APPENDIX G

Section 8

Arroyo Simi-Frontier Park – February 11, 2013

Test America Analytical Laboratory Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-37740-1
Client Project/Site: Annual Sediment Arroyo Simi-FP

For:
MWH Americas Inc
618 Michillinda Avenue, Suite 200
Arcadia, California 91007

Attn: Bronwyn Kelly

Debby Wilson

Authorized for release by:
3/8/2013 8:24:36 AM

Debby Wilson
Project Manager I
debby.wilson@testamericainc.com

I certify under penalty of perjury that the information contained in this report and all attachments was produced in accordance with the indicated methods and laboratory standard operating procedures, except as noted, and are complete and accurate to the best of my knowledge and belief. Subcontract laboratory reports that are attached have been evaluated for completeness and quality control acceptability.

Debby Wilson
Project Manager I
3/8/2013 8:24:36 AM

Table of Contents

Sample Summary

Client: MWH Americas Inc
Project/Site: Annual Sediment Arroyo Simi-FP

TestAmerica Job ID: 440-37740-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-37740-3	Arroyo Simi-FP	Solid	02/11/13 12:00	02/11/13 19:20

Job ID: 440-37740-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-37740-1

Comments
No additional comments.

Receipt
The sample was received on 2/11/2013 7:20 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.3º C.

GC Semi VOA
Method(s) 8081A: Due to the high concentration of Pesticides, the matrix spike / matrix spike duplicate (MS/MSD) for batch 84900 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 8082: The continuing calibration verification (CCV) for 1016-1260 associated with batch 85021 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. Arroyo Simi-FP (440-37740-3)

Method(s) 8082: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and surrogate recoveries associated with batch 84805 were outside control limits: (440-37748-1 MS), (440-37748-1 MSD). Matrix interference is suspected.

No other analytical or quality issues were noted.

General Chemistry
No analytical or quality issues were noted.

Subcontract non-Sister
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Client: MWH Americas Inc
Project/Site: Annual Sediment Arroyo Simi-FP

TestAmerica Job ID: 440-37740-1

Client Sample ID: Arroyo Simi-FP
Date Collected: 02/11/13 12:00
Date Received: 02/11/13 19:20

Lab Sample ID: 440-37740-3
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		5.0	1.5	ug/Kg		02/13/13 13:22	02/16/13 01:36	1
4,4'-DDE	**2.2**	**J,DX**	5.0	1.5	ug/Kg		02/13/13 13:22	02/16/13 01:36	1
4,4'-DDT	ND		5.0	1.5	ug/Kg		02/13/13 13:22	02/16/13 01:36	1
Chlordane (technical)	ND		50	10	ug/Kg		02/13/13 13:22	02/16/13 01:36	1
Dieldrin	ND		5.0	1.5	ug/Kg		02/13/13 13:22	02/16/13 01:36	1
Toxaphene	ND		200	50	ug/Kg		02/13/13 13:22	02/16/13 01:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*93*		*45 - 120*	*02/13/13 13:22*	*02/16/13 01:36*	*1*
Tetrachloro-m-xylene	*83*		*35 - 115*	*02/13/13 13:22*	*02/16/13 01:36*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	12	ug/Kg		02/13/13 09:01	02/14/13 13:56	1
Aroclor 1221	ND		50	12	ug/Kg		02/13/13 09:01	02/14/13 13:56	1
Aroclor 1232	ND	PI	50	12	ug/Kg		02/13/13 09:01	02/14/13 13:56	1
Aroclor 1242	ND		50	12	ug/Kg		02/13/13 09:01	02/14/13 13:56	1
Aroclor 1248	ND		50	12	ug/Kg		02/13/13 09:01	02/14/13 13:56	1
Aroclor 1254	ND		50	12	ug/Kg		02/13/13 09:01	02/14/13 13:56	1
Aroclor 1260	ND		50	12	ug/Kg		02/13/13 09:01	02/14/13 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*50*		*45 - 120*	*02/13/13 09:01*	*02/14/13 13:56*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		5000	1700	mg/Kg			02/20/13 06:37	1
Ammonia (as N)	**4.37**	**J,DX**	10.0	2.00	mg/Kg		02/20/13 04:30	02/20/13 06:43	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**27**		0.10	0.10	%			02/12/13 15:40	1

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Annual Sediment Arroyo Simi-FP

TestAmerica Job ID: 440-37740-1

Client Sample ID: Arroyo Simi-FP — **Lab Sample ID: 440-37740-3**
Date Collected: 02/11/13 12:00 — **Matrix: Solid**
Date Received: 02/11/13 19:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.05 g	2 mL	84805	02/13/13 09:01	AD	TAL IRV
Total/NA	Analysis	8082		1			85021	02/14/13 13:56	CN	TAL IRV
Total/NA	Prep	3546			15.00 g	2 mL	84900	02/13/13 13:22	AB	TAL IRV
Total/NA	Analysis	8081A		1			85620	02/16/13 01:36		TAL IRV
Total/NA	Analysis	Moisture		1			84657	02/12/13 15:40	DK	TAL IRV
Total/NA	Prep	SM 4500 NH3 B			5 g	100 mL	86416	02/20/13 04:30		TAL IRV
Total/NA	Analysis	SM 4500 NH3 D		1			86440	02/20/13 06:43		TAL IRV
Total/NA	Analysis	9060		1	0.1009 g	0.1009 g	86477	02/20/13 06:37		TAL IRV

Laboratory References:

ABC = Aquatic Bioassay - Ventura, CA, 29 North Olive Street, Ventura, CA 93001

PTSL = PTS Laboratories, Inc, 8100 Secura Way, Santa Fe Springs, CA 90670

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 440-84900/1-A
Matrix: Solid
Analysis Batch: 85620

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 84900

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		5.0	1.5	ug/Kg		02/13/13 13:22	02/15/13 22:09	1
4,4'-DDE	ND		5.0	1.5	ug/Kg		02/13/13 13:22	02/15/13 22:09	1
4,4'-DDT	ND		5.0	1.5	ug/Kg		02/13/13 13:22	02/15/13 22:09	1
Chlordane (technical)	ND		50	10	ug/Kg		02/13/13 13:22	02/15/13 22:09	1
Dieldrin	ND		5.0	1.5	ug/Kg		02/13/13 13:22	02/15/13 22:09	1
Toxaphene	ND		200	50	ug/Kg		02/13/13 13:22	02/15/13 22:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*98*		*45 - 120*	*02/13/13 13:22*	*02/15/13 22:09*	*1*
Tetrachloro-m-xylene	*81*		*35 - 115*	*02/13/13 13:22*	*02/15/13 22:09*	*1*

Lab Sample ID: LCS 440-84900/2-A
Matrix: Solid
Analysis Batch: 85620

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 84900

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	33.3	29.9		ug/Kg		90	60 - 120
4,4'-DDE	33.3	29.8		ug/Kg		89	60 - 120
4,4'-DDT	33.3	32.9		ug/Kg		99	65 - 120
alpha-Chlordane	33.3	31.0		ug/Kg		93	50 - 115
gamma-Chlordane	33.3	31.6		ug/Kg		95	50 - 115
Dieldrin	33.3	31.8		ug/Kg		95	65 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*95*		*45 - 120*
Tetrachloro-m-xylene	*78*		*35 - 115*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 440-84805/1-A
Matrix: Solid
Analysis Batch: 85021

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 84805

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	12	ug/Kg		02/13/13 09:01	02/13/13 23:05	1
Aroclor 1221	ND		50	12	ug/Kg		02/13/13 09:01	02/13/13 23:05	1
Aroclor 1232	ND		50	12	ug/Kg		02/13/13 09:01	02/13/13 23:05	1
Aroclor 1242	ND		50	12	ug/Kg		02/13/13 09:01	02/13/13 23:05	1
Aroclor 1248	ND		50	12	ug/Kg		02/13/13 09:01	02/13/13 23:05	1
Aroclor 1254	ND		50	12	ug/Kg		02/13/13 09:01	02/13/13 23:05	1
Aroclor 1260	ND		50	12	ug/Kg		02/13/13 09:01	02/13/13 23:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*88*		*45 - 120*	*02/13/13 09:01*	*02/13/13 23:05*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 440-84805/2-A
Matrix: Solid
Analysis Batch: 85021

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 84805

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor 1016			267	224		ug/Kg		84	65 - 115		
Aroclor 1260			267	232		ug/Kg		87	65 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*92*		*45 - 120*

Lab Sample ID: 440-37748-C-1-D MS
Matrix: Solid
Analysis Batch: 85021

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 84805

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor 1016	ND		266	116	LN	ug/Kg		44	50 - 120		
Aroclor 1260	ND		266	265		ug/Kg		100	50 - 125		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*34*	*LG*	*45 - 120*

Lab Sample ID: 440-37748-C-1-E MSD
Matrix: Solid
Analysis Batch: 85021

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 84805

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor 1016	ND		266	82.6	LN BA	ug/Kg		31	50 - 120	34	30
Aroclor 1260	ND		266	220		ug/Kg		83	50 - 125	19	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*33*	*LG*	*45 - 120*

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 440-86477/6
Matrix: Solid
Analysis Batch: 86477

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		5000	1700	mg/Kg			02/20/13 06:32	1

Lab Sample ID: LCS 440-86477/5
Matrix: Solid
Analysis Batch: 86477

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon			10000	10100		mg/Kg		101	90 - 110		

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 440-37740-3 MS
Matrix: Solid
Analysis Batch: 86477

Client Sample ID: Arroyo Simi-FP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	ND		19600	19100		mg/Kg		98	70 - 130

Lab Sample ID: 440-37740-3 MSD
Matrix: Solid
Analysis Batch: 86477

Client Sample ID: Arroyo Simi-FP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	ND		19700	19800		mg/Kg		100	70 - 130	3	30

Method: Moisture - Percent Moisture

Lab Sample ID: 440-37740-3 DU
Matrix: Solid
Analysis Batch: 84657

Client Sample ID: Arroyo Simi-FP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	27		24		%		15	20

Method: SM 4500 NH3 D - Ammonia

Lab Sample ID: MB 440-86416/4-A
Matrix: Solid
Analysis Batch: 86440

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 86416

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	ND		10.0	2.00	mg/Kg		02/20/13 04:30	02/20/13 06:39	1

Lab Sample ID: LCS 440-86416/3-A
Matrix: Solid
Analysis Batch: 86440

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 86416

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	50.0	48.11		mg/Kg		96	85 - 115

Lab Sample ID: 440-37740-3 MS
Matrix: Solid
Analysis Batch: 86440

Client Sample ID: Arroyo Simi-FP
Prep Type: Total/NA
Prep Batch: 86416

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	4.37	J,DX	50.0	52.67		mg/Kg		97	75 - 125

Lab Sample ID: 440-37740-3 MSD
Matrix: Solid
Analysis Batch: 86440

Client Sample ID: Arroyo Simi-FP
Prep Type: Total/NA
Prep Batch: 86416

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia (as N)	4.37	J,DX	50.0	48.11		mg/Kg		87	75 - 125	9	15

GC Semi VOA

Prep Batch: 84805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-37740-3	Arroyo Simi-FP	Total/NA	Solid	3546	
440-37748-C-1-D MS	Matrix Spike	Total/NA	Solid	3546	
440-37748-C-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	
LCS 440-84805/2-A	Lab Control Sample	Total/NA	Solid	3546	
MB 440-84805/1-A	Method Blank	Total/NA	Solid	3546	

Prep Batch: 84900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-37740-3	Arroyo Simi-FP	Total/NA	Solid	3546	
LCS 440-84900/2-A	Lab Control Sample	Total/NA	Solid	3546	
MB 440-84900/1-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 85021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-37740-3	Arroyo Simi-FP	Total/NA	Solid	8082	84805
440-37748-C-1-D MS	Matrix Spike	Total/NA	Solid	8082	84805
440-37748-C-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8082	84805
LCS 440-84805/2-A	Lab Control Sample	Total/NA	Solid	8082	84805
MB 440-84805/1-A	Method Blank	Total/NA	Solid	8082	84805

Analysis Batch: 85620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-37740-3	Arroyo Simi-FP	Total/NA	Solid	8081A	84900
LCS 440-84900/2-A	Lab Control Sample	Total/NA	Solid	8081A	84900
MB 440-84900/1-A	Method Blank	Total/NA	Solid	8081A	84900

General Chemistry

Analysis Batch: 84657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-37740-3	Arroyo Simi-FP	Total/NA	Solid	Moisture	
440-37740-3 DU	Arroyo Simi-FP	Total/NA	Solid	Moisture	

Prep Batch: 86416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-37740-3	Arroyo Simi-FP	Total/NA	Solid	SM 4500 NH3 B	
440-37740-3 MS	Arroyo Simi-FP	Total/NA	Solid	SM 4500 NH3 B	
440-37740-3 MSD	Arroyo Simi-FP	Total/NA	Solid	SM 4500 NH3 B	
LCS 440-86416/3-A	Lab Control Sample	Total/NA	Solid	SM 4500 NH3 B	
MB 440-86416/4-A	Method Blank	Total/NA	Solid	SM 4500 NH3 B	

Analysis Batch: 86440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-37740-3	Arroyo Simi-FP	Total/NA	Solid	SM 4500 NH3 D	86416
440-37740-3 MS	Arroyo Simi-FP	Total/NA	Solid	SM 4500 NH3 D	86416
440-37740-3 MSD	Arroyo Simi-FP	Total/NA	Solid	SM 4500 NH3 D	86416
LCS 440-86416/3-A	Lab Control Sample	Total/NA	Solid	SM 4500 NH3 D	86416
MB 440-86416/4-A	Method Blank	Total/NA	Solid	SM 4500 NH3 D	86416

General Chemistry (Continued)

Analysis Batch: 86477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-37740-3	Arroyo Simi-FP	Total/NA	Solid	9060	
440-37740-3 MS	Arroyo Simi-FP	Total/NA	Solid	9060	
440-37740-3 MSD	Arroyo Simi-FP	Total/NA	Solid	9060	
LCS 440-86477/5	Lab Control Sample	Total/NA	Solid	9060	
MB 440-86477/6	Method Blank	Total/NA	Solid	9060	

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
PI	Primary and confirm results varied by > than 40% RPD
J,DX	Estimated value; value < lowest standard (MQL), but >than MDL
LN	MS and/or MSD below acceptance limits. See Blank Spike (LCS)
LG	LG=Surrogate recovery below the acceptance limits
BA	Relative percent difference out of control

General Chemistry

Qualifier	Qualifier Description
J,DX	Estimated value; value < lowest standard (MQL), but >than MDL

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: MWH Americas Inc
Project/Site: Annual Sediment Arroyo Simi-FP

TestAmerica Job ID: 440-37740-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-13
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	02-28-13
Hawaii	State Program	9	N/A	02-28-13
Nevada	State Program	9	CA015312007A	07-31-13
New Mexico	State Program	6	N/A	02-28-13
Northern Mariana Islands	State Program	9	MP0002	02-28-13
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

PTS Laboratories, Inc.

8100 Secura Way • Santa Fe Springs, CA 90670
Telephone (562) 347-2500 • Fax (562) 907-3610

February 26, 2013

Debby Wilson
TestAmerica
17461 Derian Avenue, Suite 100
Irvine, CA 92614-5817

Re: PTS File No: 43108
Physical Properties Data
Boeing SSFL NPDES Ann. Sediment Arroyo; 440-37740-1

Dear Ms. Wilson:

Please find enclosed report for Physical Properties analyses conducted upon the sample received from your Boeing SSFL NPDES Ann. Sediment Arroyo; 440-37740-1 project. All analyses were performed by applicable ASTM, EPA, or API methodologies. An electronic version of the report has previously been sent to your attention via the internet. The sample is currently in storage and will be retained for thirty days past completion of testing at no charge. Please note that the sample will be disposed of at that time. You may contact me regarding storage, disposal, or return of the sample.

PTS Laboratories appreciates the opportunity to be of service. If you have any questions or require additional information, please contact Morgan Richards at (562) 347-2509.

Sincerely,
PTS Laboratories

for Rachel

Michael Mark Brady, P.G.
District Manager

Encl.

PTS Laboratories

Project Name: Boeing SSFL NPDES Ann. Sediment Arroyo
Project Number: 440-37740-1

PTS File No: 43108
Client: TestAmerica

TEST PROGRAM - 20130214

CORE ID	Depth ft.	Core Recovery ft.	Grain Size Analysis ASTM D4464M				Notes
		Plugs:	Grab				
Date Received: 20130214							
Arroyo Simi-FP (440-37740-3)	N/A	N/A	X				
TOTALS:	1 jar		1				

Laboratory Test Program Notes

Contaminant identification: _____

Standard TAT for basic analysis is 10 business days.

PARTICLE SIZE SUMMARY

(METHODOLOGY: ASTM D422/D4464M)

PROJECT NAME: Boeing SSFL NPDES Ann. Sediment Arroyo
PROJECT NO: 440-37740-1

Sample ID	Depth, ft.	Mean Grain Size Description (1)	Median Grain Size mm	Particle Size Distribution, wt. percent						Silt & Clay
				Gravel	Sand Size			Silt	Clay	
					Coarse	Medium	Fine			
Arroyo Simi-FP (440-37740-3)	N/A	Fine sand	0.039	0.00	0.00	18.47	24.74	37.26	19.52	56.79

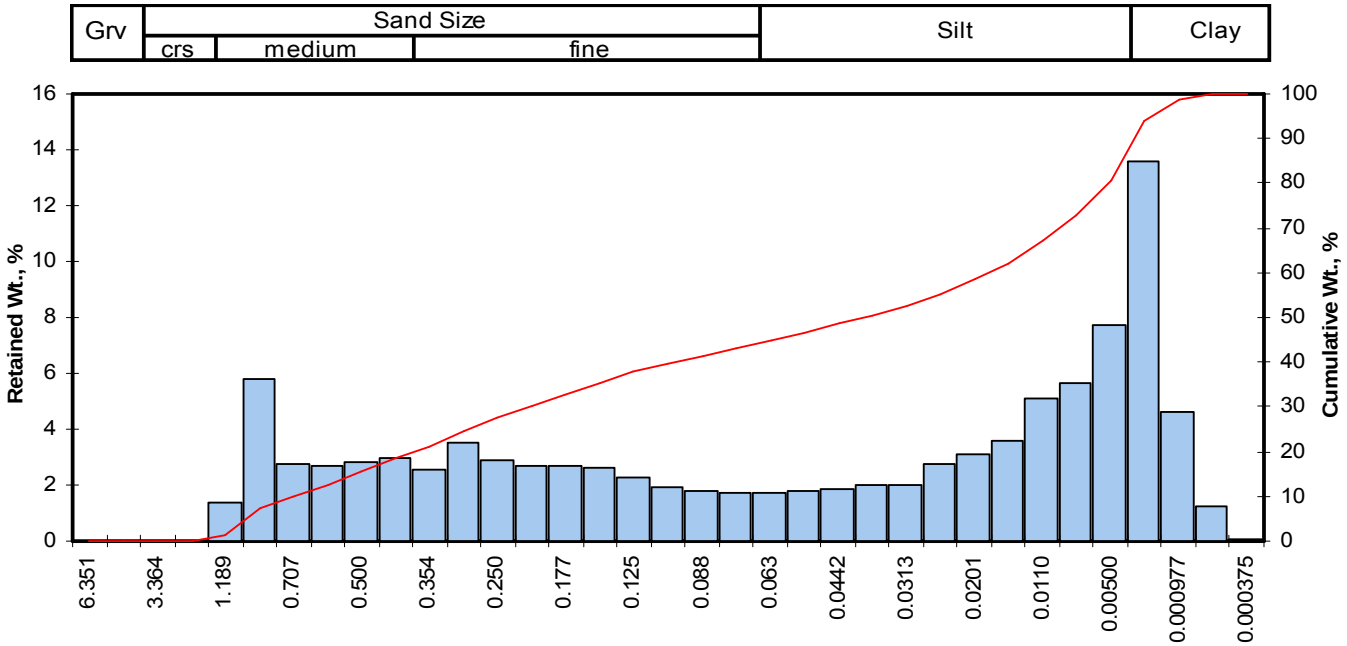
(1) Based on Mean from Trask

PTS Laboratories, Inc.

Particle Size Analysis - ASTM D4464M

Client: TestAmerica
Project: Boeing SSFL NPDES Ann. Sediment Arroyo
Project No: 440-37740-1

PTS File No: 43108
Sample ID: Arroyo Simi-FP (440-37740-3)
Depth, ft: N/A



Opening		Phi of	U.S.	Sample Weight,	Increment Weight,	Cumulative Weight,
Inches	Millimeters	Screen	No.	grams	percent	percent
0.2500	6.351	-2.67	1/4	0.00	0.00	0.00
0.1873	4.757	-2.25	4	0.00	0.00	0.00
0.1324	3.364	-1.75	6	0.00	0.00	0.00
0.0787	2.000	-1.00	10	0.00	0.00	0.00
0.0468	1.189	-0.25	16	1.40	1.40	1.40
0.0331	0.841	0.25	20	5.80	5.80	7.20
0.0278	0.707	0.50	25	2.75	2.75	9.95
0.0234	0.595	0.75	30	2.69	2.69	12.63
0.0197	0.500	1.00	35	2.85	2.85	15.48
0.0166	0.420	1.25	40	2.99	2.99	18.47
0.0139	0.354	1.50	45	2.56	2.56	21.03
0.0117	0.297	1.75	50	3.53	3.53	24.56
0.0098	0.250	2.00	60	2.87	2.87	27.43
0.0083	0.210	2.25	70	2.72	2.72	30.15
0.0070	0.177	2.50	80	2.70	2.70	32.85
0.0059	0.149	2.75	100	2.64	2.64	35.48
0.0049	0.125	3.00	120	2.31	2.31	37.79
0.0041	0.105	3.25	140	1.93	1.93	39.72
0.0035	0.088	3.50	170	1.76	1.76	41.48
0.0029	0.074	3.75	200	1.73	1.73	43.21
0.0025	0.063	4.00	230	1.73	1.73	44.94
0.0021	0.053	4.25	270	1.76	1.76	46.70
0.00174	0.0442	4.50	325	1.88	1.88	48.58
0.00146	0.0372	4.75	400	1.97	1.97	50.55
0.00123	0.0313	5.00	450	2.03	2.03	52.58
0.000986	0.0250	5.32	500	2.76	2.76	55.34
0.000790	0.0201	5.64	635	3.09	3.09	58.42
0.000615	0.0156	6.00		3.56	3.56	61.98
0.000435	0.0110	6.50		5.11	5.11	67.09
0.000308	0.00781	7.00		5.68	5.68	72.77
0.000197	0.00500	7.65		7.71	7.71	80.48
0.000077	0.00195	9.00		13.60	13.59	94.07
0.000038	0.000977	10.00		4.62	4.62	98.69
0.000019	0.000488	11.00		1.23	1.23	99.92
0.000015	0.000375	11.38		0.08	0.08	100.00
TOTALS				**100.00**	**100.00**	**100.00**

Cumulative Weight Percent greater than

Weight	Phi	Particle Size	
percent	Value	Inches	Millimeters
5	0.06	0.0378	0.959
10	0.51	0.0277	0.705
16	1.04	0.0191	0.485
25	1.79	0.0114	0.289
40	3.29	0.0040	0.102
50	4.68	0.0015	0.039
60	5.80	0.0007	0.018
75	7.19	0.0003	0.007
84	8.00	0.0002	0.004
90	8.59	0.0001	0.003
95	9.20	0.0001	0.002

Measure	Trask	Inman	Folk-Ward
Median, phi	4.68	4.68	4.68
Median, in.	0.0015	0.0015	0.0015
Median, mm	0.039	0.039	0.039
Mean, phi	2.75	4.52	4.57
Mean, in.	0.0058	0.0017	0.0017
Mean, mm	0.148	0.044	0.042
Sorting	6.494	3.477	3.123
Skewness	1.143	-0.046	-0.029
Kurtosis	0.201	0.315	0.694
Grain Size Description (ASTM-USCS Scale)		Fine sand (based on Mean from Trask)	

Description	Retained on Sieve #	Weight Percent
Gravel	4	0.00
Coarse Sand	10	0.00
Medium Sand	40	18.47
Fine Sand	200	24.74
Silt	>0.005 mm	37.26
Clay	<0.005 mm	19.52
	Total	**100**

43108

TestAmerica Irvine
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone (949) 261-1022 Fax (949) 260-3297

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Wilson, Debby	Carrier Tracking No(s):	COC No: 440-17998.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: debby.wilson@testamericainc.com		Page: Page 1 of 1
Company: PTS laboratories, Inc				Job #: 440-37740-1
Address: 8100 Secura Way, ,	Due Date Requested: 2/21/2013			
City: Santa Fe Springs	TAT Requested (days):			
State, Zip: CA, 90670				
Phone:	PO #:			
Email:	WO #:			
Project Name: Boeing SSFL NPDES Ann. Sediment Arroyo	Project #: 44002624			
Site: Boeing SSFL	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUBCONTRACT/ Particle Size	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
Arroyo Simi-FP (440-37740-3)	2/11/13	12:00 Pacific		Solid			X	1	Temp 3.4°C

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Vu Banh				02/14/13	PTS LABS
2		2/14/13 12:17	TAI			
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

3/8/2013

aquatic bioassay & consulting laboratories, inc

March 6th, 2013

Debby Wilson
TestAmerica Irvine
17461 Derian Avenue, Suite 100
Irvine, CA 92614

Dear Ms. Wilson:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms, EPA/R-95/136.* Results were as follows:

CLIENT:	TestAmerica
SAMPLE I.D.:	Arroyo Simi-FP
DATE RECEIVED:	2/12/2013
ABC LAB. NO.:	TAM0213.173

CHRONIC MYTILUS DEVELOPMENT BIOASSAY

NOEC	=	100.00 %
TUc	=	1.00
IC25	=	>100.00 %
IC50	=	>100.00 %

Yours very truly,

Scott Johnson
Laboratory Director

29 north olive ventura, ca 93001 (805) 643 5621 www.aquabio.org

CETIS Summary Report

Report Date: 06 Mar-13 13:25 (p 1 of 1)
Test Code: TAM0213.173myt | 10-1196-1863

Mussel Shell Development Test — Aquatic Bioassay & Consulting Labs, Inc.

Batch ID:	10-2452-3459	Test Type:	Development-Survival	Analyst:	
Start Date:	15 Feb-13 16:01	Protocol:	EPA/600/R-95/136 (1995)	Diluent:	Laboratory Water
Ending Date:	17 Feb-13 16:00	Species:	Mytilis galloprovincialis	Brine:	
Duration:	48h	Source:	Carlsbad Aquafarms CA	Age:	

Sample ID:	10-5562-1427	Code:	TAM0213.173m	Client:	Test America
Sample Date:	11 Feb-13 12:00	Material:	Sediment	Project:	Boeing-SSFL NPDES Ann. Sediment
Receive Date:	12 Feb-13 12:30	Source:	Bioassay Report		
Sample Age:	4d 4h	Station:	Arroyo Simi-FP		

Comparison Summary

Analysis ID	Endpoint	NOEL	LOEL	TOEL	PMSD	TU	Method
04-7857-5025	Combined Proportion Norm	100	>100	NA	5.03%	1	Equal Variance t Two-Sample Test

Point Estimate Summary

Analysis ID	Endpoint	Level	%	95% LCL	95% UCL	TU	Method
17-3750-4123	Combined Proportion Norm	EC5	>100	N/A	N/A	<1	Linear Interpolation (ICPIN)
		EC10	>100	N/A	N/A	<1	
		EC15	>100	N/A	N/A	<1	
		EC20	>100	N/A	N/A	<1	
		EC25	>100	N/A	N/A	<1	
		EC40	>100	N/A	N/A	<1	
		EC50	>100	N/A	N/A	<1	

Test Acceptability

Analysis ID	Endpoint	Attribute	Test Stat	TAC Limits	Overlap	Decision
04-7857-5025	Combined Proportion Norm	PMSD	0.05033	NL - 0.25	No	Passes Acceptability Criteria

Combined Proportion Normal Summary

C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Contro	5	0.9118	0.8685	0.9551	0.875	0.9559	0.0156	0.03488	3.83%	0.0%
100		5	0.9441	0.9025	0.9858	0.8897	0.9706	0.015	0.03353	3.55%	-3.55%

Combined Proportion Normal Detail

C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	Negative Contro	0.9559	0.9412	0.8971	0.875	0.8897
100		0.9632	0.9338	0.9706	0.8897	0.9632

Combined Proportion Normal Binomials

C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	Negative Contro	130/136	128/136	122/136	119/136	121/136
100		131/136	127/136	132/136	121/136	131/136

CETIS Analytical Report

Report Date: 06 Mar-13 13:25 (p 1 of 2)
Test Code: TAM0213.173myt | 10-1196-1863

Mussel Shell Development Test — Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:	04-7857-5025	Endpoint:	Combined Proportion Normal	CETIS Version:	CETISv1.8.6
Analyzed:	06 Mar-13 13:24	Analysis:	Parametric-Two Sample	Official Results:	Yes
Batch ID:	10-2452-3459	Test Type:	Development-Survival	Analyst:	
Start Date:	15 Feb-13 16:01	Protocol:	EPA/600/R-95/136 (1995)	Diluent:	Laboratory Water
Ending Date:	17 Feb-13 16:00	Species:	Mytilis galloprovincialis	Brine:	
Duration:	48h	Source:	Carlsbad Aquafarms CA	Age:	
Sample ID:	10-5562-1427	Code:	TAM0213.173m	Client:	Test America
Sample Date:	11 Feb-13 12:00	Material:	Sediment	Project:	Boeing-SSFL NPDES Ann. Sediment
Receive Date:	12 Feb-13 12:30	Source:	Bioassay Report		
Sample Age:	4d 4h	Station:	Arroyo Simi-FP		

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	Test Result
Angular (Corrected)	NA	C > T	NA	NA	5.03%	Passes combined proportion normal

Equal Variance t Two-Sample Test

Control	vs	C-%	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		100	-1.549	1.86	0.078	8	0.9200	CDF	Non-Significant Effect

Test Acceptability Criteria

Attribute	Test Stat	TAC Limits	Overlap	Decision
PMSD	0.05033	NL - 0.25	No	Passes Acceptability Criteria

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.01063992	0.01063992	1	2.398	0.1601	Non-Significant Effect
Error	0.03549288	0.00443661	8			
Total	0.0461328		9			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Variance Ratio F	1.12	23.15	0.9151	Equal Variances
Variances	Mod Levene Equality of Variance	0.003864	13.75	0.9525	Equal Variances
Variances	Levene Equality of Variance	0.000284	11.26	0.9870	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.9344	0.7411	0.4930	Normal Distribution
Distribution	Kolmogorov-Smirnov D	0.2298	0.3025	0.1469	Normal Distribution
Distribution	D'Agostino Skewness	0.4682	2.576	0.6397	Normal Distribution
Distribution	Anderson-Darling A2 Normality	0.4224	3.878	0.3258	Normal Distribution

Combined Proportion Normal Summary

C-%	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	5	0.9118	0.8685	0.9551	0.8971	0.875	0.9559	0.0156	3.83%	0.0%
100		5	0.9441	0.9025	0.9858	0.9632	0.8897	0.9706	0.015	3.55%	-3.55%

Angular (Corrected) Transformed Summary

C-%	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Contr	5	1.274	1.194	1.355	1.244	1.209	1.359	0.02893	5.08%	0.0%
100		5	1.339	1.254	1.424	1.378	1.232	1.398	0.03062	5.11%	-5.12%

Combined Proportion Normal Detail

C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	Negative Control	0.9559	0.9412	0.8971	0.875	0.8897
100		0.9632	0.9338	0.9706	0.8897	0.9632

Angular (Corrected) Transformed Detail

C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	Negative Control	1.359	1.326	1.244	1.209	1.232
100		1.378	1.311	1.398	1.232	1.378

Mussel Shell Development Test — Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:	04-7857-5025	Endpoint:	Combined Proportion Normal	CETIS Version:	CETISv1.8.6
Analyzed:	06 Mar-13 13:24	Analysis:	Parametric-Two Sample	Official Results:	Yes

Combined Proportion Normal Binomials

C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	Negative Contro	130/136	128/136	122/136	119/136	121/136
100		131/136	127/136	132/136	121/136	131/136

CETIS Analytical Report

Report Date: 06 Mar-13 13:25 (p 1 of 1)
Test Code: TAM0213.173myt | 10-1196-1863

Mussel Shell Development Test — Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:	17-3750-4123	Endpoint:	Combined Proportion Normal	CETIS Version:	CETISv1.8.6
Analyzed:	06 Mar-13 13:24	Analysis:	Linear Interpolation (ICPIN)	Official Results:	Yes
Batch ID:	10-2452-3459	Test Type:	Development-Survival	Analyst:	
Start Date:	15 Feb-13 16:01	Protocol:	EPA/600/R-95/136 (1995)	Diluent:	Laboratory Water
Ending Date:	17 Feb-13 16:00	Species:	Mytilis galloprovincialis	Brine:	
Duration:	48h	Source:	Carlsbad Aquafarms CA	Age:	
Sample ID:	10-5562-1427	Code:	TAM0213.173m	Client:	Test America
Sample Date:	11 Feb-13 12:00	Material:	Sediment	Project:	Boeing-SSFL NPDES Ann. Sediment
Receive Date:	12 Feb-13 12:30	Source:	Bioassay Report		
Sample Age:	4d 4h	Station:	Arroyo Simi-FP		

Linear Interpolation Options

X Transform	Y Transform	Seed	Resamples	Exp 95% CL	Method
Linear	Linear	0	280	Yes	Two-Point Interpolation

Point Estimates

Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL
EC5	>100	N/A	N/A	<1	NA	NA
EC10	>100	N/A	N/A	<1	NA	NA
EC15	>100	N/A	N/A	<1	NA	NA
EC20	>100	N/A	N/A	<1	NA	NA
EC25	>100	N/A	N/A	<1	NA	NA
EC40	>100	N/A	N/A	<1	NA	NA
EC50	>100	N/A	N/A	<1	NA	NA

Combined Proportion Normal Summary

			Calculated Variate(A/B)								
C-%	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	5	0.9118	0.875	0.9559	0.0156	0.03488	3.83%	0.0%	620	680
100		5	0.9441	0.8897	0.9706	0.015	0.03353	3.55%	-3.55%	642	680

Combined Proportion Normal Detail

C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	Negative Control	0.9559	0.9412	0.8971	0.875	0.8897
100		0.9632	0.9338	0.9706	0.8897	0.9632

Combined Proportion Normal Binomials

C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	Negative Contro	130/136	128/136	122/136	119/136	121/136
100		131/136	127/136	132/136	121/136	131/136

Mussel Shell Development Test — Aquatic Bioassay & Consulting Labs, Inc.

Batch ID:	10-2452-3459	Test Type:	Development-Survival	Analyst:	
Start Date:	15 Feb-13 16:01	Protocol:	EPA/600/R-95/136 (1995)	Diluent:	Laboratory Water
Ending Date:	17 Feb-13 16:00	Species:	Mytilis galloprovincialis	Brine:	
Duration:	48h	Source:	Carlsbad Aquafarms CA	Age:	
Sample ID:	10-5562-1427	Code:	TAM0213.173m	Client:	Test America
Sample Date:	11 Feb-13 12:00	Material:	Sediment	Project:	Boeing-SSFL NPDES Ann. Sediment
Receive Date:	12 Feb-13 12:30	Source:	Bioassay Report		
Sample Age:	4d 4h	Station:	Arroyo Simi-FP		

Dissolved Oxygen-mg/L

C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr	2	6.4	1.318	11.48	6	6.8	0.4	0.5657	8.84%	0
100		2	6.65	6.015	7.285	6.6	6.7	0.04998	0.07069	1.06%	0
Overall		4	6.525			6	6.8				0 (0%)

Total Ammonia (N)-mg/L

C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr	1	0			0	0	0	0		0
100		1	0			0	0	0	0		0
Overall		2	0			0	0				0 (0%)

pH-Units

C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr	2	7.9	7.884	7.916	7.9	7.9	0	0	0.0%	0
100		2	7.75	7.115	8.385	7.7	7.8	0.05001	0.07072	0.91%	0
Overall		4	7.825			7.7	7.9				0 (0%)

Salinity-ppt

C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr	2	34	34	34	34	34	0	0	0.0%	0
100		2	34	34	34	34	34	0	0	0.0%	0
Overall		4	34			34	34				0 (0%)

Temperature-°C

C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr	2	14.85	14.21	15.49	14.8	14.9	0.05004	0.07077	0.48%	0
100		2	14.85	14.21	15.49	14.8	14.9	0.05004	0.07077	0.48%	0
Overall		4	14.85			14.8	14.9				0 (0%)

Mussel Shell Development Test — Aquatic Bioassay & Consulting Labs, Inc.

Dissolved Oxygen-mg/L

C-%	Control Type	Reading	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	Negative Contr	1		6.8					
100				6.6					
0	Negative Contr	2		6					
100				6.7					

Total Ammonia (N)-mg/L

C-%	Control Type	Reading	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	Negative Contr	1		0					
100				0					

pH-Units

C-%	Control Type	Reading	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	Negative Contr	1		7.9					
100				7.8					
0	Negative Contr	2		7.9					
100				7.7					

Salinity-ppt

C-%	Control Type	Reading	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	Negative Contr	1		34					
100				34					
0	Negative Contr	2		34					
100				34					

Temperature-°C

C-%	Control Type	Reading	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	Negative Contr	1		14.9					
100				14.9					
0	Negative Contr	2		14.8					
100				14.8					

aquatic bioassay & consulting laboratories, inc

March 6, 2013

Debby Wilson
TestAmerica Irvine
17461 Derian Avenue, Suite 100
Irvine, CA 92614

Dear Ms. Wilson:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms, EPA/R-95/136.* Results were as follows:

CLIENT:	TestAmerica
SAMPLE I.D.:	Arroyo Simi-FP
DATE RECEIVED:	2/12/2013
ABC LAB. NO.:	TAM0213.173

CHRONIC EOHAUSTORIUS SURVIVAL BIOASSAY

NOEC	=	100.00 %
TUc	=	1.00
IC25	=	>100.00 %
IC50	=	>100.00 %

Yours very truly,

Scott Johnson
Laboratory Director

CETIS Summary Report

Report Date: 06 Mar-13 13:25 (p 1 of 1)
Test Code: TAM0213173eoh | 10-0452-0910

Eohaustorius 10-d Survival and Reburial Sediment Test — Aquatic Bioassay & Consulting Labs, Inc.

Batch ID:	21-0783-4802	Test Type:	Survival-Reburial	Analyst:	
Start Date:	15 Feb-13 16:00	Protocol:	EPA/600/R-94/025 (1994)	Diluent:	Laboratory Seawater
Ending Date:	25 Feb-13 16:00	Species:	Eohaustorius estuarius	Brine:	Not Applicable
Duration:	10d 0h	Source:	Northwestern Aquatic Science, OR	Age:	
Sample ID:	04-6419-4609	Code:	TAM0213.173e	Client:	Test America
Sample Date:	11 Feb-13 12:00	Material:	Sediment	Project:	Boeing-SSFL NPDES Ann. Sediment
Receive Date:	12 Feb-13 12:30	Source:	Bioassay Report		
Sample Age:	4d 4h	Station:	Arroyo Simi-FP		

Comparison Summary

Analysis ID	Endpoint	NOEL	LOEL	TOEL	PMSD	TU	Method
11-1117-6547	Survival Rate	100	>100	NA	7.05%	1	Equal Variance t Two-Sample Test

Point Estimate Summary

Analysis ID	Endpoint	Level	%	95% LCL	95% UCL	TU	Method
20-1271-0796	Survival Rate	EC5	>100	N/A	N/A	<1	Linear Interpolation (ICPIN)
		EC10	>100	N/A	N/A	<1	
		EC15	>100	N/A	N/A	<1	
		EC20	>100	N/A	N/A	<1	
		EC25	>100	N/A	N/A	<1	
		EC40	>100	N/A	N/A	<1	
		EC50	>100	N/A	N/A	<1	

Test Acceptability

Analysis ID	Endpoint	Attribute	Test Stat	TAC Limits	Overlap	Decision
11-1117-6547	Survival Rate	Control Resp	0.93	0.9 - NL	Yes	Passes Acceptability Criteria
20-1271-0796	Survival Rate	Control Resp	0.93	0.9 - NL	Yes	Passes Acceptability Criteria

Survival Rate Summary

C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Contro	5	0.93	0.8745	0.9855	0.9	1	0.02	0.04472	4.81%	0.0%
100		5	0.95	0.8879	1	0.9	1	0.02236	0.05	5.26%	-2.15%

Survival Rate Detail

C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	Negative Contro	1	0.9	0.9	0.95	0.9
100		0.9	1	1	0.95	0.9

Survival Rate Binomials

C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	Negative Contro	20/20	18/20	18/20	19/20	18/20
100		18/20	20/20	20/20	19/20	18/20

CETIS Analytical Report

Report Date: 06 Mar-13 13:25 (p 1 of 2)
Test Code: TAM0213173eoh | 10-0452-0910

Eohaustorius 10-d Survival and Reburial Sediment Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:	11-1117-6547	Endpoint:	Survival Rate	CETIS Version:	CETISv1.8.6
Analyzed:	06 Mar-13 13:25	Analysis:	Parametric-Two Sample	Official Results:	Yes
Batch ID:	21-0783-4802	Test Type:	Survival-Reburial	Analyst:	
Start Date:	15 Feb-13 16:00	Protocol:	EPA/600/R-94/025 (1994)	Diluent:	Laboratory Seawater
Ending Date:	25 Feb-13 16:00	Species:	Eohaustorius estuarius	Brine:	Not Applicable
Duration:	10d 0h	Source:	Northwestern Aquatic Science, OR	Age:	
Sample ID:	04-6419-4609	Code:	TAM0213.173e	Client:	Test America
Sample Date:	11 Feb-13 12:00	Material:	Sediment	Project:	Boeing-SSFL NPDES Ann. Sediment
Receive Date:	12 Feb-13 12:30	Source:	Bioassay Report		
Sample Age:	4d 4h	Station:	Arroyo Simi-FP		

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	Test Result
Angular (Corrected)	NA	C > T	NA	NA	7.05%	Passes survival rate

Equal Variance t Two-Sample Test

Control	vs	C-%	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		100	-0.6692	1.86	0.117	8	0.7389	CDF	Non-Significant Effect

Test Acceptability Criteria

Attribute	Test Stat	TAC Limits	Overlap	Decision
Control Resp	0.93	0.9 - NL	Yes	Passes Acceptability Criteria

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.004397951	0.004397951	1	0.4479	0.5222	Non-Significant Effect
Error	0.07855894	0.009819868	8			
Total	0.0829569		9			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Variance Ratio F	1.276	23.15	0.8191	Equal Variances
Variances	Mod Levene Equality of Variance	0.3205	13.75	0.5919	Equal Variances
Variances	Levene Equality of Variance	0.1837	11.26	0.6795	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.8826	0.7411	0.1399	Normal Distribution
Distribution	Kolmogorov-Smirnov D	0.2437	0.3025	0.0944	Normal Distribution
Distribution	D'Agostino Skewness	0.7303	2.576	0.4652	Normal Distribution
Distribution	Anderson-Darling A2 Normality	0.5941	3.878	0.1246	Normal Distribution

Survival Rate Summary

C-%	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	5	0.93	0.8745	0.9855	0.9	0.9	1	0.02	4.81%	0.0%
100		5	0.95	0.8879	1	0.95	0.9	1	0.02236	5.26%	-2.15%

Angular (Corrected) Transformed Summary

C-%	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Contr	5	1.31	1.195	1.426	1.249	1.249	1.459	0.04155	7.09%	0.0%
100		5	1.352	1.222	1.482	1.345	1.249	1.459	0.04692	7.76%	-3.2%

Survival Rate Detail

C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	Negative Control	1	0.9	0.9	0.95	0.9
100		0.9	1	1	0.95	0.9

Angular (Corrected) Transformed Detail

C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	Negative Control	1.459	1.249	1.249	1.345	1.249
100		1.249	1.459	1.459	1.345	1.249

Eohaustorius 10-d Survival and Reburial Sediment Test — Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:	11-1117-6547	Endpoint:	Survival Rate	CETIS Version:	CETISv1.8.6
Analyzed:	06 Mar-13 13:25	Analysis:	Parametric-Two Sample	Official Results:	Yes

Survival Rate Binomials

C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	Negative Contro	20/20	18/20	18/20	19/20	18/20
100		18/20	20/20	20/20	19/20	18/20

CETIS Analytical Report

Report Date: 06 Mar-13 13:25 (p 1 of 2)
Test Code: TAM0213173eoh | 10-0452-0910

Eohaustorius 10-d Survival and Reburial Sediment Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:	20-1271-0796	Endpoint:	Survival Rate	CETIS Version:	CETISv1.8.6
Analyzed:	06 Mar-13 13:25	Analysis:	Linear Interpolation (ICPIN)	Official Results:	Yes
Batch ID:	21-0783-4802	Test Type:	Survival-Reburial	Analyst:	
Start Date:	15 Feb-13 16:00	Protocol:	EPA/600/R-94/025 (1994)	Diluent:	Laboratory Seawater
Ending Date:	25 Feb-13 16:00	Species:	Eohaustorius estuarius	Brine:	Not Applicable
Duration:	10d 0h	Source:	Northwestern Aquatic Science, OR	Age:	
Sample ID:	04-6419-4609	Code:	TAM0213.173e	Client:	Test America
Sample Date:	11 Feb-13 12:00	Material:	Sediment	Project:	Boeing-SSFL NPDES Ann. Sediment
Receive Date:	12 Feb-13 12:30	Source:	Bioassay Report		
Sample Age:	4d 4h	Station:	Arroyo Simi-FP		

Linear Interpolation Options

X Transform	Y Transform	Seed	Resamples	Exp 95% CL	Method
Linear	Linear	0	280	Yes	Two-Point Interpolation

Test Acceptability Criteria

Attribute	Test Stat	TAC Limits	Overlap	Decision
Control Resp	0.93	0.9 - NL	Yes	Passes Acceptability Criteria

Point Estimates

Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL
EC5	>100	N/A	N/A	<1	NA	NA
EC10	>100	N/A	N/A	<1	NA	NA
EC15	>100	N/A	N/A	<1	NA	NA
EC20	>100	N/A	N/A	<1	NA	NA
EC25	>100	N/A	N/A	<1	NA	NA
EC40	>100	N/A	N/A	<1	NA	NA
EC50	>100	N/A	N/A	<1	NA	NA

Survival Rate Summary

			Calculated Variate(A/B)								
C-%	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	5	0.93	0.9	1	0.02	0.04472	4.81%	0.0%	93	100
100		5	0.95	0.9	1	0.02236	0.05	5.26%	-2.15%	95	100

Survival Rate Detail

C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	Negative Control	1	0.9	0.9	0.95	0.9
100		0.9	1	1	0.95	0.9

Survival Rate Binomials

C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	Negative Contro	20/20	18/20	18/20	19/20	18/20
100		18/20	20/20	20/20	19/20	18/20

Analysis ID: 20-1271-0796
Analyzed: 06 Mar-13 13:25

Endpoint: Survival Rate
Analysis: Linear Interpolation (ICPIN)

CETIS Version: CETISv1.8.6
Official Results: Yes

CETIS Measurement Report

Eohaustorius 10-d Survival and Reburial Sediment Test — Aquatic Bioassay & Consulting Labs, Inc.

Batch ID:	21-0783-4802	**Test Type:**	Survival-Reburial	**Analyst:**	
Start Date:	15 Feb-13 16:00	**Protocol:**	EPA/600/R-94/025 (1994)	**Diluent:**	Laboratory Seawater
Ending Date:	25 Feb-13 16:00	**Species:**	Eohaustorius estuarius	**Brine:**	Not Applicable
Duration:	10d 0h	**Source:**	Northwestern Aquatic Science, OR	**Age:**	
Sample ID:	04-6419-4609	**Code:**	TAM0213.173e	**Client:**	Test America
Sample Date:	11 Feb-13 12:00	**Material:**	Sediment	**Project:**	Boeing-SSFL NPDES Ann. Sediment
Receive Date:	12 Feb-13 12:30	**Source:**	Bioassay Report		
Sample Age:	4d 4h	**Station:**	Arroyo Simi-FP		

Dissolved Oxygen-mg/L

C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr	2	10.05	9.415	10.69	10	10.1	0.05001	0.07073	0.7%	0
100		2	10.15	9.515	10.79	10.1	10.2	0.05	0.0707	0.7%	0
Overall		4	10.1			10	10.2				0 (0%)

Total Ammonia (N)-mg/L

C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr	1	0			0	0	0	0		0
100		1	0			0	0	0	0		0
Overall		2	0			0	0				0 (0%)

pH-Units

C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr	2	7.9	7.884	7.916	7.9	7.9	0	0	0.0%	0
100		2	7.75	7.115	8.385	7.7	7.8	0.05001	0.07072	0.91%	0
Overall		4	7.825			7.7	7.9				0 (0%)

Salinity-ppt

C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr	2	34	34	34	34	34	0	0	0.0%	0
100		2	34	34	34	34	34	0	0	0.0%	0
Overall		4	34			34	34				0 (0%)

Temperature-°C

C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr	2	14.85	14.21	15.49	14.8	14.9	0.05004	0.07077	0.48%	0
100		2	14.85	14.21	15.49	14.8	14.9	0.05004	0.07077	0.48%	0
Overall		4	14.85			14.8	14.9				0 (0%)

Eohaustorius 10-d Survival and Reburial Sediment Test — Aquatic Bioassay & Consulting Labs, Inc.

Dissolved Oxygen-mg/L

C-%	Control Type	Reading	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	Negative Contr	1		10.1					
100				10.2					
0	Negative Contr	2		10					
100				10.1					

Total Ammonia (N)-mg/L

C-%	Control Type	Reading	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	Negative Contr	1		0					
100				0					

pH-Units

C-%	Control Type	Reading	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	Negative Contr	1		7.9					
100				7.8					
0	Negative Contr	2		7.9					
100				7.7					

Salinity-ppt

C-%	Control Type	Reading	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	Negative Contr	1		34					
100				34					
0	Negative Contr	2		34					
100				34					

Temperature-°C

C-%	Control Type	Reading	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	Negative Contr	1		14.9					
100				14.9					
0	Negative Contr	2		14.8					
100				14.8					

TestAmerica Irvine
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone (949) 261-1022 Fax (949) 260-3297

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

3/8/2013

Client Information (Sub Contract Lab)
Client Contact: Shipping/Receiving
Company: Aquatic Bioassay
Address: 29 North Olive Street,
City: Ventura
State, Zip: CA, 93001
Phone:
Email:
Project Name: Boeing SSFL NPDES Ann. Sediment Arroyo
Site: Boeing SSFL

Sampler:
Phone:
Lab PM: Wilson, Debby
E-Mail: debby.wilson@testamericainc.com
Carrier Tracking No(s):

Due Date Requested: 2/21/2013
TAT Requested (days):
PO #:
WO #:
Project #: 44002624
SSOW#:

COC No: 440-17951.1
Page: Page 1 of 1
Job #: 440-37740-1

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUBCONTRACT/ Bioassay-Chronic 10day eohaustorius	SUBCONTRACT/ 48-hour Bivalve Embryo toxicity	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
Arroyo Siml-FP (440-37740-3)	2/11/13	12:00 Pacific		Solid			X	X	4	sub to Aquatic Bioassay Consultants-send 4 1 liter wide mouth plastic containers

1173

Possible Hazard Identification
Unconfirmed
Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Special Instructions/QC Requirements:

Empty Kit Relinquished by: Date: Time: Method of Shipment:

	Date/Time	Company		Date/Time	Company
Relinquished by:	2-12-13 9:00		Received by:	2-12-13 9:00	
Relinquished by:	2-12-13 12:30		Received by:	2.12.13 1230	ASL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

Test America Version 7/19/2010 — CHAIN OF CUSTODY FORM

440 - 37740

Client Name/Address:	Project:
MWH-Arcadia 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Test America Contact: Debby Wilson	Boeing-SSFL NPDES Annual Sediment Arroyo Simi – Frontier Park
Project Manager: Bronwyn Kelly Sampler: A. Grodenberg, Rick Banago	Phone Number: (626) 568-6691 Fax Number: (626) 568-6515

ANALYSIS REQUIRED

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #	Chronic 10-day eohaustorius estuarius Toxicity	48-hour Bivalve Embryo toxicity (Mytilus edulis or Crassostrea gigas)	Total Ammonia	% Moisture	Particle Size Distribution	Total Organic Carbon	PCBs (8082)	Chlordane, Dieldrin, Toxaphene (8081), 4,4-DDD, 4,4-DDE, 4,4-DDT				Comments
Arroyo Simi-FP	S	1L wide mouth Plastic	4	2-11-2013 1200	4C in the Dark	1A, 1B, 1C, 1D	X	X										Keep sample in cooler in the dark until delivered to ABC Labs
Arroyo Simi-FP	S	9 oz Jar	1	↑	4 deg C	2A			X									
Arroyo Simi-FP	S	9 oz Jar	1	|	4 deg C	3A				X		X						
Arroyo Simi-FP	S	9 oz Jar	1	↓	4 deg C	4A					x							
Arroyo Simi-FP	S	9 oz Jar	1	2-11-2013 1200	4 deg C	5A							X	X				

Field readings:
Temp = 11.75°C
pH = 7.90
DO = 10.40 mg/L
Conductivity = 4.7 mS/cm
Water Velocity (ft/sec) = 1 ft/10 sec
Time of readings = 1200

Relinquished By	Date/Time:	Received By	Date/Time:
[signature]	2-11-13 12:40	[signature]	2-11-2013 12:40
[signature]	2/11/13 1:40 pm	[signature]	2/11/13
[signature]	2/11/13 15:15	[signature]	2-11-13 15:15

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

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

Data Requirements: (check)
No Level IV ____ All Level IV ____
NPDES Level IV X On Ice: ____

[signature] 2-11-13 19:20   K... 2-11-13 1920 2.9 °C

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 440-37740-1

Login Number: 37740

List Source: TestAmerica Irvine

List Number: 1

Creator: Freitag, Kevin R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	AG/RB
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX G

Section 9

Arroyo Simi-Frontier Park – March 8, 2013

MECX Data Validation Report

DATA VALIDATION REPORT

Boeing SSFL NPDES

SAMPLE DELIVERY GROUP: 440-40328-1

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:	440-40328-1
Project Manager:	B. Kelly
Matrix:	Water
QC Level:	IV
No. of Samples:	1
No. of Reanalyses/Dilutions:	0
Laboratory:	TestAmerica-Irvine

Table 1. Sample Identification

Client ID	Laboratory ID	Sub-Laboratory ID	Matrix	Collected	Method
Arroyo Simi-FP	440-40328-1	N/A	Water	3/8/2013 12:15:00 PM	1613B, 200.7, 200.7 Diss, 200.8, 200.8 Diss,218.6, 245.1, 245.1 Diss, 525.2 608, 624, 625, SM2340B, SM2540D, SM4500 CN E, SM9221E, SM9221F

II. Sample Management

No anomalies were observed regarding sample management. The samples in this SDG were received at Test-America-Irvine 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. Unpreserved aliquots of the water sample were provided for the analysis of 2-chloroethyl vinyl ether. Hexavalent chromium was not requested on the COC but was added as per electronic correspondence from K. McIlvenna of MWH. The COCs were appropriately signed and dated by field and/or laboratory personnel. As the samples were couriered to TestAmerica-Irvine, custody seals were not utilized. Custody seals were intact upon receipt at TestAmerica-Sacramento.

Data Qualifier Reference Table

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

Qualification Code Reference Table Cont.

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

III. Method Analyses

A. EPA METHOD 1613—Dioxin/Furans

Reviewed By: L. Calvin
Date Reviewed: April 11, 2013

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

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

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

    - GC Column Performance: A Windows Defining Mix (WDM) containing the first and last eluting congeners of each descriptor and isomer specificity compounds was analyzed prior to 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.

    - Initial Calibration: Initial calibration criteria were met. The initial calibration was acceptable with %RSDs ≤20% for the 15 native compounds (calibration by isotope dilution) and ≤35% for the two native and all labeled compounds (calibration by internal standard). The relative retention times and ion abundance ratios were within the Method 1613 QC limits for all standards.

    - Continuing Calibration: Calibration verification (VER) consisted of a mid-level standard (CS3) analyzed at the beginning of the analytical sequence. The VER was 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 reported detects for OCDD and OCDF. The sample detect below the reporting limit for OCDF was qualified as nondetected, “U,” at the level of contamination. The method blank result for OCDD was insufficient to qualify the sample result.

- Blank Spikes and Laboratory Control Samples: Recoveries were within the acceptance criteria.

- 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: This SDG had no identified field duplicate samples.

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

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

- Compound Quantification and Reported Detection Limits: Compound quantitation was verified by recalculating any reportable sample concentrations. The laboratory calculated and reported compound-specific detection limits. Any detects reported 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. Isomer 1,2,3,4,6,7,8-HpCDF reported as an EMPC was qualified as an estimated nondetect, "UJ." Totals for HxCDD, HxCDF, and HpCDF containing EMPC peaks were qualified as estimated, "J."

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

Reviewed By: P. Meeks
Date Reviewed: April 12, 2013

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 2007., 200.8, 245.1*, and the *National Functional Guidelines for Inorganic Data Review* (7/02).

- Holding Times: Analytical holding times, six months for ICP-MS metals and 28 days for mercury, were met.

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

- Calibration: Calibration criteria were met. Mercury initial calibration r^2 values were ≥0.995 and all initial and continuing calibration recoveries were within 90-110% for the ICP and ICP-MS metals and 85-115% for mercury. CRDL/CRI recoveries were within the control limits of 70-130%.

- Blanks: Method blanks and CCBs had no detects affecting sample results.

- Interference Check Samples: Recoveries were within 80-120%. There were no target compounds present in the ICSA solution at concentrations above their certified contamination level.

- Blank Spikes and Laboratory Control Samples: Recoveries were within method-established 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 sample in this SDG for the total analytes and the dissolved ICPMS analytes. Results are not assessed when the native concentration exceeds the spiked amount by 4× or more. The MS recoveries for total cadmium (128%) and total lead (128%) exceeded the control limit; therefore, the total cadmium and lead results in the sample were qualified as estimated, "J." The remaining applicable recoveries and all RPDs were within the method-established control limits.

- Serial Dilution: No serial dilution analyses were performed on the sample in this SDG.

- Internal Standards Performance: All sample internal standard intensities were within 70-120% of the internal standard intensities measured in the initial calibration.

- Sample Result Verification: Calculations were verified and the sample results reported on the sample result summary were verified against the raw data. No transcription errors or calculation errors were noted. 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.

  Total hardness was reported twice in the electronic data deliverable, once as Method 200.7 and once as SM2340B. The reviewer rejected, "R," the duplicate SM2340B result.

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

Following are findings associated with field QC samples:

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

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

C. EPA METHOD 608 (Low Level)—Pesticides and PCBs

Reviewed By: L. Calvin
Date Reviewed: April 11, 2013

The sample listed in Table 1 for these analyses was 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 sample was extracted within seven days of collection and analyzed within 40 days of extraction.

- Calibration: The initial calibrations had %RSDs of ≤10% or r^2 of ≥0.990 on both analytical columns. The ICVs and CCVs had %Ds within the QC limit of ≤15%, with the exception of %Ds for endrin, 4,4'-DDD, and endosulfan sulfate in the CCVs bracketing the pesticide sample analysis. Results for the %D outliers, all nondetects, were qualified as estimated, "UJ." The breakdown totals for endrin and 4,4'-DDT were ≤15%.

- Blanks: The method blanks had no confirmed target compounds detected above the MDL.

- Blank Spikes and Laboratory Control Samples: Recoveries and RPDs were within the laboratory-established QC limits.

- Surrogate Recovery: Recoveries were within the laboratory-established QC limits.

- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on the sample 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: This SDG had no identified field duplicate samples.

- Compound Identification: Compound identification was verified. Review of the sample chromatograms and retention times indicated no problems with target compound identification. The laboratory analyzed for pesticides and PCB Aroclors by Method 608.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limit was supported by the low point of the initial calibration and the laboratory MDL. 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. Any reported nondetect is valid to the reporting limit.

D. EPA METHOD 525.2—Diazinon and Chlorpyrifos

Reviewed By: L. Calvin
Date Reviewed: April 11, 2013

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Semivolatile Organics (DVP-3, Rev. 0), EPA Method 525.2*, 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 24 hours of collection and analyzed within 30 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 average RRFs were $\geq$0.05 and %RSDs $\leq$30%. The continuing calibration RRFs were $\geq$0.05 and recoveries were within the method QC limits of 70-130%.

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

- Blank Spikes and Laboratory Control Samples: The 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 the 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: This SDG had no identified field duplicate samples.

- Internal Standards Performance: The internal standard area counts and retention times were within the method control limits established by the continuing calibration standards of ±30%.

- Compound Identification: Compound identification was verified. The laboratory analyzed for chlorpyrifos and diazinon by Method 525.2. 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 calibration and the laboratory MDLs. Reported nondetects are valid to the reporting limit.

- Tentatively Identified Compounds: TICs were not reported by the laboratory for this analysis.

- System Performance: Review of the raw data indicated no problems with system performance.

E. EPA METHOD 625 (Low Level)—Semivolatile Organic Compounds (SVOCs)

Reviewed By: L. Calvin
Date Reviewed: April 11, 2013

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Semivolatile Organics (DVP-3, Rev. 0), EPA Method 625*, and the *National Functional Guidelines for Organic Data Review* (2/99).

- 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. The laboratory re-extracted the sample beyond the seven-day holding time; however, as the re-extraction analysis was not retained (see Surrogates section), no qualifications were necessary.

- GC/MS Tuning: The DFTPP tunes met the method abundance criteria. The sample was analyzed within 12 hours of the DFTPP injection time.

- Calibration: Most calibration criteria were met. The initial calibration average RRFs and the ICV and continuing calibration RRFs were ≥0.05 for all target compounds. The initial

calibration %RSDs were ≤35%, or r^2 values ≥0.995. The ICV and CCV %Ds were ≤20%, with the exception of the ICV %Ds for hexachlorocyclopentadiene, 4,6-dinitro-2-methylphenol, and benzidine, and the CCV %D for 1,2-diphenylhydrazine. Results for the %D outliers, all nondetects, were qualified as estimated, "UJ."

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

- Blank Spikes and Laboratory Control Samples: Recoveries and RPDs were within laboratory-established QC limits.

- Surrogate Recovery: Surrogate d14-terphenyl was recovered marginally below the QC limits of 50-125% at 46%. The laboratory re-extracted the sample with acceptable surrogate results; however, as the original analysis required no qualification for the single outlier, the re-extraction was performed out of holding time, and sample results were comparable, the re-extraction results were rejected, "R," in favor of the original results. Remaining recoveries were within laboratory-established QC limits.

- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on the sample in this SDG. Method accuracy and precision was 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: This SDG had no identified field duplicate samples.

- 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.

F. EPA METHOD 624 (Low Level)—Volatile Organic Compounds (VOCs)

Reviewed By: L. Calvin
Date Reviewed: April 11, 2013

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method 624*, and the *National Functional Guidelines for Organic Data Review* (10/99).

- Holding Times: Analytical holding times were met. The unpreserved aliquot of the water sample was analyzed within seven days of collection and the preserved water sample was analyzed within 14 days of collection.

- GC/MS Tuning: The BFB tunes met the method abundance criteria. The samples were analyzed within 12 hours of the BFB injection time.

- Calibration: Calibration criteria were met. The initial calibration average RRFs and the ICV and continuing calibration RRFs were ≥0.05 for all applicable target compounds. The initial calibration %RSDs were ≤35%, or r^2 values ≥0.990. The second source ICV and all applicable CCV recoveries were within the method control limits.

- Blanks: The method blanks had no target compound detects above the MDL.

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

- Surrogate Recovery: Dibromofluoromethane was recovered above the QC limits in the sample; however, as the sample had no reported detects, no qualification was necessary. Remaining recoveries were within laboratory-established QC limits.

- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on the site sample of 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:

    - Trip Blanks: This SDG had no identified trip blank sample.

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

- Field Duplicates: This SDG had no identified field duplicate samples.

- Internal Standards Performance: The internal standard retention times and area counts were within the control limits established by the continuing calibration standards: ±30 seconds for retention times, and -50%/+100% for internal standard areas.

- Compound Identification: Compound identification was verified. 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 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.

G. VARIOUS EPA METHODS—General Minerals

Reviewed By: M. Cherny
Date Reviewed: April 6, 2013

The sample listed in Table 1 for these analyses was validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for General Minerals (DVP-6, Rev. 0), EPA Method 218.6, Methods for the Examination of Water and Wastewater 2540D, 4500CN E, SM9221E, and SM9221F*, and the *National Functional Guidelines for Inorganic Data Review* (7/02).

- Holding Times: The hexavalent chromium holding time, 24 hours from collection, was exceeded by more than 3×; therefore, hexavalent chromium detected in the sample was qualified as estimated, "UJ." Analytical holding times, 14 days for cyanide and 7 days for TSS, were met. The analytical holding time for coliform is listed as immediate. As the sample was prepared within eight hours, no qualifications were required.

- Calibration: Calibration criteria were met. Initial calibration r^2 values were $\geq$0.995 for cyanide and all initial and continuing calibration recoveries were within 90-110%. Balance logs were reviewed and determined to be acceptable. Coliform control results were acceptable.

- Blanks: Method blanks and CCBs had no detects above the DL; however, the reviewer noted the method blank had a peak at the hexavalent chromium retention time. The integrated area of this peak was below the MDL.

- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits. Not applicable to coliform analysis.

- 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 sample for hexavalent chromium. Recoveries and the RPD were within laboratory-established control limits.

- 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.

Validated Sample Result Forms 440-40328-1

Analysis Method 1613B

Sample Name Arroyo Simi-FP **Matrix Type:** Water **Validation Level:** IV

Lab Sample Name: 440-40328-1 **Sample Date:** 3/8/2013 12:15:00 PM

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	0.000037	0.000050	0.0000027	ug/L	J,DX	J	DNQ
1,2,3,4,6,7,8-HpCDF	67562-39-4	ND	0.000050	0.0000015	ug/L	J,DX q	UJ	*III
1,2,3,4,7,8,9-HpCDF	55673-89-7	ND	0.000050	0.0000024	ug/L		U	
1,2,3,4,7,8-HxCDD	39227-28-6	ND	0.000050	0.0000007	ug/L		U	
1,2,3,4,7,8-HxCDF	70648-26-9	ND	0.000050	0.0000009	ug/L		U	
1,2,3,6,7,8-HxCDD	57653-85-7	0.000001	0.000050	0.0000006	ug/L	J,DX q	J	DNQ
1,2,3,6,7,8-HxCDF	57117-44-9	ND	0.000050	0.0000008	ug/L		U	
1,2,3,7,8,9-HxCDD	19408-74-3	ND	0.000050	0.0000006	ug/L		U	
1,2,3,7,8,9-HxCDF	72918-21-9	ND	0.000050	0.0000011	ug/L		U	
1,2,3,7,8-PeCDD	40321-76-4	ND	0.000050	0.0000009	ug/L		U	
1,2,3,7,8-PeCDF	57117-41-6	ND	0.000050	0.0000007	ug/L		U	
2,3,4,6,7,8-HxCDF	60851-34-5	ND	0.000050	0.0000008	ug/L		U	
2,3,4,7,8-PeCDF	57117-31-4	ND	0.000050	0.0000007	ug/L		U	
2,3,7,8-TCDD	1746-01-6	ND	0.000010	0.0000005	ug/L		U	
2,3,7,8-TCDF	51207-31-9	ND	0.000010	0.0000005	ug/L		U	
OCDD	3268-87-9	0.00030	0.00010	0.000012	ug/L	MB		
OCDF	39001-02-0	ND	0.00010	0.0000018	ug/L	J,DX MB	U	B
Total HpCDD	37871-00-4	0.000076	0.000050	0.0000027	ug/L			
Total HpCDF	38998-75-3	0.000029	0.000050	0.0000020	ug/L	J,DX q	J	DNQ, *III
Total HxCDD	34465-46-8	0.000004	0.000050	0.0000006	ug/L	J,DX q	J	DNQ, *III
Total HxCDF	55684-94-1	0.000009	0.000050	0.0000009	ug/L	J,DX q	J	DNQ, *III
Total PeCDD	36088-22-9	ND	0.000050	0.0000009	ug/L		U	
Total PeCDF	30402-15-4	0.000003	0.000050	0.0000007	ug/L	J,DX	J	DNQ
Total TCDD	41903-57-5	ND	0.000010	0.0000005	ug/L		U	
Total TCDF	30402-14-3	ND	0.000010	0.0000005	ug/L		U	

Analysis Method 200.7 Rev 4.4

Sample Name Arroyo Simi-FP **Matrix Type:** Water **Validation Level:** IV

Lab Sample Name: 440-40328-1 **Sample Date:** 3/8/2013 12:15:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Aluminum	7429-90-5	6000	50	40	ug/L			
Aluminum, Dissolved	7429-90-5	ND	50	40	ug/L		U	
Arsenic	7440-38-2	ND	10	7.0	ug/L		U	
Arsenic, Dissolved	7440-38-2	ND	10	7.0	ug/L		U	
Beryllium	7440-41-7	ND	2.0	0.90	ug/L		U	
Beryllium, Dissolved	7440-41-7	ND	2.0	0.90	ug/L		U	
Boron	7440-42-8	0.20	0.050	0.020	mg/L			
Boron, Dissolved	7440-42-8	0.22	0.050	0.020	mg/L			
Calcium	7440-70-2	58	0.10	0.050	mg/L			
Calcium, Dissolved	7440-70-2	51	0.10	0.050	mg/L			
Chromium	7440-47-3	14	5.0	2.0	ug/L			
Chromium, Dissolved	7440-47-3	ND	5.0	2.0	ug/L		U	
Hardness, as CaCO3	STL00009	210	0.33	0.17	mg/L			
Hardness, as CaCO3, Dissolved	STL00009	180	0.33	0.17	mg/L			
Iron	7439-89-6	9.3	0.040	0.015	mg/L			
Iron, Dissolved	7439-89-6	0.033	0.040	0.015	mg/L	J,DX	J	DNQ
Magnesium	7439-95-4	17	0.020	0.012	mg/L			
Magnesium, Dissolved	7439-95-4	13	0.020	0.012	mg/L			
Nickel	7440-02-0	14	10	2.0	ug/L			
Nickel, Dissolved	7440-02-0	2.7	10	2.0	ug/L	J,DX	J	DNQ
Silver	7440-22-4	ND	10	6.0	ug/L		U	
Silver, Dissolved	7440-22-4	ND	10	6.0	ug/L		U	
Vanadium	7440-62-2	28	10	3.0	ug/L			
Vanadium, Dissolved	7440-62-2	ND	10	3.0	ug/L		U	
Zinc	7440-66-6	52	20	9.0	ug/L			
Zinc, Dissolved	7440-66-6	ND	20	9.0	ug/L		U	

Analysis Method 200.8

Sample Name Arroyo Simi-FP **Matrix Type:** Water **Validation Level:** IV

Lab Sample Name: 440-40328-1 **Sample Date:** 3/8/2013 12:15:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Antimony	7440-36-0	0.87	4.0	0.60	ug/L	J,DX	J	DNQ
Antimony, Dissolved	7440-36-0	0.52	2.0	0.30	ug/L	J,DX	J	DNQ
Cadmium	7440-43-9	0.68	2.0	0.20	ug/L	J,DX	J	Q, DNQ
Cadmium, Dissolved	7440-43-9	0.11	1.0	0.10	ug/L	J,DX	J	DNQ
Copper	7440-50-8	15	4.0	1.0	ug/L	MB		
Copper, Dissolved	7440-50-8	4.3	2.0	0.50	ug/L			
Lead	7439-92-1	4.9	2.0	0.40	ug/L		J	Q
Lead, Dissolved	7439-92-1	ND	1.0	0.20	ug/L		U	
Selenium	7782-49-2	3.2	4.0	1.0	ug/L	J,DX	J	DNQ
Selenium, Dissolved	7782-49-2	2.1	2.0	0.50	ug/L			
Thallium	7440-28-0	ND	2.0	0.40	ug/L		U	
Thallium, Dissolved	7440-28-0	ND	1.0	0.20	ug/L		U	

Analysis Method 218.6

Sample Name Arroyo Simi-FP **Matrix Type:** Water **Validation Level:** IV

Lab Sample Name: 440-40328-1 **Sample Date:** 3/8/2013 12:15:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Chromium, hexavalent	18540-29-9	0.39	1.0	0.25	ug/L	J,DX BU	J	H, DNQ

Analysis Method 245.1

Sample Name Arroyo Simi-FP **Matrix Type:** Water **Validation Level:** IV

Lab Sample Name: 440-40328-1 **Sample Date:** 3/8/2013 12:15:00 PM

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	
Mercury, Dissolved	7439-97-6	ND	0.20	0.10	ug/L		U	

Analysis Method 525.2

Sample Name Arroyo Simi-FP **Matrix Type:** Water **Validation Level:** IV

Lab Sample Name: 440-40328-1 **Sample Date:** 3/8/2013 12:15:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Chlorpyrifos	2921-88-2	ND	0.96	0.077	ug/L		U	
Diazinon	333-41-5	ND	0.24	0.096	ug/L		U	

Analysis Method 608

Sample Name Arroyo Simi-FP **Matrix Type:** Water **Validation Level:** IV

Lab Sample Name: 440-40328-1 **Sample Date:** 3/8/2013 12:15:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
4,4'-DDD	72-54-8	ND	0.0047	0.0038	ug/L		UJ	C
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	0.0047	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 (technical)	57-74-9	ND	0.094	0.075	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	0.0028	ug/L		U	
Endosulfan II	33213-65-9	ND	0.0047	0.0019	ug/L		U	
Endosulfan sulfate	1031-07-8	ND	0.0094	0.0028	ug/L		UJ	C
Endrin	72-20-8	ND	0.0047	0.0019	ug/L		UJ	C
Endrin aldehyde	7421-93-4	ND	0.0094	0.0019	ug/L		U	
gamma-BHC (Lindane)	58-89-9	ND	0.0094	0.0028	ug/L		U	
Heptachlor	76-44-8	ND	0.0094	0.0028	ug/L		U	
Heptachlor epoxide	1024-57-3	ND	0.0047	0.0024	ug/L		U	
Toxaphene	8001-35-2	ND	0.47	0.24	ug/L		U	

Analysis Method 624

Sample Name Arroyo Simi-FP **Matrix Type:** Water **Validation Level:** IV

Lab Sample Name: 440-40328-1 **Sample Date:** 3/8/2013 12:15:00 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	
1,2,3-Trichloropropane	96-18-4	ND	0.50	0.40	ug/L		U	
1,2-Dibromoethane (EDB)	106-93-4	ND	0.50	0.40	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	2.0	1.8	ug/L		U	
Acrolein	107-02-8	ND	5.0	4.0	ug/L		U	
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	0.50	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	0.50	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	
Dibromochloromethane	124-48-1	ND	0.50	0.40	ug/L		U	
Diisopropyl ether	108-20-3	ND	0.50	0.25	ug/L		U	
Ethyl tert-butyl ether	637-92-3	ND	0.50	0.28	ug/L		U	
Ethylbenzene	100-41-4	ND	0.50	0.25	ug/L		U	
Methyl tert-butyl ether	1634-04-4	ND	0.50	0.32	ug/L		U	
Methylene Chloride	75-09-2	ND	1.0	0.95	ug/L		U	
Naphthalene	91-20-3	ND	0.50	0.41	ug/L		U	
Tert-amyl methyl ether	994-05-8	ND	0.50	0.33	ug/L		U	
tert-Butanol	75-65-0	ND	10	6.5	ug/L		U	
Tetrachloroethene	127-18-4	ND	0.50	0.32	ug/L		U	

Analysis Method 624

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**
Vinyl chloride	75-01-4	ND	0.50	0.40	ug/L	**U**
Xylenes, Total	1330-20-7	ND	1.0	0.90	ug/L	**U**

Analysis Method 625

Sample Name Arroyo Simi-FP **Matrix Type:** Water **Validation Level:** IV

Lab Sample Name: 440-40328-1 **Sample Date:** 3/8/2013 12:15:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,2,4-Trichlorobenzene	120-82-1	ND	0.948	0.0948	ug/L	BU	R	D
1,2,4-Trichlorobenzene	120-82-1	ND	0.948	0.0948	ug/L		U	
1,2-Dichlorobenzene	95-50-1	ND	0.474	0.0948	ug/L	BU	R	D
1,2-Dichlorobenzene	95-50-1	ND	0.474	0.0948	ug/L		U	
1,2-Diphenylhydrazine(as Azobenzene)	122-66-7	ND	0.948	0.190	ug/L	BU	R	D
1,2-Diphenylhydrazine(as Azobenzene)	122-66-7	ND	0.948	0.190	ug/L		UJ	C
1,3-Dichlorobenzene	541-73-1	ND	0.474	0.0948	ug/L		U	
1,3-Dichlorobenzene	541-73-1	ND	0.474	0.0948	ug/L	BU	R	D
1,4-Dichlorobenzene	106-46-7	ND	0.474	0.190	ug/L		U	
1,4-Dichlorobenzene	106-46-7	ND	0.474	0.190	ug/L	BU	R	D
2,4,6-Trichlorophenol	88-06-2	ND	0.948	0.0948	ug/L		U	
2,4,6-Trichlorophenol	88-06-2	ND	0.948	0.0948	ug/L	BU	R	D
2,4-Dichlorophenol	120-83-2	ND	1.90	0.190	ug/L	BU	R	D
2,4-Dichlorophenol	120-83-2	ND	1.90	0.190	ug/L		U	
2,4-Dimethylphenol	105-67-9	ND	1.90	0.284	ug/L		U	
2,4-Dimethylphenol	105-67-9	ND	1.90	0.284	ug/L	BU	R	D
2,4-Dinitrophenol	51-28-5	ND	4.74	0.853	ug/L	BU	R	D
2,4-Dinitrophenol	51-28-5	ND	4.74	0.853	ug/L		U	
2,4-Dinitrotoluene	121-14-2	ND	4.74	0.190	ug/L		U	
2,4-Dinitrotoluene	121-14-2	ND	4.74	0.190	ug/L	BU	R	D
2,6-Dinitrotoluene	606-20-2	ND	4.74	0.0948	ug/L		U	
2,6-Dinitrotoluene	606-20-2	ND	4.74	0.0948	ug/L	BU	R	D
2-Chloronaphthalene	91-58-7	ND	0.474	0.0948	ug/L	BU	R	D
2-Chloronaphthalene	91-58-7	ND	0.474	0.0948	ug/L		U	
2-Chlorophenol	95-57-8	ND	0.948	0.190	ug/L	BU	R	D
2-Chlorophenol	95-57-8	ND	0.948	0.190	ug/L		U	
2-Methylnaphthalene	91-57-6	ND	0.948	0.190	ug/L		U	
2-Methylnaphthalene	91-57-6	ND	0.948	0.190	ug/L	BU	R	D
2-Methylphenol	95-48-7	ND	1.90	0.0948	ug/L		U	
2-Methylphenol	95-48-7	ND	1.90	0.0948	ug/L	BU	R	D
2-Nitroaniline	88-74-4	ND	4.74	0.0948	ug/L	BU	R	D
2-Nitroaniline	88-74-4	ND	4.74	0.0948	ug/L		U	
2-Nitrophenol	88-75-5	ND	1.90	0.0948	ug/L		U	
2-Nitrophenol	88-75-5	ND	1.90	0.0948	ug/L	BU	R	D

Analysis Method 625

3,3'-Dichlorobenzidine	91-94-1	ND	4.74	0.474	ug/L	BU	R	D
3,3'-Dichlorobenzidine	91-94-1	ND	4.74	0.474	ug/L		U	
3-Nitroaniline	99-09-2	ND	4.74	0.948	ug/L		U	
3-Nitroaniline	99-09-2	ND	4.74	0.948	ug/L	BU	R	D
4,6-Dinitro-2-methylphenol	534-52-1	ND	4.74	0.284	ug/L	BU	R	D
4,6-Dinitro-2-methylphenol	534-52-1	ND	4.74	0.284	ug/L		UJ	C
4-Bromophenyl phenyl ether	101-55-3	ND	0.948	0.190	ug/L		U	
4-Bromophenyl phenyl ether	101-55-3	ND	0.948	0.190	ug/L	BU	R	D
4-Chloro-3-methylphenol	59-50-7	ND	1.90	0.190	ug/L	BU	R	D
4-Chloro-3-methylphenol	59-50-7	ND	1.90	0.190	ug/L		U	
4-Chloroaniline	106-47-8	ND	1.90	0.284	ug/L		U	
4-Chloroaniline	106-47-8	ND	1.90	0.284	ug/L	BU	R	D
4-Chlorophenyl phenyl ether	7005-72-3	ND	0.474	0.190	ug/L	BU	R	D
4-Chlorophenyl phenyl ether	7005-72-3	ND	0.474	0.190	ug/L		U	
4-Methylphenol	106-44-5	ND	4.74	0.190	ug/L	BU	R	D
4-Methylphenol	106-44-5	ND	4.74	0.190	ug/L		U	
4-Nitroaniline	100-01-6	ND	4.74	0.474	ug/L		U	
4-Nitroaniline	100-01-6	ND	4.74	0.474	ug/L	BU	R	D
4-Nitrophenol	100-02-7	ND	4.74	2.37	ug/L		U	
4-Nitrophenol	100-02-7	ND	4.74	2.37	ug/L	BU	R	D
Acenaphthene	83-32-9	ND	0.474	0.190	ug/L		U	
Acenaphthene	83-32-9	ND	0.474	0.190	ug/L	BU	R	D
Acenaphthylene	208-96-8	ND	0.474	0.190	ug/L	BU	R	D
Acenaphthylene	208-96-8	ND	0.474	0.190	ug/L		U	
Aniline	62-53-3	ND	9.48	0.284	ug/L		U	
Aniline	62-53-3	ND	9.48	0.284	ug/L	BU	R	D
Anthracene	120-12-7	ND	0.474	0.0948	ug/L		U	
Anthracene	120-12-7	ND	0.474	0.0948	ug/L	BU	R	D
Benzidine	92-87-5	ND	4.74	0.948	ug/L	BU	R	D
Benzidine	92-87-5	ND	4.74	0.948	ug/L		UJ	C
Benzo[a]anthracene	56-55-3	ND	4.74	0.0948	ug/L	BU	R	D
Benzo[a]anthracene	56-55-3	ND	4.74	0.0948	ug/L		U	
Benzo[a]pyrene	50-32-8	ND	1.90	0.0948	ug/L	BU	R	D
Benzo[a]pyrene	50-32-8	ND	1.90	0.0948	ug/L		U	
Benzo[b]fluoranthene	205-99-2	ND	1.90	0.0948	ug/L	BU	R	D
Benzo[b]fluoranthene	205-99-2	ND	1.90	0.0948	ug/L		U	
Benzo[g,h,i]perylene	191-24-2	ND	4.74	0.0948	ug/L	BU	R	D
Benzo[g,h,i]perylene	191-24-2	ND	4.74	0.0948	ug/L		U	
Benzo[k]fluoranthene	207-08-9	ND	0.474	0.190	ug/L	BU	R	D
Benzo[k]fluoranthene	207-08-9	ND	0.474	0.190	ug/L		U	

Analysis Method 625

Benzoic acid	65-85-0	ND	4.74	2.84	ug/L	BU	R	D
Benzoic acid	65-85-0	ND	4.74	2.84	ug/L		U	
Benzyl alcohol	100-51-6	0.131	4.74	0.0948	ug/L	J,DX BU	R	D
Benzyl alcohol	100-51-6	1.00	4.74	0.0948	ug/L	J,DX	J	DNQ
bis (2-chloroisopropyl) ether	108-60-1	ND	0.474	0.0948	ug/L	BU	R	D
bis (2-chloroisopropyl) ether	108-60-1	ND	0.474	0.0948	ug/L		U	
Bis(2-chloroethoxy)methane	111-91-1	ND	0.474	0.0948	ug/L	BU	R	D
Bis(2-chloroethoxy)methane	111-91-1	ND	0.474	0.0948	ug/L		U	
Bis(2-chloroethyl)ether	111-44-4	ND	0.474	0.0948	ug/L		U	
Bis(2-chloroethyl)ether	111-44-4	ND	0.474	0.0948	ug/L	BU	R	D
Bis(2-ethylhexyl) phthalate	117-81-7	ND	4.74	1.61	ug/L	BU	R	D
Bis(2-ethylhexyl) phthalate	117-81-7	ND	4.74	1.61	ug/L		U	
Butyl benzyl phthalate	85-68-7	ND	4.74	0.664	ug/L	BU	R	D
Butyl benzyl phthalate	85-68-7	ND	4.74	0.664	ug/L		U	
Chrysene	218-01-9	ND	0.474	0.0948	ug/L	BU	R	D
Chrysene	218-01-9	ND	0.474	0.0948	ug/L		U	
Dibenz(a,h)anthracene	53-70-3	ND	0.474	0.0948	ug/L	BU	R	D
Dibenz(a,h)anthracene	53-70-3	ND	0.474	0.0948	ug/L		U	
Dibenzofuran	132-64-9	ND	0.474	0.0948	ug/L	BU	R	D
Dibenzofuran	132-64-9	ND	0.474	0.0948	ug/L		U	
Diethyl phthalate	84-66-2	ND	0.948	0.0948	ug/L		U	
Diethyl phthalate	84-66-2	0.277	0.948	0.0948	ug/L	J,DX BU	R	D
Dimethyl phthalate	131-11-3	ND	0.474	0.190	ug/L		U	
Dimethyl phthalate	131-11-3	ND	0.474	0.190	ug/L	BU	R	D
Di-n-butyl phthalate	84-74-2	ND	1.90	0.284	ug/L	BU	R	D
Di-n-butyl phthalate	84-74-2	ND	1.90	0.284	ug/L		U	
Di-n-octyl phthalate	117-84-0	0.602	4.74	0.190	ug/L	J,DX	J	DNQ
Di-n-octyl phthalate	117-84-0	ND	4.74	0.190	ug/L	BU	R	D
Fluoranthene	206-44-0	ND	0.474	0.0948	ug/L	BU	R	D
Fluoranthene	206-44-0	ND	0.474	0.0948	ug/L		U	
Fluorene	86-73-7	ND	0.474	0.0948	ug/L	BU	R	D
Fluorene	86-73-7	ND	0.474	0.0948	ug/L		U	
Hexachlorobenzene	118-74-1	ND	0.948	0.0948	ug/L	BU	R	D
Hexachlorobenzene	118-74-1	ND	0.948	0.0948	ug/L		U	
Hexachlorobutadiene	87-68-3	ND	1.90	0.190	ug/L	BU	R	D
Hexachlorobutadiene	87-68-3	ND	1.90	0.190	ug/L		U	
Hexachlorocyclopentadiene	77-47-4	ND	4.74	0.0948	ug/L		UJ	C
Hexachlorocyclopentadiene	77-47-4	ND	4.74	0.0948	ug/L	BU	R	D
Hexachloroethane	67-72-1	ND	2.84	0.190	ug/L	BU	R	D
Hexachloroethane	67-72-1	ND	2.84	0.190	ug/L		U	

Analysis Method 625

Indeno[1,2,3-cd]pyrene	193-39-5	ND	1.90	0.0948	ug/L	BU	R	D
Indeno[1,2,3-cd]pyrene	193-39-5	ND	1.90	0.0948	ug/L		U	
Isophorone	78-59-1	ND	0.948	0.0948	ug/L	BU	R	D
Isophorone	78-59-1	ND	0.948	0.0948	ug/L		U	
Naphthalene	91-20-3	ND	0.948	0.0948	ug/L	BU	R	D
Naphthalene	91-20-3	ND	0.948	0.0948	ug/L		U	
Nitrobenzene	98-95-3	ND	0.948	0.0948	ug/L	BU	R	D
Nitrobenzene	98-95-3	ND	0.948	0.0948	ug/L		U	
N-Nitrosodimethylamine	62-75-9	ND	1.90	0.0948	ug/L	BU	R	D
N-Nitrosodimethylamine	62-75-9	ND	1.90	0.0948	ug/L		U	
N-Nitrosodi-n-propylamine	621-64-7	ND	1.90	0.0948	ug/L	BU	R	D
N-Nitrosodi-n-propylamine	621-64-7	ND	1.90	0.0948	ug/L		U	
N-Nitrosodiphenylamine	86-30-6	ND	0.948	0.0948	ug/L	BU	R	D
N-Nitrosodiphenylamine	86-30-6	ND	0.948	0.0948	ug/L		U	
Pentachlorophenol	87-86-5	ND	1.90	0.379	ug/L		U	
Pentachlorophenol	87-86-5	ND	1.90	0.379	ug/L	BU	R	D
Phenanthrene	85-01-8	ND	0.474	0.0948	ug/L		U	
Phenanthrene	85-01-8	ND	0.474	0.0948	ug/L	BU	R	D
Phenol	108-95-2	ND	0.948	0.284	ug/L		U	
Phenol	108-95-2	ND	0.948	0.284	ug/L	BU	R	D
Pyrene	129-00-0	ND	0.474	0.0948	ug/L		U	
Pyrene	129-00-0	ND	0.474	0.0948	ug/L	BU	R	D

Analysis Method SM 2340B

Sample Name Arroyo Simi-FP **Matrix Type:** Water **Validation Level:** IV

Lab Sample Name: 440-40328-1 **Sample Date:** 3/8/2013 12:15:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Hardness, as CaCO3	STL00009	210	0.33	0.17	mg/L		R	D

Analysis Method SM 2540D

Sample Name Arroyo Simi-FP **Matrix Type:** Water **Validation Level:** IV

Lab Sample Name: 440-40328-1 **Sample Date:** 3/8/2013 12:15:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Total Suspended Solids	STL00161	310	20	20	mg/L			

Analysis Method SM 4500 CN E

Sample Name Arroyo Simi-FP **Matrix Type:** Water **Validation Level:** IV

Lab Sample Name: 440-40328-1 **Sample Date:** 3/8/2013 12:15:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Cyanide, Total	57-12-5	ND	5.0	3.0	ug/L		U	

Analysis Method SM 9221E

Sample Name Arroyo Simi-FP **Matrix Type:** Water **Validation Level:** IV

Lab Sample Name: 440-40328-1 **Sample Date:** 3/8/2013 12:15:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Coliform, Fecal	STL00002	>=1600			MPN/10			

Analysis Method SM 9221F

Sample Name Arroyo Simi-FP **Matrix Type:** Water **Validation Level:** IV

Lab Sample Name: 440-40328-1 **Sample Date:** 3/8/2013 12:15:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Escherichia coli	68586-22	>=1600	2.0	2.0	MPN/10			

APPENDIX G

Section 10

Arroyo Simi-Frontier Park – March 8, 2013

Test America Analytical Laboratory Report

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-40328-1

Client Project/Site: Boeing SSFL NPDES Annual Arroyo Simi-Fro

For:

MWH Americas Inc
618 Michillinda Avenue, Suite 200
Arcadia, California 91007

Attn: Bronwyn Kelly

Debby Wilson

Authorized for release by:
4/3/2013 7:57:10 AM

Debby Wilson
Project Manager I
debby.wilson@testamericainc.com

I certify under penalty of perjury that the information contained in this report and all attachments was produced in accordance with the indicated methods and laboratory standard operating procedures, except as noted, and are complete and accurate to the best of my knowledge and belief. Subcontract laboratory reports that are attached have been evaluated for completeness and quality control acceptability.

Debby Wilson

Debby Wilson
Project Manager I
4/3/2013 7:57:10 AM

Table of Contents

Sample Summary

Client: MWH Americas Inc
Project/Site: Boeing SSFL NPDES Annual Arroyo Simi-Fro

TestAmerica Job ID: 440-40328-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-40328-1	Arroyo Simi-FP	Water	03/08/13 12:15	03/08/13 16:45

Job ID: 440-40328-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-40328-1

Comments
No additional comments. Hexavalent chromium analysis was added in by client after holding time had expired.

Receipt
The sample was received on 3/8/2013 4:45 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.9º C.

GC/MS VOA
Method(s) 624: Surrogate recovery for the following sample(s) was outside the upper control limit: Arroyo Simi-FP (440-40328-1). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 525.2: The matrix spike (MS) recovery associated with batch 90585 were outside control limits for Diazinon: (440-39233-6 MS). Matrix interference is suspected.

Method(s) 525.2: The surrogate recovery for the blank associated with batch 90585 was outside recovery limits. All associated sample surrogates fell within acceptance criteria; therefore, the data have been reported.

Method(s) 625: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 91160. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Method(s) 625: Surrogate recovery of Terphenyl d-14 for the following sample was below control limits: Arroyo Simi-FP (440-40328-1). Matrix interference was suspected. Sample was re-extracted after the method holding time had expired to confirm matrix interference however the Terphynyl d-14 had acceptable recovery. Both results are included and qualified appropriately.

Method(s) 625: The continuing calibration verification (CCV) for 1,2-diphenylhydrazine and n-octadecane associated with batch 92112 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 625: The matrix spike (MS) recoveries associated with batch 94270 were outside control limits: (440-41729-3 MS), (440-41729-3 MSD). Matrix interference is suspected. The associated laboratory control sample (LCS) recovery met acceptance criteria. The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 94270 was outside control limits

Method(s) 625: The continuing calibration verification (CCV) for bis(2-ethylhexyl)phthalate, butylbenzylphthalate, and pyrene associated with batch 94968 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No other analytical or quality issues were noted.

No other analytical or quality issues were noted.

HPLC
Method(s) 218.6: The following sample(s) was prepared and/or analyzed outside the method defined holding time because the request for the test was made after the holding time for the sample expired : Arroyo Simi-FP (440-40328-1).

No other analytical or quality issues were noted.

GC Semi VOA
No analytical or quality issues were noted.

Job ID: 440-40328-1 (Continued)

Laboratory: TestAmerica Irvine (Continued)

Dioxin
Method(s) 1613B: Ion abundance ratios are outside criteria for the following samples and for the MB: (MB 320-12332/1-A), Arroyo Simi-FP (440-40328-1). Quantitation is based on the theoretical ion abundance ratio; therefore, these analytes have been reported as an estimated maximum possible concentration (EMPC). The affected analytes have been flagged.

No other analytical or quality issues were noted.

Metals
Method(s) 200.7 Rev 4.4: The matrix spike / matrix spike duplicate (MS/MSD) precision for aluminum and iron in batch 440-92737 was outside control limits.

Method(s) 200.8: The following sample(s) was diluted due to the nature of the sample matrix: Arroyo Simi-FP (440-40328-1). Elevated reporting limits (RLs) are provided.

Method(s) 200.8: The matrix spike / matrix spike duplicate (MS/MSD) percent recoveries for batch 440-92787 were outside control limits for Zn due to matrix interferences.

No other analytical or quality issues were noted.

General Chemistry
No analytical or quality issues were noted.

Biology
No analytical or quality issues were noted.

Subcontract non-Sister
No analytical or quality issues were noted.

Organic Prep
Method(s) 3520C, 625: The following sample(s) was prepared outside of preparation holding time: Arroyo Simi-FP (440-40328-1).No analytical or quality issues were noted.

Dioxin Prep
No analytical or quality issues were noted.

Client: MWH Americas Inc
Project/Site: Boeing SSFL NPDES Annual Arroyo Simi-Fro

TestAmerica Job ID: 440-40328-1

Client Sample ID: Arroyo Simi-FP
Date Collected: 03/08/13 12:15
Date Received: 03/08/13 16:45

Lab Sample ID: 440-40328-1
Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	0.30	ug/L			03/19/13 00:21	1
2-Chloroethyl vinyl ether	ND		2.0	1.8	ug/L			03/10/13 16:47	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.30	ug/L			03/19/13 00:21	1
Acrolein	ND		5.0	4.0	ug/L			03/10/13 16:47	1
1,1,2-Trichloroethane	ND		0.50	0.30	ug/L			03/19/13 00:21	1
Acrylonitrile	ND		2.0	1.2	ug/L			03/10/13 16:47	1
1,1-Dichloroethane	ND		0.50	0.40	ug/L			03/19/13 00:21	1
1,1-Dichloroethene	ND		0.50	0.42	ug/L			03/19/13 00:21	1
1,2-Dichlorobenzene	ND		0.50	0.32	ug/L			03/19/13 00:21	1
1,2-Dichloroethane	ND		0.50	0.28	ug/L			03/19/13 00:21	1
1,2-Dichloropropane	ND		0.50	0.35	ug/L			03/19/13 00:21	1
1,3-Dichlorobenzene	ND		0.50	0.35	ug/L			03/19/13 00:21	1
1,2,3-Trichloropropane	ND		0.50	0.40	ug/L			03/19/13 00:21	1
1,4-Dichlorobenzene	ND		0.50	0.37	ug/L			03/19/13 00:21	1
Benzene	ND		0.50	0.28	ug/L			03/19/13 00:21	1
Bromoform	ND		0.50	0.40	ug/L			03/19/13 00:21	1
Bromomethane	ND		0.50	0.42	ug/L			03/19/13 00:21	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/19/13 00:21	1
Chlorobenzene	ND		0.50	0.36	ug/L			03/19/13 00:21	1
Dibromochloromethane	ND		0.50	0.40	ug/L			03/19/13 00:21	1
Chloroethane	ND		0.50	0.40	ug/L			03/19/13 00:21	1
Chloroform	ND		0.50	0.33	ug/L			03/19/13 00:21	1
Chloromethane	ND		0.50	0.40	ug/L			03/19/13 00:21	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/19/13 00:21	1
Bromodichloromethane	ND		0.50	0.30	ug/L			03/19/13 00:21	1
Ethylbenzene	ND		0.50	0.25	ug/L			03/19/13 00:21	1
Methylene Chloride	ND		1.0	0.95	ug/L			03/19/13 00:21	1
Tetrachloroethene	ND		0.50	0.32	ug/L			03/19/13 00:21	1
Toluene	ND		0.50	0.36	ug/L			03/19/13 00:21	1
trans-1,2-Dichloroethene	ND		0.50	0.30	ug/L			03/19/13 00:21	1
tert-Butanol	ND		10	6.5	ug/L			03/19/13 00:21	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/19/13 00:21	1
Trichlorofluoromethane	ND		0.50	0.34	ug/L			03/19/13 00:21	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/19/13 00:21	1
Trichloroethene	ND		0.50	0.26	ug/L			03/19/13 00:21	1
cis-1,2-Dichloroethene	ND		0.50	0.32	ug/L			03/19/13 00:21	1
1,2-Dibromoethane (EDB)	ND		0.50	0.40	ug/L			03/19/13 00:21	1
Diisopropyl ether	ND		0.50	0.25	ug/L			03/19/13 00:21	1
Methyl tert-butyl ether	ND		0.50	0.32	ug/L			03/19/13 00:21	1
Naphthalene	ND		0.50	0.41	ug/L			03/19/13 00:21	1
Tert-amyl methyl ether	ND		0.50	0.33	ug/L			03/19/13 00:21	1
Ethyl tert-butyl ether	ND		0.50	0.28	ug/L			03/19/13 00:21	1
Xylenes, Total	ND		1.0	0.90	ug/L			03/19/13 00:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*80 - 120*		*03/10/13 16:47*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*03/10/13 16:47*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*03/19/13 00:21*	*1*
Dibromofluoromethane (Surr)	*121*	*LH*	*80 - 120*		*03/19/13 00:21*	*1*

Client Sample ID: Arroyo Simi-FP
Date Collected: 03/08/13 12:15
Date Received: 03/08/13 16:45

Lab Sample ID: 440-40328-1
Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*110*		*80 - 120*		*03/19/13 00:21*	*1*

Method: 525.2 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorpyrifos	ND		0.96	0.077	ug/L		03/09/13 07:08	03/12/13 19:02	1
Diazinon	ND		0.24	0.096	ug/L		03/09/13 07:08	03/12/13 19:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,3-Dimethyl-2-nitrobenzene	*109*		*70 - 130*	*03/09/13 07:08*	*03/12/13 19:02*	*1*
Perylene-d12	*94*		*70 - 130*	*03/09/13 07:08*	*03/12/13 19:02*	*1*
Triphenylphosphate	*124*		*70 - 130*	*03/09/13 07:08*	*03/12/13 19:02*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.474	0.190	ug/L		03/12/13 13:52	03/16/13 09:30	1
Acenaphthylene	ND		0.474	0.190	ug/L		03/12/13 13:52	03/16/13 09:30	1
Aniline	ND		9.48	0.284	ug/L		03/12/13 13:52	03/16/13 09:30	1
Anthracene	ND		0.474	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
Benzidine	ND		4.74	0.948	ug/L		03/12/13 13:52	03/16/13 09:30	1
Benzo[a]anthracene	ND		4.74	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
Benzo[b]fluoranthene	ND		1.90	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
Benzo[k]fluoranthene	ND		0.474	0.190	ug/L		03/12/13 13:52	03/16/13 09:30	1
Benzoic acid	ND		4.74	2.84	ug/L		03/12/13 13:52	03/16/13 09:30	1
Benzo[a]pyrene	ND		1.90	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
Bis(2-chloroethoxy)methane	ND		0.474	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
Bis(2-chloroethyl)ether	ND		0.474	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
Bis(2-ethylhexyl) phthalate	ND		4.74	1.61	ug/L		03/12/13 13:52	03/16/13 09:30	1
4-Bromophenyl phenyl ether	ND		0.948	0.190	ug/L		03/12/13 13:52	03/16/13 09:30	1
Butyl benzyl phthalate	ND		4.74	0.664	ug/L		03/12/13 13:52	03/16/13 09:30	1
4-Chloro-3-methylphenol	ND		1.90	0.190	ug/L		03/12/13 13:52	03/16/13 09:30	1
2-Chloronaphthalene	ND		0.474	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
2-Chlorophenol	ND		0.948	0.190	ug/L		03/12/13 13:52	03/16/13 09:30	1
4-Chlorophenyl phenyl ether	ND		0.474	0.190	ug/L		03/12/13 13:52	03/16/13 09:30	1
Chrysene	ND		0.474	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
Dibenz(a,h)anthracene	ND		0.474	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
Di-n-butyl phthalate	ND		1.90	0.284	ug/L		03/12/13 13:52	03/16/13 09:30	1
1,2-Dichlorobenzene	ND		0.474	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
1,3-Dichlorobenzene	ND		0.474	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
1,4-Dichlorobenzene	ND		0.474	0.190	ug/L		03/12/13 13:52	03/16/13 09:30	1
3,3'-Dichlorobenzidine	ND		4.74	0.474	ug/L		03/12/13 13:52	03/16/13 09:30	1
2,4-Dichlorophenol	ND		1.90	0.190	ug/L		03/12/13 13:52	03/16/13 09:30	1
Diethyl phthalate	ND		0.948	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
2,4-Dimethylphenol	ND		1.90	0.284	ug/L		03/12/13 13:52	03/16/13 09:30	1
Dimethyl phthalate	ND		0.474	0.190	ug/L		03/12/13 13:52	03/16/13 09:30	1
4,6-Dinitro-2-methylphenol	ND		4.74	0.284	ug/L		03/12/13 13:52	03/16/13 09:30	1
2,4-Dinitrophenol	ND		4.74	0.853	ug/L		03/12/13 13:52	03/16/13 09:30	1
2,4-Dinitrotoluene	ND		4.74	0.190	ug/L		03/12/13 13:52	03/16/13 09:30	1
2,6-Dinitrotoluene	ND		4.74	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
Di-n-octyl phthalate	**0.602**	**J,DX**	4.74	0.190	ug/L		03/12/13 13:52	03/16/13 09:30	1

Client Sample ID: Arroyo Simi-FP
Date Collected: 03/08/13 12:15
Date Received: 03/08/13 16:45

Lab Sample ID: 440-40328-1
Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.948	0.190	ug/L		03/12/13 13:52	03/16/13 09:30	1
Fluoranthene	ND		0.474	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
Fluorene	ND		0.474	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
Hexachlorobenzene	ND		0.948	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
Hexachlorobutadiene	ND		1.90	0.190	ug/L		03/12/13 13:52	03/16/13 09:30	1
Hexachloroethane	ND		2.84	0.190	ug/L		03/12/13 13:52	03/16/13 09:30	1
Hexachlorocyclopentadiene	ND		4.74	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
Indeno[1,2,3-cd]pyrene	ND		1.90	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
Isophorone	ND		0.948	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
4-Methylphenol	ND		4.74	0.190	ug/L		03/12/13 13:52	03/16/13 09:30	1
Naphthalene	ND		0.948	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
Nitrobenzene	ND		0.948	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
2-Nitrophenol	ND		1.90	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
4-Nitrophenol	ND		4.74	2.37	ug/L		03/12/13 13:52	03/16/13 09:30	1
N-Nitrosodimethylamine	ND		1.90	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
N-Nitrosodiphenylamine	ND		0.948	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
N-Nitrosodi-n-propylamine	ND		1.90	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
Pentachlorophenol	ND		1.90	0.379	ug/L		03/12/13 13:52	03/16/13 09:30	1
Phenanthrene	ND		0.474	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
Phenol	ND		0.948	0.284	ug/L		03/12/13 13:52	03/16/13 09:30	1
Pyrene	ND		0.474	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
1,2,4-Trichlorobenzene	ND		0.948	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
2,4,6-Trichlorophenol	ND		0.948	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
2-Methylphenol	ND		1.90	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
4-Chloroaniline	ND		1.90	0.284	ug/L		03/12/13 13:52	03/16/13 09:30	1
2-Methylnaphthalene	ND		0.948	0.190	ug/L		03/12/13 13:52	03/16/13 09:30	1
2-Nitroaniline	ND		4.74	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
3-Nitroaniline	ND		4.74	0.948	ug/L		03/12/13 13:52	03/16/13 09:30	1
Dibenzofuran	ND		0.474	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
4-Nitroaniline	ND		4.74	0.474	ug/L		03/12/13 13:52	03/16/13 09:30	1
Benzo[g,h,i]perylene	ND		4.74	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
Benzyl alcohol	**1.00**	**J,DX**	4.74	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1
bis (2-chloroisopropyl) ether	ND		0.474	0.0948	ug/L		03/12/13 13:52	03/16/13 09:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*50 - 120*	*03/12/13 13:52*	*03/16/13 09:30*	*1*
2-Fluorophenol	*70*		*30 - 120*	*03/12/13 13:52*	*03/16/13 09:30*	*1*
2,4,6-Tribromophenol	*107*		*40 - 120*	*03/12/13 13:52*	*03/16/13 09:30*	*1*
Nitrobenzene-d5	*82*		*45 - 120*	*03/12/13 13:52*	*03/16/13 09:30*	*1*
Terphenyl-d14	*46*	*LG*	*50 - 125*	*03/12/13 13:52*	*03/16/13 09:30*	*1*
Phenol-d6	*78*		*35 - 120*	*03/12/13 13:52*	*03/16/13 09:30*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	BU	0.474	0.190	ug/L		03/26/13 12:03	03/28/13 22:54	1
Acenaphthylene	ND	BU	0.474	0.190	ug/L		03/26/13 12:03	03/28/13 22:54	1
Aniline	ND	BU	9.48	0.284	ug/L		03/26/13 12:03	03/28/13 22:54	1
Anthracene	ND	BU	0.474	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
Benzidine	ND	BU	4.74	0.948	ug/L		03/26/13 12:03	03/28/13 22:54	1

Client: MWH Americas Inc
Project/Site: Boeing SSFL NPDES Annual Arroyo Simi-Fro

TestAmerica Job ID: 440-40328-1

Client Sample ID: Arroyo Simi-FP
Date Collected: 03/08/13 12:15
Date Received: 03/08/13 16:45

Lab Sample ID: 440-40328-1
Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND	BU	4.74	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
Benzo[b]fluoranthene	ND	BU	1.90	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
Benzo[k]fluoranthene	ND	BU	0.474	0.190	ug/L		03/26/13 12:03	03/28/13 22:54	1
Benzoic acid	ND	BU	4.74	2.84	ug/L		03/26/13 12:03	03/28/13 22:54	1
Benzo[a]pyrene	ND	BU	1.90	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
Bis(2-chloroethoxy)methane	ND	BU	0.474	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
Bis(2-chloroethyl)ether	ND	BU	0.474	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
Bis(2-ethylhexyl) phthalate	ND	BU	4.74	1.61	ug/L		03/26/13 12:03	03/28/13 22:54	1
4-Bromophenyl phenyl ether	ND	BU	0.948	0.190	ug/L		03/26/13 12:03	03/28/13 22:54	1
Butyl benzyl phthalate	ND	BU	4.74	0.664	ug/L		03/26/13 12:03	03/28/13 22:54	1
4-Chloro-3-methylphenol	ND	BU	1.90	0.190	ug/L		03/26/13 12:03	03/28/13 22:54	1
2-Chloronaphthalene	ND	BU	0.474	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
2-Chlorophenol	ND	BU	0.948	0.190	ug/L		03/26/13 12:03	03/28/13 22:54	1
4-Chlorophenyl phenyl ether	ND	BU	0.474	0.190	ug/L		03/26/13 12:03	03/28/13 22:54	1
Chrysene	ND	BU	0.474	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
Dibenz(a,h)anthracene	ND	BU	0.474	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
Di-n-butyl phthalate	ND	BU	1.90	0.284	ug/L		03/26/13 12:03	03/28/13 22:54	1
1,2-Dichlorobenzene	ND	BU	0.474	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
1,3-Dichlorobenzene	ND	BU	0.474	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
1,4-Dichlorobenzene	ND	BU	0.474	0.190	ug/L		03/26/13 12:03	03/28/13 22:54	1
3,3'-Dichlorobenzidine	ND	BU	4.74	0.474	ug/L		03/26/13 12:03	03/28/13 22:54	1
2,4-Dichlorophenol	ND	BU	1.90	0.190	ug/L		03/26/13 12:03	03/28/13 22:54	1
Diethyl phthalate	**0.277**	**J,DX BU**	0.948	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
2,4-Dimethylphenol	ND	BU	1.90	0.284	ug/L		03/26/13 12:03	03/28/13 22:54	1
Dimethyl phthalate	ND	BU	0.474	0.190	ug/L		03/26/13 12:03	03/28/13 22:54	1
4,6-Dinitro-2-methylphenol	ND	BU	4.74	0.284	ug/L		03/26/13 12:03	03/28/13 22:54	1
2,4-Dinitrophenol	ND	BU	4.74	0.853	ug/L		03/26/13 12:03	03/28/13 22:54	1
2,4-Dinitrotoluene	ND	BU	4.74	0.190	ug/L		03/26/13 12:03	03/28/13 22:54	1
2,6-Dinitrotoluene	ND	BU	4.74	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
Di-n-octyl phthalate	ND	BU	4.74	0.190	ug/L		03/26/13 12:03	03/28/13 22:54	1
1,2-Diphenylhydrazine(as Azobenzene)	ND	BU	0.948	0.190	ug/L		03/26/13 12:03	03/28/13 22:54	1
Fluoranthene	ND	BU	0.474	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
Fluorene	ND	BU	0.474	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
Hexachlorobenzene	ND	BU	0.948	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
Hexachlorobutadiene	ND	BU	1.90	0.190	ug/L		03/26/13 12:03	03/28/13 22:54	1
Hexachloroethane	ND	BU	2.84	0.190	ug/L		03/26/13 12:03	03/28/13 22:54	1
Hexachlorocyclopentadiene	ND	BU	4.74	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
Indeno[1,2,3-cd]pyrene	ND	BU	1.90	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
Isophorone	ND	BU	0.948	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
4-Methylphenol	ND	BU	4.74	0.190	ug/L		03/26/13 12:03	03/28/13 22:54	1
Naphthalene	ND	BU	0.948	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
Nitrobenzene	ND	BU	0.948	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
2-Nitrophenol	ND	BU	1.90	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
4-Nitrophenol	ND	BU	4.74	2.37	ug/L		03/26/13 12:03	03/28/13 22:54	1
N-Nitrosodimethylamine	ND	BU	1.90	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
N-Nitrosodiphenylamine	ND	BU	0.948	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
N-Nitrosodi-n-propylamine	ND	BU	1.90	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
Pentachlorophenol	ND	BU	1.90	0.379	ug/L		03/26/13 12:03	03/28/13 22:54	1
Phenanthrene	ND	BU	0.474	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1

Client Sample ID: Arroyo Simi-FP
Date Collected: 03/08/13 12:15
Date Received: 03/08/13 16:45

Lab Sample ID: 440-40328-1
Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND	BU	0.948	0.284	ug/L		03/26/13 12:03	03/28/13 22:54	1
Pyrene	ND	BU	0.474	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
1,2,4-Trichlorobenzene	ND	BU	0.948	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
2,4,6-Trichlorophenol	ND	BU	0.948	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
2-Methylphenol	ND	BU	1.90	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
4-Chloroaniline	ND	BU	1.90	0.284	ug/L		03/26/13 12:03	03/28/13 22:54	1
2-Methylnaphthalene	ND	BU	0.948	0.190	ug/L		03/26/13 12:03	03/28/13 22:54	1
2-Nitroaniline	ND	BU	4.74	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
3-Nitroaniline	ND	BU	4.74	0.948	ug/L		03/26/13 12:03	03/28/13 22:54	1
Dibenzofuran	ND	BU	0.474	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
4-Nitroaniline	ND	BU	4.74	0.474	ug/L		03/26/13 12:03	03/28/13 22:54	1
Benzo[g,h,i]perylene	ND	BU	4.74	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
Benzyl alcohol	**0.131**	**J,DX BU**	4.74	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1
bis (2-chloroisopropyl) ether	ND	BU	0.474	0.0948	ug/L		03/26/13 12:03	03/28/13 22:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*50 - 120*	*03/26/13 12:03*	*03/28/13 22:54*	*1*
2-Fluorophenol	*70*		*30 - 120*	*03/26/13 12:03*	*03/28/13 22:54*	*1*
2,4,6-Tribromophenol	*104*		*40 - 120*	*03/26/13 12:03*	*03/28/13 22:54*	*1*
Nitrobenzene-d5	*88*		*45 - 120*	*03/26/13 12:03*	*03/28/13 22:54*	*1*
Terphenyl-d14	*65*		*50 - 125*	*03/26/13 12:03*	*03/28/13 22:54*	*1*
Phenol-d6	*74*		*35 - 120*	*03/26/13 12:03*	*03/28/13 22:54*	*1*

Method: 608 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.094	0.075	ug/L		03/10/13 12:49	03/12/13 19:22	1
Dieldrin	ND		0.0047	0.0019	ug/L		03/10/13 12:49	03/12/13 19:22	1
Toxaphene	ND		0.47	0.24	ug/L		03/10/13 12:49	03/12/13 19:22	1
4,4'-DDD	ND		0.0047	0.0038	ug/L		03/10/13 12:49	03/12/13 19:22	1
4,4'-DDE	ND		0.0047	0.0028	ug/L		03/10/13 12:49	03/12/13 19:22	1
4,4'-DDT	ND		0.0094	0.0038	ug/L		03/10/13 12:49	03/12/13 19:22	1
alpha-BHC	ND		0.0047	0.0024	ug/L		03/10/13 12:49	03/12/13 19:22	1
gamma-BHC (Lindane)	ND		0.0094	0.0028	ug/L		03/10/13 12:49	03/12/13 19:22	1
Endrin aldehyde	ND		0.0094	0.0019	ug/L		03/10/13 12:49	03/12/13 19:22	1
delta-BHC	ND		0.0047	0.0033	ug/L		03/10/13 12:49	03/12/13 19:22	1
Aldrin	ND		0.0047	0.0014	ug/L		03/10/13 12:49	03/12/13 19:22	1
Endosulfan sulfate	ND		0.0094	0.0028	ug/L		03/10/13 12:49	03/12/13 19:22	1
Endosulfan I	ND		0.0047	0.0028	ug/L		03/10/13 12:49	03/12/13 19:22	1
Endrin	ND		0.0047	0.0019	ug/L		03/10/13 12:49	03/12/13 19:22	1
Endosulfan II	ND		0.0047	0.0019	ug/L		03/10/13 12:49	03/12/13 19:22	1
beta-BHC	ND		0.0094	0.0038	ug/L		03/10/13 12:49	03/12/13 19:22	1
Heptachlor	ND		0.0094	0.0028	ug/L		03/10/13 12:49	03/12/13 19:22	1
Heptachlor epoxide	ND		0.0047	0.0024	ug/L		03/10/13 12:49	03/12/13 19:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*35 - 115*	*03/10/13 12:49*	*03/12/13 19:22*	*1*

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		0.47	0.24	ug/L		03/10/13 12:49	03/11/13 16:09	1

Client Sample ID: Arroyo Simi-FP
Date Collected: 03/08/13 12:15
Date Received: 03/08/13 16:45

Lab Sample ID: 440-40328-1
Matrix: Water

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1221	ND		0.47	0.24	ug/L		03/10/13 12:49	03/11/13 16:09	1
Aroclor 1232	ND		0.47	0.24	ug/L		03/10/13 12:49	03/11/13 16:09	1
Aroclor 1242	ND		0.47	0.24	ug/L		03/10/13 12:49	03/11/13 16:09	1
Aroclor 1248	ND		0.47	0.24	ug/L		03/10/13 12:49	03/11/13 16:09	1
Aroclor 1254	ND		0.47	0.24	ug/L		03/10/13 12:49	03/11/13 16:09	1
Aroclor 1260	ND		0.47	0.24	ug/L		03/10/13 12:49	03/11/13 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*79*		*45 - 120*	*03/10/13 12:49*	*03/11/13 16:09*	*1*

Method: 218.6 - Chromium, Hexavalent (Ion Chromatography)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.39**	**J,DX BU**	1.0	0.25	ug/L			03/11/13 22:19	1

Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		0.000010	0.00000058	ug/L		03/14/13 08:56	03/16/13 11:18	1
2,3,7,8-TCDF	ND		0.000010	0.00000052	ug/L		03/14/13 08:56	03/16/13 11:18	1
1,2,3,7,8-PeCDD	ND		0.000050	0.00000097	ug/L		03/14/13 08:56	03/16/13 11:18	1
1,2,3,7,8-PeCDF	ND		0.000050	0.00000070	ug/L		03/14/13 08:56	03/16/13 11:18	1
2,3,4,7,8-PeCDF	ND		0.000050	0.00000077	ug/L		03/14/13 08:56	03/16/13 11:18	1
1,2,3,4,7,8-HxCDD	ND		0.000050	0.00000072	ug/L		03/14/13 08:56	03/16/13 11:18	1
1,2,3,6,7,8-HxCDD	**0.0000015**	**J,DX q**	0.000050	0.00000065	ug/L		03/14/13 08:56	03/16/13 11:18	1
1,2,3,7,8,9-HxCDD	ND		0.000050	0.00000061	ug/L		03/14/13 08:56	03/16/13 11:18	1
1,2,3,4,7,8-HxCDF	ND		0.000050	0.00000090	ug/L		03/14/13 08:56	03/16/13 11:18	1
1,2,3,6,7,8-HxCDF	ND		0.000050	0.00000080	ug/L		03/14/13 08:56	03/16/13 11:18	1
1,2,3,7,8,9-HxCDF	ND		0.000050	0.0000011	ug/L		03/14/13 08:56	03/16/13 11:18	1
2,3,4,6,7,8-HxCDF	ND		0.000050	0.00000081	ug/L		03/14/13 08:56	03/16/13 11:18	1
1,2,3,4,6,7,8-HpCDD	**0.000037**	**J,DX**	0.000050	0.0000027	ug/L		03/14/13 08:56	03/16/13 11:18	1
1,2,3,4,6,7,8-HpCDF	**0.000011**	**J,DX q**	0.000050	0.0000015	ug/L		03/14/13 08:56	03/16/13 11:18	1
1,2,3,4,7,8,9-HpCDF	ND		0.000050	0.0000024	ug/L		03/14/13 08:56	03/16/13 11:18	1
OCDD	**0.00030**	**MB**	0.00010	0.000012	ug/L		03/14/13 08:56	03/16/13 11:18	1
OCDF	**0.000024**	**J,DX MB**	0.00010	0.0000018	ug/L		03/14/13 08:56	03/16/13 11:18	1
Total TCDD	ND		0.000010	0.00000058	ug/L		03/14/13 08:56	03/16/13 11:18	1
Total TCDF	ND		0.000010	0.00000052	ug/L		03/14/13 08:56	03/16/13 11:18	1
Total PeCDD	ND		0.000050	0.00000097	ug/L		03/14/13 08:56	03/16/13 11:18	1
Total PeCDF	**0.0000034**	**J,DX**	0.000050	0.00000074	ug/L		03/14/13 08:56	03/16/13 11:18	1
Total HxCDD	**0.0000047**	**J,DX q**	0.000050	0.00000066	ug/L		03/14/13 08:56	03/16/13 11:18	1

Client Sample ID: Arroyo Simi-FP
Date Collected: 03/08/13 12:15
Date Received: 03/08/13 16:45

Lab Sample ID: 440-40328-1
Matrix: Water

Method: 1613B - Dioxins and Furans (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
Total HxCDF	0.0000098	J,DX q	0.000050	0.0000091	ug/L		03/14/13 08:56	03/16/13 11:18	1
Total HpCDD	0.000076		0.000050	0.0000027	ug/L		03/14/13 08:56	03/16/13 11:18	1
Total HpCDF	0.000029	J,DX q	0.000050	0.0000020	ug/L		03/14/13 08:56	03/16/13 11:18	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*64*		*25 - 164*	*03/14/13 08:56*	*03/16/13 11:18*	*1*
13C-2,3,7,8-TCDF	*59*		*24 - 169*	*03/14/13 08:56*	*03/16/13 11:18*	*1*
13C-1,2,3,7,8-PeCDD	*68*		*25 - 181*	*03/14/13 08:56*	*03/16/13 11:18*	*1*
13C-1,2,3,7,8-PeCDF	*56*		*24 - 185*	*03/14/13 08:56*	*03/16/13 11:18*	*1*
13C-2,3,4,7,8-PeCDF	*58*		*21 - 178*	*03/14/13 08:56*	*03/16/13 11:18*	*1*
13C-1,2,3,4,7,8-HxCDD	*63*		*32 - 141*	*03/14/13 08:56*	*03/16/13 11:18*	*1*
13C-1,2,3,6,7,8-HxCDD	*65*		*28 - 130*	*03/14/13 08:56*	*03/16/13 11:18*	*1*
13C-1,2,3,4,7,8-HxCDF	*59*		*26 - 152*	*03/14/13 08:56*	*03/16/13 11:18*	*1*
13C-1,2,3,6,7,8-HxCDF	*67*		*26 - 123*	*03/14/13 08:56*	*03/16/13 11:18*	*1*
13C-1,2,3,7,8,9-HxCDF	*56*		*29 - 147*	*03/14/13 08:56*	*03/16/13 11:18*	*1*
13C-2,3,4,6,7,8-HxCDF	*65*		*28 - 136*	*03/14/13 08:56*	*03/16/13 11:18*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*62*		*23 - 140*	*03/14/13 08:56*	*03/16/13 11:18*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*61*		*28 - 143*	*03/14/13 08:56*	*03/16/13 11:18*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*53*		*26 - 138*	*03/14/13 08:56*	*03/16/13 11:18*	*1*
13C-OCDD	*54*		*17 - 157*	*03/14/13 08:56*	*03/16/13 11:18*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
37Cl4-2,3,7,8-TCDD	*84*		*35 - 197*	*03/14/13 08:56*	*03/16/13 11:18*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6000		50	40	ug/L		03/19/13 14:45	03/19/13 20:34	1
Calcium	58		0.10	0.050	mg/L		03/19/13 14:45	03/19/13 20:34	1
Arsenic	ND		10	7.0	ug/L		03/19/13 14:45	03/19/13 20:34	1
Magnesium	17		0.020	0.012	mg/L		03/19/13 14:45	03/19/13 20:34	1
Boron	0.20		0.050	0.020	mg/L		03/19/13 14:45	03/19/13 20:34	1
Beryllium	ND		2.0	0.90	ug/L		03/19/13 14:45	03/19/13 20:34	1
Calcium	58		0.10	0.050	mg/L		03/19/13 14:45	03/19/13 20:34	1
Chromium	14		5.0	2.0	ug/L		03/19/13 14:45	03/19/13 20:34	1
Iron	9.3		0.040	0.015	mg/L		03/19/13 14:45	03/19/13 20:34	1
Magnesium	17		0.020	0.012	mg/L		03/19/13 14:45	03/19/13 20:34	1
Nickel	14		10	2.0	ug/L		03/19/13 14:45	03/19/13 20:34	1
Vanadium	28		10	3.0	ug/L		03/19/13 14:45	03/19/13 20:34	1
Zinc	52		20	9.0	ug/L		03/19/13 14:45	03/19/13 20:34	1
Silver	ND		10	6.0	ug/L		03/19/13 14:45	03/19/13 20:34	1
Hardness, as CaCO3	210		0.33	0.17	mg/L		03/19/13 14:45	03/19/13 20:34	1

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		50	40	ug/L		03/18/13 08:20	03/18/13 19:01	1
Arsenic	ND		10	7.0	ug/L		03/18/13 08:20	03/18/13 19:01	1
Boron	0.22		0.050	0.020	mg/L		03/18/13 08:20	03/18/13 19:01	1
Beryllium	ND		2.0	0.90	ug/L		03/18/13 08:20	03/18/13 19:01	1
Calcium	51		0.10	0.050	mg/L		03/18/13 08:20	03/18/13 19:01	1
Chromium	ND		5.0	2.0	ug/L		03/18/13 08:20	03/18/13 19:01	1

Client Sample ID: Arroyo Simi-FP
Date Collected: 03/08/13 12:15
Date Received: 03/08/13 16:45

Lab Sample ID: 440-40328-1
Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.033	J,DX	0.040	0.015	mg/L		03/18/13 08:20	03/18/13 19:01	1
Magnesium	13		0.020	0.012	mg/L		03/18/13 08:20	03/18/13 19:01	1
Nickel	2.7	J,DX	10	2.0	ug/L		03/18/13 08:20	03/18/13 19:01	1
Vanadium	ND		10	3.0	ug/L		03/18/13 08:20	03/18/13 19:01	1
Zinc	ND		20	9.0	ug/L		03/18/13 08:20	03/18/13 19:01	1
Silver	ND		10	6.0	ug/L		03/18/13 08:20	03/18/13 19:01	1
Hardness, as CaCO3	180		0.33	0.17	mg/L		03/18/13 08:20	03/18/13 19:01	1

Method: 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.68	J,DX	2.0	0.20	ug/L		03/19/13 17:23	03/20/13 10:35	2
Copper	15	MB	4.0	1.0	ug/L		03/20/13 19:03	03/21/13 10:09	2
Lead	4.9		2.0	0.40	ug/L		03/19/13 17:23	03/20/13 10:35	2
Antimony	0.87	J,DX	4.0	0.60	ug/L		03/19/13 17:23	03/20/13 10:35	2
Selenium	3.2	J,DX	4.0	1.0	ug/L		03/19/13 17:23	03/20/13 10:35	2
Thallium	ND		2.0	0.40	ug/L		03/19/13 17:23	03/20/13 10:35	2

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.11	J,DX	1.0	0.10	ug/L		03/20/13 13:48	03/20/13 18:48	1
Copper	4.3		2.0	0.50	ug/L		03/20/13 13:48	03/20/13 18:48	1
Lead	ND		1.0	0.20	ug/L		03/20/13 13:48	03/20/13 18:48	1
Antimony	0.52	J,DX	2.0	0.30	ug/L		03/20/13 13:48	03/20/13 18:48	1
Selenium	2.1		2.0	0.50	ug/L		03/20/13 13:48	03/20/13 18:48	1
Thallium	ND		1.0	0.20	ug/L		03/20/13 13:48	03/20/13 18:48	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.10	ug/L		03/20/13 12:27	03/20/13 19:39	1

Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.10	ug/L		03/20/13 12:27	03/20/13 16:19	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness, as CaCO3	210		0.33	0.17	mg/L			03/11/13 11:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	310		20	20	mg/L			03/12/13 20:09	1
Cyanide, Total	ND		5.0	3.0	ug/L		03/11/13 15:04	03/11/13 21:38	1

Method: SM 9221E - Coliforms, Fecal (Multiple-Tube Fermentation)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Coliform, Fecal	>=1600				MPN/100mL			03/08/13 17:30	1

Method: SM 9221F - E.Coli (Multiple-Tube Fermentation; EC-MUG)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	>=1600		2.0	2.0	MPN/100mL			03/08/13 17:30	1

Method Summary

Client: MWH Americas Inc
Project/Site: Boeing SSFL NPDES Annual Arroyo Simi-Fro

TestAmerica Job ID: 440-40328-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL IRV
525.2	Semivolatile Organic Compounds (GC/MS)	EPA	TAL IRV
625	Semivolatile Organic Compounds (GC/MS)	EPA	TAL IRV
608	Organochlorine Pesticides in Water	40CFR136A	TAL IRV
608	Polychlorinated Biphenyls (PCBs) (GC)	40CFR136A	TAL IRV
218.6	Chromium, Hexavalent (Ion Chromatography)	EPA	TAL IRV
1613B	Dioxins and Furans (HRGC/HRMS)	40CFR136A	TAL SAC
200.7 Rev 4.4	Metals (ICP)	EPA	TAL IRV
200.8	Metals (ICP/MS)	EPA	TAL IRV
245.1	Mercury (CVAA)	EPA	TAL IRV
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	TAL IRV
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL IRV
SM 4500 CN E	Cyanide, Total (Low Level)	SM	TAL IRV
SM 9221E	Coliforms, Fecal (Multiple-Tube Fermentation)	SM	TAL IRV
SM 9221F	E.Coli (Multiple-Tube Fermentation; EC-MUG)	SM	TAL IRV
DNA-human bacteriodes; EMSL	General Sub Contract Method	NONE	EMSL

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
EPA = US Environmental Protection Agency
NONE = NONE
SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

EMSL = EMSL Analytical, Inc., 200 Rt 130 North, Cinnaminson, NJ 08077, TEL (800)220-3675
TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022
TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Client Sample ID: Arroyo Simi-FP
Date Collected: 03/08/13 12:15
Date Received: 03/08/13 16:45

Lab Sample ID: 440-40328-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	10 mL	10 mL	90650	03/10/13 16:47	WC	TAL IRV
Total/NA	Analysis	624		1	10 mL	10 mL	92541	03/19/13 00:21	MP	TAL IRV
Total/NA	Prep	525.2			1040 mL	1 mL	90585	03/09/13 07:08	CN	TAL IRV
Total/NA	Analysis	525.2		1			91197	03/12/13 19:02	CP	TAL IRV
Total/NA	Prep	625			1055 mL	2 mL	91160	03/12/13 13:52	AG	TAL IRV
Total/NA	Analysis	625		1			92112	03/16/13 09:30	DF	TAL IRV
Total/NA	Prep	625	RE		1055 mL	2 mL	94270	03/26/13 12:03	AG	TAL IRV
Total/NA	Analysis	625	RE	1			94968	03/28/13 22:54	DF	TAL IRV
Total/NA	Prep	608			1060 mL	2 mL	90661	03/10/13 12:49	AB	TAL IRV
Total/NA	Analysis	608		1			90786	03/11/13 16:09	JM	TAL IRV
Total/NA	Prep	608			1060 mL	2 mL	90661	03/10/13 12:49	AB	TAL IRV
Total/NA	Analysis	608		1			91083	03/12/13 19:22	DD	TAL IRV
Total/NA	Analysis	218.6		1	10 mL		90811	03/11/13 22:19	QPD	TAL IRV
Total/NA	Prep	1613B			990.3 mL	20 uL	12332	03/14/13 08:56	NM	TAL SAC
Total/NA	Analysis	1613B		1			12476	03/16/13 11:18	MG	TAL SAC
Total/NA	Analysis	SM 2340B		1			90113	03/11/13 11:11	FR	TAL IRV
Dissolved	Prep	200.2			50 mL	50 mL	92375	03/18/13 08:20	DT	TAL IRV
Dissolved	Analysis	200.7 Rev 4.4		1			92623	03/18/13 19:01	TK	TAL IRV
Total Recoverable	Prep	200.2			50 mL	50 mL	92737	03/19/13 14:45	ND	TAL IRV
Total Recoverable	Analysis	200.7 Rev 4.4		1			92891	03/19/13 20:34	VS	TAL IRV
Total Recoverable	Prep	200.2			50 mL	50 mL	92737	03/19/13 14:45	ND	TAL IRV
Total Recoverable	Analysis	200.7 Rev 4.4		1			92891	03/19/13 20:34	VS	TAL IRV
Total Recoverable	Prep	200.2			50 mL	50 mL	92787	03/19/13 17:23	ND	TAL IRV
Total Recoverable	Analysis	200.8		2			92959	03/20/13 10:35	NH	TAL IRV
Dissolved	Prep	245.1			20 mL	20 mL	92967	03/20/13 12:27	MM	TAL IRV
Dissolved	Analysis	245.1		1			93120	03/20/13 16:19	DB	TAL IRV
Dissolved	Prep	200.2			25 mL	25 mL	93021	03/20/13 13:48	ND	TAL IRV
Dissolved	Analysis	200.8		1			93128	03/20/13 18:48	YS	TAL IRV
Total/NA	Prep	245.1			20 mL	20 mL	92502	03/20/13 12:27	MM	TAL IRV
Total/NA	Analysis	245.1		1			93279	03/20/13 19:39	DB	TAL IRV
Total Recoverable	Prep	200.2			50 mL	50 mL	93130	03/20/13 19:03	ND	TAL IRV
Total Recoverable	Analysis	200.8		2			93289	03/21/13 10:09	RC	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	90885	03/11/13 15:04	BT	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			90984	03/11/13 21:38	BT	TAL IRV
Total/NA	Analysis	SM 2540D		1	50 mL	100 mL	91279	03/12/13 20:09	DK	TAL IRV
Total/NA	Analysis	SM 9221E		1	100 mL	100 mL	90673		EF	TAL IRV
								(Start) 03/08/13 17:30		
								(End) 03/11/13 14:50		
Total/NA	Analysis	SM 9221F		1	100 mL	100 mL	90674		EF	TAL IRV
								(Start) 03/08/13 17:30		
								(End) 03/11/13 14:50		

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Boeing SSFL NPDES Annual Arroyo Simi-Fro

TestAmerica Job ID: 440-40328-1

Laboratory References:

EMSL = EMSL Analytical, Inc., 200 Rt 130 North, Cinnaminson, NJ 08077, TEL (800)220-3675

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-90650/5
Matrix: Water
Analysis Batch: 90650

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloroethyl vinyl ether	ND		2.0	1.8	ug/L			03/10/13 12:05	1
Acrolein	ND		5.0	4.0	ug/L			03/10/13 12:05	1
Acrylonitrile	ND		2.0	1.2	ug/L			03/10/13 12:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/10/13 12:05*	*1*
Dibromofluoromethane (Surr)	*92*		*80 - 120*		*03/10/13 12:05*	*1*

Lab Sample ID: LCS 440-90650/6
Matrix: Water
Analysis Batch: 90650

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
2-Chloroethyl vinyl ether			25.0	17.9		ug/L		72	25 - 170		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*80 - 120*

Lab Sample ID: 440-40019-S-1 MS
Matrix: Water
Analysis Batch: 90650

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
2-Chloroethyl vinyl ether	ND		25.0	15.5		ug/L		62	25 - 170		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*95*		*80 - 120*

Lab Sample ID: 440-40019-S-1 MSD
Matrix: Water
Analysis Batch: 90650

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Chloroethyl vinyl ether	ND		25.0	17.0		ug/L		68	25 - 170	9	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*

Lab Sample ID: MB 440-92541/4
Matrix: Water
Analysis Batch: 92541

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	0.30	ug/L			03/18/13 19:43	1

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-92541/4
Matrix: Water
Analysis Batch: 92541

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50	0.30	ug/L			03/18/13 19:43	1
1,1,2-Trichloroethane	ND		0.50	0.30	ug/L			03/18/13 19:43	1
1,1-Dichloroethane	ND		0.50	0.40	ug/L			03/18/13 19:43	1
1,1-Dichloroethene	ND		0.50	0.42	ug/L			03/18/13 19:43	1
1,2-Dichlorobenzene	ND		0.50	0.32	ug/L			03/18/13 19:43	1
1,2-Dichloroethane	ND		0.50	0.28	ug/L			03/18/13 19:43	1
1,2-Dichloropropane	ND		0.50	0.35	ug/L			03/18/13 19:43	1
1,3-Dichlorobenzene	ND		0.50	0.35	ug/L			03/18/13 19:43	1
1,2,3-Trichloropropane	ND		0.50	0.40	ug/L			03/18/13 19:43	1
1,4-Dichlorobenzene	ND		0.50	0.37	ug/L			03/18/13 19:43	1
Benzene	ND		0.50	0.28	ug/L			03/18/13 19:43	1
Bromoform	ND		0.50	0.40	ug/L			03/18/13 19:43	1
Bromomethane	ND		0.50	0.42	ug/L			03/18/13 19:43	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/18/13 19:43	1
Chlorobenzene	ND		0.50	0.36	ug/L			03/18/13 19:43	1
Dibromochloromethane	ND		0.50	0.40	ug/L			03/18/13 19:43	1
Chloroethane	ND		0.50	0.40	ug/L			03/18/13 19:43	1
Chloroform	ND		0.50	0.33	ug/L			03/18/13 19:43	1
Chloromethane	ND		0.50	0.40	ug/L			03/18/13 19:43	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/18/13 19:43	1
Bromodichloromethane	ND		0.50	0.30	ug/L			03/18/13 19:43	1
Ethylbenzene	ND		0.50	0.25	ug/L			03/18/13 19:43	1
Methylene Chloride	ND		1.0	0.95	ug/L			03/18/13 19:43	1
Tetrachloroethene	ND		0.50	0.32	ug/L			03/18/13 19:43	1
Toluene	ND		0.50	0.36	ug/L			03/18/13 19:43	1
trans-1,2-Dichloroethene	ND		0.50	0.30	ug/L			03/18/13 19:43	1
tert-Butanol	ND		10	6.5	ug/L			03/18/13 19:43	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/18/13 19:43	1
Trichlorofluoromethane	ND		0.50	0.34	ug/L			03/18/13 19:43	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/18/13 19:43	1
Trichloroethene	ND		0.50	0.26	ug/L			03/18/13 19:43	1
cis-1,2-Dichloroethene	ND		0.50	0.32	ug/L			03/18/13 19:43	1
1,2-Dibromoethane (EDB)	ND		0.50	0.40	ug/L			03/18/13 19:43	1
Diisopropyl ether	ND		0.50	0.25	ug/L			03/18/13 19:43	1
Methyl tert-butyl ether	ND		0.50	0.32	ug/L			03/18/13 19:43	1
Naphthalene	ND		0.50	0.41	ug/L			03/18/13 19:43	1
Tert-amyl methyl ether	ND		0.50	0.33	ug/L			03/18/13 19:43	1
Ethyl tert-butyl ether	ND		0.50	0.28	ug/L			03/18/13 19:43	1
Xylenes, Total	ND		1.0	0.90	ug/L			03/18/13 19:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*03/18/13 19:43*	*1*
Dibromofluoromethane (Surr)	*113*		*80 - 120*		*03/18/13 19:43*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*		*03/18/13 19:43*	*1*

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-92541/5
Matrix: Water
Analysis Batch: 92541

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	27.9		ug/L		112	65 - 135
1,1,2,2-Tetrachloroethane	25.0	24.3		ug/L		97	55 - 130
1,1,2-Trichloroethane	25.0	25.8		ug/L		103	70 - 125
1,1-Dichloroethane	25.0	25.2		ug/L		101	70 - 125
1,1-Dichloroethene	25.0	26.9		ug/L		108	70 - 125
1,2-Dichlorobenzene	25.0	25.3		ug/L		101	75 - 120
1,2-Dichloroethane	25.0	26.2		ug/L		105	60 - 140
1,2-Dichloropropane	25.0	24.1		ug/L		97	70 - 125
1,3-Dichlorobenzene	25.0	25.9		ug/L		103	75 - 120
1,2,3-Trichloropropane	25.0	21.7		ug/L		87	60 - 130
1,4-Dichlorobenzene	25.0	25.4		ug/L		102	75 - 120
Benzene	25.0	23.9		ug/L		96	70 - 120
Bromoform	25.0	29.4		ug/L		118	55 - 130
Bromomethane	25.0	25.2		ug/L		101	65 - 140
Carbon tetrachloride	25.0	29.7		ug/L		119	65 - 140
Chlorobenzene	25.0	25.3		ug/L		101	75 - 120
Dibromochloromethane	25.0	30.3		ug/L		121	70 - 140
Chloroethane	25.0	24.7		ug/L		99	60 - 140
Chloroform	25.0	27.5		ug/L		110	70 - 130
Chloromethane	25.0	21.3		ug/L		85	50 - 140
cis-1,3-Dichloropropene	25.0	29.6		ug/L		119	75 - 125
Bromodichloromethane	25.0	28.1		ug/L		113	70 - 135
Ethylbenzene	25.0	25.5		ug/L		102	75 - 125
Methylene Chloride	25.0	27.0		ug/L		108	55 - 130
Tetrachloroethene	25.0	25.0		ug/L		100	70 - 125
Toluene	25.0	24.9		ug/L		100	70 - 120
trans-1,2-Dichloroethene	25.0	26.3		ug/L		105	70 - 125
tert-Butanol	125	129		ug/L		103	70 - 135
trans-1,3-Dichloropropene	25.0	29.7		ug/L		119	70 - 125
Trichlorofluoromethane	25.0	28.3		ug/L		113	65 - 145
Vinyl chloride	25.0	25.9		ug/L		104	55 - 135
Trichloroethene	25.0	25.2		ug/L		101	70 - 125
cis-1,2-Dichloroethene	25.0	27.9		ug/L		112	70 - 125
1,2-Dibromoethane (EDB)	25.0	26.0		ug/L		104	75 - 125
Diisopropyl ether	25.0	25.4		ug/L		102	60 - 135
Methyl tert-butyl ether	25.0	24.2		ug/L		97	60 - 135
Naphthalene	25.0	20.4		ug/L		82	55 - 135
Tert-amyl methyl ether	25.0	23.0		ug/L		92	60 - 135
Ethyl tert-butyl ether	25.0	23.8		ug/L		95	65 - 135
Xylenes, Total	75.0	75.2		ug/L		100	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*
Dibromofluoromethane (Surr)	*118*		*80 - 120*
Toluene-d8 (Surr)	*110*		*80 - 120*

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-40534-D-1 MS
Matrix: Water
Analysis Batch: 92541

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		25.0	27.3		ug/L		109	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	25.4		ug/L		102	55 - 135
1,1,2-Trichloroethane	ND		25.0	27.6		ug/L		110	65 - 130
1,1-Dichloroethane	ND		25.0	25.3		ug/L		101	65 - 130
1,1-Dichloroethene	ND		25.0	25.6		ug/L		103	60 - 130
1,2-Dichlorobenzene	ND		25.0	25.2		ug/L		101	75 - 125
1,2-Dichloroethane	ND		25.0	26.4		ug/L		105	60 - 140
1,2-Dichloropropane	ND		25.0	24.2		ug/L		97	65 - 130
1,3-Dichlorobenzene	ND		25.0	25.7		ug/L		103	75 - 125
1,2,3-Trichloropropane	ND		25.0	22.5		ug/L		90	55 - 135
1,4-Dichlorobenzene	ND		25.0	26.1		ug/L		104	75 - 125
Benzene	ND		25.0	23.8		ug/L		95	65 - 125
Bromoform	ND		25.0	31.4		ug/L		125	55 - 135
Bromomethane	ND		25.0	24.4		ug/L		98	55 - 145
Carbon tetrachloride	ND		25.0	29.3		ug/L		117	65 - 140
Chlorobenzene	ND		25.0	26.1		ug/L		104	75 - 125
Dibromochloromethane	ND		25.0	31.5		ug/L		126	65 - 140
Chloroethane	ND		25.0	23.6		ug/L		95	55 - 140
Chloroform	ND		25.0	27.2		ug/L		109	65 - 135
Chloromethane	ND		25.0	20.8		ug/L		83	45 - 145
cis-1,3-Dichloropropene	ND		25.0	30.7		ug/L		123	70 - 130
Bromodichloromethane	ND		25.0	29.1		ug/L		116	70 - 135
Ethylbenzene	ND		25.0	25.8		ug/L		103	65 - 130
Methylene Chloride	ND		25.0	25.9		ug/L		104	50 - 135
Tetrachloroethene	ND		25.0	25.1		ug/L		100	65 - 130
Toluene	ND		25.0	24.4		ug/L		97	70 - 125
trans-1,2-Dichloroethene	ND		25.0	26.0		ug/L		104	65 - 130
tert-Butanol	28		125	158		ug/L		104	65 - 140
trans-1,3-Dichloropropene	ND		25.0	31.1		ug/L		124	65 - 135
Trichlorofluoromethane	ND		25.0	26.6		ug/L		106	60 - 145
Vinyl chloride	ND		25.0	25.4		ug/L		102	45 - 140
Trichloroethene	ND		25.0	25.0		ug/L		100	65 - 125
cis-1,2-Dichloroethene	ND		25.0	28.3		ug/L		113	65 - 130
1,2-Dibromoethane (EDB)	ND		25.0	27.2		ug/L		109	70 - 130
Diisopropyl ether	ND		25.0	25.2		ug/L		101	60 - 140
Methyl tert-butyl ether	ND		25.0	26.0		ug/L		104	55 - 145
Naphthalene	ND		25.0	20.7		ug/L		83	50 - 140
Tert-amyl methyl ether	ND		25.0	25.5		ug/L		102	60 - 140
Ethyl tert-butyl ether	ND		25.0	24.2		ug/L		97	60 - 135
Xylenes, Total	ND		75.0	76.2		ug/L		102	60 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*80 - 120*
Dibromofluoromethane (Surr)	*119*		*80 - 120*
Toluene-d8 (Surr)	*110*		*80 - 120*

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-40534-D-1 MSD
Matrix: Water
Analysis Batch: 92541

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		25.0	27.9		ug/L		111	65 - 140	2	20
1,1,2,2-Tetrachloroethane	ND		25.0	25.2		ug/L		101	55 - 135	1	30
1,1,2-Trichloroethane	ND		25.0	26.4		ug/L		106	65 - 130	5	25
1,1-Dichloroethane	ND		25.0	26.1		ug/L		105	65 - 130	3	20
1,1-Dichloroethene	ND		25.0	26.6		ug/L		107	60 - 130	4	20
1,2-Dichlorobenzene	ND		25.0	25.9		ug/L		104	75 - 125	3	20
1,2-Dichloroethane	ND		25.0	26.9		ug/L		108	60 - 140	2	20
1,2-Dichloropropane	ND		25.0	24.9		ug/L		100	65 - 130	3	20
1,3-Dichlorobenzene	ND		25.0	26.3		ug/L		105	75 - 125	2	20
1,2,3-Trichloropropane	ND		25.0	22.9		ug/L		91	55 - 135	2	30
1,4-Dichlorobenzene	ND		25.0	26.5		ug/L		106	75 - 125	2	20
Benzene	ND		25.0	24.4		ug/L		98	65 - 125	3	20
Bromoform	ND		25.0	30.6		ug/L		122	55 - 135	2	25
Bromomethane	ND		25.0	25.4		ug/L		102	55 - 145	4	25
Carbon tetrachloride	ND		25.0	29.8		ug/L		119	65 - 140	2	25
Chlorobenzene	ND		25.0	26.0		ug/L		104	75 - 125	0	20
Dibromochloromethane	ND		25.0	31.3		ug/L		125	65 - 140	1	25
Chloroethane	ND		25.0	25.2		ug/L		101	55 - 140	6	25
Chloroform	ND		25.0	26.8		ug/L		107	65 - 135	2	20
Chloromethane	ND		25.0	21.2		ug/L		85	45 - 145	2	25
cis-1,3-Dichloropropene	ND		25.0	30.3		ug/L		121	70 - 130	1	20
Bromodichloromethane	ND		25.0	29.7		ug/L		119	70 - 135	2	20
Ethylbenzene	ND		25.0	25.5		ug/L		102	65 - 130	1	20
Methylene Chloride	ND		25.0	26.2		ug/L		105	50 - 135	1	20
Tetrachloroethene	ND		25.0	25.2		ug/L		101	65 - 130	1	20
Toluene	ND		25.0	25.0		ug/L		100	70 - 125	2	20
trans-1,2-Dichloroethene	ND		25.0	26.2		ug/L		105	65 - 130	1	20
tert-Butanol	28		125	165		ug/L		109	65 - 140	4	25
trans-1,3-Dichloropropene	ND		25.0	31.3		ug/L		125	65 - 135	1	25
Trichlorofluoromethane	ND		25.0	28.0		ug/L		112	60 - 145	5	25
Vinyl chloride	ND		25.0	27.1		ug/L		108	45 - 140	6	30
Trichloroethene	ND		25.0	25.3		ug/L		101	65 - 125	1	20
cis-1,2-Dichloroethene	ND		25.0	28.7		ug/L		115	65 - 130	1	20
1,2-Dibromoethane (EDB)	ND		25.0	27.1		ug/L		108	70 - 130	0	25
Diisopropyl ether	ND		25.0	25.9		ug/L		104	60 - 140	3	25
Methyl tert-butyl ether	ND		25.0	25.9		ug/L		104	55 - 145	0	25
Naphthalene	ND		25.0	21.2		ug/L		85	50 - 140	2	30
Tert-amyl methyl ether	ND		25.0	25.8		ug/L		103	60 - 140	1	30
Ethyl tert-butyl ether	ND		25.0	23.8		ug/L		95	60 - 135	1	25
Xylenes, Total	ND		75.0	74.8		ug/L		100	60 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*
Dibromofluoromethane (Surr)	*116*		*80 - 120*
Toluene-d8 (Surr)	*110*		*80 - 120*

Method: 525.2 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-90585/1-A
Matrix: Water
Analysis Batch: 90937

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 90585

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorpyrifos	ND		1.0	0.080	ug/L		03/09/13 07:08	03/11/13 18:35	1
Diazinon	ND		0.25	0.10	ug/L		03/09/13 07:08	03/11/13 18:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,3-Dimethyl-2-nitrobenzene	*98*		*70 - 130*	*03/09/13 07:08*	*03/11/13 18:35*	*1*
Perylene-d12	*87*		*70 - 130*	*03/09/13 07:08*	*03/11/13 18:35*	*1*
Triphenylphosphate	*141*	*LH*	*70 - 130*	*03/09/13 07:08*	*03/11/13 18:35*	*1*

Lab Sample ID: MB 440-90585/1-A
Matrix: Water
Analysis Batch: 91851

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 90585

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorpyrifos	ND		1.0	0.080	ug/L		03/09/13 07:08	03/14/13 22:45	1
Diazinon	ND		0.25	0.10	ug/L		03/09/13 07:08	03/14/13 22:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,3-Dimethyl-2-nitrobenzene	*95*		*70 - 130*	*03/09/13 07:08*	*03/14/13 22:45*	*1*
Perylene-d12	*101*		*70 - 130*	*03/09/13 07:08*	*03/14/13 22:45*	*1*
Triphenylphosphate	*134*	*LH*	*70 - 130*	*03/09/13 07:08*	*03/14/13 22:45*	*1*

Lab Sample ID: LCS 440-90585/2-A
Matrix: Water
Analysis Batch: 90937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 90585

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorpyrifos	5.00	4.92		ug/L		98	70 - 130
Diazinon	5.00	4.26		ug/L		85	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,3-Dimethyl-2-nitrobenzene	*100*		*70 - 130*
Perylene-d12	*94*		*70 - 130*
Triphenylphosphate	*138*	*LH*	*70 - 130*

Lab Sample ID: LCS 440-90585/2-A
Matrix: Water
Analysis Batch: 91851

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 90585

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorpyrifos	5.00	5.51		ug/L		110	70 - 130
Diazinon	5.00	4.59		ug/L		92	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,3-Dimethyl-2-nitrobenzene	*94*		*70 - 130*
Perylene-d12	*98*		*70 - 130*
Triphenylphosphate	*132*	*LH*	*70 - 130*

Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 440-90585/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 90937 — **Prep Batch: 90585**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorpyrifos			5.00	4.74		ug/L		95	70 - 130	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,3-Dimethyl-2-nitrobenzene	*103*		*70 - 130*
Perylene-d12	*90*		*70 - 130*
Triphenylphosphate	*121*		*70 - 130*

Lab Sample ID: LCSD 440-90585/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 91851 — **Prep Batch: 90585**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorpyrifos			5.00	4.91		ug/L		98	70 - 130	11	30
Diazinon			5.00	3.58		ug/L		72	70 - 130	25	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,3-Dimethyl-2-nitrobenzene	*105*		*70 - 130*
Perylene-d12	*95*		*70 - 130*
Triphenylphosphate	*114*		*70 - 130*

Lab Sample ID: 440-39233-Q-6-A MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 91197 — **Prep Batch: 90585**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorpyrifos	ND		4.78	4.07		ug/L		85	70 - 130
Diazinon	ND	LR	4.78	2.45	LN	ug/L		51	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,3-Dimethyl-2-nitrobenzene	*84*		*70 - 130*
Perylene-d12	*98*		*70 - 130*
Triphenylphosphate	*104*		*70 - 130*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-91160/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 92112 — **Prep Batch: 91160**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.500	0.200	ug/L		03/12/13 13:52	03/15/13 18:15	1
Acenaphthylene	ND		0.500	0.200	ug/L		03/12/13 13:52	03/15/13 18:15	1
Aniline	ND		10.0	0.300	ug/L		03/12/13 13:52	03/15/13 18:15	1
Anthracene	ND		0.500	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
Benzidine	ND		5.00	1.00	ug/L		03/12/13 13:52	03/15/13 18:15	1
Benzo[a]anthracene	ND		5.00	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
Benzo[b]fluoranthene	ND		2.00	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-91160/1-A
Matrix: Water
Analysis Batch: 92112

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 91160

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.500	0.200	ug/L		03/12/13 13:52	03/15/13 18:15	1
Benzoic acid	ND		5.00	3.00	ug/L		03/12/13 13:52	03/15/13 18:15	1
Benzo[a]pyrene	ND		2.00	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
Bis(2-chloroethoxy)methane	ND		0.500	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
Bis(2-chloroethyl)ether	ND		0.500	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
Bis(2-ethylhexyl) phthalate	ND		5.00	1.70	ug/L		03/12/13 13:52	03/15/13 18:15	1
4-Bromophenyl phenyl ether	ND		1.00	0.200	ug/L		03/12/13 13:52	03/15/13 18:15	1
Butyl benzyl phthalate	ND		5.00	0.700	ug/L		03/12/13 13:52	03/15/13 18:15	1
4-Chloro-3-methylphenol	ND		2.00	0.200	ug/L		03/12/13 13:52	03/15/13 18:15	1
2-Chloronaphthalene	ND		0.500	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
2-Chlorophenol	ND		1.00	0.200	ug/L		03/12/13 13:52	03/15/13 18:15	1
4-Chlorophenyl phenyl ether	ND		0.500	0.200	ug/L		03/12/13 13:52	03/15/13 18:15	1
Chrysene	ND		0.500	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
Dibenz(a,h)anthracene	ND		0.500	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
Di-n-butyl phthalate	ND		2.00	0.300	ug/L		03/12/13 13:52	03/15/13 18:15	1
1,2-Dichlorobenzene	ND		0.500	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
1,3-Dichlorobenzene	ND		0.500	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
1,4-Dichlorobenzene	ND		0.500	0.200	ug/L		03/12/13 13:52	03/15/13 18:15	1
3,3'-Dichlorobenzidine	ND		5.00	0.500	ug/L		03/12/13 13:52	03/15/13 18:15	1
2,4-Dichlorophenol	ND		2.00	0.200	ug/L		03/12/13 13:52	03/15/13 18:15	1
Diethyl phthalate	ND		1.00	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
2,4-Dimethylphenol	ND		2.00	0.300	ug/L		03/12/13 13:52	03/15/13 18:15	1
Dimethyl phthalate	ND		0.500	0.200	ug/L		03/12/13 13:52	03/15/13 18:15	1
4,6-Dinitro-2-methylphenol	ND		5.00	0.300	ug/L		03/12/13 13:52	03/15/13 18:15	1
2,4-Dinitrophenol	ND		5.00	0.900	ug/L		03/12/13 13:52	03/15/13 18:15	1
2,4-Dinitrotoluene	ND		5.00	0.200	ug/L		03/12/13 13:52	03/15/13 18:15	1
2,6-Dinitrotoluene	ND		5.00	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
Di-n-octyl phthalate	ND		5.00	0.200	ug/L		03/12/13 13:52	03/15/13 18:15	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		1.00	0.200	ug/L		03/12/13 13:52	03/15/13 18:15	1
Fluoranthene	ND		0.500	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
Fluorene	ND		0.500	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
Hexachlorobenzene	ND		1.00	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
Hexachlorobutadiene	ND		2.00	0.200	ug/L		03/12/13 13:52	03/15/13 18:15	1
Hexachloroethane	ND		3.00	0.200	ug/L		03/12/13 13:52	03/15/13 18:15	1
Hexachlorocyclopentadiene	ND		5.00	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
Indeno[1,2,3-cd]pyrene	ND		2.00	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
Isophorone	ND		1.00	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
4-Methylphenol	ND		5.00	0.200	ug/L		03/12/13 13:52	03/15/13 18:15	1
Naphthalene	ND		1.00	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
Nitrobenzene	ND		1.00	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
2-Nitrophenol	ND		2.00	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
4-Nitrophenol	ND		5.00	2.50	ug/L		03/12/13 13:52	03/15/13 18:15	1
N-Nitrosodimethylamine	ND		2.00	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
N-Nitrosodiphenylamine	ND		1.00	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
N-Nitrosodi-n-propylamine	ND		2.00	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
Pentachlorophenol	ND		2.00	0.400	ug/L		03/12/13 13:52	03/15/13 18:15	1
Phenanthrene	ND		0.500	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-91160/1-A
Matrix: Water
Analysis Batch: 92112

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 91160

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		1.00	0.300	ug/L		03/12/13 13:52	03/15/13 18:15	1
Pyrene	ND		0.500	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
1,2,4-Trichlorobenzene	ND		1.00	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
2,4,6-Trichlorophenol	ND		1.00	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
2-Methylphenol	ND		2.00	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
4-Chloroaniline	ND		2.00	0.300	ug/L		03/12/13 13:52	03/15/13 18:15	1
2-Methylnaphthalene	ND		1.00	0.200	ug/L		03/12/13 13:52	03/15/13 18:15	1
2-Nitroaniline	ND		5.00	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
3-Nitroaniline	ND		5.00	1.00	ug/L		03/12/13 13:52	03/15/13 18:15	1
Dibenzofuran	ND		0.500	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
4-Nitroaniline	ND		5.00	0.500	ug/L		03/12/13 13:52	03/15/13 18:15	1
Benzo[g,h,i]perylene	ND		5.00	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
Benzyl alcohol	ND		5.00	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1
bis (2-chloroisopropyl) ether	ND		0.500	0.100	ug/L		03/12/13 13:52	03/15/13 18:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*87*		*50 - 120*	*03/12/13 13:52*	*03/15/13 18:15*	*1*
2-Fluorophenol	*87*		*30 - 120*	*03/12/13 13:52*	*03/15/13 18:15*	*1*
2,4,6-Tribromophenol	*104*		*40 - 120*	*03/12/13 13:52*	*03/15/13 18:15*	*1*
Nitrobenzene-d5	*95*		*45 - 120*	*03/12/13 13:52*	*03/15/13 18:15*	*1*
Terphenyl-d14	*109*		*50 - 125*	*03/12/13 13:52*	*03/15/13 18:15*	*1*
Phenol-d6	*91*		*35 - 120*	*03/12/13 13:52*	*03/15/13 18:15*	*1*

Lab Sample ID: LCS 440-91160/2-A
Matrix: Water
Analysis Batch: 92112

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 91160

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	10.0	9.099		ug/L		91	57 - 120
Acenaphthylene	10.0	9.090		ug/L		91	60 - 120
Aniline	10.0	8.841	J,DX	ug/L		88	53 - 120
Anthracene	10.0	9.861		ug/L		99	62 - 120
Benzidine	10.0	4.962	J,DX	ug/L		50	20 - 168
Benzo[a]anthracene	10.0	9.683		ug/L		97	62 - 120
Benzo[b]fluoranthene	10.0	8.596		ug/L		86	46 - 125
Benzo[k]fluoranthene	10.0	9.916		ug/L		99	61 - 127
Benzoic acid	10.0	7.520		ug/L		75	20 - 120
Benzo[a]pyrene	10.0	9.383		ug/L		94	66 - 130
Bis(2-chloroethoxy)methane	10.0	8.597		ug/L		86	57 - 120
Bis(2-chloroethyl)ether	10.0	8.729		ug/L		87	54 - 120
Bis(2-ethylhexyl) phthalate	10.0	11.10		ug/L		111	61 - 126
4-Bromophenyl phenyl ether	10.0	9.243		ug/L		92	58 - 120
Butyl benzyl phthalate	10.0	10.53		ug/L		105	57 - 129
4-Chloro-3-methylphenol	10.0	8.108		ug/L		81	46 - 123
2-Chloronaphthalene	10.0	8.022		ug/L		80	54 - 120
2-Chlorophenol	10.0	8.130		ug/L		81	20 - 122
4-Chlorophenyl phenyl ether	10.0	10.12		ug/L		101	50 - 122
Chrysene	10.0	9.862		ug/L		99	63 - 120

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-91160/2-A
Matrix: Water
Analysis Batch: 92112

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 91160

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenz(a,h)anthracene	10.0	10.03		ug/L		100	56 - 124
Di-n-butyl phthalate	10.0	10.42		ug/L		104	60 - 126
1,2-Dichlorobenzene	10.0	6.614		ug/L		66	43 - 120
1,3-Dichlorobenzene	10.0	6.171		ug/L		62	41 - 120
1,4-Dichlorobenzene	10.0	6.367		ug/L		64	41 - 120
3,3'-Dichlorobenzidine	10.0	6.427		ug/L		64	25 - 135
2,4-Dichlorophenol	10.0	8.301		ug/L		83	21 - 132
Diethyl phthalate	10.0	10.66		ug/L		107	44 - 131
2,4-Dimethylphenol	10.0	7.723		ug/L		77	51 - 120
Dimethyl phthalate	10.0	10.69		ug/L		107	33 - 140
4,6-Dinitro-2-methylphenol	10.0	9.334		ug/L		93	22 - 147
2,4-Dinitrophenol	10.0	8.442		ug/L		84	20 - 134
2,4-Dinitrotoluene	10.0	9.942		ug/L		99	65 - 120
2,6-Dinitrotoluene	10.0	9.954		ug/L		100	65 - 120
Di-n-octyl phthalate	10.0	10.09		ug/L		101	63 - 130
1,2-Diphenylhydrazine(as Azobenzene)	10.0	11.67		ug/L		117	59 - 124
Fluoranthene	10.0	10.29		ug/L		103	64 - 120
Fluorene	10.0	10.37		ug/L		104	52 - 120
Hexachlorobenzene	10.0	9.099		ug/L		91	61 - 120
Hexachlorobutadiene	10.0	5.538		ug/L		55	34 - 120
Hexachloroethane	10.0	5.638		ug/L		56	34 - 120
Hexachlorocyclopentadiene	10.0	5.366		ug/L		54	23 - 120
Indeno[1,2,3-cd]pyrene	10.0	9.744		ug/L		97	59 - 128
Isophorone	10.0	8.761		ug/L		88	50 - 120
4-Methylphenol	10.0	8.113		ug/L		81	50 - 120
Naphthalene	10.0	8.433		ug/L		84	52 - 120
Nitrobenzene	10.0	8.770		ug/L		88	52 - 120
2-Nitrophenol	10.0	8.396		ug/L		84	21 - 132
4-Nitrophenol	10.0	8.479		ug/L		85	20 - 151
N-Nitrosodimethylamine	10.0	8.765		ug/L		88	20 - 143
N-Nitrosodiphenylamine	10.0	9.166		ug/L		92	58 - 120
N-Nitrosodi-n-propylamine	10.0	8.565		ug/L		86	60 - 120
Pentachlorophenol	10.0	6.815		ug/L		68	20 - 137
Phenanthrene	10.0	9.713		ug/L		97	62 - 120
Phenol	10.0	8.268		ug/L		83	20 - 120
Pyrene	10.0	10.08		ug/L		101	54 - 120
1,2,4-Trichlorobenzene	10.0	6.801		ug/L		68	44 - 120
2,4,6-Trichlorophenol	10.0	8.319		ug/L		83	20 - 139
2-Methylphenol	10.0	8.086		ug/L		81	47 - 120
4-Chloroaniline	10.0	8.157		ug/L		82	52 - 120
2-Methylnaphthalene	10.0	7.743		ug/L		77	55 - 120
2-Nitroaniline	10.0	9.943		ug/L		99	60 - 135
3-Nitroaniline	10.0	9.933		ug/L		99	63 - 123
Dibenzofuran	10.0	9.828		ug/L		98	60 - 120
4-Nitroaniline	10.0	10.54		ug/L		105	60 - 126
Benzo[g,h,i]perylene	10.0	9.139		ug/L		91	52 - 136
Benzyl alcohol	10.0	9.743		ug/L		97	50 - 120

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-91160/2-A
Matrix: Water
Analysis Batch: 92112

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 91160

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
bis (2-chloroisopropyl) ether			10.0	8.570		ug/L		86	45 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*86*		*50 - 120*
2-Fluorophenol	*83*		*30 - 120*
2,4,6-Tribromophenol	*99*		*40 - 120*
Nitrobenzene-d5	*90*		*45 - 120*
Terphenyl-d14	*96*		*50 - 125*
Phenol-d6	*83*		*35 - 120*

Lab Sample ID: LCSD 440-91160/3-A
Matrix: Water
Analysis Batch: 92112

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 91160

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene			10.0	9.336		ug/L		93	57 - 120	3	20
Acenaphthylene			10.0	9.571		ug/L		96	60 - 120	5	20
Aniline			10.0	9.203	J,DX	ug/L		92	53 - 120	4	30
Anthracene			10.0	10.20		ug/L		102	62 - 120	3	20
Benzidine			10.0	4.693	J,DX	ug/L		47	20 - 168	6	35
Benzo[a]anthracene			10.0	10.14		ug/L		101	62 - 120	5	20
Benzo[b]fluoranthene			10.0	8.487		ug/L		85	46 - 125	1	25
Benzo[k]fluoranthene			10.0	9.286		ug/L		93	61 - 127	7	20
Benzoic acid			10.0	8.077		ug/L		81	20 - 120	7	30
Benzo[a]pyrene			10.0	9.739		ug/L		97	66 - 130	4	25
Bis(2-chloroethoxy)methane			10.0	9.232		ug/L		92	57 - 120	7	20
Bis(2-chloroethyl)ether			10.0	8.037		ug/L		80	54 - 120	8	20
Bis(2-ethylhexyl) phthalate			10.0	11.94		ug/L		119	61 - 126	7	20
4-Bromophenyl phenyl ether			10.0	9.819		ug/L		98	58 - 120	6	25
Butyl benzyl phthalate			10.0	11.27		ug/L		113	57 - 129	7	20
4-Chloro-3-methylphenol			10.0	8.287		ug/L		83	46 - 123	2	25
2-Chloronaphthalene			10.0	8.739		ug/L		87	54 - 120	9	20
2-Chlorophenol			10.0	8.332		ug/L		83	20 - 122	2	25
4-Chlorophenyl phenyl ether			10.0	10.52		ug/L		105	50 - 122	4	20
Chrysene			10.0	10.27		ug/L		103	63 - 120	4	20
Dibenz(a,h)anthracene			10.0	10.85		ug/L		109	56 - 124	8	25
Di-n-butyl phthalate			10.0	10.83		ug/L		108	60 - 126	4	20
1,2-Dichlorobenzene			10.0	6.804		ug/L		68	43 - 120	3	25
1,3-Dichlorobenzene			10.0	6.622		ug/L		66	41 - 120	7	25
1,4-Dichlorobenzene			10.0	6.502		ug/L		65	41 - 120	2	25
3,3'-Dichlorobenzidine			10.0	6.627		ug/L		66	25 - 135	3	25
2,4-Dichlorophenol			10.0	8.456		ug/L		85	21 - 132	2	20
Diethyl phthalate			10.0	11.05		ug/L		111	44 - 131	4	30
2,4-Dimethylphenol			10.0	7.884		ug/L		79	51 - 120	2	25
Dimethyl phthalate			10.0	11.27		ug/L		113	33 - 140	5	30
4,6-Dinitro-2-methylphenol			10.0	10.31		ug/L		103	22 - 147	10	25
2,4-Dinitrophenol			10.0	9.433		ug/L		94	20 - 134	11	25
2,4-Dinitrotoluene			10.0	10.53		ug/L		105	65 - 120	6	20

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 440-91160/3-A
Matrix: Water
Analysis Batch: 92112

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 91160

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,6-Dinitrotoluene			10.0	10.58		ug/L		106	65 - 120	6	20
Di-n-octyl phthalate			10.0	10.40		ug/L		104	63 - 130	3	20
1,2-Diphenylhydrazine(as Azobenzene)			10.0	12.26		ug/L		123	59 - 124	5	25
Fluoranthene			10.0	10.54		ug/L		105	64 - 120	2	20
Fluorene			10.0	10.86		ug/L		109	52 - 120	5	20
Hexachlorobenzene			10.0	9.479		ug/L		95	61 - 120	4	20
Hexachlorobutadiene			10.0	6.064		ug/L		61	34 - 120	9	25
Hexachloroethane			10.0	6.059		ug/L		61	34 - 120	7	25
Hexachlorocyclopentadiene			10.0	5.643		ug/L		56	23 - 120	5	30
Indeno[1,2,3-cd]pyrene			10.0	10.08		ug/L		101	59 - 128	3	25
Isophorone			10.0	9.309		ug/L		93	50 - 120	6	20
4-Methylphenol			10.0	8.408		ug/L		84	50 - 120	4	20
Naphthalene			10.0	8.298		ug/L		83	52 - 120	2	20
Nitrobenzene			10.0	8.832		ug/L		88	52 - 120	1	25
2-Nitrophenol			10.0	8.513		ug/L		85	21 - 132	1	25
4-Nitrophenol			10.0	8.859		ug/L		89	20 - 151	4	30
N-Nitrosodimethylamine			10.0	9.054		ug/L		91	20 - 143	3	20
N-Nitrosodiphenylamine			10.0	9.322		ug/L		93	58 - 120	2	20
N-Nitrosodi-n-propylamine			10.0	9.388		ug/L		94	60 - 120	9	20
Pentachlorophenol			10.0	6.650		ug/L		67	20 - 137	2	25
Phenanthrene			10.0	10.12		ug/L		101	62 - 120	4	20
Phenol			10.0	8.404		ug/L		84	20 - 120	2	25
Pyrene			10.0	10.50		ug/L		105	54 - 120	4	25
1,2,4-Trichlorobenzene			10.0	6.723		ug/L		67	44 - 120	1	20
2,4,6-Trichlorophenol			10.0	9.047		ug/L		90	20 - 139	8	30
2-Methylphenol			10.0	8.381		ug/L		84	47 - 120	4	20
4-Chloroaniline			10.0	8.916		ug/L		89	52 - 120	9	25
2-Methylnaphthalene			10.0	8.107		ug/L		81	55 - 120	5	20
2-Nitroaniline			10.0	10.44		ug/L		104	60 - 135	5	20
3-Nitroaniline			10.0	10.49		ug/L		105	63 - 123	5	25
Dibenzofuran			10.0	10.14		ug/L		101	60 - 120	3	20
4-Nitroaniline			10.0	10.63		ug/L		106	60 - 126	1	20
Benzo[g,h,i]perylene			10.0	10.86		ug/L		109	52 - 136	17	25
Benzyl alcohol			10.0	10.36		ug/L		104	50 - 120	6	20
bis (2-chloroisopropyl) ether			10.0	8.758		ug/L		88	45 - 120	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*92*		*50 - 120*
2-Fluorophenol	*83*		*30 - 120*
2,4,6-Tribromophenol	*100*		*40 - 120*
Nitrobenzene-d5	*89*		*45 - 120*
Terphenyl-d14	*99*		*50 - 125*
Phenol-d6	*90*		*35 - 120*

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-94270/1-A
Matrix: Water
Analysis Batch: 94968

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 94270

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.500	0.200	ug/L		03/26/13 12:03	03/28/13 20:38	1
Acenaphthylene	ND		0.500	0.200	ug/L		03/26/13 12:03	03/28/13 20:38	1
Aniline	ND		10.0	0.300	ug/L		03/26/13 12:03	03/28/13 20:38	1
Anthracene	ND		0.500	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
Benzidine	ND		5.00	1.00	ug/L		03/26/13 12:03	03/28/13 20:38	1
Benzo[a]anthracene	ND		5.00	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
Benzo[b]fluoranthene	ND		2.00	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
Benzo[k]fluoranthene	ND		0.500	0.200	ug/L		03/26/13 12:03	03/28/13 20:38	1
Benzoic acid	ND		5.00	3.00	ug/L		03/26/13 12:03	03/28/13 20:38	1
Benzo[a]pyrene	ND		2.00	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
Bis(2-chloroethoxy)methane	ND		0.500	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
Bis(2-chloroethyl)ether	ND		0.500	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
Bis(2-ethylhexyl) phthalate	ND		5.00	1.70	ug/L		03/26/13 12:03	03/28/13 20:38	1
4-Bromophenyl phenyl ether	ND		1.00	0.200	ug/L		03/26/13 12:03	03/28/13 20:38	1
Butyl benzyl phthalate	ND		5.00	0.700	ug/L		03/26/13 12:03	03/28/13 20:38	1
4-Chloro-3-methylphenol	ND		2.00	0.200	ug/L		03/26/13 12:03	03/28/13 20:38	1
2-Chloronaphthalene	ND		0.500	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
2-Chlorophenol	ND		1.00	0.200	ug/L		03/26/13 12:03	03/28/13 20:38	1
4-Chlorophenyl phenyl ether	ND		0.500	0.200	ug/L		03/26/13 12:03	03/28/13 20:38	1
Chrysene	ND		0.500	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
Dibenz(a,h)anthracene	ND		0.500	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
Di-n-butyl phthalate	ND		2.00	0.300	ug/L		03/26/13 12:03	03/28/13 20:38	1
1,2-Dichlorobenzene	ND		0.500	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
1,3-Dichlorobenzene	ND		0.500	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
1,4-Dichlorobenzene	ND		0.500	0.200	ug/L		03/26/13 12:03	03/28/13 20:38	1
3,3'-Dichlorobenzidine	ND		5.00	0.500	ug/L		03/26/13 12:03	03/28/13 20:38	1
2,4-Dichlorophenol	ND		2.00	0.200	ug/L		03/26/13 12:03	03/28/13 20:38	1
Diethyl phthalate	ND		1.00	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
2,4-Dimethylphenol	ND		2.00	0.300	ug/L		03/26/13 12:03	03/28/13 20:38	1
Dimethyl phthalate	ND		0.500	0.200	ug/L		03/26/13 12:03	03/28/13 20:38	1
4,6-Dinitro-2-methylphenol	ND		5.00	0.300	ug/L		03/26/13 12:03	03/28/13 20:38	1
2,4-Dinitrophenol	ND		5.00	0.900	ug/L		03/26/13 12:03	03/28/13 20:38	1
2,4-Dinitrotoluene	ND		5.00	0.200	ug/L		03/26/13 12:03	03/28/13 20:38	1
2,6-Dinitrotoluene	ND		5.00	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
Di-n-octyl phthalate	ND		5.00	0.200	ug/L		03/26/13 12:03	03/28/13 20:38	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		1.00	0.200	ug/L		03/26/13 12:03	03/28/13 20:38	1
Fluoranthene	ND		0.500	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
Fluorene	ND		0.500	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
Hexachlorobenzene	ND		1.00	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
Hexachlorobutadiene	ND		2.00	0.200	ug/L		03/26/13 12:03	03/28/13 20:38	1
Hexachloroethane	ND		3.00	0.200	ug/L		03/26/13 12:03	03/28/13 20:38	1
Hexachlorocyclopentadiene	ND		5.00	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
Indeno[1,2,3-cd]pyrene	ND		2.00	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
Isophorone	ND		1.00	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
4-Methylphenol	ND		5.00	0.200	ug/L		03/26/13 12:03	03/28/13 20:38	1
Naphthalene	ND		1.00	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
Nitrobenzene	ND		1.00	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-94270/1-A
Matrix: Water
Analysis Batch: 94968

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 94270

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		2.00	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
4-Nitrophenol	ND		5.00	2.50	ug/L		03/26/13 12:03	03/28/13 20:38	1
N-Nitrosodimethylamine	ND		2.00	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
N-Nitrosodiphenylamine	ND		1.00	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
N-Nitrosodi-n-propylamine	ND		2.00	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
Pentachlorophenol	ND		2.00	0.400	ug/L		03/26/13 12:03	03/28/13 20:38	1
Phenanthrene	ND		0.500	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
Phenol	ND		1.00	0.300	ug/L		03/26/13 12:03	03/28/13 20:38	1
Pyrene	ND		0.500	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
1,2,4-Trichlorobenzene	ND		1.00	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
2,4,6-Trichlorophenol	ND		1.00	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
2-Methylphenol	ND		2.00	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
4-Chloroaniline	ND		2.00	0.300	ug/L		03/26/13 12:03	03/28/13 20:38	1
2-Methylnaphthalene	ND		1.00	0.200	ug/L		03/26/13 12:03	03/28/13 20:38	1
2-Nitroaniline	ND		5.00	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
3-Nitroaniline	ND		5.00	1.00	ug/L		03/26/13 12:03	03/28/13 20:38	1
Dibenzofuran	ND		0.500	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
4-Nitroaniline	ND		5.00	0.500	ug/L		03/26/13 12:03	03/28/13 20:38	1
Benzo[g,h,i]perylene	ND		5.00	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
Benzyl alcohol	ND		5.00	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1
bis (2-chloroisopropyl) ether	ND		0.500	0.100	ug/L		03/26/13 12:03	03/28/13 20:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*50 - 120*	*03/26/13 12:03*	*03/28/13 20:38*	*1*
2-Fluorophenol	*82*		*30 - 120*	*03/26/13 12:03*	*03/28/13 20:38*	*1*
2,4,6-Tribromophenol	*94*		*40 - 120*	*03/26/13 12:03*	*03/28/13 20:38*	*1*
Nitrobenzene-d5	*88*		*45 - 120*	*03/26/13 12:03*	*03/28/13 20:38*	*1*
Terphenyl-d14	*97*		*50 - 125*	*03/26/13 12:03*	*03/28/13 20:38*	*1*
Phenol-d6	*79*		*35 - 120*	*03/26/13 12:03*	*03/28/13 20:38*	*1*

Lab Sample ID: LCS 440-94270/2-A
Matrix: Water
Analysis Batch: 94968

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 94270

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	10.0	8.565		ug/L		86	57 - 120
Acenaphthylene	10.0	8.784		ug/L		88	60 - 120
Aniline	10.0	8.165	J,DX	ug/L		82	53 - 120
Anthracene	10.0	8.975		ug/L		90	62 - 120
Benzidine	10.0	2.824	J,DX	ug/L		28	20 - 168
Benzo[a]anthracene	10.0	9.160		ug/L		92	62 - 120
Benzo[b]fluoranthene	10.0	8.256		ug/L		83	46 - 125
Benzo[k]fluoranthene	10.0	8.251		ug/L		83	61 - 127
Benzoic acid	10.0	8.242		ug/L		82	20 - 120
Benzo[a]pyrene	10.0	8.298		ug/L		83	66 - 130
Bis(2-chloroethoxy)methane	10.0	8.388		ug/L		84	57 - 120
Bis(2-chloroethyl)ether	10.0	8.177		ug/L		82	54 - 120
Bis(2-ethylhexyl) phthalate	10.0	11.43		ug/L		114	61 - 126

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-94270/2-A
Matrix: Water
Analysis Batch: 94968

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 94270

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Bromophenyl phenyl ether	10.0	8.494		ug/L		85	58 - 120
Butyl benzyl phthalate	10.0	11.03		ug/L		110	57 - 129
4-Chloro-3-methylphenol	10.0	9.238		ug/L		92	46 - 123
2-Chloronaphthalene	10.0	7.700		ug/L		77	54 - 120
2-Chlorophenol	10.0	7.729		ug/L		77	20 - 122
4-Chlorophenyl phenyl ether	10.0	8.471		ug/L		85	50 - 122
Chrysene	10.0	9.278		ug/L		93	63 - 120
Dibenz(a,h)anthracene	10.0	7.201		ug/L		72	56 - 124
Di-n-butyl phthalate	10.0	9.790		ug/L		98	60 - 126
1,2-Dichlorobenzene	10.0	6.142		ug/L		61	43 - 120
1,3-Dichlorobenzene	10.0	5.681		ug/L		57	41 - 120
1,4-Dichlorobenzene	10.0	5.884		ug/L		59	41 - 120
3,3'-Dichlorobenzidine	10.0	4.914	J,DX	ug/L		49	25 - 135
2,4-Dichlorophenol	10.0	7.902		ug/L		79	21 - 132
Diethyl phthalate	10.0	8.808		ug/L		88	44 - 131
2,4-Dimethylphenol	10.0	7.827		ug/L		78	51 - 120
Dimethyl phthalate	10.0	8.971		ug/L		90	33 - 140
4,6-Dinitro-2-methylphenol	10.0	8.925		ug/L		89	22 - 147
2,4-Dinitrophenol	10.0	7.541		ug/L		75	20 - 134
2,4-Dinitrotoluene	10.0	8.273		ug/L		83	65 - 120
2,6-Dinitrotoluene	10.0	8.438		ug/L		84	65 - 120
Di-n-octyl phthalate	10.0	9.668		ug/L		97	63 - 130
1,2-Diphenylhydrazine(as Azobenzene)	10.0	9.461		ug/L		95	59 - 124
Fluoranthene	10.0	9.576		ug/L		96	64 - 120
Fluorene	10.0	8.802		ug/L		88	52 - 120
Hexachlorobenzene	10.0	8.296		ug/L		83	61 - 120
Hexachlorobutadiene	10.0	5.006		ug/L		50	34 - 120
Hexachloroethane	10.0	5.273		ug/L		53	34 - 120
Hexachlorocyclopentadiene	10.0	3.823	J,DX	ug/L		38	23 - 120
Indeno[1,2,3-cd]pyrene	10.0	7.796		ug/L		78	59 - 128
Isophorone	10.0	9.574		ug/L		96	50 - 120
4-Methylphenol	10.0	7.935		ug/L		79	50 - 120
Naphthalene	10.0	7.914		ug/L		79	52 - 120
Nitrobenzene	10.0	8.145		ug/L		81	52 - 120
2-Nitrophenol	10.0	8.051		ug/L		81	21 - 132
4-Nitrophenol	10.0	7.291		ug/L		73	20 - 151
N-Nitrosodimethylamine	10.0	7.536		ug/L		75	20 - 143
N-Nitrosodiphenylamine	10.0	8.221		ug/L		82	58 - 120
N-Nitrosodi-n-propylamine	10.0	9.165		ug/L		92	60 - 120
Pentachlorophenol	10.0	7.896		ug/L		79	20 - 137
Phenanthrene	10.0	9.076		ug/L		91	62 - 120
Phenol	10.0	7.572		ug/L		76	20 - 120
Pyrene	10.0	10.47		ug/L		105	54 - 120
1,2,4-Trichlorobenzene	10.0	5.969		ug/L		60	44 - 120
2,4,6-Trichlorophenol	10.0	8.445		ug/L		84	20 - 139
2-Methylphenol	10.0	7.949		ug/L		79	47 - 120
4-Chloroaniline	10.0	8.853		ug/L		89	52 - 120

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-94270/2-A
Matrix: Water
Analysis Batch: 94968

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 94270

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	10.0	7.726		ug/L		77	55 - 120
2-Nitroaniline	10.0	8.397		ug/L		84	60 - 135
3-Nitroaniline	10.0	7.923		ug/L		79	63 - 123
Dibenzofuran	10.0	8.676		ug/L		87	60 - 120
4-Nitroaniline	10.0	7.263		ug/L		73	60 - 126
Benzo[g,h,i]perylene	10.0	8.776		ug/L		88	52 - 136
Benzyl alcohol	10.0	8.991		ug/L		90	50 - 120
bis (2-chloroisopropyl) ether	10.0	8.492		ug/L		85	45 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*81*		*50 - 120*
2-Fluorophenol	*74*		*30 - 120*
2,4,6-Tribromophenol	*99*		*40 - 120*
Nitrobenzene-d5	*86*		*45 - 120*
Terphenyl-d14	*93*		*50 - 125*
Phenol-d6	*80*		*35 - 120*

Lab Sample ID: 440-41729-J-3-C MS
Matrix: Water
Analysis Batch: 94968

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 94270

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		9.71	8.151		ug/L		84	60 - 120
Acenaphthylene	ND		9.71	8.256		ug/L		85	60 - 120
Aniline	ND		9.71	5.217	J,DX	ug/L		54	35 - 120
Anthracene	ND		9.71	7.022		ug/L		72	65 - 120
Benzidine	ND		9.71	ND	LN	ug/L		0	30 - 160
Benzo[a]anthracene	ND		9.71	6.235	LN	ug/L		64	65 - 120
Benzo[b]fluoranthene	ND		9.71	5.131	LN	ug/L		53	55 - 125
Benzo[k]fluoranthene	ND		9.71	4.782	LN	ug/L		49	55 - 125
Benzoic acid	ND		9.71	15.23	LM	ug/L		157	25 - 125
Benzo[a]pyrene	ND		9.71	3.518	LN	ug/L		36	55 - 130
Bis(2-chloroethoxy)methane	ND		9.71	8.524		ug/L		88	50 - 120
Bis(2-chloroethyl)ether	ND		9.71	7.621		ug/L		78	50 - 120
Bis(2-ethylhexyl) phthalate	3.94	J,DX	9.71	5.536	LN	ug/L		16	65 - 130
4-Bromophenyl phenyl ether	ND		9.71	8.163		ug/L		84	60 - 120
Butyl benzyl phthalate	ND		9.71	10.66		ug/L		110	55 - 130
4-Chloro-3-methylphenol	ND		9.71	9.583		ug/L		99	60 - 120
2-Chloronaphthalene	ND		9.71	7.409		ug/L		76	60 - 120
2-Chlorophenol	ND		9.71	7.188		ug/L		74	45 - 120
4-Chlorophenyl phenyl ether	ND		9.71	8.362		ug/L		86	65 - 120
Chrysene	ND		9.71	5.822	LN	ug/L		60	65 - 120
Dibenz(a,h)anthracene	ND		9.71	3.502	LN	ug/L		36	45 - 135
Di-n-butyl phthalate	0.821	J,DX	9.71	9.104		ug/L		85	60 - 125
1,2-Dichlorobenzene	ND		9.71	7.302		ug/L		75	40 - 120
1,3-Dichlorobenzene	ND		9.71	5.676		ug/L		58	35 - 120
1,4-Dichlorobenzene	ND		9.71	5.846		ug/L		60	35 - 120
3,3'-Dichlorobenzidine	ND		9.71	ND	LN	ug/L		0	45 - 135

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-41729-J-3-C MS
Matrix: Water
Analysis Batch: 94968

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 94270

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dichlorophenol	ND		9.71	8.294		ug/L		85	55 - 120
Diethyl phthalate	1.13		9.71	9.738		ug/L		89	55 - 120
2,4-Dimethylphenol	ND		9.71	3.120	LN	ug/L		32	40 - 120
Dimethyl phthalate	0.502		9.71	9.181		ug/L		89	30 - 120
4,6-Dinitro-2-methylphenol	ND		9.71	7.785		ug/L		80	45 - 120
2,4-Dinitrophenol	ND		9.71	8.447		ug/L		87	40 - 120
2,4-Dinitrotoluene	ND		9.71	8.482		ug/L		87	65 - 120
2,6-Dinitrotoluene	ND		9.71	8.840		ug/L		91	65 - 120
Di-n-octyl phthalate	ND		9.71	4.426	J,DX LN	ug/L		46	65 - 135
1,2-Diphenylhydrazine(as Azobenzene)	ND		9.71	8.556		ug/L		88	60 - 120
Fluoranthene	ND		9.71	8.162		ug/L		84	60 - 120
Fluorene	ND		9.71	8.790		ug/L		91	65 - 120
Hexachlorobenzene	ND		9.71	6.420		ug/L		66	60 - 120
Hexachlorobutadiene	ND		9.71	5.444		ug/L		56	40 - 120
Hexachloroethane	ND		9.71	5.264		ug/L		54	35 - 120
Hexachlorocyclopentadiene	ND		9.71	4.582	J,DX	ug/L		47	25 - 120
Indeno[1,2,3-cd]pyrene	ND		9.71	3.240	LN	ug/L		33	40 - 135
Isophorone	ND		9.71	9.538		ug/L		98	50 - 120
4-Methylphenol	ND		9.71	6.897		ug/L		71	50 - 120
Naphthalene	ND		9.71	7.505		ug/L		77	55 - 120
Nitrobenzene	ND		9.71	12.00	LM	ug/L		124	55 - 120
2-Nitrophenol	ND		9.71	8.071		ug/L		83	50 - 120
4-Nitrophenol	ND		9.71	10.70		ug/L		110	45 - 120
N-Nitrosodimethylamine	ND		9.71	6.580		ug/L		68	45 - 120
N-Nitrosodiphenylamine	ND		9.71	2.793	LN	ug/L		29	60 - 120
N-Nitrosodi-n-propylamine	ND		9.71	9.216		ug/L		95	45 - 120
Pentachlorophenol	ND		9.71	10.59		ug/L		109	24 - 121
Phenanthrene	ND		9.71	8.766		ug/L		90	65 - 120
Phenol	1.16		9.71	8.789		ug/L		79	40 - 120
Pyrene	ND		9.71	8.940		ug/L		92	55 - 125
1,2,4-Trichlorobenzene	ND		9.71	6.264		ug/L		65	45 - 120
2,4,6-Trichlorophenol	ND		9.71	8.814		ug/L		91	55 - 120
2-Methylphenol	ND		9.71	6.857		ug/L		71	50 - 120
4-Chloroaniline	ND		9.71	ND	LN	ug/L		0	55 - 120
2-Methylnaphthalene	ND		9.71	7.744		ug/L		80	55 - 120
2-Nitroaniline	ND		9.71	4.708	J,DX LN	ug/L		48	65 - 120
3-Nitroaniline	ND		9.71	ND	LN	ug/L		0	60 - 120
Dibenzofuran	ND		9.71	8.539		ug/L		88	65 - 120
4-Nitroaniline	ND		9.71	ND	LN	ug/L		0	55 - 125
Benzo[g,h,i]perylene	ND		9.71	3.418	J,DX LN	ug/L		35	45 - 135
Benzyl alcohol	0.561	J,DX	9.71	9.542		ug/L		93	40 - 120
bis (2-chloroisopropyl) ether	ND		9.71	8.567		ug/L		88	45 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*79*		*50 - 120*
2-Fluorophenol	*73*		*30 - 120*
2,4,6-Tribromophenol	*107*		*40 - 120*

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-41729-J-3-C MS
Matrix: Water
Analysis Batch: 94968

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 94270

Surrogate	MS %Recovery	MS Qualifier	Limits
Nitrobenzene-d5	*88*		*45 - 120*
Terphenyl-d14	*56*		*50 - 125*
Phenol-d6	*80*		*35 - 120*

Lab Sample ID: 440-41729-K-3-B MSD
Matrix: Water
Analysis Batch: 94968

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 94270

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		9.52	7.961		ug/L		84	60 - 120	2	25
Acenaphthylene	ND		9.52	8.330		ug/L		87	60 - 120	1	25
Aniline	ND		9.52	ND	LN	ug/L		0	35 - 120	NC	30
Anthracene	ND		9.52	7.728		ug/L		81	65 - 120	10	25
Benzidine	ND		9.52	ND	LN	ug/L		0	30 - 160	NC	35
Benzo[a]anthracene	ND		9.52	6.536		ug/L		69	65 - 120	5	20
Benzo[b]fluoranthene	ND		9.52	4.560	LN	ug/L		48	55 - 125	12	25
Benzo[k]fluoranthene	ND		9.52	4.536	LN	ug/L		48	55 - 125	5	30
Benzoic acid	ND		9.52	16.23	LM	ug/L		170	25 - 125	6	30
Benzo[a]pyrene	ND		9.52	3.865	LN	ug/L		41	55 - 130	9	25
Bis(2-chloroethoxy)methane	ND		9.52	8.637		ug/L		91	50 - 120	1	25
Bis(2-chloroethyl)ether	ND		9.52	7.150		ug/L		75	50 - 120	6	25
Bis(2-ethylhexyl) phthalate	3.94	J,DX	9.52	7.480	LN BA	ug/L		37	65 - 130	30	25
4-Bromophenyl phenyl ether	ND		9.52	7.974		ug/L		84	60 - 120	2	25
Butyl benzyl phthalate	ND		9.52	10.98		ug/L		115	55 - 130	3	25
4-Chloro-3-methylphenol	ND		9.52	9.933		ug/L		104	60 - 120	4	25
2-Chloronaphthalene	ND		9.52	6.816		ug/L		72	60 - 120	8	20
2-Chlorophenol	ND		9.52	7.054		ug/L		74	45 - 120	2	25
4-Chlorophenyl phenyl ether	ND		9.52	8.195		ug/L		86	65 - 120	2	25
Chrysene	ND		9.52	6.145		ug/L		65	65 - 120	5	25
Dibenz(a,h)anthracene	ND		9.52	6.053	BA	ug/L		64	45 - 135	53	30
Di-n-butyl phthalate	0.821	J,DX	9.52	9.209		ug/L		88	60 - 125	1	25
1,2-Dichlorobenzene	ND		9.52	7.211		ug/L		76	40 - 120	1	25
1,3-Dichlorobenzene	ND		9.52	5.323		ug/L		56	35 - 120	6	25
1,4-Dichlorobenzene	ND		9.52	5.362		ug/L		56	35 - 120	9	25
3,3'-Dichlorobenzidine	ND		9.52	ND	LN	ug/L		0	45 - 135	NC	25
2,4-Dichlorophenol	ND		9.52	8.548		ug/L		90	55 - 120	3	25
Diethyl phthalate	1.13		9.52	10.42		ug/L		97	55 - 120	7	30
2,4-Dimethylphenol	ND		9.52	7.257	BA	ug/L		76	40 - 120	80	25
Dimethyl phthalate	0.502		9.52	13.01	LM BA	ug/L		131	30 - 120	34	30
4,6-Dinitro-2-methylphenol	ND		9.52	6.199		ug/L		65	45 - 120	23	25
2,4-Dinitrophenol	ND		9.52	7.950		ug/L		83	40 - 120	6	25
2,4-Dinitrotoluene	ND		9.52	8.138		ug/L		85	65 - 120	4	25
2,6-Dinitrotoluene	ND		9.52	9.087		ug/L		95	65 - 120	3	20
Di-n-octyl phthalate	ND		9.52	5.305	LN	ug/L		56	65 - 135	18	20
1,2-Diphenylhydrazine(as Azobenzene)	ND		9.52	8.658		ug/L		91	60 - 120	1	25
Fluoranthene	ND		9.52	7.724		ug/L		81	60 - 120	6	25
Fluorene	ND		9.52	8.621		ug/L		91	65 - 120	2	25

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-41729-K-3-B MSD
Matrix: Water
Analysis Batch: 94968

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 94270

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachlorobenzene	ND		9.52	6.466		ug/L		68	60 - 120	1	25
Hexachlorobutadiene	ND		9.52	5.010		ug/L		53	40 - 120	8	25
Hexachloroethane	ND		9.52	5.046		ug/L		53	35 - 120	4	25
Hexachlorocyclopentadiene	ND		9.52	3.962	J,DX	ug/L		42	25 - 120	15	30
Indeno[1,2,3-cd]pyrene	ND		9.52	5.345	BA	ug/L		56	40 - 135	49	30
Isophorone	ND		9.52	8.811		ug/L		93	50 - 120	8	25
4-Methylphenol	ND		9.52	7.880		ug/L		83	50 - 120	13	25
Naphthalene	ND		9.52	7.116		ug/L		75	55 - 120	5	25
Nitrobenzene	ND		9.52	11.83	LM	ug/L		124	55 - 120	1	25
2-Nitrophenol	ND		9.52	7.621		ug/L		80	50 - 120	6	25
4-Nitrophenol	ND		9.52	12.76	LM	ug/L		134	45 - 120	18	30
N-Nitrosodimethylamine	ND		9.52	6.110		ug/L		64	45 - 120	7	25
N-Nitrosodiphenylamine	ND		9.52	1.510	LN BA	ug/L		16	60 - 120	60	25
N-Nitrosodi-n-propylamine	ND		9.52	9.142		ug/L		96	45 - 120	1	25
Pentachlorophenol	ND		9.52	11.25		ug/L		118	24 - 121	6	25
Phenanthrene	ND		9.52	8.694		ug/L		91	65 - 120	1	25
Phenol	1.16		9.52	7.790		ug/L		70	40 - 120	12	25
Pyrene	ND		9.52	10.86		ug/L		114	55 - 125	19	25
1,2,4-Trichlorobenzene	ND		9.52	5.822		ug/L		61	45 - 120	7	20
2,4,6-Trichlorophenol	ND		9.52	8.894		ug/L		93	55 - 120	1	30
2-Methylphenol	ND		9.52	7.525		ug/L		79	50 - 120	9	25
4-Chloroaniline	ND		9.52	ND	LN	ug/L		0	55 - 120	NC	25
2-Methylnaphthalene	ND		9.52	7.586		ug/L		80	55 - 120	2	20
2-Nitroaniline	ND		9.52	1.863	J,DX LN BA	ug/L		20	65 - 120	87	25
3-Nitroaniline	ND		9.52	ND	LN	ug/L		0	60 - 120	NC	25
Dibenzofuran	ND		9.52	8.420		ug/L		88	65 - 120	1	25
4-Nitroaniline	ND		9.52	ND	LN	ug/L		0	55 - 125	NC	25
Benzo[g,h,i]perylene	ND		9.52	5.856	BA	ug/L		61	45 - 135	53	30
Benzyl alcohol	0.561	J,DX	9.52	9.495		ug/L		94	40 - 120	0	30
bis (2-chloroisopropyl) ether	ND		9.52	8.471		ug/L		89	45 - 120	1	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*81*		*50 - 120*
2-Fluorophenol	*66*		*30 - 120*
2,4,6-Tribromophenol	*113*		*40 - 120*
Nitrobenzene-d5	*87*		*45 - 120*
Terphenyl-d14	*70*		*50 - 125*
Phenol-d6	*76*		*35 - 120*

Method: 608 - Organochlorine Pesticides in Water

Lab Sample ID: MB 440-90661/1-A
Matrix: Water
Analysis Batch: 90808

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 90661

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.10	0.080	ug/L		03/10/13 12:49	03/11/13 15:17	1

Method: 608 - Organochlorine Pesticides in Water (Continued)

Lab Sample ID: MB 440-90661/1-A
Matrix: Water
Analysis Batch: 90808

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 90661

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	ND		0.0050	0.0020	ug/L		03/10/13 12:49	03/11/13 15:17	1
Toxaphene	ND		0.50	0.25	ug/L		03/10/13 12:49	03/11/13 15:17	1
4,4'-DDD	ND		0.0050	0.0040	ug/L		03/10/13 12:49	03/11/13 15:17	1
4,4'-DDE	ND		0.0050	0.0030	ug/L		03/10/13 12:49	03/11/13 15:17	1
4,4'-DDT	ND		0.010	0.0040	ug/L		03/10/13 12:49	03/11/13 15:17	1
alpha-BHC	ND		0.0050	0.0025	ug/L		03/10/13 12:49	03/11/13 15:17	1
gamma-BHC (Lindane)	ND		0.010	0.0030	ug/L		03/10/13 12:49	03/11/13 15:17	1
Endrin aldehyde	ND		0.010	0.0020	ug/L		03/10/13 12:49	03/11/13 15:17	1
delta-BHC	ND		0.0050	0.0035	ug/L		03/10/13 12:49	03/11/13 15:17	1
Aldrin	ND		0.0050	0.0015	ug/L		03/10/13 12:49	03/11/13 15:17	1
Endosulfan sulfate	ND		0.010	0.0030	ug/L		03/10/13 12:49	03/11/13 15:17	1
Endosulfan I	ND		0.0050	0.0030	ug/L		03/10/13 12:49	03/11/13 15:17	1
Endrin	ND		0.0050	0.0020	ug/L		03/10/13 12:49	03/11/13 15:17	1
Endosulfan II	ND		0.0050	0.0020	ug/L		03/10/13 12:49	03/11/13 15:17	1
beta-BHC	ND		0.010	0.0040	ug/L		03/10/13 12:49	03/11/13 15:17	1
Heptachlor	ND		0.010	0.0030	ug/L		03/10/13 12:49	03/11/13 15:17	1
Heptachlor epoxide	ND		0.0050	0.0025	ug/L		03/10/13 12:49	03/11/13 15:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*79*		*35 - 115*	*03/10/13 12:49*	*03/11/13 15:17*	*1*

Lab Sample ID: LCS 440-90661/2-A
Matrix: Water
Analysis Batch: 90808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 90661

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dieldrin	0.500	0.505		ug/L		101	55 - 115
4,4'-DDD	0.500	0.528		ug/L		106	55 - 120
4,4'-DDE	0.500	0.523		ug/L		105	50 - 120
4,4'-DDT	0.500	0.543		ug/L		109	55 - 120
alpha-BHC	0.500	0.486		ug/L		97	45 - 115
gamma-BHC (Lindane)	0.500	0.493		ug/L		99	45 - 115
Endrin aldehyde	0.500	0.509		ug/L		102	50 - 120
delta-BHC	0.500	0.517		ug/L		103	55 - 115
Aldrin	0.500	0.473		ug/L		95	40 - 115
Endosulfan sulfate	0.500	0.511		ug/L		102	60 - 120
Endosulfan I	0.500	0.486		ug/L		97	55 - 115
Endrin	0.500	0.511		ug/L		102	55 - 115
Endosulfan II	0.500	0.504		ug/L		101	55 - 120
beta-BHC	0.500	0.497		ug/L		99	55 - 115
Heptachlor	0.500	0.469		ug/L		94	45 - 115
Heptachlor epoxide	0.500	0.493		ug/L		99	55 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*82*		*35 - 115*

Method: 608 - Organochlorine Pesticides in Water (Continued)

Lab Sample ID: 440-39926-A-1-A MS
Matrix: Water
Analysis Batch: 90808

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 90661

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dieldrin	ND		0.500	0.438		ug/L		88	50 - 120
4,4'-DDD	ND		0.500	0.487		ug/L		97	50 - 125
4,4'-DDE	ND		0.500	0.448		ug/L		90	45 - 125
4,4'-DDT	ND		0.500	0.481		ug/L		96	50 - 125
alpha-BHC	0.028		0.500	0.367		ug/L		68	40 - 120
gamma-BHC (Lindane)	ND		0.500	0.387		ug/L		77	40 - 120
Endrin aldehyde	ND		0.500	0.431		ug/L		86	45 - 125
delta-BHC	ND		0.500	0.411		ug/L		82	50 - 120
Aldrin	ND		0.500	0.367		ug/L		73	35 - 120
Endosulfan sulfate	ND		0.500	0.508		ug/L		102	55 - 125
Endosulfan I	ND		0.500	0.421		ug/L		84	50 - 120
Endrin	ND		0.500	0.499		ug/L		100	50 - 120
Endosulfan II	ND		0.500	0.475		ug/L		95	50 - 125
beta-BHC	0.018	J,DX PI	0.500	0.396		ug/L		76	50 - 120
Heptachlor	ND		0.500	0.390		ug/L		78	40 - 120
Heptachlor epoxide	ND		0.500	0.429		ug/L		86	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*53*		*35 - 115*

Lab Sample ID: 440-39926-A-1-B MSD
Matrix: Water
Analysis Batch: 90808

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 90661

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dieldrin	ND		0.500	0.427		ug/L		85	50 - 120	3	30
4,4'-DDD	ND		0.500	0.483		ug/L		97	50 - 125	1	30
4,4'-DDE	ND		0.500	0.431		ug/L		86	45 - 125	4	30
4,4'-DDT	ND		0.500	0.456		ug/L		91	50 - 125	5	30
alpha-BHC	ND		0.500	0.363		ug/L		73	40 - 120	1	30
gamma-BHC (Lindane)	ND		0.500	0.380		ug/L		76	40 - 120	2	30
Endrin aldehyde	ND		0.500	0.409		ug/L		82	45 - 125	5	30
delta-BHC	ND		0.500	0.405		ug/L		81	50 - 120	1	30
Aldrin	ND		0.500	0.362		ug/L		72	35 - 120	1	30
Endosulfan sulfate	ND		0.500	0.486		ug/L		97	55 - 125	4	30
Endosulfan I	ND		0.500	0.411		ug/L		82	50 - 120	2	30
Endrin	ND		0.500	0.475		ug/L		95	50 - 120	5	30
Endosulfan II	ND		0.500	0.455		ug/L		91	50 - 125	4	30
beta-BHC	0.0084	J,DX PI	0.500	0.394		ug/L		77	50 - 120	1	30
Heptachlor	ND		0.500	0.386		ug/L		77	40 - 120	1	30
Heptachlor epoxide	ND		0.500	0.418		ug/L		84	50 - 120	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*54*		*35 - 115*

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 440-90661/1-A
Matrix: Water
Analysis Batch: 90786

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 90661

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		0.50	0.25	ug/L		03/10/13 12:49	03/11/13 12:39	1
Aroclor 1221	ND		0.50	0.25	ug/L		03/10/13 12:49	03/11/13 12:39	1
Aroclor 1232	ND		0.50	0.25	ug/L		03/10/13 12:49	03/11/13 12:39	1
Aroclor 1242	ND		0.50	0.25	ug/L		03/10/13 12:49	03/11/13 12:39	1
Aroclor 1248	ND		0.50	0.25	ug/L		03/10/13 12:49	03/11/13 12:39	1
Aroclor 1254	ND		0.50	0.25	ug/L		03/10/13 12:49	03/11/13 12:39	1
Aroclor 1260	ND		0.50	0.25	ug/L		03/10/13 12:49	03/11/13 12:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*78*		*45 - 120*	*03/10/13 12:49*	*03/11/13 12:39*	*1*

Lab Sample ID: LCS 440-90661/5-A
Matrix: Water
Analysis Batch: 90786

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 90661

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor 1016			4.00	3.37		ug/L		84	50 - 115		
Aroclor 1260			4.00	3.55		ug/L		89	60 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*87*		*45 - 120*

Lab Sample ID: 440-39926-A-1-C MS
Matrix: Water
Analysis Batch: 90786

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 90661

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor 1016	ND		4.00	2.95		ug/L		74	45 - 120		
Aroclor 1260	ND		4.00	3.10		ug/L		77	55 - 125		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*79*		*45 - 120*

Lab Sample ID: 440-39926-A-1-D MSD
Matrix: Water
Analysis Batch: 90786

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 90661

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor 1016	ND		4.00	2.98		ug/L		75	45 - 120	1	30
Aroclor 1260	ND		4.00	3.11		ug/L		78	55 - 125	0	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*78*		*45 - 120*

Method: 218.6 - Chromium, Hexavalent (Ion Chromatography)

Lab Sample ID: MB 440-90811/34
Matrix: Water
Analysis Batch: 90811

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		1.0	0.25	ug/L			03/11/13 21:15	1

Lab Sample ID: LCS 440-90811/35
Matrix: Water
Analysis Batch: 90811

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium, hexavalent			50.0	51.1		ug/L		102	90 - 110		

Lab Sample ID: 440-40328-1 MS
Matrix: Water
Analysis Batch: 90811

Client Sample ID: Arroyo Simi-FP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium, hexavalent	0.39	J,DX BU	50.0	51.7		ug/L		103	90 - 110		

Lab Sample ID: 440-40328-1 MSD
Matrix: Water
Analysis Batch: 90811

Client Sample ID: Arroyo Simi-FP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium, hexavalent	0.39	J,DX BU	50.0	52.4		ug/L		104	90 - 110	1	10

Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Lab Sample ID: MB 320-12332/1-A
Matrix: Water
Analysis Batch: 12476

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12332

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		0.000010	0.00000064	ug/L		03/14/13 08:56	03/16/13 10:32	1
2,3,7,8-TCDF	ND		0.000010	0.00000097	ug/L		03/14/13 08:56	03/16/13 10:32	1
1,2,3,7,8-PeCDD	ND		0.000050	0.00000093	ug/L		03/14/13 08:56	03/16/13 10:32	1
1,2,3,7,8-PeCDF	ND		0.000050	0.00000075	ug/L		03/14/13 08:56	03/16/13 10:32	1
2,3,4,7,8-PeCDF	ND		0.000050	0.00000074	ug/L		03/14/13 08:56	03/16/13 10:32	1
1,2,3,4,7,8-HxCDD	ND		0.000050	0.00000084	ug/L		03/14/13 08:56	03/16/13 10:32	1
1,2,3,6,7,8-HxCDD	ND		0.000050	0.00000069	ug/L		03/14/13 08:56	03/16/13 10:32	1
1,2,3,7,8,9-HxCDD	ND		0.000050	0.00000067	ug/L		03/14/13 08:56	03/16/13 10:32	1
1,2,3,4,7,8-HxCDF	ND		0.000050	0.00000074	ug/L		03/14/13 08:56	03/16/13 10:32	1
1,2,3,6,7,8-HxCDF	ND		0.000050	0.00000065	ug/L		03/14/13 08:56	03/16/13 10:32	1

Method: 1613B - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-12332/1-A
Matrix: Water
Analysis Batch: 12476

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12332

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,7,8,9-HxCDF	ND		0.000050	0.00000091	ug/L		03/14/13 08:56	03/16/13 10:32	1
2,3,4,6,7,8-HxCDF	ND		0.000050	0.00000066	ug/L		03/14/13 08:56	03/16/13 10:32	1
1,2,3,4,6,7,8-HpCDD	ND		0.000050	0.0000013	ug/L		03/14/13 08:56	03/16/13 10:32	1
1,2,3,4,6,7,8-HpCDF	ND		0.000050	0.0000012	ug/L		03/14/13 08:56	03/16/13 10:32	1
1,2,3,4,7,8,9-HpCDF	ND		0.000050	0.0000020	ug/L		03/14/13 08:56	03/16/13 10:32	1
OCDD	0.00000395	J,DX	0.00010	0.0000014	ug/L		03/14/13 08:56	03/16/13 10:32	1
OCDF	0.00000218	J,DX q	0.00010	0.0000018	ug/L		03/14/13 08:56	03/16/13 10:32	1
Total TCDD	ND		0.000010	0.00000064	ug/L		03/14/13 08:56	03/16/13 10:32	1
Total TCDF	ND		0.000010	0.00000097	ug/L		03/14/13 08:56	03/16/13 10:32	1
Total PeCDD	ND		0.000050	0.00000093	ug/L		03/14/13 08:56	03/16/13 10:32	1
Total PeCDF	ND		0.000050	0.00000074	ug/L		03/14/13 08:56	03/16/13 10:32	1
Total HxCDD	ND		0.000050	0.00000067	ug/L		03/14/13 08:56	03/16/13 10:32	1
Total HxCDF	ND		0.000050	0.00000065	ug/L		03/14/13 08:56	03/16/13 10:32	1
Total HpCDD	ND		0.000050	0.0000013	ug/L		03/14/13 08:56	03/16/13 10:32	1
Total HpCDF	ND		0.000050	0.0000012	ug/L		03/14/13 08:56	03/16/13 10:32	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*62*		*25 - 164*	*03/14/13 08:56*	*03/16/13 10:32*	*1*
13C-2,3,7,8-TCDF	*60*		*24 - 169*	*03/14/13 08:56*	*03/16/13 10:32*	*1*
13C-1,2,3,7,8-PeCDD	*65*		*25 - 181*	*03/14/13 08:56*	*03/16/13 10:32*	*1*
13C-1,2,3,7,8-PeCDF	*53*		*24 - 185*	*03/14/13 08:56*	*03/16/13 10:32*	*1*
13C-2,3,4,7,8-PeCDF	*58*		*21 - 178*	*03/14/13 08:56*	*03/16/13 10:32*	*1*
13C-1,2,3,4,7,8-HxCDD	*51*		*32 - 141*	*03/14/13 08:56*	*03/16/13 10:32*	*1*
13C-1,2,3,6,7,8-HxCDD	*63*		*28 - 130*	*03/14/13 08:56*	*03/16/13 10:32*	*1*
13C-1,2,3,4,7,8-HxCDF	*51*		*26 - 152*	*03/14/13 08:56*	*03/16/13 10:32*	*1*
13C-1,2,3,6,7,8-HxCDF	*63*		*26 - 123*	*03/14/13 08:56*	*03/16/13 10:32*	*1*
13C-1,2,3,7,8,9-HxCDF	*52*		*29 - 147*	*03/14/13 08:56*	*03/16/13 10:32*	*1*
13C-2,3,4,6,7,8-HxCDF	*60*		*28 - 136*	*03/14/13 08:56*	*03/16/13 10:32*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*50*		*23 - 140*	*03/14/13 08:56*	*03/16/13 10:32*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*51*		*28 - 143*	*03/14/13 08:56*	*03/16/13 10:32*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*43*		*26 - 138*	*03/14/13 08:56*	*03/16/13 10:32*	*1*
13C-OCDD	*40*		*17 - 157*	*03/14/13 08:56*	*03/16/13 10:32*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
37Cl4-2,3,7,8-TCDD	*83*		*35 - 197*	*03/14/13 08:56*	*03/16/13 10:32*	*1*

Lab Sample ID: LCS 320-12332/2-A
Matrix: Water
Analysis Batch: 12476

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12332

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
2,3,7,8-TCDD			0.000200	0.000184		ug/L		92	67 - 158		

Method: 1613B - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 320-12332/2-A
Matrix: Water
Analysis Batch: 12476

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12332

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
2,3,7,8-TCDF			0.000200	0.000162		ug/L		81	75 - 158		
1,2,3,7,8-PeCDD			0.00100	0.000917		ug/L		92	70 - 142		
1,2,3,7,8-PeCDF			0.00100	0.000981		ug/L		98	80 - 134		
2,3,4,7,8-PeCDF			0.00100	0.000998		ug/L		100	68 - 160		
1,2,3,4,7,8-HxCDD			0.00100	0.00105		ug/L		105	70 - 164		
1,2,3,6,7,8-HxCDD			0.00100	0.000936		ug/L		94	76 - 134		
1,2,3,7,8,9-HxCDD			0.00100	0.00101		ug/L		101	64 - 162		
1,2,3,4,7,8-HxCDF			0.00100	0.000913		ug/L		91	72 - 134		
1,2,3,6,7,8-HxCDF			0.00100	0.000911		ug/L		91	84 - 130		
1,2,3,7,8,9-HxCDF			0.00100	0.000890		ug/L		89	78 - 130		
2,3,4,6,7,8-HxCDF			0.00100	0.000891		ug/L		89	70 - 156		
1,2,3,4,6,7,8-HpCDD			0.00100	0.000966		ug/L		97	70 - 140		
1,2,3,4,6,7,8-HpCDF			0.00100	0.000952		ug/L		95	82 - 122		
1,2,3,4,7,8,9-HpCDF			0.00100	0.000975		ug/L		97	78 - 138		
OCDD			0.00200	0.00202		ug/L		101	78 - 144		
OCDF			0.00200	0.00175		ug/L		87	63 - 170		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*69*		*20 - 175*
13C-2,3,7,8-TCDF	*62*		*22 - 152*
13C-1,2,3,7,8-PeCDD	*80*		*21 - 227*
13C-1,2,3,7,8-PeCDF	*64*		*21 - 192*
13C-2,3,4,7,8-PeCDF	*66*		*13 - 328*
13C-1,2,3,4,7,8-HxCDD	*70*		*21 - 193*
13C-1,2,3,6,7,8-HxCDD	*79*		*25 - 163*
13C-1,2,3,4,7,8-HxCDF	*66*		*19 - 202*
13C-1,2,3,6,7,8-HxCDF	*76*		*21 - 159*
13C-1,2,3,7,8,9-HxCDF	*66*		*17 - 205*
13C-2,3,4,6,7,8-HxCDF	*73*		*22 - 176*
13C-1,2,3,4,6,7,8-HpCDD	*73*		*26 - 166*
13C-1,2,3,4,6,7,8-HpCDF	*68*		*21 - 158*
13C-1,2,3,4,7,8,9-HpCDF	*62*		*20 - 186*
13C-OCDD	*57*		*13 - 199*

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
37Cl4-2,3,7,8-TCDD	*82*		*35 - 197*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 440-92737/1-A
Matrix: Water
Analysis Batch: 92891

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 92737

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.050	0.040	mg/L		03/19/13 14:45	03/19/13 20:29	1
Arsenic	ND		0.010	0.0070	mg/L		03/19/13 14:45	03/19/13 20:29	1
Boron	ND		0.050	0.020	mg/L		03/19/13 14:45	03/19/13 20:29	1
Beryllium	ND		0.0020	0.00090	mg/L		03/19/13 14:45	03/19/13 20:29	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: MB 440-92737/1-A
Matrix: Water
Analysis Batch: 92891

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 92737

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		0.10	0.050	mg/L		03/19/13 14:45	03/19/13 20:29	1
Chromium	ND		0.0050	0.0020	mg/L		03/19/13 14:45	03/19/13 20:29	1
Iron	ND		0.040	0.015	mg/L		03/19/13 14:45	03/19/13 20:29	1
Magnesium	ND		0.020	0.012	mg/L		03/19/13 14:45	03/19/13 20:29	1
Nickel	ND		0.010	0.0020	mg/L		03/19/13 14:45	03/19/13 20:29	1
Vanadium	ND		0.010	0.0030	mg/L		03/19/13 14:45	03/19/13 20:29	1
Zinc	ND		0.020	0.0090	mg/L		03/19/13 14:45	03/19/13 20:29	1
Silver	ND		0.010	0.0060	mg/L		03/19/13 14:45	03/19/13 20:29	1
Hardness, as CaCO3	ND		0.33	0.17	mg/L		03/19/13 14:45	03/19/13 20:29	1

Lab Sample ID: LCS 440-92737/2-A
Matrix: Water
Analysis Batch: 92891

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 92737

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.500	0.497		mg/L		99	85 - 115
Arsenic	0.500	0.495		mg/L		99	85 - 115
Boron	0.500	0.495		mg/L		99	85 - 115
Beryllium	0.500	0.510		mg/L		102	85 - 115
Calcium	2.50	2.56		mg/L		103	85 - 115
Chromium	0.500	0.512		mg/L		102	85 - 115
Iron	0.500	0.500		mg/L		100	85 - 115
Magnesium	2.50	2.61		mg/L		104	85 - 115
Nickel	0.500	0.526		mg/L		105	85 - 115
Vanadium	0.500	0.508		mg/L		102	85 - 115
Zinc	0.500	0.491		mg/L		98	85 - 115
Silver	0.250	0.253		mg/L		101	85 - 115

Lab Sample ID: 440-40328-1 MS
Matrix: Water
Analysis Batch: 92891

Client Sample ID: Arroyo Simi-FP
Prep Type: Total Recoverable
Prep Batch: 92737

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	6.0		0.500	9.11	BB	mg/L		620	70 - 130
Arsenic	ND		0.500	0.515		mg/L		103	70 - 130
Boron	0.20		0.500	0.712		mg/L		103	70 - 130
Beryllium	ND		0.500	0.524		mg/L		105	70 - 130
Calcium	58		2.50	59.7	BB	mg/L		52	70 - 130
Chromium	0.014		0.500	0.525		mg/L		102	70 - 130
Iron	9.3		0.500	10.8	BB	mg/L		305	70 - 130
Magnesium	17		2.50	19.5	BB	mg/L		119	70 - 130
Nickel	0.014		0.500	0.524		mg/L		102	70 - 130
Vanadium	0.028		0.500	0.557		mg/L		106	70 - 130
Zinc	0.052		0.500	0.542		mg/L		98	70 - 130
Silver	ND		0.250	0.251		mg/L		101	70 - 130

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 440-40328-1 MSD
Matrix: Water
Analysis Batch: 92891

Client Sample ID: Arroyo Simi-FP
Prep Type: Total Recoverable
Prep Batch: 92737

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	6.0		0.500	12.7	BB BA	mg/L		1344	70 - 130	33	20
Arsenic	ND		0.500	0.524		mg/L		105	70 - 130	2	20
Boron	0.20		0.500	0.735		mg/L		107	70 - 130	3	20
Beryllium	ND		0.500	0.539		mg/L		108	70 - 130	3	20
Calcium	58		2.50	61.0	BB	mg/L		102	70 - 130	2	20
Chromium	0.014		0.500	0.539		mg/L		105	70 - 130	3	20
Iron	9.3		0.500	13.5	BB BA	mg/L		847	70 - 130	22	20
Magnesium	17		2.50	20.1	BB	mg/L		141	70 - 130	3	20
Nickel	0.014		0.500	0.534		mg/L		104	70 - 130	2	20
Vanadium	0.028		0.500	0.578		mg/L		110	70 - 130	4	20
Zinc	0.052		0.500	0.570		mg/L		104	70 - 130	5	20
Silver	ND		0.250	0.257		mg/L		103	70 - 130	2	20

Lab Sample ID: MB 440-91577/1-D
Matrix: Water
Analysis Batch: 92623

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 92375

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		50	40	ug/L		03/18/13 08:20	03/18/13 18:19	1
Arsenic	ND		10	7.0	ug/L		03/18/13 08:20	03/18/13 18:19	1
Boron	ND		0.050	0.020	mg/L		03/18/13 08:20	03/18/13 18:19	1
Beryllium	ND		2.0	0.90	ug/L		03/18/13 08:20	03/18/13 18:19	1
Calcium	ND		0.10	0.050	mg/L		03/18/13 08:20	03/18/13 18:19	1
Chromium	ND		5.0	2.0	ug/L		03/18/13 08:20	03/18/13 18:19	1
Iron	ND		0.040	0.015	mg/L		03/18/13 08:20	03/18/13 18:19	1
Magnesium	ND		0.020	0.012	mg/L		03/18/13 08:20	03/18/13 18:19	1
Nickel	ND		10	2.0	ug/L		03/18/13 08:20	03/18/13 18:19	1
Vanadium	ND		10	3.0	ug/L		03/18/13 08:20	03/18/13 18:19	1
Zinc	ND		20	9.0	ug/L		03/18/13 08:20	03/18/13 18:19	1
Silver	ND		10	6.0	ug/L		03/18/13 08:20	03/18/13 18:19	1
Hardness, as CaCO3	ND		0.33	0.17	mg/L		03/18/13 08:20	03/18/13 18:19	1

Lab Sample ID: LCS 440-91577/2-D
Matrix: Water
Analysis Batch: 92623

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 92375

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	500	462		ug/L		92	85 - 115
Arsenic	500	485		ug/L		97	85 - 115
Boron	0.500	0.468		mg/L		94	85 - 115
Beryllium	500	503		ug/L		101	85 - 115
Calcium	2.50	2.61		mg/L		104	85 - 115
Chromium	500	498		ug/L		100	85 - 115
Iron	0.500	0.523		mg/L		105	85 - 115
Magnesium	2.50	2.51		mg/L		100	85 - 115
Nickel	500	515		ug/L		103	85 - 115
Vanadium	500	501		ug/L		100	85 - 115
Zinc	500	474		ug/L		95	85 - 115

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 440-91577/2-D
Matrix: Water
Analysis Batch: 92623

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 92375

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Silver			250	245		ug/L		98	85 - 115		

Lab Sample ID: 440-40193-AL-4-C MS
Matrix: Water
Analysis Batch: 92623

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 92375

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aluminum	ND		500	419		ug/L		84	70 - 130		
Arsenic	ND		500	556		ug/L		111	70 - 130		
Boron	0.46		0.500	0.980		mg/L		104	70 - 130		
Beryllium	ND		500	538		ug/L		108	70 - 130		
Chromium	ND		500	527		ug/L		105	70 - 130		
Iron	0.41		0.500	1.03		mg/L		122	70 - 130		
Nickel	2.6	J,DX	500	499		ug/L		99	70 - 130		
Vanadium	ND		500	564		ug/L		113	70 - 130		
Zinc	ND		500	508		ug/L		102	70 - 130		
Silver	ND		250	250		ug/L		100	70 - 130		

Lab Sample ID: 440-40193-AL-4-C MS ^2
Matrix: Water
Analysis Batch: 92798

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 92375

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Calcium	490		2.50	484	BB	mg/L		-84	70 - 130		
Magnesium	220		2.50	225	BB	mg/L		161	70 - 130		

Lab Sample ID: 440-40193-AL-4-D MSD
Matrix: Water
Analysis Batch: 92623

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 92375

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	ND		500	433		ug/L		87	70 - 130	3	20
Arsenic	ND		500	532		ug/L		106	70 - 130	4	20
Boron	0.46		0.500	0.994		mg/L		107	70 - 130	1	20
Beryllium	ND		500	514		ug/L		103	70 - 130	4	20
Chromium	ND		500	509		ug/L		102	70 - 130	4	20
Iron	0.41		0.500	1.01		mg/L		120	70 - 130	1	20
Nickel	2.6	J,DX	500	483		ug/L		96	70 - 130	3	20
Vanadium	ND		500	539		ug/L		108	70 - 130	5	20
Zinc	ND		500	492		ug/L		98	70 - 130	3	20
Silver	ND		250	256		ug/L		102	70 - 130	2	20

Lab Sample ID: 440-40193-AL-4-D MSD ^2
Matrix: Water
Analysis Batch: 92798

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 92375

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	490		2.50	477	BB	mg/L		-358	70 - 130	1	20
Magnesium	220		2.50	218	BB	mg/L		-114	70 - 130	3	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 440-92787/1-A
Matrix: Water
Analysis Batch: 92959

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 92787

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		1.0	0.10	ug/L		03/19/13 17:23	03/20/13 10:53	1
Lead	ND		1.0	0.20	ug/L		03/19/13 17:23	03/20/13 10:53	1
Antimony	ND		2.0	0.30	ug/L		03/19/13 17:23	03/20/13 10:53	1
Selenium	ND		2.0	0.50	ug/L		03/19/13 17:23	03/20/13 10:53	1
Thallium	ND		1.0	0.20	ug/L		03/19/13 17:23	03/20/13 10:53	1

Lab Sample ID: LCS 440-92787/2-A
Matrix: Water
Analysis Batch: 92959

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 92787

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	80.0	80.5		ug/L		101	85 - 115
Lead	80.0	78.9		ug/L		99	85 - 115
Antimony	80.0	80.4		ug/L		100	85 - 115
Selenium	80.0	79.0		ug/L		99	85 - 115
Thallium	80.0	78.0		ug/L		97	85 - 115

Lab Sample ID: 440-40328-1 MS
Matrix: Water
Analysis Batch: 92959

Client Sample ID: Arroyo Simi-FP
Prep Type: Total Recoverable
Prep Batch: 92787

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.68	J,DX	80.0	103		ug/L		128	70 - 130
Lead	4.9		80.0	107		ug/L		128	70 - 130
Antimony	0.87	J,DX	80.0	83.6		ug/L		103	70 - 130
Selenium	3.2	J,DX	80.0	102		ug/L		124	70 - 130
Thallium	ND		80.0	102		ug/L		127	70 - 130

Lab Sample ID: 440-40328-1 MSD
Matrix: Water
Analysis Batch: 92959

Client Sample ID: Arroyo Simi-FP
Prep Type: Total Recoverable
Prep Batch: 92787

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	0.68	J,DX	80.0	98.3		ug/L		122	70 - 130	5	20
Lead	4.9		80.0	101		ug/L		121	70 - 130	5	20
Antimony	0.87	J,DX	80.0	78.5		ug/L		97	70 - 130	6	20
Selenium	3.2	J,DX	80.0	96.4		ug/L		117	70 - 130	6	20
Thallium	ND		80.0	97.0		ug/L		121	70 - 130	5	20

Lab Sample ID: MB 440-93130/1-A
Matrix: Water
Analysis Batch: 93289

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 93130

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.76	J,DX	2.0	0.50	ug/L		03/20/13 19:03	03/21/13 09:48	1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 440-93130/2-A
Matrix: Water
Analysis Batch: 93289

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 93130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	80.0	85.5		ug/L		107	85 - 115

Lab Sample ID: 440-40945-A-3-B MS ^5
Matrix: Water
Analysis Batch: 93289

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 93130

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	3.3	J,DX MB	80.0	82.1		ug/L		98	70 - 130

Lab Sample ID: 440-40945-A-3-C MSD ^5
Matrix: Water
Analysis Batch: 93289

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 93130

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	3.3	J,DX MB	80.0	88.7		ug/L		107	70 - 130	8	20

Lab Sample ID: MB 440-91577/1-J
Matrix: Water
Analysis Batch: 93128

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 93021

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		1.0	0.10	ug/L		03/20/13 13:48	03/20/13 18:44	1
Copper	ND		2.0	0.50	ug/L		03/20/13 13:48	03/20/13 18:44	1
Lead	ND		1.0	0.20	ug/L		03/20/13 13:48	03/20/13 18:44	1
Antimony	ND		2.0	0.30	ug/L		03/20/13 13:48	03/20/13 18:44	1
Selenium	ND		2.0	0.50	ug/L		03/20/13 13:48	03/20/13 18:44	1
Thallium	ND		1.0	0.20	ug/L		03/20/13 13:48	03/20/13 18:44	1

Lab Sample ID: LCS 440-91577/2-J
Matrix: Water
Analysis Batch: 93128

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 93021

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	80.0	79.0		ug/L		99	85 - 115
Copper	80.0	79.7		ug/L		100	85 - 115
Lead	80.0	79.3		ug/L		99	85 - 115
Antimony	80.0	80.3		ug/L		100	85 - 115
Selenium	80.0	79.4		ug/L		99	85 - 115
Thallium	80.0	80.9		ug/L		101	85 - 115

Lab Sample ID: 440-40328-1 MS
Matrix: Water
Analysis Batch: 93128

Client Sample ID: Arroyo Simi-FP
Prep Type: Dissolved
Prep Batch: 93021

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.11	J,DX	80.0	75.6		ug/L		94	70 - 130
Copper	4.3		80.0	80.3		ug/L		95	70 - 130
Lead	ND		80.0	75.4		ug/L		94	70 - 130
Antimony	0.52	J,DX	80.0	79.3		ug/L		98	70 - 130

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 440-40328-1 MS — **Client Sample ID: Arroyo Simi-FP**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 93128 — **Prep Batch: 93021**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	2.1		80.0	77.4		ug/L		94	70 - 130
Thallium	ND		80.0	77.1		ug/L		96	70 - 130

Lab Sample ID: 440-40328-1 MSD — **Client Sample ID: Arroyo Simi-FP**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 93128 — **Prep Batch: 93021**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	0.11	J,DX	80.0	75.5		ug/L		94	70 - 130	0	20
Copper	4.3		80.0	78.6		ug/L		93	70 - 130	2	20
Lead	ND		80.0	75.3		ug/L		94	70 - 130	0	20
Antimony	0.52	J,DX	80.0	80.1		ug/L		99	70 - 130	1	20
Selenium	2.1		80.0	77.1		ug/L		94	70 - 130	0	20
Thallium	ND		80.0	77.2		ug/L		97	70 - 130	0	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 440-92502/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 93279 — **Prep Batch: 92502**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.10	ug/L		03/20/13 12:27	03/20/13 18:42	1

Lab Sample ID: LCS 440-92502/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 93279 — **Prep Batch: 92502**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	8.00	7.81		ug/L		98	85 - 115

Lab Sample ID: 440-40019-AN-3-D MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 93279 — **Prep Batch: 92502**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		8.00	8.00		ug/L		100	70 - 130

Lab Sample ID: 440-40019-AN-3-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 93279 — **Prep Batch: 92502**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		8.00	7.85		ug/L		98	70 - 130	2	20

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: MB 440-91577/1-I — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 93120 — **Prep Batch: 92967**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.10	ug/L		03/20/13 12:27	03/20/13 16:14	1

Lab Sample ID: LCS 440-91577/2-I — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 93120 — **Prep Batch: 92967**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	8.00	8.00		ug/L		100	85 - 115

Lab Sample ID: 440-40328-1 MS — **Client Sample ID: Arroyo Simi-FP**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 93120 — **Prep Batch: 92967**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		8.00	7.83		ug/L		98	70 - 130

Lab Sample ID: 440-40328-1 MSD — **Client Sample ID: Arroyo Simi-FP**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 93120 — **Prep Batch: 92967**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		8.00	7.93		ug/L		99	70 - 130	1	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 440-91279/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 91279

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10	10	mg/L			03/12/13 20:09	1

Lab Sample ID: LCS 440-91279/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 91279

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	1000	991		mg/L		99	85 - 115

Lab Sample ID: 440-40430-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 91279

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	130		135		mg/L		1	10

Method: SM 4500 CN E - Cyanide, Total (Low Level)

Lab Sample ID: MB 440-90885/1-A
Matrix: Water
Analysis Batch: 90984

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 90885

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		5.0	3.0	ug/L		03/11/13 15:04	03/11/13 21:37	1

Lab Sample ID: LCS 440-90885/2-A
Matrix: Water
Analysis Batch: 90984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 90885

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	100	97.2		ug/L		97	90 - 110

Lab Sample ID: 440-39884-B-1-B MS
Matrix: Water
Analysis Batch: 90984

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 90885

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	ND		100	102		ug/L		102	70 - 115

Lab Sample ID: 440-39884-B-1-C MSD
Matrix: Water
Analysis Batch: 90984

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 90885

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	ND		100	104		ug/L		104	70 - 115	2	15

GC/MS VOA

Analysis Batch: 90650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40019-S-1 MS	Matrix Spike	Total/NA	Water	624	
440-40019-S-1 MSD	Matrix Spike Duplicate	Total/NA	Water	624	
440-40328-1	Arroyo Simi-FP	Total/NA	Water	624	
LCS 440-90650/6	Lab Control Sample	Total/NA	Water	624	
MB 440-90650/5	Method Blank	Total/NA	Water	624	

Analysis Batch: 92541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Total/NA	Water	624	
440-40534-D-1 MS	Matrix Spike	Total/NA	Water	624	
440-40534-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	624	
LCS 440-92541/5	Lab Control Sample	Total/NA	Water	624	
MB 440-92541/4	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 90585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39233-Q-6-A MS	Matrix Spike	Total/NA	Water	525.2	
440-40328-1	Arroyo Simi-FP	Total/NA	Water	525.2	
LCS 440-90585/2-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 440-90585/3-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MB 440-90585/1-A	Method Blank	Total/NA	Water	525.2	

Analysis Batch: 90937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 440-90585/2-A	Lab Control Sample	Total/NA	Water	525.2	90585
LCSD 440-90585/3-A	Lab Control Sample Dup	Total/NA	Water	525.2	90585
MB 440-90585/1-A	Method Blank	Total/NA	Water	525.2	90585

Prep Batch: 91160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Total/NA	Water	625	
LCS 440-91160/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 440-91160/3-A	Lab Control Sample Dup	Total/NA	Water	625	
MB 440-91160/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 91197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39233-Q-6-A MS	Matrix Spike	Total/NA	Water	525.2	90585
440-40328-1	Arroyo Simi-FP	Total/NA	Water	525.2	90585

Analysis Batch: 91851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 440-90585/2-A	Lab Control Sample	Total/NA	Water	525.2	90585
LCSD 440-90585/3-A	Lab Control Sample Dup	Total/NA	Water	525.2	90585
MB 440-90585/1-A	Method Blank	Total/NA	Water	525.2	90585

GC/MS Semi VOA (Continued)

Analysis Batch: 92112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Total/NA	Water	625	91160
LCS 440-91160/2-A	Lab Control Sample	Total/NA	Water	625	91160
LCSD 440-91160/3-A	Lab Control Sample Dup	Total/NA	Water	625	91160
MB 440-91160/1-A	Method Blank	Total/NA	Water	625	91160

Prep Batch: 94270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1 - RE	Arroyo Simi-FP	Total/NA	Water	625	
440-41729-J-3-C MS	Matrix Spike	Total/NA	Water	625	
440-41729-K-3-B MSD	Matrix Spike Duplicate	Total/NA	Water	625	
LCS 440-94270/2-A	Lab Control Sample	Total/NA	Water	625	
MB 440-94270/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 94968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1 - RE	Arroyo Simi-FP	Total/NA	Water	625	94270
440-41729-J-3-C MS	Matrix Spike	Total/NA	Water	625	94270
440-41729-K-3-B MSD	Matrix Spike Duplicate	Total/NA	Water	625	94270
LCS 440-94270/2-A	Lab Control Sample	Total/NA	Water	625	94270
MB 440-94270/1-A	Method Blank	Total/NA	Water	625	94270

GC Semi VOA

Prep Batch: 90661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39926-A-1-A MS	Matrix Spike	Total/NA	Water	608	
440-39926-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	608	
440-39926-A-1-C MS	Matrix Spike	Total/NA	Water	608	
440-39926-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	608	
440-40328-1	Arroyo Simi-FP	Total/NA	Water	608	
LCS 440-90661/2-A	Lab Control Sample	Total/NA	Water	608	
LCS 440-90661/5-A	Lab Control Sample	Total/NA	Water	608	
MB 440-90661/1-A	Method Blank	Total/NA	Water	608	

Analysis Batch: 90786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39926-A-1-C MS	Matrix Spike	Total/NA	Water	608	90661
440-39926-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	608	90661
440-40328-1	Arroyo Simi-FP	Total/NA	Water	608	90661
LCS 440-90661/5-A	Lab Control Sample	Total/NA	Water	608	90661
MB 440-90661/1-A	Method Blank	Total/NA	Water	608	90661

Analysis Batch: 90808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39926-A-1-A MS	Matrix Spike	Total/NA	Water	608	90661
440-39926-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	608	90661
LCS 440-90661/2-A	Lab Control Sample	Total/NA	Water	608	90661
MB 440-90661/1-A	Method Blank	Total/NA	Water	608	90661

GC Semi VOA (Continued)

Analysis Batch: 91083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Total/NA	Water	608	90661

HPLC/IC

Analysis Batch: 90811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Total/NA	Water	218.6	
440-40328-1 MS	Arroyo Simi-FP	Total/NA	Water	218.6	
440-40328-1 MSD	Arroyo Simi-FP	Total/NA	Water	218.6	
LCS 440-90811/35	Lab Control Sample	Total/NA	Water	218.6	
MB 440-90811/34	Method Blank	Total/NA	Water	218.6	

Specialty Organics

Prep Batch: 12332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Total/NA	Water	1613B	
LCS 320-12332/2-A	Lab Control Sample	Total/NA	Water	1613B	
MB 320-12332/1-A	Method Blank	Total/NA	Water	1613B	

Analysis Batch: 12476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Total/NA	Water	1613B	12332
LCS 320-12332/2-A	Lab Control Sample	Total/NA	Water	1613B	12332
MB 320-12332/1-A	Method Blank	Total/NA	Water	1613B	12332

Metals

Analysis Batch: 90113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Total/NA	Water	SM 2340B	

Prep Batch: 92375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Dissolved	Water	200.2	
440-40193-AL-4-C MS	Matrix Spike	Dissolved	Water	200.2	
440-40193-AL-4-C MS ^2	Matrix Spike	Dissolved	Water	200.2	
440-40193-AL-4-D MSD	Matrix Spike Duplicate	Dissolved	Water	200.2	
440-40193-AL-4-D MSD ^2	Matrix Spike Duplicate	Dissolved	Water	200.2	
LCS 440-91577/2-D	Lab Control Sample	Dissolved	Water	200.2	
MB 440-91577/1-D	Method Blank	Dissolved	Water	200.2	

Prep Batch: 92502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Total/NA	Water	245.1	
440-40019-AN-3-D MS	Matrix Spike	Total/NA	Water	245.1	
440-40019-AN-3-E MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	
LCS 440-92502/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 440-92502/1-A	Method Blank	Total/NA	Water	245.1	

Metals (Continued)

Analysis Batch: 92623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Dissolved	Water	200.7 Rev 4.4	92375
440-40193-AL-4-C MS	Matrix Spike	Dissolved	Water	200.7 Rev 4.4	92375
440-40193-AL-4-D MSD	Matrix Spike Duplicate	Dissolved	Water	200.7 Rev 4.4	92375
LCS 440-91577/2-D	Lab Control Sample	Dissolved	Water	200.7 Rev 4.4	92375
MB 440-91577/1-D	Method Blank	Dissolved	Water	200.7 Rev 4.4	92375

Prep Batch: 92737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Total Recoverable	Water	200.2	
440-40328-1 MS	Arroyo Simi-FP	Total Recoverable	Water	200.2	
440-40328-1 MSD	Arroyo Simi-FP	Total Recoverable	Water	200.2	
LCS 440-92737/2-A	Lab Control Sample	Total Recoverable	Water	200.2	
MB 440-92737/1-A	Method Blank	Total Recoverable	Water	200.2	

Prep Batch: 92787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Total Recoverable	Water	200.2	
440-40328-1 MS	Arroyo Simi-FP	Total Recoverable	Water	200.2	
440-40328-1 MSD	Arroyo Simi-FP	Total Recoverable	Water	200.2	
LCS 440-92787/2-A	Lab Control Sample	Total Recoverable	Water	200.2	
MB 440-92787/1-A	Method Blank	Total Recoverable	Water	200.2	

Analysis Batch: 92798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40193-AL-4-C MS ^2	Matrix Spike	Dissolved	Water	200.7 Rev 4.4	92375
440-40193-AL-4-D MSD ^2	Matrix Spike Duplicate	Dissolved	Water	200.7 Rev 4.4	92375

Analysis Batch: 92891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Total Recoverable	Water	200.7 Rev 4.4	92737
440-40328-1 MS	Arroyo Simi-FP	Total Recoverable	Water	200.7 Rev 4.4	92737
440-40328-1 MSD	Arroyo Simi-FP	Total Recoverable	Water	200.7 Rev 4.4	92737
LCS 440-92737/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	92737
MB 440-92737/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	92737

Analysis Batch: 92959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Total Recoverable	Water	200.8	92787
440-40328-1 MS	Arroyo Simi-FP	Total Recoverable	Water	200.8	92787
440-40328-1 MSD	Arroyo Simi-FP	Total Recoverable	Water	200.8	92787
LCS 440-92787/2-A	Lab Control Sample	Total Recoverable	Water	200.8	92787
MB 440-92787/1-A	Method Blank	Total Recoverable	Water	200.8	92787

Prep Batch: 92967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Dissolved	Water	245.1	
440-40328-1 MS	Arroyo Simi-FP	Dissolved	Water	245.1	
440-40328-1 MSD	Arroyo Simi-FP	Dissolved	Water	245.1	
LCS 440-91577/2-I	Lab Control Sample	Dissolved	Water	245.1	
MB 440-91577/1-I	Method Blank	Dissolved	Water	245.1	

Metals (Continued)

Prep Batch: 93021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Dissolved	Water	200.2	
440-40328-1 MS	Arroyo Simi-FP	Dissolved	Water	200.2	
440-40328-1 MSD	Arroyo Simi-FP	Dissolved	Water	200.2	
LCS 440-91577/2-J	Lab Control Sample	Dissolved	Water	200.2	
MB 440-91577/1-J	Method Blank	Dissolved	Water	200.2	

Analysis Batch: 93120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Dissolved	Water	245.1	92967
440-40328-1 MS	Arroyo Simi-FP	Dissolved	Water	245.1	92967
440-40328-1 MSD	Arroyo Simi-FP	Dissolved	Water	245.1	92967
LCS 440-91577/2-I	Lab Control Sample	Dissolved	Water	245.1	92967
MB 440-91577/1-I	Method Blank	Dissolved	Water	245.1	92967

Analysis Batch: 93128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Dissolved	Water	200.8	93021
440-40328-1 MS	Arroyo Simi-FP	Dissolved	Water	200.8	93021
440-40328-1 MSD	Arroyo Simi-FP	Dissolved	Water	200.8	93021
LCS 440-91577/2-J	Lab Control Sample	Dissolved	Water	200.8	93021
MB 440-91577/1-J	Method Blank	Dissolved	Water	200.8	93021

Prep Batch: 93130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Total Recoverable	Water	200.2	
440-40945-A-3-B MS ^5	Matrix Spike	Total Recoverable	Water	200.2	
440-40945-A-3-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	200.2	
LCS 440-93130/2-A	Lab Control Sample	Total Recoverable	Water	200.2	
MB 440-93130/1-A	Method Blank	Total Recoverable	Water	200.2	

Analysis Batch: 93279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Total/NA	Water	245.1	92502
440-40019-AN-3-D MS	Matrix Spike	Total/NA	Water	245.1	92502
440-40019-AN-3-E MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	92502
LCS 440-92502/2-A	Lab Control Sample	Total/NA	Water	245.1	92502
MB 440-92502/1-A	Method Blank	Total/NA	Water	245.1	92502

Analysis Batch: 93289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Total Recoverable	Water	200.8	93130
440-40945-A-3-B MS ^5	Matrix Spike	Total Recoverable	Water	200.8	93130
440-40945-A-3-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	200.8	93130
LCS 440-93130/2-A	Lab Control Sample	Total Recoverable	Water	200.8	93130
MB 440-93130/1-A	Method Blank	Total Recoverable	Water	200.8	93130

QC Association Summary

Client: MWH Americas Inc
Project/Site: Boeing SSFL NPDES Annual Arroyo Simi-Fro

TestAmerica Job ID: 440-40328-1

General Chemistry

Prep Batch: 90885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39884-B-1-B MS	Matrix Spike	Total/NA	Water	Distill/CN	
440-39884-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	Distill/CN	
440-40328-1	Arroyo Simi-FP	Total/NA	Water	Distill/CN	
LCS 440-90885/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
MB 440-90885/1-A	Method Blank	Total/NA	Water	Distill/CN	

Analysis Batch: 90984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39884-B-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	90885
440-39884-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	90885
440-40328-1	Arroyo Simi-FP	Total/NA	Water	SM 4500 CN E	90885
LCS 440-90885/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	90885
MB 440-90885/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	90885

Analysis Batch: 91279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Total/NA	Water	SM 2540D	
440-40430-A-1 DU	Duplicate	Total/NA	Water	SM 2540D	
LCS 440-91279/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 440-91279/1	Method Blank	Total/NA	Water	SM 2540D	

Biology

Analysis Batch: 90673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Total/NA	Water	SM 9221E	

Analysis Batch: 90674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40328-1	Arroyo Simi-FP	Total/NA	Water	SM 9221F	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
LH	Surrogate Recoveries were higher than QC limits

GC/MS Semi VOA

Qualifier	Qualifier Description
LN	MS and/or MSD below acceptance limits. See Blank Spike (LCS)
J,DX	Estimated value; value < lowest standard (MQL), but >than MDL
LG	LG=Surrogate recovery below the acceptance limits
BU	Sample was prepped beyond the specified holding time
LM	MS and/or MSD above acceptance limits. See Blank Spike (LCS)
BA	Relative percent difference out of control
LH	Surrogate Recoveries were higher than QC limits

HPLC/IC

Qualifier	Qualifier Description
BU	Analyzed out of holding time
J,DX	Estimated value; value < lowest standard (MQL), but >than MDL

Dioxin

Qualifier	Qualifier Description
J,DX	Estimated value; value < lowest standard (MQL), but >than MDL
q	The isomer is qualified as positively identified, but at an estimated quantity because the quantitation is based on the theoretical ratio for these samples.
MB	Analyte present in the method blank

Metals

Qualifier	Qualifier Description
BB	Sample > 4X spike concentration
J,DX	Estimated value; value < lowest standard (MQL), but >than MDL
MB	Analyte present in the method blank
BA	Relative percent difference out of control

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: MWH Americas Inc
Project/Site: Boeing SSFL NPDES Annual Arroyo Simi-Fro

TestAmerica Job ID: 440-40328-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-13
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	03-28-13
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-13
Northern Mariana Islands	State Program	9	MP0002	01-31-14
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

Laboratory: TestAmerica Sacramento

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2928-01	01-31-14
Alaska (UST)	State Program	10	UST-055	12-18-13
Arizona	State Program	9	AZ0708	08-11-13
Arkansas DEQ	State Program	6	88-0691	06-17-13
California	NELAP	9	1119CA	01-31-14
Colorado	State Program	8	N/A	08-31-13
Connecticut	State Program	1	PH-0691	06-30-13
Florida	NELAP	4	E87570	06-30-13
Guam	State Program	9	N/A	08-31-13
Hawaii	State Program	9	N/A	01-31-14
Illinois	NELAP	5	200060	03-17-14
Kansas	NELAP	7	E-10375	10-31-13
Louisiana	NELAP	6	30612	06-30-13
Michigan	State Program	5	9947	01-31-14
Nevada	State Program	9	CA44	07-31-13
New Jersey	NELAP	2	CA005	06-30-13
New York	NELAP	2	11666	05-01-13
Northern Mariana Islands	State Program	9	MP0007	02-01-14
Oregon	NELAP	10	CA200005	03-28-14
Pennsylvania	NELAP	3	68-01272	05-31-13
South Carolina	State Program	4	87014	06-30-13
Texas	NELAP	6	T104704399-08-TX	05-31-13
US Fish & Wildlife	Federal		LE148388-0	12-31-13
USDA	Federal		P330-11-00436	12-30-14
USEPA UCMR	Federal	1	CA00044	11-06-14
Utah	NELAP	8	QUAN1	01-31-14
Washington	State Program	10	C581	05-05-13
West Virginia	State Program	3	9930C	12-31-13
West Virginia DEP	State Program	3	334	07-31-13
Wyoming	State Program	8	8TMS-Q	01-31-14

EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (800) 220-3675/ 786-0262

http://www.emsl.com E-mail: MicrobiologyLab@emsl.com

Client:	TestAmerica Irvine	**EMSL Order ID:**	611300335
	17461 Derian Avenue Suite 100	**Date Received:**	3/12/2013
	Irvine , CA 92614	**Date Analyzed:**	3/13/2013
Attn.	Debby Wilson	**Date Reported:**	3/15/2013
Project:	**Boeing SSFL NPDES Annual Arroyo Simi-Fro/44002624**	**Date Amended:**	

Real-Time PCR Analysis for Human *Bacteroides*

(Based on a published method SAM: 348 - 357, 2010), EMSL Test Code: M199, Revision No. 3, 04/18/2011)

Lab Sample Number	Client Sample ID	Sample Date and Time	Amount Received	Amount Sampled	CEs /100 mL
0335-1	Arroyo Simi-FP(440-40328-1)	3/8/2013 12:15 Pacific	Water 250 ml	Water 250 ml	None Detected

EMSL maintains liability limited to cost of analysis. Interpretation of the data contained in this report is the responsibility of the client. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. The above test report relates only to the items tested. EMSL bears no responsibility for sample collection activities or analytical method limitations.

Note: The PCR primer is HF183 and the qPCR probe and primer was evaluated in 2010 by EPA scientists. The real-time PCR based on HF183 detects human specific total bacteroides predominantly with minor cross-detections on chicken and dog fecal materials. CEs: Cell Equivalents, measured by PCR using genomic DNA standards.

USEPA License No: 0240-02

Quanyi "Charlie" Li, Ph.D.

Director, PCR and DNA Analysis Lab

446-403278

Test America Version 7/19/2010

CHAIN OF CUSTODY FORM

Client Name/Address:	Project:
MWH-Arcadia 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Test America Contact: Debby Wilson	Boeing-SSFL NPDES Annual Arroyo Simi-Frontier Park
Project Manager: Bronwyn Kelly Sampler: J. PARKES	Phone Number: (626) 568-6691 Fax Number: (626) 568-6515

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #	Hardness as $CaCO_3$	PP PCBs/Pesticides (608)	Chlorpyrifos, Diazinon (525.2)	TSS	TCDD (and all cogeners)	Fecal coliform (SM9223)	E. coli (SM9223)	MST-Bateriodales, Human	PP Metals (200.7/200.8)	PP SVOCs (625)	PP VOCs (624)	Cyanide		Comments
Arroyo Simi-FP	W	1L Poly	1	3/8/13 1215	HNO_3	1	X													
Arroyo Simi-FP	W	1L Amber	2		None	2A, 2B		X												
Arroyo Simi-FP	W	1L Amber	2		HCl	3A, 3B			X											Extract within 36-Hours of sampling
Arroyo Simi-FP	W	500 mL Poly	1		None	4				X										
Arroyo Simi-FP	W	1L Amber	2		None	5A, 5B					X									
Arroyo Simi-FP	W	125 mL Poly	1		Na2S2O3	6						X								
Arroyo Simi-FP	W	125 mL Poly	1		Na2S2O3	7							X							
Arroyo Simi-FP	W	125 mL Poly	1		None	8								X						Deliver to lab ASAP
Arroyo Simi-FP	W	1L Poly	1		HNO_3	9									X					
Arroyo Simi-FP	W	1L Amber	2		None	10a, 10b										X				
Arroyo Simi-FP	W	VOAs	3		None	11a, 11b, 11c											X			
Arroyo Simi-FP	W	VOAs	3		HCl	12a, 12b, 12c											X			
Arroyo Simi-FP	W	500 mL Poly	1		NaOH	13												X		

ANALYSIS REQUIRED

Field readings:
Temp = 15.67°C (60.2°F)
pH = 7.31
Water Velocity (Ft/second) = 3 FT/6 SEC
Time of readings = 12:15

Relinquished By	Date/Time:	Received By	Date/Time:
	3-8-13 13:30		3-8-13 13:30
Relinquished By	Date/Time:	Received By	Date/Time:
	3-8-13 16:45		
Relinquished By	Date/Time:	Received By	Date/Time:
			3/8/13

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

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

Data Requirements: (check)
No Level IV ____ All Level IV ____
NPDES Level IV X

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 440-40328-1

Login Number: 40328

List Source: TestAmerica Irvine

List Number: 1

Creator: Perez, Angel

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	N/A	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	J. Parkes
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 440-40328-1

Login Number: 40328
List Number: 1
Creator: Tecson, Jeffrey

List Source: TestAmerica Sacramento
List Creation: 03/12/13 12:09 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	678733
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	1.1
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Isotope Dilution Summary

Client: MWH Americas Inc
Project/Site: Boeing SSFL NPDES Annual Arroyo Simi-Fro

TestAmerica Job ID: 440-40328-1

Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		TCDD	TCDF	PeCDD	PeCDF1	PeCDF2	HxCDD1	HxCDD2	HxCDF1
Lab Sample ID	Client Sample ID	(25-164)	(24-169)	(25-181)	(24-185)	(21-178)	(32-141)	(28-130)	(26-152)
440-40328-1	Arroyo Simi-FP	64	59	68	56	58	63	65	59
MB 320-12332/1-A	Method Blank	62	60	65	53	58	51	63	51

		Percent Isotope Dilution Recovery (Acceptance Limits)						
		HxCDF2	HxCDF4	HxCDF3	HpCDD	HpCDF1	HpCDF2	OCDD
Lab Sample ID	Client Sample ID	(26-123)	(29-147)	(28-136)	(23-140)	(28-143)	(26-138)	(17-157)
440-40328-1	Arroyo Simi-FP	67	56	65	62	61	53	54
MB 320-12332/1-A	Method Blank	63	52	60	50	51	43	40

Surrogate Legend

TCDD = 13C-2,3,7,8-TCDD
TCDF = 13C-2,3,7,8-TCDF
PeCDD = 13C-1,2,3,7,8-PeCDD
PeCDF1 = 13C-1,2,3,7,8-PeCDF
PeCDF2 = 13C-2,3,4,7,8-PeCDF
HxCDD1 = 13C-1,2,3,4,7,8-HxCDD
HxCDD2 = 13C-1,2,3,6,7,8-HxCDD
HxCDF1 = 13C-1,2,3,4,7,8-HxCDF
HxCDF2 = 13C-1,2,3,6,7,8-HxCDF
HxCDF4 = 13C-1,2,3,7,8,9-HxCDF
HxCDF3 = 13C-2,3,4,6,7,8-HxCDF
HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
HpCDF1 = 13C-1,2,3,4,6,7,8-HpCDF
HpCDF2 = 13C-1,2,3,4,7,8,9-HpCDF
OCDD = 13C-OCDD

Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		TCDD	TCDF	PeCDD	PeCDF1	PeCDF2	HxCDD1	HxCDD2	HxCDF1
Lab Sample ID	Client Sample ID	(20-175)	(22-152)	(21-227)	(21-192)	(13-328)	(21-193)	(25-163)	(19-202)
LCS 320-12332/2-A	Lab Control Sample	69	62	80	64	66	70	79	66

		Percent Isotope Dilution Recovery (Acceptance Limits)						
		HxCDF2	HxCDF4	HxCDF3	HpCDD	HpCDF1	HpCDF2	OCDD
Lab Sample ID	Client Sample ID	(21-159)	(17-205)	(22-176)	(26-166)	(21-158)	(20-186)	(13-199)
LCS 320-12332/2-A	Lab Control Sample	76	66	73	73	68	62	57

Surrogate Legend

TCDD = 13C-2,3,7,8-TCDD
TCDF = 13C-2,3,7,8-TCDF
PeCDD = 13C-1,2,3,7,8-PeCDD
PeCDF1 = 13C-1,2,3,7,8-PeCDF
PeCDF2 = 13C-2,3,4,7,8-PeCDF
HxCDD1 = 13C-1,2,3,4,7,8-HxCDD
HxCDD2 = 13C-1,2,3,6,7,8-HxCDD
HxCDF1 = 13C-1,2,3,4,7,8-HxCDF
HxCDF2 = 13C-1,2,3,6,7,8-HxCDF
HxCDF4 = 13C-1,2,3,7,8,9-HxCDF
HxCDF3 = 13C-2,3,4,6,7,8-HxCDF

HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
HpCDF1 = 13C-1,2,3,4,6,7,8-HpCDF
HpCDF2 = 13C-1,2,3,4,7,8,9-HpCDF
OCDD = 13C-OCDD

APPENDIX G

Section 11

Arroyo Simi-Frontier Park – March 13, 2013

Test America Analytical Laboratory Report

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-40769-1
Client Project/Site: Arroyo Simi-Frontier Park GRAB

For:
MWH Americas Inc
618 Michillinda Avenue, Suite 200
Arcadia, California 91007

Attn: Bronwyn Kelly

Debby Wilson

Authorized for release by:
3/23/2013 3:12:35 PM

Debby Wilson
Project Manager I
debby.wilson@testamericainc.com

I certify under penalty of perjury that the information contained in this report and all attachments was produced in accordance with the indicated methods and laboratory standard operating procedures, except as noted, and are complete and accurate to the best of my knowledge and belief. Subcontract laboratory reports that are attached have been evaluated for completeness and quality control acceptability.

Debby Wilson
Project Manager I
3/23/2013 3:12:35 PM

Table of Contents

Sample Summary

Client: MWH Americas Inc
Project/Site: Arroyro Simi-Frontier Park GRAB

TestAmerica Job ID: 440-40769-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-40769-1	Arroyo Simi-FP	Water	03/13/13 13:25	03/13/13 19:30

Job ID: 440-40769-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-40769-1

Comments
No additional comments.

Receipt
The sample was received on 3/13/2013 7:30 PM; the sample arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 4.8º C.

Biology
No analytical or quality issues were noted.

Subcontract non-Sister
No analytical or quality issues were noted.

Client: MWH Americas Inc
Project/Site: Arroyo Simi-Frontier Park GRAB

TestAmerica Job ID: 440-40769-1

Client Sample ID: Arroyo Simi-FP
Date Collected: 03/13/13 13:25
Date Received: 03/13/13 19:30

Lab Sample ID: 440-40769-1
Matrix: Water

Method: SM 9221E - Coliforms, Fecal (Multiple-Tube Fermentation)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Coliform, Fecal	80		2.0	2.0	MPN/100mL			03/13/13 20:40	1

Method: SM 9221F - E.Coli (Multiple-Tube Fermentation; EC-MUG)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	37		2.0	2.0	MPN/100mL			03/13/13 20:40	1

Method Summary

Client: MWH Americas Inc
Project/Site: Arroyo Simi-Frontier Park GRAB

TestAmerica Job ID: 440-40769-1

Method	Method Description	Protocol	Laboratory
SM 9221E	Coliforms, Fecal (Multiple-Tube Fermentation)	SM	TAL IRV
SM 9221F	E.Coli (Multiple-Tube Fermentation; EC-MUG)	SM	TAL IRV
DNA-human bacteriodes; EMSL	General Sub Contract Method	NONE	EMSL

Protocol References:

NONE = NONE

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

EMSL = EMSL Analytical, Inc., 200 Rt 130 North, Cinnaminson, NJ 08077, TEL (800)220-3675

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Arroyo Simi-Frontier Park GRAB

TestAmerica Job ID: 440-40769-1

Client Sample ID: Arroyo Simi-FP
Date Collected: 03/13/13 13:25
Date Received: 03/13/13 19:30

Lab Sample ID: 440-40769-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 9221E		1	100 mL	100 mL	91803		SK	TAL IRV
								(Start) 03/13/13 20:40		
								(End) 03/16/13 17:14		
Total/NA	Analysis	SM 9221F		1	100 mL	100 mL	91807		SK	TAL IRV
								(Start) 03/13/13 20:40		
								(End) 03/16/13 17:14		

Laboratory References:

EMSL = EMSL Analytical, Inc., 200 Rt 130 North, Cinnaminson, NJ 08077, TEL (800)220-3675

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

QC Association Summary

Client: MWH Americas Inc
Project/Site: Arroyo Simi-Frontier Park GRAB

TestAmerica Job ID: 440-40769-1

Biology

Analysis Batch: 91803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40769-1	Arroyo Simi-FP	Total/NA	Water	SM 9221E	

Analysis Batch: 91807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-40769-1	Arroyo Simi-FP	Total/NA	Water	SM 9221F	

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: MWH Americas Inc
Project/Site: Arroyro Simi-Frontier Park GRAB

TestAmerica Job ID: 440-40769-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-13
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	03-28-13
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-13
New Mexico	State Program	6	N/A	03-28-13
Northern Mariana Islands	State Program	9	MP0002	03-28-13
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (800) 220-3675/ 786-0262

http://www.emsl.com E-mail: MicrobiologyLab@emsl.com

Client:	Test America - Irvine, CA 17461 Derian Avenue, Suite 100 Irvine, CA 92614	EMSL Order ID:	611300355
		Date Received:	3/15/2013
		Date Analyzed:	3/19/2013
Attn.	Debby Wilson	Date Reported:	3/19/2013
Project:	Arroyro Simi-Frontier Park GRAB - 44002624	Date Amended:	

Real-Time PCR Analysis for Human *Bacteroides*

Based on a published method SAM: 348 - 357, 2010), EMSL Test Code: M199, Revision No. 3, 04/18/2011

Lab Sample Number	Client Sample ID	Location	Amount Received	Amount Sampled	CEs /100 mL
611300355-1	Arroyo Simi-FP (440-40769-1)	Arroyo Simi-Frontier Park	125 ml	125 ml	None Detected

Note: The PCR primer is HF183 and the qPCR probe and primer was evaluated in 2010 by EPA scientists. The real-time PCR based on HF183 detects human specific bacteroides predominantly with minor cross-detections on chicken and dog fecal materials. CEs: Cell Equivalents, measured by PCR using genomic DNA standards.

Quanyi "Charlie" Li, Ph.D.
Director, DNA Analysis Laboratory

Client Name/Address:	Project:
MWH-Arcadia 618 Michillinda Ave, Suite 200 Arcadia, CA 91007 Test America Contact: Debby Wilson	Boeing-SSFL NPDES **Arroyo Simi-Frontier Park** **GRAB**
Project Manager: Bronwyn Kelly Sampler:	Phone Number: (626) 568-6691 Fax Number: (626) 568-6515

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #	Fecal coliform (SM9221)	E. coli (SM9221)	MST-Bateriodales, Human	Field readings: (Log in and include in report Temp and pH) Temp °F = pH = Time of readings = **Comments**
Arroyo Simi-FP	W	125 mL Poly	1	3-13-2013 1325	Na2S2O3	1	X			
Arroyo Simi-FP	W	125 mL Poly	1	〃	Na2S2O3	2		X		
Arroyo Simi-FP	W	125 mL Poly	1	3-13-2013 1325	None	3			X	Deliver to lab ASAP

Relinquished By	Date/Time:	Received By	Date/Time:
	3-13-2013 15:05		3-13-13 15:05
Relinquished By	Date/Time:	Received By	Date/Time:
	3-13-13 19:30		
Relinquished By	Date/Time:	Received By	Date/Time: 19:3
			03/13/13

Turn-around time: (Check)
24 Hour: _____ 72 Hour: _____ 10 Day: _____
48 Hour: _____ 5 Day: _____ Normal: X 7 days

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

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

3/23/2013

5-1

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 440-40769-1

Login Number: 40769

List Source: TestAmerica Irvine

List Number: 1

Creator: Avila, Stephanie

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX G

Section 12

Arroyo Simi-Frontier Park – March 18, 2013

Test America Analytical Laboratory Report

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-41157-1
Client Project/Site: Arroyo Simi-Frontier Park GRAB

For:
MWH Americas Inc
618 Michillinda Avenue, Suite 200
Arcadia, California 91007

Attn: Bronwyn Kelly

Debby Wilson

Authorized for release by:
3/28/2013 7:16:14 PM

Debby Wilson
Project Manager I
debby.wilson@testamericainc.com

I certify under penalty of perjury that the information contained in this report and all attachments was produced in accordance with the indicated methods and laboratory standard operating procedures, except as noted, and are complete and accurate to the best of my knowledge and belief. Subcontract laboratory reports that are attached have been evaluated for completeness and quality control acceptability.

Debby Wilson
Project Manager I
3/28/2013 7:16:14 PM

Table of Contents

Sample Summary

Client: MWH Americas Inc
Project/Site: Arroyro Simi-Frontier Park GRAB

TestAmerica Job ID: 440-41157-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-41157-1	Arroyo Simi-FP	Water	03/18/13 13:40	03/18/13 18:05

Job ID: 440-41157-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-41157-1

Comments
No additional comments.

Receipt
The sample was received on 3/18/2013 6:05 PM; the sample arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 3.8º C.

Biology
No analytical or quality issues were noted.

Subcontract non-Sister
No analytical or quality issues were noted.

Client Sample Results

Client: MWH Americas Inc
Project/Site: Arroyo Simi-Frontier Park GRAB

TestAmerica Job ID: 440-41157-1

Client Sample ID: Arroyo Simi-FP
Date Collected: 03/18/13 13:40
Date Received: 03/18/13 18:05

Lab Sample ID: 440-41157-1
Matrix: Water

Method: SM 9221E - Coliforms, Fecal (Multiple-Tube Fermentation)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Coliform, Fecal	130		2.0	2.0	MPN/100mL			03/18/13 20:38	1

Method: SM 9221F - E.Coli (Multiple-Tube Fermentation; EC-MUG)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	130		2.0	2.0	MPN/100mL			03/18/13 20:38	1

Method Summary

Client: MWH Americas Inc
Project/Site: Arroyo Simi-Frontier Park GRAB

TestAmerica Job ID: 440-41157-1

Method	Method Description	Protocol	Laboratory
SM 9221E	Coliforms, Fecal (Multiple-Tube Fermentation)	SM	TAL IRV
SM 9221F	E.Coli (Multiple-Tube Fermentation; EC-MUG)	SM	TAL IRV
DNA-human bacteriodes; EMSL	General Sub Contract Method	NONE	EMSL

Protocol References:

NONE = NONE

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

EMSL = EMSL Analytical, Inc., 200 Rt 130 North, Cinnaminson, NJ 08077, TEL (800)220-3675

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Arroyo Simi-Frontier Park GRAB

TestAmerica Job ID: 440-41157-1

Client Sample ID: Arroyo Simi-FP
Date Collected: 03/18/13 13:40
Date Received: 03/18/13 18:05

Lab Sample ID: 440-41157-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 9221E		1	100 mL	100 mL	92689		PP	TAL IRV
								(Start) 03/18/13 20:38		
								(End) 03/21/13 18:13		
Total/NA	Analysis	SM 9221F		1	100 mL	100 mL	92694		PP	TAL IRV
								(Start) 03/18/13 20:38		
								(End) 03/21/13 18:13		

Laboratory References:

EMSL = EMSL Analytical, Inc., 200 Rt 130 North, Cinnaminson, NJ 08077, TEL (800)220-3675

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

QC Association Summary

Client: MWH Americas Inc
Project/Site: Arroyo Simi-Frontier Park GRAB

TestAmerica Job ID: 440-41157-1

Biology

Analysis Batch: 92689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-41157-1	Arroyo Simi-FP	Total/NA	Water	SM 9221E	

Analysis Batch: 92694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-41157-1	Arroyo Simi-FP	Total/NA	Water	SM 9221F	

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: MWH Americas Inc
Project/Site: Arroyro Simi-Frontier Park GRAB

TestAmerica Job ID: 440-41157-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-13
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	03-28-13
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-13
Northern Mariana Islands	State Program	9	MP0002	01-31-14
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (800) 220-3675/ 786-0262

http://www.emsl.com E-mail: MicrobiologyLab@emsl.com

Client:	Test America - Irvine, CA 17461 Derian Avenue, Suite 100 Irvine, CA 92614	EMSL Order ID:	611300383
		Date Received:	3/20/2013
		Date Analyzed:	3/25/2013
Attn.	Debby Wilson	Date Reported:	3/25/2013
Project:	Arroyro Simi-Frontier Park GRAB - 44002624	Date Amended:	

Real-Time PCR Analysis for Human *Bacteroides*

Based on a published method SAM: 348 - 357, 2010), EMSL Test Code: M199, Revision No. 3, 04/18/2011

Lab Sample Number	Client Sample ID	Location	Amount Received	Amount Sampled	CEs /100 mL
611300383-1	Arroyo Simi-FP (440-41157-1)	Boeing SSFL	125 ml	125 ml	None Detected

EMSL maintains liability limited to cost of analysis. Interpretation of the data contained in this report is the responsibility of the client. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. The above test report relates only to the items tested. EMSL bears no responsibility for sample collection activities or analytical method limitations.

Note: The PCR primer is HF183 and the qPCR probe and primer was evaluated in 2010 by EPA scientists. The real-time PCR based on HF183 detects human specific bacteroides predominantly with minor cross-detections on chicken and dog fecal materials. CEs: Cell Equivalents, measured by PCR using genomic DNA standards.

Quanyi "Charlie" Li, Ph.D.
Director, DNA Analysis Laboratory

Client Name/Address:	Project:
MWH-Arcadia 618 Michillinda Ave, Suite 200 Arcadia, CA 91007 Test America Contact: Debby Wilson	Boeing-SSFL NPDES **Arroyo Simi-Frontier Park** **GRAB**
Project Manager: Bronwyn Kelly Sampler: A. Gonzalez	Phone Number: (626) 568-6691 Fax Number: (626) 568-6515

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #	Fecal coliform (SM9221)	E. coli (SM9221)	MST-Bateriodales, Human											Comments
Arroyo Simi-FP	W	125 mL Poly	1	3-18-13 1340	Na2S2O3	1	X													
Arroyo Simi-FP	W	125 mL Poly	1	"	Na2S2O3	2		X												
Arroyo Simi-FP	W	125 mL Poly	1	3-18-13 1340	None	3			X											Deliver to lab ASAP

ANALYSIS REQUIRED

Field readings:
(Log in and include in report Temp and pH)

Temp °F =

pH =

Time of readings =

Relinquished By	Date/Time:	Received By	Date/Time:
[signature]	3-18-2013 1415	[signature]	3-18-13 14:15
[signature]	3-18-13 18:05	Stephanie Ania	3/18/13 1805

Turn-around time: (Check)

24 Hour: _____ 72 Hour: _____ 10 Day: _____

48 Hour: _____ 5 Day: _____ Normal: X

Sample Integrity: (Check)

Intact: X On Ice: X

Data Requirements: (Check)

No Level IV: _____ All Level IV: _____ NPDES Level IV: X

4/3/81

Page 13 of 14

3/28/2013

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 440-41157-1

Login Number: 41157

List Source: TestAmerica Irvine

List Number: 1

Creator: Chavez, Elizabeth

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	A. Goldenbery
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

APPENDIX G

Section 13

Arroyo Simi-Frontier Park – March 22, 2013

Test America Analytical Laboratory Report

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-41627-1
Client Project/Site: Arroyo Simi-Frontier Park GRAB

For:
MWH Americas Inc
618 Michillinda Avenue, Suite 200
Arcadia, California 91007

Attn: Bronwyn Kelly

Debby Wilson

Authorized for release by:
4/3/2013 2:31:48 PM

Debby Wilson
Project Manager I
debby.wilson@testamericainc.com

I certify under penalty of perjury that the information contained in this report and all attachments was produced in accordance with the indicated methods and laboratory standard operating procedures, except as noted, and are complete and accurate to the best of my knowledge and belief. Subcontract laboratory reports that are attached have been evaluated for completeness and quality control acceptability.

Debby Wilson
Project Manager I
4/3/2013 2:31:48 PM

Table of Contents

Sample Summary

Client: MWH Americas Inc
Project/Site: Arroyro Simi-Frontier Park GRAB

TestAmerica Job ID: 440-41627-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-41627-1	Arroyo Simi-FP	Water	03/22/13 13:40	03/22/13 18:25

Job ID: 440-41627-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-41627-1

Comments
No additional comments.

Receipt
The sample was received on 3/22/2013 6:25 PM; the sample arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 2.7º C.

Biology
No analytical or quality issues were noted.

Subcontract non-Sister
No analytical or quality issues were noted.

Client Sample Results

Client: MWH Americas Inc
Project/Site: Arroyo Simi-Frontier Park GRAB

TestAmerica Job ID: 440-41627-1

Client Sample ID: Arroyo Simi-FP
Date Collected: 03/22/13 13:40
Date Received: 03/22/13 18:25

Lab Sample ID: 440-41627-1
Matrix: Water

Method: SM 9221E - Coliforms, Fecal (Multiple-Tube Fermentation)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Coliform, Fecal	30		2.0	2.0	MPN/100mL			03/22/13 18:47	1

Method: SM 9221F - E.Coli (Multiple-Tube Fermentation; EC-MUG)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	30		2.0	2.0	MPN/100mL			03/22/13 18:47	1

Method Summary

Client: MWH Americas Inc
Project/Site: Arroyo Simi-Frontier Park GRAB

TestAmerica Job ID: 440-41627-1

Method	Method Description	Protocol	Laboratory
SM 9221E	Coliforms, Fecal (Multiple-Tube Fermentation)	SM	TAL IRV
SM 9221F	E.Coli (Multiple-Tube Fermentation; EC-MUG)	SM	TAL IRV
DNA-human bacteriodes; EMSL	General Sub Contract Method	NONE	EMSL

Protocol References:

NONE = NONE

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

EMSL = EMSL Analytical, Inc., 200 Rt 130 North, Cinnaminson, NJ 08077, TEL (800)220-3675

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Arroyo Simi-Frontier Park GRAB

TestAmerica Job ID: 440-41627-1

Client Sample ID: Arroyo Simi-FP
Date Collected: 03/22/13 13:40
Date Received: 03/22/13 18:25

Lab Sample ID: 440-41627-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 9221E		1	100 mL	100 mL	94039		SK	TAL IRV
							(Start)	03/22/13 18:47		
							(End)	03/25/13 14:10		
Total/NA	Analysis	SM 9221F		1	100 mL	100 mL	94042		SK	TAL IRV
							(Start)	03/22/13 18:47		
							(End)	03/25/13 14:10		

Laboratory References:

EMSL = EMSL Analytical, Inc., 200 Rt 130 North, Cinnaminson, NJ 08077, TEL (800)220-3675

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

QC Association Summary

Client: MWH Americas Inc
Project/Site: Arroyo Simi-Frontier Park GRAB

TestAmerica Job ID: 440-41627-1

Biology

Analysis Batch: 94039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-41627-1	Arroyo Simi-FP	Total/NA	Water	SM 9221E	

Analysis Batch: 94042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-41627-1	Arroyo Simi-FP	Total/NA	Water	SM 9221F	

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: MWH Americas Inc
Project/Site: Arroyo Simi-Frontier Park GRAB

TestAmerica Job ID: 440-41627-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-13
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	03-28-13
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-13
Northern Mariana Islands	State Program	9	MP0002	01-31-14
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (800) 220-3675/ 786-0262

http://www.emsl.com E-mail: MicrobiologyLab@emsl.com

Client:	Test America - Irvine, CA 17461 Derian Avenue, Suite 100 Irvine, CA 92614	EMSL Order ID:	611300406
		Date Received:	3/26/2013
		Date Analyzed:	3/27/2013
Attn.	Debby Wilson	Date Reported:	3/29/2013
Project:	Boeing SSFL Outfalls	Date Amended:	

Real-Time PCR Analysis for Human *Bacteroides*

Based on a published method SAM: 348 - 357, 2010), EMSL Test Code: M199, Revision No. 3, 04/18/2011

Lab Sample Number	Client Sample ID	Location	Amount Received	Amount Sampled	CEs /100 mL
611300406-1	Arroyo Simi-FP (440-41627-1)	Boeing SSFL	125 ml	125 ml	None Detected

Note: The PCR primer is HF183 and the qPCR probe and primer was evaluated in 2010 by EPA scientists. The real-time PCR based on HF183 detects human specific bacteroides predominantly with minor cross-detections on chicken and dog fecal materials. CEs: Cell Equivalents, measured by PCR using genomic DNA standards.

Quanyi "Charlie" Li, Ph.D.
Director, DNA Analysis Laboratory

Client Name/Address:	Project:
MWH-Arcadia 618 Michillinda Ave, Suite 200 Arcadia, CA 91007 Test America Contact: Debby Wilson	Boeing-SSFL NPDES **Arroyo Simi-Frontier Park** **GRAB**
Project Manager: Bronwyn Kelly Sampler: A. Gadomski	Phone Number: (626) 568-6691 Fax Number: (626) 568-6515

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #	Fecal coliform (SM9221)	E. coli (SM9221)	MST-Bateriodales, Human	Comments
Arroyo Simi-FP	W	125 mL Poly	1	3-22-13 1000	Na2S2O3	1	X			
Arroyo Simi-FP	W	125 mL Poly	1	"	Na2S2O3	2		X		
Arroyo Simi-FP	W	125 mL Poly	1	3-22-13 1540	None	3			X	Deliver to lab ASAP

ANALYSIS REQUIRED

Field readings:
(Log in and include in report Temp and pH)

Temp °F =

pH =

Time of readings =

Relinquished By	Date/Time:	Received By	Date/Time:
	3-22-13 1400		3/22/13 1400
Relinquished By	Date/Time:	Received By	Date/Time:
	3/22/13 2:30pm	TAL	3/22/13 14:30
Relinquished By	Date/Time:	Received By	Date/Time:
TAL	3/22/13 18:25	Stephanie Ann	3/22/13 1825

Turn-around time: (Check)
24 Hour: _____ 72 Hour: _____ 10 Day: _____
48 Hour: _____ 5 Day: _____ Normal: ✓

Sample Integrity: (Check)
Intact: _____ On Ice: ✓

Data Requirements: (Check)
No Level IV: _____ All Level IV: _____ NPDES Level IV: ✓

Temp = 3.0°C/27

4/3/2013

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 440-41627-1

Login Number: 41627
List Number: 1
Creator: Avila, Stephanie

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	A.G
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX G

Section 14

Arroyo Simi-Frontier Park – March 27, 2013

Test America Analytical Laboratory Report

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-42004-1
Client Project/Site: Boeing SSFL outfalls

For:
MWH Americas Inc
618 Michillinda Avenue, Suite 200
Arcadia, California 91007

Attn: Bronwyn Kelly

Debby Wilson

Authorized for release by:
4/4/2013 5:02:31 PM

Debby Wilson
Project Manager I
debby.wilson@testamericainc.com

I certify under penalty of perjury that the information contained in this report and all attachments was produced in accordance with the indicated methods and laboratory standard operating procedures, except as noted, and are complete and accurate to the best of my knowledge and belief. Subcontract laboratory reports that are attached have been evaluated for completeness and quality control acceptability.

Debby Wilson
Project Manager I
4/4/2013 5:02:31 PM

Table of Contents

Sample Summary

Client: MWH Americas Inc
Project/Site: Boeing SSFL outfalls

TestAmerica Job ID: 440-42004-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-42004-1	Arroyo Simi-FP	Water	03/27/13 13:35	03/27/13 19:00

Job ID: 440-42004-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-42004-1

Comments
No additional comments.

Receipt
The sample was received on 3/27/2013 7:00 PM; the sample arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 4.1° C.

Biology
No analytical or quality issues were noted.

Subcontract non-Sister
No analytical or quality issues were noted.

Client: MWH Americas Inc
Project/Site: Boeing SSFL outfalls

TestAmerica Job ID: 440-42004-1

Client Sample ID: Arroyo Simi-FP
Date Collected: 03/27/13 13:35
Date Received: 03/27/13 19:00

Lab Sample ID: 440-42004-1
Matrix: Water

Method: SM 9221E - Coliforms, Fecal (Multiple-Tube Fermentation)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Coliform, Fecal	130		2.0	2.0	MPN/100mL			03/27/13 19:25	1

Method: SM 9221F - E.Coli (Multiple-Tube Fermentation; EC-MUG)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	130		2.0	2.0	MPN/100mL			03/27/13 19:25	1

Method Summary

Client: MWH Americas Inc
Project/Site: Boeing SSFL outfalls

TestAmerica Job ID: 440-42004-1

Method	Method Description	Protocol	Laboratory
SM 9221E	Coliforms, Fecal (Multiple-Tube Fermentation)	SM	TAL IRV
SM 9221F	E.Coli (Multiple-Tube Fermentation; EC-MUG)	SM	TAL IRV
DNA-human bacteriodes; EMSL	General Sub Contract Method	NONE	EMSL

Protocol References:

NONE = NONE

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

EMSL = EMSL Analytical, Inc., 200 Rt 130 North, Cinnaminson, NJ 08077, TEL (800)220-3675

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Boeing SSFL outfalls

TestAmerica Job ID: 440-42004-1

Client Sample ID: Arroyo Simi-FP
Date Collected: 03/27/13 13:35
Date Received: 03/27/13 19:00

Lab Sample ID: 440-42004-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 9221E		1	100 mL	100 mL	94803		ST	TAL IRV
								(Start) 03/27/13 19:25		
								(End) 03/30/13 15:30		
Total/NA	Analysis	SM 9221F		1	100 mL	100 mL	94804		ST	TAL IRV
								(Start) 03/27/13 19:25		
								(End) 03/30/13 15:30		

Laboratory References:

EMSL = EMSL Analytical, Inc., 200 Rt 130 North, Cinnaminson, NJ 08077, TEL (800)220-3675

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

QC Association Summary

Client: MWH Americas Inc
Project/Site: Boeing SSFL outfalls

TestAmerica Job ID: 440-42004-1

Biology

Analysis Batch: 94803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-42004-1	Arroyo Simi-FP	Total/NA	Water	SM 9221E	

Analysis Batch: 94804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-42004-1	Arroyo Simi-FP	Total/NA	Water	SM 9221F	

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: MWH Americas Inc
Project/Site: Boeing SSFL outfalls

TestAmerica Job ID: 440-42004-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-13
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	03-28-13 *
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-13
Northern Mariana Islands	State Program	9	MP0002	01-31-14
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

* Expired certification is currently pending renewal and is considered valid.

EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (800) 220-3675/ 786-0262

http://www.emsl.com E-mail: MicrobiologyLab@emsl.com

Client:	Test America - Irvine, CA 17461 Derian Avenue, Suite 100 Irvine, CA 92614	EMSL Order ID:	611300438
		Date Received:	3/29/2013
		Date Analyzed:	4/2/2013
Attn.	Debby Wilson	Date Reported:	4/2/2013
Project:	Boeing SSFL Outfalls	Date Amended:	

Real-Time PCR Analysis for Human *Bacteroides*

Based on a published method SAM: 348 - 357, 2010), EMSL Test Code: M199, Revision No. 3, 04/18/2011

Lab Sample Number	Client Sample ID	Location	Amount Received	Amount Sampled	CEs /100 mL
611300438-1	Arroyo Simi-FP (440-42004-1)	Boeing SSFL	125 ml	125 ml	None Detected

Note: The PCR primer is HF183 and the qPCR probe and primer was evaluated in 2010 by EPA scientists. The real-time PCR based on HF183 detects human specific bacteroides predominantly with minor cross-detections on chicken and dog fecal materials. CEs: Cell Equivalents, measured by PCR using genomic DNA standards.

Quanyi "Charlie" Li, Ph.D.
Director, DNA Analysis Laboratory

Client Name/Address:	Project:
MWH-Arcadia 618 Michillinda Ave, Suite 200 Arcadia, CA 91007 Test America Contact: Debby Wilson	Boeing-SSFL NPDES **Arroyo Simi-Frontier Park** **GRAB**
Project Manager: Bronwyn Kelly Sampler:	Phone Number: (626) 568-6691 Fax Number: (626) 568-6515

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #	Fecal coliform (SM9221)	E. coli (SM9221)	MST-Bateriodales, Human	Comments
Arroyo Simi-FP	W	125 mL Poly	1		Na2S2O3	1	X			
Arroyo Simi-FP	W	125 mL Poly	1		Na2S2O3	2		X		
Arroyo Simi-FP	W	125 mL Poly	1		None	3			X	Deliver to lab ASAP

ANALYSIS REQUIRED

Field readings:
(Log in and include in report Temp and pH)

Temp °F =

pH =

Time of readings =

Relinquished By	Date/Time:	Received By	Date/Time:
			3-27-13 14:50
Relinquished By	Date/Time: 3-27-13 14:20	Received By	Date/Time: 3/27/13 1900
Relinquished By	Date/Time:	Received By	Date/Time:

Turn-around time: (Check)

24 Hour: _____ 72 Hour: _____ 10 Day: _____

48 Hour: _____ 5 Day: _____ Normal: ✓

Sample Integrity: (Check)

Intact: ✓ On Ice: ✓

Data Requirements: (Check)

No Level IV: _____ All Level IV: _____ NPDES Level IV: ✓

4.4/4.1

Page 13 of 14

4/4/2013

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 440-42004-1

Login Number: 42004

List Source: TestAmerica Irvine

List Number: 1

Creator: Chavez, Elizabeth

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	N/A	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	B. Barajas/D. Smith
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	