA1965 Received: 01/22/10

Arcadia, CA 91007 Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

MWH-Pasadena/Boeing

DATA QUALIFIERS AND DEFINITIONS

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.

RPD Relative Percent Difference



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

Project ID: BMP Effectiveness MWH-Pasadena/Boeing

Monitoring Program Sampled: 01/18/10-01/21/10

Report Number: ITA1965 Received: 01/22/10

Arcadia, CA 91007 Attention: Bronwyn Kelly

Certification Summary

TestAmerica Irvine

Displacement

618 Michillinda Avenue, Suite 200

Method	Matrix	Nelac	California
ASTM D3977	Water		

Water

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

TestAmerica Irvine

CHAIN OF CUSTODY FORM Test America version 06/29/09

Page 1 of 1

ANALYSIS REQUIRED Normal Sample Integrity; (Check)
Intact
On Ice: 10 Days Comments Turn around Time: (check)
24 Hours 5 Days Perchlorate Only 72 Hours grab grab grab grab grab grab Metals Only 72 Hours_ 72 Hours 48 Hours 14/8) Wha Date/Time: Date/Time: Date/Time: -22-16 Project: Boeing BMP Effectiveness Monitoring Program (7991-779EQ-MTSA Concentration (SSC, × × × × Suspended Sediment 4A, 4B Bottle # S ဖ 2 Preservative WWH. Received By Received By None None None None None None (626) 568-6515 (626) 568-6691 Phone Number Fax Number: 1/20/10 1400 1/21/10 0810 1/18/10 1700 1/20/10 0800 1/21/10 1345 1/19/10 1341 Sampling Date/Time 22.40 Date/Time: # of Cont. Container Type Project Manager: Bronwyn Kelly Poly cube 1 gal Poly cube 1 gal Poly-1 L Poly-1 L Poly-1 L Poly-1 L Test America contact: Joseph Doak Sampler: Shelby Dawson Client Name/Address: MWH-Pasadena 618 Michillinda Ave., Ste 200 Arcadia, CA 91007 Sample Matrix 3 3 3 3 ≥ ≥ Relinqujshed By Relinquished By Sample Description 018 EFF-3 018 EFF-4 018 EFF-5 018 EFF-6 018 EFF-2 018 EFF-1



LABORATORY REPORT

Prepared For: MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project: BMP Effectiveness
Monitoring Program

Sampled: 01/22/10-01/26/10

Received: 01/26/10 Issued: 02/04/10 17:54

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

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

This entire report was reviewed and approved for release.

CASE NARRATIVE

SAMPLE RECEIPT: Samples were received intact, at 3°C, on ice and with chain of custody documentation.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the TestAmerica

Sample Acceptance Policy unless otherwise noted in the report.

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

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

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

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

LABORATORY ID	CLIENT ID	MATRIX
ITA2244-01	018 EFF-7	Water
ITA2244-02	018 EFF-8	Water
ITA2244-03	018 EFF-9	Water
ITA2244-04	018 EFF-10	Water
ITA2244-05	018 EFF-11	Water
ITA2244-06	018 EFF-12	Water
ITA2244-07	018 EFF-13	Water
ITA2244-08	018 EFF-14	Water
ITA2244-09	018 EFF-15	Water

Reviewed By:

Debby Wilson

TestAmerica Irvine

Debby Wilson For Joseph Doak Project Manager



MWH-Pasadena/Boeing

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Project ID: BMP Effectiveness

Monitoring Program

Report Number: ITA2244

Sampled: 01/22/10-01/26/10

Received: 01/26/10

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITA2244-01 (018 EFF-7 - Wa	nter)				Sample	ed: 01/22/1	10		
Reporting Units: g/cc Density	Displacement	10B0360	N/A	NA	0.99	1	02/03/10	02/03/10	
Sample ID: ITA2244-02 (018 EFF-8 - Wa Reporting Units: g/cc	nter)				Sample	ed: 01/22/1	10		
Density	Displacement	10B0360	N/A	NA	1.0	1	02/03/10	02/03/10	
Sample ID: ITA2244-03 (018 EFF-9 - Wa Reporting Units: g/cc	ater)				Sample	ed: 01/23/1	10		
Density	Displacement	10B0360	N/A	NA	1.0	1	02/03/10	02/03/10	
Sample ID: ITA2244-04 (018 EFF-10 - W	ater)				Sample	ed: 01/23/1	10		
Reporting Units: g/cc Density	Displacement	10B0360	N/A	NA	1.0	1	02/03/10	02/03/10	
Sample ID: ITA2244-05 (018 EFF-11 - W Reporting Units: g/cc	ater)				Sample	ed: 01/23/1	10		
Density	Displacement	10B0360	N/A	NA	0.99	1	02/03/10	02/03/10	
Sample ID: ITA2244-06 (018 EFF-12 - W	ater)				Sample	ed: 01/24/1	10		
Reporting Units: g/cc Density	Displacement	10B0360	N/A	NA	1.0	1	02/03/10	02/03/10	
Sample ID: ITA2244-07 (018 EFF-13 - W Reporting Units: g/cc	ater)				Sample	ed: 01/24/1	10		
Density	Displacement	10B0360	N/A	NA	1.0	1	02/03/10	02/03/10	
Sample ID: ITA2244-08 (018 EFF-14 - W Reporting Units: g/cc	ater)				Sample	ed: 01/25/1	10		
Density Green Density	Displacement	10B0360	N/A	NA	1.0	1	02/03/10	02/03/10	
Sample ID: ITA2244-09 (018 EFF-15 - W Reporting Units: g/cc	ater)				Sample	ed: 01/26/1	10		
Density	Displacement	10B0360	N/A	NA	1.0	1	02/03/10	02/03/10	
Sample ID: ITA2244-01 (018 EFF-7 - Wa	nter)				Sample	ed: 01/22/1	10		
Reporting Units: mg/l Sediment	ASTM D3977	10B0379	10	10	ND	1	01/22/10	02/03/10	

TestAmerica Irvine



THE ELABERT IN ENTIRORMENTAL TEOTH

MWH-Pasadena/Boeing

Attention: Bronwyn Kelly

Project ID: BMP Effectiveness

618 Michillinda Avenue, Suite 200

Monitoring Program

Arcadia, CA 91007

Report Number: ITA2244

Sampled: 01/22/10-01/26/10 Received: 01/26/10

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITA2244-02 (018 EFF-8 - W	ater)				Sample				
Reporting Units: mg/l Sediment	ASTM D3977	10B0379	10	10	ND	1	01/22/10	02/03/10	
Sample ID: ITA2244-03 (018 EFF-9 - Ware Reporting Units: mg/l	ater)				Sample	ed: 01/23/1	10		
Sediment Sediment	ASTM D3977	10B0379	10	10	10	1	01/23/10	02/03/10	
Sample ID: ITA2244-04 (018 EFF-10 - V Reporting Units: mg/l	Vater)				Sample	ed: 01/23/1	10		
Sediment Sediment	ASTM D3977	10B0379	10	10	12	1	01/23/10	02/03/10	
Sample ID: ITA2244-05 (018 EFF-11 - V Reporting Units: mg/l				Sample	ed: 01/23/1	10			
Sediment	ASTM D3977	10B0379	10	10	ND	1	01/23/10	02/03/10	
Sample ID: ITA2244-06 (018 EFF-12 - V Reporting Units: mg/l	Vater)				Sample	ed: 01/24/1	10		
Sediment	ASTM D3977	10B0379	10	10	ND	1	01/24/10	02/03/10	
Sample ID: ITA2244-07 (018 EFF-13 - V Reporting Units: mg/l	Vater)				Sample	ed: 01/24/1	10		
Sediment	ASTM D3977	10B0379	10	10	ND	1	01/24/10	02/03/10	
Sample ID: ITA2244-08 (018 EFF-14 - V Reporting Units: mg/l	Vater)				Sample	ed: 01/25/1	10		
Sediment	ASTM D3977	10B0379	10	10	ND	1	01/25/10	02/03/10	
Sample ID: ITA2244-09 (018 EFF-15 - V Reporting Units: mg/l				Sample	ed: 01/26/1	10			
Sediment Sediment	ASTM D3977	10B0379	10	10	ND	1	01/26/10	02/03/10	



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: BMP Effectiveness

Monitoring Program Sampled: 01/22/10-01/26/10

Report Number: ITA2244 Received: 01/26/10

110001100. 01/20/11

METHOD BLANK/QC DATA

INORGANICS

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B0360 Extracted: 02/03/1	10										
Duplicate Analyzed: 02/03/2010 (10B03	360-DUP1)				Sou	rce: ITA	2244-01				
Density	0.995	NA	N/A	g/cc		0.995			0	20	



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

Project ID: BMP Effectiveness

Monitoring Program Sampled: 01/22/10-01/26/10

Report Number: ITA2244 Received: 01/26/10

Arcadia, CA 91007 Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

MWH-Pasadena/Boeing

DATA QUALIFIERS AND DEFINITIONS

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.

RPD Relative Percent Difference



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

MWH-Pasadena/Boeing Project ID: BMP Effectiveness

Monitoring Program Sampled: 01/22/10-01/26/10

Report Number: ITA2244 Received: 01/26/10

Arcadia, CA 91007 Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

Certification Summary

TestAmerica Irvine

Displacement

Method	Matrix	Nelac	California
ASTM D3977	Water		

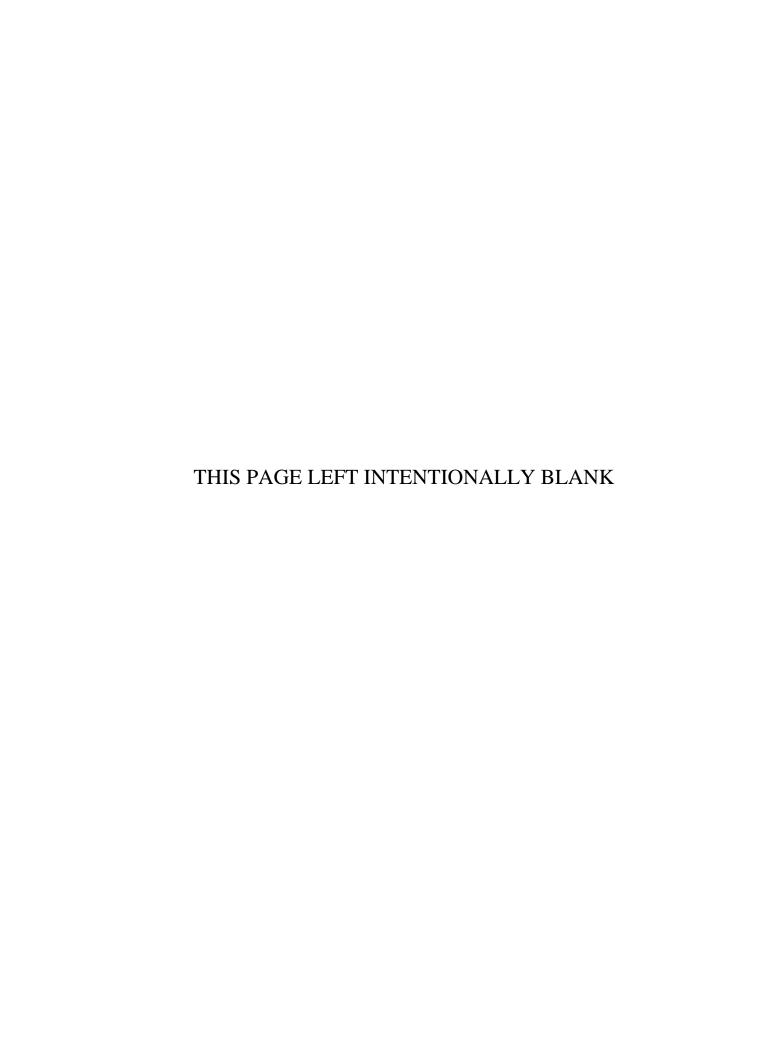
Water

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

TestAmerica Irvine

2742244 Page 1 of 1 CHAIN OF CUSTODY FORM Test America Version 06/29/09 Client Name/Address: Project: Boeing BMP **ANALYSIS REQUIRED Effectiveness Monitoring** MWH-Arcadia Field readings: Program Suspended Sediment
Concentration (SSC, ASTM-D3977-1997) 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Temp = NATest America Contact: Joseph Doak AM = HqProject Manager: Bronwyn Kelly Phone Number: (626) 568-6691 Time of readings = NA Sampler: E. WAZKER Fax Number: (626) 568-6515 Comments Sample Sample Container # of Sampling Preservative Date/Time Description Matrix Type Cont. 018 EFF-7 W 500 ml Poly 1/22/10-1141 7A, 7B None 018 EFF-8 W 500 ml Poly 1/22/10-1420 None 8A, 8B Х 018 EFF-9 W 500 ml Poly 1/23/10-0830 None 9A, 9B X 10A, Х 018 EFF-10 W 500 ml Poly 1/23/10-1100 None 10B 11A, 018 EFF-11 W 500 ml Poly 1/23/10-1440 None Х 11B 12A, 018 EFF-12 W 500 ml Poly 1/24/10-1205 None Х 12B 13A, Х 018 EFF-13 W 500 ml Poly 1/24/10-1407 None 13B 018 EFF-14 W 1L Poly 1/25/10-1250 None 14 Х 018 EFF-15 N 14 Poly 1/26/10 1400 none 15A,15B X Date/Time: Date/Time: Relinquished By Turn around Time: (check) 1-26-10 / 4:3C 24 Hours _____ 5 Days 48 Hours _____ 10 Days 1/24/10 1955 72 Hours _____ Normal

#4042 ac





LABORATORY REPORT

Prepared For: MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project: BMP Effectiveness

Monitoring Program

Sampled: 01/28/10-01/29/10

Received: 01/29/10 Issued: 02/09/10 19:27

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

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

This entire report was reviewed and approved for release.

CASE NARRATIVE

SAMPLE RECEIPT: Samples were received intact, at 2°C, on ice and with chain of custody documentation.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the TestAmerica

Sample Acceptance Policy unless otherwise noted in the report.

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

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

No analyses were subcontracted to an outside laboratory.

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

 LABORATORY ID
 CLIENT ID
 MATRIX

 ITA2599-01
 018 EFF-16
 Water

 ITA2599-02
 018 EFF-17
 Water

Reviewed By:

Delby Wilson TestAmerica Irvine

SUBCONTRACTED:

Debby Wilson For Joseph Doak Project Manager



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: BMP Effectiveness

Monitoring Program Sampled: 01/28/10-01/29/10

Report Number: ITA2599 Received: 01/29/10

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITA2599-01 (018 EFF-16 - W Reporting Units: g/cc	ater)				Sample	ed: 01/28/1	10		
Density	Displacement	10B0924	N/A	NA	0.99	1	02/08/10	02/08/10	
Sample ID: ITA2599-02 (018 EFF-17 - W Reporting Units: g/cc				Sample	ed: 01/29/1	10			
Density	Displacement	10B0924	N/A	NA	0.99	1	02/08/10	02/08/10	
Sample ID: ITA2599-01 (018 EFF-16 - W Reporting Units: mg/l	'ater)				Sample	ed: 01/28/1	10		
Sediment	ASTM D3977	10B0925	10	10	ND	1	01/28/10	02/08/10	
Sample ID: ITA2599-02 (018 EFF-17 - W Reporting Units: mg/l	ater)				Sample	ed: 01/29/1	10		
Sediment Sediment	ASTM D3977	10B0925	10	10	ND	1	01/29/10	02/08/10	



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: BMP Effectiveness

Monitoring Program Sampled: 01/28/10-01/29/10

Report Number: ITA2599 Received: 01/29/10

METHOD BLANK/QC DATA

INORGANICS

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B0924 Extracted: 02/08	<u>/10</u>										
Duplicate Analyzed: 02/08/2010 (10Be	0924-DUP1)				Sou	rce: ITA	2570-01				
Density	1.00	NA	N/A	g/cc		1.00			0.06	20	



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

Project ID: BMP Effectiveness

Monitoring Program Sampled: 01/28/10-01/29/10

Report Number: ITA2599 Received: 01/29/10

Arcadia, CA 91007 Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

MWH-Pasadena/Boeing

DATA QUALIFIERS AND DEFINITIONS

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.

RPD Relative Percent Difference



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: BMP Effectiveness

Monitoring Program Sampled: 01/28/10-01/29/10

Report Number: ITA2599 Received: 01/29/10

Certification Summary

TestAmerica Irvine

Displacement

Method Matrix Nelac California
ASTM D3977 Water

Water

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

42599 Page 1 of 1		Comments				S: U		,			,	,		Turn around Time: (check)	24 Hours 5 Days 5.00.	48 Hours 10 Days 72 Hours Normal X	e Only 72 Ho	Metals Only 72 Hours	Sample Integrity: (Check) Intact On Ice:
T	ANALYSIS REQUIRED	(2661-	D38\1\		,									Date/Time:	1-29-10 1/5:20	() Sterlime: /	Date/Time:		
CHAIN OF CUSTODY FORM	Project: Boeing BMP Effectiveness Monitoring Program	nded Sediment orange (SSC, As	Preservative Bottle * Sonce # Sonce	0 None 16A, X	None	18 A, **							,	Received By		Received By C	Received By		
CHAIR	Project: Bc Effectiven Program	Kelly Phone Number: (626) 568-6691 Fax Number: (626) 568-6515	Container # of Sampling Type Cont. Date/Time	Poly-500 mL 2 1/25/10 1240	Poly-500 mL 2 (24/10 150	Poly-500 mt 2								Date/Time:	1-24-10/15:20	Date/Time: // // //	Date/Time:		
Test America	Client Name/Address: MWH-Pasadena 618 Michillinda Ave, Suite 200 Pasadena, CA 91007	Test America Contact: Joe Doak Project Manager: Bronwyn Kelly Sampler: ちしんようり	Sample Sample Con Description Matrix Ty	018 EFF-16 W Poly-5	018 EFF-17 W Poly-5	-818-EFF-18								Relinquished By.	MILETTHAM IN	Relinguished By	Refinquished by	5	

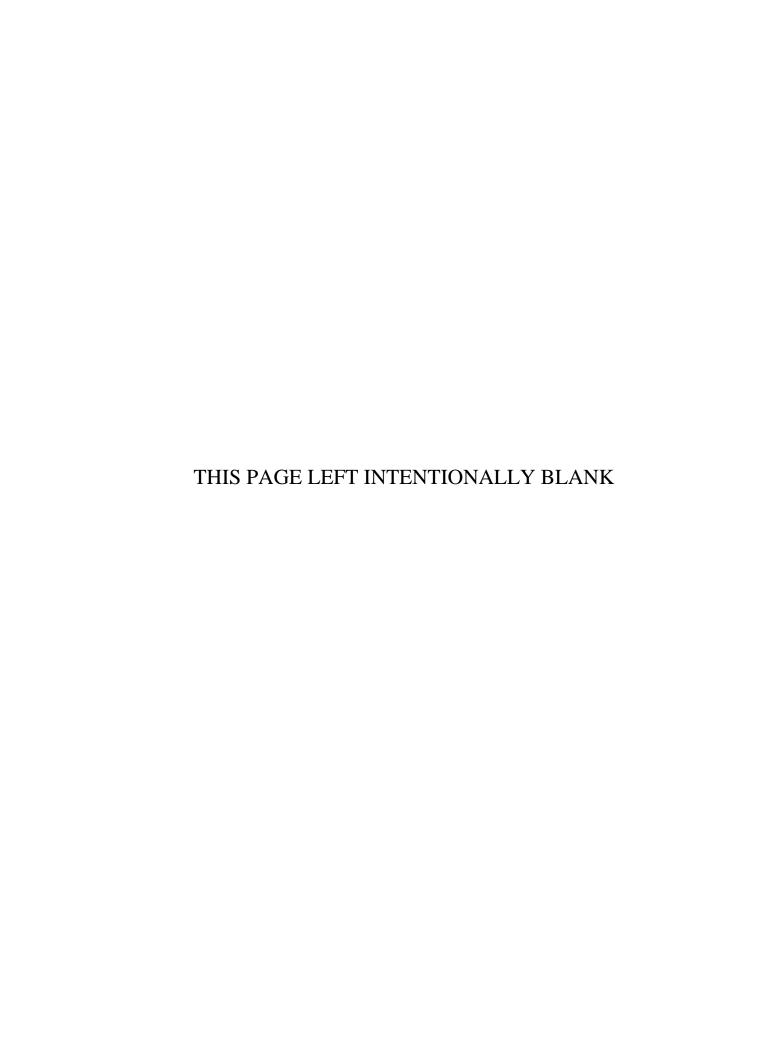
1.6 #19/

APPENDIX G

Section 63

Outfall 018 – February 6 & 7, 2010

MEC^X Data Validation Report





DATA VALIDATION REPORT

Boeing SSFL NPDES

SAMPLE DELIVERY GROUP: ITB0889/ITB0895

Prepared by

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

I. INTRODUCTION

Task Order Title: Boeing SSFL NPDES

Contract Task Order: 1261.100D.00 Sample Delivery Group: ITB0889/ITB0895

Project Manager: B. Kelly Matrix: Water

QC Level: IV
No. of Samples: 3

No. of Reanalyses/Dilutions: 0

Laboratory: TestAmerica-Irvine

Table 1. Sample Identification

Client ID	Laboratory ID	Sub- Laboratory ID	Matrix	Collected	Method
Outfall 018 (Grab)	ITB0889-01	N/A	Water	2/6/10 01:00 PM	
Outfall 018	ITB0895-01	F0B090485- 001, G0B120540- 001, 987713	Water		ASTM 5174-91, 180.1, 200.7, 200.7 (Diss), 200.8, 200.8 (Diss), 245.1, 245.1 (Diss), 300.0, 314.0, 608, 625, 900.0 MOD, 901.1 MOD, 903.0 MOD, 904 MOD, 905 MOD, 906.0 MOD, 8260B-SIM, SM 2540D, SM 4500-F-C, SM2340B, SM2340B-Diss, SM2540C, SM4500-NH3-C, SM5210B, SM5310B, SM5540-C, 1613B
Trip Blank	ITB0890-02	N/A	Water	2/6/10 07:00 AM	624

II. Sample Management

No anomalies were observed regarding sample management. The samples were received at ambient temperature at TestAmerica-St. Louis; however, due to the nonvolatile nature of the analytes, no qualifications were required. The samples in this SDG were received at the remaining laboratories within the temperature limits of 4°C ±2°C. According to the case narrative for this SDG, the samples were received intact, on ice, and properly preserved, if applicable. The COCs were appropriately signed and dated by field and/or laboratory personnel. Custody seals were intact upon receipt at TestAmerica-St. Louis and TestAmerica-West Sacramento. As the sample was couriered to TestAmerica-Irvine, no custody seals were required. If necessary, the client ID was added to the sample result summary by the reviewer.

Data Qualifier Reference Table

Qualifie	r 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 or PCB congeners.	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
Н	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
С	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.
В	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.
Е	Not applicable.	Duplicates showed poor agreement.
1	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
Α	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
Т	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.
Р	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.
*11, *111	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: L. Calvin

Date Reviewed: March 27, 2010

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 (9/05).

- 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.
 - O GC Column Performance: A Windows Defining Mix (WDM) containing the first and last eluting congeners of each descriptor and isomer specificity compounds was analyzed with the initial calibration sequence and at the beginning of each analytical sequence. 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.
 - o Initial Calibration: Initial calibration criteria were met. The initial calibration was acceptable with %RSDs ≤20% for the 16 native compounds (calibration by isotope dilution) and ≤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.
 - o 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 detects between the EDL and the RL for all target compounds except 2,3,7,8-TCDD and total TCDD, 1,2,3,7,8-PeCDD, and 2,3,7,8-TCDF and total TCDF. Most detects in the method blank did not meet ratio criteria and were reported as EMPCs; however, due to the extent of contamination present in the method blank, it was the reviewer's professional opinion that those results be utilized to qualify

applicable sample results. Isomers present in the sample between the EDLs and RLs were qualified as nondetected, "U," at the levels of contamination. The sample results for total PeCDD, total HxCDD, total HpCDD, total PeCDF, and total HxCDF were qualified as nondetected, "U," as all peaks comprising the totals were present in the method blank at similar concentrations. Total HpCDF included one peak not present in the method blank, and was qualified as estimated, "J," as only a portion of the total was considered method blank contamination.

- Blank Spikes and Laboratory Control Samples: OPR 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 a representative number of reportable sample results or LCS results. Any EMPCs qualified as nondetected for method blank contamination were not further qualified as EMPCs. Any total result reported as an EMPC or including EMPCs was qualified as estimated, "J." Any detects reported below the EDL, or between the estimated detection limit (EDL) and the reporting limit (RL) were qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES permit. Nondetects are valid to the EDL.

B. EPA METHOD 8315M—Hydrazines

Reviewed By: P. Meeks Date Reviewed: April 4, 2010

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the MEC^{X} Data Validation Procedure for General Minerals (DVP-6, Rev. 0), EPA Method 8315M, and the National Functional Guidelines for Organic Data Review (10/99).

- Holding Times: Extraction and analytical holding times were met. The sample was derivitized and analyzed within three days of collection.
- Calibration: Calibration criteria were met. The initial calibration r² values were ≥0.995. The ICV, CCV and QCS recoveries were within 85-115%.
- Blanks: There were no target compound detects above the MDL in the method blank.
- Blank Spikes and Laboratory Control Samples: Recoveries and RPDs were within laboratory-established QC limits.
- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on the sample in this SDG. Method accuracy and precision were evaluated based on LCS results.
- 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.
- Compound Identification: Compound identification was verified. Review of the sample chromatograms and retention times indicated no problems with target compound identification.
- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibrations and the laboratory MDLs. Any results reported between the MDL and 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 reporting limit.

C. EPA METHODS 200.7, 200.8, and 245.1—Metals and Mercury

Reviewed By: P. Meeks

Date Reviewed: March 27, 2010

The sample listed in Table 1 for these analyses 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 200.7, 200.8, 245.1, and the National Functional Guidelines for Inorganic Data Review (7/02).

- Holding Times: Analytical holding times, six months for ICP and ICP-MS metals and 28 days for mercury, were met.
- Tuning: The measured beryllium mass associated with the dissolved copper analysis exceeded the true value by >0.1 amu; however, the magnesium mass calibration was acceptable. As the mass of copper is nearer in value to magnesium, no qualifications were required. The remaining mass calibration and resolution checks criteria were met. All tuning solution %RSDs were ≤5%, and allremaining masses of interest were calibrated to ≤ 0.1 amu and ≤0.9 amu at 10% peak height.
- Calibration: Calibration criteria were met. The thallium ICV was recovered marginally above the control limit; however, as thallium was not detected in the sample, no qualifications were required. Mercury initial calibration r² values were ≥0.995 and all remaining initial and continuing calibration recoveries were within 90-110% for the ICP and ICP-MS metals and 85-115% for mercury. The nickel 5 ppb CRDL recovery associated with the total nickel analysis was 66% and the total cadmium and silver 0.2 ppb CRDL recoveries were 50% and 64%, respectively therefore, the nondetected total results for these analytes were qualified as estimated, "UJ." The remaining CRDL/CRI recoveries were within the control limits of 70-130%.
- Blanks: Boron was detected in dissolved method blank and a bracketing CCB at 45.3 and 43.9 μg/L, respectively; therefore, total and dissolved boron detected in the sample were qualified as nondetected, "U," at the levels of contamination. Antimony, cadmium, and silver were reported in the total method blank at -0.36, -0.15, and -0.11 μg/L, respectively; therefore, the nondetected total results for these analytes were qualified as estimated, "UJ." Method blanks and CCBs had no other applicable detects.
- Interference Check Samples: Recoveries were within 80-120%. Boron was reported in the ICSA analysis at -75 µg/L; however, the concentration of the primary interferent, iron, was not sufficient to cause matrix interference in the site sample. Copper and cadmium were detected in the 200.8 ICSA; however, the reviewer was not able to determine if the detects were due to low-level contamination of the ICSA standard.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratoryestablished QC limits.

 Laboratory Duplicates: No laboratory duplicate analyses were performed on the sample in this SDG.

- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were performed on the dissolved 200.7 analytes and total mercury. MS/MSD results are not assessed with the native concentration exceeds the spike by a factor of 4x or more. Recoveries and RPDs were within laboratory-established QC limits. Method accuracy for the remaining methods was evaluated based on the LCS results.
- Serial Dilution: No serial dilution analyses were performed on the sample in this SDG.
- Internal Standards Performance: All sample internal standard intensities were within 60-125% of the internal standard intensities measured in the initial calibration blank. Copper was not bracketed by an internal standard of lower mass; therefore, copper detected in the sample was qualified as estimated, "J."
- 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. When the sample results were qualified and the reviewer was able to clearly determine bias, detected results were qualified as either "J+" or "J-"; otherwise, bias was not indicated in the qualification. Any detects between the method detection limit and 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 the laboratory did not list the dissolved chromium results for the sample, method blank, or the LCS. The reviewer checked the raw data and determined that the LCS recovery was acceptable and that chromium was not detected in either the site sample or the method blank.

Zinc was detected at a nominally larger concentration in the dissolved fraction that in the total fraction. Antimony was not detected in the total fraction but was detected marginally above the MDL in the dissolved fraction.

- 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.

D. EPA METHOD 314.0—Perchlorate

Reviewed By: P. Meeks

Date Reviewed: March 27, 2010

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the MEC^{\times} Data Validation Procedure for Metals (DVP-20, Rev. 0), EPA Method 314.0, and the National Functional Guidelines for Inorganic Data Review (7/02).

- Holding Times: The analytical holding time, 28 days, was met.
- Calibration: Calibration criteria were met. The initial calibration r² value was ≥0.995 and all initial and continuing calibration recoveries were within 90-110%. IPC recoveries were within the method-established control limit of 80-120%. The IPC-MA recovery was within 85-115%
- Blanks: Method blanks and CCBs had no detects.
- Blank Spikes and Laboratory Control Samples: The recovery was within the methodestablished QC limits of 85-115%.
- Laboratory Duplicates: No laboratory duplicate analyses were performed.
- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on the sample in this SDG. Method accuracy was evaluated based on LCS results.
- 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. Any detects between the method detection limit and 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 reporting limit.
- 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.
 - o Field Duplicates: There were no field duplicate samples identified for this SDG.

E. EPA METHOD 608—Pesticides and PCBs

Reviewed By: P. Meeks

Date Reviewed: March 27, 2010

The sample listed in Table 1 for this analysis were validated based on the guidelines outlined in the MEC^X Data Validation Procedure for Organochlorine Pesticides/PCBs by GC (DVP-4, Rev. 0), EPA Method 608, and the National Functional Guidelines for Organic Data Review (10/99).

- Holding Times: Extraction and analytical holding times were met. The water samples were extracted within seven days of collection and analyzed within 40 days of extraction.
- Calibration: The initial calibration had average %RSDs of ≤20%. %Ds exceeded 15% for endrin and heptachlor on channel B and toxaphene both channels; therefore, the nondetected results for these compounds were qualified as estimated, "UJ." The remaining ICV and CCVs bracketing the sample analyses had %Ds within the QC limit of ≤15%.
- Blanks: The method blanks had no target compound detects above the MDL.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratoryestablished QC limits. All results were acceptable when calculated using the correct volume.
- Surrogate Recovery: Recoveries were within laboratory-established QC limits.
- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on the sample in this SDG. Method accuracy was evaluated based on LCS results.
- 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.
- Compound Identification: Compound identification was verified. Review of the sample chromatograms and retention times indicated no problems with target compound identification.
- Compound Quantification and Reported Detection Limits: Compound quantification was verified from the raw data. The reporting limits were supported by the lower level of the initial calibration. Any detects between the method detection limit and 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 reporting limit.

F. VARIOUS EPA METHODS — Radionuclides

Reviewed By: P. Meeks

Date Reviewed: March 27, 2010

The sample listed in Table 1 for these analyses were 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 (10/04).

- Holding Times: The aliquots for total uranium and radium-228 were reanalyzed more than 3x beyond the holding time for unpreserved samples; therefore, the nondetected results for total uranium and radium-228 were rejected, "R." The tritium sample was analyzed within 180 days of collection. Aliquots for gamma spectroscopy, gross alpha, gross beta, radium-226, and strontium-90 were prepared within the five-day holding time for unpreserved aqueous samples.
- Calibration: The laboratory calibration information included the standard certificates and applicable preparation/dilutions logs for NIST-traceability.

The gross alpha and radium-226 detector efficiencies were less than 20%; therefore, the nondetected results for gross alpha and radium-226 were qualified as estimated, "UJ." The remaining detector efficiencies were greater than 20%.

The tritium aliquot was spiked for efficiency determination; therefore, no calibration was necessary. All chemical yields were at least 40% and were considered acceptable. The gamma spectroscopy analytes were determined at the maximum photopeak energy. The kinetic phosphorescence analyzer (KPA) was calibrated immediately prior to the sample analysis. All KPA calibration check standard recoveries were within 90-110% and were deemed acceptable.

- Blanks: Tritium was detected in the method blank at 165 pCi/L; however, tritium was not detected in the site sample. There were no other analytes detected in the method blanks or the KPA CCBs.
- Blank Spikes and Laboratory Control Samples: The recoveries and the radium-228 RPD were within laboratory-established control limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed on the sample in this SDG.
- 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. Any
detects between the MDA and 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 MDA.

The reviewer noted that the total uranium preparation log was not signed as reviewed.

- 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.

G. EPA METHOD 625—Semivolatile Organic Compounds (SVOCs)

Reviewed By: P. Meeks

Date Reviewed: March 27, 2010

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the MEC^{\times} Data Validation Procedure for Semivolatile Organics (DVP-3, Rev. 0), EPA Method 625, and the National Functional Guidelines for Organic Data Review (10/99).

- Holding Times: Extraction and analytical holding times were met. The water sample was
 extracted within seven days of collection and analyzed within 40 days of extraction.
- GC/MS Tuning: The DFTPP tunes met the method abundance criteria. The sample was analyzed within 12 hours of the DFTPP injection time.
- Calibration: Calibration criteria were met. The initial calibration RRF and the continuing calibration RF was <0.05 for 4,6-dinitro-2-methylphenol; therefore, the nondetected result for the analyte was rejected, "R." The r² value for benzoic acid was less than the control limit; therefore, the nondetected result for benzoic acid was qualified as estimated, "UJ." The remaining initial calibration average RRFs were ≥0.05, the %RSDs ≤35%, and the remaining r² values were ≥0.995. The second source ICV had %Ds above 20% for 2,4-dinitrophenol, n-nitrosodiphenylamine, and pentachlorophenol; therefore, the nondetected results for these compound were qualified as estimated, "UJ." The ICV RRFs were ≥0.05 and the remaining ICV and CCV %Ds ≤20%.

• Blanks: n-Nitrosodimethylamine was detected in the method blank but was not detected in the site sample. Method blanks had no other target compound detects above the MDL.

- Blank Spikes and Laboratory Control Samples: In the LCSD only the following compounds were either not recovered or were recovered <10%: aniline, benzidine, 3,3'dichlorobenzidine, 4-chloroaniline, and 3-nitroanailine. The RPDs for aniline, benzidine, 3,3'dichlorobenzidine, 4-chloroaniline, 4-nitroaniline, hexachlorocyclopentadiene, and 3-nitroanailine; therefore, the nondetected results for these analytes were qualified as estimated, "UJ." The remaining recoveries and RPDs were within laboratory-established QC limits.
- Surrogate Recovery: Recoveries were within laboratory-established QC limits.
- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on the sample in this SDG. Method accuracy and precision were evaluated based on LCS/LCSD results.
- 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 internal standard area counts and retention times were within the control limits established by the continuing calibration standards:
 -50%/+100% for internal standard areas and ±30 seconds for retention times.
- Compound Identification: Compound identification was verified. Review of the sample chromatogram, retention times, and spectra indicated no problems with target compound identification.
- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Any result reported between the MDL and the reporting limit was qualified as estimated, "J," and coded with "DNQ" in order to comply with the NPDES permit. Reported nondetects are valid to the reporting limit.
- Tentatively Identified Compounds: TICs were not reported by the laboratory for this SDG.
- System Performance: Review of the raw data indicated no problems with system performance.

H. EPA METHOD 8015B—Total Fuel Hydrocarbons (EFHs)

Reviewed By: P. Meeks

Date Reviewed: March 27, 2010

The samples were listed in Table 1 for this analysis was validated based on the guidelines outlined in the MEC^{X} Data Validation Procedure for Total Fuel Hydrocarbons (DVP-8, Rev. 0), EPA Method 8015B, and the National Functional Guidelines for Organic Data Review (2/94).

- Holding Times: Extraction and analytical holding times were met. The water samples were extracted within seven days of collection and analyzed within 40 days of extraction.
- Calibration: Calibration criteria were met. The ICV %D for GRO was above the control limit at 17%; therefore, nondetected GRO in the sample was qualified as estimated, "UJ." Initial calibration %RSDs were ≤20% and the remaining initial and continuing calibration %Ds ≤15%.
- Blanks: The method blanks had no target compound detect above the MDL.
- Blank Spikes and Laboratory Control Samples: The recoveries were within laboratoryestablished QC limits.
- Surrogate Recovery: The recovery was within laboratory-established QC limits.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on the samples from this SDG. Evaluation of method accuracy was based on the LCS results.
- 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.
- Compound Identification: Compound identification was verified. GRO (C4-C12) and DRO (C13-C28) were reported. Review of the sample chromatogram and retention times indicated no problems with target compound identification.
- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Any result reported between the MDL and the reporting limit was qualified as estimated, "J," and coded with "DNQ" in order to comply with the NPDES permit. Reported nondetects are valid to the reporting limit.

I. EPA METHODS 624 and 8260B-SIM —Volatile Organic Compounds (VOCs)

Reviewed By: P. Meeks

Date Reviewed: March 26, 2010

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the MEC^{\times} Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Methods 624 and 8260B, and the National Functional Guidelines for Organic Data Review (10/99).

- Holding Times: Analytical holding times were met. The unpreserved aliquots of the water samples were analyzed within seven days of collection and the preserved water samples were analyzed within 14 days of collection.
- GC/MS Tuning: The BFB tunes met the respective method abundance criteria specified by EPA Method 624 or 8260B. Samples were analyzed within 12 hours of the BFB injection time.
- Calibration: For the Method 8260B initial calibration of 1,4-dioxane the %RSD was ≤15%. The acrolein RRF was <0.05; therefore, nondetected acrolein in the samples was rejected, "R." The remaining initial calibration average RRFs and continuing calibration RRFs were ≥0.05. The remaining initial calibration %RSDs were ≤35% or r² ≥0.995. The continuing calibration %D exceeded the control limit for 2-chloroethyl vinyl ether; therefore, nondetected results for 2-chloroethyl vinyl ether in both samples were qualified as estimated, "UJ." Remaining continuing calibration %Ds were ≤20%.
- Blanks: The method blanks had no target compound detects above the MDL.
- Blank Spikes and Laboratory Control Samples: LCS recoveries were within QC limits for both Methods 624 and 8260B.
- Surrogate Recovery: Recoveries were within laboratory-established QC limits.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on a sample from this SDG. Evaluation of method accuracy was based on LCS results.
- 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:
 - Trip Blanks: Sample Trip Blank was the trip blank associated with the site sample in this SDG. There were no detects above the MDL in the trip blank. Method 8260B analysis for 1,4-dioxane was not requested for sample Trip Blanks.

 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 in this SDG.
- Internal Standards Performance: The internal standard area counts and retention times were within the control limits established by the continuing calibration standards:
 -50%/+100% for internal standard areas and ±30 seconds for retention times.
- Compound Identification: Compound identification was verified. The laboratory analyzed for volatile target compounds by EPA Method 624 and for 1,4-dioxane by Method 8260B SIM. Review of the sample chromatograms, retention times, and spectra indicated no problems with target compound identification.
- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibrations and the laboratory MDLs. Review of the sample chromatograms, retention times, and spectra indicated no problems with target compound identification; however, the reviewer noted that the laboratory's reference spectrum for 1,4-dioxane was incorrect. Data were not affected. Any result reported between the MDL and the reporting limit was qualified as estimated, "J," and coded with "DNQ" to comply with the NPDES permit. Reported nondetects are valid to the reporting limit.
- Tentatively Identified Compounds: TICs were not reported by the laboratory for this SDG.
- System Performance: Review of the raw data indicated no problems with system performance.

J. VARIOUS EPA METHODS—General Minerals

Reviewed By: P. Meeks

Date Reviewed: March 26 & 27, 2010

The sample listed in Table 1 for this analysis were validated based on the guidelines outlined in the MEC^X Data Validation Procedure for General Minerals (DVP-6, Rev. 0), EPA Methods 120.1, 180.1, 218.6, 300.0, 1664A, SM2540C, SM2540D, SM2540F, SM4500-F-C, SM4500NH3-C, SM4500CN-E, SM5210B, SM5310B, SM5540C, and the National Functional Guidelines for Inorganic Data Review (7/02).

- Holding Times: Analytical holding times were met.
- Calibration: Calibration criteria were met. Initial calibration r² values were ≥0.995. TOC in the closing CCV was recovered above the control limit; therefore, TOC detected in the sample was qualified as estimated, "J." Nitrite was recovered at 11% in one CCV bracketing the sample analyses; however, nitrite was not detected in the site sample and

no qualification was required for the nitrate/nitrite result. All remaining initial and continuing calibration recoveries were within 90-110%. Balance calibration logs were considered acceptable. No titrant standardization information was provided for the ammonia analysis.

- Blanks: Fluoride was detected in the ICB at 0. 335 mg/L; therefore, fluoride detected in the sample was qualified as nondetected, "U," at the reporting limit. Method blanks and CCBs had no other applicable detects.
- Blank Spikes and Laboratory Control Samples: A nitrate/nitrite recovery was not listed on the summary form. The reviewer checked the raw data and determined that the nitrate/nitrite recovery was acceptable. The remaining recoveries and the BOD RPD were within laboratory-established QC limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed on the sample in this SDG.
- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on the sample in this SDG. Method accuracy was evaluated based on LCS results.
- 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. When the sample results were qualified and the reviewer was able to clearly determine bias, detected results were qualified as either "J+" or "J-"; otherwise, bias was not indicated in the qualification. Any detects between the method detection limit and 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.
- 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.

TRUESDAIL LABORATORIES, INC.

EXCELLENCE IN INDEPENDENT TESTING



Established 1931

14201 FRANKLIN AVENUE · TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 · www.truesdail.com

Client:

Test America - Irvine

17461 Derian Avenue, Suite 100

Irvine, CA 92614-5817

Attention:

Joseph Doak

Sample:

Water / 1 Sample

Project Name: Project Number: ITB0895

ITB0895

17

Method Number:

EPA 8315 (Modified)

Investigation:

Hydrazines

REPORT

Laboratory No: 987713

Report Date: Febru

February 11, 2010

Sampling Date:

February 7, 2010

Receiving Date:

February 8, 2010

Extraction Date:

February 8, 2010

Analysis Date:

February 9, 2010

Units:

μg/L

Reported By: JS

Analytical Results

Analytical Results										
	Sample	Dilution	Monomethyl	u-Dimethyl	Hydrazine	Qualifier				
Sample Description	Amount (mL)	Factor	Hydrazine	Hydrazine		Codes				
Method Blank	100	1	¾ ND	≥% ND	-%ND	None				
ITB0895-01	100	1	Ų ND	∪ ND	⊘ ND	None				
			0.857	1.42	0.452					
			5.0	5.0	1.00					
ng Limits			5.0	5.0	1.00					
	Method Blank ITB0895-01	Sample Description Amount (mL) Method Blank 100 ITB0895-01 100	Sample Dilution Sample Description Amount (mL) Factor Method Blank 100 1 ITB0895-01 100 1	Sample DescriptionSample Amount (mL)Dilution FactorMonomethyl HydrazineMethod Blank1001 ND ND ND 0.857 5.0	Sample Sample Description Dilution Amount (mL) Monomethyl Factor u-Dimethyl Hydrazine Method Blank 100 1 ♣ ND ♣ ND ITB0895-01 100 1 ✔ ND ✔ ND 0.857 1.42 5.0 5.0	Sample Sample Dilution Monomethyl Hydrazine u-Dimethyl Hydrazine Hydrazine Method Blank 100 1 ⅓ ND ⅙ ND ⅙ ND ITB0895-01 100 1 ∁ ND ∁ ND ∁ ND 0.857 1.42 0.452 5.0 5.0 1.00				

& Analysis not valdated

Note: Results based on detector #1 (UV=365nm) data.

Lever IV

Linda Saetern, Project Manager

Analytical Services, Truesdail Laboratories, Inc.

Pm 4/5/10

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from Truesdail Laboratories.

Validated Sample Result Forms ITB0895/ITB0889

Sample Name	Outfall 018		Matri	х Туре:	WATER	7	alidation Le	vel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM	I		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Γotal Uranium	7440-61-1	0.125	0.693	0.21	pCi/L	U	R	Н
Analysis Metho	od EPA	120.1						
Sample Name	Outfall 018 (Grab)	Matri	х Туре:	Water	V	alidation Le	vel: IV
Lab Sample Name:	ITB0889-01	Sam	ple Date:	2/6/2010	1:00:00 PM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validatior Notes
Specific Conductance	NA	350	1.0	1.0	uS/cm			
Analysis Metho	od EPA	1664A						
Sample Name	Outfall 018 (Grab)	Matri	x Type:	Water	V	alidation Le	vel: IV
Lab Sample Name:	ITB0889-01	Sam	ple Date:	2/6/2010	1:00:00 PM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Hexane Extractable Materi & Grease)	al (Oil HEM	ND	4.8	1.3	mg/l		U	
Analysis Metho	od EPA	180.1						
Sample Name	Outfall 018		Matri	х Туре:	Water	7	alidation Le	vel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM	I		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes

Monday, April 05, 2010 Page 1 of 16

Analysis Method EPA 200.7

Sample Name	Outfall 018		Matri	x Type:	Water	7	alidation Le	vel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM	I		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Arsenic	7440-38-2	ND	10	7.0	ug/l		U	
Barium	7440-39-3	0.025	0.010	0.0060	mg/l			
Beryllium	7440-41-7	ND	2.0	0.90	ug/l		U	
Boron	7440-42-8	ND	0.086	0.020	mg/l		U	В
Calcium	7440-70-2	27	0.10	0.050	mg/l			
Chromium	7440-47-3	ND	5.0	2.0	ug/l		U	
Cobalt	7440-48-4	ND	10	2.0	ug/l		U	
Iron	7439-89-6	ND	0.040	0.015	mg/l		U	
Magnesium	7439-95-4	5.5	0.020	0.012	mg/l			
Manganese	7439-96-5	210	20	7.0	ug/l			
Nickel	7440-02-0	ND	10	2.0	ug/l		UJ	R
Vanadium	7440-62-2	ND	10	3.0	ug/l		U	
Zinc	7440-66-6	12	20	6.0	ug/l	Ja	J	DNQ

Analysis Method EPA 200.7-Diss

Sample Name	Outfall 018		Matri	ix Type:	Water	7	Validation Le	evel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM	1		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Arsenic	7440-38-2	ND	10	7.0	ug/l		U	
Barium	7440-39-3	0.024	0.010	0.0060	mg/l			
Beryllium	7440-41-7	ND	2.0	0.90	ug/l		U	
Boron	7440-42-8	ND	0.11	0.020	mg/l	В	U	В
Calcium	7440-70-2	25	0.10	0.050	mg/l	MHA		
Cobalt	7440-48-4	ND	10	2.0	ug/l		U	
Iron	7439-89-6	ND	0.040	0.015	mg/l		U	
Magnesium	7439-95-4	5.0	0.020	0.012	mg/l			
Manganese	7439-96-5	190	20	7.0	ug/l			
Nickel	7440-02-0	ND	10	2.0	ug/l		UJ	R
Vanadium	7440-62-2	ND	10	3.0	ug/l		U	
Zinc	7440-66-6	13	20	6.0	ug/l	Ja	J	DNQ

Monday, April 05, 2010 Page 2 of 16

Analysis	Method	EPA	200.8

Sample Name	Outfall 018		Matri	x Type:	Water	7	Validation Le	vel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Antimony	7440-36-0	ND	2.0	0.30	ug/l		UJ	В
Cadmium	7440-43-9	ND	1.0	0.10	ug/l		UJ	R, B
Copper	7440-50-8	0.79	2.0	0.50	ug/l	Ja	J	*III, DNQ
Lead	7439-92-1	ND	1.0	0.20	ug/l		U	
Selenium	7782-49-2	ND	2.0	0.50	ug/l		U	
Silver	7440-22-4	ND	1.0	0.10	ug/l		UJ	R, B
Thallium	7440-28-0	ND	1.0	0.20	ug/l	С	U	
Analysis Method	d EPA	200.8-L	<i>Diss</i>					
Sample Name	Outfall 018		Matri	x Type:	Water	7	Validation Le	vel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Antimony	7440-36-0	0.41	2.0	0.30	ug/l	Ja	J	DNQ
Cadmium	7440-43-9	ND	1.0	0.10	ug/l		U	
Copper	7440-50-8	ND	2.0	0.50	ug/l		UJ	*III
Lead	7439-92-1	ND	1.0	0.20	ug/l		U	
Selenium	7782-49-2	ND	2.0	0.50	ug/l		U	
Silver	7440-22-4	ND	1.0	0.10	ug/l	С	U	
Thallium	7440-28-0	ND	1.0	0.20	ug/l		U	
Analysis Method	d EPA	218.6						
Sample Name	Outfall 018 (C	Grab)	Matri	x Type:	Water	V	Validation Le	vel: IV
Lab Sample Name:	ITB0889-01	Sam	ple Date:	2/6/2010	1:00:00 PM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Chromium VI	18540-29-9	ND	1.0	0.25	ug/l		U	
Analysis Method	d EPA	245.1						
Sample Name	Outfall 018		Matri	х Туре:	Water	V	Validation Le	vel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes

Monday, April 05, 2010 Page 3 of 16

Analysis Method EPA 245.1-Diss

Sample Name	Outfall 018	·	Matri	x Type:	Water	7	Validation Le	vel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Mercury	7439-97-6	ND	0.20	0.10	ug/l		U	
Analysis Metho	od EPA 3	800.0						
Sample Name	Outfall 018		Matri	х Туре:	Water	7	Validation Le	vel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Chloride	16887-00-6	7.7	0.50	0.25	mg/l			
Nitrate/Nitrite-N	NA	0.22	0.26	0.15	mg/l	Ja	J	DNQ
Nitrate-N	14797-55-8	0.22	0.11	0.060	mg/l			
Nitrite-N	14797-65-0	ND	0.15	0.090	mg/l		U	
Sulfate	14808-79-8	110	5.0	2.0	mg/l			
Analysis Metho	od EPA 3	314.0						
Sample Name	Outfall 018		Matri	x Type:	Water	7	Validation Le	vel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Perchlorate	14797-73-0	ND	4.0	0.90	ug/l		U	

Monday, April 05, 2010 Page 4 of 16

Analysis Method EPA 608

Sample Name	Outfall 018		Matri	х Туре:	Water	7	Validation Le	vel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM	1		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
4,4'-DDD	72-54-8	ND	0.0047	0.0019	ug/l		U	
4,4'-DDE	72-55-9	ND	0.0047	0.0028	ug/l		U	
4,4'-DDT	50-29-3	ND	0.0094	0.0038	ug/l		U	
Aldrin	309-00-2	ND	0.0047	0.0014	ug/l		U	
alpha-BHC	319-84-6	ND	0.0094	0.0024	ug/l		U	
alpha-BHC	319-84-6	ND	0.0047	0.0024	ug/l		U	
Aroclor 1016	12674-11-2	ND	0.47	0.24	ug/l		U	
Aroclor 1221	11104-28-2	ND	0.47	0.24	ug/l		U	
Aroclor 1232	11141-16-5	ND	0.47	0.24	ug/l		U	
Aroclor 1242	53469-21-9	ND	0.47	0.24	ug/l		U	
Aroclor 1248	12672-29-6	ND	0.47	0.24	ug/l		U	
Aroclor 1254	11097-69-1	ND	0.47	0.24	ug/l		U	
Aroclor 1260	11096-82-5	ND	0.47	0.24	ug/l		U	
beta-BHC	319-85-7	ND	0.0094	0.0038	ug/l		U	
Chlordane	57-74-9	ND	0.094	0.038	ug/l		U	
delta-BHC	319-86-8	ND	0.0047	0.0033	ug/l		U	
Dieldrin	60-57-1	ND	0.0047	0.0019	ug/l		U	
Endosulfan I	959-98-8	ND	0.0047	0.0019	ug/l		U	
Endosulfan II	33213-65-9	ND	0.0047	0.0028	ug/l		U	
Endosulfan sulfate	1031-07-8	ND	0.0094	0.0028	ug/l		U	
Endrin	72-20-8	ND	0.0047	0.0019	ug/l	С	UJ	С
Endrin aldehyde	7421-93-4	ND	0.0094	0.0019	ug/l		U	
Endrin ketone	53494-70-5	ND	0.0094	0.0028	ug/l		U	
gamma-BHC (Lindane)	58-89-9	ND	0.019	0.0028	ug/l		U	
Heptachlor	76-44-8	ND	0.0094	0.0028	ug/l	С	UJ	С
Heptachlor epoxide	1024-57-3	ND	0.0047	0.0024	ug/l		U	
Methoxychlor	72-43-5	ND	0.0047	0.0033	ug/l		U	
Toxaphene	8001-35-2	ND	0.47	0.24	ug/l		UJ	С

Monday, April 05, 2010 Page 5 of 16

Sample Name	Outfall 018 (C	Grab)	Matri	x Type:	Water	V	alidation Le	vel: IV
Lab Sample Name:	ITB0889-01	Sam	ple Date:	2/6/2010	1:00:00 PM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1-Trichloroethane	71-55-6	ND	0.50	0.30	ug/l		U	
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.50	0.30	ug/l		U	
1,1,2-Trichloroethane	79-00-5	ND	0.50	0.30	ug/l		U	
1,1-Dichloroethane	75-34-3	ND	0.50	0.40	ug/l		U	
1,1-Dichloroethene	75-35-4	ND	0.50	0.42	ug/l		U	
1,2-Dichloro-1,1,2- trifluoroethane	354-23-4	ND	2.0	1.1	ug/l		U	
1,2-Dichlorobenzene	95-50-1	ND	0.50	0.32	ug/l		U	
1,2-Dichloroethane	107-06-2	ND	0.50	0.28	ug/l		U	
1,2-Dichloropropane	78-87-5	ND	0.50	0.35	ug/l		U	
1,3-Dichlorobenzene	541-73-1	ND	0.50	0.35	ug/l		U	
1,4-Dichlorobenzene	106-46-7	ND	0.50	0.37	ug/l		U	
2-Chloroethyl vinyl ether	110-75-8	ND	5.0	1.8	ug/l		UJ	С
Acrolein	107-02-8	ND	5.0	4.0	ug/l		R	R
Acrylonitrile	107-13-1	ND	2.0	1.2	ug/l		U	
Benzene	71-43-2	ND	0.50	0.28	ug/l		U	
Bromodichloromethane	75-27-4	ND	0.50	0.30	ug/l		U	
Bromoform	75-25-2	ND	0.50	0.40	ug/l		U	
Bromomethane	74-83-9	ND	1.0	0.42	ug/l		U	
Carbon tetrachloride	56-23-5	ND	0.50	0.28	ug/l		U	
Chlorobenzene	108-90-7	ND	0.50	0.36	ug/l		U	
Chloroethane	75-00-3	ND	1.0	0.40	ug/l		U	
Chloroform	67-66-3	ND	0.50	0.33	ug/l		U	
Chloromethane	74-87-3	ND	0.50	0.40	ug/l		U	
cis-1,2-Dichloroethene	156-59-2	ND	0.50	0.32	ug/l		U	
cis-1,3-Dichloropropene	10061-01-5	ND	0.50	0.22	ug/l		U	
Cyclohexane	110-82-7	ND	1.0	0.40	ug/l		U	
Dibromochloromethane	124-48-1	ND	0.50	0.40	ug/l		U	
Ethylbenzene	100-41-4	ND	0.50	0.25	ug/l		U	
Methylene chloride	75-09-2	ND	1.0	0.95	ug/l		U	
Tetrachloroethene	127-18-4	ND	0.50	0.32	ug/l		U	
Toluene	108-88-3	ND	0.50	0.36	ug/l		U	
trans-1,2-Dichloroethene	156-60-5	ND	0.50	0.30	ug/l		U	
trans-1,3-Dichloropropene	10061-02-6	ND	0.50	0.32	ug/l		U	
Trichloroethene	79-01-6	ND	0.50	0.26	ug/l		U	
Trichlorofluoromethane	75-69-4	ND	0.50	0.34	ug/l		U	

Monday, April 05, 2010 Page 6 of 16

Analysis Method EPA 624

Trichlorotrifluoroethane (Freon 113)	76-13-1	ND	5.0	0.50	ug/l	U
Vinyl chloride	75-01-4	ND	0.50	0.40	ug/l	U
Xylenes, Total	1330-20-7	ND	1.5	0.90	ug/l	U

Monday, April 05, 2010 Page 7 of 16

Sample Name	Trip Blank		Matri	ix Type:	Water	Validation Level: IV		
Lab Sample Name:	ITB0889-02	Sam	ple Date:	2/6/2010	7:00:00 AM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,1,1-Trichloroethane	71-55-6	ND	0.50	0.30	ug/l		U	
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.50	0.30	ug/l		U	
1,1,2-Trichloroethane	79-00-5	ND	0.50	0.30	ug/l		U	
1,1-Dichloroethane	75-34-3	ND	0.50	0.40	ug/l		U	
1,1-Dichloroethene	75-35-4	ND	0.50	0.42	ug/l		U	
1,2-Dichloro-1,1,2- crifluoroethane	354-23-4	ND	2.0	1.1	ug/l		U	
1,2-Dichlorobenzene	95-50-1	ND	0.50	0.32	ug/l		U	
1,2-Dichloroethane	107-06-2	ND	0.50	0.28	ug/l		U	
1,2-Dichloropropane	78-87-5	ND	0.50	0.35	ug/l		U	
1,3-Dichlorobenzene	541-73-1	ND	0.50	0.35	ug/l		U	
1,4-Dichlorobenzene	106-46-7	ND	0.50	0.37	ug/l		U	
2-Chloroethyl vinyl ether	110-75-8	ND	5.0	1.8	ug/l		UJ	С
Acrolein	107-02-8	ND	5.0	4.0	ug/l		R	R
Acrylonitrile	107-13-1	ND	2.0	1.2	ug/l		U	
Benzene	71-43-2	ND	0.50	0.28	ug/l		U	
Bromodichloromethane	75-27-4	ND	0.50	0.30	ug/l		U	
Bromoform	75-25-2	ND	0.50	0.40	ug/l		U	
Bromomethane	74-83-9	ND	1.0	0.42	ug/l		U	
Carbon tetrachloride	56-23-5	ND	0.50	0.28	ug/l		U	
Chlorobenzene	108-90-7	ND	0.50	0.36	ug/l		U	
Chloroethane	75-00-3	ND	1.0	0.40	ug/l		U	
Chloroform	67-66-3	ND	0.50	0.33	ug/l		U	
Chloromethane	74-87-3	ND	0.50	0.40	ug/l		U	
cis-1,2-Dichloroethene	156-59-2	ND	0.50	0.32	ug/l		U	
cis-1,3-Dichloropropene	10061-01-5	ND	0.50	0.22	ug/l		U	
Cyclohexane	110-82-7	ND	1.0	0.40	ug/l		U	
Dibromochloromethane	124-48-1	ND	0.50	0.40	ug/l		U	
Ethylbenzene	100-41-4	ND	0.50	0.25	ug/l		U	
Methylene chloride	75-09-2	ND	1.0	0.95	ug/l		U	
Γetrachloroethene	127-18-4	ND	0.50	0.32	ug/l		U	
Toluene	108-88-3	ND	0.50	0.36	ug/l		U	
rans-1,2-Dichloroethene	156-60-5	ND	0.50	0.30	ug/l		U	
trans-1,3-Dichloropropene	10061-02-6	ND	0.50	0.32	ug/l		U	
Trichloroethene	79-01-6	ND	0.50	0.26	ug/l		U	
Trichlorofluoromethane	75-69-4	ND	0.50	0.34	ug/l		U	
Manadan Andul 05 0013								

Monday, April 05, 2010 Page 8 of 16

Analysis Method EPA 624

Trichlorotrifluoroethane (Freon 113)	76-13-1	ND	5.0	0.50	ug/l	U
Vinyl chloride	75-01-4	ND	0.50	0.40	ug/l	U
Xylenes, Total	1330-20-7	ND	1.5	0.90	ug/l	U

Monday, April 05, 2010 Page 9 of 16

Monday, April 05, 2010

Sample Name	Outfall 018		Matri	x Type:	Water	Validation Level: IV			
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM				
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes	
1,2,4-Trichlorobenzene	120-82-1	ND	0.94	0.094	ug/l		U		
1,2-Dichlorobenzene	95-50-1	ND	0.47	0.094	ug/l		U		
1,2- Diphenylhydrazine/Azobenz	103-33-3 zene	ND	0.94	0.094	ug/l		U		
1,3-Dichlorobenzene	541-73-1	ND	0.47	0.094	ug/l		U		
1,4-Dichlorobenzene	106-46-7	ND	0.47	0.19	ug/l		U		
2,4,5-Trichlorophenol	95-95-4	ND	1.9	0.19	ug/l		U		
2,4,6-Trichlorophenol	88-06-2	ND	0.94	0.094	ug/l		U		
2,4-Dichlorophenol	120-83-2	ND	1.9	0.19	ug/l		U		
2,4-Dimethylphenol	105-67-9	ND	1.9	0.28	ug/l		U		
2,4-Dinitrophenol	51-28-5	ND	4.7	0.85	ug/l		UJ	С	
2,4-Dinitrotoluene	121-14-2	ND	4.7	0.19	ug/l		U		
2,6-Dinitrotoluene	606-20-2	ND	4.7	0.094	ug/l		U		
2-Chloronaphthalene	91-58-7	ND	0.47	0.094	ug/l		U		
2-Chlorophenol	95-57-8	ND	0.94	0.19	ug/l		U		
2-Methylnaphthalene	91-57-6	ND	0.94	0.094	ug/l		U		
2-Methylphenol	95-48-7	ND	1.9	0.094	ug/l		U		
2-Nitroaniline	88-74-4	ND	4.7	0.094	ug/l		U		
2-Nitrophenol	88-75-5	ND	1.9	0.094	ug/l		U		
3,3'-Dichlorobenzidine	91-94-1	ND	4.7	4.7	ug/l	L2	UJ	*III	
3-Nitroaniline	99-09-2	ND	4.7	0.19	ug/l	L2	UJ	*III	
4,6-Dinitro-2-methylphenol	534-52-1	ND	4.7	0.19	ug/l		R	R	
4-Bromophenyl phenyl ether	r 101-55-3	ND	0.94	0.094	ug/l		U		
4-Chloro-3-methylphenol	59-50-7	ND	1.9	0.19	ug/l		U		
4-Chloroaniline	106-47-8	ND	1.9	0.094	ug/l	L2	UJ	*III	
4-Chlorophenyl phenyl ether	r 7005-72-3	ND	0.47	0.094	ug/l		U		
4-Methylphenol	106-44-5	ND	4.7	0.19	ug/l		U		
4-Nitroaniline	100-01-6	ND	4.7	0.47	ug/l	L2	UJ	*III	
4-Nitrophenol	100-02-7	ND	4.7	2.4	ug/l		U		
Acenaphthene	83-32-9	ND	0.47	0.094	ug/l		U		
Acenaphthylene	208-96-8	ND	0.47	0.094	ug/l		U		
Aniline	62-53-3	ND	9.4	0.28	ug/l	L2	UJ	*III	
Anthracene	120-12-7	ND	0.47	0.094	ug/l		U		
Benzidine	92-87-5	ND	4.7	4.7	ug/l	L2	UJ	*III	
Benzo(a)anthracene	56-55-3	ND	4.7	0.094	ug/l		U		
Benzo(a)pyrene	50-32-8	ND	1.9	0.094	ug/l		U		

Page 10 of 16

Analysis Method EPA 625

Benzo(b)fluoranthene	205-99-2	ND	1.9	0.094	ug/l	U	
Benzo(g,h,i)perylene	191-24-2	ND	4.7	0.094	ug/l	U	
Benzo(k)fluoranthene	207-08-9	ND	0.47	0.094	ug/l	U	
Benzoic acid	65-85-0	ND	19	2.8	ug/l	UJ	C
Benzyl alcohol	100-51-6	ND	4.7	0.094	ug/l	U	
Bis(2-chloroethoxy)methane	111-91-1	ND	0.47	0.094	ug/l	U	
Bis(2-chloroethyl)ether	111-44-4	ND	0.47	0.094	ug/l	U	
Bis(2-chloroisopropyl)ether	108-60-1	ND	0.47	0.094	ug/l	U	
Bis(2-ethylhexyl)phthalate	117-81-7	ND	4.7	1.6	ug/l	U	
Butyl benzyl phthalate	85-68-7	ND	4.7	0.66	ug/l	U	
Chrysene	218-01-9	ND	0.47	0.094	ug/l	U	
Dibenz(a,h)anthracene	53-70-3	ND	0.47	0.094	ug/l	U	
Dibenzofuran	132-64-9	ND	0.47	0.094	ug/l	U	
Diethyl phthalate	84-66-2	ND	0.94	0.094	ug/l	U	
Dimethyl phthalate	131-11-3	ND	0.47	0.094	ug/l	U	
Di-n-butyl phthalate	84-74-2	ND	1.9	0.19	ug/l	U	
Di-n-octyl phthalate	117-84-0	ND	4.7	0.094	ug/l	U	
Fluoranthene	206-44-0	ND	0.47	0.094	ug/l	U	
Fluorene	86-73-7	ND	0.47	0.094	ug/l	U	
Hexachlorobenzene	118-74-1	ND	0.94	0.094	ug/l	U	
Hexachlorobutadiene	87-68-3	ND	1.9	0.19	ug/l	U	
Hexachlorocyclopentadiene	77-47-4	ND	4.7	0.094	ug/l	UJ	*III
Hexachloroethane	67-72-1	ND	2.8	0.19	ug/l	U	
Indeno(1,2,3-cd)pyrene	193-39-5	ND	1.9	0.094	ug/l	U	
Isophorone	78-59-1	ND	0.94	0.094	ug/l	U	
Naphthalene	91-20-3	ND	0.94	0.094	ug/l	U	
Nitrobenzene	98-95-3	ND	0.94	0.094	ug/l	U	
N-Nitrosodimethylamine	62-75-9	ND	1.9	0.094	ug/l	U	
N-Nitroso-di-n-propylamine	621-64-7	ND	1.9	0.094	ug/l	U	
N-Nitrosodiphenylamine	86-30-6	ND	0.94	0.094	ug/l	UJ	С
Pentachlorophenol	87-86-5	ND	1.9	0.094	ug/l	UJ	С
Phenanthrene	85-01-8	ND	0.47	0.094	ug/l	U	
Phenol	108-95-2	ND	0.94	0.28	ug/l	U	
Pyrene	129-00-0	ND	0.47	0.094	ug/l	U	

Monday, April 05, 2010 Page 11 of 16

Analysis Method EPA 8015 Mod.

Sample Name	Outfall 018 (C	Grab)	Matri	x Type:	Water	7	Validation Le	evel: IV
Lab Sample Name:	ITB0889-01	Sam	ple Date:	2/6/2010	1:00:00 PM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
GRO (C4 - C12)	8006-61-9	ND	100	25	ug/l		UJ	С
Analysis Metho	od EPA 8	8015B						
Sample Name	Outfall 018 (C	Grab)	Matri	х Туре:	Water	1	Validation Le	evel: IV
Lab Sample Name:	ITB0889-01	Sam	ple Date:	2/6/2010	1:00:00 PM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
DRO (C13 - C28)	C13-C28	ND	94	47	ug/l		U	
Analysis Metho	od EPA 8	8260B-	SIM					
Sample Name	Outfall 018		Matri	х Туре:	Water	7	Validation Le	evel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM	I		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,4-Dioxane	123-91-1	ND	2.0	1.0	ug/l		U	
Analysis Metho	od EPA 9	900.0 N	10D					
Sample Name	Outfall 018		Matri	х Туре:	WATER	7	Validation Le	evel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM	I		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Gross Alpha	12587-46-1	-0.22	3	1.3	pCi/L	U	UJ	С
Gross Beta	12587-47-2	1.52	4	1.4	pCi/L	Jb	J	DNQ
Analysis Metho	od EPA 9	901.1 N	10D					
Sample Name	Outfall 018		Matri	х Туре:	WATER	7	Validation Le	evel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM	I		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Cesium 137	10045-97-3	1.3	20	12	pCi/L	U	U	
Potassium 40	13966-00-2	-60	0	200	pCi/L	U	U	

Monday, April 05, 2010 Page 12 of 16

Analysis Method EPA 903.0 MOD

Sample Name	Outfall 018		Matri	x Type:	WATER	7	alidation Le	vel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM	I		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Radium (226)	13982-63-3	0	1	0.2	pCi/L	U	UJ	С
Analysis Metho	od EPA 9	904 MC)D					
Sample Name	Outfall 018		Matri	x Type:	WATER	V	alidation Le	vel: IV
Lab Sample Name:	ITB0895-01RE1	Sam	ple Date:	2/7/2010	10:45:00 AM	Į.		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Radium 228	15262-20-1	0.009	1	0.27	pCi/L	U	R	Н
Analysis Metho	od EPA 9	905 MC	DD					
Sample Name	Outfall 018		Matri	x Type:	WATER	V	alidation Le	vel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM	I		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Strontium 90	10098-97-2	0.004	3	0.45	pCi/L	U	U	
Analysis Metho	od EPA 9	906.0 N	10D					
Sample Name	Outfall 018		Matri	x Type:	WATER	7	alidation Le	vel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM	I		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Tritium	10028-17-8	30	500	91	pCi/L	U	U	

Monday, April 05, 2010 Page 13 of 16

Analysis Method EPA-5 1613B

Sample Name	Outfall 018		Matri	x Type: \	WATER	7	alidation Le	vel: IV	
Lab Sample Name:	ITB0895-01RE1	Sam	ple Date:	2/7/2010 1	0:45:00 AM	I			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes	
1,2,3,4,6,7,8-HpCDD	35822-46-9	ND	0.000047	0.0000009	ug/L	J, Ba	U	В	
1,2,3,4,6,7,8-HpCDF	67562-39-4	ND	1.8e-006	0.0000007	ug/L	J, Q, Ba	U	В	
1,2,3,4,7,8,9-HpCDF	55673-89-7	ND	0.000047	0.0000013	ug/L		U		
1,2,3,4,7,8-HxCDD	39227-28-6	ND	8e-007	0.0000002	ug/L	J, Q, Ba	U	В	
1,2,3,4,7,8-HxCDF	70648-26-9	ND	1e-006	0.0000004	ug/L	J, Q, Ba	U	В	
1,2,3,6,7,8-HxCDD	57653-85-7	ND	1.2e-006	0.0000002	ug/L	J, Q, Ba	U	В	
1,2,3,6,7,8-HxCDF	57117-44-9	ND	0.000047	0.0000003	ug/L	J, Ba	U	В	
1,2,3,7,8,9-HxCDD	19408-74-3	ND	7.1e-007	0.0000002	ug/L	J, Q, Ba	U	В	
1,2,3,7,8,9-HxCDF	72918-21-9	ND	6.8e-007	0.0000005	ug/L	J, Q, Ba	U	В	
1,2,3,7,8-PeCDD	40321-76-4	ND	0.000047	0.0000004	ug/L		U		
1,2,3,7,8-PeCDF	57117-41-6	ND	1e-006	0.0000000	ug/L	J, Q, Ba	U	В	
2,3,4,6,7,8-HxCDF	60851-34-5	ND	7.8e-007	0.0000004	ug/L	J, Q, Ba	U	В	
2,3,4,7,8-PeCDF	57117-31-4	ND	0.000047	0.0000000	ug/L	J, Ba	U	В	
2,3,7,8-TCDD	1746-01-6	ND	0.0000094	0.0000000	ug/L		U		
2,3,7,8-TCDF	51207-31-9	ND	0.0000094	0.0000000	ug/L		U		
OCDD	3268-87-9	ND	1.3e-005	0.0000009	ug/L	J, Q, Ba	U	В	
OCDF	39001-02-0	ND	0.000094	0.0000008	ug/L	J, Ba	U	В	
Total HpCDD	37871-00-4	ND	0.000047	0.0000009	ug/L	Ba, J	U	В	
Total HpCDF	38998-75-3	3.5e-006	3.5e-006	0.0000007	ug/L	J, Q, Ba	J	B, DNQ, *III	
Total HxCDD	34465-46-8	ND	2.7e-006	0.0000002	ug/L	J, Q, Ba	U	В	
Total HxCDF	55684-94-1	ND	3.6e-006	0.0000003	ug/L	J, Q, Ba	U	В	
Total PeCDD	36088-22-9	ND	1e-006	0.0000004	ug/L	J, Q, Ba	U	В	
Total PeCDF	30402-15-4	ND	2.1e-006	0.0000000	ug/L	J, Q, Ba	U	В	
Total TCDD	41903-57-5	ND	0.0000094	0.0000000	ug/L		U		
Total TCDF	55722-27-5	ND	0.0000094	0.0000000	ug/L		U		
Analysis Method	d SM 25	540D							
Sample Name	Outfall 018		Matri	x Type:	Water	Validation Level: IV			
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010 1	0:45:00 AM	I			
Analyte	CAS No	Result	RL	MDL	Result	Lab	Validation	Validation	

Monday, April 05, 2010 Page 14 of 16

1.0

Units

mg/l

Qualifier Qualifier

U

Notes

Value

10

ND

TSS

Total Suspended Solids

Analysis Method SM 4500-F-C

Sample Name	Outfall 018		Matri	x Type:	Water	V	alidation Le	vel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Fluoride	16984-48-8	ND	0.15	0.020	mg/l	В	U	В
Analysis Metho	d SM23	240B						
Sample Name	Outfall 018		Matri	x Type:	Water	V	alidation Le	vel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Hardness as CaCO3		89	0.33	0.17	mg/l			
Analysis Metho	d SM23	40B-D	iss					
Sample Name	Outfall 018		Matri	х Туре:	Water	V	alidation Le	vel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Hardness as CaCO3		82	0.33	0.17	mg/l			
Analysis Metho	d SM25	740C						
Sample Name	Outfall 018		Matri	x Type:	Water	V	alidation Le	vel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
		, arac						
Total Dissolved Solids	NA	200	10	1.0	mg/l			
		200	10	1.0	mg/l			
		200 240F		1.0 x Type:	mg/l Water	\ \	alidation Le	vel: IV
Analysis Metho	d SM25	200 740F Grab)	Matri	x Type:		\	√alidation Le	vel: IV
Sample Name	d SM25	200 740F Grab)	Matri	x Type:	Water	V Lab Qualifier	Validation Le Validation Qualifier	vel: ^{IV} Validation Notes

Monday, April 05, 2010 Page 15 of 16

Analysis Method SM4500CN-E

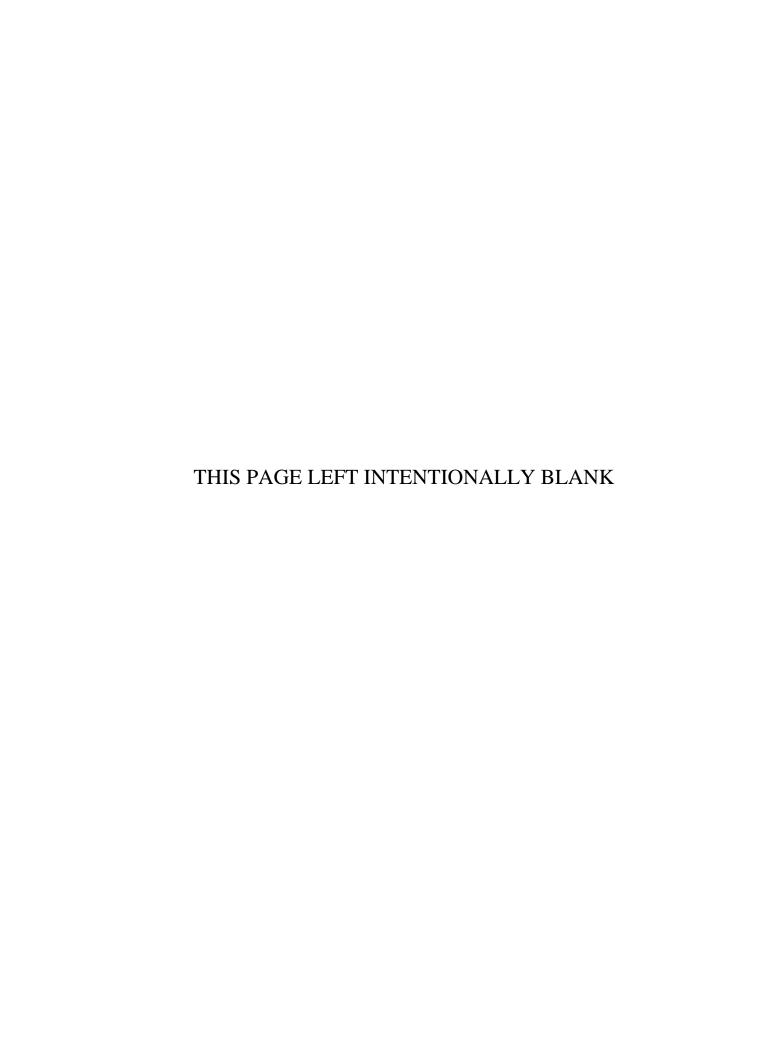
Sample Name	Outfall 018 (Grab)	Matri	ix Type:	Water	7	Validation Le	evel: IV
Lab Sample Name:	ITB0889-01	Sam	ple Date:	2/6/2010	1:00:00 PM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Total Cyanide	57-12-5	ND	5.0	2.2	ug/l		U	
Analysis Metho	od SM45	500NH3	8-C					
Sample Name	Outfall 018		Matri	іх Туре:	Water	V	Validation Le	evel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM	I		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Ammonia-N (Distilled)	7664-41-7	ND	0.50	0.50	mg/l		U	
Analysis Metho	od SM52	210B						
Sample Name	Outfall 018		Matri	іх Туре:	Water	7	Validation Le	evel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM	I		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Biochemical Oxygen Dema	and BOD	0.57	2.0	0.50	mg/l	Ja	J	DNQ
Analysis Metho	od SM53	310B						
Sample Name	Outfall 018		Matri	іх Туре:	Water	7	Validation Le	evel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM	I		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Total Organic Carbon	TOC	5.0	1.0	0.50	mg/l		J	R
Analysis Metho	od SM55	540-C						
Sample Name	Outfall 018		Matri	іх Туре:	Water	V	Validation Le	evel: IV
Lab Sample Name:	ITB0895-01	Sam	ple Date:	2/7/2010	10:45:00 AM	I		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Surfactants (MBAS)	MBAS	0.12	0.10	0.025	mg/l			

Monday, April 05, 2010 Page 16 of 16

APPENDIX G

Section 64

Outfall 018 – February 6 & 7, 2010 Test America Analytical Laboratory Report







LABORATORY REPORT

Prepared For: MWH-Pasadena/Boeing Project: Annual Outfall 018

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly Sampled: 02/06/10-02/07/10

Received: 02/06/10 Issued: 03/31/10 13:36

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

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain(s) of Custody, 2 pages, are included and are 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: Complete final report including Radchem data.

LABORATORY ID	CLIENT ID	MATRIX
ITB0889-01	Outfall 018 (Grab)	Water
ITB0889-02	Trip Blank	Water
ITB0895-01	Outfall 018	Water

Reviewed By:

TestAmerica Irvine

Aaron Harris For Heather Clark Project Manager

7. H



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

Sampled: 02/06/10-02/07/10

MWH-Pasadena/Boeing Project ID: Annual Outfall 018

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Report Number: ITB0889 Received: 02/06/10

Attention: Bronwyn Kelly

VOLATILE FUEL HYDROCARBONS (EPA 5030/CADHS Mod. 8015)

			MDL	Reporting	Sample	Dilution	Date	Date	Data
Analyte	Method	Batch	Limit	Limit	Result	Factor	Extracted	Analyzed	Qualifiers
Sample ID: ITB0889-01 (Outfall 018 (G	rab) - Water)				Sample	d: 02/06/1	0		
Reporting Units: ug/l									
GRO (C4 - C12)	EPA 8015 Mod.	10B1582	N/A	100	ND	1	02/12/10	02/12/10	
Surrogate: 4-BFB (FID) (65-140%)					79 %				



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

Sampled: 02/06/10-02/07/10

MWH-Pasadena/Boeing Project ID: Annual Outfall 018

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Report Number: ITB0889 Received: 02/06/10

Attention: Bronwyn Kelly

EXTRACTABLE FUEL HYDROCARBONS (EPA 3510C/EPA 8015B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0889-01 (Outfall 018 (Gra	ab) - Water)				Sample	d: 02/06/1	0		
Reporting Units: ug/l									
DRO (C13 - C28)	EPA 8015B	10B1526	47	94	ND	0.943	02/12/10	02/12/10	
Surrogate: n-Octacosane (45-120%)					64 %				



MWH-Pasadena/Boeing Project ID: Annual Outfall 018

618 Michillinda Avenue, Suite 200 Sampled: 02/06/10-02/07/10

Arcadia, CA 91007 Report Number: ITB0889 Received: 02/06/10

Attention: Bronwyn Kelly

PURGEABLES BY GC/MS (EPA 624)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0889-01 (Outfall 018 (Grab)	- Water)				Sample	ed: 02/06/1	10		
Reporting Units: ug/l					•				
Benzene	EPA 624	10B0840	0.28	0.50	ND	1	02/08/10	02/08/10	
Bromodichloromethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/08/10	
Bromoform	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/08/10	
Bromomethane	EPA 624	10B0840	0.42	1.0	ND	1	02/08/10	02/08/10	
Carbon tetrachloride	EPA 624	10B0840	0.28	0.50	ND	1	02/08/10	02/08/10	
Chlorobenzene	EPA 624	10B0840	0.36	0.50	ND	1	02/08/10	02/08/10	
Chloroethane	EPA 624	10B0840	0.40	1.0	ND	1	02/08/10	02/08/10	
Chloroform	EPA 624	10B0840	0.33	0.50	ND	1	02/08/10	02/08/10	
Chloromethane	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/08/10	
Dibromochloromethane	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/08/10	
1,2-Dichlorobenzene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/08/10	
1,3-Dichlorobenzene	EPA 624	10B0840	0.35	0.50	ND	1	02/08/10	02/08/10	
1,4-Dichlorobenzene	EPA 624	10B0840	0.37	0.50	ND	1	02/08/10	02/08/10	
1,1-Dichloroethane	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/08/10	
1,2-Dichloroethane	EPA 624	10B0840	0.28	0.50	ND	1	02/08/10	02/08/10	
1,1-Dichloroethene	EPA 624	10B0840	0.42	0.50	ND	1	02/08/10	02/08/10	
cis-1,2-Dichloroethene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/08/10	
trans-1,2-Dichloroethene	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/08/10	
1,2-Dichloropropane	EPA 624	10B0840	0.35	0.50	ND	1	02/08/10	02/08/10	
cis-1,3-Dichloropropene	EPA 624	10B0840	0.22	0.50	ND	1	02/08/10	02/08/10	
trans-1,3-Dichloropropene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/08/10	
1,2-Dichloro-1,1,2-trifluoroethane	EPA 624	10B0840	1.1	2.0	ND	1	02/08/10	02/08/10	
Ethylbenzene	EPA 624	10B0840	0.25	0.50	ND	1	02/08/10	02/08/10	
Methylene chloride	EPA 624	10B0840	0.95	1.0	ND	1	02/08/10	02/08/10	
1,1,2,2-Tetrachloroethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/08/10	
Tetrachloroethene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/08/10	
Toluene	EPA 624	10B0840	0.36	0.50	ND	1	02/08/10	02/08/10	
1,1,1-Trichloroethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/08/10	
1,1,2-Trichloroethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/08/10	
Trichloroethene	EPA 624	10B0840	0.26	0.50	ND	1	02/08/10	02/08/10	
Trichlorofluoromethane	EPA 624	10B0840	0.34	0.50	ND	1	02/08/10	02/08/10	
Trichlorotrifluoroethane (Freon 113)	EPA 624	10B0840	0.50	5.0	ND	1	02/08/10	02/08/10	
Vinyl chloride	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/08/10	
Xylenes, Total	EPA 624	10B0840	0.90	1.5	ND	1	02/08/10	02/08/10	
Cyclohexane	EPA 624	10B0840	0.40	1.0	ND	1	02/08/10	02/08/10	
Surrogate: 4-Bromofluorobenzene (80-120%)					94 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					94 %				
Surrogate: Dibromofluoromethane (80-120%))				106 %				
Surrogate: Dibromofluoromethane (80-120%))				106 %				
Surrogate: Toluene-d8 (80-120%)					109 %				
Surrogate: Toluene-d8 (80-120%)					109 %				

TestAmerica Irvine

Aaron Harris For Heather Clark Project Manager



MWH-Pasadena/Boeing Project ID: Annual Outfall 018

618 Michillinda Avenue, Suite 200 Sampled: 02/06/10-02/07/10

Arcadia, CA 91007 Report Number: ITB0889 Received: 02/06/10

Attention: Bronwyn Kelly

PURGEABLES BY GC/MS (EPA 624)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0889-02 (Trip Blank - Wate	r)				Sample	ed: 02/06/1	10		
Reporting Units: ug/l					•				
Benzene	EPA 624	10B0840	0.28	0.50	ND	1	02/08/10	02/09/10	
Bromodichloromethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/09/10	
Bromoform	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/09/10	
Bromomethane	EPA 624	10B0840	0.42	1.0	ND	1	02/08/10	02/09/10	
Carbon tetrachloride	EPA 624	10B0840	0.28	0.50	ND	1	02/08/10	02/09/10	
Chlorobenzene	EPA 624	10B0840	0.36	0.50	ND	1	02/08/10	02/09/10	
Chloroethane	EPA 624	10B0840	0.40	1.0	ND	1	02/08/10	02/09/10	
Chloroform	EPA 624	10B0840	0.33	0.50	ND	1	02/08/10	02/09/10	
Chloromethane	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/09/10	
Dibromochloromethane	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/09/10	
1,2-Dichlorobenzene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/09/10	
1,3-Dichlorobenzene	EPA 624	10B0840	0.35	0.50	ND	1	02/08/10	02/09/10	
1,4-Dichlorobenzene	EPA 624	10B0840	0.37	0.50	ND	1	02/08/10	02/09/10	
1,1-Dichloroethane	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/09/10	
1,2-Dichloroethane	EPA 624	10B0840	0.28	0.50	ND	1	02/08/10	02/09/10	
1,1-Dichloroethene	EPA 624	10B0840	0.42	0.50	ND	1	02/08/10	02/09/10	
cis-1,2-Dichloroethene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/09/10	
trans-1,2-Dichloroethene	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/09/10	
1,2-Dichloropropane	EPA 624	10B0840	0.35	0.50	ND	1	02/08/10	02/09/10	
cis-1,3-Dichloropropene	EPA 624	10B0840	0.22	0.50	ND	1	02/08/10	02/09/10	
trans-1,3-Dichloropropene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/09/10	
1,2-Dichloro-1,1,2-trifluoroethane	EPA 624	10B0840	1.1	2.0	ND	1	02/08/10	02/09/10	
Ethylbenzene	EPA 624	10B0840	0.25	0.50	ND	1	02/08/10	02/09/10	
Methylene chloride	EPA 624	10B0840	0.95	1.0	ND	1	02/08/10	02/09/10	
1,1,2,2-Tetrachloroethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/09/10	
Tetrachloroethene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/09/10	
Toluene	EPA 624	10B0840	0.36	0.50	ND	1	02/08/10	02/09/10	
1,1,1-Trichloroethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/09/10	
1,1,2-Trichloroethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/09/10	
Trichloroethene	EPA 624	10B0840	0.26	0.50	ND	1	02/08/10	02/09/10	
Trichlorofluoromethane	EPA 624	10B0840	0.34	0.50	ND	1	02/08/10	02/09/10	
Trichlorotrifluoroethane (Freon 113)	EPA 624	10B0840	0.50	5.0	ND	1	02/08/10	02/09/10	
Vinyl chloride	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/09/10	
Xylenes, Total	EPA 624	10B0840	0.90	1.5	ND	1	02/08/10	02/09/10	
Cyclohexane	EPA 624	10B0840	0.40	1.0	ND	1	02/08/10	02/09/10	
Surrogate: 4-Bromofluorobenzene (80-120%)					93 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					93 %				
Surrogate: Dibromofluoromethane (80-120%					101 %				
Surrogate: Dibromofluoromethane (80-120%					101 %				
Surrogate: Toluene-d8 (80-120%)					107 %				
Surrogate: Toluene-d8 (80-120%)					107 %				

TestAmerica Irvine

Aaron Harris For Heather Clark Project Manager

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

Sampled: 02/06/10-02/07/10

MWH-Pasadena/Boeing Project ID: Annual Outfall 018

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Report Number: ITB0889 Received: 02/06/10

Attention: Bronwyn Kelly

PURGEABLES-- GC/MS (EPA 624)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0889-01 (Outfall 018 (Grab) - Water)					·				
Reporting Units: ug/l									
Acrolein	EPA 624	10B0840	4.0	5.0	ND	1	02/08/10	02/08/10	
Acrylonitrile	EPA 624	10B0840	1.2	2.0	ND	1	02/08/10	02/08/10	
2-Chloroethyl vinyl ether	EPA 624	10B0840	1.8	5.0	ND	1	02/08/10	02/08/10	
Surrogate: 4-Bromofluorobenzene (80-120%)	5)				94 %				
Surrogate: Dibromofluoromethane (80-120%)	6)				106 %				
Surrogate: Toluene-d8 (80-120%)					109 %				
Sample ID: ITB0889-02 (Trip Blank - Water)			Sampled: 02/06/10						
Reporting Units: ug/l									
Acrolein	EPA 624	10B0840	4.0	5.0	ND	1	02/08/10	02/09/10	
Acrylonitrile	EPA 624	10B0840	1.2	2.0	ND	1	02/08/10	02/09/10	
2-Chloroethyl vinyl ether	EPA 624	10B0840	1.8	5.0	ND	1	02/08/10	02/09/10	
Surrogate: 4-Bromofluorobenzene (80-120%)	5)				93 %				
Surrogate: Dibromofluoromethane (80-120%)	6)				101 %				
Surrogate: Toluene-d8 (80-120%)					107 %				



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

Sampled: 02/06/10-02/07/10

MWH-Pasadena/Boeing Project ID: Annual Outfall 018

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Report Number: ITB0889 Received: 02/06/10

Attention: Bronwyn Kelly

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

			MDL	Reporting	Sample	Dilution	Date	Date	Data	
Analyte	Method	Batch	Limit	Limit	Result	Factor	Extracted	Analyzed	Qualifiers	
Sample ID: ITB0895-01 (Outfall 018 - Water)			Sampled: 02/07/10							
Reporting Units: ug/l										
1,4-Dioxane	EPA 8260B-SIM	10B0317	1.0	2.0	ND	1	02/08/10	02/08/10		
Surrogate: Dibromofluoromethane (80-1	20%)				100 %					



MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

Attention: Bronwyn Kelly

Arcadia, CA 91007

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

Project ID: Annual Outfall 018

			MDL	Reporting	Sample	Dilution	Date	Date	Data		
Analyte	Method	Batch	Limit	Limit	Result	Factor	Extracted	Analyzed	Qualifiers		
Sample ID: ITB0895-01 (Outfall 018 - Water)				Sampled: 02/07/10							
Reporting Units: ug/l					_						
Acenaphthene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10			
Acenaphthylene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10			
Aniline	EPA 625	10B1393	0.28	9.4	ND	0.943	02/11/10	02/15/10	L2		
Anthracene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10			
Benzidine	EPA 625	10B1393	4.7	4.7	ND	0.943	02/11/10	02/15/10	L2		
Benzo(a)anthracene	EPA 625	10B1393	0.094	4.7	ND	0.943	02/11/10	02/15/10			
Benzo(a)pyrene	EPA 625	10B1393	0.094	1.9	ND	0.943	02/11/10	02/15/10			
Benzo(b)fluoranthene	EPA 625	10B1393	0.094	1.9	ND	0.943	02/11/10	02/15/10			
Benzo(g,h,i)perylene	EPA 625	10B1393	0.094	4.7	ND	0.943	02/11/10	02/15/10			
Benzo(k)fluoranthene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10			
Benzoic acid	EPA 625	10B1393	2.8	19	ND	0.943	02/11/10	02/15/10			
Benzyl alcohol	EPA 625	10B1393	0.094	4.7	ND	0.943	02/11/10	02/15/10			
4-Bromophenyl phenyl ether	EPA 625	10B1393	0.094	0.94	ND	0.943	02/11/10	02/15/10			
Butyl benzyl phthalate	EPA 625	10B1393	0.66	4.7	ND	0.943	02/11/10	02/15/10			
4-Chloro-3-methylphenol	EPA 625	10B1393	0.19	1.9	ND	0.943	02/11/10	02/15/10			
4-Chloroaniline	EPA 625	10B1393	0.094	1.9	ND	0.943	02/11/10	02/15/10	L2		
Bis(2-chloroethoxy)methane	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10			
Bis(2-chloroethyl)ether	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10			
Bis(2-chloroisopropyl)ether	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10			
Bis(2-ethylhexyl)phthalate	EPA 625	10B1393	1.6	4.7	ND	0.943	02/11/10	02/15/10			
2-Chloronaphthalene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10			
2-Chlorophenol	EPA 625	10B1393	0.19	0.94	ND	0.943	02/11/10	02/15/10			
4-Chlorophenyl phenyl ether	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10			
Chrysene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10			
Dibenz(a,h)anthracene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10			
Dibenzofuran	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10			
Di-n-butyl phthalate	EPA 625	10B1393	0.19	1.9	ND	0.943	02/11/10	02/15/10			
1,2-Dichlorobenzene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10			
1,3-Dichlorobenzene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10			
1,4-Dichlorobenzene	EPA 625	10B1393	0.19	0.47	ND	0.943	02/11/10	02/15/10			
3,3'-Dichlorobenzidine	EPA 625	10B1393	4.7	4.7	ND	0.943	02/11/10	02/15/10	L2		
2,4-Dichlorophenol	EPA 625	10B1393	0.19	1.9	ND	0.943	02/11/10	02/15/10			
Diethyl phthalate	EPA 625	10B1393	0.094	0.94	ND	0.943	02/11/10	02/15/10			
2,4-Dimethylphenol	EPA 625	10B1393	0.28	1.9	ND	0.943	02/11/10	02/15/10			
Dimethyl phthalate	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10			
4,6-Dinitro-2-methylphenol	EPA 625	10B1393	0.19	4.7	ND	0.943	02/11/10	02/15/10			
2,4-Dinitrophenol	EPA 625	10B1393	0.85	4.7	ND	0.943	02/11/10	02/15/10			
2,4-Dinitrotoluene	EPA 625	10B1393	0.19	4.7	ND	0.943	02/11/10	02/15/10			
2,6-Dinitrotoluene	EPA 625	10B1393	0.094	4.7	ND	0.943	02/11/10	02/15/10			
Di-n-octyl phthalate	EPA 625	10B1393	0.094	4.7	ND	0.943	02/11/10	02/15/10			
1,2-Diphenylhydrazine/Azobenzene	EPA 625	10B1393	0.094	0.94	ND	0.943	02/11/10	02/15/10			

TestAmerica Irvine

Aaron Harris For Heather Clark Project Manager

Sampled: 02/06/10-02/07/10



THE LEADER IN ENVIRONMENTAL TESTING

MWH-Pasadena/Boeing Project ID: Annual Outfall 018

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Report Number: ITB0889 Received: 02/06/10

Attention: Bronwyn Kelly

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

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0895-01 (Outfall 018 - Water	or) - cont				Cample	.d. 02/07/1	10	·	
Reporting Units: ug/l	ar) - cont.				Sample	ed: 02/07/1	10		
Fluoranthene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10	
Fluorene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10	
Hexachlorobenzene	EPA 625	10B1393	0.094	0.94	ND	0.943	02/11/10	02/15/10	
Hexachlorobutadiene	EPA 625	10B1393	0.19	1.9	ND	0.943	02/11/10	02/15/10	
Hexachlorocyclopentadiene	EPA 625	10B1393	0.094	4.7	ND	0.943	02/11/10	02/15/10	
Hexachloroethane	EPA 625	10B1393	0.19	2.8	ND	0.943	02/11/10	02/15/10	
Indeno(1,2,3-cd)pyrene	EPA 625	10B1393	0.094	1.9	ND	0.943	02/11/10	02/15/10	
Isophorone	EPA 625	10B1393	0.094	0.94	ND	0.943	02/11/10	02/15/10	
2-Methylnaphthalene	EPA 625	10B1393	0.094	0.94	ND	0.943	02/11/10	02/15/10	
2-Methylphenol	EPA 625	10B1393	0.094	1.9	ND	0.943	02/11/10	02/15/10	
4-Methylphenol	EPA 625	10B1393	0.19	4.7	ND	0.943	02/11/10	02/15/10	
Naphthalene	EPA 625	10B1393	0.094	0.94	ND	0.943	02/11/10	02/15/10	
2-Nitroaniline	EPA 625	10B1393	0.094	4.7	ND	0.943	02/11/10	02/15/10	
3-Nitroaniline	EPA 625	10B1393	0.19	4.7	ND	0.943	02/11/10	02/15/10	L2
4-Nitroaniline	EPA 625	10B1393	0.47	4.7	ND	0.943	02/11/10	02/15/10	L2
Nitrobenzene	EPA 625	10B1393	0.094	0.94	ND	0.943	02/11/10	02/15/10	
2-Nitrophenol	EPA 625	10B1393	0.094	1.9	ND	0.943	02/11/10	02/15/10	
4-Nitrophenol	EPA 625	10B1393	2.4	4.7	ND	0.943	02/11/10	02/15/10	
N-Nitroso-di-n-propylamine	EPA 625	10B1393	0.094	1.9	ND	0.943	02/11/10	02/15/10	
N-Nitrosodimethylamine	EPA 625	10B1393	0.094	1.9	ND	0.943	02/11/10	02/15/10	
N-Nitrosodiphenylamine	EPA 625	10B1393	0.094	0.94	ND	0.943	02/11/10	02/15/10	
Pentachlorophenol	EPA 625	10B1393	0.094	1.9	ND	0.943	02/11/10	02/15/10	
Phenanthrene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10	
Phenol	EPA 625	10B1393	0.28	0.94	ND	0.943	02/11/10	02/15/10	
Pyrene	EPA 625	10B1393	0.094	0.47	ND	0.943	02/11/10	02/15/10	
1,2,4-Trichlorobenzene	EPA 625	10B1393	0.094	0.94	ND	0.943	02/11/10	02/15/10	
2,4,5-Trichlorophenol	EPA 625	10B1393	0.19	1.9	ND	0.943	02/11/10	02/15/10	
2,4,6-Trichlorophenol	EPA 625	10B1393	0.094	0.94	ND	0.943	02/11/10	02/15/10	
Surrogate: 2,4,6-Tribromophenol (40-120%)					100 %				
Surrogate: 2-Fluorobiphenyl (50-120%)					84 %				
Surrogate: 2-Fluorophenol (30-120%)					69 %				
Surrogate: Nitrobenzene-d5 (45-120%)					83 %				
Surrogate: Phenol-d6 (35-120%)					75 %				
Surrogate: Terphenyl-d14 (50-125%)					95 %				

TestAmerica Irvine

Aaron Harris For Heather Clark Project Manager



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

Sampled: 02/06/10-02/07/10

MWH-Pasadena/Boeing Project ID: Annual Outfall 018

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Report Number: ITB0889 Received: 02/06/10

Attention: Bronwyn Kelly

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers	
Sample ID: ITB0895-01 (Outfall 018 - Water)			Sampled: 02/07/10							
Reporting Units: ug/l										
4,4'-DDD	EPA 608	10B1291	0.0019	0.0047	ND	0.943	02/11/10	02/13/10		
4,4'-DDE	EPA 608	10B1291	0.0028	0.0047	ND	0.943	02/11/10	02/13/10		
4,4'-DDT	EPA 608	10B1291	0.0038	0.0094	ND	0.943	02/11/10	02/13/10		
Aldrin	EPA 608	10B1291	0.0014	0.0047	ND	0.943	02/11/10	02/13/10		
-										
alpha-BHC	EPA 608	10B1291	0.0024	0.0047	ND	0.943	02/11/10	02/13/10		
beta-BHC	EPA 608	10B1291	0.0038	0.0094	ND	0.943	02/11/10	02/13/10		
delta-BHC	EPA 608	10B1291	0.0033	0.0047	ND	0.943	02/11/10	02/13/10		
Dieldrin	EPA 608	10B1291	0.0019	0.0047	ND	0.943	02/11/10	02/13/10		
Endosulfan I	EPA 608	10B1291	0.0019	0.0047	ND	0.943	02/11/10	02/13/10		
Endosulfan II	EPA 608	10B1291	0.0028	0.0047	ND	0.943	02/11/10	02/13/10		
Endosulfan sulfate	EPA 608	10B1291	0.0028	0.0094	ND	0.943	02/11/10	02/13/10		
Endrin	EPA 608	10B1291	0.0019	0.0047	ND	0.943	02/11/10	02/13/10	C	
Endrin aldehyde	EPA 608	10B1291	0.0019	0.0094	ND	0.943	02/11/10	02/13/10		
Endrin ketone	EPA 608	10B1291	0.0028	0.0094	ND	0.943	02/11/10	02/13/10		
gamma-BHC (Lindane)	EPA 608	10B1291	0.0028	0.019	ND	0.943	02/11/10	02/13/10		
Heptachlor	EPA 608	10B1291	0.0028	0.0094	ND	0.943	02/11/10	02/13/10	C	
Heptachlor epoxide	EPA 608	10B1291	0.0024	0.0047	ND	0.943	02/11/10	02/13/10		
Methoxychlor	EPA 608	10B1291	0.0033	0.0047	ND	0.943	02/11/10	02/13/10		
Chlordane	EPA 608	10B1291	0.038	0.094	ND	0.943	02/11/10	02/13/10		
Toxaphene	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/13/10		
Surrogate: Decachlorobiphenyl (45-120%)					76 %					
Surrogate: Decachlorobiphenyl (45-120%)					76 %					
Surrogate: Tetrachloro-m-xylene (35-115%)					50 %					
Surrogate: Tetrachloro-m-xylene (35-115%)					50 %					



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

Sampled: 02/06/10-02/07/10

MWH-Pasadena/Boeing

Project ID: Annual Outfall 018 618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Report Number: ITB0889 Received: 02/06/10

Attention: Bronwyn Kelly

TOTAL PCBS (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0895-01 (Outfall 018 - Wat	er) - cont.				Sample	ed: 02/07/1	10		
Reporting Units: ug/l									
Aroclor 1016	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/12/10	
Aroclor 1221	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/12/10	
Aroclor 1232	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/12/10	
Aroclor 1242	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/12/10	
Aroclor 1248	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/12/10	
Aroclor 1254	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/12/10	
Aroclor 1260	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/12/10	
Surrogate: Decachlorobiphenyl (45-120%)					85 %				



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

Sampled: 02/06/10-02/07/10

MWH-Pasadena/Boeing Project ID: Annual Outfall 018

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Report Number: ITB0889 Received: 02/06/10

Attention: Bronwyn Kelly

HEXANE EXTRACTABLE MATERIAL

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0889-01 (Outfall 018 (Grab) - Water)					Sample	d: 02/06/1	10		
Reporting Units: mg/l									
Hexane Extractable Material (Oil &	EPA 1664A	10B1991	1.3	4.8	ND	1	02/17/10	02/17/10	
Grease)									



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

MWH-Pasadena/Boeing

Project ID: Annual Outfall 018

618 Michillinda Avenue, Suite 200 Sampled: 02/06/10-02/07/10 Arcadia, CA 91007 Received: 02/06/10

Report Number: ITB0889 Attention: Bronwyn Kelly

METALS

		1	, III I I I I I I						
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0895-01 (Outfall 01	8 - Water)				Sample	ed: 02/07/1	10		
Reporting Units: mg/l									
Hardness as CaCO3	SM2340B	[CALC]	N/A	0.33	89	1	02/15/10	02/16/10	
Barium	EPA 200.7	10B1807	0.0060	0.010	0.025	1	02/15/10	02/16/10	
Boron	EPA 200.7	10B1807	0.020	0.050	0.086	1	02/15/10	02/16/10	
Calcium	EPA 200.7	10B1807	N/A	0.10	27	1	02/15/10	02/16/10	
Iron	EPA 200.7	10B1807	0.015	0.040	ND	1	02/15/10	02/16/10	
Magnesium	EPA 200.7	10B1807	N/A	0.020	5.5	1	02/15/10	02/16/10	
Sample ID: ITB0895-01 (Outfall 01	8 - Water)				Sample	ed: 02/07/1	10		
Reporting Units: ug/l									
Mercury	EPA 245.1	10B1943	N/A	0.20	ND	1	02/16/10	02/16/10	
Arsenic	EPA 200.7	10B1807	7.0	10	ND	1	02/15/10	02/16/10	
Antimony	EPA 200.8	10B1598	0.30	2.0	ND	1	02/12/10	02/15/10	
Beryllium	EPA 200.7	10B1807	0.90	2.0	ND	1	02/15/10	02/16/10	
Chromium	EPA 200.7	10B1807	2.0	5.0	ND	1	02/15/10	02/16/10	
Cobalt	EPA 200.7	10B1807	2.0	10	ND	1	02/15/10	02/16/10	
Manganese	EPA 200.7	10B1807	7.0	20	210	1	02/15/10	02/16/10	
Nickel	EPA 200.7	10B1807	2.0	10	ND	1	02/15/10	02/16/10	
Cadmium	EPA 200.8	10B1598	0.10	1.0	ND	1	02/12/10	02/15/10	
Vanadium	EPA 200.7	10B1807	3.0	10	ND	1	02/15/10	02/16/10	
Zinc	EPA 200.7	10B1807	6.0	20	12	1	02/15/10	02/16/10	Ja
Copper	EPA 200.8	10B1598	0.50	2.0	0.79	1	02/12/10	02/15/10	Ja
Lead	EPA 200.8	10B1598	0.20	1.0	ND	1	02/12/10	02/15/10	
Selenium	EPA 200.8	10B1598	0.50	2.0	ND	1	02/12/10	02/15/10	
Silver	EPA 200.8	10B1598	0.10	1.0	ND	1	02/12/10	02/15/10	
Thallium	EPA 200.8	10B1598	0.20	1.0	ND	1	02/12/10	02/15/10	C

TestAmerica Irvine



MWH-Pasadena/Boeing

Project ID: Annual Outfall 018

618 Michillinda Avenue, Suite 200

Sampled: 02/06/10-02/07/10 Report Number: ITB0889

Arcadia, CA 91007 Attention: Bronwyn Kelly Received: 02/06/10

DISSOLVED METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0895-01 (Outfall 01	8 - Water)				Sample	ed: 02/07/1	10		
Reporting Units: mg/l									
Hardness as CaCO3	SM2340B-Diss	[CALC]	N/A	0.33	82	1	02/15/10	02/16/10	
Barium	EPA 200.7-Diss	10B1846	0.0060	0.010	0.024	1	02/15/10	02/16/10	
Boron	EPA 200.7-Diss	10B1846	0.020	0.050	0.11	1	02/15/10	02/16/10	В
Calcium	EPA 200.7-Diss	10B1846	0.050	0.10	25	1	02/15/10	02/16/10	MHA
Iron	EPA 200.7-Diss	10B1846	0.015	0.040	ND	1	02/15/10	02/16/10	
Magnesium	EPA 200.7-Diss	10B1846	0.012	0.020	5.0	1	02/15/10	02/16/10	
Sample ID: ITB0895-01 (Outfall 01	8 - Water)				Sample	ed: 02/07/1	10		
Reporting Units: ug/l									
Mercury	EPA 245.1-Diss	10B1953	0.10	0.20	ND	1	02/16/10	02/16/10	
Arsenic	EPA 200.7-Diss	10B1846	7.0	10	ND	1	02/15/10	02/16/10	
Antimony	EPA 200.8-Diss	10B1845	0.30	2.0	0.41	1	02/15/10	02/17/10	Ja
Beryllium	EPA 200.7-Diss	10B1846	0.90	2.0	ND	1	02/15/10	02/16/10	
Cobalt	EPA 200.7-Diss	10B1846	2.0	10	ND	1	02/15/10	02/16/10	
Manganese	EPA 200.7-Diss	10B1846	7.0	20	190	1	02/15/10	02/16/10	
Nickel	EPA 200.7-Diss	10B1846	2.0	10	ND	1	02/15/10	02/16/10	
Cadmium	EPA 200.8-Diss	10B1845	0.10	1.0	ND	1	02/15/10	02/17/10	
Vanadium	EPA 200.7-Diss	10B1846	3.0	10	ND	1	02/15/10	02/16/10	
Zinc	EPA 200.7-Diss	10B1846	6.0	20	13	1	02/15/10	02/16/10	Ja
Copper	EPA 200.8-Diss	10B2106	0.50	2.0	ND	1	02/17/10	02/17/10	
Lead	EPA 200.8-Diss	10B1845	0.20	1.0	ND	1	02/15/10	02/17/10	
Selenium	EPA 200.8-Diss	10B1845	0.50	2.0	ND	1	02/15/10	02/17/10	
Silver	EPA 200.8-Diss	10B1845	0.10	1.0	ND	1	02/15/10	02/17/10	C
Thallium	EPA 200.8-Diss	10B1845	0.20	1.0	ND	1	02/15/10	02/17/10	

TestAmerica Irvine



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

Sampled: 02/06/10-02/07/10

MWH-Pasadena/Boeing

Project ID: Annual Outfall 018 618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Report Number: ITB0889 Received: 02/06/10

Attention: Bronwyn Kelly

DISSOLVED INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0889-01 (Outfall 018 (Grab) - Water)					Sample	d: 02/06/1	10		
Reporting Units: ug/l Chromium VI	EPA 218.6	10B0756	0.25	1.0	ND	1	02/06/10	02/06/10	



MWH-Pasadena/Boeing

Attention: Bronwyn Kelly

Project ID: Annual Outfall 018

618 Michillinda Avenue, Suite 200

Sampled: 02/06/10-02/07/10

Arcadia, CA 91007

Report Number: ITB0889

Received: 02/06/10

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result		Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0895-01 (Outfall 018 -	Water)				Cample			٠	
Reporting Units: mg/l	water)				Sample	ed: 02/07/	10		
Ammonia-N (Distilled)	SM4500NH3-C	10B1575	0.50	0.50	ND	1	02/12/10	02/12/10	
Biochemical Oxygen Demand	SM5210B	10B0912	0.50	2.0	0.57	1	02/08/10	02/13/10	Ja
Chloride	EPA 300.0	10B0856	0.25	0.50	7.7	1	02/08/10	02/08/10	
Fluoride	SM 4500-F-C	10B0814	0.020	0.10	0.15	1	02/08/10	02/08/10	В
Nitrate-N	EPA 300.0	10B0856	0.060	0.11	0.22	1	02/08/10	02/08/10	
Nitrite-N	EPA 300.0	10B0856	0.090	0.15	ND	1	02/08/10	02/08/10	
Nitrate/Nitrite-N	EPA 300.0	10B0856	0.15	0.26	0.22	1	02/08/10	02/08/10	Ja
Sulfate	EPA 300.0	10B0856	2.0	5.0	110	10	02/08/10	02/08/10	
Surfactants (MBAS)	SM5540-C	10B0951	0.025	0.10	0.12	1	02/08/10	02/08/10	
Total Dissolved Solids	SM2540C	10B1487	1.0	10	200	1	02/12/10	02/12/10	
Total Organic Carbon	SM5310B	10B1284	0.50	1.0	5.0	1	02/11/10	02/11/10	
Total Suspended Solids	SM 2540D	10B1648	1.0	10	ND	1	02/12/10	02/12/10	
Sample ID: ITB0889-01 (Outfall 018 (Grab) - Water)				Sample	ed: 02/06/	10		
Reporting Units: ml/l					•				
Total Settleable Solids	SM2540F	10B0770	0.10	0.10	ND	1	02/07/10	02/07/10	
Sample ID: ITB0895-01 (Outfall 018 -	Water)				Sample	ed: 02/07/	10		
Reporting Units: NTU									
Turbidity	EPA 180.1	10B1015	0.040	1.0	0.10	1	02/08/10	02/08/10	Ja
Sample ID: ITB0889-01 (Outfall 018 (Reporting Units: ug/l	Grab) - Water)				Sample	ed: 02/06/	10		
Total Cyanide	SM4500CN-E	10B1250	2.2	5.0	ND	1	02/10/10	02/10/10	
Sample ID: ITB0895-01 (Outfall 018 - Reporting Units: ug/l	Water)				Sample	ed: 02/07/	10		
Perchlorate	EPA 314.0	10B1658	0.90	4.0	ND	1	02/13/10	02/13/10	
Sample ID: ITB0889-01 (Outfall 018 (Grab) - Water)				Sample	ed: 02/06/	10		
Reporting Units: umhos/cm Specific Conductance	EPA 120.1	10B1155	1.0	1.0	350	1	02/10/10	02/10/10	

TestAmerica Irvine



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

Sampled: 02/06/10-02/07/10

MWH-Pasadena/Boeing Project ID: Annual Outfall 018

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Report Number: ITB0889 Received: 02/06/10

Attention: Bronwyn Kelly

ASTM 5174-91

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0895-01 (Outfall 018			Sample	ed: 02/07/1	10				
Reporting Units: pCi/L									
Total Uranium	ASTM 5174-91	53280	0.21	0.693	0.125	1	02/23/10	02/26/10	U



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: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889

Received: 02/06/10

EPA 900.0 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result		Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0895-01 (Outfall 018 - Water)					Sample	ed: 02/07/1	10		
Reporting Units: pCi/L									
Gross Alpha	EPA 900.0 MOD	43108	1.3	3	-0.22	1	02/10/10	02/19/10	U
Gross Beta	EPA 900.0 MOD	43108	1.4	4	1.52	1	02/10/10	02/19/10	Jb



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

Sampled: 02/06/10-02/07/10

MWH-Pasadena/Boeing Project ID: Annual Outfall 018

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Report Number: ITB0889 Received: 02/06/10

Attention: Bronwyn Kelly

EPA 901.1 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0895-01 (Outfall 018 - Water)					Sample	d: 02/07/1	10		
Reporting Units: pCi/L									
Cesium 137	EPA 901.1 MOD	42136	12	20	1.3	1	02/11/10	02/19/10	U
Potassium 40	EPA 901.1 MOD	42136	200	NA	-60	1	02/11/10	02/19/10	U



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: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

EPA 903.0 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0895-01 (Outfall 018 - Water)					Sample	ed: 02/07/1	10		
Reporting Units: pCi/L									
Radium (226)	EPA 903.0 MOD	41160	0.2	1	ND	1	02/10/10	02/26/10	U



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: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

EPA 904 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0895-01RE1 (Outfall 018 - Water)					Sample	ed: 02/07/1	10		
Reporting Units: pCi/L Radium 228	EPA 904 MOD	60257	0.27	1	0.009	1	03/01/10	03/05/10	U



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: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Received: 02/06/10

Report Number: ITB0889

EPA 905 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0895-01 (Outfall 018 - Water)					Sample	ed: 02/07/1	10		
Reporting Units: pCi/L									
Strontium 90	EPA 905 MOD	41162	0.45	3	0.004	1	02/10/10	02/19/10	U



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

MWH-Pasadena/Boeing

Project ID: Annual Outfall 018

618 Michillinda Avenue, Suite 200

Report Number: ITB0889

Attention: Bronwyn Kelly

Arcadia, CA 91007

Received: 02/06/10

Sampled: 02/06/10-02/07/10

EPA 906.0 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0895-01 (Outfall 018 - V	Vater)				Sample	ed: 02/07/1	10		
Reporting Units: pCi/L									
Tritium	EPA 906.0 MOD	49035	91	500	30	1	02/18/10	02/18/10	U



MWH-Pasadena/Boeing

Project ID: Annual Outfall 018

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Report Number: ITB0889

Attention: Bronwyn Kelly

Sampled: 02/06/10-02/07/10

Received: 02/06/10

EPA-5 1613B

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0895-01RE1 (Outfall 0	18 - Water)				Sample	ed: 02/07/1	10		
Reporting Units: ug/L									
1,2,3,4,6,7,8-HpCDD	EPA-5 1613B	60222	0.0000009	9 0.000047	4.7e-006	0.94	03/01/10	03/02/10	J, Ba
1,2,3,4,6,7,8-HpCDF	EPA-5 1613B	60222	0.0000007	6 0.000047	1.8e-006	0.94	03/01/10	03/02/10	J, Q, Ba
1,2,3,4,7,8,9-HpCDF	EPA-5 1613B	60222	0.0000013	3 0.000047	ND	0.94	03/01/10	03/02/10	
1,2,3,4,7,8-HxCDD	EPA-5 1613B	60222	0.0000002	8 0.000047	8e-007	0.94	03/01/10	03/02/10	J, Q, Ba
1,2,3,4,7,8-HxCDF	EPA-5 1613B	60222	0.0000004	2 0.000047	1e-006	0.94	03/01/10	03/02/10	J, Q, Ba
1,2,3,6,7,8-HxCDD	EPA-5 1613B	60222	0.0000002	3 0.000047	1.2e-006	0.94	03/01/10	03/02/10	J, Q, Ba
1,2,3,6,7,8-HxCDF	EPA-5 1613B	60222	0.0000003	9 0.000047	1.1e-006	0.94	03/01/10	03/02/10	J, Ba
1,2,3,7,8,9-HxCDD	EPA-5 1613B	60222	0.0000002	3 0.000047	7.1e-007	0.94	03/01/10	03/02/10	J, Q, Ba
1,2,3,7,8,9-HxCDF	EPA-5 1613B	60222	0.000000	5 0.000047	6.8e-007	0.94	03/01/10	03/02/10	J, Q, Ba
1,2,3,7,8-PeCDD	EPA-5 1613B	60222	0.0000004	4 0.000047	ND	0.94	03/01/10	03/02/10	
1,2,3,7,8-PeCDF	EPA-5 1613B	60222	0.0000000	5 0.000047	1e-006	0.94	03/01/10	03/02/10	J, Q, Ba
2,3,4,6,7,8-HxCDF	EPA-5 1613B	60222	0.0000004	1 0.000047	7.8e-007	0.94	03/01/10	03/02/10	J, Q, Ba
2,3,4,7,8-PeCDF	EPA-5 1613B	60222	0.0000000	6 0.000047	1.1e-006	0.94	03/01/10	03/02/10	J, Ba
2,3,7,8-TCDD	EPA-5 1613B	60222	0.0000000	30.0000094	ND	0.94	03/01/10	03/02/10	
2,3,7,8-TCDF	EPA-5 1613B	60222	0.0000000	20.0000094	ND	0.94	03/01/10	03/02/10	
OCDD	EPA-5 1613B	60222	0.0000009	3 0.000094	1.3e-005	0.94	03/01/10	03/02/10	J, Q, Ba
OCDF	EPA-5 1613B	60222	0.0000008	7 0.000094	5e-006	0.94	03/01/10	03/02/10	J, Ba
Total HpCDD	EPA-5 1613B	60222	0.0000009	9 0.000047	1.2e-005	0.94	03/01/10	03/02/10	Ba, J
Total HpCDF	EPA-5 1613B	60222	0.0000007	6 0.000047	3.5e-006	0.94	03/01/10	03/02/10	J, Q, Ba
Total HxCDD	EPA-5 1613B	60222		3 0.000047	2.7e-006	0.94	03/01/10	03/02/10	J, Q, Ba
Total HxCDF	EPA-5 1613B	60222	0.0000003	9 0.000047	3.6e-006	0.94	03/01/10	03/02/10	J, Q, Ba
Total PeCDD	EPA-5 1613B	60222		4 0.000047	1e-006	0.94	03/01/10	03/02/10	J, Q, Ba
Total PeCDF	EPA-5 1613B	60222	0.0000000	4 0.000047	2.1e-006	0.94	03/01/10	03/02/10	J, Q, Ba
Total TCDD	EPA-5 1613B	60222	0.0000000	30.0000094	ND	0.94	03/01/10	03/02/10	
Total TCDF	EPA-5 1613B	60222		20.0000094	ND	0.94	03/01/10	03/02/10	
Surrogate: 13C-1,2,3,4,6,7,8-HpCDD (2	3-140%)				95 %				
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF (2)	8-143%)				90 %				
Surrogate: 13C-1,2,3,4,7,8,9-HpCDF (2)	6-138%)				87 %				
Surrogate: 13C-1,2,3,4,7,8-HxCDD (32-	141%)				81 %				
Surrogate: 13C-1,2,3,4,7,8-HxCDF (26-					82 %				
Surrogate: 13C-1,2,3,6,7,8-HxCDD (28-					89 %				
Surrogate: 13C-1,2,3,6,7,8-HxCDF (26-	123%)				83 %				
Surrogate: 13C-1,2,3,7,8,9-HxCDF (29-					87 %				
Surrogate: 13C-1,2,3,7,8-PeCDD (25-18					81 %				
Surrogate: 13C-1,2,3,7,8-PeCDF (24-18	25%)				82 %				
Surrogate: 13C-2,3,4,6,7,8-HxCDF (28-	136%)				85 %				
Surrogate: 13C-2,3,4,7,8-PeCDF (21-17					78 %				
Surrogate: 13C-2,3,7,8-TCDD (25-164%)					84 %				
Surrogate: 13C-2,3,7,8-TCDF (24-169%)					83 %				
Surrogate: 13C-OCDD (17-157%)					97 %				
Surrogate: 37Cl4-2,3,7,8-TCDD (35-197	7%)				91 %				
The state of the transfer of the state of th	•								

TestAmerica Irvine



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

MWH-Pasadena/Boeing Project ID: Annual Outfall 018

618 Michillinda Avenue, Suite 200 Sampled: 02/06/10-02/07/10

Arcadia, CA 91007 Report Number: ITB0889 Received: 02/06/10

Attention: Bronwyn Kelly

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: Outfall 018 (Grab) (ITB0889-01)	- Water				
EPA 218.6	1	02/06/2010 13:00	02/06/2010 17:00	02/06/2010 18:15	02/06/2010 19:18
EPA 624	3	02/06/2010 13:00	02/06/2010 17:00	02/08/2010 00:00	02/08/2010 23:49
SM2540F	2	02/06/2010 13:00	02/06/2010 17:00	02/07/2010 08:03	02/07/2010 09:00
Sample ID: Trip Blank (ITB0889-02) - Water	•				
EPA 624	3	02/06/2010 07:00	02/06/2010 17:00	02/08/2010 00:00	02/09/2010 00:19
Sample ID: Outfall 018 (ITB0895-01) - Water	•				
EPA 180.1	2	02/07/2010 10:45	02/07/2010 15:40	02/08/2010 20:00	02/08/2010 20:00
EPA 300.0	2	02/07/2010 10:45	02/07/2010 15:40	02/08/2010 14:00	02/08/2010 14:25
Filtration	1	02/07/2010 10:45	02/07/2010 15:40	02/07/2010 19:33	02/07/2010 19:35
SM5210B	2	02/07/2010 10:45	02/07/2010 15:40	02/08/2010 13:30	02/13/2010 11:00
SM5540-C	2	02/07/2010 10:45	02/07/2010 15:40	02/08/2010 20:13	02/08/2010 20:59

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: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS (EPA 5030/CADHS Mod. 8015)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result		%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1582 Extracted: 02/12/10	_										
Blank Analyzed: 02/12/2010 (10B1582-B	LK1)										
GRO (C4 - C12)	ND	100	N/A	ug/l							
Surrogate: 4-BFB (FID)	9.01			ug/l	10.0		90	65-140			
LCS Analyzed: 02/12/2010 (10B1582-BS	1)										
GRO (C4 - C12)	824	100	N/A	ug/l	800		103	80-120			
Surrogate: 4-BFB (FID)	14.1			ug/l	10.0		141	65-140			<i>Z2</i>
Matrix Spike Analyzed: 02/12/2010 (10B	1582-MS1)				Sou	rce: ITB	1073-01				
GRO (C4 - C12)	296	100	N/A	ug/l	220	ND	134	65-140			
Surrogate: 4-BFB (FID)	8.45			ug/l	10.0		84	65-140			
Matrix Spike Dup Analyzed: 02/12/2010	(10B1582-M	SD1)			Sou	rce: ITB	1073-01				
GRO (C4 - C12)	267	100	N/A	ug/l	220	ND	122	65-140	10	20	
Surrogate: 4-BFB (FID)	8.42			ug/l	10.0		84	65-140			



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: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

EXTRACTABLE FUEL HYDROCARBONS (EPA 3510C/EPA 8015B)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1526 Extracted: 02/12/10	_										
Blank Analyzed: 02/12/2010 (10B1526-B	LK1)										
DRO (C13 - C28)	ND	100	50	ug/l							
EFH (C10 - C28)	ND	100	50	ug/l							
Surrogate: n-Octacosane	145			ug/l	200		72	45-120			
LCS Analyzed: 02/12/2010 (10B1526-BS	1)										MNR1
EFH (C10 - C28)	547	100	50	ug/l	1000		55	40-115			
Surrogate: n-Octacosane	116			ug/l	200		58	45-120			
LCS Dup Analyzed: 02/12/2010 (10B1520	6-BSD1)										
EFH (C10 - C28)	584	100	50	ug/l	1000		58	40-115	7	25	
Surrogate: n-Octacosane	125			ug/l	200		63	45-120			

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

%REC

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 018

Sampled: 02/06/10-02/07/10

RPD

Data

Report Number: ITB0889 Received: 02/06/10

Source

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Spike

Reporting

		Keporting			Spike	Source		OKEC		KI D	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B0840 Extracted: 02/08/1	0										
Blank Analyzed: 02/08/2010 (10B0840-	BLK1)										
Benzene	ND	0.50	0.28	ug/l							
Bromodichloromethane	ND	0.50	0.30	ug/l							
Bromoform	ND	0.50	0.40	ug/l							
Bromomethane	ND	1.0	0.42	ug/l							
Carbon tetrachloride	ND	0.50	0.28	ug/l							
Chlorobenzene	ND	0.50	0.36	ug/l							
Chloroethane	ND	1.0	0.40	ug/l							
Chloroform	ND	0.50	0.33	ug/l							
Chloromethane	ND	0.50	0.40	ug/l							
Dibromochloromethane	ND	0.50	0.40	ug/l							
1,2-Dichlorobenzene	ND	0.50	0.32	ug/l							
1,3-Dichlorobenzene	ND	0.50	0.35	ug/l							
1,4-Dichlorobenzene	ND	0.50	0.37	ug/l							
1,1-Dichloroethane	ND	0.50	0.40	ug/1							
1,2-Dichloroethane	ND	0.50	0.28	ug/1							
1,1-Dichloroethene	ND	0.50	0.42	ug/l							
cis-1,2-Dichloroethene	ND	0.50	0.32	ug/1							
trans-1,2-Dichloroethene	ND	0.50	0.30	ug/1							
1,2-Dichloropropane	ND	0.50	0.35	ug/1							
cis-1,3-Dichloropropene	ND	0.50	0.22	ug/1							
trans-1,3-Dichloropropene	ND	0.50	0.32	ug/1							
1,2-Dichloro-1,1,2-trifluoroethane	ND	2.0	1.1	ug/l							
Ethylbenzene	ND	0.50	0.25	ug/l							
Methylene chloride	ND	1.0	0.95	ug/l							
1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l							
Tetrachloroethene	ND	0.50	0.32	ug/l							
Toluene	ND	0.50	0.36	ug/l							
1,1,1-Trichloroethane	ND	0.50	0.30	ug/l							
1,1,2-Trichloroethane	ND	0.50	0.30	ug/l							
Trichloroethene	ND	0.50	0.26	ug/l							
Trichlorofluoromethane	ND	0.50	0.34	ug/l							
Trichlorotrifluoroethane (Freon 113)	ND	5.0	0.50	ug/l							
Vinyl chloride	ND	0.50	0.40	ug/l							
Xylenes, Total	ND	1.5	0.90	ug/1							
Cyclohexane	ND	1.0	0.40	ug/1							

TestAmerica Irvine



THE LEADER IN ENVIRONMENTAL TESTING

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source	%REC	%REC	RPD	RPD Limit	Data Qualifiers
Batch: 10B0840 Extracted: 02/0		Limit	MDL	Cilits	Level	Kesuit	/UKEC	Limits	KI D	Limit	Quanners
Daten: 10D0840 Extracted: 02/0	00/10										
Blank Analyzed: 02/08/2010 (10B08-	40-BLK1)										
Surrogate: 4-Bromofluorobenzene	23.4			ug/l	25.0		94	80-120			
Surrogate: 4-Bromofluorobenzene	23.4			ug/l	25.0		94	80-120			
Surrogate: Dibromofluoromethane	25.6			ug/l	25.0		102	80-120			
Surrogate: Dibromofluoromethane	25.6			ug/l	25.0		102	80-120			
Surrogate: Toluene-d8	27.0			ug/l	25.0		108	80-120			
Surrogate: Toluene-d8	27.0			ug/l	25.0		108	80-120			
LCS Analyzed: 02/08/2010 (10B0840	0-BS1)										
Benzene	23.2	0.50	0.28	ug/l	25.0		93	70-120			
Bromodichloromethane	24.0	0.50	0.30	ug/l	25.0		96	70-135			
Bromoform	20.1	0.50	0.40	ug/l	25.0		81	55-130			
Bromomethane	28.6	1.0	0.42	ug/l	25.0		115	65-140			
Carbon tetrachloride	24.9	0.50	0.28	ug/l	25.0		99	65-140			
Chlorobenzene	24.7	0.50	0.36	ug/l	25.0		99	75-120			
Chloroethane	26.6	1.0	0.40	ug/l	25.0		107	60-140			
Chloroform	24.0	0.50	0.33	ug/l	25.0		96	70-130			
Chloromethane	28.4	0.50	0.40	ug/l	25.0		114	50-140			
Dibromochloromethane	22.3	0.50	0.40	ug/l	25.0		89	70-140			
1,2-Dichlorobenzene	24.5	0.50	0.32	ug/l	25.0		98	75-120			
1,3-Dichlorobenzene	25.1	0.50	0.35	ug/l	25.0		100	75-120			
1,4-Dichlorobenzene	24.6	0.50	0.37	ug/l	25.0		99	75-120			
1,1-Dichloroethane	23.8	0.50	0.40	ug/l	25.0		95	70-125			
1,2-Dichloroethane	23.1	0.50	0.28	ug/l	25.0		92	60-140			
1,1-Dichloroethene	26.6	0.50	0.42	ug/l	25.0		106	70-125			
cis-1,2-Dichloroethene	26.5	0.50	0.32	ug/l	25.0		106	70-125			
trans-1,2-Dichloroethene	25.9	0.50	0.30	ug/l	25.0		104	70-125			
1,2-Dichloropropane	21.7	0.50	0.35	ug/l	25.0		87	70-125			
cis-1,3-Dichloropropene	25.8	0.50	0.22	ug/l	25.0		103	75-125			
trans-1,3-Dichloropropene	19.9	0.50	0.32	ug/l	25.0		80	70-125			
Ethylbenzene	25.0	0.50	0.25	ug/l	25.0		100	75-125			
Methylene chloride	24.0	1.0	0.95	ug/l	25.0		96	55-130			
1,1,2,2-Tetrachloroethane	25.5	0.50	0.30	ug/l	25.0		102	55-130			
Tetrachloroethene	25.2	0.50	0.32	ug/l	25.0		101	70-125			
Toluene	24.1	0.50	0.36	ug/l	25.0		96	70-120			
1,1,1-Trichloroethane	24.2	0.50	0.30	ug/l	25.0		97	65-135			
1,1,2-Trichloroethane	24.2	0.50	0.30	ug/l	25.0		97	70-125			

TestAmerica Irvine



MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source	%REC	%REC	RPD	RPD Limit	Data Qualifiers
•		Limit	WIDE	Cints	Level	Result	/ore	Limits	KI D	Limit	Quanners
Batch: 10B0840 Extracted: 02/08/19	<u>0</u>										
LCS Analyzed: 02/08/2010 (10B0840-B5	S1)										
Trichloroethene	25.6	0.50	0.26	ug/l	25.0		102	70-125			
Trichlorofluoromethane	28.1	0.50	0.34	ug/l	25.0		112	65-145			
Vinyl chloride	33.6	0.50	0.40	ug/l	25.0		134	55-135			
Xylenes, Total	77.5	1.5	0.90	ug/l	75.0		103	70-125			
Surrogate: 4-Bromofluorobenzene	25.5			ug/l	25.0		102	80-120			
Surrogate: 4-Bromofluorobenzene	25.5			ug/l	25.0		102	80-120			
Surrogate: Dibromofluoromethane	26.0			ug/l	25.0		104	80-120			
Surrogate: Dibromofluoromethane	26.0			ug/l	25.0		104	80-120			
Surrogate: Toluene-d8	26.4			ug/l	25.0		105	80-120			
Surrogate: Toluene-d8	26.4			ug/l	25.0		105	80-120			
Matrix Spike Analyzed: 02/08/2010 (10l	B0840-MS1)				Sou	rce: ITB	0892-01				
Benzene	24.9	0.50	0.28	ug/l	25.0	ND	100	65-125			
Bromodichloromethane	27.4	0.50	0.30	ug/l	25.0	ND	109	70-135			
Bromoform	22.2	0.50	0.40	ug/l	25.0	ND	89	55-135			
Bromomethane	30.0	1.0	0.42	ug/1	25.0	ND	120	55-145			
Carbon tetrachloride	25.9	0.50	0.28	ug/l	25.0	ND	103	65-140			
Chlorobenzene	26.9	0.50	0.36	ug/l	25.0	ND	108	75-125			
Chloroethane	28.3	1.0	0.40	ug/l	25.0	ND	113	55-140			
Chloroform	27.1	0.50	0.33	ug/l	25.0	ND	108	65-135			
Chloromethane	29.6	0.50	0.40	ug/1	25.0	ND	118	45-145			
Dibromochloromethane	25.1	0.50	0.40	ug/l	25.0	ND	100	65-140			
1,2-Dichlorobenzene	26.3	0.50	0.32	ug/l	25.0	ND	105	75-125			
1,3-Dichlorobenzene	27.5	0.50	0.35	ug/l	25.0	ND	110	75-125			
1,4-Dichlorobenzene	27.0	0.50	0.37	ug/l	25.0	ND	108	75-125			
1,1-Dichloroethane	26.2	0.50	0.40	ug/l	25.0	ND	105	65-130			
1,2-Dichloroethane	25.0	0.50	0.28	ug/l	25.0	ND	100	60-140			
1,1-Dichloroethene	27.3	0.50	0.42	ug/l	25.0	ND	109	60-130			
cis-1,2-Dichloroethene	29.2	0.50	0.32	ug/1	25.0	ND	117	65-130			
trans-1,2-Dichloroethene	27.6	0.50	0.30	ug/1	25.0	ND	111	65-130			
1,2-Dichloropropane	24.3	0.50	0.35	ug/1	25.0	ND	97	65-130			
cis-1,3-Dichloropropene	29.5	0.50	0.22	ug/1	25.0	ND	118	70-130			
trans-1,3-Dichloropropene	22.6	0.50	0.32	ug/1	25.0	ND	90	65-135			
Ethylbenzene	26.3	0.50	0.25	ug/1	25.0	ND	105	65-130			
Methylene chloride	26.0	1.0	0.95	ug/l	25.0	ND	104	50-135			
1,1,2,2-Tetrachloroethane	26.1	0.50	0.30	ug/l	25.0	ND	104	55-135			

TestAmerica Irvine

%REC

RPD

Data



THE LEADER IN ENVIRONMENTAL TESTING

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

Source

Spike

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Reporting

Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B0840 Extracted: 02/08	8/10										
Matrix Spike Analyzed: 02/08/2010 ((10B0840-MS1)				Sou	rce: ITB(0892-01				
Tetrachloroethene	26.4	0.50	0.32	ug/l	25.0	ND	106	65-130			
Toluene	25.9	0.50	0.36	ug/l	25.0	ND	104	70-125			
1,1,1-Trichloroethane	25.8	0.50	0.30	ug/l	25.0	ND	103	65-140			
1,1,2-Trichloroethane	26.8	0.50	0.30	ug/l	25.0	ND	107	65-130			
Trichloroethene	26.8	0.50	0.26	ug/l	25.0	ND	107	65-125			
Trichlorofluoromethane	29.0	0.50	0.34	ug/l	25.0	ND	116	60-145			
Vinyl chloride	34.1	0.50	0.40	ug/l	25.0	ND	137	45-140			
Xylenes, Total	83.0	1.5	0.90	ug/l	75.0	ND	111	60-130			
Surrogate: 4-Bromofluorobenzene	26.5			ug/l	25.0		106	80-120			
Surrogate: 4-Bromofluorobenzene	26.5			ug/l	25.0		106	80-120			
Surrogate: Dibromofluoromethane	26.8			ug/l	25.0		107	80-120			
Surrogate: Dibromofluoromethane	26.8			ug/l	25.0		107	80-120			
Surrogate: Toluene-d8	26.7			ug/l	25.0		107	80-120			
Surrogate: Toluene-d8	26.7			ug/l	25.0		107	80-120			
Matrix Spike Dup Analyzed: 02/08/2	010 (10B0840-M	SD1)			Sou	rce: ITB(0892-01				
Benzene	23.8	0.50	0.28	ug/l	25.0	ND	95	65-125	4	20	
Bromodichloromethane	25.6	0.50	0.30	ug/l	25.0	ND	102	70-135	7	20	
Bromoform	21.2	0.50	0.40	ug/l	25.0	ND	85	55-135	5	25	
Bromomethane	29.2	1.0	0.42	ug/l	25.0	ND	117	55-145	3	25	
Carbon tetrachloride	25.1	0.50	0.28	ug/l	25.0	ND	100	65-140	3	25	
Chlorobenzene	26.0	0.50	0.36	ug/l	25.0	ND	104	75-125	3	20	
Chloroethane	26.8	1.0	0.40	ug/l	25.0	ND	107	55-140	5	25	
Chloroform	25.4	0.50	0.33	ug/l	25.0	ND	102	65-135	6	20	
Chloromethane	28.7	0.50	0.40	ug/l	25.0	ND	115	45-145	3	25	
Dibromochloromethane	23.7	0.50	0.40	ug/l	25.0	ND	95	65-140	6	25	
1,2-Dichlorobenzene	25.2	0.50	0.32	ug/l	25.0	ND	101	75-125	4	20	
1,3-Dichlorobenzene	26.2	0.50	0.35	ug/l	25.0	ND	105	75-125	5	20	
1,4-Dichlorobenzene	25.9	0.50	0.37	ug/l	25.0	ND	103	75-125	4	20	
1,1-Dichloroethane	25.1	0.50	0.40	ug/l	25.0	ND	100	65-130	4	20	
1,2-Dichloroethane	23.4	0.50	0.28	ug/l	25.0	ND	94	60-140	6	20	
1,1-Dichloroethene	26.4	0.50	0.42	ug/l	25.0	ND	106	60-130	3	20	
cis-1,2-Dichloroethene	27.3	0.50	0.32	ug/l	25.0	ND	109	65-130	7	20	
trans-1,2-Dichloroethene	26.2	0.50	0.30	ug/l	25.0	ND	105	65-130	6	20	
1,2-Dichloropropane	23.2	0.50	0.35	ug/l	25.0	ND	93	65-130	5	20	
cis-1,3-Dichloropropene	28.0	0.50	0.22	ug/l	25.0	ND	112	70-130	5	20	
m											

TestAmerica Irvine

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: Annual Outfall 018

Report Number: ITB0889

Sampled: 02/06/10-02/07/10

Received: 02/06/10

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0840 Extracted: 02/08/10	<u>)</u>										
Matrix Spike Dup Analyzed: 02/08/2010	(10B0840-M	ISD1)			Sou	rce: ITB0	892-01				
trans-1,3-Dichloropropene	20.9	0.50	0.32	ug/l	25.0	ND	84	65-135	8	25	
Ethylbenzene	25.5	0.50	0.25	ug/l	25.0	ND	102	65-130	3	20	
Methylene chloride	25.0	1.0	0.95	ug/l	25.0	ND	100	50-135	4	20	
1,1,2,2-Tetrachloroethane	24.5	0.50	0.30	ug/l	25.0	ND	98	55-135	6	30	
Tetrachloroethene	25.8	0.50	0.32	ug/l	25.0	ND	103	65-130	2	20	
Toluene	24.8	0.50	0.36	ug/l	25.0	ND	99	70-125	4	20	
1,1,1-Trichloroethane	25.1	0.50	0.30	ug/l	25.0	ND	100	65-140	3	20	
1,1,2-Trichloroethane	24.4	0.50	0.30	ug/l	25.0	ND	97	65-130	9	25	
Trichloroethene	25.8	0.50	0.26	ug/l	25.0	ND	103	65-125	4	20	
Trichlorofluoromethane	28.2	0.50	0.34	ug/l	25.0	ND	113	60-145	3	25	
Vinyl chloride	33.1	0.50	0.40	ug/l	25.0	ND	132	45-140	3	30	
Xylenes, Total	81.0	1.5	0.90	ug/l	75.0	ND	108	60-130	2	20	
Surrogate: 4-Bromofluorobenzene	25.8			ug/l	25.0		103	80-120			
Surrogate: 4-Bromofluorobenzene	25.8			ug/l	25.0		103	80-120			
Surrogate: Dibromofluoromethane	26.7			ug/l	25.0		107	80-120			
Surrogate: Dibromofluoromethane	26.7			ug/l	25.0		107	80-120			
Surrogate: Toluene-d8	26.3			ug/l	25.0		105	80-120			
Surrogate: Toluene-d8	26.3			ug/l	25.0		105	80-120			

TestAmerica Irvine



MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 018

Report Number: ITB0889

Sampled: 02/06/10-02/07/10

Received: 02/06/10

METHOD BLANK/QC DATA

PURGEABLES-- GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC	RPD	RPD Limit	Data Qualifiers
•		2	1,122	0 11105	20,01	11000110	,,,,,,	2,,,,,,,		2	Quantities 5
Batch: 10B0840 Extracted: 02/08/10	<u>'</u>										
Blank Analyzed: 02/08/2010 (10B0840-B	LK1)										
Acrolein	ND	5.0	4.0	ug/l							
Acrylonitrile	ND	2.0	1.2	ug/l							
2-Chloroethyl vinyl ether	ND	5.0	1.8	ug/l							
Surrogate: 4-Bromofluorobenzene	23.4			ug/l	25.0		94	80-120			
Surrogate: Dibromofluoromethane	25.6			ug/l	25.0		102	80-120			
Surrogate: Toluene-d8	27.0			ug/l	25.0		108	80-120			
LCS Analyzed: 02/08/2010 (10B0840-BS	1)										
2-Chloroethyl vinyl ether	13.8	5.0	1.8	ug/l	25.0		55	25-170			
Surrogate: 4-Bromofluorobenzene	25.5			ug/l	25.0		102	80-120			
Surrogate: Dibromofluoromethane	26.0			ug/l	25.0		104	80-120			
Surrogate: Toluene-d8	26.4			ug/l	25.0		105	80-120			
Matrix Spike Analyzed: 02/08/2010 (10B	0840-MS1)				Sou	rce: ITB(0892-01				
2-Chloroethyl vinyl ether	13.8	5.0	1.8	ug/l	25.0	ND	55	25-170			
Surrogate: 4-Bromofluorobenzene	26.5			ug/l	25.0		106	80-120			
Surrogate: Dibromofluoromethane	26.8			ug/l	25.0		107	80-120			
Surrogate: Toluene-d8	26.7			ug/l	25.0		107	80-120			
Matrix Spike Dup Analyzed: 02/08/2010	(10B0840-M	ISD1)			Sou	rce: ITB(0892-01				
2-Chloroethyl vinyl ether	12.8	5.0	1.8	ug/l	25.0	ND	51	25-170	7	25	
Surrogate: 4-Bromofluorobenzene	25.8			ug/l	25.0		103	80-120			
Surrogate: Dibromofluoromethane	26.7			ug/l	25.0		107	80-120			
Surrogate: Toluene-d8	26.3			ug/l	25.0		105	80-120			

TestAmerica Irvine



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: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0317 Extracted: 02/08/10	-										
Blank Analyzed: 02/08/2010 (10B0317-B	LK1)										
1,4-Dioxane	ND	2.0	1.0	ug/l							
Surrogate: Dibromofluoromethane	0.980			ug/l	1.00		98	80-120			
LCS Analyzed: 02/08/2010 (10B0317-BS)	1)										
1,4-Dioxane	9.80	2.0	1.0	ug/l	10.0		98	70-125			
Surrogate: Dibromofluoromethane	0.960			ug/l	1.00		96	80-120			
Matrix Spike Analyzed: 02/08/2010 (10B	0317-MS1)				Sou	rce: ITB	0632-01				
1,4-Dioxane	9.00	2.0	1.0	ug/l	10.0	ND	90	70-130			
Surrogate: Dibromofluoromethane	1.03			ug/l	1.00		103	80-120			
Matrix Spike Dup Analyzed: 02/08/2010	(10B0317-M	SD1)			Sou	rce: ITB	0632-01				
1,4-Dioxane	9.37	2.0	1.0	ug/l	10.0	ND	94	70-130	4	30	
Surrogate: Dibromofluoromethane	1.02			ug/l	1.00		102	80-120			

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

MWH-Pasadena/Boeing

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

a/Boeing Project ID: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1393 Extracted: 02/11/10	0_										
	_										
Blank Analyzed: 02/15/2010 (10B1393-E	BLK1)										
Acenaphthene	ND	0.50	0.10	ug/l							
Acenaphthylene	ND	0.50	0.10	ug/l							
Aniline	ND	10	0.30	ug/l							
Anthracene	ND	0.50	0.10	ug/l							
Benzidine	ND	5.0	5.0	ug/l							
Benzo(a)anthracene	ND	5.0	0.10	ug/l							
Benzo(a)pyrene	ND	2.0	0.10	ug/l							
Benzo(b)fluoranthene	ND	2.0	0.10	ug/l							
Benzo(g,h,i)perylene	ND	5.0	0.10	ug/l							
Benzo(k)fluoranthene	ND	0.50	0.10	ug/l							
Benzoic acid	ND	20	3.0	ug/l							
Benzyl alcohol	ND	5.0	0.10	ug/l							
4-Bromophenyl phenyl ether	ND	1.0	0.10	ug/l							
Butyl benzyl phthalate	ND	5.0	0.70	ug/l							
4-Chloro-3-methylphenol	ND	2.0	0.20	ug/l							
4-Chloroaniline	ND	2.0	0.10	ug/l							
Bis(2-chloroethoxy)methane	ND	0.50	0.10	ug/l							
Bis(2-chloroethyl)ether	ND	0.50	0.10	ug/l							
Bis(2-chloroisopropyl)ether	ND	0.50	0.10	ug/l							
Bis(2-ethylhexyl)phthalate	ND	5.0	1.7	ug/l							
2-Chloronaphthalene	ND	0.50	0.10	ug/l							
2-Chlorophenol	ND	1.0	0.20	ug/l							
4-Chlorophenyl phenyl ether	ND	0.50	0.10	ug/l							
Chrysene	ND	0.50	0.10	ug/l							
Dibenz(a,h)anthracene	ND	0.50	0.10	ug/l							
Dibenzofuran	ND	0.50	0.10	ug/l							
Di-n-butyl phthalate	ND	2.0	0.20	ug/l							
1,2-Dichlorobenzene	ND	0.50	0.10	ug/l							
1,3-Dichlorobenzene	ND	0.50	0.10	ug/l							
1,4-Dichlorobenzene	ND	0.50	0.20	ug/l							
3,3'-Dichlorobenzidine	ND	5.0	5.0	ug/l							
2,4-Dichlorophenol	ND	2.0	0.20	ug/l							
Diethyl phthalate	ND	1.0	0.10	ug/l							
2,4-Dimethylphenol	ND	2.0	0.30	ug/l							
Dimethyl phthalate	ND	0.50	0.10	ug/l							
To the state of th	•			<i>G</i>							

TestAmerica Irvine

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: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC	RPD	RPD Limit	Data Qualifiers
Batch: 10B1393 Extracted: 02/11/10	n										-
Butch: 10B13/3 Extracted: 02/11/19	<u> </u>										
Blank Analyzed: 02/15/2010 (10B1393-F	BLK1)										
4,6-Dinitro-2-methylphenol	ND	5.0	0.20	ug/l							
2,4-Dinitrophenol	ND	5.0	0.90	ug/l							
2,4-Dinitrotoluene	ND	5.0	0.20	ug/l							
2,6-Dinitrotoluene	ND	5.0	0.10	ug/l							
Di-n-octyl phthalate	ND	5.0	0.10	ug/l							
1,2-Diphenylhydrazine/Azobenzene	ND	1.0	0.10	ug/l							
Fluoranthene	ND	0.50	0.10	ug/l							
Fluorene	ND	0.50	0.10	ug/l							
Hexachlorobenzene	ND	1.0	0.10	ug/l							
Hexachlorobutadiene	ND	2.0	0.20	ug/l							
Hexachlorocyclopentadiene	ND	5.0	0.10	ug/l							
Hexachloroethane	ND	3.0	0.20	ug/l							
Indeno(1,2,3-cd)pyrene	ND	2.0	0.10	ug/l							
Isophorone	ND	1.0	0.10	ug/l							
2-Methylnaphthalene	ND	1.0	0.10	ug/l							
2-Methylphenol	ND	2.0	0.10	ug/l							
4-Methylphenol	ND	5.0	0.20	ug/l							
Naphthalene	ND	1.0	0.10	ug/l							
2-Nitroaniline	ND	5.0	0.10	ug/l							
3-Nitroaniline	ND	5.0	0.20	ug/l							
4-Nitroaniline	ND	5.0	0.50	ug/l							
Nitrobenzene	ND	1.0	0.10	ug/l							
2-Nitrophenol	ND	2.0	0.10	ug/l							
4-Nitrophenol	ND	5.0	2.5	ug/l							
N-Nitroso-di-n-propylamine	ND	2.0	0.10	ug/l							
N-Nitrosodimethylamine	0.860	2.0	0.10	ug/l							Ja
N-Nitrosodiphenylamine	ND	1.0	0.10	ug/l							
Pentachlorophenol	ND	2.0	0.10	ug/l							
Phenanthrene	ND	0.50	0.10	ug/l							
Phenol	ND	1.0	0.30	ug/l							
Pyrene	ND	0.50	0.10	ug/l							
1,2,4-Trichlorobenzene	ND	1.0	0.10	ug/l							
2,4,5-Trichlorophenol	ND	2.0	0.20	ug/l							
2,4,6-Trichlorophenol	ND	1.0	0.10	ug/l							
Surrogate: 2,4,6-Tribromophenol	17.8			ug/l	20.0		89	40-120			

TestAmerica Irvine



MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

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

Analyto	Result	Reporting Limit	MDL	Units	Spike Level	Source	%REC	%REC	RPD	RPD Limit	Data Qualifiers
Analyte		Lillit	MIDL	Units	Levei	Result	70KEC	Lillits	KID	Lillit	Quanners
Batch: 10B1393 Extracted: 02/11/1	<u>0</u>										
Diamin A., alama da 02/15/2010 (10D1202)	DI 1/1)										
Blank Analyzed: 02/15/2010 (10B1393-1				a	10.0		0.4	50.120			
Surrogate: 2-Fluorobiphenyl	8.44			ug/l	10.0		84	50-120			
Surrogate: 2-Fluorophenol	13.9			ug/l	20.0		70 72	30-120			
Surrogate: Nitrobenzene-d5	7.20			ug/l	10.0		72	45-120			
Surrogate: Phenol-d6	14.2			ug/l	20.0		71	35-120			
Surrogate: Terphenyl-d14	9.32			ug/l	10.0		93	50-125			
LCS Analyzed: 02/15/2010 (10B1393-B3	S1)										MNR1
Acenaphthene	8.34	0.50	0.10	ug/l	10.0		83	60-120			
Acenaphthylene	8.32	0.50	0.10	ug/l	10.0		83	60-120			
Aniline	7.38	10	0.30	ug/l	10.0		74	35-120			Ja
Anthracene	9.00	0.50	0.10	ug/l	10.0		90	65-120			
Benzidine	6.32	5.0	5.0	ug/l	10.0		63	30-160			
Benzo(a)anthracene	9.34	5.0	0.10	ug/l	10.0		93	65-120			
Benzo(a)pyrene	9.58	2.0	0.10	ug/l	10.0		96	55-130			
Benzo(b)fluoranthene	9.44	2.0	0.10	ug/l	10.0		94	55-125			
Benzo(g,h,i)perylene	11.5	5.0	0.10	ug/l	10.0		115	45-135			
Benzo(k)fluoranthene	9.36	0.50	0.10	ug/l	10.0		94	50-125			
Benzoic acid	7.22	20	3.0	ug/l	10.0		72	25-120			Ja
Benzyl alcohol	7.18	5.0	0.10	ug/l	10.0		72	50-120			
4-Bromophenyl phenyl ether	9.16	1.0	0.10	ug/l	10.0		92	60-120			
Butyl benzyl phthalate	9.66	5.0	0.70	ug/l	10.0		97	55-130			
4-Chloro-3-methylphenol	7.42	2.0	0.20	ug/l	10.0		74	60-120			
4-Chloroaniline	7.34	2.0	0.10	ug/l	10.0		73	55-120			
Bis(2-chloroethoxy)methane	7.94	0.50	0.10	ug/l	10.0		79	55-120			
Bis(2-chloroethyl)ether	7.20	0.50	0.10	ug/l	10.0		72	50-120			
Bis(2-chloroisopropyl)ether	6.66	0.50	0.10	ug/l	10.0		67	45-120			
Bis(2-ethylhexyl)phthalate	10.3	5.0	1.7	ug/l	10.0		103	65-130			
2-Chloronaphthalene	8.08	0.50	0.10	ug/l	10.0		81	60-120			
2-Chlorophenol	7.14	1.0	0.20	ug/l	10.0		71	45-120			
4-Chlorophenyl phenyl ether	9.72	0.50	0.10	ug/l	10.0		97	65-120			
Chrysene	9.44	0.50	0.10	ug/l	10.0		94	65-120			
Dibenz(a,h)anthracene	10.4	0.50	0.10	ug/l	10.0		104	50-135			
Dibenzofuran	8.78	0.50	0.10	ug/l	10.0		88	65-120			
Di-n-butyl phthalate	9.34	2.0	0.20	ug/l	10.0		93	60-125			
1,2-Dichlorobenzene	6.50	0.50	0.10	ug/l	10.0		65	40-120			
1,3-Dichlorobenzene	6.20	0.50	0.10	ug/l	10.0		62	35-120			

TestAmerica Irvine



MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 018

Report Number: ITB0889

Sampled: 02/06/10-02/07/10

Received: 02/06/10

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC	RPD	RPD Limit	Data Qualifiers
Batch: 10B1393 Extracted: 02/11/1											C
Daten: 10B1393 Extracted: 02/11/1	<u>U</u>										
LCS Analyzed: 02/15/2010 (10B1393-B	S1)										MNR1
1,4-Dichlorobenzene	6.22	0.50	0.20	ug/l	10.0		62	35-120			
3,3'-Dichlorobenzidine	7.54	5.0	5.0	ug/l	10.0		75	45-135			
2,4-Dichlorophenol	7.58	2.0	0.20	ug/l	10.0		76	55-120			
Diethyl phthalate	9.94	1.0	0.10	ug/l	10.0		99	55-120			
2,4-Dimethylphenol	5.72	2.0	0.30	ug/l	10.0		57	40-120			
Dimethyl phthalate	9.56	0.50	0.10	ug/l	10.0		96	30-120			
4,6-Dinitro-2-methylphenol	8.68	5.0	0.20	ug/l	10.0		87	45-120			
2,4-Dinitrophenol	8.26	5.0	0.90	ug/l	10.0		83	40-120			
2,4-Dinitrotoluene	9.70	5.0	0.20	ug/l	10.0		97	65-120			
2,6-Dinitrotoluene	9.46	5.0	0.10	ug/l	10.0		95	65-120			
Di-n-octyl phthalate	9.70	5.0	0.10	ug/l	10.0		97	65-135			
1,2-Diphenylhydrazine/Azobenzene	9.68	1.0	0.10	ug/l	10.0		97	60-120			
Fluoranthene	9.48	0.50	0.10	ug/l	10.0		95	60-120			
Fluorene	9.78	0.50	0.10	ug/l	10.0		98	65-120			
Hexachlorobenzene	9.06	1.0	0.10	ug/l	10.0		91	60-120			
Hexachlorobutadiene	6.24	2.0	0.20	ug/l	10.0		62	40-120			
Hexachlorocyclopentadiene	3.42	5.0	0.10	ug/l	10.0		34	25-120			Ja
Hexachloroethane	5.78	3.0	0.20	ug/l	10.0		58	35-120			
Indeno(1,2,3-cd)pyrene	11.1	2.0	0.10	ug/l	10.0		111	45-135			
Isophorone	7.82	1.0	0.10	ug/l	10.0		78	50-120			
2-Methylnaphthalene	7.38	1.0	0.10	ug/l	10.0		74	55-120			
2-Methylphenol	7.28	2.0	0.10	ug/l	10.0		73	50-120			
4-Methylphenol	7.92	5.0	0.20	ug/l	10.0		79	50-120			
Naphthalene	7.12	1.0	0.10	ug/l	10.0		71	55-120			
2-Nitroaniline	8.30	5.0	0.10	ug/l	10.0		83	65-120			
3-Nitroaniline	9.74	5.0	0.20	ug/l	10.0		97	60-120			
4-Nitroaniline	9.52	5.0	0.50	ug/l	10.0		95	55-125			
Nitrobenzene	7.84	1.0	0.10	ug/l	10.0		78	55-120			
2-Nitrophenol	7.74	2.0	0.10	ug/l	10.0		77	50-120			
4-Nitrophenol	11.2	5.0	2.5	ug/l	10.0		112	45-120			
N-Nitroso-di-n-propylamine	7.62	2.0	0.10	ug/l	10.0		76	45-120			
N-Nitrosodimethylamine	7.84	2.0	0.10	ug/l	10.0		78	45-120			
N-Nitrosodiphenylamine	8.94	1.0	0.10	ug/l	10.0		89	60-120			
Pentachlorophenol	8.20	2.0	0.10	ug/l	10.0		82	50-120			
Phenanthrene	9.14	0.50	0.10	ug/l	10.0		91	65-120			

TestAmerica Irvine



MWH-Pasadena/Boeing

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Project ID: Annual Outfall 018

Report Number: ITB0889

Sampled: 02/06/10-02/07/10

Received: 02/06/10

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1393 Extracted: 02/11/10	_										
L CC A I I. 02/15/2010 (10D1202 DC	1)										MND1
LCS Analyzed: 02/15/2010 (10B1393-BS)	′	1.0	0.20	/1	10.0		76	40, 120			MNR1
Phenol	7.56	1.0	0.30	ug/l	10.0		76	40-120			
Pyrene	9.54	0.50	0.10	ug/l	10.0		95	55-125			
1,2,4-Trichlorobenzene	6.70	1.0	0.10	ug/l	10.0		67	45-120			
2,4,5-Trichlorophenol	8.30	2.0	0.20	ug/l	10.0		83	55-120			
2,4,6-Trichlorophenol	8.42 19.7	1.0	0.10	ug/l	10.0 20.0		84 98	55-120 <i>40-120</i>			
Surrogate: 2,4,6-Tribromophenol				ug/l							
Surrogate: 2-Fluorobiphenyl	8.40 12.9			ug/l	10.0		84	50-120			
Surrogate: 2-Fluorophenol	7.68			ug/l	20.0		64 77	30-120 45-120			
Surrogate: Nitrobenzene-d5				ug/l	10.0						
Surrogate: Phenol-d6	14.6			ug/l	20.0		73	35-120			
Surrogate: Terphenyl-d14	9.36			ug/l	10.0		94	50-125			
LCS Dup Analyzed: 02/15/2010 (10B139	3-BSD1)										
Acenaphthene	8.78	0.50	0.10	ug/l	10.0		88	60-120	5	20	
Acenaphthylene	8.54	0.50	0.10	ug/l	10.0		85	60-120	3	20	
Aniline	ND	10	0.30	ug/l	10.0			35-120		30	L2
Anthracene	9.04	0.50	0.10	ug/l	10.0		90	65-120	0.4	20	
Benzidine	ND	5.0	5.0	ug/l	10.0			30-160		35	L2
Benzo(a)anthracene	9.34	5.0	0.10	ug/l	10.0		93	65-120	0	20	
Benzo(a)pyrene	9.42	2.0	0.10	ug/l	10.0		94	55-130	2	25	
Benzo(b)fluoranthene	9.62	2.0	0.10	ug/l	10.0		96	55-125	2	25	
Benzo(g,h,i)perylene	11.7	5.0	0.10	ug/l	10.0		117	45-135	1	25	
Benzo(k)fluoranthene	9.52	0.50	0.10	ug/l	10.0		95	50-125	2	20	
Benzoic acid	7.32	20	3.0	ug/l	10.0		73	25-120	1	30	Ja
Benzyl alcohol	6.98	5.0	0.10	ug/l	10.0		70	50-120	3	20	
4-Bromophenyl phenyl ether	9.14	1.0	0.10	ug/l	10.0		91	60-120	0.2	25	
Butyl benzyl phthalate	9.02	5.0	0.70	ug/l	10.0		90	55-130	7	20	
4-Chloro-3-methylphenol	7.58	2.0	0.20	ug/l	10.0		76	60-120	2	25	
4-Chloroaniline	0.100	2.0	0.10	ug/l	10.0		1	55-120	195	25	L2, R-2, Ja
Bis(2-chloroethoxy)methane	7.20	0.50	0.10	ug/l	10.0		72	55-120	10	20	
Bis(2-chloroethyl)ether	8.08	0.50	0.10	ug/l	10.0		81	50-120	12	20	
Bis(2-chloroisopropyl)ether	7.42	0.50	0.10	ug/l	10.0		74	45-120	11	20	
Bis(2-ethylhexyl)phthalate	9.40	5.0	1.7	ug/l	10.0		94	65-130	9	20	
2-Chloronaphthalene	9.02	0.50	0.10	ug/l	10.0		90	60-120	11	20	
2-Chlorophenol	7.60	1.0	0.20	ug/l	10.0		76	45-120	6	25	
4-Chlorophenyl phenyl ether	11.2	0.50	0.10	ug/l	10.0		112	65-120	15	20	

TestAmerica Irvine



MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

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

Analysta	Result	Reporting Limit	MDL	Units	Spike Level	Source	%REC	%REC	RPD	RPD Limit	Data Qualifiers
Analyte		Limit	MDL	Units	Level	Result	70KEC	Limits	KPD	Limit	Quanners
Batch: 10B1393 Extracted: 02/11/	<u>/10</u>										
1 CC D	202 BCD1)										
LCS Dup Analyzed: 02/15/2010 (10B1	,	0.50	0.40		100			< .		•	
Chrysene	9.34	0.50	0.10	ug/l	10.0		93	65-120	1	20	
Dibenz(a,h)anthracene	10.7	0.50	0.10	ug/l	10.0		107	50-135	3	25	
Dibenzofuran	9.56	0.50	0.10	ug/l	10.0		96	65-120	9	20	
Di-n-butyl phthalate	9.26	2.0	0.20	ug/l	10.0		93	60-125	0.9	20	
1,2-Dichlorobenzene	7.10	0.50	0.10	ug/l	10.0		71	40-120	9	25	
1,3-Dichlorobenzene	6.62	0.50	0.10	ug/l	10.0		66	35-120	7	25	
1,4-Dichlorobenzene	6.88	0.50	0.20	ug/l	10.0		69	35-120	10	25	
3,3'-Dichlorobenzidine	ND	5.0	5.0	ug/l	10.0			45-135		25	L2
2,4-Dichlorophenol	7.64	2.0	0.20	ug/l	10.0		76	55-120	0.8	20	
Diethyl phthalate	10.2	1.0	0.10	ug/l	10.0		102	55-120	3	30	
2,4-Dimethylphenol	6.84	2.0	0.30	ug/l	10.0		68	40-120	18	25	
Dimethyl phthalate	10.8	0.50	0.10	ug/l	10.0		108	30-120	12	30	
4,6-Dinitro-2-methylphenol	7.46	5.0	0.20	ug/l	10.0		75	45-120	15	25	
2,4-Dinitrophenol	8.44	5.0	0.90	ug/l	10.0		84	40-120	2	25	
2,4-Dinitrotoluene	10.1	5.0	0.20	ug/l	10.0		101	65-120	4	20	
2,6-Dinitrotoluene	10.3	5.0	0.10	ug/l	10.0		103	65-120	9	20	
Di-n-octyl phthalate	9.46	5.0	0.10	ug/l	10.0		95	65-135	3	20	
1,2-Diphenylhydrazine/Azobenzene	9.92	1.0	0.10	ug/l	10.0		99	60-120	2	25	
Fluoranthene	9.34	0.50	0.10	ug/l	10.0		93	60-120	1	20	
Fluorene	10.4	0.50	0.10	ug/l	10.0		104	65-120	7	20	
Hexachlorobenzene	9.18	1.0	0.10	ug/l	10.0		92	60-120	1	20	
Hexachlorobutadiene	6.94	2.0	0.20	ug/l	10.0		69	40-120	11	25	
Hexachlorocyclopentadiene	5.02	5.0	0.10	ug/l	10.0		50	25-120	38	30	R-7
Hexachloroethane	6.76	3.0	0.20	ug/l	10.0		68	35-120	16	25	
Indeno(1,2,3-cd)pyrene	11.2	2.0	0.10	ug/l	10.0		112	45-135	0.7	25	
Isophorone	7.46	1.0	0.10	ug/l	10.0		75	50-120	5	20	
2-Methylnaphthalene	7.94	1.0	0.10	ug/l	10.0		79	55-120	7	20	
2-Methylphenol	7.56	2.0	0.10	ug/l	10.0		76	50-120	4	20	
4-Methylphenol	7.72	5.0	0.20	ug/l	10.0		77	50-120	3	20	
Naphthalene	7.96	1.0	0.10	ug/l	10.0		80	55-120	11	20	
2-Nitroaniline	7.88	5.0	0.10	ug/l	10.0		79	65-120	5	20	
3-Nitroaniline	0.940	5.0	0.20	ug/l	10.0		9	60-120	165	25	L2, R-2, Ja
4-Nitroaniline	3.98	5.0	0.50	ug/l	10.0		40	55-125	82	20	L2, R-2, Ja
Nitrobenzene	8.40	1.0	0.10	ug/l	10.0		84	55-120	7	25	
2-Nitrophenol	7.84	2.0	0.10	ug/l	10.0		78	50-120	1	25	

TestAmerica Irvine

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: Annual Outfall 018

Report Number: ITB0889

Sampled: 02/06/10-02/07/10

Received: 02/06/10

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC	RPD	RPD Limit	Data Qualifiers
Batch: 10B1393 Extracted: 02/11/10		Limit	MDL	Cints	Level	Result	70KEC	Limits	KI D	Limit	Quanners
LCS Dup Analyzed: 02/15/2010 (10B139	3-BSD1)										
4-Nitrophenol	10.4	5.0	2.5	ug/l	10.0		104	45-120	7	30	
N-Nitroso-di-n-propylamine	7.98	2.0	0.10	ug/l	10.0		80	45-120	5	20	
N-Nitrosodimethylamine	7.78	2.0	0.10	ug/l	10.0		78	45-120	0.8	20	
N-Nitrosodiphenylamine	8.24	1.0	0.10	ug/l	10.0		82	60-120	8	20	
Pentachlorophenol	8.58	2.0	0.10	ug/l	10.0		86	50-120	5	25	
Phenanthrene	9.28	0.50	0.10	ug/l	10.0		93	65-120	2	20	
Phenol	6.78	1.0	0.30	ug/l	10.0		68	40-120	11	25	
Pyrene	9.58	0.50	0.10	ug/l	10.0		96	55-125	0.4	25	
1,2,4-Trichlorobenzene	7.14	1.0	0.10	ug/l	10.0		71	45-120	6	20	
2,4,5-Trichlorophenol	8.72	2.0	0.20	ug/l	10.0		87	55-120	5	30	
2,4,6-Trichlorophenol	9.06	1.0	0.10	ug/l	10.0		91	55-120	7	30	
Surrogate: 2,4,6-Tribromophenol	19.7			ug/l	20.0		99	40-120			
Surrogate: 2-Fluorobiphenyl	9.14			ug/l	10.0		91	50-120			
Surrogate: 2-Fluorophenol	12.8			ug/l	20.0		64	30-120			
Surrogate: Nitrobenzene-d5	8.12			ug/l	10.0		81	45-120			
Surrogate: Phenol-d6	13.9			ug/l	20.0		69	35-120			
Surrogate: Terphenyl-d14	9.54			ug/l	10.0		95	50-125			

TestAmerica Irvine

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: Annual Outfall 018

Report Number: ITB0889

Sampled: 02/06/10-02/07/10

Received: 02/06/10

METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 608)

Analysta	Result	Reporting Limit	MDL	Units	Spike Level	Source	%REC	%REC	RPD	RPD Limit	Data Qualifiers
Analyte		LIIIII	MDL	Units	Level	Result	70KEC	Limits	KPD	Limit	Quaimers
Batch: 10B1291 Extracted: 02/11/10	<u>) </u>										
Blank Analyzed: 02/12/2010 (10B1291-B	LK1)										
4,4'-DDD	ND	0.0050	0.0020	ug/l							
4,4'-DDE	ND	0.0050	0.0030	ug/l							
4,4'-DDT	ND	0.010	0.0040	ug/l							
Aldrin	ND	0.0050	0.0015	ug/l							
alpha-BHC	ND	0.0050	0.0025	ug/l							
beta-BHC	ND	0.010	0.0040	ug/l							
delta-BHC	ND	0.0050	0.0035	ug/l							
Dieldrin	ND	0.0050	0.0020	ug/l							
Endosulfan I	ND	0.0050	0.0020	ug/l							
Endosulfan II	ND	0.0050	0.0030	ug/l							
Endosulfan sulfate	ND	0.010	0.0030	ug/l							
Endrin	ND	0.0050	0.0020	ug/l							
Endrin aldehyde	ND	0.010	0.0020	ug/l							
Endrin ketone	ND	0.010	0.0030	ug/l							
gamma-BHC (Lindane)	ND	0.020	0.0030	ug/l							
Heptachlor	ND	0.010	0.0030	ug/l							
Heptachlor epoxide	ND	0.0050	0.0025	ug/l							
Methoxychlor	ND	0.0050	0.0035	ug/l							
Chlordane	ND	0.10	0.040	ug/l							
Toxaphene	ND	0.50	0.25	ug/l							
Surrogate: Decachlorobiphenyl	0.387			ug/l	0.500		77	45-120			
Surrogate: Decachlorobiphenyl	0.387			ug/l	0.500		77	45-120			
Surrogate: Tetrachloro-m-xylene	0.240			ug/l	0.500		48	35-115			
Surrogate: Tetrachloro-m-xylene	0.240			ug/l	0.500		48	35-115			
LCS Analyzed: 02/12/2010 (10B1291-BS	1)										
4,4'-DDD	0.464	0.0050	0.0020	ug/l	0.500		93	55-120			
4,4'-DDE	0.418	0.0050	0.0030	ug/l	0.500		84	50-120			
4,4'-DDT	0.450	0.010	0.0040	ug/l	0.500		90	55-120			
Aldrin	0.374	0.0050	0.0015	ug/l	0.500		75	40-115			
alpha-BHC	0.369	0.010	0.0025	ug/l	0.500		74	45-115			
beta-BHC	0.361	0.010	0.0040	ug/l	0.500		72	55-115			
delta-BHC	0.404	0.0050	0.0035	ug/l	0.500		81	55-115			
Dieldrin	0.434	0.0050	0.0020	ug/l	0.500		87	55-115			
TestAmerica Irvine											

TestAmerica Irvine



MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 608)

	D 14	Reporting	MDI	WT *4	Spike	Source	0/DEC	%REC	DDD	RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B1291 Extracted: 02/11/10	<u>0_</u>										
LCS Analyzed: 02/12/2010 (10B1291-BS	51)										
Endosulfan I	0.423	0.0050	0.0020	ug/l	0.500		85	55-115			
Endosulfan II	0.464	0.0050	0.0030	ug/l	0.500		93	55-120			
Endosulfan sulfate	0.431	0.010	0.0030	ug/l	0.500		86	60-120			
Endrin	0.477	0.0050	0.0020	ug/l	0.500		95	55-115			
Endrin aldehyde	0.393	0.010	0.0020	ug/l	0.500		79	50-120			
Endrin ketone	0.454	0.010	0.0030	ug/l	0.500		91	55-120			
gamma-BHC (Lindane)	0.381	0.020	0.0030	ug/l	0.500		76	45-115			
Heptachlor	0.415	0.010	0.0030	ug/l	0.500		83	45-115			
Heptachlor epoxide	0.407	0.0050	0.0025	ug/l	0.500		81	55-115			
Methoxychlor	0.485	0.0050	0.0035	ug/l	0.500		97	60-120			
Surrogate: Decachlorobiphenyl	0.394			ug/l	0.500		79	45-120			
Surrogate: Decachlorobiphenyl	0.394			ug/l	0.500		79	45-120			
Surrogate: Tetrachloro-m-xylene	0.339			ug/l	0.500		68	35-115			
Surrogate: Tetrachloro-m-xylene	0.339			ug/l	0.500		68	35-115			
Matrix Spike Analyzed: 02/12/2010 (10I	31291-MS1)				Sou	ırce: ITB(0602-01				
4,4'-DDD	0.362	0.019	0.0075	ug/l	0.472	ND	77	50-125			
4,4'-DDE	0.530	0.019	0.011	ug/l	0.472	ND	112	45-125			
4,4'-DDT	0.402	0.038	0.015	ug/l	0.472	ND	85	50-125			
Aldrin	0.386	0.019	0.0057	ug/l	0.472	ND	82	35-120			
alpha-BHC	0.372	0.019	0.0094	ug/l	0.472	ND	79	40-120			
beta-BHC	0.186	0.038	0.015	ug/l	0.472	ND	39	50-120			M2
delta-BHC	0.314	0.019	0.013	ug/l	0.472	ND	67	50-120			
Dieldrin	0.390	0.019	0.0075	ug/l	0.472	ND	83	50-120			
Endosulfan I	0.475	0.019	0.0075	ug/l	0.472	ND	101	50-120			
Endosulfan II	0.390	0.019	0.011	ug/l	0.472	ND	83	50-125			
Endosulfan sulfate	0.333	0.038	0.011	ug/l	0.472	ND	71	55-125			
Endrin	0.413	0.019	0.0075	ug/l	0.472	ND	88	50-120			
Endrin aldehyde	0.190	0.038	0.0075	ug/l	0.472	ND	40	45-125			M2
Endrin ketone	0.342	0.038	0.011	ug/l	0.472	ND	72	50-125			
gamma-BHC (Lindane)	0.371	0.075	0.011	ug/l	0.472	ND	79	40-120			
Heptachlor	0.452	0.038	0.011	ug/l	0.472	ND	96	40-120			
Heptachlor epoxide	0.450	0.019	0.0094	ug/l	0.472	ND	95	50-120			
Methoxychlor	0.447	0.019	0.013	ug/l	0.472	ND	95	55-125			
Surrogate: Decachlorobiphenyl	0.418			ug/l	0.472		89	45-120			

TestAmerica Irvine

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: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 608)

Amaluto	Result	Reporting Limit	MDL	Units	Spike Level	Source	%REC	%REC	RPD	RPD Limit	Data Qualifiers
Analyte		Limit	MIDL	Units	Levei	Resuit	70KEC	Limits	KPD	Limit	Quanners
Batch: 10B1291 Extracted: 02/11/10	_										
N	1001 3401)					ITD					
Matrix Spike Analyzed: 02/12/2010 (10B	-			_		rce: ITB(
Surrogate: Decachlorobiphenyl	0.418			ug/l	0.472		89	45-120			
Surrogate: Tetrachloro-m-xylene	0.220			ug/l	0.472		47	35-115			
Surrogate: Tetrachloro-m-xylene	0.220			ug/l	0.472		47	35-115			
Matrix Spike Dup Analyzed: 02/12/2010	(10B1291-M	ISD1)			Sou	rce: ITB(0602-01				
4,4'-DDD	0.364	0.019	0.0075	ug/1	0.472	ND	77	50-125	0.5	30	
4,4'-DDE	0.527	0.019	0.011	ug/l	0.472	ND	112	45-125	0.7	30	
4,4'-DDT	0.396	0.038	0.015	ug/l	0.472	ND	84	50-125	1	30	
Aldrin	0.384	0.019	0.0057	ug/l	0.472	ND	81	35-120	0.6	30	
alpha-BHC	0.367	0.019	0.0094	ug/l	0.472	ND	78	40-120	1	30	
beta-BHC	0.196	0.038	0.015	ug/l	0.472	ND	42	50-120	5	30	M2
delta-BHC	0.313	0.019	0.013	ug/l	0.472	ND	66	50-120	0.2	30	
Dieldrin	0.387	0.019	0.0075	ug/l	0.472	ND	82	50-120	0.7	30	
Endosulfan I	0.471	0.019	0.0075	ug/l	0.472	ND	100	50-120	1	30	
Endosulfan II	0.393	0.019	0.011	ug/l	0.472	ND	83	50-125	0.7	30	
Endosulfan sulfate	0.346	0.038	0.011	ug/l	0.472	ND	73	55-125	4	30	
Endrin	0.409	0.019	0.0075	ug/l	0.472	ND	87	50-120	1	30	
Endrin aldehyde	0.197	0.038	0.0075	ug/l	0.472	ND	42	45-125	4	30	<i>M</i> 2
Endrin ketone	0.338	0.038	0.011	ug/l	0.472	ND	72	50-125	1	30	
gamma-BHC (Lindane)	0.368	0.075	0.011	ug/l	0.472	ND	78	40-120	0.6	30	
Heptachlor	0.441	0.038	0.011	ug/1	0.472	ND	93	40-120	3	30	
Heptachlor epoxide	0.447	0.019	0.0094	ug/1	0.472	ND	95	50-120	0.7	30	
Methoxychlor	0.442	0.019	0.013	ug/l	0.472	ND	94	55-125	1	30	
Surrogate: Decachlorobiphenyl	0.407			ug/l	0.472		86	45-120			
Surrogate: Decachlorobiphenyl	0.407			ug/l	0.472		86	45-120			
Surrogate: Tetrachloro-m-xylene	0.264			ug/l	0.472		56	35-115			
Surrogate: Tetrachloro-m-xylene	0.264			ug/l	0.472		56	35-115			
				0.							

TestAmerica Irvine

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: Annual Outfall 018

Report Number: ITB0889

Sampled: 02/06/10-02/07/10

Received: 02/06/10

METHOD BLANK/QC DATA

TOTAL PCBS (EPA 608)

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B1291 Extracted: 02/11/1	10										
Blank Analyzed: 02/11/2010 (10B1291-	BLK1)										
Aroclor 1016	ND	0.50	0.25	ug/l							
Aroclor 1221	ND	0.50	0.25	ug/l							
Aroclor 1232	ND	0.50	0.25	ug/l							
Aroclor 1242	ND	0.50	0.25	ug/l							
Aroclor 1248	ND	0.50	0.25	ug/l							
Aroclor 1254	ND	0.50	0.25	ug/l							
Aroclor 1260	ND	0.50	0.25	ug/l							
Surrogate: Decachlorobiphenyl	0.422			ug/l	0.500		84	45-120			
LCS Analyzed: 02/11/2010 (10B1291-B	S2)										
Aroclor 1016	2.94	0.50	0.25	ug/l	4.00		74	50-115			
Aroclor 1260	3.60	0.50	0.25	ug/l	4.00		90	60-120			
Surrogate: Decachlorobiphenyl	0.432			ug/l	0.500		86	45-120			
Matrix Spike Analyzed: 02/11/2010 (10	B1291-MS2)				Sou	rce: ITB	0602-01				
Aroclor 1016	4.30	0.47	0.24	ug/l	3.77	ND	114	45-120			
Aroclor 1260	3.32	0.47	0.24	ug/l	3.77	ND	88	55-125			
Surrogate: Decachlorobiphenyl	0.388			ug/l	0.472		82	45-120			
Matrix Spike Dup Analyzed: 02/11/201	0 (10B1291-M	ISD2)			Sou	rce: ITB	0602-01				
Aroclor 1016	4.36	0.47	0.24	ug/l	3.77	ND	116	45-120	1	30	
Aroclor 1260	3.32	0.47	0.24	ug/l	3.77	ND	88	55-125	0.2	25	
Surrogate: Decachlorobiphenyl	0.383			ug/l	0.472		81	45-120			

TestAmerica Irvine



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: Annual Outfall 018

Report Number: ITB0889

Sampled: 02/06/10-02/07/10

Received: 02/06/10

METHOD BLANK/QC DATA

HEXANE EXTRACTABLE MATERIAL

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1991 Extracted: 02/17/10	-										
Blank Analyzed: 02/17/2010 (10B1991-Bl	LK1)										
Hexane Extractable Material (Oil & Grease)	ND	5.0	1.4	mg/l							
LCS Analyzed: 02/17/2010 (10B1991-BS1	a)										
Hexane Extractable Material (Oil & Grease)	20.5	5.0	1.4	mg/l	20.0		102	78-114			
LCS Dup Analyzed: 02/17/2010 (10B1991	-BSD1)										
Hexane Extractable Material (Oil & Grease)	20.2	5.0	1.4	mg/l	20.0		101	78-114	1	11	



MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

METALS

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B1598 Extracted: 02/12/10)										
Blank Analyzed: 02/15/2010 (10B1598-B	SLK1)										
Antimony	ND	2.0	0.30	ug/l							
Cadmium	ND	1.0	0.10	ug/l							
Copper	ND	2.0	0.50	ug/l							
Lead	ND	1.0	0.20	ug/l							
Selenium	ND	2.0	0.50	ug/l							
Silver	ND	1.0	0.10	ug/l							
Thallium	ND	1.0	0.20	ug/l							
LCS Analyzed: 02/15/2010 (10B1598-BS	1)										
Antimony	82.5	2.0	0.30	ug/l	80.0		103	85-115			
Cadmium	82.4	1.0	0.10	ug/l	80.0		103	85-115			
Copper	81.0	2.0	0.50	ug/l	80.0		101	85-115			
Lead	84.3	1.0	0.20	ug/l	80.0		105	85-115			
Selenium	81.2	2.0	0.50	ug/l	80.0		101	85-115			
Silver	82.7	1.0	0.10	ug/l	80.0		103	85-115			
Thallium	81.6	1.0	0.20	ug/l	80.0		102	85-115			
Matrix Spike Analyzed: 02/15/2010 (10E	31598-MS1)				Sou	rce: ITB	0888-01				
Antimony	83.1	2.0	0.30	ug/l	80.0	ND	104	70-130			
Cadmium	79.9	1.0	0.10	ug/l	80.0	ND	100	70-130			
Copper	80.3	2.0	0.50	ug/l	80.0	1.68	98	70-130			
Lead	77.4	1.0	0.20	ug/l	80.0	0.398	96	70-130			
Selenium	80.3	2.0	0.50	ug/l	80.0	ND	100	70-130			
Silver	78.7	1.0	0.10	ug/l	80.0	ND	98	70-130			
Thallium	79.3	1.0	0.20	ug/l	80.0	ND	99	70-130			
Matrix Spike Analyzed: 02/15/2010 (10E	31598-MS2)				Sou	rce: ITB	0900-02				
Antimony	82.9	2.0	0.30	ug/l	80.0	ND	104	70-130			
Cadmium	81.1	1.0	0.10	ug/l	80.0	ND	101	70-130			
Copper	84.1	2.0	0.50	ug/l	80.0	1.41	103	70-130			
Lead	78.7	1.0	0.20	ug/l	80.0	0.252	98	70-130			
Selenium	77.8	2.0	0.50	ug/l	80.0	ND	97	70-130			
Silver	81.0	1.0	0.10	ug/l	80.0	ND	101	70-130			
Thallium	82.9	1.0	0.20	ug/l	80.0	ND	104	70-130			

TestAmerica Irvine

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: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

METALS

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B1598 Extracted: 02/12/1	10										
Butter 10B10/0 Extruction 02/12/1											
Matrix Spike Dup Analyzed: 02/15/201	0 (10B1598-M	ISD1)			Sou	rce: ITB	0888-01				
Antimony	84.1	2.0	0.30	ug/l	80.0	ND	105	70-130	1	20	
Cadmium	80.8	1.0	0.10	ug/l	80.0	ND	101	70-130	1	20	
Copper	82.7	2.0	0.50	ug/l	80.0	1.68	101	70-130	3	20	
Lead	79.1	1.0	0.20	ug/l	80.0	0.398	98	70-130	2	20	
Selenium	81.4	2.0	0.50	ug/l	80.0	ND	102	70-130	1	20	
Silver	79.8	1.0	0.10	ug/l	80.0	ND	100	70-130	1	20	
Thallium	80.5	1.0	0.20	ug/l	80.0	ND	101	70-130	1	20	
Batch: 10B1807 Extracted: 02/15/1	10										
Butter: 10B1007 Extracted: 02/13/1											
Blank Analyzed: 02/16/2010 (10B1807-	BLK1)										
Arsenic	ND	10	7.0	ug/l							
Barium	ND	0.010	0.0060	mg/l							
Beryllium	ND	2.0	0.90	ug/l							
Boron	ND	0.050	0.020	mg/l							
Calcium	ND	0.10	N/A	mg/l							
Chromium	ND	5.0	2.0	ug/1							
Cobalt	ND	10	2.0	ug/l							
Iron	ND	0.040	0.015	mg/l							
Magnesium	ND	0.020	N/A	mg/l							
Manganese	ND	20	7.0	ug/l							
Nickel	ND	10	2.0	ug/l							
Vanadium	ND	10	3.0	ug/l							
Zinc	ND	20	6.0	ug/l							
LCS Analyzed: 02/16/2010 (10B1807-B	S1)										
Arsenic	518	10	7.0	ug/l	500		104	85-115			
Barium	0.511	0.010	0.0060	mg/l	0.500		102	85-115			
Beryllium	511	2.0	0.90	ug/l	500		102	85-115			
Boron	0.520	0.050	0.020	mg/l	0.500		104	85-115			
Calcium	2.58	0.10	N/A	mg/l	2.50		103	85-115			
Chromium	488	5.0	2.0	ug/1	500		98	85-115			
Cobalt	483	10	2.0	ug/l	500		97	85-115			
Iron	0.505	0.040	0.015	mg/l	0.500		101	85-115			
Magnesium	2.52	0.020	N/A	mg/l	2.50		101	85-115			
Manganese	497	20	7.0	ug/l	500		99	85-115			

TestAmerica Irvine

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 018

Report Number: ITB0889

Sampled: 02/06/10-02/07/10

Received: 02/06/10

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1807 Extracted: 02/15/10	<u>_</u>										
LCS Analyzed: 02/16/2010 (10B1807-BS	1)										
Nickel	500	10	2.0	ug/l	500		100	85-115			
Vanadium	500	10	3.0	ug/l	500		100	85-115			
Zinc	522	20	6.0	ug/l	500		104	85-115			
Matrix Spike Analyzed: 02/16/2010 (10B	1807-MS1)				Sou	rce: ITB(980-01				
Arsenic	522	10	7.0	ug/l	500	ND	104	70-130			
Barium	0.511	0.010	0.0060	mg/l	0.500	ND	102	70-130			
Beryllium	501	2.0	0.90	ug/l	500	0.967	100	70-130			
Boron	0.537	0.050	0.020	mg/l	0.500	0.0262	102	70-130			
Calcium	5.69	0.10	N/A	mg/l	2.50	3.23	98	70-130			
Chromium	483	5.0	2.0	ug/l	500	ND	97	70-130			
Cobalt	477	10	2.0	ug/l	500	ND	95	70-130			
Iron	0.539	0.040	0.015	mg/l	0.500	0.0466	98	70-130			
Magnesium	2.75	0.020	N/A	mg/l	2.50	0.285	99	70-130			
Manganese	491	20	7.0	ug/l	500	ND	98	70-130			
Nickel	492	10	2.0	ug/l	500	2.57	98	70-130			
Vanadium	491	10	3.0	ug/l	500	3.29	98	70-130			
Zinc	524	20	6.0	ug/l	500	34.0	98	70-130			
Matrix Spike Analyzed: 02/16/2010 (10B	1807-MS2)				Sou	rce: ITB	1117-02				
Arsenic	ND	1000	700	ug/l	500	ND		70-130			M2
Barium	0.924	1.0	0.60	mg/l	0.500	ND	185	70-130			M1, Ja
Beryllium	565	200	90	ug/l	500	ND	113	70-130			
Boron	ND	5.0	2.0	mg/l	0.500	ND		70-130			M2
Calcium	65.3	10	N/A	mg/l	2.50	65.0	12	70-130			MHA
Chromium	4140	500	200	ug/l	500	3620	104	70-130			MHA
Cobalt	2410	1000	200	ug/l	500	1980	86	70-130			MHA
Iron	19100	4.0	1.5	mg/l	0.500	19000	8290	70-130			MHA
Magnesium	258	2.0	N/A	mg/l	2.50	256	57	70-130			MHA
Manganese	90700	2000	700	ug/l	500	90600	11	70-130			MHA
Nickel	5520	1000	200	ug/l	500	5010	101	70-130			MHA
Vanadium	906	1000	300	ug/l	500	477	86	70-130			Ja
Zinc	24100	2000	600	ug/l	500	24000	18	70-130			M2

TestAmerica Irvine

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: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

METALS

		Reporting	;		Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B1807 Extracted: 02/15/10)										
	_										
Matrix Spike Dup Analyzed: 02/16/2010	(10B1807-MS	SD1)			Sou	rce: ITB(980-01				
Arsenic	524	10	7.0	ug/l	500	ND	105	70-130	0.4	20	
Barium	0.503	0.010	0.0060	mg/l	0.500	ND	101	70-130	2	20	
Beryllium	503	2.0	0.90	ug/l	500	0.967	100	70-130	0.4	20	
Boron	0.532	0.050	0.020	mg/l	0.500	0.0262	101	70-130	1	20	
Calcium	5.71	0.10	N/A	mg/l	2.50	3.23	99	70-130	0.3	20	
Chromium	487	5.0	2.0	ug/l	500	ND	97	70-130	0.7	20	
Cobalt	479	10	2.0	ug/l	500	ND	96	70-130	0.2	20	
Iron	0.546	0.040	0.015	mg/l	0.500	0.0466	100	70-130	1	20	
Magnesium	2.76	0.020	N/A	mg/l	2.50	0.285	99	70-130	0.3	20	
Manganese	492	20	7.0	ug/l	500	ND	98	70-130	0.2	20	
Nickel	493	10	2.0	ug/l	500	2.57	98	70-130	0.2	20	
Vanadium	490	10	3.0	ug/l	500	3.29	97	70-130	0.1	20	
Zinc	527	20	6.0	ug/l	500	34.0	99	70-130	0.4	20	
Batch: 10B1943 Extracted: 02/16/10)										
	_										
Blank Analyzed: 02/16/2010 (10B1943-B	SLK1)										
Mercury	ND	0.20	N/A	ug/l							
LCS Analyzed: 02/16/2010 (10B1943-BS	1)										
Mercury	7.80	0.20	N/A	ug/l	8.00		97	85-115			
Matrix Spike Analyzed: 02/16/2010 (10E	31943-MS1)				Sou	rce: ITB(0895-01				
Mercury	7.69	0.20	N/A	ug/l	8.00	ND	96	70-130			
Matrix Spike Dup Analyzed: 02/16/2010	(10R10/3, MS	SD1)			San	rce: ITB(1805_01				
1 1 1	7.91	0.20	N/A	u ~/1	8.00		99 99	70-130	2	20	
Mercury	7.91	0.20	IN/A	ug/l	8.00	ND	99	/0-130	3	20	

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: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

DISSOLVED METALS

Amelioto	Result	Reporting Limit	MDL	Units	Spike Level	Source	%REC	%REC	RPD	RPD Limit	Data
Analyte		LIIIII	MIDL	Units	Level	Resuit	%KEC	Limits	KPD	Limit	Qualifiers
Batch: 10B1845 Extracted: 02/15/10	_										
Blank Analyzed: 02/16/2010 (10B1845-B	L IV 1)										
Antimony	ND	2.0	0.30	ug/l							
Cadmium	ND	1.0	0.10	ug/l							
Lead	ND	1.0	0.20	ug/l							
Selenium	ND	2.0	0.50	ug/l							
Silver	ND	1.0	0.10	ug/l							
Thallium	ND	1.0	0.10	ug/l							
Hamum	ND	1.0	0.20	ug/1							
LCS Analyzed: 02/16/2010 (10B1845-BS)	1)										
Antimony	81.7	2.0	0.30	ug/l	80.0		102	85-115			
Cadmium	81.8	1.0	0.10	ug/l	80.0		102	85-115			
Lead	84.1	1.0	0.20	ug/l	80.0		105	85-115			
Selenium	82.4	2.0	0.50	ug/l	80.0		103	85-115			
Silver	84.4	1.0	0.10	ug/l	80.0		105	85-115			
Thallium	87.0	1.0	0.20	ug/l	80.0		109	85-115			
Matrix Spike Analyzed: 02/16/2010 (10B	1845-MS1)				Sou	rce: ITB	1082-03				
Antimony	82.8	20	3.0	ug/l	80.0	ND	103	70-130			
Cadmium	81.7	10	1.0	ug/l	80.0	1.14	101	70-130			
Lead	74.3	10	2.0	ug/l	80.0	ND	93	70-130			
Selenium	88.1	20	5.0	ug/l	80.0	10.3	97	70-130			
Silver	82.2	10	1.0	ug/l	80.0	ND	103	70-130			
Thallium	78.4	10	2.0	ug/l	80.0	ND	98	70-130			
Matrix Spike Analyzed: 02/16/2010 (10B	1845-MS2)				Sou	rce: ITB(1888-01				
Antimony	86.1	2.0	0.30	ug/l	80.0	ND	108	70-130			
Cadmium	83.4	1.0	0.10	ug/l	80.0	ND	104	70-130			
Lead	78.5	1.0	0.10	ug/l	80.0	ND ND	98	70-130			
Selenium	83.6	2.0	0.50	ug/l	80.0	0.511	104	70-130			
Silver	82.6	1.0	0.10	ug/l	80.0	ND	104	70-130			
Thallium	85.5	1.0	0.10	ug/l	80.0	ND ND	103	70-130			
Halliulli	05.5	1.0	0.20	ug/1	00.0	ND	107	/0-130			

TestAmerica Irvine



THE LEADER IN ENVIRONMENTAL TESTING

MWH-Pasadena/Boeing

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Project ID: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte Result Limit Mode Result Result (Partic 10B1845 Extracetics) Limit Qualification Brackin: IDB1845 Extracetics (2/16/2011 (IDB1845-WIFE) S.7 20 3.0 10 10.0 10.1 10.0 70.13 4 20 4 20 4 20 4 20 4 20 4 20 10 10 10 10 90 70.13 6 20 20 20 10 10 10 90 70.13 6 20 20 10			Reporting			Spike	Source		%REC		RPD	Data
Matrix Spike Du Analyzed: 02/16/2010 (10B1845-MS)	Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Antimony	Batch: 10B1845 Extracted: 02/15/10	<u>) </u>										
Antimony												
Cadmium	Matrix Spike Dup Analyzed: 02/16/2010		ISD1)					1082-03				
Lead	•				ug/l		ND					
Scienium					ug/l		1.14	105				
Silver	Lead		10	2.0	ug/l	80.0	ND	96	70-130	3	20	
Rallium Ro.8 Ro.8 Ro.8 Ro.9 Ro.9			20	5.0	ug/l	80.0		104	70-130	6	20	
Blank Analyzed: 02/16/2010 (10B1846-BLK1) Arsenic ND 0.010 0.0060 mg/l Beryllium ND 10 0.00 0.0060 mg/l Colacium 0.0573 0.10 0.050 mg/l Coloalit ND 10 0.00 0.012 mg/l Bron 0.0219 0.040 0.015 mg/l Bron 0.0150 0.020 0.012 mg/l Namagnesium 0.0150 0.020 0.020 mg/l Namagnesium ND 10 0.00 0.000 0.001 mg/l Namagnese ND 10 0.00 0.000 0.001 mg/l Namagnese ND 10 0.000 0.000 0.001 mg/l Namagnese 0.016 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.0000 0				1.0	ug/l	80.0		106	70-130			
Blank Analyzed: 02/16/2010 (10B1846-BLK1)	Thallium	80.8	10	2.0	ug/l	80.0	ND	101	70-130	3	20	
Arsenic ND 10 7.0 ug/l Barium ND 0.010 0.0060 mg/l Beryllium ND 2.0 0.90 ug/l Boron 0.0453 0.050 0.020 mg/l Image: Calcium 0.0533 0.10 0.050 mg/l Image: Calcium Ja Ja Cobalt ND 10 2.0 ug/l Image: Calcium Ja Ja Magnesium 0.0150 0.020 0.012 mg/l Image: Calcium Ja Manganese ND 0.020 0.012 mg/l Image: Calcium Ja Vanadium ND 20 7.0 ug/l Image: Calcium Image: Calciu	Batch: 10B1846 Extracted: 02/15/10	<u>) </u>										
Barium ND 0.010 0.0060 mg/l	Blank Analyzed: 02/16/2010 (10B1846-B	SLK1)										
Beryllium	Arsenic	ND	10	7.0	ug/l							
Boron 0.0453 0.050 0.020 mg/l	Barium	ND	0.010	0.0060	mg/l							
Calcium 0.0573 0.10 0.050 mg/l Cobalt ND 10 2.0 ug/l Cobalt ND 10 2.0 ug/l Cobalt ND 0.0219 0.040 0.015 mg/l Cobalt Magnesium 0.0150 0.020 0.012 mg/l Cobalt Cobalt ND 10 2.0 ug/l 500 104 85-115 Cobalt Magnesium ND 10 2.0 ug/l 500 104 85-115 85-115 85-115 85-115 85-115 95 104 85-115 95 95-115 95 95-115 95 95-115 95 95-115 95 95-115 95 95-115 95 95-115 95 95-115 95 95-115 95 95-115	Beryllium	ND	2.0	0.90	ug/l							
Cobalt ND 10 2.0 ug/l Iron 0.0219 0.040 0.015 mg/l Ja Magnesium 0.0150 0.020 0.012 mg/l Ja Manganese ND 20 7.0 ug/l <td>Boron</td> <td>0.0453</td> <td>0.050</td> <td>0.020</td> <td>mg/l</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Ja</td>	Boron	0.0453	0.050	0.020	mg/l							Ja
Iron	Calcium	0.0573	0.10	0.050	mg/l							Ja
Magnesium 0.0150 0.020 0.012 mg/l Manganese ND 20 7.0 ug/l Nickel ND 10 2.0 ug/l Vanadium ND 10 3.0 ug/l Zinc ND 20 6.0 ug/l LCS Analyzed: 02/16/2010 (10B1846-BS1) Arsenic 521 10 7.0 ug/l 500 104 85-115 Barium 0.489 0.010 0.0060 mg/l 0.500 98 85-115 Beryllium 486 2.0 0.90 ug/l 500 97 85-115 Boron 0.521 0.050 0.020 mg/l 0.500 97 85-115 Calcium 2.42 0.10 0.050 mg/l 0.500 97 85-115 Iron 0.499 0.040 0.015 mg/l 500 92 85-115 Magnesium 2.42 0.020 0.012 mg/l 0.500 97 85-115 Manganese 481 20 7.0 ug/l 500 96 85-115 Nickel 480 10 2.0 ug/l 500 96 85-115	Cobalt	ND	10	2.0	ug/l							
Manganese ND 20 7.0 ug/l Nickel ND 10 2.0 ug/l Vanadium ND 10 3.0 ug/l Zinc ND 20 6.0 ug/l LCS Analyzed: 02/16/2010 (10B1846-BS1) V V V Arsenic 521 10 7.0 ug/l 500 104 85-115 Barium 0.489 0.010 0.0060 mg/l 0.500 98 85-115 Boron 0.521 0.050 0.90 ug/l 500 104 85-115 Calcium 2.42 0.10 0.050 mg/l 0.500 97 85-115 Cobalt 461 10 2.0 ug/l 500 92 85-115 Iron 0.499 0.040 0.015 mg/l 0.500 100 85-115 Magnesium 2.42 0.020 0.012 mg/l 2.50 97 85-115	Iron	0.0219	0.040	0.015	mg/l							Ja
Nickel ND 10 2.0 ug/l Vanadium ND 10 3.0 ug/l Zinc ND 20 6.0 ug/l LCS Analyzed: 02/16/2010 (10B1846-BS1) Arsenic 521 10 7.0 ug/l 500 104 85-115 Barium 0.489 0.010 0.0060 mg/l 0.500 98 85-115 Beryllium 486 2.0 0.90 ug/l 500 97 85-115 Boron 0.521 0.050 0.020 mg/l 0.500 104 85-115 Calcium 2.42 0.10 0.050 mg/l 2.50 97 85-115 Cobalt 461 10 2.0 ug/l 500 92 85-115 Iron 0.499 0.040 0.015 mg/l 0.500 100 85-115 Magnesium 2.42 0.020 0.012 mg/l 2.50 97 85-115	Magnesium	0.0150	0.020	0.012	mg/l							Ja
Vanadium ND 10 3.0 ug/l LCS Analyzed: 02/16/2010 (10B1846-BS1) LCS Analyzed: 02/16/2010 (10B1846-BS1) Arsenic 521 10 7.0 ug/l 500 104 85-115 Barium 0.489 0.010 0.0060 mg/l 0.500 98 85-115 Beryllium 486 2.0 0.90 ug/l 500 97 85-115 Boron 0.521 0.050 0.020 mg/l 0.500 104 85-115 Calcium 2.42 0.10 0.050 mg/l 2.50 97 85-115 Cobalt 461 10 2.0 ug/l 500 92 85-115 Iron 0.499 0.040 0.015 mg/l 0.500 100 85-115 Magnesium 2.42 0.020 0.012 mg/l 2.50 97 85-115 Nickel 480 10 2.0 ug/l 500 96 <td>Manganese</td> <td>ND</td> <td>20</td> <td>7.0</td> <td>ug/l</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Manganese	ND	20	7.0	ug/l							
Zinc ND 20 6.0 ug/l LCS Analyzed: 02/16/2010 (10B1846-BS1) Arsenic 521 10 7.0 ug/l 500 104 85-115 Barium 0.489 0.010 0.0060 mg/l 0.500 98 85-115 Beryllium 486 2.0 0.90 ug/l 500 97 85-115 Boron 0.521 0.050 0.020 mg/l 0.500 104 85-115 Calcium 2.42 0.10 0.050 mg/l 2.50 97 85-115 Cobalt 461 10 2.0 ug/l 500 92 85-115 Iron 0.499 0.040 0.015 mg/l 0.500 100 85-115 Manganesium 2.42 0.020 0.012 mg/l 2.50 97 85-115 Nickel 480 10 2.0 ug/l 500 96 85-115	Nickel	ND	10	2.0	ug/l							
LCS Analyzed: 02/16/2010 (10B1846-BS1) Arsenic 521 10 7.0 ug/l 500 104 85-115 Barium 0.489 0.010 0.0060 mg/l 0.500 98 85-115 Beryllium 486 2.0 0.90 ug/l 500 97 85-115 Boron 0.521 0.050 0.020 mg/l 0.500 104 85-115 Calcium 2.42 0.10 0.050 mg/l 2.50 97 85-115 Cobalt 461 10 2.0 ug/l 500 92 85-115 Iron 0.499 0.040 0.015 mg/l 0.500 100 85-115 Magnesium 2.42 0.020 0.012 mg/l 2.50 97 85-115 Manganese 481 20 7.0 ug/l 500 96 85-115 Nickel 480 10 2.0 ug/l 500 96 85-11	Vanadium	ND	10	3.0	ug/l							
Arsenic 521 10 7.0 ug/l 500 104 85-115 Barium 0.489 0.010 0.0060 mg/l 0.500 98 85-115 Beryllium 486 2.0 0.90 ug/l 500 97 85-115 Boron 0.521 0.050 0.020 mg/l 0.500 104 85-115 Calcium 2.42 0.10 0.050 mg/l 2.50 97 85-115 Cobalt 461 10 2.0 ug/l 500 92 85-115 Iron 0.499 0.040 0.015 mg/l 0.500 100 85-115 Magnesium 2.42 0.020 0.012 mg/l 2.50 97 85-115 Manganese 481 20 7.0 ug/l 500 96 85-115 Nickel 480 10 2.0 ug/l 500 96 85-115	Zinc	ND	20	6.0	ug/l							
Barium 0.489 0.010 0.0060 mg/l 0.500 98 85-115 Beryllium 486 2.0 0.90 ug/l 500 97 85-115 Boron 0.521 0.050 0.020 mg/l 0.500 104 85-115 Calcium 2.42 0.10 0.050 mg/l 2.50 97 85-115 Cobalt 461 10 2.0 ug/l 500 92 85-115 Iron 0.499 0.040 0.015 mg/l 0.500 100 85-115 Magnesium 2.42 0.020 0.012 mg/l 2.50 97 85-115 Manganese 481 20 7.0 ug/l 500 96 85-115 Nickel 480 10 2.0 ug/l 500 96 85-115	LCS Analyzed: 02/16/2010 (10B1846-BS	1)										
Beryllium 486 2.0 0.90 ug/l 500 97 85-115 Boron 0.521 0.050 0.020 mg/l 0.500 104 85-115 Calcium 2.42 0.10 0.050 mg/l 2.50 97 85-115 Cobalt 461 10 2.0 ug/l 500 92 85-115 Iron 0.499 0.040 0.015 mg/l 0.500 100 85-115 Magnesium 2.42 0.020 0.012 mg/l 2.50 97 85-115 Manganese 481 20 7.0 ug/l 500 96 85-115 Nickel 480 10 2.0 ug/l 500 96 85-115	Arsenic	521	10	7.0	ug/l	500		104	85-115			
Boron 0.521 0.050 0.020 mg/l 0.500 104 85-115 Calcium 2.42 0.10 0.050 mg/l 2.50 97 85-115 Cobalt 461 10 2.0 ug/l 500 92 85-115 Iron 0.499 0.040 0.015 mg/l 0.500 100 85-115 Magnesium 2.42 0.020 0.012 mg/l 2.50 97 85-115 Manganese 481 20 7.0 ug/l 500 96 85-115 Nickel 480 10 2.0 ug/l 500 96 85-115	Barium	0.489	0.010	0.0060	mg/l	0.500		98	85-115			
Calcium 2.42 0.10 0.050 mg/l 2.50 97 85-115 Cobalt 461 10 2.0 ug/l 500 92 85-115 Iron 0.499 0.040 0.015 mg/l 0.500 100 85-115 Magnesium 2.42 0.020 0.012 mg/l 2.50 97 85-115 Manganese 481 20 7.0 ug/l 500 96 85-115 Nickel 480 10 2.0 ug/l 500 96 85-115	Beryllium	486	2.0	0.90	ug/l	500		97	85-115			
Cobalt 461 10 2.0 ug/l 500 92 85-115 Iron 0.499 0.040 0.015 mg/l 0.500 100 85-115 Magnesium 2.42 0.020 0.012 mg/l 2.50 97 85-115 Manganese 481 20 7.0 ug/l 500 96 85-115 Nickel 480 10 2.0 ug/l 500 96 85-115	Boron	0.521	0.050	0.020	mg/l	0.500		104	85-115			
Iron 0.499 0.040 0.015 mg/l 0.500 100 85-115 Magnesium 2.42 0.020 0.012 mg/l 2.50 97 85-115 Manganese 481 20 7.0 ug/l 500 96 85-115 Nickel 480 10 2.0 ug/l 500 96 85-115	Calcium	2.42	0.10	0.050	mg/l	2.50		97	85-115			
Magnesium 2.42 0.020 0.012 mg/l 2.50 97 85-115 Manganese 481 20 7.0 ug/l 500 96 85-115 Nickel 480 10 2.0 ug/l 500 96 85-115	Cobalt	461	10	2.0	ug/l	500		92	85-115			
Manganese 481 20 7.0 ug/l 500 96 85-115 Nickel 480 10 2.0 ug/l 500 96 85-115	Iron	0.499	0.040	0.015	mg/l	0.500		100	85-115			
Nickel 480 10 2.0 ug/l 500 96 85-115	Magnesium	2.42	0.020	0.012	mg/l	2.50		97	85-115			
	Manganese	481	20	7.0	ug/l	500		96	85-115			
Vanadium 489 10 3.0 ug/l 500 98 85-115	Nickel	480	10	2.0	ug/l	500		96	85-115			
	Vanadium	489	10	3.0	ug/l	500		98	85-115			
Zinc 499 20 6.0 ug/l 500 100 85-115	Zinc	499	20	6.0	ug/l	500		100	85-115			

TestAmerica Irvine



MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 018

Report Number: ITB0889

Sampled: 02/06/10-02/07/10

Received: 02/06/10

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: 10B1846 Extracted: 02/15/10)										
	_										
Matrix Spike Analyzed: 02/16/2010 (10E	31846-MS1)				Sou	rce: ITB(0895-01				
Arsenic	543	10	7.0	ug/l	500	ND	109	70-130			
Barium	0.525	0.010	0.0060	mg/l	0.500	0.0235	100	70-130			
Beryllium	503	2.0	0.90	ug/l	500	ND	101	70-130			
Boron	0.617	0.050	0.020	mg/l	0.500	0.110	102	70-130			
Calcium	28.3	0.10	0.050	mg/l	2.50	24.7	144	70-130			MHA
Cobalt	468	10	2.0	ug/l	500	ND	94	70-130			
Iron	0.567	0.040	0.015	mg/l	0.500	ND	113	70-130			
Magnesium	7.76	0.020	0.012	mg/l	2.50	4.98	111	70-130			
Manganese	686	20	7.0	ug/l	500	190	99	70-130			
Nickel	488	10	2.0	ug/l	500	ND	98	70-130			
Vanadium	500	10	3.0	ug/l	500	ND	100	70-130			
Zinc	523	20	6.0	ug/l	500	12.7	102	70-130			
Matrix Spike Analyzed: 02/16/2010 (10E	31846-MS2)				Sou	rce: ITB(0887-04				
Arsenic	510	10	7.0	ug/l	500	ND	102	70-130			
Barium	0.496	0.010	0.0060	mg/l	0.500	0.0149	96	70-130			
Beryllium	481	2.0	0.90	ug/l	500	ND	96	70-130			
Boron	0.549	0.050	0.020	mg/l	0.500	0.0701	96	70-130			
Calcium	13.1	0.10	0.050	mg/l	2.50	11.0	84	70-130			MHA
Cobalt	453	10	2.0	ug/l	500	ND	91	70-130			
Iron	1.16	0.040	0.015	mg/l	0.500	0.642	104	70-130			
Magnesium	5.35	0.020	0.012	mg/l	2.50	3.23	85	70-130			
Manganese	477	20	7.0	ug/l	500	ND	95	70-130			
Nickel	465	10	2.0	ug/l	500	ND	93	70-130			
Vanadium	486	10	3.0	ug/l	500	ND	97	70-130			
Zinc	497	20	6.0	ug/l	500	10.3	97	70-130			
Matrix Spike Dup Analyzed: 02/16/2010	(10B1846-M	(SD1)			Sou	rce: ITB(0895-01				
Arsenic	534	10	7.0	ug/l	500	ND	107	70-130	2	20	
Barium	0.502	0.010	0.0060	mg/l	0.500	0.0235	96	70-130	4	20	
Beryllium	480	2.0	0.90	ug/l	500	ND	96	70-130	5	20	
Boron	0.599	0.050	0.020	mg/l	0.500	0.110	98	70-130	3	20	
Calcium	27.1	0.10	0.050	mg/l	2.50	24.7	96	70-130	4	20	MHA
Cobalt	455	10	2.0	ug/l	500	ND	91	70-130	3	20	
Iron	0.509	0.040	0.015	mg/l	0.500	ND	102	70-130	11	20	
Magnesium	7.37	0.020	0.012	mg/l	2.50	4.98	96	70-130	5	20	

TestAmerica Irvine



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: Annual Outfall 018

Report Number: ITB0889

Sampled: 02/06/10-02/07/10

Received: 02/06/10

METHOD BLANK/QC DATA

DISSOLVED METALS

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B1846 Extracted: 02/15/10	_										
Matrix Spike Dup Analyzed: 02/16/2010	(10B1846-MS	D1)			Sou	rce: ITB(0895-01				
Manganese	658	20	7.0	ug/l	500	190	94	70-130	4	20	
Nickel	472	10	2.0	ug/l	500	ND	94	70-130	3	20	
Vanadium	480	10	3.0	ug/l	500	ND	96	70-130	4	20	
Zinc	510	20	6.0	ug/l	500	12.7	99	70-130	3	20	
Batch: 10B1953 Extracted: 02/16/10	_										
Blank Analyzed: 02/16/2010 (10B1953-Bl	L K1)										
Mercury	ND	0.20	0.10	ug/l							
LCS Analyzed: 02/16/2010 (10B1953-BS1	1)										
Mercury	8.15	0.20	0.10	ug/l	8.00		102	85-115			
Matrix Spike Analyzed: 02/16/2010 (10B	1953-MS1)				Sou	rce: ITB(907-01				
Mercury	7.43	0.20	0.10	ug/l	8.00	ND	93	70-130			
Matrix Spike Dup Analyzed: 02/16/2010	(10B1953-MS	D1)			Sou	rce: ITB(907-01				
Mercury	7.66	0.20	0.10	ug/l	8.00	ND	96	70-130	3	20	
Batch: 10B2106 Extracted: 02/17/10	_										
Disals Assalssed a 02/17/2010 (10D2107 DI	(IZ1)										
Blank Analyzed: 02/17/2010 (10B2106-Bl	<i>'</i>	2.0	0.50	/1							
Copper	ND	2.0	0.50	ug/l							
LCS Analyzed: 02/17/2010 (10B2106-BS1	1)										
Copper	77.6	2.0	0.50	ug/l	80.0		97	85-115			



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: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

DISSOLVED METALS

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B2106 Extracted: 02/17/10	_										
N	310 (34C1)					IDD					
Matrix Spike Analyzed: 02/17/2010 (10B)	2106-MS1)				Sou	rce: ITB	17/5-07				
Copper	76.0	2.0	0.50	ug/l	80.0	2.19	92	70-130			
Matrix Spike Dup Analyzed: 02/17/2010	(10B2106-MS	D1)			Sou	rce: ITB	1775-07				
Copper	77.2	2.0	0.50	ug/l	80.0	2.19	94	70-130	2	20	



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: Annual Outfall 018

Report Number: ITB0889

Sampled: 02/06/10-02/07/10

Received: 02/06/10

METHOD BLANK/QC DATA

DISSOLVED INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0756 Extracted: 02/06/10	-										
Blank Analyzed: 02/06/2010 (10B0756-Bl	LK1)										
Chromium VI	ND	1.0	0.25	ug/l							
LCS Analyzed: 02/06/2010 (10B0756-BS)	1)										
Chromium VI	4.95	1.0	0.25	ug/l	5.00		99	90-110			
Matrix Spike Analyzed: 02/06/2010 (10B	0756-MS1)				Sou	rce: ITB(0889-01				
Chromium VI	4.80	1.0	0.25	ug/l	5.00	ND	96	90-110			
Matrix Spike Dup Analyzed: 02/06/2010	trix Spike Dup Analyzed: 02/06/2010 (10B0756-MSD1)				Sou	rce: ITB(0889-01				
Chromium VI	4.91	1.0	0.25	ug/l	5.00	ND	98	90-110	2	10	



MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

INORGANICS

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B0814 Extracted: 02/08/10)										
<u> </u>	=										
Blank Analyzed: 02/08/2010 (10B0814-B	LK1)										
Fluoride	0.0335	0.10	0.020	mg/l							Ja
LCS Analyzed: 02/08/2010 (10B0814-BS	1)										
Fluoride	1.04	0.10	0.020	mg/l	1.00		104	90-110			
Fluoride	1.04	0.10	0.020	IIIg/I	1.00		104	90-110			
Matrix Spike Analyzed: 02/08/2010 (10B	30814-MS1)				Sou	rce: ITB(0610-01				
Fluoride	1.48	0.10	0.020	mg/l	1.00	0.481	100	80-120			
Matrix Spike Dup Analyzed: 02/08/2010	(10B0814-M	SD1)			Sou	rce: ITB(0610-01				
Fluoride	1.50	0.10	0.020	mg/l	1.00	0.481	101	80-120	1	20	
Batch: 10B0856 Extracted: 02/08/10)										
	_										
Blank Analyzed: 02/08/2010 (10B0856-B	LK1)										
Chloride	ND	0.50	0.25	mg/l							
Nitrate-N	ND	0.11	0.060	mg/l							
Nitrite-N	ND	0.15	0.090	mg/l							
Nitrate/Nitrite-N	ND	0.26	0.15	mg/l							
Sulfate	ND	0.50	0.20	mg/l							
LCS Analyzed: 02/08/2010 (10B0856-BS	1)										
Chloride	4.73	0.50	0.25	mg/l	5.00		95	90-110			M-3
Nitrate-N	1.05	0.11	0.060	mg/l	1.13		93	90-110			
Nitrite-N	1.44	0.15	0.090	mg/l	1.52		94	90-110			
Sulfate	9.84	0.50	0.20	mg/l	10.0		98	90-110			M-3
Matrix Spike Analyzed: 02/08/2010 (10B	0856-MS1)				Sou	rce: ITB(0894-01				
Chloride	11.2	0.50	0.25	mg/l	5.00	5.65	112	80-120			
Nitrate-N	2.01	0.11	0.060	mg/l	1.13	0.816	105	80-120			
Nitrite-N	1.53	0.15	0.090	mg/l	1.52	ND	101	80-120			
Sulfate	23.8	0.50	0.20	mg/l	10.0	12.8	110	80-120			

TestAmerica Irvine



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: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

INORGANICS

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B0856 Extracted: 02/08/10	_										
	_										
Matrix Spike Analyzed: 02/09/2010 (10B	0856-MS2)				Sou	rce: ITB0	963-03				
Nitrate-N	1.47	0.11	0.060	mg/l	1.13	0.349	99	80-120			
Nitrite-N	1.90	0.15	0.090	mg/l	1.52	0.298	105	80-120			
Matrix Spike Dup Analyzed: 02/08/2010	(10B0856-MS	D 1)			Sou	rce: ITB0	894-01				
Chloride	11.2	0.50	0.25	mg/l	5.00	5.65	111	80-120	0.5	20	
Nitrate-N	1.99	0.11	0.060	mg/l	1.13	0.816	104	80-120	0.9	20	
Nitrite-N	1.52	0.15	0.090	mg/l	1.52	ND	100	80-120	0.5	20	
Sulfate	23.6	0.50	0.20	mg/l	10.0	12.8	108	80-120	0.6	20	
Batch: 10B0912 Extracted: 02/08/10	-										
Blank Analyzed: 02/13/2010 (10B0912-B	LK1)										
Biochemical Oxygen Demand	ND	2.0	0.50	mg/l							
LCS Analyzed: 02/13/2010 (10B0912-BS	1)										
Biochemical Oxygen Demand	208	100	25	mg/l	198		105	85-115			
LCS Dup Analyzed: 02/13/2010 (10B0912	2-BSD1)										
Biochemical Oxygen Demand	208	100	25	mg/l	198		105	85-115	0.2	20	
Batch: 10B0951 Extracted: 02/08/10	-										
Blank Analyzed: 02/08/2010 (10B0951-B	LK1)										
Surfactants (MBAS)	ND	0.10	0.025	mg/l							
LCS Analyzed: 02/08/2010 (10B0951-BS	1)										
Surfactants (MBAS)	0.255	0.10	0.025	mg/l	0.250		102	90-110			



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: Annual Outfall 018

Report Number: ITB0889

Sampled: 02/06/10-02/07/10

Received: 02/06/10

METHOD BLANK/QC DATA

INORGANICS

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B0951 Extracted: 02/08/10	_										
Matrix Spike Analyzed: 02/08/2010 (10B						rce: ITB(
Surfactants (MBAS)	0.287	0.10	0.025	mg/l	0.250	0.0423	98	50-125			
Matrix Spike Dup Analyzed: 02/08/2010	(10B0951-MS	SD1)			Sou	rce: ITB(0896-01				
Surfactants (MBAS)	0.298	0.10	0.025	mg/l	0.250	0.0423	102	50-125	4	20	
Batch: 10B1015 Extracted: 02/08/10											
	-										
Blank Analyzed: 02/08/2010 (10B1015-B	LK1)										
Turbidity	ND	1.0	0.040	NTU							
Duplicate Analyzed: 02/08/2010 (10B101	5-DUP1)				Sou	rce: ITB(0895-01				
Turbidity	0.110	1.0	0.040	NTU		0.100			10	20	Ja
Batch: 10B1155 Extracted: 02/10/10											
<u> </u>	_										
Blank Analyzed: 02/10/2010 (10B1155-B	LK1)										
Specific Conductance	ND	1.0	1.0	umhos/cm							
LCS Analyzed: 02/10/2010 (10B1155-BS)	1)										
Specific Conductance	1460	1.0	1.0	umhos/cm	1410		103	90-110			
Duplicate Analyzed: 02/10/2010 (10B115:	5-DUP1)				Sou	rce: ITB(0864-01				
Specific Conductance	156	1.0	1.0	umhos/cm		155			0.5	5	
Batch: 10B1250 Extracted: 02/10/10											
Daten. 10D1250 Extracted: 02/10/10	-										
Blank Analyzed: 02/10/2010 (10B1250-B	LK1)										
Total Cyanide	ND	5.0	2.2	ug/l							



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: Annual Outfall 018

Report Number: ITB0889

Sampled: 02/06/10-02/07/10

Received: 02/06/10

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1250 Extracted: 02/10/10	-										
LCS Analyzed: 02/10/2010 (10B1250-BS1	1)										
Total Cyanide	190	5.0	2.2	ug/l	200		95	90-110			
Matrix Spike Analyzed: 02/10/2010 (10B	1250-MS1)				Sou	rce: ITB(359-02				
Total Cyanide	187	5.0	2.2	ug/l	200	ND	94	70-115			
Matrix Spike Dup Analyzed: 02/10/2010	(10B1250-M	SD1)			Sou	rce: ITB(359-02				
Total Cyanide	182	5.0	2.2	ug/l	200	ND	91	70-115	3	15	
Batch: 10B1284 Extracted: 02/11/10	-										
Blank Analyzed: 02/11/2010 (10B1284-Bl	LK1)										
Total Organic Carbon	ND	1.0	0.50	mg/l							
LCS Analyzed: 02/11/2010 (10B1284-BS1	1)										
Total Organic Carbon	10.0	1.0	0.50	mg/l	10.0		100	90-110			
Matrix Spike Analyzed: 02/11/2010 (10B	1284-MS1)				Sou	rce: ITB	1082-01				
Total Organic Carbon	9.13	1.0	0.50	mg/l	5.00	4.47	93	80-120			
Matrix Spike Dup Analyzed: 02/11/2010	(10B1284-M	SD1)			Sou	rce: ITB	1082-01				
Total Organic Carbon	9.43	1.0	0.50	mg/l	5.00	4.47	99	80-120	3	20	
Batch: 10B1487 Extracted: 02/12/10	-										
Blank Analyzed: 02/12/2010 (10B1487-Bl	LK1)										
Total Dissolved Solids	ND	10	1.0	mg/l							



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: Annual Outfall 018

Report Number: ITB0889

Sampled: 02/06/10-02/07/10

Received: 02/06/10

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
·		Limit	MDL	Units	Level	Kesuit	70KEC	Lillits	KFD	Lillit	Quanners
Batch: 10B1487 Extracted: 02/12/10	-										
LCS Analyzed: 02/12/2010 (10B1487-BS1	1)										
Total Dissolved Solids	1010	10	1.0	mg/l	1000		101	90-110			
Duplicate Analyzed: 02/12/2010 (10B148'	7-DUP1)				Sou	rce: ITB1	1082-01				
Total Dissolved Solids	2140	10	1.0	mg/l		2150			0.7	10	
Batch: 10B1575 Extracted: 02/12/10											
	-										
Blank Analyzed: 02/12/2010 (10B1575-Bl	•										
Ammonia-N (Distilled)	ND	0.50	0.50	mg/l							
LCS Analyzed: 02/12/2010 (10B1575-BS1	1)										
Ammonia-N (Distilled)	10.6	0.50	0.50	mg/l	10.0		106	80-115			
Matrix Spike Analyzed: 02/12/2010 (10B	1575-MS1)				Sou	rce: ITB(0887-04				
Ammonia-N (Distilled)	11.2	0.50	0.50	mg/l	10.0	0.560	106	70-120			
Matrix Spike Dup Analyzed: 02/12/2010	(10B1575-MS	D1)			Sou	rce: ITB(0887-04				
Ammonia-N (Distilled)	11.5	0.50	0.50	mg/l	10.0	0.560	109	70-120	2	15	
Batch: 10B1648 Extracted: 02/12/10											
	-										
Blank Analyzed: 02/12/2010 (10B1648-Bl	,										
Total Suspended Solids	ND	10	1.0	mg/l							
LCS Analyzed: 02/12/2010 (10B1648-BS1	1)										
Total Suspended Solids	1000	10	1.0	mg/l	1000		100	85-115			



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: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

INORGANICS

Analyta	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC	RPD	RPD Limit	Data Oualifiers
Analyte	Result	Limit	MIDL	Units	Level	Result	70KEC	Limits	KFD	Lillit	Qualifiers
Batch: 10B1648 Extracted: 02/12/10	_										
Duplicate Analyzed: 02/12/2010 (10B164	8-DUP1)				Sou	rce: ITB1	069-01				
Total Suspended Solids	35.0	10	1.0	mg/l		36.0			3	10	
Batch: 10B1658 Extracted: 02/13/10	-										
Blank Analyzed: 02/13/2010 (10B1658-B	LK1)										
Perchlorate	ND	4.0	0.90	ug/l							
LCS Analyzed: 02/13/2010 (10B1658-BS	1)										
Perchlorate	24.4	4.0	0.90	ug/l	25.0		98	85-115			
Matrix Spike Analyzed: 02/13/2010 (10B	1658-MS1)		Source: ITB1511-01								
Perchlorate	24.6	4.0	0.90	ug/l	25.0	1.91	91	80-120			
Matrix Spike Dup Analyzed: 02/13/2010	(10B1658-M	SD1)	Source: ITB1511-01								
Perchlorate	24.7	4.0	0.90	ug/l	25.0	1.91	91	80-120	0.2	20	



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: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

ASTM 5174-91

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result		%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 53280 Extracted: 02/23/10											
Matrix Spike Dup Analyzed: 02/26/2010	(F0B09047000	1D)			Sou	rce: F0B	09047000	1			
Total Uranium	30	1.4	0.4	pCi/L	27.7	0.566	106	62-150	1	20	
Matrix Spike Analyzed: 02/26/2010 (F0B	090470001S)				Sou	rce: F0B	09047000	1			
Total Uranium	29.7	1.4	0.4	pCi/L	27.7	0.566	105	62-150			
Blank Analyzed: 02/26/2010 (F0B220000	280B)				Sou	rce:					
Total Uranium	0.046	0.693	0.21	pCi/L				-			U
LCS Analyzed: 02/26/2010 (F0B2200002	80C)				Sou	rce:					
Total Uranium	30.2	0.7	0.2	pCi/L	27.7		109	90-120			



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: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

EPA 900.0 MOD

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 43108 Extracted: 02/10/10											
Matrix Spike Analyzed: 02/18/2010 (F0B	090470001S)				Sou	rce: F0B(9047000	1			
Gross Alpha	47.2	3	1	pCi/L	49.4	2	91	35-150			
Gross Beta	79	4	1.5	pCi/L	68	3.9	110	54-150			
Duplicate Analyzed: 02/18/2010 (F0B090	470001X)				Sou	rce: F0B(9047000	1			
Gross Alpha	0.84	3	0.94	pCi/L		2		-			U
Gross Beta	3.2	4	1.5	pCi/L		3.9		-			Jb, U
Blank Analyzed: 02/19/2010 (F0B120000	108B)				Sou	rce:					
Gross Alpha	-0.28	2	0.87	pCi/L				-			U , Jb
Gross Beta	-0.23	4	1.1	pCi/L				-			U
LCS Analyzed: 02/19/2010 (F0B1200001	08C)				Sou	rce:					
Gross Alpha	34.8	3	1.2	pCi/L	49.4		70	62-134			U
Gross Beta	71.6	4	1	pCi/L	68		105	58-133			



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: Annual Outfall 018

Report Number: ITB0889

Sampled: 02/06/10-02/07/10

Received: 02/06/10

METHOD BLANK/QC DATA

EPA 901.1 MOD

Analyte <u>Batch: 42136 Extracted: 02/11/10</u>	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Duplicate Analyzed: 02/19/2010 (F0B09	0470001X)				Sou	rce: F0B0	09047000	1			
Cesium 137	1.2	20	14	pCi/L		-2.9		-			U
Potassium 40	-50	NA	200	pCi/L		-100		-			U
Blank Analyzed: 02/19/2010 (F0B11000	0136B)				Sou	rce:					
Cesium 137	1.8	20	14	pCi/L				-			U
Potassium 40	-80	NA	210	pCi/L				-			U
LCS Analyzed: 02/19/2010 (F0B110000)	136C)				Sou	rce:					
Americium 241	140000	NA	500	pCi/L	141000		99	87-110			U
Cobalt 60	88000	NA	200	pCi/L	87900		100	89-110			
Cesium 137	52900	20	200	pCi/L	53100		100	90-110			



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: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

EPA 903.0 MOD

Analyte Batch: 41160 Extracted: 02/10/10	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Duplicate Analyzed: 02/26/2010 (F0B09	<i>'</i>		0.20	C: /I	Sou	rce: F0B0	9046700	1			
Radium (226)	0.07	1	0.29	pCi/L		0.089		-			U
Blank Analyzed: 02/26/2010 (F0B10000	0160B)				Sou	rce:					
Radium (226)	0.092	1	0.14	pCi/L				-			U
LCS Analyzed: 02/26/2010 (F0B100000	160C)				Sou	rce:					
Radium (226)	10.4	1	0.2	pCi/L	11.3		93	68-136			U



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: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889

Received: 02/06/10

METHOD BLANK/QC DATA

EPA 904 MOD

Analyte Batch: 60257 Extracted: 03/01/10	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Blank Analyzed: 03/05/2010 (F0C010000) Radium 228	0.08	1	0.39	pCi/L	Sour	rce:		-			U
LCS Analyzed: 03/05/2010 (F0C0100002) Radium 228	57C) 6.23	1	0.39	pCi/L	Sou : 6.4	rce:	97	60-142			U
LCS Dup Analyzed: 03/05/2010 (F0C010 Radium 228	0000257L) 6.35	1	0.4	pCi/L	Sou 1 6.4	rce:	99	60-142	2	40	



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: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

EPA 905 MOD

Analyte <u>Batch: 41162 Extracted: 02/10/10</u>	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Duplicate Analyzed: 02/19/2010 (F0B09	0475001X)				Sou	rce: F0B0	9047500	1			
Strontium 90	-0.15	3	0.42	pCi/L		-0.05		-			U
Blank Analyzed: 02/19/2010 (F0B100000	0162B)				Sou	rce:					
Strontium 90	-0.15	3	0.38	pCi/L				-			U
LCS Analyzed: 02/19/2010 (F0B1000001	62C)				Sou	rce:					
Strontium 90	6.82	3	0.34	pCi/L	6.8		100	80-130			U



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: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

EPA 906.0 MOD

Analyte Batch: 49035 Extracted: 02/18/10	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Duplicate Analyzed: 02/18/2010 (F0B090	470001X)				Sou	rce: F0B0	9047000	1			
Tritium	80	500	92	pCi/L		114		-			U
Matrix Spike Analyzed: 02/18/2010 (F0E	3090473001S)				Sou	rce: F0B0	9047300	1			
Tritium	4650	500	90	pCi/L	4530	122	100	62-147			U
Blank Analyzed: 02/18/2010 (F0B180000	035B)				Sou	rce:					
Tritium	165	500	95	pCi/L				-			Jb
LCS Analyzed: 02/18/2010 (F0B180000035C)						rce:					
Tritium	4440	500	90	pCi/L	4530		98	85-112			Jb

%REC



618 Michillinda Avenue, Suite 200

MWH-Pasadena/Boeing

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 018

Report Number: ITB0889

Reporting

Sampled: 02/06/10-02/07/10

RPD

Data

Received: 02/06/10

METHOD BLANK/QC DATA

EPA-5 1613B

Spike Source

		Reportin	g		Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 60222 Extracted: 03/01/1	10_										
Blank Analyzed: 03/02/2010 (G0C0	10000222B)				Sou	rce:					
1,2,3,4,6,7,8-HpCDD	0.000003	0.00005	0.0000008	ug/L				-			J
1,2,3,4,6,7,8-HpCDF	0.000002	0.00005	0.00000072	ug/L				-			J, Q
1,2,3,4,7,8,9-HpCDF	0.000001	0.00005	0.0000012	ug/L				-			J, Q
1,2,3,4,7,8-HxCDD	0.00000091	0.00005	0.00000062	ug/L				-			J, Q
1,2,3,4,7,8-HxCDF	0.0000012	0.00005	0.00000002	ug/L				-			J, Q
1,2,3,6,7,8-HxCDD	0.0000013	0.00005	0.00000053	ug/L				-			J
1,2,3,6,7,8-HxCDF	0.00000092	0.00005	0.00000002	ug/L				-			J
1,2,3,7,8,9-HxCDD	0.0000012	0.00005	0.00000051	ug/L				-			J
1,2,3,7,8,9-HxCDF	0.000001	0.00005	0.00000002	ug/L				-			J, Q
1,2,3,7,8-PeCDD	ND	0.00005	0.00000056	ug/L				-			
1,2,3,7,8-PeCDF	0.00000043	0.00005	0.00000006	ug/L				-			J, Q
2,3,4,6,7,8-HxCDF	0.000001	0.00005	0.00000002	ug/L				-			J
2,3,4,7,8-PeCDF	0.00000072	0.00005	0.00000006	ug/L				-			J, Q
2,3,7,8-TCDD	ND	0.00001	0.00000037	ug/L				-			
2,3,7,8-TCDF	ND	0.00001	0.00000031	ug/L				-			
OCDD	0.0000077	0.0001	0.0000012	ug/L				-			J
OCDF	0.0000031	0.0001	0.0000008	ug/L				-			J
Total HpCDD	0.0000051	0.00005	0.0000008	ug/L				-			J
Total HpCDF	0.000003	0.00005	0.00000072	ug/L				-			J, Q
Total HxCDD	0.000004	0.00005	0.00000051	ug/L				-			J, Q
Total HxCDF	0.0000042	0.00005	0.00000002	ug/L				-			J, Q
Total PeCDD	0.0000017	0.00005	0.00000056	ug/L				-			J, Q
Total PeCDF	0.0000012	0.00005	0.00000004	ug/L				-			J, Q
Total TCDD	ND	0.00001	0.00000037	ug/L				-			
Total TCDF	ND	0.00001	0.00000031	ug/L				-			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDD	0.0019			ug/L	0.002		93	23-140			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF	0.0017			ug/L	0.002		87	28-143			
Surrogate: 13C-1,2,3,4,7,8,9-HpCDF	0.0016			ug/L	0.002		82	26-138			
Surrogate: 13C-1,2,3,4,7,8-HxCDD	0.0016			ug/L	0.002		80	32-141			
Surrogate: 13C-1,2,3,4,7,8-HxCDF	0.0016			ug/L	0.002		79	26-152			
Surrogate: 13C-1,2,3,6,7,8-HxCDD	0.0017			ug/L	0.002		83	28-130			
Surrogate: 13C-1,2,3,6,7,8-HxCDF	0.0016			ug/L	0.002		80	26-123			
Surrogate: 13C-1,2,3,7,8,9-HxCDF	0.0017			ug/L	0.002		83	29-147			
Surrogate: 13C-1,2,3,7,8-PeCDD	0.0016			ug/L	0.002		80	25-181			
Surrogate: 13C-1,2,3,7,8-PeCDF	0.0015			ug/L	0.002		76	24-185			

TestAmerica Irvine

%REC

RPD

Data



THE LEADER IN ENVIRONMENTAL TESTING

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

Source

Spike

METHOD BLANK/QC DATA

EPA-5 1613B

Reporting

Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 60222 Extracted: 03/01/1	0										
	_										
Blank Analyzed: 03/02/2010 (G0C01	0000222B)				Sou	irce:					
Surrogate: 13C-2,3,4,6,7,8-HxCDF	0.0017			ug/L	0.002		83	28-136			
Surrogate: 13C-2,3,4,7,8-PeCDF	0.0015			ug/L	0.002		73	21-178			
Surrogate: 13C-2,3,7,8-TCDD	0.0016			ug/L	0.002		80	25-164			
Surrogate: 13C-2,3,7,8-TCDF	0.0015			ug/L	0.002		76	24-169			
Surrogate: 13C-OCDD	0.0037			ug/L	0.004		92	17-157			
Surrogate: 37Cl4-2,3,7,8-TCDD	0.00071			ug/L	0.0008		89	35-197			
LCS Analyzed: 03/02/2010 (G0C010	000222C)				Sou	ırce:					
1,2,3,4,6,7,8-HpCDD	0.000995	0.00005	0.0000019	ug/L	0.001		100	70-140			
1,2,3,4,6,7,8-HpCDF	0.00101	0.00005	0.0000041	ug/L	0.001		101	82-122			
1,2,3,4,7,8,9-HpCDF	0.00105	0.00005	0.0000064	ug/L	0.001		105	78-138			
1,2,3,4,7,8-HxCDD	0.00102	0.00005	0.0000006	ug/L	0.001		102	70-164			
1,2,3,4,7,8-HxCDF	0.00108	0.00005	0.00000042	ug/L	0.001		108	72-134			
1,2,3,6,7,8-HxCDD	0.00094	0.00005	0.00000052	ug/L	0.001		94	76-134			
1,2,3,6,7,8-HxCDF	0.00105	0.00005	0.00000038	ug/L	0.001		105	84-130			
1,2,3,7,8,9-HxCDD	0.000975	0.00005	0.0000005	ug/L	0.001		97	64-162			
1,2,3,7,8,9-HxCDF	0.00103	0.00005	0.00000045	ug/L	0.001		103	78-130			
1,2,3,7,8-PeCDD	0.000984	0.00005	0.0000023	ug/L	0.001		98	70-142			
1,2,3,7,8-PeCDF	0.00105	0.00005	0.0000027	ug/L	0.001		105	80-134			
2,3,4,6,7,8-HxCDF	0.00105	0.00005	0.00000038	ug/L	0.001		105	70-156			
2,3,4,7,8-PeCDF	0.00108	0.00005	0.0000032	ug/L	0.001		108	68-160			
2,3,7,8-TCDD	0.000192	0.00001	0.00000037	ug/L	0.0002		96	67-158			
2,3,7,8-TCDF	0.000193	0.00001	0.0000001	ug/L	0.0002		97	75-158			
OCDD	0.00198	0.0001	0.0000027	ug/L	0.002		99	78-144			
OCDF	0.0019	0.0001	0.0000016	ug/L	0.002		95	63-170			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDD	0.0018			ug/L	0.002		90	26-166			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF	0.00176			ug/L	0.002		88	21-158			
Surrogate: 13C-1,2,3,4,7,8,9-HpCDF	0.00165			ug/L	0.002		83	20-186			
Surrogate: 13C-1,2,3,4,7,8-HxCDD	0.00175			ug/L	0.002		88	21-193			
Surrogate: 13C-1,2,3,4,7,8-HxCDF	0.00164			ug/L	0.002		82	19-202			
Surrogate: 13C-1,2,3,6,7,8-HxCDD	0.00157			ug/L	0.002		78	25-163			
Surrogate: 13C-1,2,3,6,7,8-HxCDF	0.00155			ug/L	0.002		77	21-159			
Surrogate: 13C-1,2,3,7,8,9-HxCDF	0.00165			ug/L	0.002		82	17-205			
Surrogate: 13C-1,2,3,7,8-PeCDD	0.00155			ug/L	0.002		77	21-227			
Surrogate: 13C-1,2,3,7,8-PeCDF	0.00148			ug/L	0.002		74	21-192			
Surrogate: 13C-2,3,4,6,7,8-HxCDF	0.00164			ug/L	0.002		82	22-176			
m											

TestAmerica Irvine



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: Annual Outfall 018

Sampled: 02/06/10-02/07/10

Report Number: ITB0889 Received: 02/06/10

METHOD BLANK/QC DATA

EPA-5 1613B

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 60222 Extracted: 03/01/10											
Y 53	•••										
LCS Analyzed: 03/02/2010 (G0C010000	222C)				Sou	rce:					
Surrogate: 13C-2,3,4,7,8-PeCDF	0.00146			ug/L	0.002		73	13-328			
Surrogate: 13C-2,3,7,8-TCDD	0.00151			ug/L	0.002		75	20-175			
Surrogate: 13C-2,3,7,8-TCDF	0.00148			ug/L	0.002		74	22-152			
Surrogate: 13C-OCDD	0.00361			ug/L	0.004		90	13-199			
Surrogate: 37Cl4-2,3,7,8-TCDD	0.000721			ug/L	0.0008		90	31-191			

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

MWH-Pasadena/Boeing Project ID: Annual Outfall 018

618 Michillinda Avenue, Suite 200 Sampled: 02/06/10-02/07/10

Arcadia, CA 91007 Report Number: ITB0889 Received: 02/06/10

Attention: Bronwyn Kelly

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
ITB0889-01	1664-HEM	Hexane Extractable Material (Oil & Greas	mg/l	0.095	4.8	15
ITB0889-01	624-Boeing 001/002Q (Fr113+X+I	Fr1,1-Dichloroethene	ug/l	0	0.50	6
ITB0889-01	624-Boeing 001/002Q (Fr113+X+I	FrTrichloroethene	ug/l	0	0.50	5
ITB0889-01	8015B-DRO (C13-C28)-LL	DRO (C13 - C28)	ug/l	24	94	100
ITB0889-01	Chromium VI-218.6	Chromium VI	ug/l	0.052	1.0	16
ITB0889-01	Cyanide, Total-4500CN-E (5ppb)	Total Cyanide	ug/l	-2	5.0	8.5
ITB0889-01	Settleable Solids - SM2540F	Total Settleable Solids	ml/l	0	0.10	0.3

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.

						Compliance
LabNumber	Analysis	Analyte	Units	Result	MRL	Limit
ITB0889-02	624-Boeing 001/00	2Q (Fr113+X+Fr1,1-Dichloroethene	ug/l	0	0.50	6
ITB0889-02	624-Boeing 001/00	2Q (Fr113+X+FrTrichloroethene	ug/l	0	0.50	5

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.

						Compliance
<u>LabNumber</u>	Analysis	Analyte	Units	Result	MRL	Limit
ITB0895-01	608-Pest Boeing 001/002 Q (LL)	alpha-BHC	ug/l	0	0.0094	0.03
ITB0895-01	608-Pesticides (LowRL)	alpha-BHC	ug/l	0	0.0047	0.03
ITB0895-01	625+NDMA, LL	2,4,6-Trichlorophenol	ug/l	0	0.94	13
ITB0895-01	625+NDMA, LL	2,4-Dinitrotoluene	ug/l	0	4.7	18
ITB0895-01	625+NDMA, LL	Bis(2-ethylhexyl)phthalate	ug/l	0.30	4.7	4
ITB0895-01	625+NDMA, LL	N-Nitrosodimethylamine	ug/l	0	1.9	16
ITB0895-01	625+NDMA, LL	Pentachlorophenol	ug/l	0	1.9	16
ITB0895-01	Ammonia-N, Titr 4500NH3-C (w/o	di:Ammonia-N (Distilled)	mg/l	0	0.50	10
ITB0895-01	Antimony-200.8	Antimony	ug/l	0	2.0	6
ITB0895-01	Arsenic-200.7	Arsenic	ug/l	0.80	10	10
ITB0895-01	Barium-200.7	Barium	mg/l	0.025	0.010	1
ITB0895-01	Beryllium-200.7	Beryllium	ug/l	0.00090	2.0	4
ITB0895-01	BOD - SM5210B	Biochemical Oxygen Demand	mg/l	0.57	2.0	30

TestAmerica Irvine



MWH-Pasad	•	Project ID: Annual Outfall 018				
	da Avenue, Suite 200			•	oled: 02/06/10-	02/07/10
Arcadia, CA		Report Number: ITB0889		Recei	ved: 02/06/10	
Attention: B	ronwyn Kelly					
ITB0895-01	Cadmium-200.8	Cadmium	ug/l	0	1.0	3.1
ITB0895-01	Chloride - 300.0	Chloride	mg/l	7.72	0.50	150
ITB0895-01	Chromium-200.7	Chromium	ug/l	0	5.0	16
ITB0895-01	Copper-200.8	Copper	ug/l	0.79	2.0	14
ITB0895-01	Fluoride SM4500F,C	Fluoride	mg/l	0.15	0.10	1.6
ITB0895-01	Iron-200.7	Iron	mg/l	0.0056	0.040	0.3
ITB0895-01	Lead-200.8	Lead	ug/l	0	1.0	5.2
ITB0895-01	Manganese-200.7	Manganese	ug/l	214	20	50
ITB0895-01	MBAS - SM5540-C	Surfactants (MBAS)	mg/l	0.12	0.10	0.5
ITB0895-01	Nickel-200.7	Nickel	ug/l	0.096	10	96
ITB0895-01	Nitrate-N, 300.0	Nitrate-N	mg/l	0.22	0.11	8
ITB0895-01	Nitrite-N, 300.0	Nitrite-N	mg/l	0	0.15	1
ITB0895-01	Nitrogen, NO3+NO2 -N EPA 3	00.0 Nitrate/Nitrite-N	mg/l	0.22	0.26	8
ITB0895-01	Perchlorate 314.0 - Default	Perchlorate	ug/l	0	4.0	6
ITB0895-01	Selenium-200.8	Selenium	ug/l	0	2.0	5
ITB0895-01	Silver-200.8	Silver	ug/l	0	1.0	4.1
ITB0895-01	Sulfate-300.0	Sulfate	mg/l	105	5.0	300
ITB0895-01	TDS - SM2540C	Total Dissolved Solids	mg/l	198	10	950
ITB0895-01	Thallium-200.8	Thallium	ug/l	0	1.0	2
ITB0895-01	TSS - SM2540D	Total Suspended Solids	mg/l	0	10	45
ITB0895-01	Zinc-200.7	Zinc	ug/l	12	20	120

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.

						Compliance
LabNumber	Analysis	Analyte	Units	Result	MRL	Limit



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

MWH-Pasadena/Boeing Project ID: Annual Outfall 018

618 Michillinda Avenue, Suite 200 Sampled: 02/06/10-02/07/10

Arcadia, CA 91007 Report Number: ITB0889 Received: 02/06/10

Attention: Bronwyn Kelly

DATA QUALIFIERS AND DEFINITIONS

B Analyte was detected in the associated Method Blank.	
---	--

- **Ba** Method blank contamination. The associated method blank contains the target analyte at a reportable level.
- C Calibration Verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
- J Estimated result. Result is less than the reporting limit.
- 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.
- **Jb** Result is greater than sample detection limit but less than stated reporting limit.
- L2 Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was below acceptance limits.
- M1 The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
- M2 The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
- 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).
- MHA Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
- MNR1 There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike/Blank Spike Duplicate.
- **Q** Estimated maximum possible concentration (EMPC).
- **R-2** The RPD exceeded the acceptance limit.
- R-7 LFB/LFBD RPD exceeded the acceptance limit. Recovery met acceptance criteria.
- U Result is less than the sample detection limit.
- **Z2** Surrogate recovery was above the acceptance limits. Data not impacted.
- **ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- **RPD** Relative Percent Difference

ADDITIONAL COMMENTS

For 1,2-Diphenylhydrazine:

The result for 1,2-Diphenylhydrazine is based upon the reading of its breakdown product, Azobenzene.

For GRO (C4-C12):

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

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

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

TestAmerica Irvine



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: Annual Outfall 018

Report Number: ITB0889

Sampled: 02/06/10-02/07/10

Received: 02/06/10

Certification Summary

TestAmerica Irvine

Method	Matrix	Nelac	California
EDD + Level 4	Water	N/A	N/A
EPA 120.1	Water	X	X
EPA 1664A	Water	X	X
EPA 180.1	Water	X	X
EPA 200.7-Diss	Water	X	X
EPA 200.7	Water	X	X
EPA 200.8-Diss	Water	X	X
EPA 200.8	Water	X	X
EPA 218.6	Water	X	X
EPA 245.1-Diss	Water	X	X
EPA 245.1	Water	X	X
EPA 300.0	Water	X	X
EPA 314.0	Water	X	X
EPA 608	Water	X	X
EPA 624	Water	X	X
EPA 625	Water	X	X
EPA 8015 Mod.	Water	X	X
EPA 8015B	Water	X	X
EPA 8260B-SIM	Water	X	X
Filtration	Water	N/A	N/A
SM 2540D	Water	X	X
SM 4500-F-C	Water	X	X
SM2340B-Diss	Water		
SM2340B	Water	X	X
SM2540C	Water	X	
SM2540F	Water	X	X
SM4500CN-E	Water	X	X
SM4500NH3-C	Water	X	X
SM5210B	Water	X	X
SM5310B	Water	X	X
SM5540-C	Water	X	X

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

Subcontracted Laboratories

TestAmerica Irvine



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

MWH-Pasadena/Boeing Project ID: Annual Outfall 018

618 Michillinda Avenue, Suite 200 Sampled: 02/06/10-02/07/10

Arcadia, CA 91007 Report Number: ITB0889 Received: 02/06/10

Attention: Bronwyn Kelly

Aquatic Testing Laboratories-SUB California Cert #1775

4350 Transport Street, Unit 107 - Ventura, CA 93003

Analysis Performed: Bioassay-7 dy Chrnic

Samples: ITB0895-01

Analysis Performed: Bioassay-Acute 96hr

Samples: ITB0889-01

Analysis Performed: Level 4 Data Package

Samples: ITB0895-01

TestAmerica Denver

4955 Yarrow Street - Arvada, CO 80002

Analysis Performed: Level 4 Data Package

Samples: ITB0895-01

TestAmerica St. Louis

13715 Rider Trail North - Earth City, MO 63045

Method Performed: ASTM 5174-91

Samples: ITB0895-01

Method Performed: EPA 900.0 MOD

Samples: ITB0895-01

Method Performed: EPA 901.1 MOD

Samples: ITB0895-01

Method Performed: EPA 903.0 MOD

Samples: ITB0895-01

Method Performed: EPA 904 MOD

Samples: ITB0895-01RE1

Method Performed: EPA 905 MOD

Samples: ITB0895-01

Method Performed: EPA 906.0 MOD

Samples: ITB0895-01

TestAmerica West Sacramento

880 Riverside Parkway - West Sacramento, CA 95605

Method Performed: EPA-5 1613B Samples: ITB0895-01RE1

TestAmerica Irvine



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

Sampled: 02/06/10-02/07/10

Project ID: Annual Outfall 018

MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Report Number: ITB0889 Received: 02/06/10

Attention: Bronwyn Kelly

Truesdail Laboratories-SUB California Cert #1237

14201 Franklin Avenue - Tustin, CA 92680 Analysis Performed: Hydrazine Samples: ITB0895-01

	Field readings: (Log in and include in report Temp and pH) Temp ${}^{\circ}F = 53$, ${}^{\circ}E$	Total Residual Chlorine = 0.02 W 1.7 Time of readings =	Comments																to this work order.	10 Day:		2
ANALYSIS REQUIRED		uctivity Toxicity	bnoO														×	×	These Samples are the Grab Portion of Outfall 018 for this storm event. Composite samples will follow and are to be added to this work order.	Turtr-around line: (Check) 24 Hour: 72 Hour:	ntegrify: (Chec	Data Requirements: (Check)
ANAL	srable)	ide (total recover sag -	Cyani 8015							×			×	×	×	×			ples will follow		Sampl	Date
		I) (218.6) Rable Solids Mecidual Chlori G rease (1664-1	Settle Total			×	×	×	×										t. Composite sam	Date/Time:	Date/Time:	Date/Time:
	dd +	. Cyclohexane -	AES1	×	×			1			×	×		-					orm even			
	+ Freon 113, Freon	senelyx + 429 s	Bottle #	1A, 1B, 1C, 1D, 1E	2A, 2B, 2C	3	4	1	64, 68	7	8A, 8B, 8C	9A, 9B, 9C	10A	10B, 10C	11A	118	12A, 12B	13	018 for this st	Received By	Received By	Received By
	018		Preservalive	HCI	None	None	None	None	HCI	NaOH	HCI	None	HCI	HCI	None	None	None	None	of Outfall			
Project:	Boeing-SSFL NPDES Annual Outfall 018 GRAB	Phone Number: (626) 568-6691 Fax Number: (626) 568-6515	Sampling Date/Time	26/10-1300						A	26/10-0700	→ →	2/4/10-1300	_				>	Grab Portion	ne:	ne:	ne:
1		п э г э	# of Conf.	5	3	-	-	-	2	-	3 2	က	1 2	2	-	-	2	-	e the	Date/Time:	Date/Time	Date/Time:
	suite 200 : Joseph Do	nwyn Kelly LICE RZ c 1 L	Container Type	VOAs	VOAs	500 mL Poly	1L Poly	150 ml. Poly	1L Amber	500 mL Poly	VOAs	VOAs	VOAs	VOAs	1L Amber	1L Amber	500 mL Poly	1 Gal Cube	Samples ar	7		
Address.	dia a Ave, § 91007 Contact	nager: Bronwyr F. W. M. C. L. e. I. I.	Sample Matrix	×	W	W	W	*	W	W	W	W	W	W	W	*	×	м	These	1		
Client Name/Address:	MWH-Arcadia 618 Michillinda Ave, Suite 200 Arcadia, CA 91007 Test America Contact: Joseph Doak	Project Manager: Bronwyn Kelly Sampler: だいとんだで? M. こりょいし	Sample Description	Outfall 018	Outfall 018	Outfall 018	Outfall 018	Outfall 818	Outfall 018	Outfall 018	Trip Blanks	Trip Blanks	Outfall 018	Outfall 018 Dup	Outfall 018	Outfall 018 Dup	Outfall 018	Outfall 018		Relinquished By	Relinquished By	Relinquished By

Client Name/Address:	ess:			Project:	ect:								4	NALY	SIS RE	ANALYSIS REQUIRED			
MWH-Arcadia 618 Michillinda Ave, Arcadia, CA 91007	ve, Suit 37	Suite 200		Anni GRA	Boeing-SSFL NPDES Annual Outfall 018 GRAB	IPDES 1 018		3, Freon										Field readings: (Log in and include in report Temp and pH)	
Test America Contact: Joseph Doak	ntact:	Joseph D	oak	-				Freon 113	9		6		(əjar					Temp°F = 53.6 pH = 7.6	
Project Manager: Bronwyn Kelly	Bronw	vyn Kelly		Phon	Phone Number:			gue + F	/+SCAE	S			covera	ləuì				Total Residual	
Sampler: F. WALKER M. Chell	WALKE	CER		(626) (626)	(626) 568-6691 Fax Number: (626) 568-6515			624 + xyle	A+A+ 428	(3.81S) (sbiloS elds	O lsubiseA	Srease (16	de (total re gas	tə[\leseib ·	nctivity	Toxicity		Chlorine = 6,0 7 vv3 11. Time of readings =	
Sample Sam Description Ma	Sample (Container	Sort.	-	Sampling Date/Time	Preservative	Bottle #	VOCs	_				Cyanic 8015	_	ondu	Acute		Comments	
1	*	VOAs	2	_	46/10-1300	Ę	1A, 1B, 1C, 1D, 1E	×	-	-	-	-	-	+		,			
Outfall 018 V	*	VOAs	6			None	2A, 2B, 2C		×				-						
Outfall 018 V	W 50	500 mL Poly	-			None	6			×									
Outfall 018 V	W	1L Poly	-			None	7			×									0/
Outfall 018 V	W 15	150 mL Poly	-			None	5				×								7
Outfall 018 V	W	1L Amber	2			НСІ	6A, 6B					×							g - 7
Outfail 018 V	W 50	500 mL Poly	-		4	NaOH	4						×						6
Trip Blanks V	W	VOAs	6		2410-0700	HCI	8A, 8B, 8C	×					-						Ø
Trip Blanks V	W	VOAs	က		→	None	9A, 9B, 9C		×										
Outfall 018 V	w	VOAs	-	2/0/2	2/4/10-1300	HCI	401						×						
Outfall 018 Dup	w	VOAs	2			HCI	10B, 10C						×						
Outfall 018 V	. · ·	1L Amber	-			None	Att							×					
Outfall 018 Dup	8	1L Amber	-			None	118							×					
Outfall 018 V	W 50	500 mL Poly	2			None	12A, 12B								×				
Outfall 018 V	8	1 Gal Cube	-		->	None	13		\vdash	-		\forall				×			
-1 1	ese Sa	umples at	- th	e Gra	These Samples are the Grab Portion of Outfal		018 for this	storm	event.	Comp	osite s	ample	s will t	ollow	and a	e to be ad	ded to thi	018 for this storm event. Composite samples will follow and are to be added to this work order.	
Relinquished By	1	2	Date	Date/Time:			Received By		V	Da Con	Date/Time:	to the		Turn-arou 24 Hour: 48 Hour:	around fin ur:	Turn-around time: (Check) 24 Hour: 72 Hour: 48 Hour: 5 Day:		10 Day:	
Relinquished By		7	Date of	2-6-46	17 66	V	Received By	/	V	100	2(6(10)	170	3	Sampl Intact:	le Integrit	Sample Integrity: (Check)	×	26.2	
Relind/lished By			Date/Time	Time:			Received By	M	ħ.	E .	e/Time:	1		Data F	Tequirem	Data Requirements: (Check)	1	>	
														No Le	No Level IV:	All Level IV:	el IV:	NPDES Level IV:	

LABORATORY REPORT

Date:

February 11, 2010

Client:

Test America - Irvine

17461 Derian Ave., Suite 100

Irvine, CA 92614 Attn: Joseph Doak 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

Laboratory No.:

A-10020704-001

Sample ID.:

ITB0889-01

Sample Control:

The sample was received by ATL in a chilled state, within the recommended hold

time and with the chain of custody record attached.

Date Sampled:

02/06/10

Date Received:

02/07/10 2.3°C

Temp. Received: Chlorine (TRC):

0.0 mg/1

Date Tested:

02/07/10 to 02/11/10

Sample Analysis:

The following analyses were performed on your sample:

Fathead Minnow 96hr Percent Survival Bioassay (EPA Method 2000.0).

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

Result Summary:

Sample ID.

Results

ITB0889-01

100% Survival (TUa = 0.0)

Quality Control:

Reviewed and approved by:

Joseph A. LeMay

Laboratory Director

FATHEAD MINNOW PERCENT SURVIVAL TEST EPA Method 2000.0



Lab No.: A-10020704-001

Client/ID: TestAmerica ITB0889-01 Outfall 018 Start Date: 02/07/2010

TEST SUMMARY

Species: Pimephales promelas.

Age: 12-(1-14) days. Regulations: NPDES.

Test solution volume: 250 ml. Feeding: prior to renewal at 48 hrs.

Number of replicates: 2.

Dilution water: Moderately hard reconstituted water.

Photoperiod: 16/8 hrs light/dark.

Source: In-laboratory Culture. Test type: Static-Renewal.

Test Protocol: EPA-821-R-02-012. Endpoints: Percent Survival at 96 hrs.

Test chamber: 600 ml beakers. Temperature: 20 +/- 1°C. Number of fish per chamber: 10.

QA/QC Batch No.: RT-100202.

TEST DATA

		200	200	1.5	# E	Dead	Analyst & Time
		°C	DO	рН	Α	В	of Readings
D. Harris	Control	20.1	8.5	7.7	0	0	M
INITIAL	100%	20,0	9.3	7.6	0	0	1400
	Control	19.4	8.1	8.0	0	0	2
24 Hr	100%	19.2	8.7	8.0	0	U	1200
40.77	Control	19.3	8.1	7.5	0	0	De
48 Hr	100%	19.1	8.4	8.1	0	0	1300
A Control	Control	19-8	9.0	8.0	0	0	Ru
Renewal	100%	20.5	9.5	7.9	0	0	1300
70.11	Control	19.4	7.1	7.5	0	0	Rr
72 Hr	100%	19.1	7.1	7-8	0	0	1500
06.11	Control	19.1	8.2	2.7	0	12	RN
96 Hr	100%	19.1	7.1	7.6	0	0	1400

Comments:

Sample as received: Chlorine: 0.0 mg/l; pH: 7.6; Conductivity: >38 umho; Temp: 2.3°C;

DO: 1.3 mg/l; Alkalinity: 56 mg/l; Hardness: 125 mg/l; NH₃-N: 201 mg/l. Sample aerated moderately (approx. 500 ml/min) to raise or lower DO? Yes / NO.

Control: Alkalinity: 71 mg/l; Hardness: 108 mg/l; Conductivity: 325 umho.

Test solution aerated (not to exceed 100 bubbles/min) to maintain DO >4.0 mg/l? Yes / No.

Sample used for renewal is the original sample kept at 0-6°C with minimal headspace.

Dissolved Oxygen (DO) readings in mg/l O2.

RESULTS

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

SUBCONTRACT ORDER TestAmerica Irvine

ITB0889

SENDING LABORATORY:

TestAmerica Irvine

17461 Derian Avenue. Suite 100

Irvine, CA 92614

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

Project Manager: Joseph Doak

RECEIVING LABORATORY:

Aquatic Testing Laboratories-SUB 4350 Transport Street, Unit 107

Ventura, CA 93003 Phone :(805) 650-0546 Fax: (805) 650-0756

Project Location: CA - CALIFORNIA

Receipt Temperature: 7 3 °C

ice: (Y) N

Standard TAT is reques	ted unless specific due	date is requested. => Due Date:	Initials:
Analysis	Units	Expires	Comments
Sample ID: ITB0889-01 (0	Outfall 018 (Grab) - Wa	ter) Sampled: 02/06/10 13:0	0
Bioassay-Acute 96hr	% Survival	02/08/10 01:00	FH minnow, EPA/821-R02-012, Sub to Aquatic
Containers Supplied:			
1 gal Poly (S)			



REFERENCE TOXICANT DATA

FATHEAD MINNOW ACUTE Method 2000.0 Reference Toxicant - SDS



QA/QC Batch No.: RT-100202

TEST SUMMARY

Species: Pimephales promelas.

Age: 13 days old. Regulations: NPDES.

Test chamber volume: 250 ml. Feeding: Prior to renewal at 48 hrs.

Temperature: 20 +/- 1°C. Number of replicates: 2. Dilution water: MHSF.

Source: In-lab culture.

Test type: Static-Renewal.

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

Endpoints: LC50 at 96 hrs. Test chamber: 600 ml beakers.

Aeration: None.

Number of organisms per chamber: 10.

Photoperiod: 16/8 hrs light/dark.

TEST DATA

		INITIAI	3			24 Hr					48 Hr		
Date/Time:	2-2-	-10	1200	2-3	-10		13	OU	2-	4-10		120	2)
Analyst:		R	~			En					en		
	"C	DO	-11	³C	DO	-11	# D	Dead	°C	DO	-11	# 0	ead
		DO	рН	3.0	DO	pН	A	В		DO	pН	A	В
Control	19.6	8.4	7.6	19.4	7.9	7.4	0	0	19.2	7.1	7.9	0	0
1.0 mg/I	19.6	8.5	7.6	19.2	8.0	7.4	0	0	19.2	7.3	7.7	0	0
2.0 mg/l	19.6	8.5	7-7	19.1	8.0	7.4	0	0	19.1	2.2	7.6	0	0
4.0 mg/l	19.6	8.5	22	19.1	7.6	24	0	0	19.1	7.2	7.6	0	0
8.0 mg/l	19.6	8.6	7.7	19.0	6.8	7.3	W	10	-	-	-	_	_

	R	ENEWA	\L			72 Hr					96 Hr		
Date/Time:	2-4.	-10	1200	2-5	-10		1200)	2-4	1-10		11	30
Analyst:		Ru				en					R		
	°C	DO	pH	"C	DO	417	# D	Dead	°C	DO	sir.	# [Dead
		DO	pii		DO	рН	Α	В		DO	pН	A	В
Control	19.5	8.8	7.8	19.5	7.4	7.4	0	0	20.6	6.3	7.4	0	0
1.0 mg/l	19.5	8.8	7.8	19.4	7.4	7.4	0	0	20.6	6.6	7.4	0	0
2.0 mg/l	19.5	8.9	7.8	19.2	2.4	7.4	0	0	20.6	6.5	7.4	0	0
4.0 mg/l	19.5	8.9	7.8	19.2	2.3	7.4	0	0	20.5	6.4	2.4	0	0
8.0 mg/l	-	_	-	_	-	_	-	-	-			_	_

Comments: Control: Alkalinity: <u>69</u> mg/l; Hardness: <u>94</u> mg/l; Conductivity: <u>330</u> umho. SDS: Alkalinity: <u>68</u> mg/l; Hardness: <u>94</u> mg/l; Conductivity: <u>333</u> umho.

Concentration-response relationship acceptable? (see attached computer analysis):

Yes (response curve normal)

No (dose interrupted indicated or non-normal)

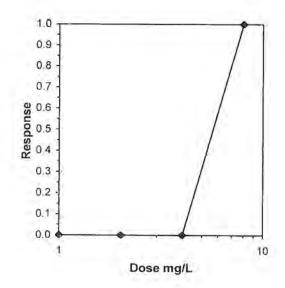
				Acute Fish Test-96	Hr Survival	
Start Date:	2/2/2010	12:00	Test ID:	RT100202f	Sample ID:	REF-Ref Toxicant
End Date:	2/6/2010	11:30	Lab ID:	CAATL-Aquatic Testing Labs	Sample Type:	SDS-Sodium dodecyl sulfate
Sample Date: Comments:	2/2/2010		Protocol:	ACUTE-EPA-821-R-02-012	Test Species:	PP-Pimephales promelas
Conc-mg/L	1	2				
D-Control	1.0000	1.0000				
1	1.0000	1.0000				
2	1.0000	1.0000				
4	1,0000	1.0000				
8	0.0000	0.0000				

			Tr	ansform:	Arcsin So	uare Root		Number Tot	tal
Conc-mg/L	Mean	N-Mean	Mean	Min	Max	CV%	N	Resp Num	ber
D-Control	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2	0	20
1	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2	0	20
2	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2	0	20
4	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2	0	20
8	0.0000	0.0000	0.1588	0.1588	0.1588	0.000	2	20	20

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Normality of the data set cannot be confirmed			13727	
Equality of variance cannot be confirmed				
	Graphical Method			

Trim Level	EC50	
0.0%	5.6569	

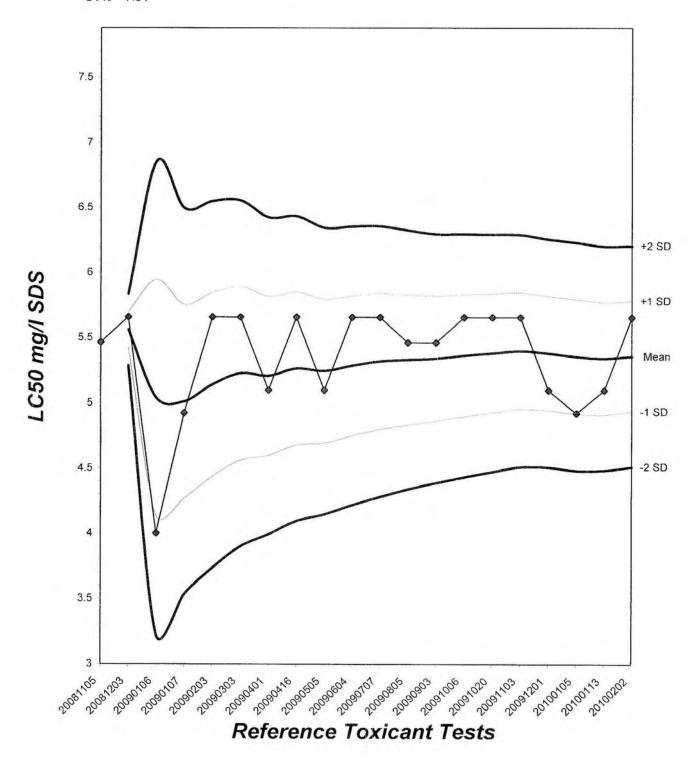
5.6569



Reviewed by:

Fathead Minnow Acute Laboratory Control Chart

CV% = 7.91



TEST ORGANISM LOG



FATHEAD MINNOW - LARVAL (Pimephales promelas)

QA/QC BATCH NO .: RT-100202
SOURCE: In-Lab Culture
DATE HATCHED: 1-20-10
APPROXIMATE QUANTITY:U W
APPROXIMATE QUANTITY: GENERAL APPEARANCE:
MORTALITIES 48 HOURS PRIOR TO TO USE IN TESTING:
DATE USED IN LAB: 1 / 5 / 10
AVERAGE FISH WEIGHT: 0,006 gm
LOADING LIMITS: 0.65 gm/liter @ 20°C, 0.40 gm/liter @ 25°C
Approximately 1000 fish per 10 liters limit if held overnight for acclimation without filtration @ 20°C for fish with a mean weight of 0.006 gm.
Approximately 650 fish per 10 liters limit if held overnight for acclimation without filtration @ 25°C for fish with a mean weight of 0.006 gm.
200 ml test solution volume = 0.013 gm mean fish weight limit @ 20°C; 0.008 @ 25°C 250 ml test solution volume = 0.016 gm mean fish weight limit @ 20°C; 0.010 @ 25°C
ACCLIMATION WATER QUALITY:
Temp.: <u>19-6</u> °C pH: <u>7-6</u> Ammonia: <u>10-1</u> mg/l NH ₃ -N
DO: 8 4 mg/l Alkalinity: 69 mg/l Hardness: 94 mg/l
READINGS RECORDED BY: DATE: Z-3-/O



Test Temperature Chart

Test No: RT-100202

Date Tested: 02/02/10 to 02/06/10

Acceptable Range: 20+/- 1°C



SUBCONTRACT ORDER TestAmerica Irvine

ITB0895

987713

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:

Truesdail Laboratories-SUB

14201 Franklin Avenue

Tustin, CA 92680

Phone: (714) 730-6239

Fax: (714) 730-6462

Project Location: CA - CALIFORNIA

Receipt Temperature:

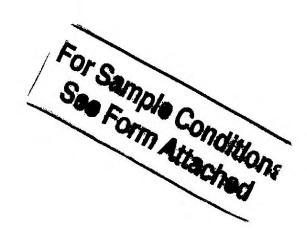
02/08/10 Rec'd

s9b

Y / N Ice:

Standard TAT is requ	uested unless specific due d	late is requested. => Due Date:	Initials:
Analysis	Units	Expires	Comments
Sample ID: ITB0895-0	1 (Outfall 018 - Water)	Sampled: 02/07/10 10:45	
Hydrazine-OUT	%	02/10/10 10:45	Sub Truesdail for Monomethylhydrazine, J flags
Containers Supplied:			Level 4 Data Package &
1 L Amber (AA)	1 L Amber (Z)		Level 4 Data Package &





28W7!u Date/Time Released By 2-8-10 742

Released By

Date/Time

Received By

Page 1 of 1

TRUESDAIL LABORATORIES, INC.

EXCELLENCE IN INDEPENDENT TESTING



[714] 730-6239 · FAX [714] 730-6462 · www.truesdail.com 14201 FRANKLIN AVENUE · TUSTIN, CALIFORNIA 92780-7008

Client: Test America - Irvine

Irvine, CA 92614-5817 17461 Derian Avenue, Suite 100

Joseph Doak

Project Name: Sample: Water / 1 Sample TB0895

Attention:

Method Number: **Project Number:** EPA 8315 (Modified) TB0895

Investigation: Hydrazines

REPORT

Laboratory No. 987713

Sampling Date: Report Date: February 7, 2010 February 11, 2010

Receiving Date: February 8, 2010

Extraction Date: Analysis Date: February 9, 2010 February 8, 2010

Reported By: S Je

Units:

Analytical Results

50	5.0			g Entities
-				Sample Reporting imite
5.0	5.0			
1.42	0.857			
S	ND		100	1100083-01
ć		٠ .	100	TB0805 01
3	ON	->	100	Method Blank
lydrazine	Hydrazine H	Factor	Amount (mL)	Cample Description
u-Dimethy	Monomethyl	חוותווסח	Sample	Sample Description

Note: Results based on detector #1 (UV=365nm) data

Analytical Services, Truesdail Laboratories, Inc. Linda Saetern, Project Manager

TRUESDAIL LABORATORIES, INC.

EXCELLENCE IN INDEPENDENT TESTING

Client:

Test America - Irvine

Irvine, CA 92614-5817

17461 Derian Avenue, Suite 100

Established 1931

(714) 730-6239 · FAX (714) 730-6462 · www.truesdail.com 14201 FRANKLIN AVENUE · TUSTIN, CALIFORNIA 92780-7008

Project Lab. No.: QC Lab. No. 987713 708690

Spiked Sample ID: 987712

Report Date: February 7, 2010 February 11, 2010

Receiving Date: February 8, 2010

Analysis Date: February 9, 2010 February 8, 2010

Reported By:

Extraction Date: Sampling Date:

Method Number: Project Number:

EPA 8315 (Modified)

Client Contact:

Sample:

Water / 1 Sample

Joseph Doak

ITB0895

Run Batch No.:

Extraction: 5138; Analysis: 678

Investigation:

Hydrazines

Quality Control/Quality Assurance Calibration Report

	ICV					acs				
Parameter	Theoretical	Measured	Percent	Control	Flag	Parameter	Theoretical	Measured	Percent	Control
	Value (ug/L)	Value (ug/L)	Recovery	Limits			Value (ug/L)	Value (ug/L)	Recovery	Limits
Monomethyl Hydrazine	25.0	25.1	100	85-115	PASS	Monomethyl Hydrazine	50.0	46.4	92.7	85-115
u-Dimethyl Hydrazine	25.0	25.7	103	85-115	PASS	u-Dimethyl Hydrazine	50.0	48.0	96.0	85-115
Hydrazine	5.0	4.76	95.2	85-115	PASS	Hydrazine	10.0	10.2	102	85-115

PASS PASS PASS

Flag

Quality Control/Quality Assurance Spikes Report

		LCS/LCSE	CSD								MS/MS	ö				
	Spiked		Recovered	O.	Percent	cent	LCS/		Co	Control	_	Recovered	ä	Per	ercent	NS/
	Conc.	Ω	Concentration	9	Recov	Recovery (%)	LCSD	Flag	<u> </u>	Limits	δ	Concentration	ion	Recov	Recovery (%)	MSD
Parameter	J/Bn	LCS	LCSD	MB	LCS	LCSD	RPD		%D	% Rec.	NS	MSD	mple	MS	MSD	RPD
Monomethyl Hydrazine	50.0	52.3	50.8	0.0	105	102	2.93%	PASS	20	50-150	11	40.8		83.0	81.7	1.55%
u-Dirnethyl Hydrazine	50.0	53.4	51.6	0.0	107		3.30%	3.30% PASS	20	50-150	44.9	45.7	0.00	89.7	91.4	1.91%
Hydrazine	10.0	11.3	11.0	0.0	113	110	2.77%	PASS	20	50-150	10.3	10.7	0.00	103	107	
									j		0.000				1000	

PASS PASS PASS Flag **Control Limits** 20 20 20 Accuracy

% Rec.

50-150 50-150 50-150

Note: Results based on detector #1 (UV=365nm) data.

Linda Saetern, Project Manager

Analytical Services, Truesdail Laboratories, Inc.

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from Truesdail Laboratories.

LABORATORY REPORT

Date:

February 17, 2010

Client:

TestAmerica, Irvine

17461 Derian Ave., Suite 100

Irvine, CA 92614 Attn: Joseph Doak 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

Laboratory No.:

A-10020803-001

Sample I.D.:

ITB0895-01 (Outfall 018)

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). Chronic testing initiated outside the recommended hold time of 36 hr per additional client instruction.

Date Sampled:

02/07/10

Date Received:

02/08/10

Temp. Received: Chlorine (TRC):

1.3°C 0.0 mg/l

Date Tested:

02/09/10 to 02/16/10

Sample Analysis:

The following analyses were performed on your sample:

Ceriodaphnia dubia Survival and Reproduction Test (EPA Method 1002).

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

Result Summary:

Ceriodaphnia Survival: 100% 1.0 100% 1.0

Quality Control:

Reviewed and approved by:

Joseph A. LeMay Laboratory Director

CERIODAPHNIA CHRONIC BIOASSAY EPA METHOD 1002.0



Lab No.: A-10020803-001 Date Tested: 02/09/10 to 02/16/10

Client/ID: Test America - ITB0895-01 (Outfall 018)

TEST SUMMARY

Test type: Daily static-renewal. Endpoints: Survival and Reproduction.

Species: Ceriodaphnia dubia. Source: In-laboratory culture.

Age: < 24 hrs; all released within 8 hrs. Food: .1 ml YTC, algae per day. Test vessel size: 30 ml. Test solution volume: 15 ml.

Number of test organisms per vessel: 1. Number of replicates: 10.

Temperature: 25 +/- 1°C. Photoperiod: 16/8 hrs. light/dark cycle.

Dilution water: Mod. hard reconstituted (MHRW). Test duration: 7 days.

QA/QC Batch No.: RT-100207. Statistics: ToxCalc computer program.

RESULTS SUMMARY

Sample Concentration	Percent Survival	Mean Number of Young Per Female
Control	100%	27.1
100% Sample	100%	30.5

CHRONIC TOXICITY

100%
1.0
100%
1.0

QA/QC TEST ACCEPTABILITY

Parameter	Result
Control survival ≥80%	Pass (100% survival)
≥15 young per surviving control female	Pass (27.1 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 = 10.7%)
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	Rep	roduction	Test-7	Day	Survival
oci iodapinia							

2/9/2010 15:00 Start Date: 2/16/2010 15:00 End Date:

Test ID: 10020803c Lab ID: CAATL-Aquatic Testing Labs Sample Type:

Sample ID:

ITB0895-01 EFF2-Industrial

Sample Date: 2/7/2010 10:45

Protocol: FWCH EPA

Test Species:

CD-Ceriodaphnia dubia

Comments:

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

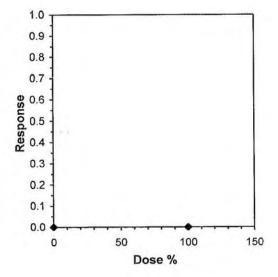
1600		NAME OF THE PARTY	Not				Fisher's	Isot	onic	
Conc-%	Mean	N-Mean	Resp	Resp	Total	N	Exact P	Critical	Mean	N-Mean
D-Control	1.0000	1.0000	0	10	10	10			1.0000	1.0000
100	1.0000	1.0000	0	10	10	10	1.0000	0.0500	1.0000	1.0000

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

Treatments vs D-Control

Linear Interpolation (200 Resamples)

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



Start Date: End Date: Sample Date:	2/9/2010 1 2/16/2010 2/7/2010 1	15:00	Lab ID:	100208036 CAATL-AC FWCH EP	uatic Test	ting Labs	Sample ID Sample Ty Test Spec	/pe:	ITB0895-01 EFF2-Industrial CD-Ceriodaphnia dubia		
Conc-%	1	2	3	4	5	6	7	8	9	10	
D-Contro	23.000	23.000	30.000	27.000	31.000	26.000	31.000	32.000	23.000	25.000	
100		27.000	30.000	34.000	32.000	35.000	34.000	27.000	33.000	23.000	

	-			Transform: Untransformed					1-Tailed		Isot	onic
Conc-%	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD	Mean	N-Mean
D-Control	27.100	1.0000	27.100	23.000	32.000	13.412	10				28.800	1.0000
100	30.500	1.1255	30.500	23.000	35.000	12.675	10	-2.026	1.734	2.910	28.800	1.0000

Auxiliary Tests	Statistic		Critical		Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.05)	0.92598		0.905		-0.3226	-1.0223
F-Test indicates equal variances (p = 0.86)	1.1312		6.54109			
Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences	2.90969	0.10737	57.8	14.0778	0.05782	1, 18

Treatments vs D-Control Linear Interpolation (200 Resamples) 95% CL Skew SD **Point** IC05 >100 >100 IC10 >100 1.0 IC15 IC20 >100 0.9 IC25 >100 8.0 IC40 >100 0.7 IC50 >100 0.6 0.5 0.4 0.3 0.2 0.1

> 0.0 -0.1 -0.2 0

50

Dose %

100

150

CERIODAPHNIA DUBIA CHRONIC BIOASSAY EPA METHOD 1002.0 Raw Data Sheet



Lab No.: A-10020803-001

Client ID: TestAmerica - ITB0895-01 Outfall 018 Start Date: 02/09/2010 DAY I DAY 2 DAY 3 DAY 4 DAY 5 DAY 6 DAY 7 0 hr 0 hr 24hr 24hr 0 hr 24hr 0 hr 24hr 0 hr 24hr 0 hr 0 hr 24hr 2 Analyst Initials: Time of Readings: pH Control Temp DO 100% pH Temp **Additional Parameters** Control 100% Sample 349 Conductivity (umohms) Alkalinity (mg/l CaCO₃) 67 Hardness (mg/l CaCO₃) 90 20-1 Ammonia (mg/I NH₃-N) Source of Neonates Replicate:

Brood ID:	62	A	\$	0	6	0	4E		4F	SH	7	6F	46	SG	66
Sample	Day					Num	ber of Y	oung P	roduced				Total Live	No. Live	Analyst
		2	A	В	C	D	E	F	G	H	I	J	Young	Adults	Initials
	11-11		0	0	0	0	0	0	0	0	0	0	0	10	h
	2	(0	0	0	0	0	0	0	0	0	0	0	10	Ru
	3		3	0	0	0	0	0	4	0	0	0	47,	10	C
Control	4		0	4	5	5	4	4	0	5	4	4	35	10	1
Control	5	(6	7	10	9	8	7	9	11	0	0	67	10	10
	6	(1	0	15	0	19	0	0	16	7	6	63	10	19
	7)	4	12	-0	13	0	15	18	0	12	15	9971	10	1
	Total	2	3 1	23	30	27	31	26	31	32	23	25	268	. 10	1
	ì	1	2 1	0	0	0	0	12	0	0	0	0	0	10	R
	2	1	2	0	0	0	0	0	0	0	0	0	0	10	R
	3	1	0	4	0	4	4	4	0	0	0	0	16	10	6
10007	4	4	1	7	5	0	0	0	5	5	U	4	34	10	h
100%	5	6	9	0	11	14	13	14	12	9	12	9	103	10	10
	6	(0	16	0	16	15	17	17	13	17	0	111	10	10
	7	Y	2/	10	140	TD	(12)	16	0	0	(10)	10	41	10	1
	Total	3	00	わ	30	34	32	35	34	27	33	23	305	10	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.

SUBCONTRACT ORDER TestAmerica Irvine

ITB0895

SENDING LABORATORY:

TestAmerica Irvine

17461 Derian Avenue. Suite 100

Irvine, CA 92614 Phone: (949) 261-1022 Fax: (949) 260-3297

Project Manager: Joseph Doak

RECEIVING LABORATORY:

Aquatic Testing Laboratories-SUB 4350 Transport Street, Unit 107

Ventura, CA 93003 Phone :(805) 650-0546 Fax: (805) 650-0756

Project Location: CA - CALIFORNIA

Receipt Temperature: \ 3 °C

Ice:

Analysis	Units	Expires	Comments
Sample ID: ITB0895-01 (Outfall 018 - Water)	Sampled: 02/07/10 10:45	
Bioassay-Acute 96hr	% Survival 2	02/08/10 22:45	FH-minnow, EPA/821-R02-012, Sub to AqTox Labs
Level 4 Data Package	N/A	03/07/10 10:45	C Ch

Released By

Released By

Date/Time

Page 1 of 1



Ceriodaphnia dubia Chronic Toxicity Test Reference Toxicant Data

CERIODAPHNIA CHRONIC BIOASSAY EPA METHOD 1002.0 REFERENCE TOXICANT - NaCl



QA/QC Batch No.: RT-100207

Date Tested: 02/07/10 to 02/14/10

TEST SUMMARY

Test type: Daily static-renewal. Species: *Ceriodaphnia dubia*.

Age: <24 hrs; all released within 8 hrs.

Test vessel size: 30 ml.

Number of test organisms per vessel: 1.

Temperature: 25 +/- 1°C.

Dilution water: Mod. hard reconstituted (MHRW).

Reference Toxicant: Sodium chloride (NaCl).

Endpoints: Survival and Reproduction.

Source: In-laboratory culture. Food: .1 ml YTC, algae per day. Test solution volume: 20 ml. Number of replicates: 10.

Photoperiod: 16/8 hrs. light/dark cycle.

Test duration: 7 days.

Statistics: ToxCalc computer program.

RESULTS SUMMARY

Sample Concentration	Percent Surviva	al	Mean Number of Young Per Female			
Control	100%		28.5			
0.25 g/l	100%		30.9			
0.5 g/l	100%		25.5			
1.0 g/I	100%		15.4	*		
2.0 g/l	100%		2.9	*		
4.0 g/l	0%	*	0	**		

^{*} Statistically significantly less than control at P = 0.05 level

** Reproduction data from concentrations greater than survival NŒC are

excluded from statistical analysis.

CHRONIC TOXICITY

Survival LC50	2.8 g/l
Reproduction IC25	0.66 g/l

QA/QC TEST ACCEPTABILITY

Result
Pass (100% Survival)
Pass (28.5 young)
Pass (100% with 3 broods)
Pass (PMSD = 14.7%)
Pass (Stat. sig. diff. conc. Relative difference = 46.0%)
Pass (Response curve normal)
֡֡֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜

Start Date:	2/7/2010 1	5:00	Test ID:	RT100207	c		Sample ID	;	REF-Ref T	
End Date:	2/14/2010	14:00	Lab ID:	CAATL-AC	uatic Test	ing Labs	Sample Ty	/pe:		lium chloride
Sample Date:	2/7/2010		Protocol:	FWCH EP	A		Test Spec	ies:	CD-Ceriod	laphnia dubia
Comments: Conc-gm/L	4	2	3	1	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
0.25		1.0000	1000000		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.5	1.0000	1.0000	1.0000	1.0000	1,0000	1.0000	1.0000	1.0000	1.0000	1.0000
1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

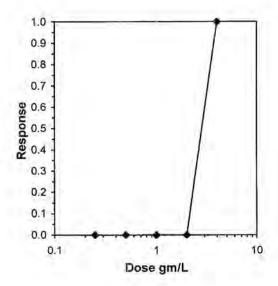
				Not			Fisher's	1-Tailed	Number	Total
Conc-am/L	Mean	N-Mean	Resp	Resp	Total	N	Exact P	Critical	Resp	Number
D-Control	1.0000	1.0000	0	10	10	10			0	10
0.25	1.0000	1.0000	0	10	10	10	1.0000	0.0500	0	10
0.5	1.0000	1.0000	0	10	10	10	1.0000	0.0500	0	10
1	1.0000	1.0000	0	10	10	10	1.0000	0.0500	0	10
2	1.0000	1.0000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

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

Graphical Method

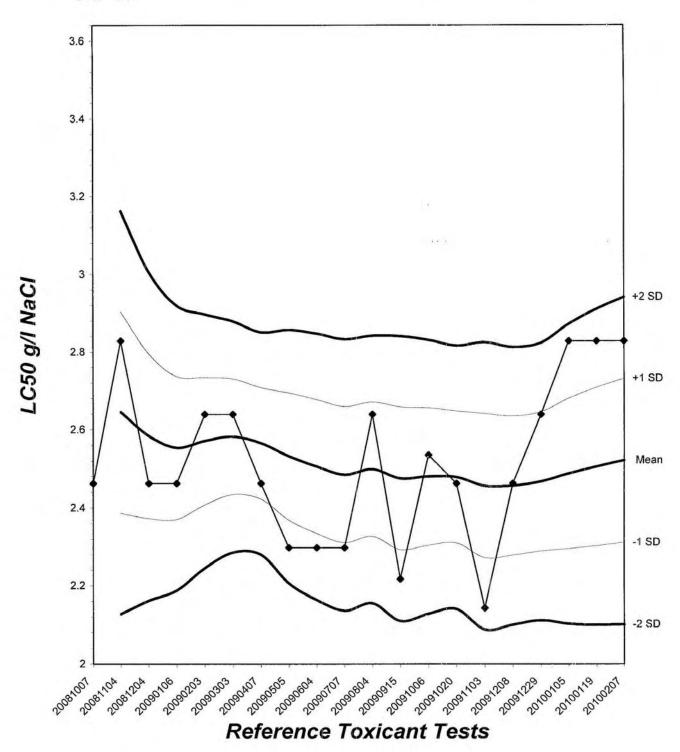
Trim Level EC50 0.0% 2.8284

2.8284



Ceriodaphnia Chronic Survival Laboratory Control Chart

CV% = 8.34



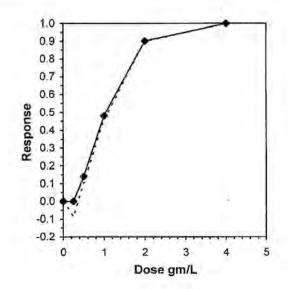
Start Date:	2/7/2010 1	5:00	Test ID:	RT100207	'c		Sample ID	:	REF-Ref T	oxicant
End Date:	2/14/2010	14:00	Lab ID:	CAATL-AC	quatic Tes	ting Labs	Sample Ty	/pe:	NACL-Soc	lium chloride
Sample Date: Comments:	2/7/2010		Protocol:	FWCH EP	A		Test Spec	ies:	CD-Cerioo	laphnia dubia
Conc-gm/L	1 -1 -	2	3	4	5	6	7	8	9	10
D-Control	30.000	29.000	30,000	32.000	29.000	30.000	30.000	25.000	26.000	24.000
0.25	48.000	29.000	31.000	31.000	27.000	27.000	28.000	36.000	25.000	27.000
0.5	27.000	26.000	26.000	28.000	25.000	25.000	30.000	25.000	18.000	25.000
1	24.000	13.000	15,000	19.000	24.000	13.000	11.000	13.000	11.000	11.000
2	3.000	3.000	2.000	3.000	2.000	3.000	4.000	4.000	2.000	3.000
4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

			Transform	n: Untran	sformed	Rank	1-Tailed	Isotonic		
Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical	Mean	N-Mean
28.500	1.0000	28.500	24,000	32.000	9.097	10			29.700	1.0000
30.900	1.0842	30.900	25,000	48.000	21.867	10	110.50	76.00	29.700	1.0000
25.500	0.8947	25.500	18.000	30.000	12.158	10	79.00	76.00	25.500	0.8586
15.400	0.5404	15.400	11.000	24.000	33.280	10	56.00	76.00	15.400	0.5185
2.900	0.1018	2.900	2.000	4.000	25.444	10	55.00	76.00	2.900	0.0976
0.000	0.0000	0.000	0.000	0.000	0.000	10			0.000	0.0000
	28.500 30.900 25.500 15.400 2.900	28.500 1.0000 30.900 1.0842 25.500 0.8947 15.400 0.5404 2.900 0.1018	Mean N-Mean Mean 28.500 1.0000 28.500 30.900 1.0842 30.900 25.500 0.8947 25.500 15.400 0.5404 15.400 2.900 0.1018 2.900	Mean N-Mean Mean Min 28.500 1.0000 28.500 24.000 30.900 1.0842 30.900 25.000 25.500 0.8947 25.500 18.000 15.400 0.5404 15.400 11.000 2.900 0.1018 2.900 2.000	Mean N-Mean Mean Min Max 28.500 1.0000 28.500 24.000 32.000 30.900 1.0842 30.900 25.000 48.000 25.500 0.8947 25.500 18.000 30.000 15.400 0.5404 15.400 11.000 24.000 2.900 0.1018 2.900 2.000 4.000	28.500 1.0000 28.500 24.000 32.000 9.097 30.900 1.0842 30.900 25.000 48.000 21.867 25.500 0.8947 25.500 18.000 30.000 12.158 15.400 0.5404 15.400 11.000 24.000 33.280 2.900 0.1018 2.900 2.000 4.000 25.444	Mean N-Mean Mean Min Max CV% N 28.500 1.0000 28.500 24.000 32.000 9.097 10 30.900 1.0842 30.900 25.000 48.000 21.867 10 25.500 0.8947 25.500 18.000 30.000 12.158 10 15.400 0.5404 15.400 11.000 24.000 33.280 10 2.900 0.1018 2.900 2.000 4.000 25.444 10	Mean N-Mean Mean Min Max CV% N Sum 28.500 1.0000 28.500 24.000 32.000 9.097 10 30.900 1.0842 30.900 25.000 48.000 21.867 10 110.50 25.500 0.8947 25.500 18.000 30.000 12.158 10 79.00 15.400 0.5404 15.400 11.000 24.000 33.280 10 56.00 2.900 0.1018 2.900 2.000 4.000 25.444 10 55.00	Mean N-Mean Mean Min Max CV% N Sum Critical 28.500 1.0000 28.500 24.000 32.000 9.097 10 30.900 1.0842 30.900 25.000 48.000 21.867 10 110.50 76.00 25.500 0.8947 25.500 18.000 30.000 12.158 10 79.00 76.00 15.400 0.5404 15.400 11.000 24.000 33.280 10 56.00 76.00 2.900 0.1018 2.900 2.000 4.000 25.444 10 55.00 76.00	Mean N-Mean Mean Min Max CV% N Sum Critical Mean 28.500 1.0000 28.500 24.000 32.000 9.097 10 29.700 30.900 1.0842 30.900 25.000 48.000 21.867 10 110.50 76.00 29.700 25.500 0.8947 25.500 18.000 30.000 12.158 10 79.00 76.00 25.500 15.400 0.5404 15.400 11.000 24.000 33.280 10 56.00 76.00 15.400 2.900 0.1018 2.900 2.000 4.000 25.444 10 55.00 76.00 2.900

Auxiliary Tests		-			Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates nor	-normal dis	stribution	$(p \le 0.05)$		0.87968	0.947	1.72192	5.90298
Bartlett's Test indicates unequal					32.1843	13.2767		
Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU				
Steel's Many-One Rank Test	0.5	1	0.70711					
Total Control of D. Octobrol								

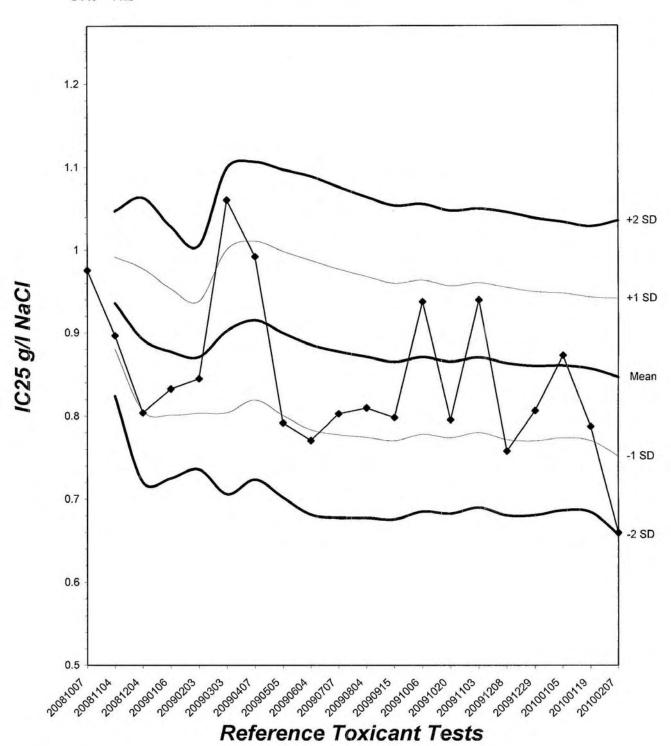
Treatments vs D-Control

				Linea	ar Interpolation	(200 Resamples)
Point	gm/L	SD	95%	CL	Skew	1-000
IC05	0.3384	0.0442	0.2691	0.4525	0.4001	
IC10	0.4268	0.0548	0.3537	0.5444	0.4118	
IC15	0.5126	0.0553	0.4160	0.6069	0.0105	1.0
IC20	0.5861	0.0571	0.4714	0.6748	-0.2745	0.9
IC25	0.6597	0.0572	0.5402	0.7608	-0.3338	0.8
IC40	0.8802	0.0645	0.7629	1.0101	0.4008	100
IC50	1.0440	0.0882	0.8903	1.2112	0.2244	0.7
						0.6 -



Ceriodaphnia Chronic Reproduction Laboratory Control Chart

CV% = 11.2



CERIODAPHNIA DUBIA CHRONIC BIOASSAY

Reference Toxicant - NaCl Reproduction and Survival Raw Data Sheet



QA/QC No.: RT-100207

Start Date: 02/07/2010

				Nu	mbei	r of Y	oung	Produ	uced			Total	No.	Analyst
Sample	Day	A	В	C	D	E	F	G	н	I	J	Live Young	Live Adults	Initials
	1	0	0	0	0	0	0	0	0	0	0	0	10	2
	2	0	0	0	0	0	0	0	0	0	0	0	10	R
	3	5	0	4	4	3	4	4	4	3	4	35	10	R
Control	4	0	5	0	0	0	9	10	7	9	9	49	10	R
Control	5	8	8	12	11	10	0	16	14	14	11	104	10	Ly
	6	0	0	U	0	0	12	(13)	(13)	0	(Z)	17	10	h
	7	17	16	14	17	16	15)	0	0	0	0	80	10	1/6
	Total	30	29	30	32	29	30	30	25	26	24	285	10	
	1	0	0	0	0	0	0	0	0	0	0	C	10	R
	2	0	0	0	0	0	0	0	0	0	0	0	10	Ry
	3	0	4	4	4	5	3	4	0	4	3	31	10	R
0.25 - //	4	0	0	0	0	9	8	11	10	9	0	47	10	Lu
0.25 g/l	5	11	8	8	10	13	0	13	11	12	8	ad	10	Ly
	6	18	17	19	1)	13	116	13	0	(17)	16	103	10	h
	7	19	0	(2)	(16)	0	(17)	0	15	0	(15)	34	10	16
	Total	88	29	31	31	27	27	28	36	25	27	309	10	1/
	1	0	0	0	0	0	0	0	C	0	C	0	10	en
	2	0	0	0	0	0	0	0	0	0	0	0	10	En
	3	2	0	3	0	3	3	0	0	4	3	18	(0)	R
0.5 //	4	0	4	4	2	5	0	6	4	6	5	36	10	Lin
0.5 g/l	5	7	5	0	0	0	7	8	6	8	0	41	10	Rom
	6	18	17	19	12	17	0	16	0	0	0	99	10	1
	7	0	0	0	14	(16)	15	0	15	(14)	17	61	10	
	Total	27	26	26	£	25	25	30	35	18	25	255	10	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.

b I

CERIODAPHNIA DUBIA CHRONIC BIOASSAY

Reference Toxicant - NaCl Reproduction and Survival Raw Data Sheet



QA/QC No.: RT-100207

Start Date: 02/07/2010

1 /71. 0

C1	D			Nı	ımbe	r of Y	oung l	Produ	ced			Total	No.	Analyst
Sample	Day	A	В	C	D	E	F	G	н	I	J	Live Young	Live Adults	Initials
	1	0	0	0	0	0	0	0	0	0	C	0	10	1
	2	0	0	0	0	0	0	0	0	0	0	0	10	En
	3	3	0	2	3	3	0	0	2	2	0	15	10	for
1.0 α/1	4	0	2	5	2	4	0	0	3	3	0	19	10	La
1.0 g/l	5	5	4	0	0	0	6	4	0	0	0	19	10	for
	6	0	0	0	14	17	0	0	0	0	4	35	10	b
	7	16	7	8	0	0	7	7	8	. 6	7	66	10	R
	Total	24	13	15	19	24	13	11	13	(1	10	154	10	1/
	1	a	0	0	0	0	0	C	C	0	C	0	10	1
	2	0	0	0	C	C	0	0	C	C	C	D	10	1
	3	0	0	0	0	0	0	0	C	C	0	0	10	2
2.0 //	4	0	0	0	0	0	C	0	0	0	0	U	10	2
2.0 g/l	5	0	0	0	0	0	C	0	0	0	0	0	10	2
	6	0	0	2	C	0	0	0	3	0	0	5	10	2
	7	3	3	0	3	Z	3	4	1	2	3	24	10	1
	Total	3	3	2	3	2	-3	U	4	2	3	29	10	
	1	200	X	X	22	X	X	X	X	X	/	0	0	1
	2	_	1	-	-	-)	-	-	-		_		
	3		_	-	-		_	_			_	-	-	
4.0 . "	4	-		-	-		-	_	-	-	_		_	
4.0 g/l	5	_	_			-	-	_	_	_	_	Special Contract	_	
	6	-	-		-	-	-	_	-	-	_	_	_	,
	7	_		_	-		_	-	·	_	-		_	
	Total	0	0	0	0	0	0	0	C	0	0	0	0	1

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

C\RIODAPHNIA DUBIA CHRONIC BIOASSAY

Reference Toxicant - NaCl Water Chemistries Raw Data Sheet



QA/QC No.: RT-100207

Start Date: 02/07/2010

A/QC NO	o.: RT-10	00207										Start	Date:0	2/07/20	110
		DA	Y 1	DA	Y 2	DA	Y 3	DA	Y 4	DA	Y 5	DA	Υ 6	DA	Y 7
		Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Fina
Analyst I	nitials:	N	0	1	En	Bo	for	Ru	Por	2	En	Ro	Ru	En	2
Time of R	eadings:	1500	1430	1430	1500	1500	1400	1400	1400	1400	1500	15au	1600	1600	Mi
	DO	8.3	83	8.1	8.4	8,2	8.3	8.3	8.2	8.4	8.2	8.1	7.9	8.0	8-6
Control	рН	7-7	8.0	8.2	8.0	8.0	7.8	8.0	7.8	7.7	7.7	7.7	7.8	7.5	7-6
	Temp	243	24.2	74-7	25.0	25.7	25.1	24.4	24.0	25.7	24.8	25.4	25.2	25.9	24.5
	DO	8.4	8.4	8.2	8.4	8.2	8.3	8.3	8.2	8.4	8.2	8.1	8.0	8.0	7.0
0.25 g/l	pН	8.0	7.8	8.0	80	8.0	7.8	8.0	2.8	7.7	7.7	7.7	7.8	7.5	7.5
	Temp	24.4	24.2	24.6	25.1	25-8	25.2	24.5	24.2	25.7	24.9	25.4	25.3	25.9	25
	DO	8.2	8.3	8.2	8.3	8.2	8.3	8.3	8.1	8.4	8.2	8.1	800	8.0	8.1
0.5 g/l	pН	7-9	7.8	7-8	8.0	8.1	7-8	7.8	7.8	2.7	7.7	2.7	2.8	7.6	75
	Temp	24.4	24.6	24.4	25.2	25.8	25.4	24.5	24.2	25.7	25.0	2575	25.4	25.8	24
	DO	8-3	8.4	8.4	8.3	8.3	8.2	8.3	8.1	8.3	8.3	8.2	29	8.0	8.0
1.0 g/l	рН	7.9	2.5	7.8	80	8.1	7-8	7.8	28	2.7	7.7	7.7	2.8	7.6	7.6
	Temp	24.5	24,6	24-5	25.2	25.9	25.4	24.6	24.1	25.8	25.0	25.6	25.4	25.8	24.4
	DO	8.2	80	8.4	8.5	8.3	8.2	8.3	8.1	8:3	8.3	8,2	8.1	8.0	8
2.0 g/l	рН	7.9	7.8	7.7	8.0	8.1	2.8	7.8	7.8	7.7	7.7	7.8	2.8	7.7	7-1
	Temp	24.6	24.8	245	25.2	26.0	25.3	24.8	24.1	25.9	25.1	25.8	25.3	25.10	247
	DO	8.3	8.0	_		_		_	-	_	-	_	_	1	
4.0 g/l	pН	8.1	7.7	_	_	_	-	_	_	_	_	_	-	-	-
	Temp	24.5	25-1	_	_	_	_	_	_		_	-			
	Di	ssolved	Oxyge	en (DO)	reading	gs are ii	n mg/l	O ₂ ; Tem	perature	(Temp)) readin	gs are ii	n°C.		
	Additional	Parame	ters	-			Conti	rol				High Co	ncentra	tion	
					Day	1	Day .	3	Day 5		Day 1		Day 3	D	ay 5
	Conducti	ivity (μS)		34	9	335	-	341	6	240	3:	390	33	510
	Alkalinity (67 68			67	_	67		18	-	28	
	Hardness (mg/I CaC	O ₃)		90		93		92		90	-	92		72
		11	т		-			Neonates							
Replicate: A B C						D D	Е	F	7	G	H	1	<u> </u>		

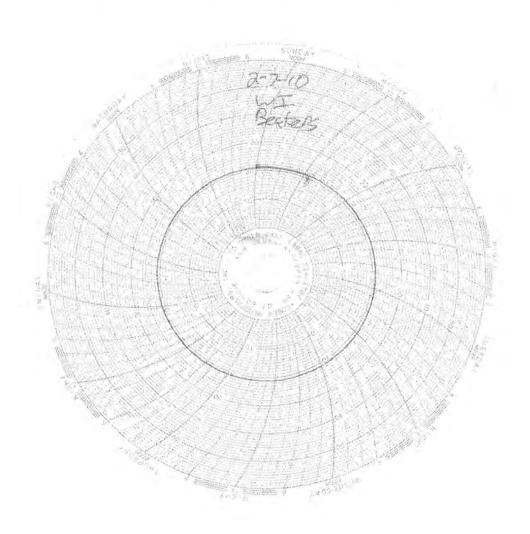


Test Temperature Chart

Test No: RT-100207

Date Tested: 02/07/10 to 02/14/10

Acceptable Range: 25+/- 1°C





TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

REVISED

PROJECT NO. ITB0895

MWH-Pasadena Boeing

Lot #: F0B090485

Joseph Doak

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

TESTAMERICA LABORATORIES, INC.

March 17, 2010

Case Narrative LOT NUMBER: F0B090485 Revised 03-17-10

This report contains the analytical results for the sample received under chain of custody by TestAmerica St. Louis on February 9, 2010. This sample is associated with your MWH-Pasadena Boeing project.

The analytical results included in this report meet all applicable quality control procedure requirements, except as noted below.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by TestAmerica St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. **TestAmerica St. Louis' Florida certification number is E87689**. The case narrative is an integral part of this report.

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

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

Report revised to report the KPA uranium results in pCi/L.

Observations/Nonconformances

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

Gross Alpha/Beta (EPA 900.0 MOD)

There was insufficient sample volume remaining to perform the gross alpha/beta at the full aliquot amount of 200mL. The aliquot used was 173mL. This had no affect on achieving the client requested reporting limit.

Affected Samples:

F0B090485 (1): ITB0895-01

Radium-228 by GFPC (EPA 904 MOD)

The Radium 228 LCS analyte recovery is outside the lower QC limit, indicating a potential negative bias for the analyte. The sample re-extract LCS recovered within acceptable QC limits.

Affected Samples:

F0B090485 (1): ITB0895-01

METHODS SUMMARY

F0B090485

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

References:

ASTM

Annual Book Of ASTM Standards.

EPA

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

SAMPLE SUMMARY

F0B090485

<u>WO #</u>	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LVF6L	001	ITB0895-01	02/07/10	10:45

NOTE(S):

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

TestAmerica Irvine

Client Sample ID: ITB0895-01

Radiochemistry

Lab Sample ID: F0B090485-001

Work Order: Matrix:

LVF6L WATER Date Collected:

02/07/10 1045

Date Received:

02/09/10 1100

			Total Uncert.			Prep	Analysis	
Parameter	Result	Qual	(2 g+/-)	RL	mdc	Date	Date	
Gamma Cs-137 & H:	its by EPA 901	.1 MOD		pCi/L	Batch	# 0042136	Yld %	
Cesium 137	1.3	U	6.9	20.0	12	02/11/10	02/19/10	
Potassium 40	-60	U	340		200	02/11/10	02/19/10	
Gross Alpha/Beta	EPA 900			pCi/L	Batch	# 0043108	Yld %	
Gross Alpha	-0.22	U	0.59	3.00	1.3	02/10/10	02/19/10	
Gross Beta	1.52	J	0.94	4.00	1.4	02/10/10	02/19/10	
SR-90 BY GFPC E	PA-905 MOD		1	pCi/L	Batch	# 0041162	Yld % 76	
Strontium 90	0.004	υ	0.26	3.00	0.45	02/10/10	02/19/10	
TRITIUM (Distill)	by EPA 906.0	MOD		pCi/L	Batch	# 0049035	Yld %	
Tritium	30	Ū	53	500	91	02/18/10	02/18/10	
Total Uranium by	KPA ASTM 5174	-91		pCi/L	Batch	# 0053280	Yld %	
Total Uranium	0.125	υ	0.015	0.693	0.21	02/23/10	02/26/10	
Radium 226 by E	PA 903.0 MOD			pCi/L	Batch	# 0041160	Yld % 99	
more and many many many	0 0	U	0.10	1.00	0.20	02/10/10	02/26/10	
Radium (226)	0.0				1042 300-0	Consultation and Consultation		
				pCi/L	Batch	# 0060257	Yld % 86	

NOTE (S)

Data are incomplete without the case narrative.

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

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

Result is less than the sample detection limit.

METHOD BLANK REPORT

Radiochemistry

Client Lot ID:

F0B090485

Matrix:

WATER

Parameter	Result	Qual	Total Uncert. (2 g+/-)	RL	MDC		Prep Date	Lab Sample ID Analysis Date
Radium 228 by	GFPC EPA 904 MC)D	pCi/L	Batch #	0060257	Yld %	88 F	OC010000-257B
Radium 228	0.08	U	0.23	1.00	0.39	77	03/01/10	03/05/10
Radium 226 by	EPA 903.0 MOD		pCi/L	Batch #	0041160	Yld %	95 F	'0B100000-160B
Radium (226)	0.092	U	0.095	1.00	0.14		02/10/10	02/26/10
SR-90 BY GFPC	EPA-905 MOD		pCi/L	Batch #	0041162	Yld %	80 F	'0B100000-162B
Strontium 90	-0.15	U	0.20	3.00	0.38		02/10/10	02/19/10
Gamma Cs-137 &	Hits by EPA 90	1.1 MOD	pCi/L	Batch #	0042136	Yld %	F	'0B110000-136B
Cesium 137	1.8	U	7.7	20.0	14		02/11/10	02/19/10
Potassium 40	-80	U	620		210		02/11/10	02/19/10
Gross Alpha/Be	ta EPA 900		pCi/L	Batch #	0043108	Yld %	F	'0B120000-108B
Gross Alpha	-0.28	U	0.35	2.00	0.87		02/10/10	02/19/10
Gross Beta	-0.23	ΰ	0.62	4.00	1.1		02/10/10	02/19/10
TRITIUM (Disti	11) by EPA 906.	O MOD	pCi/L	Batch #	0049035	Yld %	H	'0B180000-035B
Tritium	165	J	85	500	95		02/18/10	02/18/10
Total Uranium h	by KPA ASTM 517	4-91	pCi/L	Batch #	0053280	Yld %	F	'0B220000-280B
Total Uranium	0.0460	U	0.0057	0.693	0.21		02/22/10	02/26/10

NOTE (S)

Data are incomplete without the case narrative.

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

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

Laboratory Control Sample Report

Radiochemistry

Client Lot ID:

F0B090485

Matrix:

WATER

			Total			Lab	Sample ID	
Parameter	Spike Amount	Result	Uncert. (2 g+/-)		MDC	% Yld	% Rec	QC Control Limits
Radium 226 by EPA	903.0 MOD	**	pCi/L	903.0	MOD		F0B1	00000-160C
Radium (226)	11.3	10.4	1.1		0.2	97	93	(68 - 136)
	Batch #:	0041160			Analysis Date:	02/26	5/10	
SR-90 BY GFPC EPA	-905 MOD		pCi/L	905 M	OD		FOB1	00000-162C
Strontium 90	6.80	6.82	0.77		0.34	83	100	(80 - 130)
	Batch #:	0041162			Analysis Date:	02/19	9/10	
Gamma Cs-137 & Hit	s by EPA 901.1	MOD	pCi/L	901.1	MOD		F0B1	10000-136C
Americium 241	141000	140000	11000		500		99	(87 - 110)
Cesium 137	53100	52900	3000		200		100	(90 - 110)
Cobalt 60	87900	88000	5000		200		100	(89 - 110)
	Batch #:	0042136			Analysis Date:	02/19	9/10	
Gross Alpha/Beta E	PA 900	•	pCi/L	900.0	MOD		F0B1	20000-108C
Gross Beta	68.0	71.6	6.0		1		105	(58 - 133)
	Batch #:	0043108			Analysis Date:	02/19	9/10	
Gross Alpha/Beta E	PA 900		pCi/L	900.0	MOD		F0B1	20000-108C
Gross Alpha	49.4	34.8	4.3		1.2		70	(62 - 134)
	Batch #:	0043108			Analysis Date:	02/19	9/10	
TRITIUM (Distill)	by EPA 906.0 M	OD	pCi/L	906.0	MOD		F0B1	80000-035C
Tritium	4530	4440	460		90		98	(85 - 112)
	Batch #:	0049035			Analysis Date:	02/18	3/10	
Total Uranium by K	PA ASTM 5174-9	1	pCi/L	5174-	91	,	FOB2	20000-280C
Total Uranium	27.7	30.2	3.6		0.2		109	(90 - 120)
	Batch #:	0053280			Analysis Date:	02/2	6/10	
Total Uranium by K	PA ASTM 5174-9	1	pCi/L	5174-	91		F0B2	20000-280C
Total Uranium	5.54	5.97	0.61		0.21		108	(90 - 120)
	Batch #:	0053280			Analysis Date:	02/2	6/10	

Laboratory Control Sample/LCS Duplicate Report

Radiochemistry

Client Lot ID:

F0B090485

Matrix:

WATER

				Total			Lab Sample ID			
Parameter		Spike Amount	Result	Uncert. (2 g+/-)			QC Control Limits	Precision		
Radium 228	by GFPC	EPA 904 MOD	pCi/I	904 M	OD		F0C0	10000-257C		
Radium 228	Spk 2	6.40 6.40	6.23 6.35	0.74	87 84	97 99	(60 - 142) (60 - 142)	2 %RPD		
		Batch #:	0060257		Analysi	s Date:	03/05/10			

MATRIX SPIKE REPORT

Radiochemistry

Client Lot Id:

F0B090473

Matrix:

WATER

Date Sampled:

02/05/10

Date Received:

02/09/10

						QC Sample	e ID
arameter	Spike Amount	Spike Result	Total Uncert. (2s+/-)	Spike Sampl Yld. Resul	OHCUIT.	%YLD %REC	QC Control Limits
TRITIUM (Distill) by ER	A 906.0 N	1OD	pCi/L	906.0 M	OD	F0B090473	3-001
Tritium	4530	4650	470	122	77	100	(62 - 147)
	Batch #	: 0049035	An	alysis Date:	02/18/10		
Gross Alpha/Beta EPA 90	0		pCi/L	900.0 M	OD	F0B090470	0-001
Gross Alpha	49.4	47.2	5.2	2.00	0.88	91	(35 - 150)
	Batch #	: 0043108	An	alysis Date:	02/18/10		
Gross Alpha/Beta EPA 90	0		pCi/L	900.0 M	OD	F0B090470	0-001
Gross Beta	68.0	79.0	6.6	3.9	1.2	110	(54 - 150)
	Batch #	: 0043108	An	alysis Date:	02/18/10		

NOTE (S)

Data are incomplete without the case narrative.

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

MATRIX SPIKE/MATRIX SPIKE DUPLICATE REPORT

Radiochemistry

Client Lot ID: F0B090470

Matrix:

WATER

Date Sampled:

02/07/10 1143

Date Received:

02/09/10 1100

			Total				Total		QC Sampl	e ID
Parameter	Spike Amount	SPIKE Result	Uncert. (2 g+/-)	Spike Yld	SAMPLE Result		Uncert. (2 o +/-)	% Yld	%Rec	QC Contro Limits
Total Uranium by KPA	ASTM 5	****	pCi/L	E	174-91			F	DB09047	70-001
Total Uranium	27.7	29.7	3.1		0.566	J	0.068		105	(62 - 15
Spk2	27.7	30.0	3.1		0.566	J	0.068 Precis	sion:	106 1	(62 - 15 %RPD
	Batch	#: 0053280	Ana	alysis d	ate:	02/2	6/10			

DUPLICATE EVALUATION REPORT

Radiochemistry

Client Lot ID:

F0B090485

Matrix:

WATER

Date Sampled:

02/05/10

Date Received: 02/09/10

			Total		-		Total		QC Sample ID	
Parameter	SAMPLE Result		Uncert. (2σ+/-)	% Yld	DUPLICATE Result		Uncert. (2 g+/-)	% Yld	Precisi	on
Radium 226 by EP	A 903.0 MOD			pCi/L	903.	0 MC	DD		F0B090467-00	1
Radium (226)	0.089	U	0.098	92	0.07	U	0.16	92	31	%RPD
	Bato	h #:	0041160	(Sample)	0041	160	(Duplicate)			
Gamma Cs-137 & Hi	ts by EPA 9	01.1	MOD	pCi/L	901.	1 MC	D		F0B090470-00)1
Cesium 137	-2.9	U	9.0		1.2	U	7.8		479	%RPD
Potassium 40	-100	U	43000		-50	U	230		93	%RPD
	Bato	h #:	0042136	(Sample)	0042	136	(Duplicate)			
Gross Alpha/Beta	EPA 900			pCi/L	900.	0 MC	a		F0B090470-00	1
Gross Alpha	2.00	J	0.88		0.84	U	0.66		82	%RPD
Gross Beta	3.9	J	1.2		3.2	J	1.1		20	%RPD
	Bato	h #:	0043108	(Sample)	0043	108	(Duplicate)			
TRITIUM (Distill)	by EPA 906	.0 MC	DD	pCi/L	906.	0 MC	OD		F0B090470-00)1
Tritium	114	J	75		80	U	66		35	%RPD
	Bato	h#:	0049035	(Sample)	0049	035	(Duplicate)			
SR-90 BY GFPC EP	A-905 MOD			pCi/L	905	MOD			F0B090475-00)1
Strontium 90	-0.05	U	0.23	72	-0.15	U	0.23	69	97	%RPD
	Bato	h #:	0041162	(Sample)	0041	162	(Duplicate)			

NOTE (S)

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

Result is greater than sample detection limit but less than stated reporting limit. F0B090485

F0B090485



SENDING LABORATORY:

TestAmerica Irvine

17461 Derian Avenue, Suite 100

Irvine, CA 92614

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

Project Manager: Joseph Doak Client: MWH-Pasadena/Boeing TestAmerica St. Louis

RECEIVING LABORATORY:

13715 Rider Trail North Earth City, MO 63045 Phone :(314) 298-8566

Fax: (314) 298-8757

Project Location: CA - CALIFORNIA

Receipt Temperature:

Ice:

Y / N

Analysis	Units	Due	Expires	Interlab Price S	urch	Comments
Sample ID: ITB0895-01 (Outfall 018 - Wa	ater)	Sampleo	I: 02/07/10 10:4	5	
Gamma Spec-O	mg/kg	02/17/10	02/07/11 10:45	\$200,00	50%	Out St Louis, k-40 and cs-137 only, DO NOT FILTER!
Gross Alpha-O	pCi/L	02/17/10	08/06/10 10:45	\$90.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Gross Beta-O	pCi/L	02/17/10	08/06/10 10:45	\$90.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Level 4 + EDD-OUT	N/A	02/17/10	03/07/10 10:45	\$0.00	0%	**LEVEL IV.QC, ACCESS 7 EDD**
Radium, Combined-O	pCi/L	02/17/10	02/07/11 10:45	\$200,00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
.Strontium 90-O	pCi/L	02/17/10	02/07/11 10:45	\$140.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
- Tritium-O	pCi/L	02/17/10	02/07/11 10:45	\$80.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Uranium, Combined-O	pCi/L	02/17/10	02/07/11 10:45	\$100.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Containers Supplied:						
2.5 gal Poly (V)	500 mL Am	ber (W)				

Lucrecia Fru 705 17:00
Released By Date/Time

Received By

<u>\$/8/0 (71</u>07) Date/Time 2.9-10 /180

Date/Time Page 1

F0B0 8 9 9 9 8 9 By

Date/Time

THE LEADER IN ENVIRONMENTAL TESTING CONDITION UPON RECEIPTFORM Client: TA Joune				U	10, 170 481
			473 464 493 415 465 484		
C	OC/RFA No:	4		122	
	•	at select		. 0	18
Initiate	d By:	Chin	_	ate: 2.9 formation	10 Time: 1/00
	Shipper: Fo		nt O		Multiple Packages: (Y ₃). N
	ig#(s):*	Old Did Could Cit	O	nior.	Sample Temperature (s):**
		133 2309 MB 6.			mbien 6
2.		7.			2 7.
3.		8.		an il	3. 8.
4.					
5.		10.			5. 10.
		correspond to Numbered Sample Temp lines	**San	nple must be receive	d at 4°C ± 2°C- If not, note contents below. Temperature
	1	for yes, "N" for no and "N/A" for not applicable):	varian	ce does NOT affect	the following: Metals-Liquid or Rad tests- Liquid or Soli
	Q iv	Are there custody seals present on the	8.	Y N	Are there custody seals present on bottles?
2.	N/A	cooler? Do custody scals on cooler appear to be tampered with?	9,	YNMA	Do custody seals on bottles appear to be tampered with?
3.	DИ	Were contents of cooler frisked after opening, but before unpacking?	10.	Y N WAS	Was sample received with proper pH ¹ ? (If no make note below)
4.	N Sug.19	Sample received with Chain of Custody?	11. (N	Sample received in proper containers?
5.	N) N/A	Does the Chain of Custody match sample ID's on the container(s)?	12.	Y N (N/A	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)
6.	(M)	Was sample received broken?	13.	N/N N/S	Was Internal COC/Workshare received?
7.	N &	Is sample volume sufficient for analysis?	14.	Y N N/A	Was pH taken by original TestAmerica lab?
		NL, Sandia) sites, pH of ALL containers received t			OA, TOX and soils.
Notes:		TB0887 ITB0			****
		1 (95)	36) :
		-88 SN 2.9.18	97	, <u>K</u>	evised chains wer
		94	98	N	rot relinguished for
		88	99		my project
			700	· · · · · · · · · · · · · · · · · · ·	-000AA 0 11 11 1 1 1 1 1 1 1 1 1 1 1 1 1
			590	<i>I</i> 2	1BU800 label time is 13
			02		ocreads 1254
Correct	ive Action:	96		* * * * * * * * * * * * * * * * * * * *	
□ Cli	ent Contact N]	informed by:	
	nple(s) proces nple(s) on hol		YF-olo	ased, notify:	

THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

ADMIN-0004, REVISED 10/21/08 \Sisyr01\QA\FORMS\ST-LOUIS\ADMIN\admin004 revi 1.doc

