

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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TestAmerica Job ID: 660-67423-1

Client Project/Site: City of Hollywood
Revision: 1

For:

Langan Engineering & Environmental Svcs
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Authorized for release by:

1/7/2016 1:31:03 PM

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Results relate only to the items tested and the sample(s) as received by the laboratory.



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1

2

3

4

5

6

7

8

9

10

11

12

13

14

15



Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Case Narrative	4
Definitions/Glossary	5
Detection Summary	6
Client Sample Results	7
QC Sample Results	21
Internal Standard Summary	34
QC Association Summary	36
Lab Chronicle	39
Method Summary	41
Certification Summary	42
Chain of Custody	44
Receipt Checklists	45

Sample Summary

Client: Langan Engineering & Environmental Svcs
Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
660-67423-1	LMW-B7	Water	06/12/15 08:41	06/13/15 08:25
660-67423-2	LMW-DP3	Water	06/12/15 09:42	06/13/15 08:25
660-67423-3	MW-1A	Water	06/12/15 11:41	06/13/15 08:25

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Case Narrative

Client: Langan Engineering & Environmental Svcs
Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Job ID: 660-67423-1

Laboratory: TestAmerica Tampa

Narrative

Job Narrative 660-67423-1

Receipt

The samples were received on 6/13/2015 8:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.9° C, 3.1° C and 3.7° C.

Laboratory Comments

Due to system limitations Total Endosulfans and Total PCB's are not included in this report. The data for these summary analytes has been calculated by hand and entered into the accompanying EDD.

GC/MS VOA

Method 8260B: The sample duplicate (DUP) precision for <158876> was outside control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA

Method 8141B: The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for preparation batch 640-117349 and analytical batch 640-117501 recovered outside control limits for the following analyte(s): Monochrotophos. Monochrotophos has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Only batch precision exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8141B: The matrix spike/matrix spike duplicate (MS/MSD) for preparation batch 640-117349 and analytical batch 640-117501 exceeded control limits for the following analyte(s): Monochrotophos, Note that this analyte is a known poor performer when analyzed using this method.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 3520C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 400-261268.

Method 3520C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 640-117331.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Langan Engineering & Environmental Svcs
Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

DIOXIN

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J	Estimated value; value may not be accurate.
V	Indicates the analyte was detected in both the sample and method blank.

Metals

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
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)
NC	Not Calculated
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)

Detection Summary

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Client Sample ID: LMW-B7

Lab Sample ID: 660-67423-1

Analyte	Result	Qualifier	ML	EDL	TEF	TEQ	Unit	Dil Fac	D	Method	Prep Type
Total TCDD	1.34	J I	9.52	0.113			pg/L	1		1613B	Total
Total PeCDD	0.781	V J I	47.6	0.127			pg/L	1		1613B	Total
1,2,3,7,8,9-HxCDD	0.731	J I	47.6	0.164	0.1	0.073	pg/L	1		1613B	Total
Total HxCDD	5.80	I J	47.6	0.170			pg/L	1		1613B	Total
1,2,3,4,6,7,8-HpCDD	15.0	V I	47.6	0.362	0.01	0.15	pg/L	1		1613B	Total
Total HpCDD	31.0	I V	47.6	0.362			pg/L	1		1613B	Total
OCDD	84.5	V I	95.2	0.169	0.001	0.085	pg/L	1		1613B	Total
Total TCDF	18.1	I J	9.52	0.186			pg/L	1		1613B	Total
Total PeCDF	8.43	J I	47.6	0.170			pg/L	1		1613B	Total
Total HxCDF	5.43	V J I	47.6	0.159			pg/L	1		1613B	Total
1,2,3,4,6,7,8-HpCDF	1.74	J V I	47.6	0.0855	0.01	0.017	pg/L	1		1613B	Total
Total HpCDF	4.55	I J V	47.6	0.108			pg/L	1		1613B	Total
OCDF	4.15	V I	95.2	0.127	0.001	0.0042	pg/L	1		1613B	Total

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.5		2.5	1.3	ug/L	1		6020A	Total Recoverable
Barium	160		5.0	1.3	ug/L	1		6020A	Total Recoverable
Chromium	2.5	I	5.0	2.5	ug/L	1		6020A	Total Recoverable
Lead	8.0		1.5	0.20	ug/L	1		6020A	Total Recoverable

Client Sample ID: LMW-DP3

Lab Sample ID: 660-67423-2

Analyte	Result	Qualifier	ML	EDL	TEF	TEQ	Unit	Dil Fac	D	Method	Prep Type
Total HxCDD	0.738	I J	48.0	0.105			pg/L	1		1613B	Total
1,2,3,4,6,7,8-HpCDD	1.65	V I	48.0	0.281	0.01	0.017	pg/L	1		1613B	Total
Total HpCDD	3.07	J I V	48.0	0.281			pg/L	1		1613B	Total
OCDD	7.73	V I	96.1	0.191	0.001	0.0077	pg/L	1		1613B	Total
1,2,3,4,6,7,8-HpCDF	0.310	J V I	48.0	0.0623	0.01	0.0031	pg/L	1		1613B	Total
Total HpCDF	0.310	J V I	48.0	0.0779			pg/L	1		1613B	Total
OCDF	0.403	J V I	96.1	0.109	0.001	0.00040	pg/L	1		1613B	Total

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.046	I	0.20	0.040	ug/L	1		8270D LL	Total/NA
Arsenic	1.7	I	2.5	1.3	ug/L	1		6020A	Total Recoverable
Barium	670		5.0	1.3	ug/L	1		6020A	Total Recoverable

Client Sample ID: MW-1A

Lab Sample ID: 660-67423-3

Analyte	Result	Qualifier	ML	EDL	TEF	TEQ	Unit	Dil Fac	D	Method	Prep Type
Total HxCDD	0.286	J I	47.6	0.0662			pg/L	1		1613B	Total
Total HpCDD	0.384	V J I	47.6	0.191			pg/L	1		1613B	Total
OCDD	0.431	J V I	95.1	0.109	0.001	0.00043	pg/L	1		1613B	Total

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	37		5.0	1.3	ug/L	1		6020A	Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Tampa

Client Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Client Sample ID: LMW-B7

Lab Sample ID: 660-67423-1

Date Collected: 06/12/15 08:41

Matrix: Water

Date Received: 06/13/15 08:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	9.9	U	20	9.9	ug/L			06/18/15 17:43	1
Benzene	0.50	U	1.0	0.50	ug/L			06/18/15 17:43	1
Bromobenzene	0.58	U	1.0	0.58	ug/L			06/18/15 17:43	1
Bromoform	0.63	U	1.0	0.63	ug/L			06/18/15 17:43	1
Bromomethane	2.5	U	5.0	2.5	ug/L			06/18/15 17:43	1
2-Butanone (MEK)	8.4	U	10	8.4	ug/L			06/18/15 17:43	1
Carbon disulfide	1.0	U	2.0	1.0	ug/L			06/18/15 17:43	1
Carbon tetrachloride	0.43	U	1.0	0.43	ug/L			06/18/15 17:43	1
Chlorobenzene	0.63	U	1.0	0.63	ug/L			06/18/15 17:43	1
Chlorobromomethane	0.58	U	1.0	0.58	ug/L			06/18/15 17:43	1
Chlorodibromomethane	0.31	U	1.0	0.31	ug/L			06/18/15 17:43	1
Chloroethane	2.5	U	5.0	2.5	ug/L			06/18/15 17:43	1
Chloroform	0.90	U	1.0	0.90	ug/L			06/18/15 17:43	1
Chloromethane	1.0	U	4.0	1.0	ug/L			06/18/15 17:43	1
2-Chlorotoluene	0.65	U	1.0	0.65	ug/L			06/18/15 17:43	1
4-Chlorotoluene	0.52	U	1.0	0.52	ug/L			06/18/15 17:43	1
cis-1,2-Dichloroethene	0.65	U	1.0	0.65	ug/L			06/18/15 17:43	1
cis-1,3-Dichloropropene	0.39	U	1.0	0.39	ug/L			06/18/15 17:43	1
1,2-Dibromo-3-Chloropropane	2.5	U	5.0	2.5	ug/L			06/18/15 17:43	1
Dibromomethane	0.46	U	1.0	0.46	ug/L			06/18/15 17:43	1
1,2-Dichlorobenzene	0.49	U	1.0	0.49	ug/L			06/18/15 17:43	1
1,3-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/18/15 17:43	1
1,4-Dichlorobenzene	0.60	U	1.0	0.60	ug/L			06/18/15 17:43	1
Dichlorobromomethane	0.44	U	1.0	0.44	ug/L			06/18/15 17:43	1
Dichlorodifluoromethane	2.5	U	5.0	2.5	ug/L			06/18/15 17:43	1
1,1-Dichloroethane	0.52	U	1.0	0.52	ug/L			06/18/15 17:43	1
1,2-Dichloroethane	0.57	U	1.0	0.57	ug/L			06/18/15 17:43	1
1,1-Dichloroethene	0.67	U	1.0	0.67	ug/L			06/18/15 17:43	1
1,2-Dichloropropane	0.52	U	1.0	0.52	ug/L			06/18/15 17:43	1
1,3-Dichloropropane	0.42	U	1.0	0.42	ug/L			06/18/15 17:43	1
2,2-Dichloropropane	0.36	U	1.0	0.36	ug/L			06/18/15 17:43	1
1,1-Dichloropropene	0.65	U	1.0	0.65	ug/L			06/18/15 17:43	1
Ethylbenzene	0.44	U	1.0	0.44	ug/L			06/18/15 17:43	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/18/15 17:43	1
Hexachlorobutadiene	0.34	U	1.0	0.34	ug/L			06/18/15 17:43	1
2-Hexanone	4.4	U	10	4.4	ug/L			06/18/15 17:43	1
Isopropylbenzene	0.52	U	1.0	0.52	ug/L			06/18/15 17:43	1
4-Isopropyltoluene	0.69	U	1.0	0.69	ug/L			06/18/15 17:43	1
Methylene Chloride	4.0	U	5.0	4.0	ug/L			06/18/15 17:43	1
4-Methyl-2-pentanone (MIBK)	4.0	U	10	4.0	ug/L			06/18/15 17:43	1
Methyl tert-butyl ether	0.44	U	1.0	0.44	ug/L			06/18/15 17:43	1
m-Xylene & p-Xylene	0.60	U	2.0	0.60	ug/L			06/18/15 17:43	1
n-Butylbenzene	0.67	U	1.0	0.67	ug/L			06/18/15 17:43	1
N-Propylbenzene	0.59	U	1.0	0.59	ug/L			06/18/15 17:43	1
o-Xylene	0.50	U	1.0	0.50	ug/L			06/18/15 17:43	1
sec-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/18/15 17:43	1
Styrene	0.98	U	2.0	0.98	ug/L			06/18/15 17:43	1
tert-Butylbenzene	0.84	U	1.0	0.84	ug/L			06/18/15 17:43	1
1,1,1,2-Tetrachloroethane	0.63	U	1.0	0.63	ug/L			06/18/15 17:43	1

TestAmerica Tampa

Client Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Client Sample ID: LMW-B7

Lab Sample ID: 660-67423-1

Date Collected: 06/12/15 08:41

Matrix: Water

Date Received: 06/13/15 08:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	0.17	U	1.0	0.17	ug/L			06/18/15 17:43	1
Tetrachloroethene	0.50	U	1.0	0.50	ug/L			06/18/15 17:43	1
Toluene	0.51	U	1.0	0.51	ug/L			06/18/15 17:43	1
trans-1,2-Dichloroethene	0.67	U	1.0	0.67	ug/L			06/18/15 17:43	1
trans-1,3-Dichloropropene	0.27	U	1.0	0.27	ug/L			06/18/15 17:43	1
1,2,3-Trichlorobenzene	0.77	U	1.0	0.77	ug/L			06/18/15 17:43	1
1,2,4-Trichlorobenzene	0.58	U	1.0	0.58	ug/L			06/18/15 17:43	1
1,1,1-Trichloroethane	0.47	U	1.0	0.47	ug/L			06/18/15 17:43	1
1,1,2-Trichloroethane	0.47	U	1.0	0.47	ug/L			06/18/15 17:43	1
Trichloroethene	0.61	U	1.0	0.61	ug/L			06/18/15 17:43	1
Trichlorofluoromethane	2.5	U	5.0	2.5	ug/L			06/18/15 17:43	1
1,2,3-Trichloropropane	0.44	U	1.0	0.44	ug/L			06/18/15 17:43	1
1,2,4-Trimethylbenzene	0.86	U	1.0	0.86	ug/L			06/18/15 17:43	1
1,3,5-Trimethylbenzene	0.54	U	1.0	0.54	ug/L			06/18/15 17:43	1
Vinyl chloride	0.71	U	1.0	0.71	ug/L			06/18/15 17:43	1
Xylenes, Total	0.50	U	3.0	0.50	ug/L			06/18/15 17:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	110		70 - 130					06/18/15 17:43	1
Dibromofluoromethane	108		70 - 130					06/18/15 17:43	1
Toluene-d8 (Surr)	103		70 - 130					06/18/15 17:43	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 18:56	1
Acenaphthylene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 18:56	1
Anthracene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 18:56	1
Benzo[a]anthracene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 18:56	1
Benzo[a]pyrene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 18:56	1
Benzo[b]fluoranthene	0.025	U	0.10	0.025	ug/L		06/16/15 11:04	06/17/15 18:56	1
Benzo[g,h,i]perylene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 18:56	1
Benzo[k]fluoranthene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 18:56	1
Chrysene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 18:56	1
Dibenz(a,h)anthracene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 18:56	1
Fluoranthene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 18:56	1
Fluorene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 18:56	1
Indeno[1,2,3-cd]pyrene	0.044	U	0.20	0.044	ug/L		06/16/15 11:04	06/17/15 18:56	1
1-Methylnaphthalene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 18:56	1
2-Methylnaphthalene	0.031	U	0.20	0.031	ug/L		06/16/15 11:04	06/17/15 18:56	1
Naphthalene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 18:56	1
Phenanthrene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 18:56	1
Pyrene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 18:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	87		40 - 114				06/16/15 11:04	06/17/15 18:56	1

Method: 8081B - Organochlorine Pesticides by GC

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	0.0020	U	0.050	0.0020	ug/L		06/16/15 14:49	06/17/15 23:27	1
alpha-BHC	0.0060	U	0.050	0.0060	ug/L		06/16/15 14:49	06/17/15 23:27	1

TestAmerica Tampa

Client Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Client Sample ID: LMW-B7

Lab Sample ID: 660-67423-1

Date Collected: 06/12/15 08:41

Matrix: Water

Date Received: 06/13/15 08:25

Method: 8081B - Organochlorine Pesticides by GC (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-Chlordane	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:27	1
beta-BHC	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:27	1
Chlordane (technical)	0.34	U	0.99	0.34	ug/L		06/16/15 14:49	06/17/15 23:27	1
4,4'-DDD	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/17/15 23:27	1
4,4'-DDE	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/17/15 23:27	1
4,4'-DDT	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/17/15 23:27	1
delta-BHC	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:27	1
Dieldrin	0.0020	U	0.099	0.0020	ug/L		06/16/15 14:49	06/17/15 23:27	1
Endosulfan I	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:27	1
Endosulfan II	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/17/15 23:27	1
Endosulfan sulfate	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/17/15 23:27	1
Endrin	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/17/15 23:27	1
Endrin aldehyde	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/17/15 23:27	1
Endrin ketone	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/17/15 23:27	1
gamma-BHC (Lindane)	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:27	1
gamma-Chlordane	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:27	1
Heptachlor	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:27	1
Heptachlor epoxide	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:27	1
Methoxychlor	0.013	U	0.50	0.013	ug/L		06/16/15 14:49	06/17/15 23:27	1
Toxaphene	0.68	U	5.0	0.68	ug/L		06/16/15 14:49	06/17/15 23:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	47		20 - 142	06/16/15 14:49	06/17/15 23:27	1
Dibutylchloroendate	49		25 - 137	06/16/15 14:49	06/17/15 23:27	1
Tetrachloro-m-xylene	89		22 - 134	06/16/15 14:49	06/17/15 23:27	1

Method: 8141B - Organophosphorous Compounds by Gas Chromatography, Capillary Column Technique

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bolstar	0.095	U	1.0	0.095	ug/L		06/16/15 16:26	06/23/15 21:01	1
Chlorpyrifos	0.11	U	1.0	0.11	ug/L		06/16/15 16:26	06/23/15 21:01	1
Coumaphos	0.081	U	1.0	0.081	ug/L		06/16/15 16:26	06/23/15 21:01	1
Demeton, Total	0.15	U	2.5	0.15	ug/L		06/16/15 16:26	06/23/15 21:01	1
Diazinon	0.11	U	1.0	0.11	ug/L		06/16/15 16:26	06/23/15 21:01	1
Dichlorvos	0.26	U	2.0	0.26	ug/L		06/16/15 16:26	06/23/15 21:01	1
Dimethoate	0.32	U	2.0	0.32	ug/L		06/16/15 16:26	06/23/15 21:01	1
Disulfoton	0.12	U	2.0	0.12	ug/L		06/16/15 16:26	06/23/15 21:01	1
EPN	0.071	U	1.0	0.071	ug/L		06/16/15 16:26	06/23/15 21:01	1
Ethyl Parathion	0.080	U	1.0	0.080	ug/L		06/16/15 16:26	06/23/15 21:01	1
Fensulfothion	0.17	U	5.0	0.17	ug/L		06/16/15 16:26	06/23/15 21:01	1
Guthion	0.33	U	1.0	0.33	ug/L		06/16/15 16:26	06/23/15 21:01	1
Malathion	0.092	U	1.0	0.092	ug/L		06/16/15 16:26	06/23/15 21:01	1
Merphos	0.13	U	1.0	0.13	ug/L		06/16/15 16:26	06/23/15 21:01	1
Methyl parathion	0.12	U	0.50	0.12	ug/L		06/16/15 16:26	06/23/15 21:01	1
Mevinphos	0.15	U	2.0	0.15	ug/L		06/16/15 16:26	06/23/15 21:01	1
Mocap	0.41	U	0.50	0.41	ug/L		06/16/15 16:26	06/23/15 21:01	1
Monochrotophos	2.6	J3 U	10	2.6	ug/L		06/16/15 16:26	06/23/15 21:01	1
Naled	0.36	U	5.0	0.36	ug/L		06/16/15 16:26	06/23/15 21:01	1
Phorate	0.16	U	1.0	0.16	ug/L		06/16/15 16:26	06/23/15 21:01	1
Ronnel	0.13	U	1.0	0.13	ug/L		06/16/15 16:26	06/23/15 21:01	1
Sulfotepp	0.055	U	0.50	0.055	ug/L		06/16/15 16:26	06/23/15 21:01	1

TestAmerica Tampa

Client Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Client Sample ID: LMW-B7

Lab Sample ID: 660-67423-1

Date Collected: 06/12/15 08:41

Matrix: Water

Date Received: 06/13/15 08:25

Method: 8141B - Organophosphorous Compounds by Gas Chromatography, Capillary Column Technique (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tokuthion	0.087	U	1.0	0.087	ug/L		06/16/15 16:26	06/23/15 21:01	1
Trichloronate	0.11	U	1.0	0.11	ug/L		06/16/15 16:26	06/23/15 21:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Triphenylphosphate (TPP)	106		37 - 139				06/16/15 16:26	06/23/15 21:01	1

Method: FL-PRO - Florida - Petroleum Range Organics (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C8-C40)	24	U	150	24	ug/L		06/16/15 10:42	06/17/15 14:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-C39	89		42 - 193				06/16/15 10:42	06/17/15 14:55	1
o-Terphenyl	96		82 - 142				06/16/15 10:42	06/17/15 14:55	1

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

Analyte	Result	Qualifier	ML	EDL	TEF	TEQ	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		9.52	0.113	1		pg/L		07/30/15 14:45	08/06/15 21:22	1
Total TCDD	1.34	J I	9.52	0.113			pg/L		07/30/15 14:45	08/06/15 21:22	1
1,2,3,7,8-PeCDD	ND		47.6	0.127	0.5		pg/L		07/30/15 14:45	08/06/15 21:22	1
Total PeCDD	0.781	V J I	47.6	0.127			pg/L		07/30/15 14:45	08/06/15 21:22	1
1,2,3,4,7,8-HxCDD	ND		47.6	0.162	0.1		pg/L		07/30/15 14:45	08/06/15 21:22	1
1,2,3,6,7,8-HxCDD	ND		47.6	0.186	0.1		pg/L		07/30/15 14:45	08/06/15 21:22	1
1,2,3,7,8,9-HxCDD	0.731	J I	47.6	0.164	0.1	0.073	pg/L		07/30/15 14:45	08/06/15 21:22	1
Total HxCDD	5.80	I J	47.6	0.170			pg/L		07/30/15 14:45	08/06/15 21:22	1
1,2,3,4,6,7,8-HpCDD	15.0	V I	47.6	0.362	0.01	0.15	pg/L		07/30/15 14:45	08/06/15 21:22	1
Total HpCDD	31.0	I V	47.6	0.362			pg/L		07/30/15 14:45	08/06/15 21:22	1
OCDD	84.5	V I	95.2	0.169	0.001	0.085	pg/L		07/30/15 14:45	08/06/15 21:22	1
2,3,7,8-TCDF	ND		9.52	0.186	0.1		pg/L		07/30/15 14:45	08/06/15 21:22	1
Total TCDF	18.1	I J	9.52	0.186			pg/L		07/30/15 14:45	08/06/15 21:22	1
1,2,3,7,8-PeCDF	ND		47.6	0.178	0.05		pg/L		07/30/15 14:45	08/06/15 21:22	1
2,3,4,7,8-PeCDF	ND		47.6	0.164	0.5		pg/L		07/30/15 14:45	08/06/15 21:22	1
Total PeCDF	8.43	J I	47.6	0.170			pg/L		07/30/15 14:45	08/06/15 21:22	1
1,2,3,4,7,8-HxCDF	ND		47.6	0.147	0.1		pg/L		07/30/15 14:45	08/06/15 21:22	1
1,2,3,6,7,8-HxCDF	ND		47.6	0.148	0.1		pg/L		07/30/15 14:45	08/06/15 21:22	1
2,3,4,6,7,8-HxCDF	ND		47.6	0.153	0.1		pg/L		07/30/15 14:45	08/06/15 21:22	1
1,2,3,7,8,9-HxCDF	ND		47.6	0.202	0.1		pg/L		07/30/15 14:45	08/06/15 21:22	1
Total HxCDF	5.43	V J I	47.6	0.159			pg/L		07/30/15 14:45	08/06/15 21:22	1
1,2,3,4,6,7,8-HpCDF	1.74	J V I	47.6	0.0855	0.01	0.017	pg/L		07/30/15 14:45	08/06/15 21:22	1
1,2,3,4,7,8,9-HpCDF	ND		47.6	0.144	0.01		pg/L		07/30/15 14:45	08/06/15 21:22	1
Total HpCDF	4.55	I J V	47.6	0.108			pg/L		07/30/15 14:45	08/06/15 21:22	1
OCDF	4.15	V I	95.2	0.127	0.001	0.0042	pg/L		07/30/15 14:45	08/06/15 21:22	1
Total TEQ (EPA 1989)						0.33					
Surrogate	%Recovery	Qualifier	Limits					Prepared	Analyzed	Dil Fac	
37Cl4-2,3,7,8-TCDD	106		35 - 197					07/30/15 14:45	08/06/15 21:22	1	
Internal Standard	%Recovery	Qualifier	Limits					Prepared	Analyzed	Dil Fac	
13C-2,3,7,8-TCDD	81		25 - 164					07/30/15 14:45	08/06/15 21:22	1	
13C-1,2,3,7,8-PeCDD	86		25 - 181					07/30/15 14:45	08/06/15 21:22	1	

TestAmerica Tampa

Client Sample Results

Client: Langan Engineering & Environmental Svcs
Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Client Sample ID: LMW-B7

Date Collected: 06/12/15 08:41

Date Received: 06/13/15 08:25

Lab Sample ID: 660-67423-1

Matrix: Water

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

Internal Standard	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C-1,2,3,4,7,8-HxCDD	86		32 - 141	07/30/15 14:45	08/06/15 21:22	1
13C-1,2,3,6,7,8-HxCDD	81		28 - 130	07/30/15 14:45	08/06/15 21:22	1
13C-1,2,3,4,6,7,8-HpCDD	94		23 - 140	07/30/15 14:45	08/06/15 21:22	1
13C-OCDD	73		17 - 157	07/30/15 14:45	08/06/15 21:22	1
13C-2,3,7,8-TCDF	85		24 - 169	07/30/15 14:45	08/06/15 21:22	1
13C-1,2,3,7,8-PeCDF	84		24 - 185	07/30/15 14:45	08/06/15 21:22	1
13C-2,3,4,7,8-PeCDF	86		21 - 178	07/30/15 14:45	08/06/15 21:22	1
13C-1,2,3,4,7,8-HxCDF	81		26 - 152	07/30/15 14:45	08/06/15 21:22	1
13C-1,2,3,6,7,8-HxCDF	83		26 - 123	07/30/15 14:45	08/06/15 21:22	1
13C-2,3,4,6,7,8-HxCDF	86		28 - 136	07/30/15 14:45	08/06/15 21:22	1
13C-1,2,3,7,8,9-HxCDF	83		29 - 147	07/30/15 14:45	08/06/15 21:22	1
13C-1,2,3,4,6,7,8-HpCDF	90		28 - 143	07/30/15 14:45	08/06/15 21:22	1
13C-1,2,3,4,7,8,9-HpCDF	81		26 - 138	07/30/15 14:45	08/06/15 21:22	1
13C-OCDF	62		17 - 157	07/30/15 14:45	08/06/15 21:22	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.5		2.5	1.3	ug/L		06/17/15 08:23	06/17/15 22:40	1
Barium	160		5.0	1.3	ug/L		06/17/15 08:23	06/17/15 22:40	1
Cadmium	0.095	U	0.50	0.095	ug/L		06/17/15 08:23	06/17/15 22:40	1
Chromium	2.5	I	5.0	2.5	ug/L		06/17/15 08:23	06/17/15 22:40	1
Lead	8.0		1.5	0.20	ug/L		06/17/15 08:23	06/17/15 22:40	1
Selenium	1.0	U	2.5	1.0	ug/L		06/17/15 08:23	06/17/15 22:40	1
Silver	0.25	U	1.0	0.25	ug/L		06/17/15 08:23	06/17/15 22:40	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.080	U	0.20	0.080	ug/L		06/16/15 13:42	06/17/15 11:14	1

Client Sample ID: LMW-DP3

Date Collected: 06/12/15 09:42

Date Received: 06/13/15 08:25

Lab Sample ID: 660-67423-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	9.9	U	20	9.9	ug/L			06/18/15 18:02	1
Benzene	0.50	U	1.0	0.50	ug/L			06/18/15 18:02	1
Bromobenzene	0.58	U	1.0	0.58	ug/L			06/18/15 18:02	1
Bromoform	0.63	U	1.0	0.63	ug/L			06/18/15 18:02	1
Bromomethane	2.5	U	5.0	2.5	ug/L			06/18/15 18:02	1
2-Butanone (MEK)	8.4	U	10	8.4	ug/L			06/18/15 18:02	1
Carbon disulfide	1.0	U	2.0	1.0	ug/L			06/18/15 18:02	1
Carbon tetrachloride	0.43	U	1.0	0.43	ug/L			06/18/15 18:02	1
Chlorobenzene	0.63	U	1.0	0.63	ug/L			06/18/15 18:02	1
Chlorobromomethane	0.58	U	1.0	0.58	ug/L			06/18/15 18:02	1
Chlorodibromomethane	0.31	U	1.0	0.31	ug/L			06/18/15 18:02	1
Chloroethane	2.5	U	5.0	2.5	ug/L			06/18/15 18:02	1
Chloroform	0.90	U	1.0	0.90	ug/L			06/18/15 18:02	1
Chloromethane	1.0	U	4.0	1.0	ug/L			06/18/15 18:02	1
2-Chlorotoluene	0.65	U	1.0	0.65	ug/L			06/18/15 18:02	1

TestAmerica Tampa

Client Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Client Sample ID: LMW-DP3

Lab Sample ID: 660-67423-2

Date Collected: 06/12/15 09:42

Matrix: Water

Date Received: 06/13/15 08:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	0.52	U	1.0	0.52	ug/L			06/18/15 18:02	1
cis-1,2-Dichloroethene	0.65	U	1.0	0.65	ug/L			06/18/15 18:02	1
cis-1,3-Dichloropropene	0.39	U	1.0	0.39	ug/L			06/18/15 18:02	1
1,2-Dibromo-3-Chloropropane	2.5	U	5.0	2.5	ug/L			06/18/15 18:02	1
Dibromomethane	0.46	U	1.0	0.46	ug/L			06/18/15 18:02	1
1,2-Dichlorobenzene	0.49	U	1.0	0.49	ug/L			06/18/15 18:02	1
1,3-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/18/15 18:02	1
1,4-Dichlorobenzene	0.60	U	1.0	0.60	ug/L			06/18/15 18:02	1
Dichlorobromomethane	0.44	U	1.0	0.44	ug/L			06/18/15 18:02	1
Dichlorodifluoromethane	2.5	U	5.0	2.5	ug/L			06/18/15 18:02	1
1,1-Dichloroethane	0.52	U	1.0	0.52	ug/L			06/18/15 18:02	1
1,2-Dichloroethane	0.57	U	1.0	0.57	ug/L			06/18/15 18:02	1
1,1-Dichloroethene	0.67	U	1.0	0.67	ug/L			06/18/15 18:02	1
1,2-Dichloropropane	0.52	U	1.0	0.52	ug/L			06/18/15 18:02	1
1,3-Dichloropropane	0.42	U	1.0	0.42	ug/L			06/18/15 18:02	1
2,2-Dichloropropane	0.36	U	1.0	0.36	ug/L			06/18/15 18:02	1
1,1-Dichloropropene	0.65	U	1.0	0.65	ug/L			06/18/15 18:02	1
Ethylbenzene	0.44	U	1.0	0.44	ug/L			06/18/15 18:02	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/18/15 18:02	1
Hexachlorobutadiene	0.34	U	1.0	0.34	ug/L			06/18/15 18:02	1
2-Hexanone	4.4	U	10	4.4	ug/L			06/18/15 18:02	1
Isopropylbenzene	0.52	U	1.0	0.52	ug/L			06/18/15 18:02	1
4-Isopropyltoluene	0.69	U	1.0	0.69	ug/L			06/18/15 18:02	1
Methylene Chloride	4.0	U	5.0	4.0	ug/L			06/18/15 18:02	1
4-Methyl-2-pentanone (MIBK)	4.0	U	10	4.0	ug/L			06/18/15 18:02	1
Methyl tert-butyl ether	0.44	U	1.0	0.44	ug/L			06/18/15 18:02	1
m-Xylene & p-Xylene	0.60	U	2.0	0.60	ug/L			06/18/15 18:02	1
n-Butylbenzene	0.67	U	1.0	0.67	ug/L			06/18/15 18:02	1
N-Propylbenzene	0.59	U	1.0	0.59	ug/L			06/18/15 18:02	1
o-Xylene	0.50	U	1.0	0.50	ug/L			06/18/15 18:02	1
sec-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/18/15 18:02	1
Styrene	0.98	U	2.0	0.98	ug/L			06/18/15 18:02	1
tert-Butylbenzene	0.84	U	1.0	0.84	ug/L			06/18/15 18:02	1
1,1,1,2-Tetrachloroethane	0.63	U	1.0	0.63	ug/L			06/18/15 18:02	1
1,1,2,2-Tetrachloroethane	0.17	U	1.0	0.17	ug/L			06/18/15 18:02	1
Tetrachloroethene	0.50	U	1.0	0.50	ug/L			06/18/15 18:02	1
Toluene	0.51	U	1.0	0.51	ug/L			06/18/15 18:02	1
trans-1,2-Dichloroethene	0.67	U	1.0	0.67	ug/L			06/18/15 18:02	1
trans-1,3-Dichloropropene	0.27	U	1.0	0.27	ug/L			06/18/15 18:02	1
1,2,3-Trichlorobenzene	0.77	U	1.0	0.77	ug/L			06/18/15 18:02	1
1,2,4-Trichlorobenzene	0.58	U	1.0	0.58	ug/L			06/18/15 18:02	1
1,1,1-Trichloroethane	0.47	U	1.0	0.47	ug/L			06/18/15 18:02	1
1,1,2-Trichloroethane	0.47	U	1.0	0.47	ug/L			06/18/15 18:02	1
Trichloroethene	0.61	U	1.0	0.61	ug/L			06/18/15 18:02	1
Trichlorofluoromethane	2.5	U	5.0	2.5	ug/L			06/18/15 18:02	1
1,2,3-Trichloropropane	0.44	U	1.0	0.44	ug/L			06/18/15 18:02	1
1,2,4-Trimethylbenzene	0.86	U	1.0	0.86	ug/L			06/18/15 18:02	1
1,3,5-Trimethylbenzene	0.54	U	1.0	0.54	ug/L			06/18/15 18:02	1
Vinyl chloride	0.71	U	1.0	0.71	ug/L			06/18/15 18:02	1

TestAmerica Tampa

Client Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Client Sample ID: LMW-DP3

Lab Sample ID: 660-67423-2

Date Collected: 06/12/15 09:42

Matrix: Water

Date Received: 06/13/15 08:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	0.50	U	3.0	0.50	ug/L			06/18/15 18:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	107		70 - 130		06/18/15 18:02	1
Dibromofluoromethane	112		70 - 130		06/18/15 18:02	1
Toluene-d8 (Surr)	103		70 - 130		06/18/15 18:02	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 19:14	1
Acenaphthylene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 19:14	1
Anthracene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 19:14	1
Benzo[a]anthracene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 19:14	1
Benzo[a]pyrene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 19:14	1
Benzo[b]fluoranthene	0.025	U	0.10	0.025	ug/L		06/16/15 11:04	06/17/15 19:14	1
Benzo[g,h,i]perylene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 19:14	1
Benzo[k]fluoranthene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 19:14	1
Chrysene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 19:14	1
Dibenz(a,h)anthracene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 19:14	1
Fluoranthene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 19:14	1
Fluorene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 19:14	1
Indeno[1,2,3-cd]pyrene	0.044	U	0.20	0.044	ug/L		06/16/15 11:04	06/17/15 19:14	1
1-Methylnaphthalene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 19:14	1
2-Methylnaphthalene	0.031	U	0.20	0.031	ug/L		06/16/15 11:04	06/17/15 19:14	1
Naphthalene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 19:14	1
Phenanthrene	0.046	I	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 19:14	1
Pyrene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 19:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	84		40 - 114	06/16/15 11:04	06/17/15 19:14	1

Method: 8081B - Organochlorine Pesticides by GC

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	0.0020	U	0.050	0.0020	ug/L		06/16/15 14:49	06/17/15 23:42	1
alpha-BHC	0.0060	U	0.050	0.0060	ug/L		06/16/15 14:49	06/17/15 23:42	1
alpha-Chlordane	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:42	1
beta-BHC	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:42	1
Chlordane (technical)	0.34	U	0.99	0.34	ug/L		06/16/15 14:49	06/17/15 23:42	1
4,4'-DDD	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/17/15 23:42	1
4,4'-DDE	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/17/15 23:42	1
4,4'-DDT	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/17/15 23:42	1
delta-BHC	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:42	1
Dieldrin	0.0020	U	0.099	0.0020	ug/L		06/16/15 14:49	06/17/15 23:42	1
Endosulfan I	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:42	1
Endosulfan II	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/17/15 23:42	1
Endosulfan sulfate	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/17/15 23:42	1
Endrin	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/17/15 23:42	1
Endrin aldehyde	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/17/15 23:42	1
Endrin ketone	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/17/15 23:42	1
gamma-BHC (Lindane)	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:42	1

TestAmerica Tampa

Client Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Client Sample ID: LMW-DP3

Lab Sample ID: 660-67423-2

Date Collected: 06/12/15 09:42

Matrix: Water

Date Received: 06/13/15 08:25

Method: 8081B - Organochlorine Pesticides by GC (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-Chlordane	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:42	1
Heptachlor	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:42	1
Heptachlor epoxide	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:42	1
Methoxychlor	0.013	U	0.50	0.013	ug/L		06/16/15 14:49	06/17/15 23:42	1
Toxaphene	0.67	U	5.0	0.67	ug/L		06/16/15 14:49	06/17/15 23:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	44		20 - 142	06/16/15 14:49	06/17/15 23:42	1
Dibutylchloroendate	112		25 - 137	06/16/15 14:49	06/17/15 23:42	1
Tetrachloro-m-xylene	98		22 - 134	06/16/15 14:49	06/17/15 23:42	1

Method: 8141B - Organophosphorous Compounds by Gas Chromatography, Capillary Column Technique

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bolstar	0.095	U	1.0	0.095	ug/L		06/16/15 16:26	06/23/15 21:17	1
Chlorpyrifos	0.11	U	1.0	0.11	ug/L		06/16/15 16:26	06/23/15 21:17	1
Coumaphos	0.081	U	1.0	0.081	ug/L		06/16/15 16:26	06/23/15 21:17	1
Demeton, Total	0.15	U	2.5	0.15	ug/L		06/16/15 16:26	06/23/15 21:17	1
Diazinon	0.11	U	1.0	0.11	ug/L		06/16/15 16:26	06/23/15 21:17	1
Dichlorvos	0.26	U	2.0	0.26	ug/L		06/16/15 16:26	06/23/15 21:17	1
Dimethoate	0.32	U	2.0	0.32	ug/L		06/16/15 16:26	06/23/15 21:17	1
Disulfoton	0.12	U	2.0	0.12	ug/L		06/16/15 16:26	06/23/15 21:17	1
EPN	0.071	U	1.0	0.071	ug/L		06/16/15 16:26	06/23/15 21:17	1
Ethyl Parathion	0.080	U	1.0	0.080	ug/L		06/16/15 16:26	06/23/15 21:17	1
Fensulfothion	0.17	U	5.0	0.17	ug/L		06/16/15 16:26	06/23/15 21:17	1
Guthion	0.33	U	1.0	0.33	ug/L		06/16/15 16:26	06/23/15 21:17	1
Malathion	0.092	U	1.0	0.092	ug/L		06/16/15 16:26	06/23/15 21:17	1
Merphos	0.13	U	1.0	0.13	ug/L		06/16/15 16:26	06/23/15 21:17	1
Methyl parathion	0.12	U	0.50	0.12	ug/L		06/16/15 16:26	06/23/15 21:17	1
Mevinphos	0.15	U	2.0	0.15	ug/L		06/16/15 16:26	06/23/15 21:17	1
Mocap	0.41	U	0.50	0.41	ug/L		06/16/15 16:26	06/23/15 21:17	1
Monochrotophos	2.6	J3 U	10	2.6	ug/L		06/16/15 16:26	06/23/15 21:17	1
Naled	0.36	U	5.0	0.36	ug/L		06/16/15 16:26	06/23/15 21:17	1
Phorate	0.16	U	1.0	0.16	ug/L		06/16/15 16:26	06/23/15 21:17	1
Ronnel	0.13	U	1.0	0.13	ug/L		06/16/15 16:26	06/23/15 21:17	1
Sulfotepp	0.055	U	0.50	0.055	ug/L		06/16/15 16:26	06/23/15 21:17	1
Tokuthion	0.087	U	1.0	0.087	ug/L		06/16/15 16:26	06/23/15 21:17	1
Trichloronate	0.11	U	1.0	0.11	ug/L		06/16/15 16:26	06/23/15 21:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Triphenylphosphate (TPP)	106		37 - 139	06/16/15 16:26	06/23/15 21:17	1

Method: FL-PRO - Florida - Petroleum Range Organics (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C8-C40)	24	U	150	24	ug/L		06/16/15 10:42	06/17/15 15:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-C39	96		42 - 193	06/16/15 10:42	06/17/15 15:04	1
o-Terphenyl	103		82 - 142	06/16/15 10:42	06/17/15 15:04	1

TestAmerica Tampa

Client Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Client Sample ID: LMW-DP3

Lab Sample ID: 660-67423-2

Date Collected: 06/12/15 09:42

Matrix: Water

Date Received: 06/13/15 08:25

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

Analyte	Result	Qualifier	ML	EDL	TEF	TEQ	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		9.61	0.174	1		pg/L		07/30/15 14:45	08/07/15 04:20	1
Total TCDD	ND		9.61	0.174			pg/L		07/30/15 14:45	08/07/15 04:20	1
1,2,3,7,8-PeCDD	ND		48.0	0.0996	0.5		pg/L		07/30/15 14:45	08/07/15 04:20	1
Total PeCDD	ND		48.0	0.0996			pg/L		07/30/15 14:45	08/07/15 04:20	1
1,2,3,4,7,8-HxCDD	ND		48.0	0.101	0.1		pg/L		07/30/15 14:45	08/07/15 04:20	1
1,2,3,6,7,8-HxCDD	ND		48.0	0.115	0.1		pg/L		07/30/15 14:45	08/07/15 04:20	1
1,2,3,7,8,9-HxCDD	ND		48.0	0.102	0.1		pg/L		07/30/15 14:45	08/07/15 04:20	1
Total HxCDD	0.738	I J	48.0	0.105			pg/L		07/30/15 14:45	08/07/15 04:20	1
1,2,3,4,6,7,8-HpCDD	1.65	V I	48.0	0.281	0.01	0.017	pg/L		07/30/15 14:45	08/07/15 04:20	1
Total HpCDD	3.07	J I V	48.0	0.281			pg/L		07/30/15 14:45	08/07/15 04:20	1
OCDD	7.73	V I	96.1	0.191	0.001	0.0077	pg/L		07/30/15 14:45	08/07/15 04:20	1
2,3,7,8-TCDF	ND		9.61	0.107	0.1		pg/L		07/30/15 14:45	08/07/15 04:20	1
Total TCDF	ND		9.61	0.107			pg/L		07/30/15 14:45	08/07/15 04:20	1
1,2,3,7,8-PeCDF	ND		48.0	0.171	0.05		pg/L		07/30/15 14:45	08/07/15 04:20	1
2,3,4,7,8-PeCDF	ND		48.0	0.176	0.5		pg/L		07/30/15 14:45	08/07/15 04:20	1
Total PeCDF	ND		48.0	0.173			pg/L		07/30/15 14:45	08/07/15 04:20	1
1,2,3,4,7,8-HxCDF	ND		48.0	0.161	0.1		pg/L		07/30/15 14:45	08/07/15 04:20	1
1,2,3,6,7,8-HxCDF	ND		48.0	0.155	0.1		pg/L		07/30/15 14:45	08/07/15 04:20	1
2,3,4,6,7,8-HxCDF	ND		48.0	0.164	0.1		pg/L		07/30/15 14:45	08/07/15 04:20	1
1,2,3,7,8,9-HxCDF	ND		48.0	0.207	0.1		pg/L		07/30/15 14:45	08/07/15 04:20	1
Total HxCDF	ND		48.0	0.169			pg/L		07/30/15 14:45	08/07/15 04:20	1
1,2,3,4,6,7,8-HpCDF	0.310	J V I	48.0	0.0623	0.01	0.0031	pg/L		07/30/15 14:45	08/07/15 04:20	1
1,2,3,4,7,8,9-HpCDF	ND		48.0	0.102	0.01		pg/L		07/30/15 14:45	08/07/15 04:20	1
Total HpCDF	0.310	J V I	48.0	0.0779			pg/L		07/30/15 14:45	08/07/15 04:20	1
OCDF	0.403	J V I	96.1	0.109	0.001	0.00040	pg/L		07/30/15 14:45	08/07/15 04:20	1
Total TEQ (EPA 1989)						0.028					

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
37Cl4-2,3,7,8-TCDD	105		35 - 197	07/30/15 14:45	08/07/15 04:20	1
Internal Standard	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C-2,3,7,8-TCDD	56		25 - 164	07/30/15 14:45	08/07/15 04:20	1
13C-1,2,3,7,8-PeCDD	60		25 - 181	07/30/15 14:45	08/07/15 04:20	1
13C-1,2,3,4,7,8-HxCDD	59		32 - 141	07/30/15 14:45	08/07/15 04:20	1
13C-1,2,3,6,7,8-HxCDD	56		28 - 130	07/30/15 14:45	08/07/15 04:20	1
13C-1,2,3,4,6,7,8-HpCDD	64		23 - 140	07/30/15 14:45	08/07/15 04:20	1
13C-OCDD	53		17 - 157	07/30/15 14:45	08/07/15 04:20	1
13C-2,3,7,8-TCDF	54		24 - 169	07/30/15 14:45	08/07/15 04:20	1
13C-1,2,3,7,8-PeCDF	61		24 - 185	07/30/15 14:45	08/07/15 04:20	1
13C-2,3,4,7,8-PeCDF	57		21 - 178	07/30/15 14:45	08/07/15 04:20	1
13C-1,2,3,4,7,8-HxCDF	59		26 - 152	07/30/15 14:45	08/07/15 04:20	1
13C-1,2,3,6,7,8-HxCDF	55		26 - 123	07/30/15 14:45	08/07/15 04:20	1
13C-2,3,4,6,7,8-HxCDF	57		28 - 136	07/30/15 14:45	08/07/15 04:20	1
13C-1,2,3,7,8,9-HxCDF	58		29 - 147	07/30/15 14:45	08/07/15 04:20	1
13C-1,2,3,4,6,7,8-HpCDF	61		28 - 143	07/30/15 14:45	08/07/15 04:20	1
13C-1,2,3,4,7,8,9-HpCDF	54		26 - 138	07/30/15 14:45	08/07/15 04:20	1
13C-OCDF	43		17 - 157	07/30/15 14:45	08/07/15 04:20	1

TestAmerica Tampa

Client Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Client Sample ID: LMW-DP3

Lab Sample ID: 660-67423-2

Date Collected: 06/12/15 09:42

Matrix: Water

Date Received: 06/13/15 08:25

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7	I	2.5	1.3	ug/L		06/17/15 08:23	06/17/15 22:45	1
Barium	670		5.0	1.3	ug/L		06/17/15 08:23	06/17/15 22:45	1
Cadmium	0.095	U	0.50	0.095	ug/L		06/17/15 08:23	06/17/15 22:45	1
Chromium	2.5	U	5.0	2.5	ug/L		06/17/15 08:23	06/17/15 22:45	1
Lead	0.20	U	1.5	0.20	ug/L		06/17/15 08:23	06/17/15 22:45	1
Selenium	1.0	U	2.5	1.0	ug/L		06/17/15 08:23	06/17/15 22:45	1
Silver	0.25	U	1.0	0.25	ug/L		06/17/15 08:23	06/17/15 22:45	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.080	U	0.20	0.080	ug/L		06/16/15 13:42	06/17/15 11:23	1

Client Sample ID: MW-1A

Lab Sample ID: 660-67423-3

Date Collected: 06/12/15 11:41

Matrix: Water

Date Received: 06/13/15 08:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	9.9	U	20	9.9	ug/L			06/18/15 18:21	1
Benzene	0.50	U	1.0	0.50	ug/L			06/18/15 18:21	1
Bromobenzene	0.58	U	1.0	0.58	ug/L			06/18/15 18:21	1
Bromoform	0.63	U	1.0	0.63	ug/L			06/18/15 18:21	1
Bromomethane	2.5	U	5.0	2.5	ug/L			06/18/15 18:21	1
2-Butanone (MEK)	8.4	U	10	8.4	ug/L			06/18/15 18:21	1
Carbon disulfide	1.0	U	2.0	1.0	ug/L			06/18/15 18:21	1
Carbon tetrachloride	0.43	U	1.0	0.43	ug/L			06/18/15 18:21	1
Chlorobenzene	0.63	U	1.0	0.63	ug/L			06/18/15 18:21	1
Chlorobromomethane	0.58	U	1.0	0.58	ug/L			06/18/15 18:21	1
Chlorodibromomethane	0.31	U	1.0	0.31	ug/L			06/18/15 18:21	1
Chloroethane	2.5	U	5.0	2.5	ug/L			06/18/15 18:21	1
Chloroform	0.90	U	1.0	0.90	ug/L			06/18/15 18:21	1
Chloromethane	1.0	U	4.0	1.0	ug/L			06/18/15 18:21	1
2-Chlorotoluene	0.65	U	1.0	0.65	ug/L			06/18/15 18:21	1
4-Chlorotoluene	0.52	U	1.0	0.52	ug/L			06/18/15 18:21	1
cis-1,2-Dichloroethene	0.65	U	1.0	0.65	ug/L			06/18/15 18:21	1
cis-1,3-Dichloropropene	0.39	U	1.0	0.39	ug/L			06/18/15 18:21	1
1,2-Dibromo-3-Chloropropane	2.5	U	5.0	2.5	ug/L			06/18/15 18:21	1
Dibromomethane	0.46	U	1.0	0.46	ug/L			06/18/15 18:21	1
1,2-Dichlorobenzene	0.49	U	1.0	0.49	ug/L			06/18/15 18:21	1
1,3-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/18/15 18:21	1
1,4-Dichlorobenzene	0.60	U	1.0	0.60	ug/L			06/18/15 18:21	1
Dichlorobromomethane	0.44	U	1.0	0.44	ug/L			06/18/15 18:21	1
Dichlorodifluoromethane	2.5	U	5.0	2.5	ug/L			06/18/15 18:21	1
1,1-Dichloroethane	0.52	U	1.0	0.52	ug/L			06/18/15 18:21	1
1,2-Dichloroethane	0.57	U	1.0	0.57	ug/L			06/18/15 18:21	1
1,1-Dichloroethene	0.67	U	1.0	0.67	ug/L			06/18/15 18:21	1
1,2-Dichloropropane	0.52	U	1.0	0.52	ug/L			06/18/15 18:21	1
1,3-Dichloropropane	0.42	U	1.0	0.42	ug/L			06/18/15 18:21	1
2,2-Dichloropropane	0.36	U	1.0	0.36	ug/L			06/18/15 18:21	1
1,1-Dichloropropene	0.65	U	1.0	0.65	ug/L			06/18/15 18:21	1

TestAmerica Tampa

Client Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Client Sample ID: MW-1A

Lab Sample ID: 660-67423-3

Date Collected: 06/12/15 11:41

Matrix: Water

Date Received: 06/13/15 08:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	0.44	U	1.0	0.44	ug/L			06/18/15 18:21	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/18/15 18:21	1
Hexachlorobutadiene	0.34	U	1.0	0.34	ug/L			06/18/15 18:21	1
2-Hexanone	4.4	U	10	4.4	ug/L			06/18/15 18:21	1
Isopropylbenzene	0.52	U	1.0	0.52	ug/L			06/18/15 18:21	1
4-Isopropyltoluene	0.69	U	1.0	0.69	ug/L			06/18/15 18:21	1
Methylene Chloride	4.0	U	5.0	4.0	ug/L			06/18/15 18:21	1
4-Methyl-2-pentanone (MIBK)	4.0	U	10	4.0	ug/L			06/18/15 18:21	1
Methyl tert-butyl ether	0.44	U	1.0	0.44	ug/L			06/18/15 18:21	1
m-Xylene & p-Xylene	0.60	U	2.0	0.60	ug/L			06/18/15 18:21	1
n-Butylbenzene	0.67	U	1.0	0.67	ug/L			06/18/15 18:21	1
N-Propylbenzene	0.59	U	1.0	0.59	ug/L			06/18/15 18:21	1
o-Xylene	0.50	U	1.0	0.50	ug/L			06/18/15 18:21	1
sec-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/18/15 18:21	1
Styrene	0.98	U	2.0	0.98	ug/L			06/18/15 18:21	1
tert-Butylbenzene	0.84	U	1.0	0.84	ug/L			06/18/15 18:21	1
1,1,1,2-Tetrachloroethane	0.63	U	1.0	0.63	ug/L			06/18/15 18:21	1
1,1,2,2-Tetrachloroethane	0.17	U	1.0	0.17	ug/L			06/18/15 18:21	1
Tetrachloroethene	0.50	U	1.0	0.50	ug/L			06/18/15 18:21	1
Toluene	0.51	U	1.0	0.51	ug/L			06/18/15 18:21	1
trans-1,2-Dichloroethene	0.67	U	1.0	0.67	ug/L			06/18/15 18:21	1
trans-1,3-Dichloropropene	0.27	U	1.0	0.27	ug/L			06/18/15 18:21	1
1,2,3-Trichlorobenzene	0.77	U	1.0	0.77	ug/L			06/18/15 18:21	1
1,2,4-Trichlorobenzene	0.58	U	1.0	0.58	ug/L			06/18/15 18:21	1
1,1,1-Trichloroethane	0.47	U	1.0	0.47	ug/L			06/18/15 18:21	1
1,1,2-Trichloroethane	0.47	U	1.0	0.47	ug/L			06/18/15 18:21	1
Trichloroethene	0.61	U	1.0	0.61	ug/L			06/18/15 18:21	1
Trichlorofluoromethane	2.5	U	5.0	2.5	ug/L			06/18/15 18:21	1
1,2,3-Trichloropropane	0.44	U	1.0	0.44	ug/L			06/18/15 18:21	1
1,2,4-Trimethylbenzene	0.86	U	1.0	0.86	ug/L			06/18/15 18:21	1
1,3,5-Trimethylbenzene	0.54	U	1.0	0.54	ug/L			06/18/15 18:21	1
Vinyl chloride	0.71	U	1.0	0.71	ug/L			06/18/15 18:21	1
Xylenes, Total	0.50	U	3.0	0.50	ug/L			06/18/15 18:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	108		70 - 130		06/18/15 18:21	1
Dibromofluoromethane	110		70 - 130		06/18/15 18:21	1
Toluene-d8 (Surr)	104		70 - 130		06/18/15 18:21	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 19:33	1
Acenaphthylene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 19:33	1
Anthracene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 19:33	1
Benzo[a]anthracene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 19:33	1
Benzo[a]pyrene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 19:33	1
Benzo[b]fluoranthene	0.025	U	0.10	0.025	ug/L		06/16/15 11:04	06/17/15 19:33	1
Benzo[g,h,i]perylene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 19:33	1
Benzo[k]fluoranthene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 19:33	1
Chrysene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 19:33	1

TestAmerica Tampa

Client Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Client Sample ID: MW-1A

Lab Sample ID: 660-67423-3

Date Collected: 06/12/15 11:41

Matrix: Water

Date Received: 06/13/15 08:25

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 19:33	1
Fluoranthene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 19:33	1
Fluorene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 19:33	1
Indeno[1,2,3-cd]pyrene	0.044	U	0.20	0.044	ug/L		06/16/15 11:04	06/17/15 19:33	1
1-Methylnaphthalene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 19:33	1
2-Methylnaphthalene	0.031	U	0.20	0.031	ug/L		06/16/15 11:04	06/17/15 19:33	1
Naphthalene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 19:33	1
Phenanthrene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 19:33	1
Pyrene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 19:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl (Surr)	92		40 - 114				06/16/15 11:04	06/17/15 19:33	1

Method: 8081B - Organochlorine Pesticides by GC

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	0.0020	U	0.049	0.0020	ug/L		06/16/15 14:49	06/18/15 13:26	1
alpha-BHC	0.0059	U	0.049	0.0059	ug/L		06/16/15 14:49	06/18/15 13:26	1
alpha-Chlordane	0.013	U	0.049	0.013	ug/L		06/16/15 14:49	06/18/15 13:26	1
beta-BHC	0.013	U	0.049	0.013	ug/L		06/16/15 14:49	06/18/15 13:26	1
Chlordane (technical)	0.34	U	0.99	0.34	ug/L		06/16/15 14:49	06/18/15 13:26	1
4,4'-DDD	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/18/15 13:26	1
4,4'-DDE	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/18/15 13:26	1
4,4'-DDT	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/18/15 13:26	1
delta-BHC	0.013	U	0.049	0.013	ug/L		06/16/15 14:49	06/18/15 13:26	1
Dieldrin	0.0020	U	0.099	0.0020	ug/L		06/16/15 14:49	06/18/15 13:26	1
Endosulfan I	0.013	U	0.049	0.013	ug/L		06/16/15 14:49	06/18/15 13:26	1
Endosulfan II	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/18/15 13:26	1
Endosulfan sulfate	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/18/15 13:26	1
Endrin	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/18/15 13:26	1
Endrin aldehyde	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/18/15 13:26	1
Endrin ketone	0.013	U	0.099	0.013	ug/L		06/16/15 14:49	06/18/15 13:26	1
gamma-BHC (Lindane)	0.013	U	0.049	0.013	ug/L		06/16/15 14:49	06/18/15 13:26	1
gamma-Chlordane	0.013	U	0.049	0.013	ug/L		06/16/15 14:49	06/18/15 13:26	1
Heptachlor	0.013	U	0.049	0.013	ug/L		06/16/15 14:49	06/18/15 13:26	1
Heptachlor epoxide	0.013	U	0.049	0.013	ug/L		06/16/15 14:49	06/18/15 13:26	1
Methoxychlor	0.013	U	0.49	0.013	ug/L		06/16/15 14:49	06/18/15 13:26	1
Toxaphene	0.67	U	4.9	0.67	ug/L		06/16/15 14:49	06/18/15 13:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>DCB Decachlorobiphenyl</i>	95		20 - 142				06/16/15 14:49	06/18/15 13:26	1
<i>Dibutylchlorendate</i>	100		25 - 137				06/16/15 14:49	06/18/15 13:26	1
<i>Tetrachloro-m-xylene</i>	93		22 - 134				06/16/15 14:49	06/18/15 13:26	1

Method: 8141B - Organophosphorous Compounds by Gas Chromatography, Capillary Column Technique

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bolstar	0.095	U	1.0	0.095	ug/L		06/16/15 16:26	06/23/15 21:33	1
Chlorpyrifos	0.11	U	1.0	0.11	ug/L		06/16/15 16:26	06/23/15 21:33	1
Coumaphos	0.081	U	1.0	0.081	ug/L		06/16/15 16:26	06/23/15 21:33	1
Demeton, Total	0.15	U	2.5	0.15	ug/L		06/16/15 16:26	06/23/15 21:33	1
Diazinon	0.11	U	1.0	0.11	ug/L		06/16/15 16:26	06/23/15 21:33	1

TestAmerica Tampa

Client Sample Results

Client: Langan Engineering & Environmental Svcs
Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Client Sample ID: MW-1A

Lab Sample ID: 660-67423-3

Date Collected: 06/12/15 11:41

Matrix: Water

Date Received: 06/13/15 08:25

Method: 8141B - Organophosphorous Compounds by Gas Chromatography, Capillary Column Technique (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorvos	0.26	U	2.0	0.26	ug/L		06/16/15 16:26	06/23/15 21:33	1
Dimethoate	0.32	U	2.0	0.32	ug/L		06/16/15 16:26	06/23/15 21:33	1
Disulfoton	0.12	U	2.0	0.12	ug/L		06/16/15 16:26	06/23/15 21:33	1
EPN	0.071	U	1.0	0.071	ug/L		06/16/15 16:26	06/23/15 21:33	1
Ethyl Parathion	0.080	U	1.0	0.080	ug/L		06/16/15 16:26	06/23/15 21:33	1
Fensulfothion	0.17	U	5.0	0.17	ug/L		06/16/15 16:26	06/23/15 21:33	1
Guthion	0.33	U	1.0	0.33	ug/L		06/16/15 16:26	06/23/15 21:33	1
Malathion	0.092	U	1.0	0.092	ug/L		06/16/15 16:26	06/23/15 21:33	1
Merphos	0.13	U	1.0	0.13	ug/L		06/16/15 16:26	06/23/15 21:33	1
Methyl parathion	0.12	U	0.50	0.12	ug/L		06/16/15 16:26	06/23/15 21:33	1
Mevinphos	0.15	U	2.0	0.15	ug/L		06/16/15 16:26	06/23/15 21:33	1
Mocap	0.41	U	0.50	0.41	ug/L		06/16/15 16:26	06/23/15 21:33	1
Monochrotophos	2.6	J3 U	10	2.6	ug/L		06/16/15 16:26	06/23/15 21:33	1
Naled	0.36	U	5.0	0.36	ug/L		06/16/15 16:26	06/23/15 21:33	1
Phorate	0.16	U	1.0	0.16	ug/L		06/16/15 16:26	06/23/15 21:33	1
Ronnel	0.13	U	1.0	0.13	ug/L		06/16/15 16:26	06/23/15 21:33	1
Sulfotepp	0.055	U	0.50	0.055	ug/L		06/16/15 16:26	06/23/15 21:33	1
Tokuthion	0.087	U	1.0	0.087	ug/L		06/16/15 16:26	06/23/15 21:33	1
Trichloronate	0.11	U	1.0	0.11	ug/L		06/16/15 16:26	06/23/15 21:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Triphenylphosphate (TPP)	110		37 - 139	06/16/15 16:26	06/23/15 21:33	1

Method: FL-PRO - Florida - Petroleum Range Organics (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C8-C40)	24	U	150	24	ug/L		06/16/15 10:42	06/17/15 15:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-C39	103		42 - 193	06/16/15 10:42	06/17/15 15:24	1
o-Terphenyl	115		82 - 142	06/16/15 10:42	06/17/15 15:24	1

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

Analyte	Result	Qualifier	ML	EDL	TEF	TEQ	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		9.51	0.0494	1		pg/L		07/30/15 14:45	08/07/15 05:21	1
Total TCDD	ND		9.51	0.0494			pg/L		07/30/15 14:45	08/07/15 05:21	1
1,2,3,7,8-PeCDD	ND		47.6	0.0343	0.5		pg/L		07/30/15 14:45	08/07/15 05:21	1
Total PeCDD	ND		47.6	0.0343			pg/L		07/30/15 14:45	08/07/15 05:21	1
1,2,3,4,7,8-HxCDD	ND		47.6	0.0667	0.1		pg/L		07/30/15 14:45	08/07/15 05:21	1
1,2,3,6,7,8-HxCDD	ND		47.6	0.0684	0.1		pg/L		07/30/15 14:45	08/07/15 05:21	1
1,2,3,7,8,9-HxCDD	ND		47.6	0.0638	0.1		pg/L		07/30/15 14:45	08/07/15 05:21	1
Total HxCDD	0.286	J I	47.6	0.0662			pg/L		07/30/15 14:45	08/07/15 05:21	1
1,2,3,4,6,7,8-HpCDD	ND		47.6	0.191	0.01		pg/L		07/30/15 14:45	08/07/15 05:21	1
Total HpCDD	0.384	V J I	47.6	0.191			pg/L		07/30/15 14:45	08/07/15 05:21	1
OCDD	0.431	J V I	95.1	0.109	0.001	0.00043	pg/L		07/30/15 14:45	08/07/15 05:21	1
2,3,7,8-TCDF	ND		9.51	0.0387	0.1		pg/L		07/30/15 14:45	08/07/15 05:21	1
Total TCDF	ND		9.51	0.0387			pg/L		07/30/15 14:45	08/07/15 05:21	1
1,2,3,7,8-PeCDF	ND		47.6	0.105	0.05		pg/L		07/30/15 14:45	08/07/15 05:21	1
2,3,4,7,8-PeCDF	ND		47.6	0.105	0.5		pg/L		07/30/15 14:45	08/07/15 05:21	1
Total PeCDF	ND		47.6	0.105			pg/L		07/30/15 14:45	08/07/15 05:21	1

TestAmerica Tampa

Client Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Client Sample ID: MW-1A

Lab Sample ID: 660-67423-3

Date Collected: 06/12/15 11:41

Matrix: Water

Date Received: 06/13/15 08:25

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

Analyte	Result	Qualifier	ML	EDL	TEF	TEQ	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,4,7,8-HxCDF	ND		47.6	0.102	0.1		pg/L		07/30/15 14:45	08/07/15 05:21	1
1,2,3,6,7,8-HxCDF	ND		47.6	0.102	0.1		pg/L		07/30/15 14:45	08/07/15 05:21	1
2,3,4,6,7,8-HxCDF	ND		47.6	0.114	0.1		pg/L		07/30/15 14:45	08/07/15 05:21	1
1,2,3,7,8,9-HxCDF	ND		47.6	0.142	0.1		pg/L		07/30/15 14:45	08/07/15 05:21	1
Total HxCDF	ND		47.6	0.113			pg/L		07/30/15 14:45	08/07/15 05:21	1
1,2,3,4,6,7,8-HpCDF	ND		47.6	0.0379	0.01		pg/L		07/30/15 14:45	08/07/15 05:21	1
1,2,3,4,7,8,9-HpCDF	ND		47.6	0.0613	0.01		pg/L		07/30/15 14:45	08/07/15 05:21	1
Total HpCDF	ND		47.6	0.0472			pg/L		07/30/15 14:45	08/07/15 05:21	1
OCDF	ND		95.1	0.0355	0.001		pg/L		07/30/15 14:45	08/07/15 05:21	1
Total TEQ (EPA 1989)						0.00043					

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
37Cl4-2,3,7,8-TCDD	103		35 - 197	07/30/15 14:45	08/07/15 05:21	1

Internal Standard	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C-2,3,7,8-TCDD	64		25 - 164	07/30/15 14:45	08/07/15 05:21	1
13C-1,2,3,7,8-PeCDD	67		25 - 181	07/30/15 14:45	08/07/15 05:21	1
13C-1,2,3,4,7,8-HxCDD	61		32 - 141	07/30/15 14:45	08/07/15 05:21	1
13C-1,2,3,6,7,8-HxCDD	64		28 - 130	07/30/15 14:45	08/07/15 05:21	1
13C-1,2,3,4,6,7,8-HpCDD	67		23 - 140	07/30/15 14:45	08/07/15 05:21	1
13C-OCDD	58		17 - 157	07/30/15 14:45	08/07/15 05:21	1
13C-2,3,7,8-TCDF	62		24 - 169	07/30/15 14:45	08/07/15 05:21	1
13C-1,2,3,7,8-PeCDF	68		24 - 185	07/30/15 14:45	08/07/15 05:21	1
13C-2,3,4,7,8-PeCDF	63		21 - 178	07/30/15 14:45	08/07/15 05:21	1
13C-1,2,3,4,7,8-HxCDF	63		26 - 152	07/30/15 14:45	08/07/15 05:21	1
13C-1,2,3,6,7,8-HxCDF	60		26 - 123	07/30/15 14:45	08/07/15 05:21	1
13C-2,3,4,6,7,8-HxCDF	60		28 - 136	07/30/15 14:45	08/07/15 05:21	1
13C-1,2,3,7,8,9-HxCDF	61		29 - 147	07/30/15 14:45	08/07/15 05:21	1
13C-1,2,3,4,6,7,8-HpCDF	60		28 - 143	07/30/15 14:45	08/07/15 05:21	1
13C-1,2,3,4,7,8,9-HpCDF	57		26 - 138	07/30/15 14:45	08/07/15 05:21	1
13C-OCDF	48		17 - 157	07/30/15 14:45	08/07/15 05:21	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.3	U	2.5	1.3	ug/L		06/17/15 08:23	06/17/15 22:50	1
Barium	37		5.0	1.3	ug/L		06/17/15 08:23	06/17/15 22:50	1
Cadmium	0.095	U	0.50	0.095	ug/L		06/17/15 08:23	06/17/15 22:50	1
Chromium	2.5	U	5.0	2.5	ug/L		06/17/15 08:23	06/17/15 22:50	1
Lead	0.20	U	1.5	0.20	ug/L		06/17/15 08:23	06/17/15 22:50	1
Selenium	1.0	U	2.5	1.0	ug/L		06/17/15 08:23	06/17/15 22:50	1
Silver	0.25	U	1.0	0.25	ug/L		06/17/15 08:23	06/17/15 22:50	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.080	U	0.20	0.080	ug/L		06/16/15 13:42	06/17/15 11:26	1

QC Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 660-158876/6

Matrix: Water

Analysis Batch: 158876

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	9.9	U	20	9.9	ug/L			06/18/15 11:53	1
Benzene	0.50	U	1.0	0.50	ug/L			06/18/15 11:53	1
Bromobenzene	0.58	U	1.0	0.58	ug/L			06/18/15 11:53	1
Bromoform	0.63	U	1.0	0.63	ug/L			06/18/15 11:53	1
Bromomethane	2.5	U	5.0	2.5	ug/L			06/18/15 11:53	1
2-Butanone (MEK)	8.4	U	10	8.4	ug/L			06/18/15 11:53	1
Carbon disulfide	1.0	U	2.0	1.0	ug/L			06/18/15 11:53	1
Carbon tetrachloride	0.43	U	1.0	0.43	ug/L			06/18/15 11:53	1
Chlorobenzene	0.63	U	1.0	0.63	ug/L			06/18/15 11:53	1
Chlorobromomethane	0.58	U	1.0	0.58	ug/L			06/18/15 11:53	1
Chlorodibromomethane	0.31	U	1.0	0.31	ug/L			06/18/15 11:53	1
Chloroethane	2.5	U	5.0	2.5	ug/L			06/18/15 11:53	1
Chloroform	0.90	U	1.0	0.90	ug/L			06/18/15 11:53	1
Chloromethane	1.0	U	4.0	1.0	ug/L			06/18/15 11:53	1
2-Chlorotoluene	0.65	U	1.0	0.65	ug/L			06/18/15 11:53	1
4-Chlorotoluene	0.52	U	1.0	0.52	ug/L			06/18/15 11:53	1
cis-1,2-Dichloroethene	0.65	U	1.0	0.65	ug/L			06/18/15 11:53	1
cis-1,3-Dichloropropene	0.39	U	1.0	0.39	ug/L			06/18/15 11:53	1
1,2-Dibromo-3-Chloropropane	2.5	U	5.0	2.5	ug/L			06/18/15 11:53	1
Dibromomethane	0.46	U	1.0	0.46	ug/L			06/18/15 11:53	1
1,2-Dichlorobenzene	0.49	U	1.0	0.49	ug/L			06/18/15 11:53	1
1,3-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/18/15 11:53	1
1,4-Dichlorobenzene	0.60	U	1.0	0.60	ug/L			06/18/15 11:53	1
Dichlorobromomethane	0.44	U	1.0	0.44	ug/L			06/18/15 11:53	1
Dichlorodifluoromethane	2.5	U	5.0	2.5	ug/L			06/18/15 11:53	1
1,1-Dichloroethane	0.52	U	1.0	0.52	ug/L			06/18/15 11:53	1
1,2-Dichloroethane	0.57	U	1.0	0.57	ug/L			06/18/15 11:53	1
1,1-Dichloroethene	0.67	U	1.0	0.67	ug/L			06/18/15 11:53	1
1,2-Dichloropropane	0.52	U	1.0	0.52	ug/L			06/18/15 11:53	1
1,3-Dichloropropane	0.42	U	1.0	0.42	ug/L			06/18/15 11:53	1
2,2-Dichloropropane	0.36	U	1.0	0.36	ug/L			06/18/15 11:53	1
1,1-Dichloropropene	0.65	U	1.0	0.65	ug/L			06/18/15 11:53	1
Ethylbenzene	0.44	U	1.0	0.44	ug/L			06/18/15 11:53	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/18/15 11:53	1
Hexachlorobutadiene	0.34	U	1.0	0.34	ug/L			06/18/15 11:53	1
2-Hexanone	4.4	U	10	4.4	ug/L			06/18/15 11:53	1
Isopropylbenzene	0.52	U	1.0	0.52	ug/L			06/18/15 11:53	1
4-Isopropyltoluene	0.69	U	1.0	0.69	ug/L			06/18/15 11:53	1
Methylene Chloride	4.0	U	5.0	4.0	ug/L			06/18/15 11:53	1
4-Methyl-2-pentanone (MIBK)	4.0	U	10	4.0	ug/L			06/18/15 11:53	1
Methyl tert-butyl ether	0.44	U	1.0	0.44	ug/L			06/18/15 11:53	1
m-Xylene & p-Xylene	0.60	U	2.0	0.60	ug/L			06/18/15 11:53	1
n-Butylbenzene	0.67	U	1.0	0.67	ug/L			06/18/15 11:53	1
N-Propylbenzene	0.59	U	1.0	0.59	ug/L			06/18/15 11:53	1
o-Xylene	0.50	U	1.0	0.50	ug/L			06/18/15 11:53	1
sec-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/18/15 11:53	1
Styrene	0.98	U	2.0	0.98	ug/L			06/18/15 11:53	1
tert-Butylbenzene	0.84	U	1.0	0.84	ug/L			06/18/15 11:53	1

TestAmerica Tampa

QC Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 660-158876/6
Matrix: Water
Analysis Batch: 158876

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.63	U	1.0	0.63	ug/L			06/18/15 11:53	1
1,1,1,2,2-Tetrachloroethane	0.17	U	1.0	0.17	ug/L			06/18/15 11:53	1
Tetrachloroethene	0.50	U	1.0	0.50	ug/L			06/18/15 11:53	1
Toluene	0.51	U	1.0	0.51	ug/L			06/18/15 11:53	1
trans-1,2-Dichloroethene	0.67	U	1.0	0.67	ug/L			06/18/15 11:53	1
trans-1,3-Dichloropropene	0.27	U	1.0	0.27	ug/L			06/18/15 11:53	1
1,2,3-Trichlorobenzene	0.77	U	1.0	0.77	ug/L			06/18/15 11:53	1
1,2,4-Trichlorobenzene	0.58	U	1.0	0.58	ug/L			06/18/15 11:53	1
1,1,1-Trichloroethane	0.47	U	1.0	0.47	ug/L			06/18/15 11:53	1
1,1,2-Trichloroethane	0.47	U	1.0	0.47	ug/L			06/18/15 11:53	1
Trichloroethene	0.61	U	1.0	0.61	ug/L			06/18/15 11:53	1
Trichlorofluoromethane	2.5	U	5.0	2.5	ug/L			06/18/15 11:53	1
1,2,3-Trichloropropane	0.44	U	1.0	0.44	ug/L			06/18/15 11:53	1
1,2,4-Trimethylbenzene	0.86	U	1.0	0.86	ug/L			06/18/15 11:53	1
1,3,5-Trimethylbenzene	0.54	U	1.0	0.54	ug/L			06/18/15 11:53	1
Vinyl chloride	0.71	U	1.0	0.71	ug/L			06/18/15 11:53	1
Xylenes, Total	0.50	U	3.0	0.50	ug/L			06/18/15 11:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	105		70 - 130		06/18/15 11:53	1
Dibromofluoromethane	112		70 - 130		06/18/15 11:53	1
Toluene-d8 (Surr)	101		70 - 130		06/18/15 11:53	1

Lab Sample ID: LCS 660-158876/7
Matrix: Water
Analysis Batch: 158876

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	107		ug/L		107	62 - 142
Benzene	10.0	9.85		ug/L		99	68 - 134
Bromobenzene	10.0	9.87		ug/L		99	70 - 130
Bromoform	10.0	8.51		ug/L		85	65 - 130
Bromomethane	10.0	8.49		ug/L		85	22 - 150
2-Butanone (MEK)	100	99.6		ug/L		100	63 - 140
Carbon disulfide	10.0	9.40		ug/L		94	30 - 150
Carbon tetrachloride	10.0	12.2		ug/L		122	61 - 134
Chlorobenzene	10.0	9.79		ug/L		98	70 - 130
Chlorobromomethane	10.0	10.8		ug/L		108	70 - 130
Chlorodibromomethane	10.0	9.31		ug/L		93	70 - 130
Chloroethane	10.0	6.85		ug/L		68	39 - 150
Chloroform	10.0	11.7		ug/L		117	68 - 130
Chloromethane	10.0	8.73		ug/L		87	35 - 150
2-Chlorotoluene	10.0	11.1		ug/L		111	70 - 130
4-Chlorotoluene	10.0	11.3		ug/L		113	70 - 130
cis-1,2-Dichloroethene	10.0	12.4		ug/L		124	66 - 130
cis-1,3-Dichloropropene	10.0	10.5		ug/L		105	70 - 130
1,2-Dibromo-3-Chloropropane	10.0	8.00		ug/L		80	63 - 130
Dibromomethane	10.0	10.4		ug/L		104	70 - 130

TestAmerica Tampa

QC Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 660-158876/7

Matrix: Water

Analysis Batch: 158876

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	10.0	10.4		ug/L		104	70 - 130
1,3-Dichlorobenzene	10.0	10.3		ug/L		103	70 - 130
1,4-Dichlorobenzene	10.0	9.64		ug/L		96	70 - 130
Dichlorobromomethane	10.0	10.5		ug/L		105	70 - 130
Dichlorodifluoromethane	10.0	8.88		ug/L		89	16 - 149
1,1-Dichloroethane	10.0	11.4		ug/L		114	66 - 130
1,2-Dichloroethane	10.0	12.6		ug/L		126	70 - 130
1,1-Dichloroethene	10.0	9.92		ug/L		99	51 - 150
1,2-Dichloropropane	10.0	10.4		ug/L		104	70 - 130
1,3-Dichloropropane	10.0	9.78		ug/L		98	70 - 130
2,2-Dichloropropane	10.0	11.7		ug/L		117	66 - 134
1,1-Dichloropropene	10.0	12.3		ug/L		123	65 - 136
Ethylbenzene	10.0	10.2		ug/L		102	70 - 130
Ethylene Dibromide	10.0	10.5		ug/L		105	66 - 130
Hexachlorobutadiene	10.0	11.2		ug/L		112	62 - 143
2-Hexanone	100	90.7		ug/L		91	60 - 148
Isopropylbenzene	10.0	10.5		ug/L		105	62 - 130
4-Isopropyltoluene	10.0	10.2		ug/L		102	65 - 134
Methylene Chloride	10.0	10.2		ug/L		102	57 - 130
4-Methyl-2-pentanone (MIBK)	100	90.5		ug/L		91	64 - 137
Methyl tert-butyl ether	10.0	10.3		ug/L		103	67 - 130
n-Butylbenzene	10.0	10.4		ug/L		104	61 - 131
N-Propylbenzene	10.0	10.8		ug/L		108	67 - 130
o-Xylene	10.0	10.7		ug/L		107	69 - 130
sec-Butylbenzene	10.0	10.4		ug/L		104	68 - 133
Styrene	10.0	9.51		ug/L		95	68 - 131
tert-Butylbenzene	10.0	11.0		ug/L		110	64 - 130
1,1,1,2-Tetrachloroethane	10.0	10.2		ug/L		102	70 - 130
1,1,1,2,2-Tetrachloroethane	10.0	8.06		ug/L		81	70 - 130
Tetrachloroethene	10.0	10.2		ug/L		102	50 - 143
Toluene	10.0	10.1		ug/L		101	70 - 131
trans-1,2-Dichloroethene	10.0	10.8		ug/L		108	62 - 139
trans-1,3-Dichloropropene	10.0	11.3		ug/L		113	67 - 130
1,2,3-Trichlorobenzene	10.0	10.2		ug/L		102	58 - 132
1,2,4-Trichlorobenzene	10.0	10.3		ug/L		103	66 - 130
1,1,1-Trichloroethane	10.0	12.0		ug/L		120	63 - 132
1,1,2-Trichloroethane	10.0	8.90		ug/L		89	70 - 130
Trichloroethene	10.0	10.9		ug/L		109	63 - 139
Trichlorofluoromethane	10.0	11.8		ug/L		118	62 - 146
1,2,3-Trichloropropane	10.0	9.76		ug/L		98	66 - 130
1,2,4-Trimethylbenzene	10.0	11.0		ug/L		110	70 - 132
1,3,5-Trimethylbenzene	10.0	10.6		ug/L		106	65 - 134
Vinyl chloride	10.0	8.16		ug/L		82	48 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	104		70 - 130
Dibromofluoromethane	106		70 - 130
Toluene-d8 (Surr)	99		70 - 130

TestAmerica Tampa

QC Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 640-117331/1-A
Matrix: Water
Analysis Batch: 117361

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 117331

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 14:10	1
Acenaphthylene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 14:10	1
Anthracene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 14:10	1
Benzo[a]anthracene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 14:10	1
Benzo[a]pyrene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 14:10	1
Benzo[b]fluoranthene	0.025	U	0.10	0.025	ug/L		06/16/15 11:04	06/17/15 14:10	1
Benzo[g,h,i]perylene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 14:10	1
Benzo[k]fluoranthene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 14:10	1
Chrysene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 14:10	1
Dibenz(a,h)anthracene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 14:10	1
Fluoranthene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 14:10	1
Fluorene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 14:10	1
Indeno[1,2,3-cd]pyrene	0.044	U	0.20	0.044	ug/L		06/16/15 11:04	06/17/15 14:10	1
1-Methylnaphthalene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 14:10	1
2-Methylnaphthalene	0.031	U	0.20	0.031	ug/L		06/16/15 11:04	06/17/15 14:10	1
Naphthalene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 14:10	1
Phenanthrene	0.040	U	0.20	0.040	ug/L		06/16/15 11:04	06/17/15 14:10	1
Pyrene	0.025	U	0.20	0.025	ug/L		06/16/15 11:04	06/17/15 14:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl (Surr)	104		40 - 114	06/16/15 11:04	06/17/15 14:10	1

Lab Sample ID: LCS 640-117331/2-A
Matrix: Water
Analysis Batch: 117361

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 117331

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Acenaphthene	8.00	5.49		ug/L		69	50 - 110
Acenaphthylene	8.00	5.64		ug/L		71	27 - 105
Anthracene	8.00	5.87		ug/L		73	33 - 103
Benzo[a]anthracene	8.00	6.99		ug/L		87	58 - 112
Benzo[a]pyrene	8.00	6.93		ug/L		87	34 - 115
Benzo[b]fluoranthene	8.00	7.13		ug/L		89	68 - 120
Benzo[g,h,i]perylene	8.00	5.57		ug/L		70	57 - 128
Benzo[k]fluoranthene	8.00	7.02		ug/L		88	67 - 115
Chrysene	8.00	7.01		ug/L		88	64 - 115
Dibenz(a,h)anthracene	8.00	5.34		ug/L		67	52 - 128
Fluoranthene	8.00	7.19		ug/L		90	66 - 113
Fluorene	8.00	5.81		ug/L		73	59 - 113
Indeno[1,2,3-cd]pyrene	8.00	6.53		ug/L		82	58 - 121
1-Methylnaphthalene	8.00	5.98		ug/L		75	46 - 103
2-Methylnaphthalene	8.00	5.30		ug/L		66	46 - 106
Naphthalene	8.00	5.48		ug/L		68	43 - 104
Phenanthrene	8.00	5.50		ug/L		69	57 - 109
Pyrene	8.00	5.27		ug/L		66	60 - 114

TestAmerica Tampa

QC Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 640-117331/2-A
Matrix: Water
Analysis Batch: 117361

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 117331

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl (Surr)	89		40 - 114

Lab Sample ID: LCSD 640-117331/3-A
Matrix: Water
Analysis Batch: 117361

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 117331

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	8.00	6.37		ug/L		80	50 - 110	15	40
Acenaphthylene	8.00	6.44		ug/L		80	27 - 105	13	40
Anthracene	8.00	6.93		ug/L		87	33 - 103	17	40
Benzo[a]anthracene	8.00	7.87		ug/L		98	58 - 112	12	37
Benzo[a]pyrene	8.00	7.47		ug/L		93	34 - 115	7	40
Benzo[b]fluoranthene	8.00	7.73		ug/L		97	68 - 120	8	23
Benzo[g,h,i]perylene	8.00	4.81		ug/L		60	57 - 128	15	27
Benzo[k]fluoranthene	8.00	7.38		ug/L		92	67 - 115	5	23
Chrysene	8.00	7.73		ug/L		97	64 - 115	10	34
Dibenz(a,h)anthracene	8.00	4.40		ug/L		55	52 - 128	19	30
Fluoranthene	8.00	8.32		ug/L		104	66 - 113	14	32
Fluorene	8.00	6.88		ug/L		86	59 - 113	17	36
Indeno[1,2,3-cd]pyrene	8.00	6.48		ug/L		81	58 - 121	1	26
1-Methylnaphthalene	8.00	6.79		ug/L		85	46 - 103	13	40
2-Methylnaphthalene	8.00	6.11		ug/L		76	46 - 106	14	40
Naphthalene	8.00	6.06		ug/L		76	43 - 104	10	40
Phenanthrene	8.00	6.55		ug/L		82	57 - 109	17	32
Pyrene	8.00	6.32		ug/L		79	60 - 114	18	37

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl (Surr)	99		40 - 114

Method: 8081B - Organochlorine Pesticides by GC

Lab Sample ID: MB 640-117345/1-A
Matrix: Water
Analysis Batch: 117354

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 117345

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	0.0020	U	0.050	0.0020	ug/L		06/16/15 14:49	06/17/15 23:50	1
alpha-BHC	0.0060	U	0.050	0.0060	ug/L		06/16/15 14:49	06/17/15 23:50	1
alpha-Chlordane	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:50	1
beta-BHC	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:50	1
Chlordane (technical)	0.34	U	1.0	0.34	ug/L		06/16/15 14:49	06/17/15 23:50	1
4,4'-DDD	0.013	U	0.10	0.013	ug/L		06/16/15 14:49	06/17/15 23:50	1
4,4'-DDE	0.013	U	0.10	0.013	ug/L		06/16/15 14:49	06/17/15 23:50	1
4,4'-DDT	0.013	U	0.10	0.013	ug/L		06/16/15 14:49	06/17/15 23:50	1
delta-BHC	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:50	1
Dieldrin	0.0020	U	0.10	0.0020	ug/L		06/16/15 14:49	06/17/15 23:50	1
Endosulfan I	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:50	1

TestAmerica Tampa

QC Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Method: 8081B - Organochlorine Pesticides by GC (Continued)

Lab Sample ID: MB 640-117345/1-A
Matrix: Water
Analysis Batch: 117354

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 117345

Analyte	MB	MB	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Endosulfan II	0.013	U	0.10	0.013	ug/L		06/16/15 14:49	06/17/15 23:50	1
Endosulfan sulfate	0.013	U	0.10	0.013	ug/L		06/16/15 14:49	06/17/15 23:50	1
Endrin	0.013	U	0.10	0.013	ug/L		06/16/15 14:49	06/17/15 23:50	1
Endrin aldehyde	0.013	U	0.10	0.013	ug/L		06/16/15 14:49	06/17/15 23:50	1
Endrin ketone	0.013	U	0.10	0.013	ug/L		06/16/15 14:49	06/17/15 23:50	1
gamma-BHC (Lindane)	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:50	1
gamma-Chlordane	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:50	1
Heptachlor	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:50	1
Heptachlor epoxide	0.013	U	0.050	0.013	ug/L		06/16/15 14:49	06/17/15 23:50	1
Methoxychlor	0.013	U	0.50	0.013	ug/L		06/16/15 14:49	06/17/15 23:50	1
Toxaphene	0.68	U	5.0	0.68	ug/L		06/16/15 14:49	06/17/15 23:50	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
DCB Decachlorobiphenyl	101		20 - 142	06/16/15 14:49	06/17/15 23:50	1
Dibutylchlorendate	105		25 - 137	06/16/15 14:49	06/17/15 23:50	1
Tetrachloro-m-xylene	90		22 - 134	06/16/15 14:49	06/17/15 23:50	1

Lab Sample ID: LCS 640-117345/20-A
Matrix: Water
Analysis Batch: 117390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 117345

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl	107		20 - 142
Dibutylchlorendate	99		25 - 137
Tetrachloro-m-xylene	98		22 - 134

Lab Sample ID: LCS 640-117345/2-A
Matrix: Water
Analysis Batch: 117354

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 117345

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Aldrin	0.270	0.272		ug/L		101	54 - 144
alpha-BHC	0.270	0.303		ug/L		112	66 - 129
alpha-Chlordane	0.270	0.328		ug/L		121	49 - 163
beta-BHC	0.270	0.310		ug/L		115	47 - 167
4,4'-DDD	0.270	0.325		ug/L		120	38 - 156
4,4'-DDE	0.270	0.253		ug/L		94	38 - 145
4,4'-DDT	0.270	0.237		ug/L		88	21 - 137
delta-BHC	0.270	0.290		ug/L		107	51 - 132
Dieldrin	0.270	0.350		ug/L		130	51 - 161
Endosulfan I	0.270	0.290		ug/L		107	32 - 152
Endosulfan II	0.270	0.328		ug/L		121	52 - 151
Endosulfan sulfate	0.270	0.249		ug/L		92	38 - 158
Endrin	0.270	0.298		ug/L		110	59 - 144
Endrin aldehyde	0.270	0.376		ug/L		139	53 - 165
Endrin ketone	0.270	0.345		ug/L		128	60 - 167
gamma-BHC (Lindane)	0.270	0.316		ug/L		117	58 - 141
gamma-Chlordane	0.270	0.288		ug/L		107	62 - 148

TestAmerica Tampa

QC Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Method: 8081B - Organochlorine Pesticides by GC (Continued)

Lab Sample ID: LCS 640-117345/2-A
Matrix: Water
Analysis Batch: 117354

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 117345

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Heptachlor	0.270	0.270		ug/L		100	55 - 151
Heptachlor epoxide	0.270	0.327		ug/L		121	68 - 155
Methoxychlor	0.270	0.257	I	ug/L		95	33 - 151

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	107		20 - 142
Dibutylchloroendate	104		25 - 137
Tetrachloro-m-xylene	96		22 - 134

Lab Sample ID: LCSD 640-117345/21-A
Matrix: Water
Analysis Batch: 117390

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 117345

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	113		20 - 142
Dibutylchloroendate	109		25 - 137
Tetrachloro-m-xylene	102		22 - 134

Lab Sample ID: LCSD 640-117345/3-A
Matrix: Water
Analysis Batch: 117354

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 117345

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aldrin	0.270	0.275		ug/L		102	54 - 144	1	34
alpha-BHC	0.270	0.263		ug/L		97	66 - 129	14	20
alpha-Chlordane	0.270	0.327		ug/L		121	49 - 163	0	51
beta-BHC	0.270	0.256		ug/L		95	47 - 167	19	28
4,4'-DDD	0.270	0.327		ug/L		121	38 - 156	0	31
4,4'-DDE	0.270	0.266		ug/L		98	38 - 145	5	28
4,4'-DDT	0.270	0.238		ug/L		88	21 - 137	0	35
delta-BHC	0.270	0.249		ug/L		92	51 - 132	15	28
Dieldrin	0.270	0.350		ug/L		129	51 - 161	0	29
Endosulfan I	0.270	0.296		ug/L		109	32 - 152	2	50
Endosulfan II	0.270	0.326		ug/L		120	52 - 151	1	39
Endosulfan sulfate	0.270	0.248		ug/L		92	38 - 158	0	36
Endrin	0.270	0.297		ug/L		110	59 - 144	0	21
Endrin aldehyde	0.270	0.370		ug/L		137	53 - 165	1	41
Endrin ketone	0.270	0.342		ug/L		127	60 - 167	1	38
gamma-BHC (Lindane)	0.270	0.273		ug/L		101	58 - 141	15	38
gamma-Chlordane	0.270	0.294		ug/L		109	62 - 148	2	27
Heptachlor	0.270	0.252		ug/L		93	55 - 151	7	25
Heptachlor epoxide	0.270	0.321		ug/L		119	68 - 155	2	24
Methoxychlor	0.270	0.284	I	ug/L		105	33 - 151	10	44

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	106		20 - 142
Dibutylchloroendate	104		25 - 137

TestAmerica Tampa

QC Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Method: 8081B - Organochlorine Pesticides by GC (Continued)

Lab Sample ID: LCSD 640-117345/3-A
Matrix: Water
Analysis Batch: 117354

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 117345

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	90		22 - 134

Method: 8141B - Organophosphorous Compounds by Gas Chromatography, Capillary Column Technique

Lab Sample ID: MB 640-117349/1-A
Matrix: Water
Analysis Batch: 117492

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 117349

Analyte	MB MB		PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Bolstar	0.095	U	1.0	0.095	ug/L		06/16/15 16:26	06/23/15 19:25	1
Chlorpyrifos	0.11	U	1.0	0.11	ug/L		06/16/15 16:26	06/23/15 19:25	1
Coumaphos	0.081	U	1.0	0.081	ug/L		06/16/15 16:26	06/23/15 19:25	1
Demeton, Total	0.15	U	2.5	0.15	ug/L		06/16/15 16:26	06/23/15 19:25	1
Diazinon	0.11	U	1.0	0.11	ug/L		06/16/15 16:26	06/23/15 19:25	1
Dichlorvos	0.26	U	2.0	0.26	ug/L		06/16/15 16:26	06/23/15 19:25	1
Dimethoate	0.32	U	2.0	0.32	ug/L		06/16/15 16:26	06/23/15 19:25	1
Disulfoton	0.12	U	2.0	0.12	ug/L		06/16/15 16:26	06/23/15 19:25	1
EPN	0.071	U	1.0	0.071	ug/L		06/16/15 16:26	06/23/15 19:25	1
Ethyl Parathion	0.080	U	1.0	0.080	ug/L		06/16/15 16:26	06/23/15 19:25	1
Fensulfothion	0.17	U	5.0	0.17	ug/L		06/16/15 16:26	06/23/15 19:25	1
Guthion	0.33	U	1.0	0.33	ug/L		06/16/15 16:26	06/23/15 19:25	1
Malathion	0.092	U	1.0	0.092	ug/L		06/16/15 16:26	06/23/15 19:25	1
Merphos	0.13	U	1.0	0.13	ug/L		06/16/15 16:26	06/23/15 19:25	1
Methyl parathion	0.12	U	0.50	0.12	ug/L		06/16/15 16:26	06/23/15 19:25	1
Mevinphos	0.15	U	2.0	0.15	ug/L		06/16/15 16:26	06/23/15 19:25	1
Mocap	0.41	U	0.50	0.41	ug/L		06/16/15 16:26	06/23/15 19:25	1
Monochrotophos	2.6	U	10	2.6	ug/L		06/16/15 16:26	06/23/15 19:25	1
Naled	0.36	U	5.0	0.36	ug/L		06/16/15 16:26	06/23/15 19:25	1
Phorate	0.16	U	1.0	0.16	ug/L		06/16/15 16:26	06/23/15 19:25	1
Ronnel	0.13	U	1.0	0.13	ug/L		06/16/15 16:26	06/23/15 19:25	1
Sulfotepp	0.055	U	0.50	0.055	ug/L		06/16/15 16:26	06/23/15 19:25	1
Tokuthion	0.087	U	1.0	0.087	ug/L		06/16/15 16:26	06/23/15 19:25	1
Trichloronate	0.11	U	1.0	0.11	ug/L		06/16/15 16:26	06/23/15 19:25	1
Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
Triphenylphosphate (TPP)	99		37 - 139	06/16/15 16:26	06/23/15 19:25	1			

Lab Sample ID: LCS 640-117349/2-A
Matrix: Water
Analysis Batch: 117501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 117349

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Bolstar	2.50	2.35		ug/L		94	50 - 130
Chlorpyrifos	2.50	1.71		ug/L		68	50 - 130
Coumaphos	2.50	2.30		ug/L		92	50 - 130
Demeton, Total	5.00	3.33		ug/L		67	50 - 130

TestAmerica Tampa

QC Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Method: 8141B - Organophosphorous Compounds by Gas Chromatography, Capillary Column Technique (Continued)

Lab Sample ID: LCS 640-117349/2-A
Matrix: Water
Analysis Batch: 117501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 117349

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Diazinon	2.50	1.43		ug/L		57	42 - 132
Dichlorvos	2.50	1.58	I	ug/L		63	50 - 130
EPN	2.50	2.19		ug/L		88	50 - 130
Ethyl Parathion	2.50	2.09		ug/L		83	49 - 134
Fensulfothion	2.50	2.44	I	ug/L		97	50 - 130
Guthion	2.50	2.30		ug/L		92	50 - 130
Malathion	2.50	2.13		ug/L		85	50 - 130
Methyl parathion	2.50	2.04		ug/L		82	43 - 140
Mevinphos	2.50	1.99	I	ug/L		80	50 - 130
Mocap	2.50	2.05		ug/L		82	50 - 130
Monochrotophos	10.0	5.30	I	ug/L		53	10 - 100
Naled	10.0	7.42		ug/L		74	50 - 130
Phorate	2.50	1.54		ug/L		62	50 - 130
Ronnel	2.50	1.75		ug/L		70	38 - 124
Tokuthion	2.50	2.08		ug/L		83	50 - 130
Trichloronate	2.50	1.83		ug/L		73	50 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Triphenylphosphate (TPP)	102		37 - 139

Lab Sample ID: LCSD 640-117349/3-A
Matrix: Water
Analysis Batch: 117501

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 117349

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Bolstar	2.50	2.32		ug/L		93	50 - 130	1	30
Chlorpyrifos	2.50	2.09		ug/L		84	50 - 130	20	30
Coumaphos	2.50	2.24		ug/L		90	50 - 130	3	30
Demeton, Total	5.00	3.38		ug/L		68	50 - 130	1	30
Diazinon	2.50	1.60		ug/L		64	42 - 132	11	30
Dichlorvos	2.50	1.63	I	ug/L		65	50 - 130	3	30
EPN	2.50	2.10		ug/L		84	50 - 130	4	30
Ethyl Parathion	2.50	2.10		ug/L		84	49 - 134	1	30
Fensulfothion	2.50	1.90	I	ug/L		76	50 - 130	10	30
Guthion	2.50	2.20		ug/L		88	50 - 130	4	30
Malathion	2.50	2.07		ug/L		83	50 - 130	7	30
Methyl parathion	2.50	2.11		ug/L		85	43 - 140	9	30
Mevinphos	2.50	1.95	I	ug/L		78	50 - 130	2	30
Mocap	2.50	2.06		ug/L		82	50 - 130	1	30
Monochrotophos	10.0	3.00	I J3	ug/L		30	10 - 100	50	30
Naled	10.0	8.30		ug/L		83	50 - 130	11	30
Phorate	2.50	1.81		ug/L		72	50 - 130	16	30
Ronnel	2.50	2.01		ug/L		80	38 - 124	14	30
Tokuthion	2.50	2.17		ug/L		87	50 - 130	4	30
Trichloronate	2.50	2.07		ug/L		83	50 - 130	12	30

TestAmerica Tampa

QC Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Method: 8141B - Organophosphorous Compounds by Gas Chromatography, Capillary Column Technique (Continued)

Lab Sample ID: LCSD 640-117349/3-A
Matrix: Water
Analysis Batch: 117501

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 117349

	LCSD	LCSD	
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>Triphenylphosphate (TPP)</i>	102		37 - 139

Method: FL-PRO - Florida - Petroleum Range Organics (GC)

Lab Sample ID: MB 400-261268/1-A
Matrix: Water
Analysis Batch: 261409

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 261268

<i>Analyte</i>	<i>MB</i>	<i>MB</i>								
	<i>Result</i>	<i>Qualifier</i>	<i>PQL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil</i>	<i>Fac</i>
Total Petroleum Hydrocarbons (C8-C40)	24	U	150	24	ug/L		06/16/15 10:42	06/17/15 13:36		1

	MB	MB							
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil</i>	<i>Fac</i>		
<i>n-C39</i>	111		42 - 193	06/16/15 10:42	06/17/15 13:36		1		
<i>o-Terphenyl</i>	111		82 - 142	06/16/15 10:42	06/17/15 13:36		1		

Lab Sample ID: LCS 400-261268/2-A
Matrix: Water
Analysis Batch: 261409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261268

<i>Analyte</i>	<i>Spike</i>	<i>LCS</i>	<i>LCS</i>							
	<i>Added</i>	<i>Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>			
Total Petroleum Hydrocarbons (C8-C40)	3400	3360		ug/L		99	55 - 118			

	LCS	LCS	
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>n-C39</i>	112		42 - 193
<i>o-Terphenyl</i>	132		82 - 142

Lab Sample ID: LCSD 400-261268/3-A
Matrix: Water
Analysis Batch: 261409

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261268

<i>Analyte</i>	<i>Spike</i>	<i>LCSD</i>	<i>LCSD</i>							
	<i>Added</i>	<i>Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>	<i>RPD</i>	<i>Limit</i>	<i>RPD</i>
Total Petroleum Hydrocarbons (C8-C40)	3400	3280		ug/L		96	55 - 118	2	20	

	LCSD	LCSD	
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>n-C39</i>	112		42 - 193
<i>o-Terphenyl</i>	125		82 - 142

QC Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

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

Lab Sample ID: H5G30000018B

Matrix: Water

Analysis Batch: 5211018

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 5211018_P

Analyte	Result	MB Qualifier	ML	EDL	TEF	TEQ	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		10.0	0.0849	1		pg/L		07/30/15 14:45	08/06/15 15:11	1
Total TCDD	ND		10.0	0.0849			pg/L		07/30/15 14:45	08/06/15 15:11	1
1,2,3,7,8-PeCDD	0.152	J I	50.0	0.0519	0.5	0.076	pg/L		07/30/15 14:45	08/06/15 15:11	1
Total PeCDD	0.152	J I	50.0	0.0519			pg/L		07/30/15 14:45	08/06/15 15:11	1
1,2,3,4,7,8-HxCDD	ND		50.0	0.102	0.1		pg/L		07/30/15 14:45	08/06/15 15:11	1
1,2,3,6,7,8-HxCDD	ND		50.0	0.104	0.1		pg/L		07/30/15 14:45	08/06/15 15:11	1
1,2,3,7,8,9-HxCDD	ND		50.0	0.0976	0.1		pg/L		07/30/15 14:45	08/06/15 15:11	1
Total HxCDD	ND		50.0	0.101			pg/L		07/30/15 14:45	08/06/15 15:11	1
1,2,3,4,6,7,8-HpCDD	1.28	J I	50.0	0.201	0.01	0.013	pg/L		07/30/15 14:45	08/06/15 15:11	1
Total HpCDD	1.96	J I	50.0	0.201			pg/L		07/30/15 14:45	08/06/15 15:11	1
OCDD	3.85	J I	100	0.140	0.001	0.0039	pg/L		07/30/15 14:45	08/06/15 15:11	1
2,3,7,8-TCDF	ND		10.0	0.103	0.1		pg/L		07/30/15 14:45	08/06/15 15:11	1
Total TCDF	ND		10.0	0.103			pg/L		07/30/15 14:45	08/06/15 15:11	1
1,2,3,7,8-PeCDF	ND		50.0	0.128	0.05		pg/L		07/30/15 14:45	08/06/15 15:11	1
2,3,4,7,8-PeCDF	ND		50.0	0.125	0.5		pg/L		07/30/15 14:45	08/06/15 15:11	1
Total PeCDF	ND		50.0	0.126			pg/L		07/30/15 14:45	08/06/15 15:11	1
1,2,3,4,7,8-HxCDF	ND		50.0	0.107	0.1		pg/L		07/30/15 14:45	08/06/15 15:11	1
1,2,3,6,7,8-HxCDF	ND		50.0	0.104	0.1		pg/L		07/30/15 14:45	08/06/15 15:11	1
2,3,4,6,7,8-HxCDF	0.181	J I	50.0	0.118	0.1	0.018	pg/L		07/30/15 14:45	08/06/15 15:11	1
1,2,3,7,8,9-HxCDF	ND		50.0	0.145	0.1		pg/L		07/30/15 14:45	08/06/15 15:11	1
Total HxCDF	0.181	J I	50.0	0.116			pg/L		07/30/15 14:45	08/06/15 15:11	1
1,2,3,4,6,7,8-HpCDF	0.365	J I	50.0	0.0459	0.01	0.0037	pg/L		07/30/15 14:45	08/06/15 15:11	1
1,2,3,4,7,8,9-HpCDF	0.388	J I	50.0	0.0778	0.01	0.0039	pg/L		07/30/15 14:45	08/06/15 15:11	1
Total HpCDF	0.753	J I	50.0	0.0583			pg/L		07/30/15 14:45	08/06/15 15:11	1
OCDF	1.92	I	100	0.0757	0.001	0.0019	pg/L		07/30/15 14:45	08/06/15 15:11	1

Total TEQ

0.12

Surrogate	%Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
37Cl4-2,3,7,8-TCDD	104		35 - 197	07/30/15 14:45	08/06/15 15:11	1

Internal Standard	%Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C-2,3,7,8-TCDD	79		25 - 164	07/30/15 14:45	08/06/15 15:11	1
13C-1,2,3,7,8-PeCDD	80		25 - 181	07/30/15 14:45	08/06/15 15:11	1
13C-1,2,3,4,7,8-HxCDD	81		32 - 141	07/30/15 14:45	08/06/15 15:11	1
13C-1,2,3,6,7,8-HxCDD	77		28 - 130	07/30/15 14:45	08/06/15 15:11	1
13C-1,2,3,4,6,7,8-HpCDD	82		23 - 140	07/30/15 14:45	08/06/15 15:11	1
13C-OCDD	68		17 - 157	07/30/15 14:45	08/06/15 15:11	1
13C-2,3,7,8-TCDF	82		24 - 169	07/30/15 14:45	08/06/15 15:11	1
13C-1,2,3,7,8-PeCDF	80		24 - 185	07/30/15 14:45	08/06/15 15:11	1
13C-2,3,4,7,8-PeCDF	79		21 - 178	07/30/15 14:45	08/06/15 15:11	1
13C-1,2,3,4,7,8-HxCDF	82		26 - 152	07/30/15 14:45	08/06/15 15:11	1
13C-1,2,3,6,7,8-HxCDF	80		26 - 123	07/30/15 14:45	08/06/15 15:11	1
13C-2,3,4,6,7,8-HxCDF	79		28 - 136	07/30/15 14:45	08/06/15 15:11	1
13C-1,2,3,7,8,9-HxCDF	78		29 - 147	07/30/15 14:45	08/06/15 15:11	1
13C-1,2,3,4,6,7,8-HpCDF	82		28 - 143	07/30/15 14:45	08/06/15 15:11	1
13C-1,2,3,4,7,8,9-HpCDF	72		26 - 138	07/30/15 14:45	08/06/15 15:11	1
13C-OCDF	51		17 - 157	07/30/15 14:45	08/06/15 15:11	1

TestAmerica Tampa

QC Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Lab Sample ID: H5G30000018C
Matrix: Water
Analysis Batch: 5211018

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 5211018_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3,7,8-TCDD	200	204		pg/L		102	67 - 158
1,2,3,7,8-PeCDD	1000	1090	V	pg/L		109	70 - 142
1,2,3,4,7,8-HxCDD	1000	1020		pg/L		102	70 - 164
1,2,3,6,7,8-HxCDD	1000	1000		pg/L		100	76 - 134
1,2,3,7,8,9-HxCDD	1000	1110		pg/L		111	64 - 162
1,2,3,4,6,7,8-HpCDD	1000	969	V	pg/L		97	70 - 140
OCDD	2000	1780	V	pg/L		89	78 - 144
2,3,7,8-TCDF	200	208		pg/L		104	75 - 158
1,2,3,7,8-PeCDF	1000	944		pg/L		94	80 - 134
2,3,4,7,8-PeCDF	1000	1040		pg/L		104	68 - 160
1,2,3,4,7,8-HxCDF	1000	967		pg/L		97	72 - 134
1,2,3,6,7,8-HxCDF	1000	973		pg/L		97	84 - 130
2,3,4,6,7,8-HxCDF	1000	985	V	pg/L		99	70 - 156
1,2,3,7,8,9-HxCDF	1000	938		pg/L		94	78 - 130
1,2,3,4,6,7,8-HpCDF	1000	918	V	pg/L		92	82 - 122
1,2,3,4,7,8,9-HpCDF	1000	981	V	pg/L		98	78 - 138
OCDF	2000	1930	V	pg/L		96	63 - 170

Surrogate	LCS %Recovery	LCS Qualifier	Limits
37Cl4-2,3,7,8-TCDD	109		31 - 191

Internal Standard	LCS %Recovery	LCS Qualifier	Limits
13C-2,3,7,8-TCDD	77		20 - 175
13C-1,2,3,7,8-PeCDD	75		21 - 227
13C-1,2,3,4,7,8-HxCDD	79		21 - 193
13C-1,2,3,6,7,8-HxCDD	75		25 - 163
13C-1,2,3,4,6,7,8-HpCDD	88		26 - 166
13C-OCDD	82		13 - 199
13C-2,3,7,8-TCDF	74		22 - 152
13C-1,2,3,7,8-PeCDF	73		21 - 192
13C-2,3,4,7,8-PeCDF	73		13 - 328
13C-1,2,3,4,7,8-HxCDF	78		19 - 202
13C-1,2,3,6,7,8-HxCDF	76		21 - 159
13C-2,3,4,6,7,8-HxCDF	78		22 - 176
13C-1,2,3,7,8,9-HxCDF	77		17 - 205
13C-1,2,3,4,6,7,8-HpCDF	84		21 - 158
13C-1,2,3,4,7,8,9-HpCDF	81		20 - 186
13C-OCDF	68		13 - 199

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-387936/23-A
Matrix: Water
Analysis Batch: 388223

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 387936

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.3	U	2.5	1.3	ug/L		06/17/15 08:23	06/17/15 22:30	1
Barium	1.3	U	5.0	1.3	ug/L		06/17/15 08:23	06/17/15 22:30	1
Cadmium	0.095	U	0.50	0.095	ug/L		06/17/15 08:23	06/17/15 22:30	1

TestAmerica Tampa

QC Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 680-387936/23-A
Matrix: Water
Analysis Batch: 388223

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 387936

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	2.5	U	5.0	2.5	ug/L		06/17/15 08:23	06/17/15 22:30	1
Lead	0.20	U	1.5	0.20	ug/L		06/17/15 08:23	06/17/15 22:30	1
Selenium	1.0	U	2.5	1.0	ug/L		06/17/15 08:23	06/17/15 22:30	1
Silver	0.25	U	1.0	0.25	ug/L		06/17/15 08:23	06/17/15 22:30	1

Lab Sample ID: LCS 680-387936/24-A
Matrix: Water
Analysis Batch: 388223

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 387936

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	100	101		ug/L		101	75 - 125
Barium	100	106		ug/L		106	75 - 125
Cadmium	50.0	54.0		ug/L		108	75 - 125
Chromium	100	103		ug/L		103	75 - 125
Lead	500	508		ug/L		102	75 - 125
Selenium	100	101		ug/L		101	75 - 125
Silver	50.0	53.1		ug/L		106	75 - 125

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-387839/13-A
Matrix: Water
Analysis Batch: 388077

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 387839

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.080	U	0.20	0.080	ug/L		06/16/15 13:42	06/17/15 11:08	1

Lab Sample ID: LCS 680-387839/14-A
Matrix: Water
Analysis Batch: 388077

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 387839

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	2.50	2.55		ug/L		102	80 - 120

Lab Sample ID: 660-67423-1 MS
Matrix: Water
Analysis Batch: 388077

Client Sample ID: LMW-B7
Prep Type: Total/NA
Prep Batch: 387839

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.080	U	1.00	1.06		ug/L		106	80 - 120

Lab Sample ID: 660-67423-1 MSD
Matrix: Water
Analysis Batch: 388077

Client Sample ID: LMW-B7
Prep Type: Total/NA
Prep Batch: 387839

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Mercury	0.080	U	1.00	0.987		ug/L		99	80 - 120	7	20

TestAmerica Tampa

Internal Standards Summary

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

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

Matrix: Water

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Internal Standard Recovery (Acceptance Limits)							
		TCDD (25-164)	,2,3,7,8-Pi (25-181)	2,3,4,7,8-F (32-141)	2,3,6,7,8-F (28-130)	,3,4,6,7,8- (23-140)	13C-OCDD (17-157)	TCDF (24-169)	,2,3,7,8-P (24-185)
660-67423-1	LMW-B7	81	86	86	81	94	73	85	84
660-67423-2	LMW-DP3	56	60	59	56	64	53	54	61
660-67423-3	MW-1A	64	67	61	64	67	58	62	68
H5G300000018B	Method Blank	79	80	81	77	82	68	82	80

Lab Sample ID	Client Sample ID	Percent Internal Standard Recovery (Acceptance Limits)							
		PeCDF2 (21-178)	2,3,4,7,8-F (26-152)	HxCDF2 (26-123)	HxCDF3 (28-136)	HxCDF4 (29-147)	,3,4,6,7,8- (28-143)	,3,4,7,8,9- (26-138)	13C-OCDF (17-157)
660-67423-1	LMW-B7	86	81	83	86	83	90	81	62
660-67423-2	LMW-DP3	57	59	55	57	58	61	54	43
660-67423-3	MW-1A	63	63	60	60	61	60	57	48
H5G300000018B	Method Blank	79	82	80	79	78	82	72	51

Internal Standard Legend

- TCDD = 13C-2,3,7,8-TCDD
- 13C-1,2,3,7,8-PeCDD = 13C-1,2,3,7,8-PeCDD
- 13C-1,2,3,4,7,8-HxCDD = 13C-1,2,3,4,7,8-HxCDD
- 13C-1,2,3,6,7,8-HxCDD = 13C-1,2,3,6,7,8-HxCDD
- 13C-1,2,3,4,6,7,8-HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
- 13C-OCDD = 13C-OCDD
- TCDF = 13C-2,3,7,8-TCDF
- 13C-1,2,3,7,8-PeCDF = 13C-1,2,3,7,8-PeCDF
- PeCDF2 = 13C-2,3,4,7,8-PeCDF
- 13C-1,2,3,4,7,8-HxCDF = 13C-1,2,3,4,7,8-HxCDF
- HxCDF2 = 13C-1,2,3,6,7,8-HxCDF
- HxCDF3 = 13C-2,3,4,6,7,8-HxCDF
- HxCDF4 = 13C-1,2,3,7,8,9-HxCDF
- 13C-1,2,3,4,6,7,8-HpCDF = 13C-1,2,3,4,6,7,8-HpCDF
- 13C-1,2,3,4,7,8,9-HpCDF = 13C-1,2,3,4,7,8,9-HpCDF
- 13C-OCDF = 13C-OCDF

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

Matrix: Water

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Internal Standard Recovery (Acceptance Limits)							
		TCDD (20-175)	,2,3,7,8-Pi (21-227)	2,3,4,7,8-F (21-193)	2,3,6,7,8-F (25-163)	,3,4,6,7,8- (26-166)	13C-OCDD (13-199)	TCDF (22-152)	,2,3,7,8-P (21-192)
H5G300000018C	Lab Control Sample	77	75	79	75	88	82	74	73

Lab Sample ID	Client Sample ID	Percent Internal Standard Recovery (Acceptance Limits)							
		PeCDF2 (13-328)	2,3,4,7,8-F (19-202)	HxCDF2 (21-159)	HxCDF3 (22-176)	HxCDF4 (17-205)	,3,4,6,7,8- (21-158)	,3,4,7,8,9- (20-186)	13C-OCDF (13-199)
H5G300000018C	Lab Control Sample	73	78	76	78	77	84	81	68

Internal Standard Legend

- TCDD = 13C-2,3,7,8-TCDD
- 13C-1,2,3,7,8-PeCDD = 13C-1,2,3,7,8-PeCDD
- 13C-1,2,3,4,7,8-HxCDD = 13C-1,2,3,4,7,8-HxCDD
- 13C-1,2,3,6,7,8-HxCDD = 13C-1,2,3,6,7,8-HxCDD
- 13C-1,2,3,4,6,7,8-HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
- 13C-OCDD = 13C-OCDD

TestAmerica Tampa

Internal Standards Summary

Client: Langan Engineering & Environmental Svcs
Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

TCDF = 13C-2,3,7,8-TCDF
13C-1,2,3,7,8-PeCDF = 13C-1,2,3,7,8-PeCDF
PeCDF2 = 13C-2,3,4,7,8-PeCDF
13C-1,2,3,4,7,8-HxCDF = 13C-1,2,3,4,7,8-HxCDF
HxCDF2 = 13C-1,2,3,6,7,8-HxCDF
HxCDF3 = 13C-2,3,4,6,7,8-HxCDF
HxCDF4 = 13C-1,2,3,7,8,9-HxCDF
13C-1,2,3,4,6,7,8-HpCDF = 13C-1,2,3,4,6,7,8-HpCDF
13C-1,2,3,4,7,8,9-HpCDF = 13C-1,2,3,4,7,8,9-HpCDF
13C-OCDF = 13C-OCDF

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QC Association Summary

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

GC/MS VOA

Analysis Batch: 158876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-67423-1	LMW-B7	Total/NA	Water	8260B	
660-67423-2	LMW-DP3	Total/NA	Water	8260B	
660-67423-3	MW-1A	Total/NA	Water	8260B	
LCS 660-158876/7	Lab Control Sample	Total/NA	Water	8260B	
MB 660-158876/6	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 117331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-67423-1	LMW-B7	Total/NA	Water	3520C	
660-67423-2	LMW-DP3	Total/NA	Water	3520C	
660-67423-3	MW-1A	Total/NA	Water	3520C	
LCS 640-117331/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 640-117331/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 640-117331/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 117361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-67423-1	LMW-B7	Total/NA	Water	8270D LL	117331
660-67423-2	LMW-DP3	Total/NA	Water	8270D LL	117331
660-67423-3	MW-1A	Total/NA	Water	8270D LL	117331
LCS 640-117331/2-A	Lab Control Sample	Total/NA	Water	8270D LL	117331
LCSD 640-117331/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	117331
MB 640-117331/1-A	Method Blank	Total/NA	Water	8270D LL	117331

GC Semi VOA

Prep Batch: 117345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-67423-1	LMW-B7	Total/NA	Water	3511	
660-67423-2	LMW-DP3	Total/NA	Water	3511	
660-67423-3	MW-1A	Total/NA	Water	3511	
LCS 640-117345/20-A	Lab Control Sample	Total/NA	Water	3511	
LCS 640-117345/2-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 640-117345/21-A	Lab Control Sample Dup	Total/NA	Water	3511	
LCSD 640-117345/3-A	Lab Control Sample Dup	Total/NA	Water	3511	
MB 640-117345/1-A	Method Blank	Total/NA	Water	3511	

Prep Batch: 117349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-67423-1	LMW-B7	Total/NA	Water	3520C	
660-67423-2	LMW-DP3	Total/NA	Water	3520C	
660-67423-3	MW-1A	Total/NA	Water	3520C	
LCS 640-117349/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 640-117349/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 640-117349/1-A	Method Blank	Total/NA	Water	3520C	

TestAmerica Tampa

QC Association Summary

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

GC Semi VOA (Continued)

Analysis Batch: 117354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 640-117345/2-A	Lab Control Sample	Total/NA	Water	8081B	117345
LCS 640-117345/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	117345
MB 640-117345/1-A	Method Blank	Total/NA	Water	8081B	117345

Analysis Batch: 117355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-67423-1	LMW-B7	Total/NA	Water	8081B	117345
660-67423-2	LMW-DP3	Total/NA	Water	8081B	117345

Analysis Batch: 117390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-67423-3	MW-1A	Total/NA	Water	8081B	117345
LCS 640-117345/20-A	Lab Control Sample	Total/NA	Water	8081B	117345
LCS 640-117345/21-A	Lab Control Sample Dup	Total/NA	Water	8081B	117345

Analysis Batch: 117492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-67423-1	LMW-B7	Total/NA	Water	8141B	117349
660-67423-2	LMW-DP3	Total/NA	Water	8141B	117349
660-67423-3	MW-1A	Total/NA	Water	8141B	117349
MB 640-117349/1-A	Method Blank	Total/NA	Water	8141B	117349

Analysis Batch: 117501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 640-117349/2-A	Lab Control Sample	Total/NA	Water	8141B	117349
LCS 640-117349/3-A	Lab Control Sample Dup	Total/NA	Water	8141B	117349

Prep Batch: 261268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-67423-1	LMW-B7	Total/NA	Water	3520C	
660-67423-2	LMW-DP3	Total/NA	Water	3520C	
660-67423-3	MW-1A	Total/NA	Water	3520C	
LCS 400-261268/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-261268/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 400-261268/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 261409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-67423-1	LMW-B7	Total/NA	Water	FL-PRO	261268
660-67423-2	LMW-DP3	Total/NA	Water	FL-PRO	261268
660-67423-3	MW-1A	Total/NA	Water	FL-PRO	261268
LCS 400-261268/2-A	Lab Control Sample	Total/NA	Water	FL-PRO	261268
LCS 400-261268/3-A	Lab Control Sample Dup	Total/NA	Water	FL-PRO	261268
MB 400-261268/1-A	Method Blank	Total/NA	Water	FL-PRO	261268

Specialty Organics

Analysis Batch: 5211018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-67423-1	LMW-B7	Total	Water	1613B	

TestAmerica Tampa

QC Association Summary

Client: Langan Engineering & Environmental Svcs
Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Specialty Organics (Continued)

Analysis Batch: 5211018 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-67423-2	LMW-DP3	Total	Water	1613B	
660-67423-3	MW-1A	Total	Water	1613B	
H5G300000018B	Method Blank	Total	Water	1613B	
H5G300000018C	Lab Control Sample	Total	Water	1613B	

Prep Batch: 5211018_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-67423-1	LMW-B7	Total	Water	1613	
660-67423-2	LMW-DP3	Total	Water	1613	
660-67423-3	MW-1A	Total	Water	1613	
H5G300000018B	Method Blank	Total	Water	1613	
H5G300000018C	Lab Control Sample	Total	Water	1613	

Metals

Prep Batch: 387839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-67423-1	LMW-B7	Total/NA	Water	7470A	
660-67423-1 MS	LMW-B7	Total/NA	Water	7470A	
660-67423-1 MSD	LMW-B7	Total/NA	Water	7470A	
660-67423-2	LMW-DP3	Total/NA	Water	7470A	
660-67423-3	MW-1A	Total/NA	Water	7470A	
LCS 680-387839/14-A	Lab Control Sample	Total/NA	Water	7470A	
MB 680-387839/13-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 387936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-67423-1	LMW-B7	Total Recoverable	Water	3005A	
660-67423-2	LMW-DP3	Total Recoverable	Water	3005A	
660-67423-3	MW-1A	Total Recoverable	Water	3005A	
LCS 680-387936/24-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 680-387936/23-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 388077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-67423-1	LMW-B7	Total/NA	Water	7470A	387839
660-67423-1 MS	LMW-B7	Total/NA	Water	7470A	387839
660-67423-1 MSD	LMW-B7	Total/NA	Water	7470A	387839
660-67423-2	LMW-DP3	Total/NA	Water	7470A	387839
660-67423-3	MW-1A	Total/NA	Water	7470A	387839
LCS 680-387839/14-A	Lab Control Sample	Total/NA	Water	7470A	387839
MB 680-387839/13-A	Method Blank	Total/NA	Water	7470A	387839

Analysis Batch: 388223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-67423-1	LMW-B7	Total Recoverable	Water	6020A	387936
660-67423-2	LMW-DP3	Total Recoverable	Water	6020A	387936
660-67423-3	MW-1A	Total Recoverable	Water	6020A	387936
LCS 680-387936/24-A	Lab Control Sample	Total Recoverable	Water	6020A	387936
MB 680-387936/23-A	Method Blank	Total Recoverable	Water	6020A	387936

TestAmerica Tampa

Lab Chronicle

Client: Langan Engineering & Environmental Svcs
Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Client Sample ID: LMW-B7

Date Collected: 06/12/15 08:41

Date Received: 06/13/15 08:25

Lab Sample ID: 660-67423-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	158876	06/18/15 17:43	ECC	TAL TAM
Total/NA	Prep	3520C			117331	06/16/15 11:04	QMC	TAL TAL
Total/NA	Analysis	8270D LL		1	117361	06/17/15 18:56	JMF	TAL TAL
Total/NA	Prep	3511			117345	06/16/15 14:49	RDD	TAL TAL
Total/NA	Analysis	8081B		1	117355	06/17/15 23:27	CWA	TAL TAL
Total/NA	Prep	3520C			117349	06/16/15 16:26	QMC	TAL TAL
Total/NA	Analysis	8141B		1	117492	06/23/15 21:01	MLT	TAL TAL
Total/NA	Prep	3520C			261268	06/16/15 10:42	KH1	TAL PEN
Total/NA	Analysis	FL-PRO		1	261409	06/17/15 14:55	IDR	TAL PEN
Total	Prep	1613			5211018_P	07/30/15 14:45		TAL KNX
Total	Analysis	1613B		1	5211018	08/06/15 21:22	MAD	TAL KNX
Total Recoverable	Prep	3005A			387936	06/17/15 08:23	BJB	TAL SAV
Total Recoverable	Analysis	6020A		1	388223	06/17/15 22:40	BWR	TAL SAV
Total/NA	Prep	7470A			387839	06/16/15 13:42	JKL	TAL SAV
Total/NA	Analysis	7470A		1	388077	06/17/15 11:14	JKL	TAL SAV

Client Sample ID: LMW-DP3

Date Collected: 06/12/15 09:42

Date Received: 06/13/15 08:25

Lab Sample ID: 660-67423-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	158876	06/18/15 18:02	ECC	TAL TAM
Total/NA	Prep	3520C			117331	06/16/15 11:04	QMC	TAL TAL
Total/NA	Analysis	8270D LL		1	117361	06/17/15 19:14	JMF	TAL TAL
Total/NA	Prep	3511			117345	06/16/15 14:49	RDD	TAL TAL
Total/NA	Analysis	8081B		1	117355	06/17/15 23:42	CWA	TAL TAL
Total/NA	Prep	3520C			117349	06/16/15 16:26	QMC	TAL TAL
Total/NA	Analysis	8141B		1	117492	06/23/15 21:17	MLT	TAL TAL
Total/NA	Prep	3520C			261268	06/16/15 10:42	KH1	TAL PEN
Total/NA	Analysis	FL-PRO		1	261409	06/17/15 15:04	IDR	TAL PEN
Total	Prep	1613			5211018_P	07/30/15 14:45		TAL KNX
Total	Analysis	1613B		1	5211018	08/07/15 04:20	LKM	TAL KNX
Total Recoverable	Prep	3005A			387936	06/17/15 08:23	BJB	TAL SAV
Total Recoverable	Analysis	6020A		1	388223	06/17/15 22:45	BWR	TAL SAV
Total/NA	Prep	7470A			387839	06/16/15 13:42	JKL	TAL SAV
Total/NA	Analysis	7470A		1	388077	06/17/15 11:23	JKL	TAL SAV

Client Sample ID: MW-1A

Date Collected: 06/12/15 11:41

Date Received: 06/13/15 08:25

Lab Sample ID: 660-67423-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	158876	06/18/15 18:21	ECC	TAL TAM

TestAmerica Tampa

Lab Chronicle

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Client Sample ID: MW-1A

Lab Sample ID: 660-67423-3

Date Collected: 06/12/15 11:41

Matrix: Water

Date Received: 06/13/15 08:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			117331	06/16/15 11:04	QMC	TAL TAL
Total/NA	Analysis	8270D LL		1	117361	06/17/15 19:33	JMF	TAL TAL
Total/NA	Prep	3511			117345	06/16/15 14:49	RDD	TAL TAL
Total/NA	Analysis	8081B		1	117390	06/18/15 13:26	CWA	TAL TAL
Total/NA	Prep	3520C			117349	06/16/15 16:26	QMC	TAL TAL
Total/NA	Analysis	8141B		1	117492	06/23/15 21:33	MLT	TAL TAL
Total/NA	Prep	3520C			261268	06/16/15 10:42	KH1	TAL PEN
Total/NA	Analysis	FL-PRO		1	261409	06/17/15 15:24	IDR	TAL PEN
Total	Prep	1613			5211018_P	07/30/15 14:45		TAL KNX
Total	Analysis	1613B		1	5211018	08/07/15 05:21	LKM	TAL KNX
Total Recoverable	Prep	3005A			387936	06/17/15 08:23	BJB	TAL SAV
Total Recoverable	Analysis	6020A		1	388223	06/17/15 22:50	BWR	TAL SAV
Total/NA	Prep	7470A			387839	06/16/15 13:42	JKL	TAL SAV
Total/NA	Analysis	7470A		1	388077	06/17/15 11:26	JKL	TAL SAV

Laboratory References:

- TAL KNX = TestAmerica Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000
- TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001
- TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
- TAL TAL = TestAmerica Tallahassee, 2846 Industrial Plaza Drive, Tallahassee, FL 32301, TEL (850)878-3994
- TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427

Method Summary

Client: Langan Engineering & Environmental Svcs
Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL TAM
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL TAL
8081B	Organochlorine Pesticides by GC	SW846	TAL TAL
8141B	Organophosphorous Compounds by Gas Chromatography, Capillary Column Technique	SW846	TAL TAL
FL-PRO	Florida - Petroleum Range Organics (GC)	FL-DEP	TAL PEN
1613B	Dioxins/Furans, HRGC/HRMS (1613B)	EPA-5	TAL KNX
6020A	Metals (ICP/MS)	SW846	TAL SAV
7470A	Mercury (CVAA)	SW846	TAL SAV

Protocol References:

EPA-5 = EPA-5

FL-DEP = State Of Florida Department Of Environmental Protection, Florida Administrative Code.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL KNX = TestAmerica Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TAL TAL = TestAmerica Tallahassee, 2846 Industrial Plaza Drive, Tallahassee, FL 32301, TEL (850)878-3994

TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427

Certification Summary

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Laboratory: TestAmerica Tampa

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Florida	NELAP	4	E84282	06-30-16

Laboratory: TestAmerica Knoxville

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0688	06-16-16
California	State Program	9	2423	06-30-16
Colorado	State Program	8	N/A	02-28-16
Connecticut	State Program	1	PH-0223	09-30-15
Florida	NELAP	4	E87177	06-30-16
Georgia	State Program	4	906	04-13-17
Hawaii	State Program	9	N/A	04-13-16
Kansas	NELAP	7	E-10349	10-31-15
Kentucky (DW)	State Program	4	90101	12-31-15
L-A-B	DoD ELAP		L2311	02-13-16
Louisiana	NELAP	6	83979	06-30-16
Louisiana (DW)	NELAP	6	LA110001	12-31-15
Maryland	State Program	3	277	03-31-16
Michigan	State Program	5	9933	04-13-17
Nevada	State Program	9	TN00009	07-31-16
New Jersey	NELAP	2	TN001	09-30-15
New York	NELAP	2	10781	03-31-16
North Carolina (DW)	State Program	4	21705	07-31-16
North Carolina (WW/SW)	State Program	4	64	12-31-15
Ohio VAP	State Program	5	CL0059	01-16-17
Oklahoma	State Program	6	9415	08-31-15
Pennsylvania	NELAP	3	68-00576	12-31-15
South Carolina	State Program	4	84001	06-30-15
Tennessee	State Program	4	2014	04-13-17
Texas	NELAP	6	T104704380-TX	08-31-15
USDA	Federal		P330-13-00260	08-29-16
Utah	NELAP	8	QUAN3	07-31-16
Virginia	NELAP	3	460176	09-14-15
Washington	State Program	10	C593	01-19-16
West Virginia (DW)	State Program	3	9955C	12-31-15
West Virginia DEP	State Program	3	345	04-30-16
Wisconsin	State Program	5	998044300	08-31-15

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	01-31-16
Arizona	State Program	9	AZ0710	01-11-16
Arkansas DEQ	State Program	6	88-0689	09-01-16
Florida	NELAP	4	E81010	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	01-31-16 *

* Certification renewal pending - certification considered valid.

Certification Summary

Client: Langan Engineering & Environmental Svcs
 Project/Site: City of Hollywood

TestAmerica Job ID: 660-67423-1

Laboratory: TestAmerica Pensacola (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-15 *
Louisiana	NELAP	6	30976	06-30-16
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16
Michigan	State Program	5	9912	06-30-16
New Jersey	NELAP	2	FL006	06-30-16
North Carolina (WW/SW)	State Program	4	314	12-31-15 *
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-16
Rhode Island	State Program	1	LAO00307	12-30-15 *
South Carolina	State Program	4	96026	06-30-16
Tennessee	State Program	4	TN02907	06-30-16
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-13-00193	07-01-16
Virginia	NELAP	3	460166	06-14-16
West Virginia DEP	State Program	3	136	06-30-16

Laboratory: TestAmerica Savannah

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Florida	NELAP	4	E87052	06-30-16

Laboratory: TestAmerica Tallahassee

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Florida	NELAP	4	E81005	06-30-16

The following analytes are included in this report, but are not certified under this certification:

Analysis Method	Prep Method	Matrix	Analyte
8141B	3520C	Water	Demeton, Total

* Certification renewal pending - certification considered valid.

TestAmerica Tampa
 6712 Benjamin Road Suite 100
 Tampa, FL 33694
 Phone (813) 885-7427 Fax (813) 885-7049

Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information
 Client Contact: Dan Spector
 Company: Langan Engineering & Environmental Svcs
 Address: 15150 NW 79th Court Suite 200
 City: Miami Lakes
 State, Zip: FL, 33016
 Phone: 786-264-7218 (Tel)
 Email: dspector@langan.com
 3rd Name: Of Hollywood
 Project #: 66008634
 SSOV#:
 Job #: 30017001
 Page: 1 of 1

Analysis Requested
 Due Date Requested:
 TAT Requested (days):
 PO #:
 Purchase Order: not required
 W/O #:
 Carrier Tracking No(s):
 COC No: 660-62633-20108.4
 Preservation Codes:
 A - HCL
 B - NaOH
 C - Zn Acetate
 D - Nitric Acid
 E - Nitric Acid
 F - MeOH
 G - Anchor
 H - Acetic Acid
 I - Ice
 J - DI Water
 K - EDTA
 L - EDA
 M - Hexane
 N - None
 O - Acetone
 P - Na2SO4
 Q - Na2SO3
 R - Na2S2O3
 S - H2SO4
 T - TSP Dodecylmethyl
 U - Acetone
 V - MCAA
 W - pH 4.5
 Z - other (specify)

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of Containers
LMBD-B7	6/12/15	0841	G	Water	8081B, 8082A, 8141B, 8270D, FL_PRO	8260B - Standard 8260 List (QV)	8260A, 7471B
LMBD-DP3	6/12/15	0942	G	Water	8260B - Standard 8260 List (QV)	8270D_LL - PAH list	FL_PRO - FL-PRO
LMBD-1A	6/12/15	11:41	G	Water	8081B, 8082A - 8081 Standard List	8141B - 8141 Standard List	6020A, 7470A
				Water	8290A - 17 Isomers & Totals		

Loc: 660
 67423

660-67423 Chain of Custody

Special Instructions/QC Requirements:
 Return To Client
 Disposal By Lab
 Archive For
 Months

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

Special Instructions:
 SEE DIRECT
 RECOMMENDATIONS

660325
 Ft Lauderdale

Possible Hazard Identification
 Non-Hazard
 Flammable
 Skin Irritant
 Poison B
 Unknown
 Radiological

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

Empty Kit Relinquished by:
 Date:
 Method of Shipment:
 Relinquished by:
 Date/Time:
 Company:
 Relinquished by:
 Date/Time:
 Company:
 Relinquished by:
 Date/Time:
 Company:
 Custody Seals Intact:
 Custody Seal No.:
 Cooler Temperature(s) °C and Other Remarks:
 2.4, 2.9, 6.3, 13.2, 3.3 660-67423

Login Sample Receipt Checklist

Client: Langan Engineering & Environmental Svcs

Job Number: 660-67423-1

Login Number: 67423
List Number: 1
Creator: Conner, Keaton

List Source: TestAmerica Tampa

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: Langan Engineering & Environmental Svcs

Job Number: 660-67423-1

Login Number: 67423
List Number: 4
Creator: Perez, Trina M

List Source: TestAmerica Pensacola
List Creation: 06/16/15 10:37 AM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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	0.0°C IR-6
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.	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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: Langan Engineering & Environmental Svcs

Job Number: 660-67423-1

Login Number: 67423
List Number: 3
Creator: Riegner, Andrew J

List Source: TestAmerica Savannah
List Creation: 06/16/15 09:53 AM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
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?	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.	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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Langan Engineering & Environmental Svcs

Job Number: 660-67423-1

Login Number: 67423

List Number: 2

Creator: Jones, Matt

List Source: TestAmerica Tallahassee

List Creation: 06/16/15 08:20 AM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	N/A	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	