APPENDIX B

Analytical Results Report and Chain-of-Custody Documents

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 233806
ANALYTICAL REPORT

AMEC Environmental & Infrastructure 2101 Webster Street Oakland, CA 94612	Project : 0014860010.0002 Location : MEW Level : II

Sample ID	Lab ID
EFF-011212	233806-001
MID-011212	233806-002
INF-011212	233806-003
TRIPBLANK	233806-004

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Troy Bobier
Project Manager

Date: 01/19/2012

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**233806**
Client:	**AMEC Environmental & Infrastructure**
Project:	**0014860010.0002**
Location:	**MEW**
Request Date:	**01/13/12**
Samples Received:	**01/13/12**

This data package contains sample and QC results for four water samples, requested for the above referenced project on 01/13/12. The samples were received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):
No analytical problems were encountered.

Total Cyanide (SM4500CN-E):
High RPD was observed for cyanide in the MS/MSD for batch 183006; the parent sample was not a project sample. No other analytical problems were encountered.

CHAIN-OF-CUSTODY RECORD

233806

OAK 17358

PROJECT NAME: MEW			DATE: 1-12-12 PAGE 1 OF 1
PROJECT NUMBER: 001486 0010.0002	LABORATORY NAME: Curtis & Tompkins	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: Randell Camacho	LABORATORY ADDRESS:		
TURNAROUND TIME: standard			
SAMPLE SHIPMENT METHOD: Lab pick up	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): R David Pearson

ANALYSES

	DATE	TIME	SAMPLE NUMBER	* 8260B	total Cyanide	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	1-12-12	1111	EFF-011212	X	X		W			X		4	*8010 List
2	↓	1122	MID-011212	X	X		W			X		4	
3		1144	INF-011212	X	X		W			X		4	
4		trip	blank	X			W			X		2	

RDP

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: R David Pearson	1/12/12	1400	SIGNATURE:	1/13/12	1625
PRINTED NAME: R David Pearson			PRINTED NAME: C. Marrow		
COMPANY: Amec			COMPANY: C&T		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 14

SAMPLING COMMENTS:

2101 Webster Street, 12th Floor
Oakland, California 94612-3066
Tel 510.663.4100 Fax 510.663.4141

amec

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 233806 Date Received 1/13/12 Number of coolers 1
Client AMEC Project MEW

Date Opened 1/13/12 By (print) T-CHOY (sign)
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) ____ YES (NO)
   Shipping info ____

2A. Were custody seals present? .... ☒ YES (circle) (on cooler) on samples ☐ NO
   How many 1 Name signature Date 1-12-12
2B. Were custody seals intact upon arrival? ____ (YES) NO N/A
3. Were custody papers dry and intact when received? ____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ____ (YES) NO
6. Indicate the packing in cooler: (if other, describe) ____

☐ Bubble Wrap ☒ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☐ Wet ☒ Blue/Gel ☐ None Temp(°C) 10.3°C

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ____ YES (NO)
   If YES, what time were they transferred to freezer? ____
9. Did all bottles arrive unbroken/unopened? ____ (YES) NO
10. Are there any missing / extra samples? ____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? ____ (YES) NO
12. Are sample labels present, in good condition and complete? ____ (YES) NO
13. Do the sample labels agree with custody papers? ____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? ____ (YES) NO
15. Are the samples appropriately preserved? ____ (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? ____ (YES) NO N/A
17. Did you document your preservative check? ____ (YES) NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? ____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? ____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? ____ (YES) NO N/A
21. Was the client contacted concerning this sample delivery? ____ YES (NO)
   If YES, Who was called? ____ By ____ Date: ____

COMMENTS

Rev 10, 11/11

Curtis & Tompkins Sample Preservation for 233806

Sample	pH: <2	>12	Other
-001a	[ ]	[ ]	_____
b	[ ]	[ ]	_____
c	[ ]	[ ]	_____
d	[X]	[ ]	_____
-002a	[ ]	[ ]	_____
b	[ ]	[ ]	_____
c	[ ]	[ ]	_____
d	[X]	[ ]	_____
-003a	[ ]	[ ]	_____
b	[ ]	[ ]	_____
c	[ ]	[ ]	_____
d	[X]	[ ]	_____

Analyst: 1/13/12
Date: ISC

Page 1 of 1

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	233806	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860010.0002	Analysis:	EPA 8260B
Field ID:	EFF-011212	Batch#:	182928
Lab ID:	233806-001	Sampled:	01/12/12
Matrix:	Water	Received:	01/13/12
Units:	ug/L	Analyzed:	01/16/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	137	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	109	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	233806	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860010.0002	Analysis:	EPA 8260B
Field ID:	MID-011212	Batch#:	182928
Lab ID:	233806-002	Sampled:	01/12/12
Matrix:	Water	Received:	01/13/12
Units:	ug/L	Analyzed:	01/16/12
Diln Fac:	2.000		

Analyte	Result	RL
Chloromethane	ND	2.0
Vinyl Chloride	ND	1.0
Bromomethane	ND	2.0
Chloroethane	ND	2.0
Trichlorofluoromethane	ND	2.0
Freon 113	140	4.0
1,1-Dichloroethene	ND	1.0
Methylene Chloride	ND	40
trans-1,2-Dichloroethene	ND	1.0
1,1-Dichloroethane	2.0	1.0
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
1,1,1-Trichloroethane	4.5	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	ND	1.0
Trichloroethene	ND	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
Tetrachloroethene	ND	1.0
Dibromochloromethane	ND	1.0
Chlorobenzene	ND	1.0
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-125
1,2-Dichloroethane-d4	138	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	105	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	233806	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860010.0002	Analysis:	EPA 8260B
Field ID:	INF-011212	Batch#:	182928
Lab ID:	233806-003	Sampled:	01/12/12
Matrix:	Water	Received:	01/13/12
Units:	ug/L	Analyzed:	01/16/12
Diln Fac:	20.00		

Analyte	Result	RL
Chloromethane	ND	20
Vinyl Chloride	ND	10
Bromomethane	ND	20
Chloroethane	ND	20
Trichlorofluoromethane	ND	20
Freon 113	140	40
1,1-Dichloroethene	ND	10
Methylene Chloride	ND	400
trans-1,2-Dichloroethene	ND	10
1,1-Dichloroethane	ND	10
cis-1,2-Dichloroethene	150	10
Chloroform	ND	10
1,1,1-Trichloroethane	ND	10
Carbon Tetrachloride	ND	10
1,2-Dichloroethane	ND	10
Trichloroethene	1,700	10
1,2-Dichloropropane	ND	10
Bromodichloromethane	ND	10
cis-1,3-Dichloropropene	ND	10
trans-1,3-Dichloropropene	ND	10
1,1,2-Trichloroethane	ND	10
Tetrachloroethene	ND	10
Dibromochloromethane	ND	10
Chlorobenzene	ND	10
Bromoform	ND	10
1,1,2,2-Tetrachloroethane	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
1,2-Dichlorobenzene	ND	10

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	136	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	107	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	233806	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860010.0002	Analysis:	EPA 8260B
Field ID:	TRIPBLANK	Batch#:	182928
Lab ID:	233806-004	Sampled:	01/12/12
Matrix:	Water	Received:	01/13/12
Units:	ug/L	Analyzed:	01/16/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	135	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	107	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	233806	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860010.0002	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	182928
Units:	ug/L	Analyzed:	01/16/12
Diln Fac:	1.000		

Type: BS Lab ID: QC625286

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	19.23	96	66-131
Trichloroethene	20.00	21.74	109	79-120
Chlorobenzene	20.00	21.32	107	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	127	69-145
Toluene-d8	97	80-120
Bromofluorobenzene	95	80-120

Type: BSD Lab ID: QC625287

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	18.23	91	66-131	5	20
Trichloroethene	20.00	21.35	107	79-120	2	20
Chlorobenzene	20.00	20.47	102	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	128	69-145
Toluene-d8	96	80-120
Bromofluorobenzene	95	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	233806	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860010.0002	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC625335	Batch#:	182928
Matrix:	Water	Analyzed:	01/16/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	133	69-145
Toluene-d8	98	80-120
Bromofluorobenzene	107	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Cyanide

Lab #:	233806	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	METHOD
Project#:	0014860010.0002	Analysis:	SM4500CN-E
Analyte:	Cyanide	Batch#:	183006
Matrix:	Water	Sampled:	01/12/12
Units:	mg/L	Received:	01/13/12
Diln Fac:	1.000	Analyzed:	01/18/12

Field ID	Type	Lab ID	Result	RL
EFF-011212	SAMPLE	233806-001	0.07	0.01
MID-011212	SAMPLE	233806-002	0.02	0.01
INF-011212	SAMPLE	233806-003	0.03	0.01
	BLANK	QC625578	ND	0.01

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Cyanide

Lab #:	233806	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	METHOD
Project#:	0014860010.0002	Analysis:	SM4500CN-E
Analyte:	Cyanide	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	183006
MSS Lab ID:	233784-004	Sampled:	01/10/12
Matrix:	Water	Received:	01/12/12
Units:	mg/L	Analyzed:	01/18/12

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC625579		0.2000	0.2033	102	80-120		
MS	QC625580	<0.01000	0.2000	0.1737	87	74-120		
MSD	QC625581		0.2000	0.2206	110	74-120	24 *	20

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 234339
ANALYTICAL REPORT

AMEC Environmental & Infrastructure	Project : 0014860012.02
2101 Webster Street	Location : MEW
Oakland, CA 94612	Level : II

Sample ID	Lab ID
EFF-020812	234339-001
MID-020812	234339-002
INF-020812	234339-003
EX-4-020812	234339-004
TRIP BLANK	234339-005

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 02/16/2012
Project Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**234339**
Client:	**AMEC Environmental & Infrastructure**
Project:	**0014860012.02**
Location:	**MEW**
Request Date:	**02/09/12**
Samples Received:	**02/09/12**

This data package contains sample and QC results for five water samples, requested for the above referenced project on 02/09/12. The samples were received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):
No analytical problems were encountered.

Total Cyanide (EPA 335.2):
No analytical problems were encountered.

234339 OAK 17394

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: MEW			DATE: 2-8-12 PAGE 1 OF 1
PROJECT NUMBER: 00148600012.02 S.V.EE	LABORATORY NAME: Curtis & Tompkins	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: Rendell Camecho	LABORATORY ADDRESS:		
TURNAROUND TIME: Standard			
SAMPLE SHIPMENT METHOD: Lab pick up	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): RDavid Pearson

ANALYSES

	DATE	TIME	SAMPLE NUMBER	8260B *	total Cyanide	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	2-8-12	1129	EFF-020812	X	X		W			X		4	*8010 List
2		1139	MID-020812	X	X		W			X		4	
3		1149	INF-020812	X	X		W			X		4	
4		1203	EX-4-020812	X			W			X		3	
5		trip	blank	X						X		3	

RDP

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: RDavid Pearson	2/8/12	1500	SIGNATURE:	2/9/12	1650
PRINTED NAME: RDavid Pearson			PRINTED NAME: C. Morrow		
COMPANY: Amec			COMPANY: CT		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 18

SAMPLING COMMENTS: total [redacted]ide by method 335.2

2101 Webster Street, 12th Floor
Oakland, California 94612-3066
Tel 510.663.4100 Fax 510.663.4141

amec

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 234339 Date Received 2/9/12 Number of coolers 1
Client AMEL Project MEW

Date Opened 2/9/12 By (print) C. Morrow (sign) [illegible]
Date Logged in 2/10/12 By (print) I. CHOY (sign) [illegible]

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☒ YES (circle) on cooler on samples ☐ NO
   How many 1 Name R. David Ahm Date 2/9/12
2B. Were custody seals intact upon arrival? _____ YES NO N/A
3. Were custody papers dry and intact when received? _____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ___ YES NO
6. Indicate the packing in cooler: (if other, describe) _____

☒ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 4.7

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? _____ (YES) NO N/A
17. Did you document your preservative check? _____ (YES) NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ (YES) NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Rev 10, 11/11

Curtis & Tompkins Sample Preservation for 234339

Sample	pH: <2	>12	Other
-001a	[ ]	[ ]	_____
b	[ ]	[ ]	_____
c	[ ]	[ ]	_____
d	[ ]	[X]	_____
-002a	[ ]	[ ]	_____
b	[ ]	[ ]	_____
c	[ ]	[ ]	_____
d	[ ]	[X]	_____
-003a	[ ]	[ ]	_____
b	[ ]	[ ]	_____
c	[ ]	[ ]	_____
d	[ ]	[X]	_____

Analyst: NSC
Date: 2/10/12

Page 1 of 1

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	234339	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	EFF-020812	Batch#:	183736
Lab ID:	234339-001	Sampled:	02/08/12
Matrix:	Water	Received:	02/09/12
Units:	ug/L	Analyzed:	02/14/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	107	69-145
Toluene-d8	100	80-120
Bromofluorobenzene	94	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	234339	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	MID-020812	Batch#:	183736
Lab ID:	234339-002	Sampled:	02/08/12
Matrix:	Water	Received:	02/09/12
Units:	ug/L	Analyzed:	02/14/12
Diln Fac:	2.000		

Analyte	Result	RL
Chloromethane	ND	2.0
Vinyl Chloride	ND	1.0
Bromomethane	ND	2.0
Chloroethane	ND	2.0
Trichlorofluoromethane	ND	2.0
Freon 113	160	4.0
1,1-Dichloroethene	ND	1.0
Methylene Chloride	ND	40
trans-1,2-Dichloroethene	ND	1.0
1,1-Dichloroethane	2.1	1.0
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
1,1,1-Trichloroethane	3.7	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	ND	1.0
Trichloroethene	ND	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
Tetrachloroethene	ND	1.0
Dibromochloromethane	ND	1.0
Chlorobenzene	ND	1.0
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-125
1,2-Dichloroethane-d4	108	69-145
Toluene-d8	100	80-120
Bromofluorobenzene	95	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	234339	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	INF-020812	Batch#:	183736
Lab ID:	234339-003	Sampled:	02/08/12
Matrix:	Water	Received:	02/09/12
Units:	ug/L	Analyzed:	02/14/12
Diln Fac:	20.00		

Analyte	Result	RL
Chloromethane	ND	20
Vinyl Chloride	ND	10
Bromomethane	ND	20
Chloroethane	ND	20
Trichlorofluoromethane	ND	20
Freon 113	180	40
1,1-Dichloroethene	ND	10
Methylene Chloride	ND	400
trans-1,2-Dichloroethene	ND	10
1,1-Dichloroethane	ND	10
cis-1,2-Dichloroethene	140	10
Chloroform	ND	10
1,1,1-Trichloroethane	ND	10
Carbon Tetrachloride	ND	10
1,2-Dichloroethane	ND	10
Trichloroethene	1,500	10
1,2-Dichloropropane	ND	10
Bromodichloromethane	ND	10
cis-1,3-Dichloropropene	ND	10
trans-1,3-Dichloropropene	ND	10
1,1,2-Trichloroethane	ND	10
Tetrachloroethene	ND	10
Dibromochloromethane	ND	10
Chlorobenzene	ND	10
Bromoform	ND	10
1,1,2,2-Tetrachloroethane	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
1,2-Dichlorobenzene	ND	10

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-125
1,2-Dichloroethane-d4	107	69-145
Toluene-d8	100	80-120
Bromofluorobenzene	96	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	234339	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	EX-4-020812	Units:	ug/L
Lab ID:	234339-004	Sampled:	02/08/12
Matrix:	Water	Received:	02/09/12

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Chloromethane	ND	10	10.00	183736	02/14/12
Vinyl Chloride	ND	5.0	10.00	183736	02/14/12
Bromomethane	ND	10	10.00	183736	02/14/12
Chloroethane	ND	10	10.00	183736	02/14/12
Trichlorofluoromethane	ND	10	10.00	183736	02/14/12
Freon 113	160	20	10.00	183736	02/14/12
1,1-Dichloroethene	9.5	5.0	10.00	183736	02/14/12
Methylene Chloride	ND	200	10.00	183736	02/14/12
trans-1,2-Dichloroethene	ND	5.0	10.00	183736	02/14/12
1,1-Dichloroethane	ND	5.0	10.00	183736	02/14/12
cis-1,2-Dichloroethene	140	5.0	10.00	183736	02/14/12
Chloroform	ND	5.0	10.00	183736	02/14/12
1,1,1-Trichloroethane	ND	5.0	10.00	183736	02/14/12
Carbon Tetrachloride	ND	5.0	10.00	183736	02/14/12
1,2-Dichloroethane	ND	5.0	10.00	183736	02/14/12
Trichloroethene	1,600	13	25.00	183783	02/15/12
1,2-Dichloropropane	ND	5.0	10.00	183736	02/14/12
Bromodichloromethane	ND	5.0	10.00	183736	02/14/12
cis-1,3-Dichloropropene	ND	5.0	10.00	183736	02/14/12
trans-1,3-Dichloropropene	ND	5.0	10.00	183736	02/14/12
1,1,2-Trichloroethane	ND	5.0	10.00	183736	02/14/12
Tetrachloroethene	ND	5.0	10.00	183736	02/14/12
Dibromochloromethane	ND	5.0	10.00	183736	02/14/12
Chlorobenzene	ND	5.0	10.00	183736	02/14/12
Bromoform	ND	5.0	10.00	183736	02/14/12
1,1,2,2-Tetrachloroethane	ND	5.0	10.00	183736	02/14/12
1,3-Dichlorobenzene	ND	5.0	10.00	183736	02/14/12
1,4-Dichlorobenzene	ND	5.0	10.00	183736	02/14/12
1,2-Dichlorobenzene	ND	5.0	10.00	183736	02/14/12

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	106	80-125	10.00	183736	02/14/12
1,2-Dichloroethane-d4	108	69-145	10.00	183736	02/14/12
Toluene-d8	100	80-120	10.00	183736	02/14/12
Bromofluorobenzene	95	80-120	10.00	183736	02/14/12

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	234339	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	TRIP BLANK	Batch#:	183736
Lab ID:	234339-005	Sampled:	02/08/12
Matrix:	Water	Received:	02/09/12
Units:	ug/L	Analyzed:	02/14/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	106	69-145
Toluene-d8	101	80-120
Bromofluorobenzene	96	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	234339	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	183736
Units:	ug/L	Analyzed:	02/14/12
Diln Fac:	1.000		

Type: BS Lab ID: QC628532

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	23.68	95	66-131
Trichloroethene	25.00	24.76	99	79-120
Chlorobenzene	25.00	24.36	97	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	105	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	97	80-120

Type: BSD Lab ID: QC628533

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	24.61	98	66-131	4	20
Trichloroethene	25.00	25.37	101	79-120	2	20
Chlorobenzene	25.00	25.64	103	80-120	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	105	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	95	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	234339	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC628534	Batch#:	183736
Matrix:	Water	Analyzed:	02/14/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	105	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	96	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	234339	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	183783
Units:	ug/L	Analyzed:	02/15/12
Diln Fac:	1.000		

Type: BS Lab ID: QC628718

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	13.81	110	66-131
Trichloroethene	12.50	12.73	102	79-120
Chlorobenzene	12.50	12.70	102	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	113	80-125
1,2-Dichloroethane-d4	113	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	103	80-120

Type: BSD Lab ID: QC628719

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	13.59	109	66-131	2	20
Trichloroethene	12.50	12.60	101	79-120	1	20
Chlorobenzene	12.50	12.70	102	80-120	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-125
1,2-Dichloroethane-d4	113	69-145
Toluene-d8	100	80-120
Bromofluorobenzene	104	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	234339	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC628720	Batch#:	183783
Matrix:	Water	Analyzed:	02/15/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	120	80-125
1,2-Dichloroethane-d4	112	69-145
Toluene-d8	100	80-120
Bromofluorobenzene	103	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Cyanide

Lab #:	234339	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	METHOD
Project#:	0014860012.02	Analysis:	EPA 335.2
Analyte:	Cyanide	Batch#:	183729
Matrix:	Water	Sampled:	02/08/12
Units:	mg/L	Received:	02/09/12
Diln Fac:	1.000	Analyzed:	02/14/12

Field ID	Type	Lab ID	Result	RL
EFF-020812	SAMPLE	234339-001	0.01	0.01
MID-020812	SAMPLE	234339-002	ND	0.01
INF-020812	SAMPLE	234339-003	ND	0.01
	BLANK	QC628509	ND	0.01

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Cyanide

Lab #:	234339	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	METHOD
Project#:	0014860012.02	Analysis:	EPA 335.2
Analyte:	Cyanide	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	183729
MSS Lab ID:	234245-016	Sampled:	02/07/12
Matrix:	Water	Received:	02/07/12
Units:	mg/L	Analyzed:	02/14/12

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC628510	<0.01000	0.2000	0.2091	105	74-120		
MSD	QC628511		0.2000	0.2022	101	74-120	3	20
LCS	QC628512		0.2000	0.1810	91	80-120		

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 234726
ANALYTICAL REPORT

AMEC Environmental & Infrastructure	Project : 0014860012.02
2101 Webster Street	Location : MEW
Oakland, CA 94612	Level : II

Sample ID	Lab ID
EFF-030112	234726-001
MID-030112	234726-002
INF-030112	234726-003
FB-030112	234726-004
ANT-030112	234726-005
HP-030112	234726-006
TRIP BLANK	234726-007

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Troy Bobier
Project Manager

Date: 03/09/2012

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**234726**
Client:	**AMEC Environmental & Infrastructure**
Project:	**0014860012.02**
Location:	**MEW**
Request Date:	**03/02/12**
Samples Received:	**03/02/12**

This data package contains sample and QC results for seven water samples, requested for the above referenced project on 03/02/12. The samples were received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):
High surrogate recoveries were observed for 1,2-dichloroethane-d4 in EFF-030112 (lab # 234726-001), MID-030112 (lab # 234726-002), and FB-030112 (lab # 234726-004). No other analytical problems were encountered.

Total Cyanide (EPA 335.2):
No analytical problems were encountered.

Turbidity (SM2130B):
No analytical problems were encountered.

234726 OAK 17402

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: MEW

DATE: 3-1-12 PAGE 1 OF 1

PROJECT NUMBER: 00148600012.02

RESULTS TO: Randell Camacho

TURNAROUND TIME: standard

SAMPLE SHIPMENT METHOD: Lab pick up

LABORATORY NAME: Curtis & Tompkins

LABORATORY ADDRESS:

LABORATORY CONTACT:

LABORATORY PHONE NUMBER:

CLIENT INFORMATION:

REPORTING REQUIREMENTS:

GEOTRACKER REQUIRED YES (NO)

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): R David Pederson

ANALYSES

	DATE	TIME	SAMPLE NUMBER	B260B *	Total Cyanide	Turbidity	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	3-1-12	1300	EFF-030112	X	X	X		X			X		5	* 8010 List
2		1313	MID-030112	X	X			X			X		4	
3		1324	INF-030112	X	X			X			X		4	
4		1337	FB-030112	X	X			X			X		4	
5		1343	ANT-030112	[redacted]	X			X			X		1	
6		1351	HP-030112	[redacted]	X			X			X		1	
7		trip blank		X				X			X		2	

RDP

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: R David Pederson	3/1/12	1530	SIGNATURE:	3/2/12	1620
PRINTED NAME: R David [redacted]rson			PRINTED NAME: C. Morrow		
COMPANY: [redacted]			COMPANY: CAT		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 21

SAMPLING COMMENTS: Total Cyanide by EPA method 335.2

2101 Webster Street, 12th Floor
Oakland, California 94612-3066
Tel 510.663.4100 Fax 510.663.4141

amec

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 234726 Date Received 3/2/12 Number of coolers 1
Client AmeC Project MEW

Date Opened 3/2/12 By (print) C. Morrow (sign) [signature]
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) ____ YES NO
   Shipping info ____
2A. Were custody seals present? .... ☒ YES (circle) on cooler on samples ☒ NO CPM
   How many 1 Name Signature Date 3/1/12
2B. Were custody seals intact upon arrival? ____ YES NO ~~N/A~~ CPM
3. Were custody papers dry and intact when received? ____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? ____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ____ YES NO
6. Indicate the packing in cooler: (if other, describe) ____

☑ Bubble Wrap ☒ Foam blocks ☑ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 1.1

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ____ YES NO
   If YES, what time were they transferred to freezer? ____
9. Did all bottles arrive unbroken/unopened? ____ YES NO
10. Are there any missing / extra samples? ____ YES NO
11. Are samples in the appropriate containers for indicated tests? ____ YES NO
12. Are sample labels present, in good condition and complete? ____ YES NO
13. Do the sample labels agree with custody papers? ____ YES NO
14. Was sufficient amount of sample sent for tests requested? ____ YES NO
15. Are the samples appropriately preserved? ____ YES NO N/A
16. Did you check preservatives for all bottles for each sample? ____ YES NO N/A
17. Did you document your preservative check? ____ YES NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? ____ YES NO N/A
19. Did you change the hold time in LIMS for preserved terracores? ____ YES NO N/A
20. Are bubbles > 6mm absent in VOA samples? ____ YES NO N/A CPM
21. Was the client contacted concerning this sample delivery? ____ YES NO
   If YES, Who was called? ____ By ____ Date: ____

COMMENTS
15) -005 and -006 pH < 12. Added 2mL NaOH (12/03)
at 1735 → No change

Rev 10, 11/11

Curtis & Tompkins Sample Preservation for 234726

Sample	pH: <2	>12	Other
-001a	[ ]	[ ]	_____
b	[ ]	[ ]	_____
c	[ ]	[ ]	_____
d	[ ]	[ ]	_____
e	[ ]	[X]	_____
-002a	[ ]	[ ]	_____
b	[ ]	[ ]	_____
c	[ ]	[ ]	_____
d	[ ]	[X]	_____
-003a	[ ]	[ ]	_____
b	[ ]	[ ]	_____
c	[ ]	[ ]	_____
d	[ ]	[X]	_____
-004a	[ ]	[ ]	_____
b	[ ]	[ ]	_____
c	[ ]	[ ]	_____
d	[ ]	[X]	_____
-005a	[ ]	[ ]	_____
-006a	[ ]	[ ]	_____

Analyst: CPM
Date: 3/2/12

Page 1 of 1

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	234726	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	EFF-030112	Batch#:	184315
Lab ID:	234726-001	Sampled:	03/01/12
Matrix:	Water	Received:	03/02/12
Units:	ug/L	Analyzed:	03/06/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-125
1,2-Dichloroethane-d4	158 *	69-145
Toluene-d8	101	80-120
Bromofluorobenzene	108	80-120

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	234726	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	MID-030112	Batch#:	184315
Lab ID:	234726-002	Sampled:	03/01/12
Matrix:	Water	Received:	03/02/12
Units:	ug/L	Analyzed:	03/06/12
Diln Fac:	2.500		

Analyte	Result	RL
Chloromethane	ND	2.5
Vinyl Chloride	ND	1.3
Bromomethane	ND	2.5
Chloroethane	ND	2.5
Trichlorofluoromethane	ND	2.5
Freon 113	140	5.0
1,1-Dichloroethene	ND	1.3
Methylene Chloride	ND	50
trans-1,2-Dichloroethene	ND	1.3
1,1-Dichloroethane	ND	1.3
cis-1,2-Dichloroethene	ND	1.3
Chloroform	ND	1.3
1,1,1-Trichloroethane	4.1	1.3
Carbon Tetrachloride	ND	1.3
1,2-Dichloroethane	ND	1.3
Trichloroethene	ND	1.3
1,2-Dichloropropane	ND	1.3
Bromodichloromethane	ND	1.3
cis-1,3-Dichloropropene	ND	1.3
trans-1,3-Dichloropropene	ND	1.3
1,1,2-Trichloroethane	ND	1.3
Tetrachloroethene	ND	1.3
Dibromochloromethane	ND	1.3
Chlorobenzene	ND	1.3
Bromoform	ND	1.3
1,1,2,2-Tetrachloroethane	ND	1.3
1,3-Dichlorobenzene	ND	1.3
1,4-Dichlorobenzene	ND	1.3
1,2-Dichlorobenzene	ND	1.3

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	168 *	69-145
Toluene-d8	101	80-120
Bromofluorobenzene	105	80-120

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	234726	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	INF-030112	Batch#:	184370
Lab ID:	234726-003	Sampled:	03/01/12
Matrix:	Water	Received:	03/02/12
Units:	ug/L	Analyzed:	03/07/12
Diln Fac:	25.00		

Analyte	Result	RL
Chloromethane	ND	25
Vinyl Chloride	ND	13
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
Freon 113	180	50
1,1-Dichloroethene	ND	13
Methylene Chloride	ND	500
trans-1,2-Dichloroethene	ND	13
1,1-Dichloroethane	ND	13
cis-1,2-Dichloroethene	210	13
Chloroform	ND	13
1,1,1-Trichloroethane	ND	13
Carbon Tetrachloride	ND	13
1,2-Dichloroethane	ND	13
Trichloroethene	1,800	13
1,2-Dichloropropane	ND	13
Bromodichloromethane	ND	13
cis-1,3-Dichloropropene	ND	13
trans-1,3-Dichloropropene	ND	13
1,1,2-Trichloroethane	ND	13
Tetrachloroethene	ND	13
Dibromochloromethane	ND	13
Chlorobenzene	ND	13
Bromoform	ND	13
1,1,2,2-Tetrachloroethane	ND	13
1,3-Dichlorobenzene	ND	13
1,4-Dichlorobenzene	ND	13
1,2-Dichlorobenzene	ND	13

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	86	69-145
Toluene-d8	87	80-120
Bromofluorobenzene	96	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	234726	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	FB-030112	Batch#:	184315
Lab ID:	234726-004	Sampled:	03/01/12
Matrix:	Water	Received:	03/02/12
Units:	ug/L	Analyzed:	03/06/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-125
1,2-Dichloroethane-d4	149 *	69-145
Toluene-d8	103	80-120
Bromofluorobenzene	106	80-120

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	234726	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	TRIP BLANK	Batch#:	184315
Lab ID:	234726-007	Sampled:	03/01/12
Matrix:	Water	Received:	03/02/12
Units:	ug/L	Analyzed:	03/06/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	141	69-145
Toluene-d8	104	80-120
Bromofluorobenzene	110	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	234726	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	184315
Units:	ug/L	Analyzed:	03/06/12
Diln Fac:	1.000		

Type: BS Lab ID: QC630806

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	25.48	102	66-131
Trichloroethene	25.00	25.90	104	79-120
Chlorobenzene	25.00	25.91	104	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	133	69-145
Toluene-d8	105	80-120
Bromofluorobenzene	107	80-120

Type: BSD Lab ID: QC630807

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	23.07	92	66-131	10	20
Trichloroethene	25.00	25.98	104	79-120	0	20
Chlorobenzene	25.00	24.23	97	80-120	7	20

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	132	69-145
Toluene-d8	104	80-120
Bromofluorobenzene	106	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	234726	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC630808	Batch#:	184315
Matrix:	Water	Analyzed:	03/06/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	136	69-145
Toluene-d8	104	80-120
Bromofluorobenzene	108	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	234726	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC631018	Batch#:	184370
Matrix:	Water	Analyzed:	03/07/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	89	69-145
Toluene-d8	87	80-120
Bromofluorobenzene	96	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	234726	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	184370
Units:	ug/L	Analyzed:	03/07/12
Diln Fac:	1.000		

Type: BS Lab ID: QC631019

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	20.31	102	66-131
Trichloroethene	20.00	22.17	111	79-120
Chlorobenzene	20.00	18.37	92	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	86	69-145
Toluene-d8	87	80-120
Bromofluorobenzene	91	80-120

Type: BSD Lab ID: QC631020

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	19.32	97	66-131	5	20
Trichloroethene	20.00	21.18	106	79-120	5	20
Chlorobenzene	20.00	17.69	88	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	85	69-145
Toluene-d8	87	80-120
Bromofluorobenzene	92	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Cyanide

Lab #:	234726	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	METHOD
Project#:	0014860012.02	Analysis:	EPA 335.2
Analyte:	Cyanide	Batch#:	184281
Matrix:	Water	Sampled:	03/01/12
Units:	mg/L	Received:	03/02/12
Diln Fac:	1.000	Analyzed:	03/05/12

Field ID	Type	Lab ID	Result	RL
EFF-030112	SAMPLE	234726-001	ND	0.01
MID-030112	SAMPLE	234726-002	ND	0.01
INF-030112	SAMPLE	234726-003	ND	0.01
FB-030112	SAMPLE	234726-004	0.03	0.01
ANT-030112	SAMPLE	234726-005	0.06	0.01
HP-030112	SAMPLE	234726-006	ND	0.01
	BLANK	QC630675	ND	0.01

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Cyanide

Lab #:	234726	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	METHOD
Project#:	0014860012.02	Analysis:	EPA 335.2
Analyte:	Cyanide	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	184281
MSS Lab ID:	234556-002	Sampled:	02/23/12
Matrix:	Water	Received:	02/23/12
Units:	mg/L	Analyzed:	03/05/12

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC630676		0.2000	0.2284	114	80-120		
MS	QC630677	<0.01000	2.000	0.1990	100	74-120		
MSD	QC630678		2.000	0.1714	86	74-120	15	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Turbidity

Lab #:	234726	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Analysis:	SM2130B
Project#:	0014860012.02		
Analyte:	Turbidity	Diln Fac:	1.000
Field ID:	EFF-030112	Batch#:	184255
Lab ID:	234726-001	Sampled:	03/01/12 13:00
Matrix:	Water	Received:	03/02/12
Units:	NTU	Analyzed:	03/02/12 17:20

Result	RL
0.08	0.02

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Turbidity

Lab #:	234726	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Analysis:	SM2130B
Project#:	0014860012.02		
Analyte:	Turbidity	Units:	NTU
Field ID:	EFF-030112	Diln Fac:	1.000
Type:	SDUP	Batch#:	184255
MSS Lab ID:	234726-001	Sampled:	03/01/12 13:00
Lab ID:	QC630557	Received:	03/02/12
Matrix:	Water	Analyzed:	03/02/12 17:20

MSS Result	Result	RL	RPD	Lim
0.08000	0.07000	0.02000	5	20

RL= Reporting Limit
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 235520
ANALYTICAL REPORT

AMEC Environmental & Infrastructure	Project : 0014860012.02
2101 Webster Street	Location : MEW
Oakland, CA 94612	Level : II

Sample ID	Lab ID
WW-041012	235520-001
FB-041012	235520-002
AS-041012	235520-003
EFF-041012	235520-004
MID-041012	235520-005
INF-041012	235520-006
TRIP BLANK	235520-007

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Troy Bobier
Project Manager

Date: 04/18/2012

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**235520**
Client:	**AMEC Environmental & Infrastructure**
Project:	**0014860012.02**
Location:	**MEW**
Request Date:	**04/11/12**
Samples Received:	**04/11/12**

This data package contains sample and QC results for seven water samples, requested for the above referenced project on 04/11/12. The samples were received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):
No analytical problems were encountered.

Total Cyanide (EPA 335.2):
No analytical problems were encountered.

CHAIN-OF-CUSTODY RECORD 235520 OAK 17436

PROJECT NAME: MEW			DATE: 4-10-12 PAGE 1 OF 1
PROJECT NUMBER: 00148600 12.025, EE 1/3 12.02V, EE 2/3	LABORATORY NAME: Curtis & Tompkins	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: Randell Camacho	LABORATORY ADDRESS:		
TURNAROUND TIME: Standard			
SAMPLE SHIPMENT METHOD: Lab pick up	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): R David Pearson

ANALYSES

	DATE	TIME	SAMPLE NUMBER	8260B *	total Cyanide	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	4-10-12	1122	WW-041012	X	X		W			X		1	*8010 List
2		1130	FB-041012	X	X		W			X		1	
3		1136	AS-041012	X	X		W			X		1	
4		1202	EFF-041012	X	X		W			X		4	
5		1224	MID-041012	X	X		W			X		4	
6		1245	INF-041012	X	X		W			X		4	
7		trip	blank	X			W			X		2	

RDP

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: R David Pearson	4/10/12	1510	SIGNATURE:	4/11/12	1530
PRINTED NAME: R David Pearson			PRINTED NAME: Isabelle Chou		
COMPANY: Amec			COMPANY: C&T		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 17

SAMPLING COMMENTS: total Cyanide by EPA method 335.2

2101 Webster Street, 12th Floor
Oakland, California 94612-3066
Tel 510.663.4100 Fax 510.663.4141

amec

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 235520 Date Received 4/11/12 Number of coolers 1
Client AMEC Project MEW

Date Opened 4/11/12 By (print) I. CHOY (sign) [signature]
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) ____ YES (NO)
   Shipping info ____

2A. Were custody seals present? .... ☒ YES (circle) on cooler on samples ☐ NO
   How many 1 Name SIGNATURE Date 4-10-12
2B. Were custody seals intact upon arrival? ____ YES NO N/A
3. Were custody papers dry and intact when received? ____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? ____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ____ YES NO
6. Indicate the packing in cooler: (if other, describe) ____

☐ Bubble Wrap ☒ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☒ Blue/Gel ☐ None Temp(°C) 4.3°C

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ____ YES (NO)
   If YES, what time were they transferred to freezer? ____
9. Did all bottles arrive unbroken/unopened? ____ (YES) NO
10. Are there any missing / extra samples? ____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? ____ (YES) NO
12. Are sample labels present, in good condition and complete? ____ (YES) NO
13. Do the sample labels agree with custody papers? ____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? ____ (YES) NO
15. Are the samples appropriately preserved? ____ YES (NO) N/A
16. Did you check preservatives for all bottles for each sample? ____ (YES) NO N/A
17. Did you document your preservative check? ____ (YES) NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? ____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? ____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? ____ (YES) NO N/A
21. Was the client contacted concerning this sample delivery? ____ YES (NO)
   If YES, Who was called? ____ By ____ Date: ____

COMMENTS
15-003: pH was below 12. added NaOH (120103) on 4/11/12 @ 1618. NO CHANGE. [signature]

Rev 10, 11/11

Curtis & Tompkins Sample Preservation for 235520

Sample	pH: <2	>12	Other	
-001a	[ ]	[X]	_____	
-002a	[ ]	[X]	_____	
-003a	[ ]	[ ]	_____	ADDED NaOH (120103) on 4/11/12 @ 1618. NO CHANGE.
-004a	[ ]	[ ]	_____	
b	[ ]	[ ]	_____	
c	[ ]	[ ]	_____	
d	[ ]	[X]	_____	
-005a	[ ]	[ ]	_____	
b	[ ]	[ ]	_____	
c	[ ]	[ ]	_____	
d	[ ]	[X]	_____	
-006a	[ ]	[ ]	_____	
b	[ ]	[ ]	_____	
c	[ ]	[ ]	_____	
d	[ ]	[X]	_____	

Analyst: ICC
Date: 4/11/12

Page 1 of 1

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	235520	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	EFF-041012	Batch#:	185534
Lab ID:	235520-004	Sampled:	04/10/12
Matrix:	Water	Received:	04/11/12
Units:	ug/L	Analyzed:	04/13/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	113	69-145
Toluene-d8	97	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	235520	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	MID-041012	Batch#:	185534
Lab ID:	235520-005	Sampled:	04/10/12
Matrix:	Water	Received:	04/11/12
Units:	ug/L	Analyzed:	04/13/12
Diln Fac:	2.500		

Analyte	Result	RL
Chloromethane	ND	2.5
Vinyl Chloride	ND	1.3
Bromomethane	ND	2.5
Chloroethane	ND	2.5
Trichlorofluoromethane	ND	2.5
Freon 113	130	5.0
1,1-Dichloroethene	ND	1.3
Methylene Chloride	ND	50
trans-1,2-Dichloroethene	ND	1.3
1,1-Dichloroethane	1.5	1.3
cis-1,2-Dichloroethene	ND	1.3
Chloroform	ND	1.3
1,1,1-Trichloroethane	3.2	1.3
Carbon Tetrachloride	ND	1.3
1,2-Dichloroethane	ND	1.3
Trichloroethene	ND	1.3
1,2-Dichloropropane	ND	1.3
Bromodichloromethane	ND	1.3
cis-1,3-Dichloropropene	ND	1.3
trans-1,3-Dichloropropene	ND	1.3
1,1,2-Trichloroethane	ND	1.3
Tetrachloroethene	ND	1.3
Dibromochloromethane	ND	1.3
Chlorobenzene	ND	1.3
Bromoform	ND	1.3
1,1,2,2-Tetrachloroethane	ND	1.3
1,3-Dichlorobenzene	ND	1.3
1,4-Dichlorobenzene	ND	1.3
1,2-Dichlorobenzene	ND	1.3

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	115	69-145
Toluene-d8	96	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	235520	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	INF-041012	Batch#:	185534
Lab ID:	235520-006	Sampled:	04/10/12
Matrix:	Water	Received:	04/11/12
Units:	ug/L	Analyzed:	04/13/12
Diln Fac:	25.00		

Analyte	Result	RL
Chloromethane	ND	25
Vinyl Chloride	ND	13
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
Freon 113	140	50
1,1-Dichloroethene	ND	13
Methylene Chloride	ND	500
trans-1,2-Dichloroethene	ND	13
1,1-Dichloroethane	ND	13
cis-1,2-Dichloroethene	160	13
Chloroform	ND	13
1,1,1-Trichloroethane	ND	13
Carbon Tetrachloride	ND	13
1,2-Dichloroethane	ND	13
Trichloroethene	1,600	13
1,2-Dichloropropane	ND	13
Bromodichloromethane	ND	13
cis-1,3-Dichloropropene	ND	13
trans-1,3-Dichloropropene	ND	13
1,1,2-Trichloroethane	ND	13
Tetrachloroethene	ND	13
Dibromochloromethane	ND	13
Chlorobenzene	ND	13
Bromoform	ND	13
1,1,2,2-Tetrachloroethane	ND	13
1,3-Dichlorobenzene	ND	13
1,4-Dichlorobenzene	ND	13
1,2-Dichlorobenzene	ND	13

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	110	69-145
Toluene-d8	97	80-120
Bromofluorobenzene	104	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	235520	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	TRIP BLANK	Batch#:	185534
Lab ID:	235520-007	Sampled:	04/10/12
Matrix:	Water	Received:	04/11/12
Units:	ug/L	Analyzed:	04/13/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	104	69-145
Toluene-d8	102	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	235520	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	185534
Units:	ug/L	Analyzed:	04/13/12
Diln Fac:	1.000		

Type: BS Lab ID: QC635600

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	20.57	82	66-131
Trichloroethene	25.00	23.19	93	79-120
Chlorobenzene	25.00	22.26	89	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	100	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	98	80-120

Type: BSD Lab ID: QC635601

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	21.65	87	66-131	5	20
Trichloroethene	25.00	24.32	97	79-120	5	20
Chlorobenzene	25.00	23.86	95	80-120	7	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	102	69-145
Toluene-d8	100	80-120
Bromofluorobenzene	99	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	235520	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC635602	Batch#:	185534
Matrix:	Water	Analyzed:	04/13/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-125
1,2-Dichloroethane-d4	134	69-145
Toluene-d8	96	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Cyanide

Lab #:	235520	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	METHOD
Project#:	0014860012.02	Analysis:	EPA 335.2
Analyte:	Cyanide	Batch#:	185586
Matrix:	Water	Sampled:	04/10/12
Units:	mg/L	Received:	04/11/12
Diln Fac:	1.000	Analyzed:	04/16/12

Field ID	Type	Lab ID	Result	RL
WW-041012	SAMPLE	235520-001	ND	0.01
FB-041012	SAMPLE	235520-002	ND	0.01
AS-041012	SAMPLE	235520-003	ND	0.01
EFF-041012	SAMPLE	235520-004	ND	0.01
MID-041012	SAMPLE	235520-005	ND	0.01
INF-041012	SAMPLE	235520-006	0.02	0.01
	BLANK	QC635805	ND	0.01

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Cyanide

Lab #:	235520	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	METHOD
Project#:	0014860012.02	Analysis:	EPA 335.2
Analyte:	Cyanide	Diln Fac:	1.000
Field ID:	WW-041012	Batch#:	185586
MSS Lab ID:	235520-001	Sampled:	04/10/12
Matrix:	Water	Received:	04/11/12
Units:	mg/L	Analyzed:	04/16/12

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC635806		0.2000	0.1986	99	80-120		
MS	QC635807	<0.01000	0.2000	0.1781	89	74-120		
MSD	QC635808		0.2000	0.1825	91	74-120	2	20

RPD= Relative Percent Difference

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-41500-1
Client Project/Site: MEW

For:
AMEC Geomatrix Inc.
2101 Webster Street, 12th Floor
Oakland, California 94612

Attn: Mr. Rendell Camacho

Authorized for release by:
4/18/2012 11:09:46 AM

Afsaneh Salimpour
Project Manager I
afsaneh.salimpour@testamericainc.com

LINKS

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Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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

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Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: AMEC Geomatrix Inc.
Project/Site: MEW

TestAmerica Job ID: 720-41500-1

Job ID: 720-41500-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-41500-1

Comments
No additional comments.

Receipt
The samples were received on 4/11/2012 11:40 AM; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 4.70 C.

GC/MS VOA
No analytical or quality issues were noted.

General Chemistry
No analytical or quality issues were noted.

Detection Summary

Client: AMEC Geomatrix Inc.
Project/Site: MEW

TestAmerica Job ID: 720-41500-1

Client Sample ID: WW-041012 — Lab Sample ID: 720-41500-1

No Detections

Client Sample ID: FB-041012 — Lab Sample ID: 720-41500-2

No Detections

Client Sample ID: AS-041012 — Lab Sample ID: 720-41500-3

No Detections

Client Sample ID: EFF-041012 — Lab Sample ID: 720-41500-4

No Detections

Client Sample ID: MID-041012 — Lab Sample ID: 720-41500-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.9		0.50		ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	3.6		0.50		ug/L	1		8260B	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	160		0.50		ug/L	1		8260B	Total/NA

Client Sample ID: INF-041012 — Lab Sample ID: 720-41500-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	6.3		0.50		ug/L	1		8260B	Total/NA
1,1-Dichloroethane	4.1		0.50		ug/L	1		8260B	Total/NA
Vinyl chloride	4.3		0.50		ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	2.9		0.50		ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	210		25		ug/L	50		8260B	Total/NA
1,1,1-Trichloroethane	4.2		0.50		ug/L	1		8260B	Total/NA
Trichloroethene	1800		25		ug/L	50		8260B	Total/NA
Tetrachloroethene	5.9		0.50		ug/L	1		8260B	Total/NA
1,2-Dichlorobenzene	0.62		0.50		ug/L	1		8260B	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	160		0.50		ug/L	1		8260B	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 720-41500-7

No Detections

Client Sample Results

Client: AMEC Geomatrix Inc.
Project/Site: MEW

TestAmerica Job ID: 720-41500-1

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

Client Sample ID: EFF-041012
Date Collected: 04/10/12 12:02
Date Received: 04/11/12 11:40

Lab Sample ID: 720-41500-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.50		ug/L			04/13/12 13:03	1
1,1-Dichloroethane	ND		0.50		ug/L			04/13/12 13:03	1
Dichlorodifluoromethane	ND		0.50		ug/L			04/13/12 13:03	1
Vinyl chloride	ND		0.50		ug/L			04/13/12 13:03	1
Chloroethane	ND		1.0		ug/L			04/13/12 13:03	1
Trichlorofluoromethane	ND		1.0		ug/L			04/13/12 13:03	1
Methylene Chloride	ND		5.0		ug/L			04/13/12 13:03	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			04/13/12 13:03	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			04/13/12 13:03	1
Chloroform	ND		1.0		ug/L			04/13/12 13:03	1
1,1,1-Trichloroethane	ND		0.50		ug/L			04/13/12 13:03	1
Carbon tetrachloride	ND		0.50		ug/L			04/13/12 13:03	1
1,2-Dichloroethane	ND		0.50		ug/L			04/13/12 13:03	1
Trichloroethene	ND		0.50		ug/L			04/13/12 13:03	1
1,2-Dichloropropane	ND		0.50		ug/L			04/13/12 13:03	1
Dichlorobromomethane	ND		0.50		ug/L			04/13/12 13:03	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			04/13/12 13:03	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			04/13/12 13:03	1
1,1,2-Trichloroethane	ND		0.50		ug/L			04/13/12 13:03	1
Tetrachloroethene	ND		0.50		ug/L			04/13/12 13:03	1
Chlorodibromomethane	ND		0.50		ug/L			04/13/12 13:03	1
Chlorobenzene	ND		0.50		ug/L			04/13/12 13:03	1
Bromoform	ND		1.0		ug/L			04/13/12 13:03	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/13/12 13:03	1
1,3-Dichlorobenzene	ND		0.50		ug/L			04/13/12 13:03	1
1,4-Dichlorobenzene	ND		0.50		ug/L			04/13/12 13:03	1
1,2-Dichlorobenzene	ND		0.50		ug/L			04/13/12 13:03	1
Chloromethane	ND		1.0		ug/L			04/13/12 13:03	1
Bromomethane	ND		1.0		ug/L			04/13/12 13:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			04/13/12 13:03	1
EDB	ND		0.50		ug/L			04/13/12 13:03	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/13/12 13:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*70 - 130*		*04/13/12 13:03*	*1*
4-Bromofluorobenzene	*104*		*67 - 130*		*04/13/12 13:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 138*		*04/13/12 13:03*	*1*

Client Sample ID: MID-041012
Date Collected: 04/10/12 12:24
Date Received: 04/11/12 11:40

Lab Sample ID: 720-41500-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.50		ug/L			04/13/12 13:32	1
1,1-Dichloroethane	**1.9**		0.50		ug/L			04/13/12 13:32	1
Dichlorodifluoromethane	ND		0.50		ug/L			04/13/12 13:32	1
Vinyl chloride	ND		0.50		ug/L			04/13/12 13:32	1
Chloroethane	ND		1.0		ug/L			04/13/12 13:32	1
Trichlorofluoromethane	ND		1.0		ug/L			04/13/12 13:32	1
Methylene Chloride	ND		5.0		ug/L			04/13/12 13:32	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			04/13/12 13:32	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			04/13/12 13:32	1

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

Client Sample ID: MID-041012 **Lab Sample ID: 720-41500-5**
Date Collected: 04/10/12 12:24 **Matrix: Water**
Date Received: 04/11/12 11:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		1.0		ug/L			04/13/12 13:32	1
1,1,1-Trichloroethane	**3.6**		0.50		ug/L			04/13/12 13:32	1
Carbon tetrachloride	ND		0.50		ug/L			04/13/12 13:32	1
1,2-Dichloroethane	ND		0.50		ug/L			04/13/12 13:32	1
Trichloroethene	ND		0.50		ug/L			04/13/12 13:32	1
1,2-Dichloropropane	ND		0.50		ug/L			04/13/12 13:32	1
Dichlorobromomethane	ND		0.50		ug/L			04/13/12 13:32	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			04/13/12 13:32	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			04/13/12 13:32	1
1,1,2-Trichloroethane	ND		0.50		ug/L			04/13/12 13:32	1
Tetrachloroethene	ND		0.50		ug/L			04/13/12 13:32	1
Chlorodibromomethane	ND		0.50		ug/L			04/13/12 13:32	1
Chlorobenzene	ND		0.50		ug/L			04/13/12 13:32	1
Bromoform	ND		1.0		ug/L			04/13/12 13:32	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/13/12 13:32	1
1,3-Dichlorobenzene	ND		0.50		ug/L			04/13/12 13:32	1
1,4-Dichlorobenzene	ND		0.50		ug/L			04/13/12 13:32	1
1,2-Dichlorobenzene	ND		0.50		ug/L			04/13/12 13:32	1
Chloromethane	ND		1.0		ug/L			04/13/12 13:32	1
Bromomethane	ND		1.0		ug/L			04/13/12 13:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**160**		0.50		ug/L			04/13/12 13:32	1
EDB	ND		0.50		ug/L			04/13/12 13:32	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/13/12 13:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*04/13/12 13:32*	*1*
4-Bromofluorobenzene	*104*		*67 - 130*		*04/13/12 13:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 138*		*04/13/12 13:32*	*1*

Client Sample ID: INF-041012 **Lab Sample ID: 720-41500-6**
Date Collected: 04/10/12 12:45 **Matrix: Water**
Date Received: 04/11/12 11:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	**6.3**		0.50		ug/L			04/13/12 14:01	1
1,1-Dichloroethane	**4.1**		0.50		ug/L			04/13/12 14:01	1
Dichlorodifluoromethane	ND		0.50		ug/L			04/13/12 14:01	1
Vinyl chloride	**4.3**		0.50		ug/L			04/13/12 14:01	1
Chloroethane	ND		1.0		ug/L			04/13/12 14:01	1
Trichlorofluoromethane	ND		1.0		ug/L			04/13/12 14:01	1
Methylene Chloride	ND		5.0		ug/L			04/13/12 14:01	1
trans-1,2-Dichloroethene	**2.9**		0.50		ug/L			04/13/12 14:01	1
cis-1,2-Dichloroethene	**210**		25		ug/L			04/16/12 21:51	50
Chloroform	ND		1.0		ug/L			04/13/12 14:01	1
1,1,1-Trichloroethane	**4.2**		0.50		ug/L			04/13/12 14:01	1
Carbon tetrachloride	ND		0.50		ug/L			04/13/12 14:01	1
1,2-Dichloroethane	ND		0.50		ug/L			04/13/12 14:01	1
Trichloroethene	**1800**		25		ug/L			04/16/12 21:51	50
1,2-Dichloropropane	ND		0.50		ug/L			04/13/12 14:01	1
Dichlorobromomethane	ND		0.50		ug/L			04/13/12 14:01	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			04/13/12 14:01	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			04/13/12 14:01	1

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

Client Sample ID: INF-041012 **Lab Sample ID: 720-41500-6**
Date Collected: 04/10/12 12:45 **Matrix: Water**
Date Received: 04/11/12 11:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		0.50		ug/L			04/13/12 14:01	1
Tetrachloroethene	**5.9**		0.50		ug/L			04/13/12 14:01	1
Chlorodibromomethane	ND		0.50		ug/L			04/13/12 14:01	1
Chlorobenzene	ND		0.50		ug/L			04/13/12 14:01	1
Bromoform	ND		1.0		ug/L			04/13/12 14:01	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/13/12 14:01	1
1,3-Dichlorobenzene	ND		0.50		ug/L			04/13/12 14:01	1
1,4-Dichlorobenzene	ND		0.50		ug/L			04/13/12 14:01	1
1,2-Dichlorobenzene	**0.62**		0.50		ug/L			04/13/12 14:01	1
Chloromethane	ND		1.0		ug/L			04/13/12 14:01	1
Bromomethane	ND		1.0		ug/L			04/13/12 14:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**160**		0.50		ug/L			04/13/12 14:01	1
EDB	ND		0.50		ug/L			04/13/12 14:01	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/13/12 14:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*70 - 130*		*04/13/12 14:01*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*04/16/12 21:51*	*50*
4-Bromofluorobenzene	*101*		*67 - 130*		*04/13/12 14:01*	*1*
4-Bromofluorobenzene	*101*		*67 - 130*		*04/16/12 21:51*	*50*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 138*		*04/13/12 14:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 138*		*04/16/12 21:51*	*50*

Client Sample ID: TRIP BLANK **Lab Sample ID: 720-41500-7**
Date Collected: 04/10/12 00:00 **Matrix: Water**
Date Received: 04/11/12 11:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.50		ug/L			04/13/12 14:30	1
1,1-Dichloroethane	ND		0.50		ug/L			04/13/12 14:30	1
Dichlorodifluoromethane	ND		0.50		ug/L			04/13/12 14:30	1
Vinyl chloride	ND		0.50		ug/L			04/13/12 14:30	1
Chloroethane	ND		1.0		ug/L			04/13/12 14:30	1
Trichlorofluoromethane	ND		1.0		ug/L			04/13/12 14:30	1
Methylene Chloride	ND		5.0		ug/L			04/13/12 14:30	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			04/13/12 14:30	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			04/13/12 14:30	1
Chloroform	ND		1.0		ug/L			04/13/12 14:30	1
1,1,1-Trichloroethane	ND		0.50		ug/L			04/13/12 14:30	1
Carbon tetrachloride	ND		0.50		ug/L			04/13/12 14:30	1
1,2-Dichloroethane	ND		0.50		ug/L			04/13/12 14:30	1
Trichloroethene	ND		0.50		ug/L			04/13/12 14:30	1
1,2-Dichloropropane	ND		0.50		ug/L			04/13/12 14:30	1
Dichlorobromomethane	ND		0.50		ug/L			04/13/12 14:30	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			04/13/12 14:30	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			04/13/12 14:30	1
1,1,2-Trichloroethane	ND		0.50		ug/L			04/13/12 14:30	1
Tetrachloroethene	ND		0.50		ug/L			04/13/12 14:30	1
Chlorodibromomethane	ND		0.50		ug/L			04/13/12 14:30	1
Chlorobenzene	ND		0.50		ug/L			04/13/12 14:30	1
Bromoform	ND		1.0		ug/L			04/13/12 14:30	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/13/12 14:30	1

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

Client Sample ID: TRIP BLANK
Date Collected: 04/10/12 00:00
Date Received: 04/11/12 11:40

Lab Sample ID: 720-41500-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		0.50		ug/L			04/13/12 14:30	1
1,4-Dichlorobenzene	ND		0.50		ug/L			04/13/12 14:30	1
1,2-Dichlorobenzene	ND		0.50		ug/L			04/13/12 14:30	1
Chloromethane	ND		1.0		ug/L			04/13/12 14:30	1
Bromomethane	ND		1.0		ug/L			04/13/12 14:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			04/13/12 14:30	1
EDB	ND		0.50		ug/L			04/13/12 14:30	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/13/12 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*70 - 130*		*04/13/12 14:30*	*1*
4-Bromofluorobenzene	*103*		*67 - 130*		*04/13/12 14:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 138*		*04/13/12 14:30*	*1*

Client Sample Results

Client: AMEC Geomatrix Inc.
Project/Site: MEW

TestAmerica Job ID: 720-41500-1

General Chemistry

Client Sample ID: WW-041012 **Lab Sample ID: 720-41500-1**
Date Collected: 04/10/12 11:22 **Matrix: Water**
Date Received: 04/11/12 11:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010		mg/L		04/16/12 16:55	04/16/12 21:30	1

Client Sample ID: FB-041012 **Lab Sample ID: 720-41500-2**
Date Collected: 04/10/12 11:30 **Matrix: Water**
Date Received: 04/11/12 11:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010		mg/L		04/16/12 16:55	04/16/12 21:31	1

Client Sample ID: AS-041012 **Lab Sample ID: 720-41500-3**
Date Collected: 04/10/12 11:36 **Matrix: Water**
Date Received: 04/11/12 11:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010		mg/L		04/16/12 16:55	04/16/12 21:33	1

Client Sample ID: EFF-041012 **Lab Sample ID: 720-41500-4**
Date Collected: 04/10/12 12:02 **Matrix: Water**
Date Received: 04/11/12 11:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010		mg/L		04/16/12 16:55	04/16/12 21:33	1

Client Sample ID: MID-041012 **Lab Sample ID: 720-41500-5**
Date Collected: 04/10/12 12:24 **Matrix: Water**
Date Received: 04/11/12 11:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010		mg/L		04/16/12 16:55	04/16/12 21:34	1

Client Sample ID: INF-041012 **Lab Sample ID: 720-41500-6**
Date Collected: 04/10/12 12:45 **Matrix: Water**
Date Received: 04/11/12 11:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010		mg/L		04/16/12 16:55	04/16/12 21:34	1

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

Lab Sample ID: MB 720-111670/4
Matrix: Water
Analysis Batch: 111670

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.50		ug/L			04/13/12 08:28	1
1,1-Dichloroethane	ND		0.50		ug/L			04/13/12 08:28	1
Dichlorodifluoromethane	ND		0.50		ug/L			04/13/12 08:28	1
Vinyl chloride	ND		0.50		ug/L			04/13/12 08:28	1
Chloroethane	ND		1.0		ug/L			04/13/12 08:28	1
Trichlorofluoromethane	ND		1.0		ug/L			04/13/12 08:28	1
Methylene Chloride	ND		5.0		ug/L			04/13/12 08:28	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			04/13/12 08:28	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			04/13/12 08:28	1
Chloroform	ND		1.0		ug/L			04/13/12 08:28	1
1,1,1-Trichloroethane	ND		0.50		ug/L			04/13/12 08:28	1
Carbon tetrachloride	ND		0.50		ug/L			04/13/12 08:28	1
1,2-Dichloroethane	ND		0.50		ug/L			04/13/12 08:28	1
Trichloroethene	ND		0.50		ug/L			04/13/12 08:28	1
1,2-Dichloropropane	ND		0.50		ug/L			04/13/12 08:28	1
Dichlorobromomethane	ND		0.50		ug/L			04/13/12 08:28	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			04/13/12 08:28	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			04/13/12 08:28	1
1,1,2-Trichloroethane	ND		0.50		ug/L			04/13/12 08:28	1
Tetrachloroethene	ND		0.50		ug/L			04/13/12 08:28	1
Chlorodibromomethane	ND		0.50		ug/L			04/13/12 08:28	1
Chlorobenzene	ND		0.50		ug/L			04/13/12 08:28	1
Bromoform	ND		1.0		ug/L			04/13/12 08:28	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/13/12 08:28	1
1,3-Dichlorobenzene	ND		0.50		ug/L			04/13/12 08:28	1
1,4-Dichlorobenzene	ND		0.50		ug/L			04/13/12 08:28	1
1,2-Dichlorobenzene	ND		0.50		ug/L			04/13/12 08:28	1
Chloromethane	ND		1.0		ug/L			04/13/12 08:28	1
Bromomethane	ND		1.0		ug/L			04/13/12 08:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			04/13/12 08:28	1
EDB	ND		0.50		ug/L			04/13/12 08:28	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/13/12 08:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*70 - 130*		*04/13/12 08:28*	*1*
4-Bromofluorobenzene	*103*		*67 - 130*		*04/13/12 08:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 138*		*04/13/12 08:28*	*1*

Lab Sample ID: LCS 720-111670/5
Matrix: Water
Analysis Batch: 111670

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	25.0	22.6		ug/L		90	64 - 128
1,1-Dichloroethane	25.0	25.3		ug/L		101	70 - 130
Dichlorodifluoromethane	25.0	15.3		ug/L		61	34 - 132
Vinyl chloride	25.0	20.1		ug/L		80	54 - 135
Chloroethane	25.0	23.3		ug/L		93	62 - 138
Trichlorofluoromethane	25.0	23.3		ug/L		93	66 - 132

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

Lab Sample ID: LCS 720-111670/5
Matrix: Water
Analysis Batch: 111670

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	25.0	25.3		ug/L		101	70 - 147
trans-1,2-Dichloroethene	25.0	21.3		ug/L		85	68 - 130
cis-1,2-Dichloroethene	25.0	30.0		ug/L		120	70 - 130
Chloroform	25.0	24.4		ug/L		98	70 - 130
1,1,1-Trichloroethane	25.0	25.8		ug/L		103	70 - 130
Carbon tetrachloride	25.0	24.6		ug/L		98	70 - 146
1,2-Dichloroethane	25.0	24.9		ug/L		100	61 - 132
Trichloroethene	25.0	24.1		ug/L		96	70 - 130
1,2-Dichloropropane	25.0	25.1		ug/L		100	70 - 130
Dichlorobromomethane	25.0	25.6		ug/L		102	70 - 130
trans-1,3-Dichloropropene	25.0	26.9		ug/L		108	70 - 140
cis-1,3-Dichloropropene	25.0	26.1		ug/L		104	70 - 130
1,1,2-Trichloroethane	25.0	24.4		ug/L		98	70 - 130
Tetrachloroethene	25.0	24.7		ug/L		99	70 - 130
Chlorodibromomethane	25.0	24.9		ug/L		100	70 - 145
Chlorobenzene	25.0	24.1		ug/L		96	70 - 130
Bromoform	25.0	23.8		ug/L		95	68 - 136
1,1,2,2-Tetrachloroethane	25.0	22.9		ug/L		92	70 - 130
1,3-Dichlorobenzene	25.0	24.1		ug/L		96	70 - 130
1,4-Dichlorobenzene	25.0	24.0		ug/L		96	70 - 130
1,2-Dichlorobenzene	25.0	22.4		ug/L		90	70 - 130
Chloromethane	25.0	21.5		ug/L		86	52 - 175
Bromomethane	25.0	22.8		ug/L		91	43 - 151
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.0		ug/L		108	42 - 162
EDB	25.0	25.1		ug/L		100	70 - 130
1,2,4-Trichlorobenzene	25.0	18.5		ug/L		74	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*101*		*70 - 130*
4-Bromofluorobenzene	*99*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 138*

Lab Sample ID: LCSD 720-111670/6
Matrix: Water
Analysis Batch: 111670

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	25.0	24.0		ug/L		96	64 - 128	6	20
1,1-Dichloroethane	25.0	27.1		ug/L		108	70 - 130	7	20
Dichlorodifluoromethane	25.0	16.3		ug/L		65	34 - 132	6	20
Vinyl chloride	25.0	20.9		ug/L		84	54 - 135	4	20
Chloroethane	25.0	24.2		ug/L		97	62 - 138	4	20
Trichlorofluoromethane	25.0	24.7		ug/L		99	66 - 132	6	20
Methylene Chloride	25.0	26.9		ug/L		108	70 - 147	6	20
trans-1,2-Dichloroethene	25.0	22.6		ug/L		90	68 - 130	6	20
cis-1,2-Dichloroethene	25.0	31.6		ug/L		126	70 - 130	5	20
Chloroform	25.0	25.9		ug/L		104	70 - 130	6	20
1,1,1-Trichloroethane	25.0	27.2		ug/L		109	70 - 130	5	20
Carbon tetrachloride	25.0	26.1		ug/L		104	70 - 146	6	20

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

Lab Sample ID: LCSD 720-111670/6
Matrix: Water
Analysis Batch: 111670

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloroethane	25.0	27.0		ug/L		108	61 - 132	8	20
Trichloroethene	25.0	25.7		ug/L		103	70 - 130	6	20
1,2-Dichloropropane	25.0	26.7		ug/L		107	70 - 130	6	20
Dichlorobromomethane	25.0	27.1		ug/L		108	70 - 130	6	20
trans-1,3-Dichloropropene	25.0	28.8		ug/L		115	70 - 140	7	20
cis-1,3-Dichloropropene	25.0	27.8		ug/L		111	70 - 130	6	20
1,1,2-Trichloroethane	25.0	26.4		ug/L		106	70 - 130	8	20
Tetrachloroethene	25.0	26.2		ug/L		105	70 - 130	6	20
Chlorodibromomethane	25.0	26.9		ug/L		108	70 - 145	8	20
Chlorobenzene	25.0	25.0		ug/L		100	70 - 130	4	20
Bromoform	25.0	25.5		ug/L		102	68 - 136	7	20
1,1,2,2-Tetrachloroethane	25.0	24.6		ug/L		98	70 - 130	7	20
1,3-Dichlorobenzene	25.0	25.3		ug/L		101	70 - 130	5	20
1,4-Dichlorobenzene	25.0	25.1		ug/L		100	70 - 130	4	20
1,2-Dichlorobenzene	25.0	23.9		ug/L		96	70 - 130	6	20
Chloromethane	25.0	23.6		ug/L		94	52 - 175	9	20
Bromomethane	25.0	24.1		ug/L		96	43 - 151	6	20
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.1		ug/L		112	42 - 162	4	20
EDB	25.0	27.4		ug/L		110	70 - 130	9	20
1,2,4-Trichlorobenzene	25.0	20.5		ug/L		82	70 - 130	10	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*102*		*70 - 130*
4-Bromofluorobenzene	*100*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 138*

Lab Sample ID: MB 720-111811/4
Matrix: Water
Analysis Batch: 111811

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.50		ug/L			04/16/12 17:33	1
1,1-Dichloroethane	ND		0.50		ug/L			04/16/12 17:33	1
Dichlorodifluoromethane	ND		0.50		ug/L			04/16/12 17:33	1
Vinyl chloride	ND		0.50		ug/L			04/16/12 17:33	1
Chloroethane	ND		1.0		ug/L			04/16/12 17:33	1
Trichlorofluoromethane	ND		1.0		ug/L			04/16/12 17:33	1
Methylene Chloride	ND		5.0		ug/L			04/16/12 17:33	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			04/16/12 17:33	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			04/16/12 17:33	1
Chloroform	ND		1.0		ug/L			04/16/12 17:33	1
1,1,1-Trichloroethane	ND		0.50		ug/L			04/16/12 17:33	1
Carbon tetrachloride	ND		0.50		ug/L			04/16/12 17:33	1
1,2-Dichloroethane	ND		0.50		ug/L			04/16/12 17:33	1
Trichloroethene	ND		0.50		ug/L			04/16/12 17:33	1
1,2-Dichloropropane	ND		0.50		ug/L			04/16/12 17:33	1
Dichlorobromomethane	ND		0.50		ug/L			04/16/12 17:33	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			04/16/12 17:33	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			04/16/12 17:33	1

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

Lab Sample ID: MB 720-111811/4
Matrix: Water
Analysis Batch: 111811

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		0.50		ug/L			04/16/12 17:33	1
Tetrachloroethene	ND		0.50		ug/L			04/16/12 17:33	1
Chlorodibromomethane	ND		0.50		ug/L			04/16/12 17:33	1
Chlorobenzene	ND		0.50		ug/L			04/16/12 17:33	1
Bromoform	ND		1.0		ug/L			04/16/12 17:33	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/16/12 17:33	1
1,3-Dichlorobenzene	ND		0.50		ug/L			04/16/12 17:33	1
1,4-Dichlorobenzene	ND		0.50		ug/L			04/16/12 17:33	1
1,2-Dichlorobenzene	ND		0.50		ug/L			04/16/12 17:33	1
Chloromethane	ND		1.0		ug/L			04/16/12 17:33	1
Bromomethane	ND		1.0		ug/L			04/16/12 17:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			04/16/12 17:33	1
EDB	ND		0.50		ug/L			04/16/12 17:33	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/16/12 17:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*70 - 130*		*04/16/12 17:33*	*1*
4-Bromofluorobenzene	*103*		*67 - 130*		*04/16/12 17:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 138*		*04/16/12 17:33*	*1*

Lab Sample ID: LCS 720-111811/5
Matrix: Water
Analysis Batch: 111811

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	25.0	22.5		ug/L		90	64 - 128
1,1-Dichloroethane	25.0	25.4		ug/L		102	70 - 130
Dichlorodifluoromethane	25.0	20.6		ug/L		82	34 - 132
Vinyl chloride	25.0	22.4		ug/L		90	54 - 135
Chloroethane	25.0	25.4		ug/L		102	62 - 138
Trichlorofluoromethane	25.0	26.3		ug/L		105	66 - 132
Methylene Chloride	25.0	25.6		ug/L		102	70 - 147
trans-1,2-Dichloroethene	25.0	21.8		ug/L		87	68 - 130
cis-1,2-Dichloroethene	25.0	29.7		ug/L		119	70 - 130
Chloroform	25.0	24.6		ug/L		98	70 - 130
1,1,1-Trichloroethane	25.0	26.1		ug/L		104	70 - 130
Carbon tetrachloride	25.0	24.9		ug/L		100	70 - 146
1,2-Dichloroethane	25.0	25.3		ug/L		101	61 - 132
Trichloroethene	25.0	24.8		ug/L		99	70 - 130
1,2-Dichloropropane	25.0	25.1		ug/L		100	70 - 130
Dichlorobromomethane	25.0	25.9		ug/L		104	70 - 130
trans-1,3-Dichloropropene	25.0	27.6		ug/L		110	70 - 140
cis-1,3-Dichloropropene	25.0	26.6		ug/L		106	70 - 130
1,1,2-Trichloroethane	25.0	25.3		ug/L		101	70 - 130
Tetrachloroethene	25.0	25.2		ug/L		101	70 - 130
Chlorodibromomethane	25.0	26.1		ug/L		104	70 - 145
Chlorobenzene	25.0	24.0		ug/L		96	70 - 130
Bromoform	25.0	24.6		ug/L		98	68 - 136
1,1,2,2-Tetrachloroethane	25.0	23.7		ug/L		95	70 - 130

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

Lab Sample ID: LCS 720-111811/5
Matrix: Water
Analysis Batch: 111811

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	25.0	24.5		ug/L		98	70 - 130
1,4-Dichlorobenzene	25.0	24.8		ug/L		99	70 - 130
1,2-Dichlorobenzene	25.0	23.3		ug/L		93	70 - 130
Chloromethane	25.0	25.8		ug/L		103	52 - 175
Bromomethane	25.0	25.4		ug/L		102	43 - 151
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.9		ug/L		108	42 - 162
EDB	25.0	26.3		ug/L		105	70 - 130
1,2,4-Trichlorobenzene	25.0	20.1		ug/L		80	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene	*98*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 138*

Lab Sample ID: LCSD 720-111811/6
Matrix: Water
Analysis Batch: 111811

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	25.0	22.9		ug/L		92	64 - 128	1.76	20
1,1-Dichloroethane	25.0	25.6		ug/L		102	70 - 130	1.00	20
Dichlorodifluoromethane	25.0	21.1		ug/L		84	34 - 132	2.40	20
Vinyl chloride	25.0	23.1		ug/L		92	54 - 135	3.08	20
Chloroethane	25.0	25.8		ug/L		103	62 - 138	1.56	20
Trichlorofluoromethane	25.0	27.1		ug/L		108	66 - 132	3.00	20
Methylene Chloride	25.0	25.6		ug/L		102	70 - 147	0.000	20
trans-1,2-Dichloroethene	25.0	21.7		ug/L		87	68 - 130	0.000	20
cis-1,2-Dichloroethene	25.0	30.0		ug/L		120	70 - 130	1.01	20
Chloroform	25.0	24.8		ug/L		99	70 - 130	1.00	20
1,1,1-Trichloroethane	25.0	26.2		ug/L		105	70 - 130	0.000	20
Carbon tetrachloride	25.0	25.1		ug/L		100	70 - 146	1.00	20
1,2-Dichloroethane	25.0	25.4		ug/L		102	61 - 132	0.000	20
Trichloroethene	25.0	24.9		ug/L		100	70 - 130	0.000	20
1,2-Dichloropropane	25.0	25.5		ug/L		102	70 - 130	1.58	20
Dichlorobromomethane	25.0	26.1		ug/L		104	70 - 130	1.00	20
trans-1,3-Dichloropropene	25.0	27.3		ug/L		109	70 - 140	1.09	20
cis-1,3-Dichloropropene	25.0	26.4		ug/L		106	70 - 130	1.00	20
1,1,2-Trichloroethane	25.0	24.9		ug/L		100	70 - 130	1.59	20
Tetrachloroethene	25.0	25.3		ug/L		101	70 - 130	0.000	20
Chlorodibromomethane	25.0	25.6		ug/L		102	70 - 145	1.93	20
Chlorobenzene	25.0	24.1		ug/L		96	70 - 130	0.000	20
Bromoform	25.0	24.4		ug/L		98	68 - 136	1.00	20
1,1,2,2-Tetrachloroethane	25.0	23.8		ug/L		95	70 - 130	0.000	20
1,3-Dichlorobenzene	25.0	25.0		ug/L		100	70 - 130	2.02	20
1,4-Dichlorobenzene	25.0	25.1		ug/L		100	70 - 130	1.20	20
1,2-Dichlorobenzene	25.0	23.7		ug/L		95	70 - 130	1.70	20
Chloromethane	25.0	27.9		ug/L		112	52 - 175	7.82	20
Bromomethane	25.0	25.6		ug/L		102	43 - 151	1.00	20

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

Lab Sample ID: LCSD 720-111811/6 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 111811

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.0		ug/L		108	42 - 162	0.000	20
EDB	25.0	26.0		ug/L		104	70 - 130	1.15	20
1,2,4-Trichlorobenzene	25.0	20.9		ug/L		84	70 - 130	3.90	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*101*		*70 - 130*
4-Bromofluorobenzene	*96*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 138*

Method: 335.2 - Cyanide, Total

Lab Sample ID: MB 500-146571/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 146585 — **Prep Batch: 146571**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010		mg/L		04/16/12 16:55	04/16/12 21:26	1

Lab Sample ID: HLCS 500-146571/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 146585 — **Prep Batch: 146571**

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.400	0.404		mg/L		101	90 - 110

Lab Sample ID: LCS 500-146571/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 146585 — **Prep Batch: 146571**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.0881		mg/L		88	80 - 120

Lab Sample ID: LLCS 500-146571/4-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 146585 — **Prep Batch: 146571**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0400	0.0416		mg/L		104	75 - 125

QC Association Summary

Client: AMEC Geomatrix Inc.
Project/Site: MEW

TestAmerica Job ID: 720-41500-1

GC/MS VOA

Analysis Batch: 111670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-41500-4	EFF-041012	Total/NA	Water	8260B	
720-41500-5	MID-041012	Total/NA	Water	8260B	
720-41500-6	INF-041012	Total/NA	Water	8260B	
720-41500-7	TRIP BLANK	Total/NA	Water	8260B	
LCS 720-111670/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 720-111670/6	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 720-111670/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 111811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-41500-6	INF-041012	Total/NA	Water	8260B	
LCS 720-111811/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 720-111811/6	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 720-111811/4	Method Blank	Total/NA	Water	8260B	

General Chemistry

Prep Batch: 146571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-41500-1	WW-041012	Total/NA	Water	Distill/CN	
720-41500-2	FB-041012	Total/NA	Water	Distill/CN	
720-41500-3	AS-041012	Total/NA	Water	Distill/CN	
720-41500-4	EFF-041012	Total/NA	Water	Distill/CN	
720-41500-5	MID-041012	Total/NA	Water	Distill/CN	
720-41500-6	INF-041012	Total/NA	Water	Distill/CN	
HLCS 500-146571/3-A	Lab Control Sample	Total/NA	Water	Distill/CN	
LCS 500-146571/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
LLCS 500-146571/4-A	Lab Control Sample	Total/NA	Water	Distill/CN	
MB 500-146571/1-A	Method Blank	Total/NA	Water	Distill/CN	

Analysis Batch: 146585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-41500-1	WW-041012	Total/NA	Water	335.2	146571
720-41500-2	FB-041012	Total/NA	Water	335.2	146571
720-41500-3	AS-041012	Total/NA	Water	335.2	146571
720-41500-4	EFF-041012	Total/NA	Water	335.2	146571
720-41500-5	MID-041012	Total/NA	Water	335.2	146571
720-41500-6	INF-041012	Total/NA	Water	335.2	146571
HLCS 500-146571/3-A	Lab Control Sample	Total/NA	Water	335.2	146571
LCS 500-146571/2-A	Lab Control Sample	Total/NA	Water	335.2	146571
LLCS 500-146571/4-A	Lab Control Sample	Total/NA	Water	335.2	146571
MB 500-146571/1-A	Method Blank	Total/NA	Water	335.2	146571

Lab Chronicle

Client: AMEC Geomatrix Inc.
Project/Site: MEW

TestAmerica Job ID: 720-41500-1

Client Sample ID: WW-041012 — Lab Sample ID: 720-41500-1

Date Collected: 04/10/12 11:22 — **Matrix: Water**
Date Received: 04/11/12 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number		Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	Distill/CN			146571		04/16/12 16:55	TAB	TAL CHI
Total/NA	Analysis	335.2		1	146585			TAB	TAL CHI
						(Start)	04/16/12 21:30		
						(End)	04/16/12 21:31		

Client Sample ID: FB-041012 — Lab Sample ID: 720-41500-2

Date Collected: 04/10/12 11:30 — **Matrix: Water**
Date Received: 04/11/12 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number		Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	Distill/CN			146571		04/16/12 16:55	TAB	TAL CHI
Total/NA	Analysis	335.2		1	146585			TAB	TAL CHI
						(Start)	04/16/12 21:31		
						(End)	04/16/12 21:32		

Client Sample ID: AS-041012 — Lab Sample ID: 720-41500-3

Date Collected: 04/10/12 11:36 — **Matrix: Water**
Date Received: 04/11/12 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number		Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	Distill/CN			146571		04/16/12 16:55	TAB	TAL CHI
Total/NA	Analysis	335.2		1	146585			TAB	TAL CHI
						(Start)	04/16/12 21:33		
						(End)	04/16/12 21:33		

Client Sample ID: EFF-041012 — Lab Sample ID: 720-41500-4

Date Collected: 04/10/12 12:02 — **Matrix: Water**
Date Received: 04/11/12 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number		Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	111670		04/13/12 13:03	AC	TAL SF
Total/NA	Prep	Distill/CN			146571		04/16/12 16:55	TAB	TAL CHI
Total/NA	Analysis	335.2		1	146585			TAB	TAL CHI
						(Start)	04/16/12 21:33		
						(End)	04/16/12 21:34		

Client Sample ID: MID-041012 — Lab Sample ID: 720-41500-5

Date Collected: 04/10/12 12:24 — **Matrix: Water**
Date Received: 04/11/12 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number		Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	111670		04/13/12 13:32	AC	TAL SF
Total/NA	Prep	Distill/CN			146571		04/16/12 16:55	TAB	TAL CHI

Lab Chronicle

Client: AMEC Geomatrix Inc.
Project/Site: MEW

TestAmerica Job ID: 720-41500-1

Client Sample ID: MID-041012

Lab Sample ID: 720-41500-5

Date Collected: 04/10/12 12:24
Matrix: Water
Date Received: 04/11/12 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number		Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	335.2		1	146585			TAB	TAL CHI
						(Start)	04/16/12 21:34		
						(End)	04/16/12 21:35		

Client Sample ID: INF-041012

Lab Sample ID: 720-41500-6

Date Collected: 04/10/12 12:45
Matrix: Water
Date Received: 04/11/12 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number		Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	111670		04/13/12 14:01	AC	TAL SF
Total/NA	Analysis	8260B		50	111811		04/16/12 21:51	YB	TAL SF
Total/NA	Prep	Distill/CN			146571		04/16/12 16:55	TAB	TAL CHI
Total/NA	Analysis	335.2		1	146585			TAB	TAL CHI
						(Start)	04/16/12 21:34		
						(End)	04/16/12 21:35		

Client Sample ID: TRIP BLANK

Lab Sample ID: 720-41500-7

Date Collected: 04/10/12 00:00
Matrix: Water
Date Received: 04/11/12 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	111670	04/13/12 14:30	AC	TAL SF

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL SF = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Certification Summary

Client: AMEC Geomatrix Inc.
Project/Site: MEW

TestAmerica Job ID: 720-41500-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Pleasanton	California	State Program	9	2496
TestAmerica Chicago	Alabama	State Program	4	40461
TestAmerica Chicago	California	NELAC	9	01132CA
TestAmerica Chicago	Florida	NELAC	4	E871072
TestAmerica Chicago	Georgia	State Program	4	939
TestAmerica Chicago	Georgia	State Program	4	N/A
TestAmerica Chicago	Hawaii	State Program	9	N/A
TestAmerica Chicago	Illinois	NELAC	5	100201
TestAmerica Chicago	Indiana	State Program	5	C-IL-02
TestAmerica Chicago	Iowa	State Program	7	82
TestAmerica Chicago	Kansas	NELAC	7	E-10161
TestAmerica Chicago	Kentucky	State Program	4	90023
TestAmerica Chicago	Kentucky (UST)	State Program	4	66
TestAmerica Chicago	L-A-B	DoD ELAP		L2304
TestAmerica Chicago	L-A-B	ISO/IEC 17025		L2304
TestAmerica Chicago	Louisiana	NELAC	6	30720
TestAmerica Chicago	Massachusetts	State Program	1	M-IL035
TestAmerica Chicago	Mississippi	State Program	4	N/A
TestAmerica Chicago	North Carolina DENR	State Program	4	291
TestAmerica Chicago	Oklahoma	State Program	6	8908
TestAmerica Chicago	South Carolina	State Program	4	77001
TestAmerica Chicago	Texas	NELAC	6	T104704252-09-TX
TestAmerica Chicago	USDA	Federal		P330-12-00038
TestAmerica Chicago	Virginia	NELAC	3	460142
TestAmerica Chicago	Wisconsin	State Program	5	999580010
TestAmerica Chicago	Wyoming	State Program	8	8TMS-Q

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: AMEC Geomatrix Inc.
Project/Site: MEW

TestAmerica Job ID: 720-41500-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SF
335.2	Cyanide, Total	MCAWW	TAL CHI

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL SF = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: AMEC Geomatrix Inc.
Project/Site: MEW

TestAmerica Job ID: 720-41500-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-41500-1	WW-041012	Water	04/10/12 11:22	04/11/12 11:40
720-41500-2	FB-041012	Water	04/10/12 11:30	04/11/12 11:40
720-41500-3	AS-041012	Water	04/10/12 11:36	04/11/12 11:40
720-41500-4	EFF-041012	Water	04/10/12 12:02	04/11/12 11:40
720-41500-5	MID-041012	Water	04/10/12 12:24	04/11/12 11:40
720-41500-6	INF-041012	Water	04/10/12 12:45	04/11/12 11:40
720-41500-7	TRIP BLANK	Water	04/10/12 00:00	04/11/12 11:40

CHAIN-OF-CUSTODY RECORD

720-41500

OAK 17438

PROJECT NAME: MEW		DATE: 4-10-12	PAGE 1 OF 1
PROJECT NUMBER: 0014860012.025.EE 1/3 0014860012.02V.EE 2/3	LABORATORY NAME: Test America	CLIENT INFORMATION:	REPORTING REQUIREMENTS: 137676
RESULTS TO: Randell Camacho	LABORATORY ADDRESS:		
TURNAROUND TIME: standard			
SAMPLE SHIPMENT METHOD: Lab pick up	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): R David Pearson

ANALYSES

	DATE	TIME	SAMPLE NUMBER	8260 B*	total cyanide	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	4-10-12	1122	WW-041012		X			W		X		1	*8010 List
2		1130	FB-041012		X			W		X		1	
3		1136	AS-041012		X			W		X		1	
4		1202	EFF-041012	X	X			W		X		4	
5		1224	MID-041012	X	X			W		X		4	
6		1245	INF-041012	X	X			W		X		4	
7		trip	blank	X				W		X		2	

RDP

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: R David Pearson PRINTED NAME: R David Pearson COMPANY: Amec	4/10/12	1510	SIGNATURE: PRINTED NAME: Ed Martinez COMPANY: TASF	4/11/12	10:15
SIGNATURE: PRINTED NAME: Ed Martinez COMPANY: TASF	4/11/12	11:40	SIGNATURE: PRINTED NAME: Mullen COMPANY: TestAmerica	4-11-12	1140
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 17

SAMPLING COMMENTS: total Cyanide by EPA method 335.2

Custody sealed

2101 Webster Street, 12th Floor
Oakland, California 94612-3066
Tel 510.663.4100 Fax 510.663.4141

amec

4.7°c

4/18/2012

Login Sample Receipt Checklist

Client: AMEC Geomatrix Inc.

Job Number: 720-41500-1

Login Number: 41500
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is 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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Login Sample Receipt Checklist

Client: AMEC Geomatrix Inc.

Job Number: 720-41500-1

Login Number: 41500
List Number: 1
Creator: Scott, Sherri L

List Source: TestAmerica Chicago
List Creation: 04/13/12 03:04 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 236312
ANALYTICAL REPORT

AMEC Environmental & Infrastructure	Project : 0014860012.02
2101 Webster Street	Location : MEW
Oakland, CA 94612	Level : II

Sample ID	Lab ID
EFF-051712	236312-001
MID-051712	236312-002
INF-051712	236312-003

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 05/29/2012
Project Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**236312**
Client:	**AMEC Environmental & Infrastructure**
Project:	**0014860012.02**
Location:	**MEW**
Request Date:	**05/18/12**
Samples Received:	**05/18/12**

This data package contains sample and QC results for three water samples, requested for the above referenced project on 05/18/12. The samples were received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):
No analytical problems were encountered.

CHAIN-OF-CUSTODY RECORD

236312

OAK 17490

PROJECT NAME: MEW

DATE: 5-17-12 PAGE 1 OF 1

PROJECT NUMBER: 00148600012

RESULTS TO: Reindell Camacho

TURNAROUND TIME: standard

SAMPLE SHIPMENT METHOD: lab pick up

LABORATORY NAME: Curtis & Tompkins

LABORATORY ADDRESS:

LABORATORY CONTACT:

LABORATORY PHONE NUMBER:

CLIENT INFORMATION:

REPORTING REQUIREMENTS:

GEOTRACKER REQUIRED YES (NO)

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): R Daniel Pearson

ANALYSES

	DATE	TIME	SAMPLE NUMBER	8260B*	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	5-17-12	1341	EFF-051712	X		W			X		3	*8010 List
2		1352	MID-051712	X		W			X		3	
3		1402	INF-051712	X		W			X		3	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: R Daniel Pearson	5/17/12	1500	SIGNATURE: [illegible]	5/18/12	1313
PRINTED NAME: R Daniel Pearson			PRINTED NAME: Marcie C.		
COMPANY: AMEC			COMPANY: C&T		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 9

SAMPLING COMMENTS:

2101 Webster Street, 12th Floor
Oakland, California 94612-3066
Tel 510.663.4100 Fax 510.663.4141

amec

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 236312 Date Received 5/18/12 Number of coolers 1
Client AMEC Project 0049060012

Date Opened 5/18/12 By (print) I. CHOY (sign) [signature]
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☒ YES (circle) on cooler on samples ☐ NO
   How many 2 Name SIGNATURE Date 5/17/12
2B. Were custody seals intact upon arrival? _____ YES NO N/A
3. Were custody papers dry and intact when received? _____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ___ YES NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☒ Blue/Gel ☐ None Temp(°C) 5.9°C

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ YES NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ YES NO
12. Are sample labels present, in good condition and complete? _____ YES NO
13. Do the sample labels agree with custody papers? _____ YES NO
14. Was sufficient amount of sample sent for tests requested? _____ YES NO
15. Are the samples appropriately preserved? _____ YES NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO (N/A)
17. Did you document your preservative check? _____ YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
   If YES, Who was ~~called~~ emailed? Rendel By T. Bst Date: 5-21-12

COMMENTS

needed to get COC signed w/ relinquish date.

Rev 10, 11/11

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	236312	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	EFF-051712	Batch#:	186992
Lab ID:	236312-001	Sampled:	05/17/12
Matrix:	Water	Received:	05/18/12
Units:	ug/L	Analyzed:	05/27/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-125
1,2-Dichloroethane-d4	82	69-145
Toluene-d8	90	80-120
Bromofluorobenzene	95	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	236312	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	MID-051712	Batch#:	186992
Lab ID:	236312-002	Sampled:	05/17/12
Matrix:	Water	Received:	05/18/12
Units:	ug/L	Analyzed:	05/27/12
Diln Fac:	2.000		

Analyte	Result	RL
Chloromethane	ND	2.0
Vinyl Chloride	ND	1.0
Bromomethane	ND	2.0
Chloroethane	ND	2.0
Trichlorofluoromethane	ND	2.0
Freon 113	130	4.0
1,1-Dichloroethene	ND	1.0
Methylene Chloride	ND	40
trans-1,2-Dichloroethene	ND	1.0
1,1-Dichloroethane	1.1	1.0
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
1,1,1-Trichloroethane	2.8	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	ND	1.0
Trichloroethene	ND	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
Tetrachloroethene	ND	1.0
Dibromochloromethane	ND	1.0
Chlorobenzene	ND	1.0
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	80	69-145
Toluene-d8	90	80-120
Bromofluorobenzene	96	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	236312	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	INF-051712	Batch#:	187001
Lab ID:	236312-003	Sampled:	05/17/12
Matrix:	Water	Received:	05/18/12
Units:	ug/L	Analyzed:	05/28/12
Diln Fac:	25.00		

Analyte	Result	RL
Chloromethane	ND	25
Vinyl Chloride	ND	13
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
Freon 113	180	50
1,1-Dichloroethene	ND	13
Methylene Chloride	ND	500
trans-1,2-Dichloroethene	ND	13
1,1-Dichloroethane	ND	13
cis-1,2-Dichloroethene	160	13
Chloroform	ND	13
1,1,1-Trichloroethane	ND	13
Carbon Tetrachloride	ND	13
1,2-Dichloroethane	ND	13
Trichloroethene	1,800	13
1,2-Dichloropropane	ND	13
Bromodichloromethane	ND	13
cis-1,3-Dichloropropene	ND	13
trans-1,3-Dichloropropene	ND	13
1,1,2-Trichloroethane	ND	13
Tetrachloroethene	ND	13
Dibromochloromethane	ND	13
Chlorobenzene	ND	13
Bromoform	ND	13
1,1,2,2-Tetrachloroethane	ND	13
1,3-Dichlorobenzene	ND	13
1,4-Dichlorobenzene	ND	13
1,2-Dichlorobenzene	ND	13

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	83	69-145
Toluene-d8	90	80-120
Bromofluorobenzene	94	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	236312	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC641586	Batch#:	186992
Matrix:	Water	Analyzed:	05/27/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	83	69-145
Toluene-d8	90	80-120
Bromofluorobenzene	94	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	236312	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	186992
Units:	ug/L	Analyzed:	05/27/12
Diln Fac:	1.000		

Type: BS Lab ID: QC641587

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	18.75	20.63	110	66-131
Trichloroethene	18.75	20.83	111	79-120
Chlorobenzene	18.75	17.59	94	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-125
1,2-Dichloroethane-d4	79	69-145
Toluene-d8	89	80-120
Bromofluorobenzene	88	80-120

Type: BSD Lab ID: QC641588

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	18.75	18.79	100	66-131	9	20
Trichloroethene	18.75	19.74	105	79-120	5	20
Chlorobenzene	18.75	16.50	88	80-120	6	20

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-125
1,2-Dichloroethane-d4	78	69-145
Toluene-d8	90	80-120
Bromofluorobenzene	90	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	236312	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	186992
MSS Lab ID:	236299-007	Sampled:	05/17/12
Matrix:	Water	Received:	05/17/12
Units:	ug/L	Analyzed:	05/27/12
Diln Fac:	1.000		

Type: MS Lab ID: QC641606

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1268	25.00	25.96	104	74-123
Trichloroethene	<0.1000	25.00	27.51	110	68-122
Chlorobenzene	<0.1000	25.00	22.20	89	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-125
1,2-Dichloroethane-d4	79	69-145
Toluene-d8	89	80-120
Bromofluorobenzene	89	80-120

Type: MSD Lab ID: QC641607

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	25.50	102	74-123	2	20
Trichloroethene	25.00	26.47	106	68-122	4	20
Chlorobenzene	25.00	21.92	88	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-125
1,2-Dichloroethane-d4	81	69-145
Toluene-d8	89	80-120
Bromofluorobenzene	89	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	236312	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC641621	Batch#:	187001
Matrix:	Water	Analyzed:	05/28/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	79	69-145
Toluene-d8	90	80-120
Bromofluorobenzene	95	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	236312	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	187001
Units:	ug/L	Analyzed:	05/28/12
Diln Fac:	1.000		

Type: BS Lab ID: QC641622

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	17.50	19.72	113	66-131
Trichloroethene	17.50	19.21	110	79-120
Chlorobenzene	17.50	16.47	94	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	79	69-145
Toluene-d8	90	80-120
Bromofluorobenzene	89	80-120

Type: BSD Lab ID: QC641623

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	17.50	18.93	108	66-131	4	20
Trichloroethene	17.50	18.95	108	79-120	1	20
Chlorobenzene	17.50	16.07	92	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	78	69-145
Toluene-d8	90	80-120
Bromofluorobenzene	91	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	236312	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	236310-003	Batch#:	187001
Matrix:	Water	Sampled:	05/17/12
Units:	ug/L	Received:	05/17/12

Type: MS Analyzed: 05/28/12
Lab ID: QC641627

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1268	17.50	18.18	104	74-123
Trichloroethene	<0.1000	17.50	18.49	106	68-122
Chlorobenzene	<0.1000	17.50	15.79	90	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-125
1,2-Dichloroethane-d4	81	69-145
Toluene-d8	89	80-120
Bromofluorobenzene	89	80-120

Type: MSD Analyzed: 05/29/12
Lab ID: QC641628

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	17.50	17.28	99	74-123	5	20
Trichloroethene	17.50	18.34	105	68-122	1	20
Chlorobenzene	17.50	15.45	88	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	80	69-145
Toluene-d8	89	80-120
Bromofluorobenzene	90	80-120

RPD= Relative Percent Difference

NELAP Accreditation 01103CA

Caltest
ANALYTICAL LABORATORY
ENVIRONMENTAL ANALYSES

ELAP Certification 1664

Invoice

Invoice No: 468574

Lab Order: M050785
Project: MEW
Sampled: DAVID

Invoice Date: 6/5/2012
Received: 5/18/2012
Invoice Terms ** : COD
Purchase Auth/PO:

PAID
CHECK # 260913
thank you!

Invoice To: Rendell Camacho
AMEC
2101 Webster St.
Oakland, CA 94612

Report To: Rendell Camacho
AMEC
2101 Webster St.

Oakland, CA 94612

(510) 663-4116

Description	TAT	Qty	PerUnit	Total Cost
Cyanide, Total, Low Level	Standard	6 @	95.00	570.00

Please reference the invoice number on your remittance.

Invoice Total **$570.00**

Remit To CALTEST ANALYTICAL LABORATORY
1885 North Kelly Road
Napa, California 94558
(707) 258-4000

6/5 called, Per
R. Camacho's Request
Emailed Inv to
Rendell.Camacho@AMEC.com

**** Payment due Net days from Invoice Date -- Past Due Balances subject to a FINANCE CHARGE of 1.5% per month**
***** We accept VISA, Master Card or American Express *****

Tuesday, June 05, 2012

Rendell Camacho
AMEC
2101 Webster St.
Oakland, CA 94612

RE: Lab Order: M050785
Project ID: MEW

Collected By: DAVID
PO/Contract #:

Dear Rendell Camacho:

Enclosed are the analytical results for sample(s) received by the laboratory on Friday, May 18, 2012. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Enclosures

Project Manager: Mike Hamilton

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SAMPLE SUMMARY

Lab Order: M050785

Project ID: MEW

Lab ID	Sample ID	Matrix	Date Collected	Date Received
M050785001	**AS-051712**	Water	5/17/2012 11:00	5/18/2012 13:48
M050785002	**WW-051712**	Water	5/17/2012 11:11	5/18/2012 13:48
M050785003	**PER-051712**	Water	5/17/2012 11:27	5/18/2012 13:48
M050785004	**EFF-051712**	Water	5/17/2012 13:41	5/18/2012 13:48
M050785005	**MID-051712**	Water	5/17/2012 13:52	5/18/2012 13:48
M050785006	**INF-051712**	Water	5/17/2012 14:02	5/18/2012 13:48

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NARRATIVE

Lab Order: M050785

Project ID: MEW

General Qualifiers and Notes

Caltest authorizes this report to be reproduced only in its entirety. Results are specific to the sample(s) as submitted and only to the parameter(s) reported.

Caltest certifies that all test results for wastewater and hazardous waste analyses meet all applicable NELAC requirements; all microbiology and drinking water testing meet applicable ELAP requirements, unless stated otherwise.

All analyses performed by EPA Methods or Standard Methods (SM) 20th Edition except where noted (SMOL=online edition).

Caltest collects samples in compliance with 40 CFR, EPA Methods, Cal. Title 22, and Standard Methods.

Dilution Factors (DF) reported greater than '1' have been used to adjust the result, Reporting Limit (RL), and Method Detection Limit (MDL).

All Solid, sludge, and/or biosolids data is reported in Wet Weight, unless otherwise specified.

Filtrations performed at Caltest for dissolved metals (excluding mercury) and/or pH analysis were not performed within the 15 minute holding time as specified by 40CFR 136.3 table II.

Results Qualifiers: Report fields may contain codes and non-numeric data correlating to one or more of the following definitions:

ND - Non Detect - indicates analytical result has not been detected.

RL - Reporting Limit is the quantitation limit at which the laboratory is able to detect an analyte. An analyte not detected at or above the RL is reported as ND unless otherwise noted or qualified. For analyses pertaining to the State Implementation Plan of the California Toxics Rule, the Caltest Reporting Limit (RL) is equivalent to the Minimum Level (ML). A standard is always run at or below the ML. Where Reporting Limits are elevated due to dilution, the ML calibration criteria has been met.

J - reflects estimated analytical result value detected below the Reporting Limit (RL) and above the Method Detection Limit (MDL). The 'J' flag is equivalent to the DNQ Estimated Concentration flag.

E - indicates an estimated analytical result value.

B - indicates the analyte has been detected in the blank associated with the sample.

NC - means not able to be calculated for RPD or Spike Recoveries.

SS - compound is a Surrogate Spike used per laboratory quality assurance manual.

NOTE: This document represents a complete Analytical Report for the samples referenced herein and should be retained as a permanent record thereof.

Qualifiers and Compound Notes

1 The Cn method requires the sample to be at pH > 12. At the time of the analysis, the measured pH of the sample was 7.0.

2 Added 3.5g of Na2S2O3 in 75ml sample but still was not enough to nuetralize the Cl2.

3 Nitrate and/or Nitrite was detected in the sample. Sample was treated with Sulfamic Acid prior to analysis.

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ANALYTICAL RESULTS

Lab Order: M050785
Project ID MEW

Lab ID: M050785001 Date Collected: 5/17/2012 11:00 Matrix: Water
Sample ID: AS-051712 Date Received: 5/18/2012 13:48

Parameters	Result	Units	R. L.	DF	Prepared	Batch	Analyzed	Batch	Qual
Cyanide, Total Analysis, Low Level	**Analytical Method:**		SM20-4500-CN C&E, Low Level				**Analyzed by:**	BCP	
Cyanide	100	ug/L	5	5			05/31/12 00:00	WCO 7650	1

Lab ID: M050785002 Date Collected: 5/17/2012 11:11 Matrix: Water
Sample ID: WW-051712 Date Received: 5/18/2012 13:48

Parameters	Result	Units	R. L.	DF	Prepared	Batch	Analyzed	Batch	Qual
Cyanide, Total Analysis, Low Level	**Analytical Method:**		SM20-4500-CN C&E, Low Level				**Analyzed by:**	BCP	
Cyanide	ND	ug/L	1	1			05/31/12 00:00	WCO 7650	

Lab ID: M050785003 Date Collected: 5/17/2012 11:27 Matrix: Water
Sample ID: PER-051712 Date Received: 5/18/2012 13:48

Parameters	Result	Units	R. L.	DF	Prepared	Batch	Analyzed	Batch	Qual
Cyanide, Total Analysis, Low Level	**Analytical Method:**		SM20-4500-CN C&E, Low Level				**Analyzed by:**	BCP	
Cyanide	ND	ug/L	1	1			05/31/12 00:00	WCO 7650	2

Lab ID: M050785004 Date Collected: 5/17/2012 13:41 Matrix: Water
Sample ID: EFF-051712 Date Received: 5/18/2012 13:48

Parameters	Result	Units	R. L.	DF	Prepared	Batch	Analyzed	Batch	Qual
Cyanide, Total Analysis, Low Level	**Analytical Method:**		SM20-4500-CN C&E, Low Level				**Analyzed by:**	BCP	
Cyanide	2.8	ug/L	1	1			05/31/12 00:00	WCO 7650	3

Lab ID: M050785005 Date Collected: 5/17/2012 13:52 Matrix: Water
Sample ID: MID-051712 Date Received: 5/18/2012 13:48

Parameters	Result	Units	R. L.	DF	Prepared	Batch	Analyzed	Batch	Qual
Cyanide, Total Analysis, Low Level	**Analytical Method:**		SM20-4500-CN C&E, Low Level				**Analyzed by:**	BCP	

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ANALYTICAL RESULTS

Lab Order: M050785

Project ID MEW

Lab ID: **M050785005** Date Collected: 5/17/2012 13:52 Matrix: Water

Sample ID: **MID-051712** Date Received: 5/18/2012 13:48

Parameters	Result	Units	R. L.	DF	Prepared	Batch	Analyzed	Batch	Qual
Cyanide	1.0	ug/L	1	1			05/31/12 00:00	WCO 7650	3

Lab ID: **M050785006** Date Collected: 5/17/2012 14:02 Matrix: Water

Sample ID: **INF-051712** Date Received: 5/18/2012 13:48

Parameters	Result	Units	R. L.	DF	Prepared	Batch	Analyzed	Batch	Qual
Cyanide, Total Analysis, Low Level	**Analytical Method:**		SM20-4500-CN C&E, Low Level				**Analyzed by:**	BCP	
Cyanide	ND	ug/L	1	1			05/31/12 00:00	WCO 7650	3

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QUALITY CONTROL DATA

Lab Order: M050785

Project ID: MEW

Analysis Description:	Cyanide, Total Analysis, Low Level	**QC Batch:**	WCO/7650
Analysis Method:	SM20-4500-CN C&E, Low Level	**QC Batch Method:**	SM20-4500-CN C&E, Low Level

METHOD BLANK: 454589

Parameter	Blank Result	Reporting Limit	Units	Qualifiers
Cyanide	ND	1	ug/L	

LABORATORY CONTROL SAMPLE: 454590

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	4	3.9	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 454678 454679

Parameter	Units	M050785002 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Cyanide	ug/L	0.74	13	11	10	80	72	80-120	11	20	4

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QUALITY CONTROL DATA QUALIFIERS

Lab Order: M050785

Project ID: MEW

QUALITY CONTROL PARAMETER QUALIFIERS

Results Qualifiers: Report fields may contain codes and non-numeric data correlating to one or more of the following definitions:

NS - means not spiked and will not have recoveries reported for Analyte Spike Amounts

QC Codes Keys: These descriptors are used to help identify the specific QC samples and clarify the report.

MB - Method Blank

Method Blanks are reported to the same Method Detection Limits (MDLs) or Reporting Limits (RLs) as the analytical samples in the corresponding QC batch.

LCS/LCSD - Laboratory Control Spike / Laboratory Control Spike Duplicate

DUP - Duplicate of Original Sample Matrix

MS/MSD - Matrix Spike / Matrix Spike Duplicate

RPD - Relative Percent Difference

%Recovery - Spike Recovery stated as a percentage

4 Low Matrix Spike recovery(ies) due to possible matrix interferences in the QC sample. QC batch accepted based on LCS and RPD results.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab Order: M050785

Project ID: MEW

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
M050785001	**AS-051712**	SM20-4500-CN C&E, Low Level	WCO/7650		
M050785002	**WW-051712**	SM20-4500-CN C&E, Low Level	WCO/7650		
M050785003	**PER-051712**	SM20-4500-CN C&E, Low Level	WCO/7650		
M050785004	**EFF-051712**	SM20-4500-CN C&E, Low Level	WCO/7650		
M050785005	**MID-051712**	SM20-4500-CN C&E, Low Level	WCO/7650		
M050785006	**INF-051712**	SM20-4500-CN C&E, Low Level	WCO/7650		

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M050785 OAK 17491

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: MEW			DATE: 5-17-12 PAGE 1 OF 1
PROJECT NUMBER: 00148600 12	LABORATORY NAME: CALTEST	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: Ferrell Cavaglio	LABORATORY ADDRESS:		
TURNAROUND TIME: Standard			
SAMPLE SHIPMENT METHOD: Lab pick up	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): RDavid Pearson

ANALYSES: * Total Cyanide

DATE	TIME	SAMPLE NUMBER	* Total Cyanide	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
5-17-12	1100	AS-051712	X				NaOH	X		1	
	1111	WW-051712	X					X		1	
	1127	PER-051712	X					X		1	
	1341	EFF-051712	X					X		1	
	1352	MID-051712	X					X		1	
	1402	INF-051712	X					X		1	

TEMP. (°C): 22
SEALED: Y
INTACT: Y

RDP

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: RDavid Pearson PRINTED NAME: RDavid Pearson COMPANY: AMEC	5/17/12	1600	SIGNATURE: PRINTED NAME: J. Charles COMPANY: CALTEST	5/18/12	1230
SIGNATURE: PRINTED NAME: J. Charles COMPANY:	5/18/12	1348	SIGNATURE: PRINTED NAME: T. Baker COMPANY: Caltest		
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 6

SAMPLING COMMENTS:
* total Cyanide by EPA method 335.2 reporting limit 1mg/L

2101 Webster Street, 12th Floor
Oakland, California 94612-3066
Tel 510.663.4100 Fax 510.663.4141

amec

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Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 237137
ANALYTICAL REPORT

AMEC Environmental & Infrastructure	Project : 0014860012.02
2101 Webster Street	Location : MEW
Oakland, CA 94612	Level : II

Sample ID	Lab ID
EX5-061212	237137-001
EFF-061212	237137-002
FB-061212	237137-003
MID-061212	237137-004
INF-061212	237137-005
TRIP BLANK	237137-006

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Troy Bobier
Project Manager

Date: 06/20/2012

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**237137**
Client:	**AMEC Environmental & Infrastructure**
Project:	**0014860012.02**
Location:	**MEW**
Request Date:	**06/14/12**
Samples Received:	**06/14/12**

This data package contains sample and QC results for six water samples, requested for the above referenced project on 06/14/12. The samples were received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):

Low recovery was observed for trichloroethene in the MSD for batch 187679; the parent sample was not a project sample, the BS/BSD were within limits, and the associated RPD was within limits. No other analytical problems were encountered.

CHAIN-OF-CUSTODY RECORD

237137 OAK 17509

PROJECT NAME: MEW

PROJECT NUMBER: 00148600 12.02 S, EE

RESULTS TO: Randell Camacho

TURNAROUND TIME: standard

SAMPLE SHIPMENT METHOD: lab pick up

LABORATORY NAME: Curtis & Tompkins

LABORATORY ADDRESS:

LABORATORY CONTACT:

LABORATORY PHONE NUMBER:

CLIENT INFORMATION:

DATE: 6-12-12 PAGE 1 OF 1

REPORTING REQUIREMENTS:

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): RDavid Pearson

ANALYSES

	DATE	TIME	SAMPLE NUMBER	8260B *	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	6-12-12	1032	EX5-061212	X		W			X		3	* 8010 List
2		1055	EFF-061212	X		W			X		3	
3		1102	FB-061212	X		W			X		3	
4		1113	MID-061212	X		W			X		3	
5		1125	INF-061212	X		W			X		3	
6			trip blank	X		W			X		2	

RDP

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: RDavid Pearson	6/13	[redacted]	SIGNATURE:	6/14/12	1400
PRINTED NAME: RDavid Pearson			PRINTED NAME: CPM		
COMPANY: Amec			COMPANY: CFT		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 17

SAMPLING COMMENTS:

2101 Webster Street, 12th Floor
Oakland, California 94612-3066
Tel 510.663.4100 Fax 510.663.4141

amec

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 237137 Date Received 6/14/12 Number of coolers 1
Client AMEC Project MEW

Date Opened 6/14/12 By (print) CAM (sign) [illegible]
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) _____ YES NO
   Shipping info _____
2A. Were custody seals present? .... ☒ YES (circle) on cooler on samples ☐ NO
   How many 1 Name David Fochr Date 6/12/12
2B. Were custody seals intact upon arrival? _____ YES NO N/A
3. Were custody papers dry and intact when received? _____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ___ YES NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☐ Bubble Wrap ☒ Foam blocks ☒ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels
7. Temperature documentation: * Notify PM if temperature exceeds 6°C

   Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 5.1

   ☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ YES NO
10. Are there any missing / extra samples? _____ YES NO
11. Are samples in the appropriate containers for indicated tests? _____ YES NO
12. Are sample labels present, in good condition and complete? _____ YES NO
13. Do the sample labels agree with custody papers? _____ YES NO
14. Was sufficient amount of sample sent for tests requested? _____ YES NO
15. Are the samples appropriately preserved? _____ YES NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO N/A
17. Did you document your preservative check? _____ YES NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO N/A
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES NO
    If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Rev 10, 11/11

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	237137	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	EX5-061212	Batch#:	187679
Lab ID:	237137-001	Sampled:	06/12/12
Matrix:	Water	Received:	06/14/12
Units:	ug/L	Analyzed:	06/17/12
Diln Fac:	25.00		

Analyte	Result	RL
Chloromethane	ND	25
Vinyl Chloride	ND	13
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
Freon 113	130	50
1,1-Dichloroethene	ND	13
Methylene Chloride	ND	500
trans-1,2-Dichloroethene	ND	13
1,1-Dichloroethane	ND	13
cis-1,2-Dichloroethene	160	13
Chloroform	ND	13
1,1,1-Trichloroethane	ND	13
Carbon Tetrachloride	ND	13
1,2-Dichloroethane	ND	13
Trichloroethene	1,700	13
1,2-Dichloropropane	ND	13
Bromodichloromethane	ND	13
cis-1,3-Dichloropropene	ND	13
trans-1,3-Dichloropropene	ND	13
1,1,2-Trichloroethane	ND	13
Tetrachloroethene	ND	13
Dibromochloromethane	ND	13
Chlorobenzene	ND	13
Bromoform	ND	13
1,1,2,2-Tetrachloroethane	ND	13
1,3-Dichlorobenzene	ND	13
1,4-Dichlorobenzene	ND	13
1,2-Dichlorobenzene	ND	13

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	108	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	105	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	237137	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	EFF-061212	Batch#:	187689
Lab ID:	237137-002	Sampled:	06/12/12
Matrix:	Water	Received:	06/14/12
Units:	ug/L	Analyzed:	06/18/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-125
1,2-Dichloroethane-d4	75	69-145
Toluene-d8	93	80-120
Bromofluorobenzene	87	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	237137	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	FB-061212	Batch#:	187689
Lab ID:	237137-003	Sampled:	06/12/12
Matrix:	Water	Received:	06/14/12
Units:	ug/L	Analyzed:	06/18/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	90	80-125
1,2-Dichloroethane-d4	75	69-145
Toluene-d8	90	80-120
Bromofluorobenzene	88	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	237137	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	MID-061212	Batch#:	187679
Lab ID:	237137-004	Sampled:	06/12/12
Matrix:	Water	Received:	06/14/12
Units:	ug/L	Analyzed:	06/17/12
Diln Fac:	2.000		

Analyte	Result	RL
Chloromethane	ND	2.0
Vinyl Chloride	ND	1.0
Bromomethane	ND	2.0
Chloroethane	ND	2.0
Trichlorofluoromethane	ND	2.0
Freon 113	130	4.0
1,1-Dichloroethene	ND	1.0
Methylene Chloride	ND	40
trans-1,2-Dichloroethene	ND	1.0
1,1-Dichloroethane	1.4	1.0
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
1,1,1-Trichloroethane	3.2	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	ND	1.0
Trichloroethene	ND	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
Tetrachloroethene	ND	1.0
Dibromochloromethane	ND	1.0
Chlorobenzene	ND	1.0
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-125
1,2-Dichloroethane-d4	101	69-145
Toluene-d8	98	80-120
Bromofluorobenzene	105	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	237137	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	INF-061212	Batch#:	187679
Lab ID:	237137-005	Sampled:	06/12/12
Matrix:	Water	Received:	06/14/12
Units:	ug/L	Analyzed:	06/17/12
Diln Fac:	25.00		

Analyte	Result	RL
Chloromethane	ND	25
Vinyl Chloride	ND	13
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
Freon 113	120	50
1,1-Dichloroethene	ND	13
Methylene Chloride	ND	500
trans-1,2-Dichloroethene	ND	13
1,1-Dichloroethane	ND	13
cis-1,2-Dichloroethene	170	13
Chloroform	ND	13
1,1,1-Trichloroethane	ND	13
Carbon Tetrachloride	ND	13
1,2-Dichloroethane	ND	13
Trichloroethene	1,500	13
1,2-Dichloropropane	ND	13
Bromodichloromethane	ND	13
cis-1,3-Dichloropropene	ND	13
trans-1,3-Dichloropropene	ND	13
1,1,2-Trichloroethane	ND	13
Tetrachloroethene	ND	13
Dibromochloromethane	ND	13
Chlorobenzene	ND	13
Bromoform	ND	13
1,1,2,2-Tetrachloroethane	ND	13
1,3-Dichlorobenzene	ND	13
1,4-Dichlorobenzene	ND	13
1,2-Dichlorobenzene	ND	13

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	105	69-145
Toluene-d8	96	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	237137	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	TRIP BLANK	Batch#:	187689
Lab ID:	237137-006	Sampled:	06/12/12
Matrix:	Water	Received:	06/14/12
Units:	ug/L	Analyzed:	06/18/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	90	80-125
1,2-Dichloroethane-d4	75	69-145
Toluene-d8	90	80-120
Bromofluorobenzene	88	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	237137	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC644490	Batch#:	187679
Matrix:	Water	Analyzed:	06/17/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	100	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	237137	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	187679
Units:	ug/L	Analyzed:	06/17/12
Diln Fac:	1.000		

Type: BS Lab ID: QC644491

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	20.23	101	66-131
Trichloroethene	20.00	21.69	108	79-120
Chlorobenzene	20.00	20.81	104	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	99	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	90	80-120

Type: BSD Lab ID: QC644492

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	19.47	97	66-131	4	20
Trichloroethene	20.00	20.69	103	79-120	5	20
Chlorobenzene	20.00	19.87	99	80-120	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	98	69-145
Toluene-d8	96	80-120
Bromofluorobenzene	97	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	237137	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	187679
MSS Lab ID:	237109-007	Sampled:	06/13/12
Matrix:	Water	Received:	06/13/12
Units:	ug/L	Analyzed:	06/17/12
Diln Fac:	1.000		

Type: MS Lab ID: QC644496

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1000	25.00	22.21	89	74-123
Trichloroethene	39.45	25.00	59.32	80	68-122
Chlorobenzene	<0.1136	25.00	23.25	93	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	105	69-145
Toluene-d8	97	80-120
Bromofluorobenzene	95	80-120

Type: MSD Lab ID: QC644497

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	20.49	82	74-123	8	20
Trichloroethene	25.00	55.39	64 *	68-122	7	20
Chlorobenzene	25.00	23.31	93	80-120	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	104	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	95	80-120

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	237137	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	187689
Units:	ug/L	Analyzed:	06/18/12
Diln Fac:	1.000		

Type: BS Lab ID: QC644522

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	16.37	82	66-131
Trichloroethene	20.00	19.41	97	79-120
Chlorobenzene	20.00	20.70	103	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	88	80-125
1,2-Dichloroethane-d4	72	69-145
Toluene-d8	93	80-120
Bromofluorobenzene	87	80-120

Type: BSD Lab ID: QC644523

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	18.66	93	66-131	13	20
Trichloroethene	20.00	20.37	102	79-120	5	20
Chlorobenzene	20.00	20.19	101	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	87	80-125
1,2-Dichloroethane-d4	73	69-145
Toluene-d8	94	80-120
Bromofluorobenzene	84	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	237137	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC644524	Batch#:	187689
Matrix:	Water	Analyzed:	06/18/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	87	80-125
1,2-Dichloroethane-d4	73	69-145
Toluene-d8	91	80-120
Bromofluorobenzene	85	80-120

ND= Not Detected
RL= Reporting Limit

Caltest
ANALYTICAL LABORATORY
ENVIRONMENTAL ANALYSES

Monday, July 02, 2012

Rendell Camacho
AMEC
2101 Webster St.
Oakland, CA 94612

RE:	Lab Order:	M060566	Collected By:	R.D.P.
	Project ID:	MEW	PO/Contract #:	0014860012.025V.EE

Dear Rendell Camacho:

Enclosed are the analytical results for sample(s) received by the laboratory on Thursday, June 14, 2012. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Enclosures

Project Manager: Mike Hamilton

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Caltest ANALYTICAL LABORATORY
ENVIRONMENTAL ANALYSES

SAMPLE SUMMARY

Lab Order: M060566

Project ID: MEW

Lab ID	Sample ID	Matrix	Date Collected	Date Received
M060566001	**EFF-061212**	Water	6/12/2012 10:55	6/14/2012 16:33
M060566002	**WW-061212**	Water	6/12/2012 10:46	6/14/2012 16:33
M060566003	**FB-061212**	Water	6/12/2012 11:02	6/14/2012 16:33
M060566004	**MID-061212**	Water	6/12/2012 11:13	6/14/2012 16:33
M060566005	**INF-061212**	Water	6/12/2012 11:25	6/14/2012 16:33

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Caltest ANALYTICAL LABORATORY
ENVIRONMENTAL ANALYSES

NARRATIVE

Lab Order: M060566

Project ID: MEW

General Qualifiers and Notes

Caltest authorizes this report to be reproduced only in its entirety. Results are specific to the sample(s) as submitted and only to the parameter(s) reported.

Caltest certifies that all test results for wastewater and hazardous waste analyses meet all applicable NELAC requirements; all microbiology and drinking water testing meet applicable ELAP requirements, unless stated otherwise.

All analyses performed by EPA Methods or Standard Methods (SM) 20th Edition except where noted (SMOL=online edition).

Caltest collects samples in compliance with 40 CFR, EPA Methods, Cal. Title 22, and Standard Methods.

Dilution Factors (DF) reported greater than '1' have been used to adjust the result, Reporting Limit (RL), and Method Detection Limit (MDL).

All Solid, sludge, and/or biosolids data is reported in Wet Weight, unless otherwise specified.

Filtrations performed at Caltest for dissolved metals (excluding mercury) and/or pH analysis were not performed within the 15 minute holding time as specified by 40CFR 136.3 table II.

Results Qualifiers: Report fields may contain codes and non-numeric data correlating to one or more of the following definitions:

ND - Non Detect - indicates analytical result has not been detected.

RL - Reporting Limit is the quantitation limit at which the laboratory is able to detect an analyte. An analyte not detected at or above the RL is reported as ND unless otherwise noted or qualified. For analyses pertaining to the State Implementation Plan of the California Toxics Rule, the Caltest Reporting Limit (RL) is equivalent to the Minimum Level (ML). A standard is always run at or below the ML. Where Reporting Limits are elevated due to dilution, the ML calibration criteria has been met.

J - reflects estimated analytical result value detected below the Reporting Limit (RL) and above the Method Detection Limit (MDL). The 'J' flag is equivalent to the DNQ Estimated Concentration flag.

E - indicates an estimated analytical result value.

B - indicates the analyte has been detected in the blank associated with the sample.

NC - means not able to be calculated for RPD or Spike Recoveries.

SS - compound is a Surrogate Spike used per laboratory quality assurance manual.

NOTE: This document represents a complete Analytical Report for the samples referenced herein and should be retained as a permanent record thereof.

Qualifiers and Compound Notes

1 Nitrate and/or Nitrite was detected in the sample. Sample was treated with Sulfamic Acid prior to analysis.

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ANALYTICAL RESULTS

Lab Order: M060566
Project ID MEW

Lab ID: **M060566001** Date Collected: 6/12/2012 10:55 Matrix: Water
Sample ID: **EFF-061212** Date Received: 6/14/2012 16:33

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Cyanide, Total Analysis, Low Level		**Analytical Method:**	SM20-4500-CN C&E, Low Level					**Analyzed by:**	BCP	
Cyanide	2.0	ug/L	1	0.70	1			06/26/12 00:00	WCO 7716	1

Lab ID: **M060566002** Date Collected: 6/12/2012 10:46 Matrix: Water
Sample ID: **WW-061212** Date Received: 6/14/2012 16:33

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Cyanide, Total Analysis, Low Level		**Analytical Method:**	SM20-4500-CN C&E, Low Level					**Analyzed by:**	BCP	
Cyanide	ND	ug/L	1	0.70	1			06/26/12 00:00	WCO 7716	

Lab ID: **M060566003** Date Collected: 6/12/2012 11:02 Matrix: Water
Sample ID: **FB-061212** Date Received: 6/14/2012 16:33

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Cyanide, Total Analysis, Low Level		**Analytical Method:**	SM20-4500-CN C&E, Low Level					**Analyzed by:**	BCP	
Cyanide	ND	ug/L	1	0.70	1			06/26/12 00:00	WCO 7716	

Lab ID: **M060566004** Date Collected: 6/12/2012 11:13 Matrix: Water
Sample ID: **MID-061212** Date Received: 6/14/2012 16:33

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Cyanide, Total Analysis, Low Level		**Analytical Method:**	SM20-4500-CN C&E, Low Level					**Analyzed by:**	BCP	
Cyanide	1.5	ug/L	1	0.70	1			06/26/12 00:00	WCO 7716	1

Lab ID: **M060566005** Date Collected: 6/12/2012 11:25 Matrix: Water
Sample ID: **INF-061212** Date Received: 6/14/2012 16:33

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Cyanide, Total Analysis, Low Level		**Analytical Method:**	SM20-4500-CN C&E, Low Level					**Analyzed by:**	BCP	

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Caltest ANALYTICAL LABORATORY
ENVIRONMENTAL ANALYSES

ANALYTICAL RESULTS

Lab Order: M060566
Project ID MEW

Lab ID:	**M060566005**	Date Collected:	6/12/2012 11:25	Matrix:	Water
Sample ID:	**INF-061212**	Date Received:	6/14/2012 16:33		

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Cyanide	J0.95	ug/L	1	0.70	1			06/26/12 00:00	WCO 7716	1

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Lab Order: M060566

Project ID: MEW

Analysis Description:	Cyanide, Total Analysis, Low Level	**QC Batch:**	WCO/7716
Analysis Method:	SM20-4500-CN C&E, Low Level	**QC Batch Method:**	SM20-4500-CN C&E, Low Level

METHOD BLANK: 458905

Parameter	Blank Result	Reporting Limit	MDL	Units	Qualifiers
Cyanide	ND	1	0.7	ug/L	

LABORATORY CONTROL SAMPLE: 458906

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	4	4.3	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 458907 458908

Parameter	Units	M060566005 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Cyanide	ug/L	0.95	13	13	14	94	98	80-120	4.3	20	1

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Caltest ANALYTICAL LABORATORY

ENVIRONMENTAL ANALYSES

QUALITY CONTROL DATA QUALIFIERS

Lab Order: M060566

Project ID: MEW

QUALITY CONTROL PARAMETER QUALIFIERS

Results Qualifiers: Report fields may contain codes and non-numeric data correlating to one or more of the following definitions:

NS - means not spiked and will not have recoveries reported for Analyte Spike Amounts

QC Codes Keys: These descriptors are used to help identify the specific QC samples and clarify the report.

MB - Method Blank

Method Blanks are reported to the same Method Detection Limits (MDLs) or Reporting Limits (RLs) as the analytical samples in the corresponding QC batch.

LCS/LCSD - Laboratory Control Spike / Laboratory Control Spike Duplicate

DUP - Duplicate of Original Sample Matrix

MS/MSD - Matrix Spike / Matrix Spike Duplicate

RPD - Relative Percent Difference

%Recovery - Spike Recovery stated as a percentage

1 Nitrate and/or Nitrite was detected in the sample. Sample was treated with Sulfamic Acid prior to analysis.

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Caltest ANALYTICAL LABORATORY
ENVIRONMENTAL ANALYSES

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab Order: M060566

Project ID: MEW

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
M060566001	**EFF-061212**	SM20-4500-CN C&E, Low Level	WCO/7716		
M060566002	**WW-061212**	SM20-4500-CN C&E, Low Level	WCO/7716		
M060566003	**FB-061212**	SM20-4500-CN C&E, Low Level	WCO/7716		
M060566004	**MID-061212**	SM20-4500-CN C&E, Low Level	WCO/7716		
M060566005	**INF-061212**	SM20-4500-CN C&E, Low Level	WCO/7716		

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CHAIN-OF-CUSTODY RECORD

M060566 OAK 17520

PROJECT NAME: MEW

DATE: 6-12-12 PAGE 1 OF 1

PROJECT NUMBER: 00148600012.02 5, EE 1/3 2/3

RESULTS TO: Randell Camacho

TURNAROUND TIME: standard

SAMPLE SHIPMENT METHOD: Lab pick up

LABORATORY NAME: Cal Test

LABORATORY ADDRESS:

LABORATORY CONTACT:

LABORATORY PHONE NUMBER:

CLIENT INFORMATION

REPORTING REQUIREMENTS:

GEOTRACKER REQUIRED YES (NO)

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): R Daniel Pearson

ANALYSES: Total Cyanide CN, LL

DATE	TIME	SAMPLE NUMBER	Total Cyanide CN, LL	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
6-12-12	1055	EFF-061212	X		W			X		1	
	1046	WW-061212	X		W			X		1	
	1102	FB-061212	X		W			X		1	
	1113	MID-061212	X		W			X		1	
	1125	INF-061212	X		W			X		1	

DDD

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: R Daniel Pearson PRINTED NAME: R Daniel Pearson COMPANY: AMEC	6/12/12	1500	SIGNATURE: PRINTED NAME: NICK TOWNE COMPANY: CAL TEST	6/14/12	1340
SIGNATURE: PRINTED NAME: NICK TOWNE COMPANY: CAL TEST	6/14/12	1633	SIGNATURE: PRINTED NAME: COMPANY:		
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 5

SAMPLING COMMENTS: 6/14

TEMP. (°C): 5.7 6.0

SEALED: Y

INTACT: Y

CLIENT INSTRUCTED ME TO NOT OPEN COOLER. — NT 6.14.12

2101 Webster Street, 12th Floor
Oakland, California 94612-3066
Tel 510.663.4100 Fax 510.663.4141

amec

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2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 237679
ANALYTICAL REPORT

AMEC Environmental & Infrastructure	Project : 001486
2101 Webster Street	Location : MEW
Oakland, CA 94612	Level : II

Sample ID	Lab ID
EFF-070312	237679-001
MID-070312	237679-002
FB-070312	237679-003
INF-070312	237679-004
TRIP BLANK	237679-005

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Troy Bobier
Project Manager

Date: 07/10/2012

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**237679**
Client:	**AMEC Environmental & Infrastructure**
Project:	**001486**
Location:	**MEW**
Request Date:	**07/03/12**
Samples Received:	**07/03/12**

This data package contains sample and QC results for five water samples, requested for the above referenced project on 07/03/12. The samples were received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):
No analytical problems were encountered.

CHAIN-OF-CUSTODY RECORD 237679

OAK 17516

PROJECT NAME: MEW		DATE: 7-3-12	PAGE 1 OF 1
PROJECT NUMBER: 001486	LABORATORY NAME: [redacted] Curtis & Tompkins	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: Rendall Camacho	LABORATORY ADDRESS:		
TURNAROUND TIME: Standard			
SAMPLE SHIPMENT METHOD: hand	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): R David Pearson

ANALYSES: 8260B*

	DATE	TIME	SAMPLE NUMBER	8260B*	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	7/3/12	1157	EFF-070312	X	40 ml VOA	W		HCl	X		3	*8010 List
2		1206	MID-070312	X		W			X		3	
3		1214	FB-070312	X		W			X		3	
4		1221	INF-070312	X		W			X		3	
5			trip blank	X		W			X		2	

RDP

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: R David Pearson	7/3/12	1420	SIGNATURE: Pat Gonzalez	7/3/12	1420
PRINTED NAME: R David Pearson			PRINTED NAME: Pat Gonzalez		
COMPANY: AMEC			COMPANY: C&T		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 14

SAMPLING COMMENTS:

2101 Webster Street, 12th Floor
Oakland, California 94612-3066
Tel 510.663.4100 Fax 510.663.4141

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COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 237679 Date Received 7/3/12 Number of coolers 1
Client AMEC Project 001486

Date Opened 7/3/12 By (print) Eileen Leung (sign) [signature]
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO (N/A)
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☒ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels
7. Temperature documentation: * Notify PM if temperature exceeds 6°C

   Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 12.2

   ☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

   ☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO (N/A)
17. Did you document your preservative check? _____ YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ (YES) NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____
_____
_____
_____
_____
_____

Rev 10, 11/11

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	237679	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	001486	Analysis:	EPA 8260B
Field ID:	EFF-070312	Batch#:	188246
Lab ID:	237679-001	Sampled:	07/03/12
Matrix:	Water	Received:	07/03/12
Units:	ug/L	Analyzed:	07/06/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	81	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	97	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	237679	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	001486	Analysis:	EPA 8260B
Field ID:	MID-070312	Batch#:	188246
Lab ID:	237679-002	Sampled:	07/03/12
Matrix:	Water	Received:	07/03/12
Units:	ug/L	Analyzed:	07/06/12
Diln Fac:	2.000		

Analyte	Result	RL
Chloromethane	ND	2.0
Vinyl Chloride	ND	1.0
Bromomethane	ND	2.0
Chloroethane	ND	2.0
Trichlorofluoromethane	ND	2.0
Freon 113	130	4.0
1,1-Dichloroethene	ND	1.0
Methylene Chloride	ND	40
trans-1,2-Dichloroethene	ND	1.0
1,1-Dichloroethane	1.5	1.0
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
1,1,1-Trichloroethane	2.5	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	ND	1.0
Trichloroethene	ND	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
Tetrachloroethene	ND	1.0
Dibromochloromethane	ND	1.0
Chlorobenzene	ND	1.0
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	82	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	95	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	237679	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	001486	Analysis:	EPA 8260B
Field ID:	FB-070312	Batch#:	188246
Lab ID:	237679-003	Sampled:	07/03/12
Matrix:	Water	Received:	07/03/12
Units:	ug/L	Analyzed:	07/06/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	85	69-145
Toluene-d8	98	80-120
Bromofluorobenzene	98	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	237679	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	001486	Analysis:	EPA 8260B
Field ID:	INF-070312	Batch#:	188246
Lab ID:	237679-004	Sampled:	07/03/12
Matrix:	Water	Received:	07/03/12
Units:	ug/L	Analyzed:	07/06/12
Diln Fac:	25.00		

Analyte	Result	RL
Chloromethane	ND	25
Vinyl Chloride	ND	13
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
Freon 113	150	50
1,1-Dichloroethene	ND	13
Methylene Chloride	ND	500
trans-1,2-Dichloroethene	ND	13
1,1-Dichloroethane	ND	13
cis-1,2-Dichloroethene	180	13
Chloroform	ND	13
1,1,1-Trichloroethane	ND	13
Carbon Tetrachloride	ND	13
1,2-Dichloroethane	ND	13
Trichloroethene	1,600	13
1,2-Dichloropropane	ND	13
Bromodichloromethane	ND	13
cis-1,3-Dichloropropene	ND	13
trans-1,3-Dichloropropene	ND	13
1,1,2-Trichloroethane	ND	13
Tetrachloroethene	ND	13
Dibromochloromethane	ND	13
Chlorobenzene	ND	13
Bromoform	ND	13
1,1,2,2-Tetrachloroethane	ND	13
1,3-Dichlorobenzene	ND	13
1,4-Dichlorobenzene	ND	13
1,2-Dichlorobenzene	ND	13

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	80	69-145
Toluene-d8	98	80-120
Bromofluorobenzene	98	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	237679	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	001486	Analysis:	EPA 8260B
Field ID:	TRIP BLANK	Batch#:	188246
Lab ID:	237679-005	Sampled:	07/03/12
Matrix:	Water	Received:	07/03/12
Units:	ug/L	Analyzed:	07/06/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	80	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	94	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	237679	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	001486	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC646798	Batch#:	188246
Matrix:	Water	Analyzed:	07/06/12
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	24.08	96	66-131
Trichloroethene	25.00	25.97	104	79-120
Chlorobenzene	25.00	25.93	104	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-125
1,2-Dichloroethane-d4	75	69-145
Toluene-d8	98	80-120
Bromofluorobenzene	92	80-120

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	237679	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	001486	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC646799	Batch#:	188246
Matrix:	Water	Analyzed:	07/06/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	79	69-145
Toluene-d8	95	80-120
Bromofluorobenzene	91	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 238859
ANALYTICAL REPORT

AMEC Environmental & Infrastructure 2101 Webster Street Oakland, CA 94612	Project : 0014860012.02 Location : MEW Level : II

Sample ID	Lab ID
EFF-081412	238859-001
MID-081412	238859-002
INF-081412	238859-003
TRIP BLANK	238859-004

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 08/22/2012

Tracy Babjar
Project Manager
(510) 204-2226

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**238859**
Client:	**AMEC Environmental & Infrastructure**
Project:	**0014860012.02**
Location:	**MEW**
Request Date:	**08/15/12**
Samples Received:	**08/15/12**

This data package contains sample and QC results for four water samples, requested for the above referenced project on 08/15/12. The samples were received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):
No analytical problems were encountered.

238859

OAK 17552

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: MEW			DATE: 8-14-12 PAGE 1 OF 1
PROJECT NUMBER: 00148600012v02	LABORATORY NAME: Curtis & Tompkins	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: Randell Camacho	LABORATORY ADDRESS:		
TURNAROUND TIME: standard			
SAMPLE SHIPMENT METHOD: lab pick up	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

	DATE	TIME	SAMPLE NUMBER	* 8260B	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	8-14-12	1230	EFF-081412	X		W		HCl	X	X	6	*8010 List
2		1240	MID-081412	X		W			X		3	
3		1250	INF-081412	X		W			X		3	
4		trip	blank	X		W			X		2	

RDP

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: R David Pearson	8/14/12	1430	SIGNATURE: Eileen Leung	8/15	1730
PRINTED NAME: R David Pearson			PRINTED NAME: Eileen Leung		
COMPANY: Amec			COMPANY: C&T		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 14

SAMPLING COMMENTS:

2101 Webster Street, 12th Floor
Oakland, California 94612-3066
Tel 510.663.4100 Fax 510.663.4141

amec

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 238859 Date Received 8/15/12 Number of coolers 1
Client anec Project 00148600 1202

Date Opened 8/15/12 By (print) Kristina Salvador (sign) [signature]
Date Logged in ↓ By (print) Eileen Leung (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc) ____ YES (NO)
   Shipping info ____
2A. Were custody seals present? .... ☒ YES (circle) on cooler on samples ☐ NO
   How many 1 Name David Pearson Date 8/14/12
2B. Were custody seals intact upon arrival? ____ (YES) NO N/A
3. Were custody papers dry and intact when received? ____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ____ (YES) NO
6. Indicate the packing in cooler: (if other, describe) ____

   ☒ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels
7. Temperature documentation: * Notify PM if temperature exceeds 6°C

   Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 2.9

   ☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

   ☐ Samples received on ice directly from the field. Cooling process had begun
8. Were Method 5035 sampling containers present? ____ YES (NO)
   If YES, what time were they transferred to freezer? ____
9. Did all bottles arrive unbroken/unopened? ____ (YES) NO
10. Are there any missing / extra samples? ____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? ____ (YES) NO
12. Are sample labels present, in good condition and complete? ____ (YES) NO
13. Do the sample labels agree with custody papers? ____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? ____ (YES) NO
15. Are the samples appropriately preserved? ____ (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? ____ YES NO (N/A)
17. Did you document your preservative check? ____ YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? ____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? ____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? ____ YES (NO) N/A
21. Was the client contacted concerning this sample delivery? ____ YES (NO)
   If YES, Who was called? ____ By ____ Date: ____

COMMENTS
20: -002: 1 of 3 VOAs had bubbles >6mm present

Rev 10, 11/11

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	238859	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	EFF-081412	Batch#:	189519
Lab ID:	238859-001	Sampled:	08/14/12
Matrix:	Water	Received:	08/15/12
Units:	ug/L	Analyzed:	08/16/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	126	80-127
1,2-Dichloroethane-d4	138	69-148
Toluene-d8	103	80-120
Bromofluorobenzene	105	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	238859	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	MID-081412	Batch#:	189573
Lab ID:	238859-002	Sampled:	08/14/12
Matrix:	Water	Received:	08/15/12
Units:	ug/L	Analyzed:	08/17/12
Diln Fac:	2.000		

Analyte	Result	RL
Chloromethane	ND	2.0
Vinyl Chloride	ND	1.0
Bromomethane	ND	2.0
Chloroethane	ND	2.0
Trichlorofluoromethane	ND	2.0
Freon 113	190	4.0
1,1-Dichloroethene	ND	1.0
Methylene Chloride	ND	40
trans-1,2-Dichloroethene	ND	1.0
1,1-Dichloroethane	1.4	1.0
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
1,1,1-Trichloroethane	3.9	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	ND	1.0
Trichloroethene	ND	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
Tetrachloroethene	ND	1.0
Dibromochloromethane	ND	1.0
Chlorobenzene	ND	1.0
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0

Surrogate	%REC	Limits
Dibromofluoromethane	124	80-127
1,2-Dichloroethane-d4	123	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	97	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	238859	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	INF-081412	Batch#:	189519
Lab ID:	238859-003	Sampled:	08/14/12
Matrix:	Water	Received:	08/15/12
Units:	ug/L	Analyzed:	08/16/12
Diln Fac:	25.00		

Analyte	Result	RL
Chloromethane	ND	25
Vinyl Chloride	ND	13
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
Freon 113	170	50
1,1-Dichloroethene	ND	13
Methylene Chloride	ND	500
trans-1,2-Dichloroethene	ND	13
1,1-Dichloroethane	ND	13
cis-1,2-Dichloroethene	170	13
Chloroform	ND	13
1,1,1-Trichloroethane	ND	13
Carbon Tetrachloride	ND	13
1,2-Dichloroethane	ND	13
Trichloroethene	1,600	13
1,2-Dichloropropane	ND	13
Bromodichloromethane	ND	13
cis-1,3-Dichloropropene	ND	13
trans-1,3-Dichloropropene	ND	13
1,1,2-Trichloroethane	ND	13
Tetrachloroethene	ND	13
Dibromochloromethane	ND	13
Chlorobenzene	ND	13
Bromoform	ND	13
1,1,2,2-Tetrachloroethane	ND	13
1,3-Dichlorobenzene	ND	13
1,4-Dichlorobenzene	ND	13
1,2-Dichlorobenzene	ND	13

Surrogate	%REC	Limits
Dibromofluoromethane	126	80-127
1,2-Dichloroethane-d4	139	69-148
Toluene-d8	104	80-120
Bromofluorobenzene	104	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	238859	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	TRIP BLANK	Batch#:	189519
Lab ID:	238859-004	Sampled:	08/14/12
Matrix:	Water	Received:	08/15/12
Units:	ug/L	Analyzed:	08/16/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	125	80-127
1,2-Dichloroethane-d4	138	69-148
Toluene-d8	103	80-120
Bromofluorobenzene	104	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	238859	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	189519
Units:	ug/L	Analyzed:	08/16/12
Diln Fac:	1.000		

Type: BS Lab ID: QC652030

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	12.58	101	65-130
Trichloroethene	12.50	12.31	98	76-121
Chlorobenzene	12.50	11.50	92	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-127
1,2-Dichloroethane-d4	128	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	102	80-121

Type: BSD Lab ID: QC652031

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	12.15	97	65-130	3	22
Trichloroethene	12.50	12.60	101	76-121	2	20
Chlorobenzene	12.50	11.56	92	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-127
1,2-Dichloroethane-d4	131	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	102	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	238859	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC652032	Batch#:	189519
Matrix:	Water	Analyzed:	08/16/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	119	80-127
1,2-Dichloroethane-d4	134	69-148
Toluene-d8	102	80-120
Bromofluorobenzene	104	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	238859	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	EFF-081412	Batch#:	189519
MSS Lab ID:	238859-001	Sampled:	08/14/12
Matrix:	Water	Received:	08/15/12
Units:	ug/L	Analyzed:	08/17/12
Diln Fac:	1.000		

Type: MS Lab ID: QC652111

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1000	12.50	12.07	97	71-122
Trichloroethene	<0.1000	12.50	12.46	100	69-121
Chlorobenzene	<0.1000	12.50	11.64	93	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	117	80-127
1,2-Dichloroethane-d4	138	69-148
Toluene-d8	102	80-120
Bromofluorobenzene	103	80-121

Type: MSD Lab ID: QC652112

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	11.95	96	71-122	1	21
Trichloroethene	12.50	12.08	97	69-121	3	20
Chlorobenzene	12.50	11.29	90	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	116	80-127
1,2-Dichloroethane-d4	136	69-148
Toluene-d8	102	80-120
Bromofluorobenzene	104	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	238859	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	189573
Units:	ug/L	Analyzed:	08/17/12
Diln Fac:	1.000		

Type: BS Lab ID: QC652255

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	9.775	78	65-130
Trichloroethene	12.50	11.91	95	76-121
Chlorobenzene	12.50	12.67	101	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-127
1,2-Dichloroethane-d4	120	69-148
Toluene-d8	99	80-120
Bromofluorobenzene	93	80-121

Type: BSD Lab ID: QC652256

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	10.09	81	65-130	3	22
Trichloroethene	12.50	12.27	98	76-121	3	20
Chlorobenzene	12.50	12.91	103	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-127
1,2-Dichloroethane-d4	121	69-148
Toluene-d8	100	80-120
Bromofluorobenzene	95	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	238859	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC652257	Batch#:	189573
Matrix:	Water	Analyzed:	08/17/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	119	80-127
1,2-Dichloroethane-d4	122	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	98	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 239459
ANALYTICAL REPORT

AMEC Environmental & Infrastructure 2101 Webster Street Oakland, CA 94612	Project : 0014860012.02 Location : MEW Level : II

Sample ID	Lab ID
EFF-090612	239459-001
MID-090612	239459-002
FB-090612	239459-003
EX5-090612	239459-004
INF-090612	239459-005
TRIP BLANK	239459-006

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 09/13/2012

Tracy Babjar
Project Manager
(510) 204-2226

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**239459**
Client:	**AMEC Environmental & Infrastructure**
Project:	**0014860012.02**
Location:	**MEW**
Request Date:	**09/07/12**
Samples Received:	**09/07/12**

This data package contains sample and QC results for six water samples, requested for the above referenced project on 09/07/12. The samples were received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):
No analytical problems were encountered.

239459

OAK 17564

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: MEW		DATE: 9-6-12	PAGE 1 OF 1
PROJECT NUMBER: 0014860012.02	LABORATORY NAME: Curtis & Tompkins	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: Rendell Camacho	LABORATORY ADDRESS:		
TURNAROUND TIME: Standard			
SAMPLE SHIPMENT METHOD: Lab pick up	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

DATE	TIME	SAMPLE NUMBER	8260B *	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
9/6/12	1325	EFF-090612	X		w			X		3	*8010 List
	1335	MID-090612	X		w			X		3	
	1345	FB-090612	X		w			X		3	
	1400	EX5-090612	X		w			X		3	
	1410	INF-090612	X		w			X		3	
	trip	blank	X		w			X		2	

1 2 3 4 5 6

RDP

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: R David Pearson	9/6/12	1537	SIGNATURE: Eileen	9/7	1500
PRINTED NAME: R David Pearson			PRINTED NAME: Eileen Leung		
COMPANY: Amec			COMPANY: C&T		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 17

SAMPLING COMMENTS:

2101 Webster Street, 12th Floor
Oakland, California 94612-3066
Tel 510.663.4100 Fax 510.663.4141

amec

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 239459 Date Received 9/7/12 Number of coolers 1
Client AMEC Project 00148600012.02

Date Opened 9/7/12 By (print) Krishna Salvador (sign)
Date Logged in ↓ By (print) EL (sign) Eleen

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO (N/A)
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ___ (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☐ Wet ☒ Blue/Gel ☐ None Temp(°C) 4.6

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ (YES) NO ~~N/A~~
16. Did you check preservatives for all bottles for each sample? _____ YES NO (N/A)
17. Did you document your preservative check? _____ YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ (YES) NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____
_____
_____
_____
_____
_____

Rev 10, 11/11

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	239459	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	EFF-090612	Batch#:	190375
Lab ID:	239459-001	Sampled:	09/06/12
Matrix:	Water	Received:	09/07/12
Units:	ug/L	Analyzed:	09/11/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-127
1,2-Dichloroethane-d4	106	69-148
Toluene-d8	114	80-120
Bromofluorobenzene	97	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	239459	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	MID-090612	Batch#:	190375
Lab ID:	239459-002	Sampled:	09/06/12
Matrix:	Water	Received:	09/07/12
Units:	ug/L	Analyzed:	09/11/12
Diln Fac:	2.000		

Analyte	Result	RL
Chloromethane	ND	2.0
Vinyl Chloride	ND	1.0
Bromomethane	ND	2.0
Chloroethane	ND	2.0
Trichlorofluoromethane	ND	2.0
Freon 113	110	4.0
1,1-Dichloroethene	ND	1.0
Methylene Chloride	ND	40
trans-1,2-Dichloroethene	ND	1.0
1,1-Dichloroethane	1.3	1.0
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
1,1,1-Trichloroethane	2.7	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	ND	1.0
Trichloroethene	ND	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
Tetrachloroethene	ND	1.0
Dibromochloromethane	ND	1.0
Chlorobenzene	ND	1.0
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-127
1,2-Dichloroethane-d4	109	69-148
Toluene-d8	113	80-120
Bromofluorobenzene	97	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	239459	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	FB-090612	Batch#:	190375
Lab ID:	239459-003	Sampled:	09/06/12
Matrix:	Water	Received:	09/07/12
Units:	ug/L	Analyzed:	09/11/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-127
1,2-Dichloroethane-d4	108	69-148
Toluene-d8	112	80-120
Bromofluorobenzene	96	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	239459	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	EX5-090612	Batch#:	190375
Lab ID:	239459-004	Sampled:	09/06/12
Matrix:	Water	Received:	09/07/12
Units:	ug/L	Analyzed:	09/11/12
Diln Fac:	25.00		

Analyte	Result	RL
Chloromethane	ND	25
Vinyl Chloride	ND	13
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
Freon 113	110	50
1,1-Dichloroethene	ND	13
Methylene Chloride	ND	500
trans-1,2-Dichloroethene	ND	13
1,1-Dichloroethane	ND	13
cis-1,2-Dichloroethene	150	13
Chloroform	ND	13
1,1,1-Trichloroethane	ND	13
Carbon Tetrachloride	ND	13
1,2-Dichloroethane	ND	13
Trichloroethene	1,500	13
1,2-Dichloropropane	ND	13
Bromodichloromethane	ND	13
cis-1,3-Dichloropropene	ND	13
trans-1,3-Dichloropropene	ND	13
1,1,2-Trichloroethane	ND	13
Tetrachloroethene	ND	13
Dibromochloromethane	ND	13
Chlorobenzene	ND	13
Bromoform	ND	13
1,1,2,2-Tetrachloroethane	ND	13
1,3-Dichlorobenzene	ND	13
1,4-Dichlorobenzene	ND	13
1,2-Dichlorobenzene	ND	13

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-127
1,2-Dichloroethane-d4	107	69-148
Toluene-d8	115	80-120
Bromofluorobenzene	95	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	239459	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	INF-090612	Batch#:	190375
Lab ID:	239459-005	Sampled:	09/06/12
Matrix:	Water	Received:	09/07/12
Units:	ug/L	Analyzed:	09/11/12
Diln Fac:	25.00		

Analyte	Result	RL
Chloromethane	ND	25
Vinyl Chloride	ND	13
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
Freon 113	120	50
1,1-Dichloroethene	ND	13
Methylene Chloride	ND	500
trans-1,2-Dichloroethene	ND	13
1,1-Dichloroethane	ND	13
cis-1,2-Dichloroethene	150	13
Chloroform	ND	13
1,1,1-Trichloroethane	ND	13
Carbon Tetrachloride	ND	13
1,2-Dichloroethane	ND	13
Trichloroethene	1,500	13
1,2-Dichloropropane	ND	13
Bromodichloromethane	ND	13
cis-1,3-Dichloropropene	ND	13
trans-1,3-Dichloropropene	ND	13
1,1,2-Trichloroethane	ND	13
Tetrachloroethene	ND	13
Dibromochloromethane	ND	13
Chlorobenzene	ND	13
Bromoform	ND	13
1,1,2,2-Tetrachloroethane	ND	13
1,3-Dichlorobenzene	ND	13
1,4-Dichlorobenzene	ND	13
1,2-Dichlorobenzene	ND	13

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-127
1,2-Dichloroethane-d4	106	69-148
Toluene-d8	114	80-120
Bromofluorobenzene	98	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	239459	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	TRIP BLANK	Batch#:	190375
Lab ID:	239459-006	Sampled:	09/06/12
Matrix:	Water	Received:	09/07/12
Units:	ug/L	Analyzed:	09/11/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-127
1,2-Dichloroethane-d4	103	69-148
Toluene-d8	113	80-120
Bromofluorobenzene	98	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	239459	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC655669	Batch#:	190375
Matrix:	Water	Analyzed:	09/11/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-127
1,2-Dichloroethane-d4	106	69-148
Toluene-d8	113	80-120
Bromofluorobenzene	96	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	239459	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	190375
Units:	ug/L	Analyzed:	09/11/12
Diln Fac:	1.000		

Type: BS Lab ID: QC655670

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	15.97	80	65-130
Trichloroethene	20.00	18.29	91	76-121
Chlorobenzene	20.00	19.46	97	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-127
1,2-Dichloroethane-d4	106	69-148
Toluene-d8	112	80-120
Bromofluorobenzene	98	80-121

Type: BSD Lab ID: QC655671

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	14.98	75	65-130	6	22
Trichloroethene	20.00	17.98	90	76-121	2	20
Chlorobenzene	20.00	18.63	93	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-127
1,2-Dichloroethane-d4	106	69-148
Toluene-d8	111	80-120
Bromofluorobenzene	94	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 240336
ANALYTICAL REPORT

AMEC Environmental & Infrastructure 2101 Webster Street Oakland, CA 94612	Project : 0014860012.02 Location : MEW Level : II

Sample ID	Lab ID
INF-101012	240336-001
MID-101012	240336-002
EFF-101012	240336-003
TB-101012	240336-004

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 10/26/2012

Tracy Babjar
Project Manager
(510) 204-2226

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**240336**
Client:	**AMEC Environmental & Infrastructure**
Project:	**0014860012.02**
Location:	**MEW**
Request Date:	**10/11/12**
Samples Received:	**10/11/12**

This data package contains sample and QC results for four water samples, requested for the above referenced project on 10/11/12. The samples were received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):
No analytical problems were encountered.

Bioassay (EPA):
Block Environmental in Pleasant Hill, CA performed the analysis (not NELAP certified). Please see the Block Environmental case narrative.

CHAIN-OF-CUSTODY RECORD 240336 OAK 17595

PROJECT NAME: MEW		DATE: 10/10/12	PAGE 1 OF 1
PROJECT NUMBER: 0014860012	LABORATORY NAME: C&T	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: Rendell Camacho	LABORATORY ADDRESS:		
TURNAROUND TIME: Standard	Berkeley		
SAMPLE SHIPMENT METHOD: Courier	LABORATORY CONTACT: Tracy B.		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES: (1) VOCs, (2) Fish Toxicity

	DATE	TIME	SAMPLE NUMBER	VOCs	Fish Toxicity	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	10/10/12	1015	INF-101012	X		40 mL VOA	W	N	HCl	Y	N	3	
2		1100	MID-101012	X									
3		1215	EFF-101012	X									
		1215	EFF-101012		X	20L Poly			N/A			1	(2)
4		--	TB-101012	X		40 mL VOA			HCl			2	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	10/10	1600	SIGNATURE:	10/11	1000
PRINTED NAME: Rendell Camacho	2012		PRINTED NAME: Aileen Lewing		
COMPANY: AMEC			COMPANY: C&T		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 11

SAMPLING COMMENTS:
(1) VOCs by 8260, 8010 List
(2) Fish Toxicity sampled delivered directly to Block Environmental

2101 Webster Street, 12th Floor
Oakland, California 94612-3066
Tel 510.663.4100 Fax 510.663.4141

amec

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 240336 Date Received 10/11/12 Number of coolers 1
Client AMEC Project 00148600 12

Date Opened 10/11/12 By (print) EL (sign) E. Le
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) _____ YES NO
   Shipping info _____

2A. Were custody seals present? .... ☒ YES (circle) on cooler on samples ☐ NO
   How many 1 Name signature Date 10/10/12
2B. Were custody seals intact upon arrival? _____ YES NO N/A
3. Were custody papers dry and intact when received? _____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ___ YES NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 5.0

☒ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ YES NO
10. Are there any missing / extra samples? _____ YES NO
11. Are samples in the appropriate containers for indicated tests? _____ YES NO
12. Are sample labels present, in good condition and complete? _____ YES NO
13. Do the sample labels agree with custody papers? _____ YES NO
14. Was sufficient amount of sample sent for tests requested? _____ YES NO
15. Are the samples appropriately preserved? _____ YES NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO N/A
17. Did you document your preservative check? _____ YES NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO N/A
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Rev 10, 11/11

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240336	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	INF-101012	Units:	ug/L
Lab ID:	240336-001	Sampled:	10/10/12
Matrix:	Water	Received:	10/11/12

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Chloromethane	ND	2.0	2.000	191701	10/16/12
Vinyl Chloride	2.9	1.0	2.000	191701	10/16/12
Bromomethane	ND	2.0	2.000	191701	10/16/12
Chloroethane	ND	2.0	2.000	191701	10/16/12
Trichlorofluoromethane	ND	2.0	2.000	191701	10/16/12
Freon 113	200	40	20.00	191752	10/17/12
1,1-Dichloroethene	5.3	1.0	2.000	191701	10/16/12
Methylene Chloride	ND	40	2.000	191701	10/16/12
trans-1,2-Dichloroethene	4.8	1.0	2.000	191701	10/16/12
1,1-Dichloroethane	3.1	1.0	2.000	191701	10/16/12
cis-1,2-Dichloroethene	170	1.0	2.000	191701	10/16/12
Chloroform	ND	1.0	2.000	191701	10/16/12
1,1,1-Trichloroethane	3.6	1.0	2.000	191701	10/16/12
Carbon Tetrachloride	ND	1.0	2.000	191701	10/16/12
1,2-Dichloroethane	ND	1.0	2.000	191701	10/16/12
Trichloroethene	1,300	10	20.00	191752	10/17/12
1,2-Dichloropropane	ND	1.0	2.000	191701	10/16/12
Bromodichloromethane	ND	1.0	2.000	191701	10/16/12
cis-1,3-Dichloropropene	ND	1.0	2.000	191701	10/16/12
trans-1,3-Dichloropropene	ND	1.0	2.000	191701	10/16/12
1,1,2-Trichloroethane	ND	1.0	2.000	191701	10/16/12
Tetrachloroethene	6.6	1.0	2.000	191701	10/16/12
Dibromochloromethane	ND	1.0	2.000	191701	10/16/12
Chlorobenzene	ND	1.0	2.000	191701	10/16/12
Bromoform	ND	1.0	2.000	191701	10/16/12
1,1,2,2-Tetrachloroethane	ND	1.0	2.000	191701	10/16/12
1,3-Dichlorobenzene	ND	1.0	2.000	191701	10/16/12
1,4-Dichlorobenzene	ND	1.0	2.000	191701	10/16/12
1,2-Dichlorobenzene	ND	1.0	2.000	191701	10/16/12

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	102	80-127	2.000	191701	10/16/12
1,2-Dichloroethane-d4	100	69-148	2.000	191701	10/16/12
Toluene-d8	99	80-120	2.000	191701	10/16/12
Bromofluorobenzene	96	80-121	2.000	191701	10/16/12

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240336	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	MID-101012	Units:	ug/L
Lab ID:	240336-002	Sampled:	10/10/12
Matrix:	Water	Received:	10/11/12

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Chloromethane	ND	2.0	2.000	191752	10/17/12
Vinyl Chloride	ND	1.0	2.000	191752	10/17/12
Bromomethane	ND	2.0	2.000	191752	10/17/12
Chloroethane	ND	2.0	2.000	191752	10/17/12
Trichlorofluoromethane	ND	2.0	2.000	191752	10/17/12
Freon 113	160	50	25.00	191701	10/16/12
1,1-Dichloroethene	ND	1.0	2.000	191752	10/17/12
Methylene Chloride	ND	40	2.000	191752	10/17/12
trans-1,2-Dichloroethene	ND	1.0	2.000	191752	10/17/12
1,1-Dichloroethane	1.5	1.0	2.000	191752	10/17/12
cis-1,2-Dichloroethene	ND	1.0	2.000	191752	10/17/12
Chloroform	ND	1.0	2.000	191752	10/17/12
1,1,1-Trichloroethane	3.6	1.0	2.000	191752	10/17/12
Carbon Tetrachloride	ND	1.0	2.000	191752	10/17/12
1,2-Dichloroethane	ND	1.0	2.000	191752	10/17/12
Trichloroethene	ND	1.0	2.000	191752	10/17/12
1,2-Dichloropropane	ND	1.0	2.000	191752	10/17/12
Bromodichloromethane	ND	1.0	2.000	191752	10/17/12
cis-1,3-Dichloropropene	ND	1.0	2.000	191752	10/17/12
trans-1,3-Dichloropropene	ND	1.0	2.000	191752	10/17/12
1,1,2-Trichloroethane	ND	1.0	2.000	191752	10/17/12
Tetrachloroethene	ND	1.0	2.000	191752	10/17/12
Dibromochloromethane	ND	1.0	2.000	191752	10/17/12
Chlorobenzene	ND	1.0	2.000	191752	10/17/12
Bromoform	ND	1.0	2.000	191752	10/17/12
1,1,2,2-Tetrachloroethane	ND	1.0	2.000	191752	10/17/12
1,3-Dichlorobenzene	ND	1.0	2.000	191752	10/17/12
1,4-Dichlorobenzene	ND	1.0	2.000	191752	10/17/12
1,2-Dichlorobenzene	ND	1.0	2.000	191752	10/17/12

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	105	80-127	2.000	191752	10/17/12
1,2-Dichloroethane-d4	97	69-148	2.000	191752	10/17/12
Toluene-d8	91	80-120	2.000	191752	10/17/12
Bromofluorobenzene	95	80-121	2.000	191752	10/17/12

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240336	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	EFF-101012	Batch#:	191658
Lab ID:	240336-003	Sampled:	10/10/12
Matrix:	Water	Received:	10/11/12
Units:	ug/L	Analyzed:	10/15/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-127
1,2-Dichloroethane-d4	96	69-148
Toluene-d8	99	80-120
Bromofluorobenzene	96	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240336	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	TB-101012	Batch#:	191658
Lab ID:	240336-004	Sampled:	10/10/12
Matrix:	Water	Received:	10/11/12
Units:	ug/L	Analyzed:	10/15/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-127
1,2-Dichloroethane-d4	93	69-148
Toluene-d8	96	80-120
Bromofluorobenzene	96	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240336	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	191658
Units:	ug/L	Analyzed:	10/15/12
Diln Fac:	1.000		

Type: BS Lab ID: QC660994

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	11.66	93	65-130
Trichloroethene	12.50	10.48	84	76-121
Chlorobenzene	12.50	11.58	93	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-127
1,2-Dichloroethane-d4	91	69-148
Toluene-d8	94	80-120
Bromofluorobenzene	95	80-121

Type: BSD Lab ID: QC660995

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	11.69	93	65-130	0	22
Trichloroethene	12.50	10.55	84	76-121	1	20
Chlorobenzene	12.50	12.09	97	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-127
1,2-Dichloroethane-d4	92	69-148
Toluene-d8	99	80-120
Bromofluorobenzene	98	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240336	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC660996	Batch#:	191658
Matrix:	Water	Analyzed:	10/15/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-127
1,2-Dichloroethane-d4	94	69-148
Toluene-d8	100	80-120
Bromofluorobenzene	96	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240336	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	191658
MSS Lab ID:	240292-007	Sampled:	10/09/12
Matrix:	Water	Received:	10/10/12
Units:	ug/L	Analyzed:	10/15/12
Diln Fac:	5.000		

Type: MS Lab ID: QC661046

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.5000	62.50	59.85	96	71-122
Trichloroethene	301.5	62.50	337.1	57 NM	69-121
Chlorobenzene	<0.5681	62.50	59.27	95	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-127
1,2-Dichloroethane-d4	98	69-148
Toluene-d8	99	80-120
Bromofluorobenzene	97	80-121

Type: MSD Lab ID: QC661047

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	62.50	63.15	101	71-122	5	21
Trichloroethene	62.50	342.3	65 NM	69-121	2	20
Chlorobenzene	62.50	60.49	97	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-127
1,2-Dichloroethane-d4	97	69-148
Toluene-d8	98	80-120
Bromofluorobenzene	96	80-121

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240336	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	191701
Units:	ug/L	Analyzed:	10/16/12
Diln Fac:	1.000		

Type: BS Lab ID: QC661168

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	25.48	102	65-130
Trichloroethene	25.00	21.95	88	76-121
Chlorobenzene	25.00	23.59	94	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-127
1,2-Dichloroethane-d4	92	69-148
Toluene-d8	97	80-120
Bromofluorobenzene	95	80-121

Type: BSD Lab ID: QC661169

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	25.49	102	65-130	0	22
Trichloroethene	25.00	20.80	83	76-121	5	20
Chlorobenzene	25.00	22.72	91	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-127
1,2-Dichloroethane-d4	93	69-148
Toluene-d8	96	80-120
Bromofluorobenzene	94	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240336	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC661170	Batch#:	191701
Matrix:	Water	Analyzed:	10/16/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-127
1,2-Dichloroethane-d4	93	69-148
Toluene-d8	97	80-120
Bromofluorobenzene	98	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240336	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	191752
Units:	ug/L	Analyzed:	10/17/12
Diln Fac:	1.000		

Type: BS Lab ID: QC661383

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	27.99	112	65-130
Trichloroethene	25.00	22.45	90	76-121
Chlorobenzene	25.00	24.05	96	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-127
1,2-Dichloroethane-d4	91	69-148
Toluene-d8	94	80-120
Bromofluorobenzene	96	80-121

Type: BSD Lab ID: QC661384

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	25.89	104	65-130	8	22
Trichloroethene	25.00	20.73	83	76-121	8	20
Chlorobenzene	25.00	22.52	90	80-120	7	20

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-127
1,2-Dichloroethane-d4	92	69-148
Toluene-d8	96	80-120
Bromofluorobenzene	95	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240336	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC661385	Batch#:	191752
Matrix:	Water	Analyzed:	10/17/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-127
1,2-Dichloroethane-d4	95	69-148
Toluene-d8	96	80-120
Bromofluorobenzene	96	80-121

ND= Not Detected
RL= Reporting Limit

Laboratory Job Number 240336

Subcontracted Products

Block Environmental

BES

BLOCK ENVIRONMENTAL SERVICES

2451 Estand Way
Pleasant Hill, CA 94523-3911
(925) 682-7200 FAX 686-0399

Static Percent Survival Aquatic Toxicity Screening Test Results for One Water Sample – Project Number: 240336

October 2012

Prepared For:
Tracy Babjar
Curtis & Tompkins, Ltd.
2323 Fifth Street
Berkeley, CA 94710

BES Sample # 29112

Prepared By:
Block Environmental Services, Inc.
2451 Estand Way
Pleasant Hill, CA 94523-3911
(925) 682-7200

October 23, 2012

N Bradbury
Nanette Bradbury, B.S.
Laboratory Manager

David Block, Ph, D.
Laboratory Director

1. INTRODUCTION

The Federal Water Pollution Control Act Amendments of 1972 (PL 92-500), the Clean Water Act (CWA) of 1977 (PL 95-217), and the Water Quality Act of 1987 (PL 100-4) explicitly state that it is the national policy that the discharge of toxic substances in toxic amounts be prohibited. Toxicity to aquatic life is one of the criteria used to gauge the hazardous potential of a discharged waste. The type of toxicity test and particular species used for testing of effluents is dictated under the framework of the National Pollutant Discharge Elimination System and falls under the jurisdiction of the local Regional Water Quality Control Board.

This report describes the procedures used and the results obtained for the static percent survival aquatic toxicity-screening test performed by Block Environmental Services (BES) for Curtis & Tompkins, Ltd.

BES is an Environmental Laboratory Accreditation Program certified laboratory (#1812).

2. MATERIALS AND METHODS

2.1 TEST ORGANISMS

- Rainbow Trout, *Oncorhynchus mykiss,* obtained from a commercial supplier.

2.2 TEST PROCEDURES

A detailed procedure for this test is outlined in DPHS-ELAP approved standard operating procedures (SOPs), which are on file at the BES laboratory. These SOPs are based upon the following references:

- Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Receiving Waters to Freshwater and Marine Organisms, 3rd Edition (EPA/600/4-85/013)

2.3 DATA ANALYSIS

Toxicity testing results will be reported as the percent of surviving organisms during the exposure period.

3. RESULTS

Client Sample Identification	BES Sample #	Sample Collection Date	Date Received	Testing Period
EFF101712	29112	10/17/2012	10/17/2012	10/18-10/22/2012

3.2 SUMMARY OF SAMPLE WATER CHEMISTRY - These values represent the water quality of the sample as received at the BES laboratory.

Water Chemistry	29112
D.O. (mg/L)	9.40
pH	8.50
Conductivity (µS/cm)	668
Salinity (ppt)	0.30
Temperature (°C)	19.80
Total Chlorine (mg/L)	1.58
Ammonia (ppm as N)	0.03
Alkalinity (mg/L as $CaCO_3$)	400
Hardness (mg/L as $CaCO_3$)	482

ND – Not Detected (Detection limit 0.03 mg/L)

3.3 *O. mykiss* TEST RESULTS

Treatment (%)	96-Hour Percent Survival
	29112
Control	100
100	100

3.4 Statistical Analysis

Test Parameter	29112
LC-50 (mg/L)	>100
95% Confidence Limits	NA
Method	NA

NA – Not Applicable

3.5 NOTES

EPA Whole Effluent Testing Guidelines (EPA/600/4-85/013) requires that all effluent samples be cooled to 4 ± 2 °C immediately upon collection in order to maintain sample integrity. The California Department of Health Services Environmental Laboratory Accreditation Program highly recommends that the temperature of all outgoing samples

designated for subcontract analyses be documented on the chain of custody in order to assess the effect of transit on sample temperature.

For the present study, the temperature of the client's sample was > 6 °C upon receipt at the BES Laboratory. The outgoing sample temperature for the sample was not recorded on the client chain of custody.

The photocopied data sheet and chain-of-custody for testing are attached. If you have any questions concerning this report please contact the BES laboratory, (925) 682 - 7200.

BLOCK ENVIRONMENTAL SERVICES

96 Hr Acute Screening Static Test Data Sheet

Client: CH2M AMEC Client ID #: GFF BES Sample #: 29112
Species: O mykiss Common Name: R trout Stock #: 9-13-12
Control Water: CFW Avg. Fish Length (mm): 21.6 Avg. Fish Weight (g): 0.05

Treatment	Survival		D.O. (mg/L)		pH		Temperature (°C)		Technician
	A	B	A	B	A	B	A	B	
Control	10	10	11.4	11.4	7.9	7.9	12.1	12.1	Tech: KE
100	10	10	11.6	11.6	8.4	8.4	11.7	11.7	Date: 10-18-12 Time: 1040
Control	10	10	10.5	10.4	7.6	7.6	11.4	11.5	Tech: KE
100	10	10	10.9	10.9	8.6	8.6	11.5	11.5	Date: 10-19-12 Time: 1140
Control	10	10	10.4	10.4	7.5	7.6	11.4	11.5	Tech: KE
100	10	10	10.8	10.8	8.6	8.6	11.5	11.4	Date: 10-20-12 Time: 1115
Control	10	10	10.3	10.2	7.6	7.6	11.6	11.6	Tech: JPC
100	10	10	10.4	10.4	8.6	8.6	11.5	11.6	Date: 10-21-12 Time: 1120
Control	10	10	10.7	10.6	7.7	7.7	11.2	11.2	Tech: JPC
100	10	10	11.0	11.0	8.5	8.5	11.1	11.1	Date: 10-22-12 Time: 1110

Subsamples taken:

	KE 0Hr		JPC 96Hr	
	Control	100	Control	100
Hardness (mg/L as $CaCO_3$)	90	482	84	474
Alkalinity (mg/L as $CaCO_3$)	56	400	66	392
Ammonia (mg/L as N)	0.03	0.03	0.39	0.16
Total Chlorine (mg/L)	0.04	1.58	0.03	0.77
Conductivity (µS/cm)	461	580	442	636
Salinity (ppt)	0.2	0.3	0.2	0.3

ND – Not Detected (detection limit 0.03 mg/L)

Notes:

Test Supervisor: N Bradbury QA/QC Check: K Eos

OAK 17597

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: MEW			DATE: 10-17-12 PAGE 1 OF 1
PROJECT NUMBER: 00148600012	LABORATORY NAME: Curtis & Tompkins	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: Randell Carrasco	LABORATORY ADDRESS: Berkeley		delivered to Block Env.
TURNAROUND TIME: standard			
SAMPLE SHIPMENT METHOD: hand	LABORATORY CONTACT: Tracy Babjar		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER: 510 204-2226		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): RDavid Pearson

ANALYSES: * Fish Toxicity

DATE	TIME	SAMPLE NUMBER	* Fish Toxicity	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
10-17-12	1230	EFF-101712	X		W					1	
		29112									

RDP

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: RDavid Pearson	10/17/12	1400	SIGNATURE: N Bradbury		
PRINTED NAME: RDavid Pearson			PRINTED NAME:		
COMPANY: Amec			COMPANY: BES		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 1

SAMPLING COMMENTS:

* 600/4-85/013

2101 Webster Street, 12th Floor
Oakland, California 94612-3066
Tel 510.663.4100 Fax 510.663.4141

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Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510) 486-0900
(510) 486-0532

Project Number: 240336
Site: MEW

ATTN: Nanette

Subcontract Laboratory:
Block Environmental
2451 Estand Way
Pleasant Hill, CA 94523
(925) 682-7200
ATTN: David Block

686-0399

Results due: Normal

Report Level: II

Please send report to: Tracy Babjar (tracy.babjar@ctberk.com)
*** Please report using Sample ID rather than C&T Lab #.

Sample ID	Sampled	Matrix	Analysis	C&T Lab #	Comments
EFF-101012	10/10 12:15	Water	BIOASSAY	240336-003	

Do Not Do Chlorinate

Client Delivered Direct

Notes:	Relinquished By:	Received By:
	Randell	
	Date/Time: 10/11/12	Date/Time: 10/15/12
	Date/Time:	Date/Time:

Signature on this form constitutes a firm Purchase Order for the services requested above.

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 240491
ANALYTICAL REPORT

AMEC Environmental & Infrastructure 2101 Webster Street Oakland, CA 94612	Project : 0014860012.02 Location : MEW Level : II

Sample ID	Lab ID
GSF1A-101612	240491-001
GSF1B1-101612	240491-002
GSF1B2-101612	240491-003
EX4-101612	240491-004
EX3-101612	240491-005
EX2-101612	240491-006
EX1-101612	240491-007
EX5-101612	240491-008
SIL15A-101612	240491-009
PB1-101612	240491-010
42B2-101612	240491-011
25B1-101612	240491-012
SIL1A-101612	240491-013
FB1-101612	240491-014
TB-101612	240491-015
SIL14A-101612	240491-016
PB2-101612	240491-017
104B1-101612	240491-018
108A-101612	240491-019
108B2-101612	240491-020
107B2-101612	240491-021
109B1-101612	240491-022
116A-101612	240491-023
FB2-101612	240491-024

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 10/29/2012

Tracy Babjar
Project Manager
(510) 204-2226

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**240491**
Client:	**AMEC Environmental & Infrastructure**
Project:	**0014860012.02**
Location:	**MEW**
Request Date:	**10/17/12**
Samples Received:	**10/17/12**

This data package contains sample and QC results for twenty four water samples, requested for the above referenced project on 10/17/12. The samples were received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):
109B1-101612 (lab # 240491-022) was analyzed with more than 1 mL of headspace in the VOA vial. 108B2-101612 (lab # 240491-020) had pH greater than 2. No other analytical problems were encountered.

240491

CHAIN-OF-CUSTODY RECORD

MEW_2012ANN_01

PROJECT NAME: MEW			DATE: 10/16/12 — PAGE 1 OF 3
PROJECT NUMBER: 0014860012	LABORATORY NAME: CURTIS AND TOMPKINS	CLIENT INFORMATION: MEW	REPORTING REQUIREMENTS:
RESULTS TO: RENDELL CAMACHO	LABORATORY ADDRESS: BERKELEY		LEVEL 2 REPORTING
TURNAROUND TIME: STANDARD			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT: TRACY BABJAR		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER: 510 204-2226		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

	DATE	TIME	SAMPLE NUMBER	VOCs (1)	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	10/16/12	1010	GSF1A-1016 12	X	40 mL VOA	W	N	HCl	Y	N	3.	
2		1021	GSF1B1-1016 12	X								
3		1032	GSF1B2-1016 12	X								
4		0952	EX4-1016 12	X								
5		0943	EX3-1016 12	X								
6		0925	EX2-1016 12	X								
7		0910	EX1-1016 12	X								
8		0858	EX5-1016 12	X								
9		1042	SIL15A-1016 12	X								

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	10/16 2012	1700	SIGNATURE:	10/16 2012	1700
PRINTED NAME: RENDELL CAMACHO			PRINTED NAME: PLENCIARO A. SALVADOR		
COMPANY: AMEC			COMPANY: CH		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 27

SAMPLING COMMENTS:

(1) VOCs by 8010MS; INCLUDING CIS-1,2 DCE & FREON113

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Oakland, California 94612-3066
Tel 510.663.4100 Fax 510.663.4141

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240491

CHAIN-OF-CUSTODY RECORD

MEW_2012ANN_D1

PROJECT NAME: MEW			DATE: 10/16/12 — PAGE 2 OF 3
PROJECT NUMBER: 0014860012	LABORATORY NAME: CURTIS AND TOMPKINS	CLIENT INFORMATION: MEW	REPORTING REQUIREMENTS:
RESULTS TO: RENDELL CAMACHO	LABORATORY ADDRESS: BERKELEY		LEVEL 2 REPORTING
TURNAROUND TIME: STANDARD			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT: TRACY BABJAR		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER: 510 204-2226		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES: VOCs (1)

	DATE	TIME	SAMPLE NUMBER	VOCs (1)	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
10	10/16/12	0930	PB1-1016 12	X	40 mL VOA	W	N	HCl	Y	N	3	
11		1015	42B2-1016 12	X						Y	6	
12		1115	25B1-1016 12	X						N	3	
13		1232	SIL1A-1016 12	X								
			~~SIL9A-10 12~~	~~X~~								
			~~SIL18A-10 12~~	~~X~~								
14	10/16/12	1000	FB1-1016 12	X	40 mL VOA							
15		0700	TB-1016 12	X							2	
16	10/16/12	1400	SIL14A-101612	X	40 mL VOA	W	N	HCl	Y	N	3	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	10/16 2012	1700	SIGNATURE:	10/16 2012	1700
PRINTED NAME: RENDELL CAMACHO			PRINTED NAME: POTENCIANO A. SALVADOR		
COMPANY: AMEC			COMPANY: CTT		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 23

SAMPLING COMMENTS:

(1) VOCs by 8010MS; INCLUDING CIS-1,2 DCE & FREON113

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Oakland, California 94612-3066
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240491

CHAIN-OF-CUSTODY RECORD

MEW_2012ANN_01

PROJECT NAME: MEW			DATE: / PAGE 3 OF 3
PROJECT NUMBER: 0014860012	LABORATORY NAME: CURTIS AND TOMPKINS	CLIENT INFORMATION: MEW	REPORTING REQUIREMENTS:
RESULTS TO: RENDELL CAMACHO	LABORATORY ADDRESS: BERKELEY		LEVEL 2 REPORTING
TURNAROUND TIME: STANDARD			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT: TRACY BABJAR		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER: 510 204-2226		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): [signature]

ANALYSES

	DATE	TIME	SAMPLE NUMBER	VOCs (1)	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
17	10/16/12	950	PB2-10 16 12	X	40 mL VOA	W	N	HCl	Y	N	3	See Sampling Comments Below
18		1015	104B1-10 16 12	X								
19		1109	108A-10 16 12	X								
20		1015	108B2-10 16 12	X								
21		1335	107B2-10 16 12	X								
22		1415	109B1-10 16 12	X								
23		1455	116A-10 16 12	X								
	—	—	[illegible]	X								
	—	—	[illegible]									
24	10/16/12	1500	FB2-10 16 12	X								
			[illegible]									

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature]	10/16 2012	1708	SIGNATURE: [signature]	10/16 2012	1700
PRINTED NAME: RENDELL CAMACHO			PRINTED NAME: POTENCIANO A. SALVADOR		
COMPANY: AMEC			COMPANY: CTT		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 24

SAMPLING COMMENTS:

(1) VOCs by 8010MS; INCLUDING CIS-1,2 DCE & FREON113

2101 Webster Street, 12th Floor
Oakland, California 94612-3066
Tel 510.663.4100 Fax 510.663.4141

amec

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # L09 240491 Date Received 10/17/12 Number of coolers 1
Client AMEC Project MEW

Date Opened 10/17 By (print) P.S. (sign) [signature]
Date Logged in ↓ By (print) [illegible] (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc) _____ YES NO
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO N/A
3. Were custody papers dry and intact when received? _____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 4.1

☒ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ YES NO
10. Are there any missing / extra samples? _____ YES NO
11. Are samples in the appropriate containers for indicated tests? _____ YES NO
12. Are sample labels present, in good condition and complete? _____ YES NO
13. Do the sample labels agree with custody papers? _____ YES NO
14. Was sufficient amount of sample sent for tests requested? _____ YES NO
15. Are the samples appropriately preserved? _____ YES NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO N/A
17. Did you document your preservative check? _____ YES NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO N/A
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Rev 10, 11/11

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	GSF1A-101612	Batch#:	191933
Lab ID:	240491-001	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L	Analyzed:	10/22/12
Diln Fac:	10.00		

Analyte	Result	RL
Chloromethane	ND	10
Vinyl Chloride	ND	5.0
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	10
Freon 113	20	20
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	200
trans-1,2-Dichloroethene	7.4	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	190	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	500	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	89	80-127
1,2-Dichloroethane-d4	90	69-148
Toluene-d8	99	80-120
Bromofluorobenzene	93	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	GSF1B1-101612	Batch#:	191933
Lab ID:	240491-002	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L	Analyzed:	10/22/12
Diln Fac:	33.33		

Analyte	Result	RL
Chloromethane	ND	33
Vinyl Chloride	ND	17
Bromomethane	ND	33
Chloroethane	ND	33
Trichlorofluoromethane	ND	33
Freon 113	280	67
1,1-Dichloroethene	ND	17
Methylene Chloride	ND	670
trans-1,2-Dichloroethene	ND	17
1,1-Dichloroethane	ND	17
cis-1,2-Dichloroethene	29	17
Chloroform	ND	17
1,1,1-Trichloroethane	ND	17
Carbon Tetrachloride	ND	17
1,2-Dichloroethane	ND	17
Trichloroethene	1,900	17
1,2-Dichloropropane	ND	17
Bromodichloromethane	ND	17
cis-1,3-Dichloropropene	ND	17
trans-1,3-Dichloropropene	ND	17
1,1,2-Trichloroethane	ND	17
Tetrachloroethene	ND	17
Dibromochloromethane	ND	17
Chlorobenzene	ND	17
Bromoform	ND	17
1,1,2,2-Tetrachloroethane	ND	17
1,3-Dichlorobenzene	ND	17
1,4-Dichlorobenzene	ND	17
1,2-Dichlorobenzene	ND	17

Surrogate	%REC	Limits
Dibromofluoromethane	90	80-127
1,2-Dichloroethane-d4	92	69-148
Toluene-d8	99	80-120
Bromofluorobenzene	95	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	GSF1B2-101612	Diln Fac:	71.43
Lab ID:	240491-003	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Chloromethane	ND	71	191994	10/24/12
Vinyl Chloride	ND	36	191994	10/24/12
Bromomethane	ND	71	192071	10/25/12
Chloroethane	ND	71	191994	10/24/12
Trichlorofluoromethane	ND	71	191994	10/24/12
Freon 113	190	140	191994	10/24/12
1,1-Dichloroethene	ND	36	191994	10/24/12
Methylene Chloride	ND	1,400	191994	10/24/12
trans-1,2-Dichloroethene	ND	36	191994	10/24/12
1,1-Dichloroethane	ND	36	191994	10/24/12
cis-1,2-Dichloroethene	ND	36	191994	10/24/12
Chloroform	ND	36	191994	10/24/12
1,1,1-Trichloroethane	ND	36	191994	10/24/12
Carbon Tetrachloride	ND	36	191994	10/24/12
1,2-Dichloroethane	ND	36	191994	10/24/12
Trichloroethene	4,300	36	191994	10/24/12
1,2-Dichloropropane	ND	36	191994	10/24/12
Bromodichloromethane	ND	36	191994	10/24/12
cis-1,3-Dichloropropene	ND	36	191994	10/24/12
trans-1,3-Dichloropropene	ND	36	191994	10/24/12
1,1,2-Trichloroethane	ND	36	191994	10/24/12
Tetrachloroethene	ND	36	191994	10/24/12
Dibromochloromethane	ND	36	191994	10/24/12
Chlorobenzene	ND	36	191994	10/24/12
Bromoform	ND	36	191994	10/24/12
1,1,2,2-Tetrachloroethane	ND	36	191994	10/24/12
1,3-Dichlorobenzene	ND	36	191994	10/24/12
1,4-Dichlorobenzene	ND	36	191994	10/24/12
1,2-Dichlorobenzene	ND	36	191994	10/24/12

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	116	80-127	191994	10/24/12
1,2-Dichloroethane-d4	107	69-148	191994	10/24/12
Toluene-d8	101	80-120	191994	10/24/12
Bromofluorobenzene	96	80-121	191994	10/24/12

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	EX4-101612	Diln Fac:	6.250
Lab ID:	240491-004	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Chloromethane	ND	6.3	191994	10/24/12
Vinyl Chloride	ND	3.1	191994	10/24/12
Bromomethane	ND	6.3	192071	10/25/12
Chloroethane	ND	6.3	191994	10/24/12
Trichlorofluoromethane	ND	6.3	191994	10/24/12
Freon 113	ND	13	191994	10/24/12
1,1-Dichloroethene	ND	3.1	191994	10/24/12
Methylene Chloride	ND	130	191994	10/24/12
trans-1,2-Dichloroethene	ND	3.1	191994	10/24/12
1,1-Dichloroethane	ND	3.1	191994	10/24/12
cis-1,2-Dichloroethene	68	3.1	191994	10/24/12
Chloroform	ND	3.1	191994	10/24/12
1,1,1-Trichloroethane	ND	3.1	191994	10/24/12
Carbon Tetrachloride	ND	3.1	191994	10/24/12
1,2-Dichloroethane	ND	3.1	191994	10/24/12
Trichloroethene	430	3.1	191994	10/24/12
1,2-Dichloropropane	ND	3.1	191994	10/24/12
Bromodichloromethane	ND	3.1	191994	10/24/12
cis-1,3-Dichloropropene	ND	3.1	191994	10/24/12
trans-1,3-Dichloropropene	ND	3.1	191994	10/24/12
1,1,2-Trichloroethane	ND	3.1	191994	10/24/12
Tetrachloroethene	ND	3.1	191994	10/24/12
Dibromochloromethane	ND	3.1	191994	10/24/12
Chlorobenzene	ND	3.1	191994	10/24/12
Bromoform	ND	3.1	191994	10/24/12
1,1,2,2-Tetrachloroethane	ND	3.1	191994	10/24/12
1,3-Dichlorobenzene	ND	3.1	191994	10/24/12
1,4-Dichlorobenzene	ND	3.1	191994	10/24/12
1,2-Dichlorobenzene	ND	3.1	191994	10/24/12

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	113	80-127	191994	10/24/12
1,2-Dichloroethane-d4	108	69-148	191994	10/24/12
Toluene-d8	101	80-120	191994	10/24/12
Bromofluorobenzene	95	80-121	191994	10/24/12

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	EX3-101612	Batch#:	191926
Lab ID:	240491-005	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L	Analyzed:	10/22/12
Diln Fac:	5.000		

Analyte	Result	RL
Chloromethane	ND	5.0
Vinyl Chloride	ND	2.5
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
Freon 113	ND	10
1,1-Dichloroethene	ND	2.5
Methylene Chloride	ND	100
trans-1,2-Dichloroethene	ND	2.5
1,1-Dichloroethane	ND	2.5
cis-1,2-Dichloroethene	100	2.5
Chloroform	ND	2.5
1,1,1-Trichloroethane	ND	2.5
Carbon Tetrachloride	ND	2.5
1,2-Dichloroethane	ND	2.5
Trichloroethene	380	2.5
1,2-Dichloropropane	ND	2.5
Bromodichloromethane	ND	2.5
cis-1,3-Dichloropropene	ND	2.5
trans-1,3-Dichloropropene	ND	2.5
1,1,2-Trichloroethane	ND	2.5
Tetrachloroethene	ND	2.5
Dibromochloromethane	ND	2.5
Chlorobenzene	ND	2.5
Bromoform	ND	2.5
1,1,2,2-Tetrachloroethane	ND	2.5
1,3-Dichlorobenzene	ND	2.5
1,4-Dichlorobenzene	ND	2.5
1,2-Dichlorobenzene	ND	2.5

Surrogate	%REC	Limits
Dibromofluoromethane	126	80-127
1,2-Dichloroethane-d4	96	69-148
Toluene-d8	95	80-120
Bromofluorobenzene	102	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	EX2-101612	Batch#:	191932
Lab ID:	240491-006	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L	Analyzed:	10/22/12
Diln Fac:	8.333		

Analyte	Result	RL
Chloromethane	ND	8.3
Vinyl Chloride	18	4.2
Bromomethane	ND	8.3
Chloroethane	ND	8.3
Trichlorofluoromethane	ND	8.3
Freon 113	25	17
1,1-Dichloroethene	8.7	4.2
Methylene Chloride	ND	170
trans-1,2-Dichloroethene	6.1	4.2
1,1-Dichloroethane	6.1	4.2
cis-1,2-Dichloroethene	460	4.2
Chloroform	ND	4.2
1,1,1-Trichloroethane	6.7	4.2
Carbon Tetrachloride	ND	4.2
1,2-Dichloroethane	ND	4.2
Trichloroethene	730	4.2
1,2-Dichloropropane	ND	4.2
Bromodichloromethane	ND	4.2
cis-1,3-Dichloropropene	ND	4.2
trans-1,3-Dichloropropene	ND	4.2
1,1,2-Trichloroethane	ND	4.2
Tetrachloroethene	ND	4.2
Dibromochloromethane	ND	4.2
Chlorobenzene	ND	4.2
Bromoform	ND	4.2
1,1,2,2-Tetrachloroethane	ND	4.2
1,3-Dichlorobenzene	ND	4.2
1,4-Dichlorobenzene	ND	4.2
1,2-Dichlorobenzene	ND	4.2

Surrogate	%REC	Limits
Dibromofluoromethane	110	80-127
1,2-Dichloroethane-d4	114	69-148
Toluene-d8	100	80-120
Bromofluorobenzene	106	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	EX1-101612	Batch#:	191986
Lab ID:	240491-007	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L	Analyzed:	10/23/12
Diln Fac:	33.33		

Analyte	Result	RL
Chloromethane	ND	33
Vinyl Chloride	67	17
Bromomethane	ND	33
Chloroethane	ND	33
Trichlorofluoromethane	ND	33
Freon 113	150	67
1,1-Dichloroethene	ND	17
Methylene Chloride	ND	670
trans-1,2-Dichloroethene	ND	17
1,1-Dichloroethane	ND	17
cis-1,2-Dichloroethene	870	17
Chloroform	ND	17
1,1,1-Trichloroethane	ND	17
Carbon Tetrachloride	ND	17
1,2-Dichloroethane	ND	17
Trichloroethene	2,500	17
1,2-Dichloropropane	ND	17
Bromodichloromethane	ND	17
cis-1,3-Dichloropropene	ND	17
trans-1,3-Dichloropropene	ND	17
1,1,2-Trichloroethane	ND	17
Tetrachloroethene	49	17
Dibromochloromethane	ND	17
Chlorobenzene	ND	17
Bromoform	ND	17
1,1,2,2-Tetrachloroethane	ND	17
1,3-Dichlorobenzene	ND	17
1,4-Dichlorobenzene	ND	17
1,2-Dichlorobenzene	ND	17

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-127
1,2-Dichloroethane-d4	115	69-148
Toluene-d8	100	80-120
Bromofluorobenzene	108	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	EX5-101612	Batch#:	191932
Lab ID:	240491-008	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L	Analyzed:	10/22/12
Diln Fac:	25.00		

Analyte	Result	RL
Chloromethane	ND	25
Vinyl Chloride	68	13
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
Freon 113	140	50
1,1-Dichloroethene	ND	13
Methylene Chloride	ND	500
trans-1,2-Dichloroethene	ND	13
1,1-Dichloroethane	ND	13
cis-1,2-Dichloroethene	850	13
Chloroform	ND	13
1,1,1-Trichloroethane	ND	13
Carbon Tetrachloride	ND	13
1,2-Dichloroethane	ND	13
Trichloroethene	2,300	13
1,2-Dichloropropane	ND	13
Bromodichloromethane	ND	13
cis-1,3-Dichloropropene	ND	13
trans-1,3-Dichloropropene	ND	13
1,1,2-Trichloroethane	ND	13
Tetrachloroethene	49	13
Dibromochloromethane	ND	13
Chlorobenzene	ND	13
Bromoform	ND	13
1,1,2,2-Tetrachloroethane	ND	13
1,3-Dichlorobenzene	ND	13
1,4-Dichlorobenzene	ND	13
1,2-Dichlorobenzene	ND	13

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-127
1,2-Dichloroethane-d4	114	69-148
Toluene-d8	99	80-120
Bromofluorobenzene	107	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	SIL15A-101612	Batch#:	191932
Lab ID:	240491-009	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L	Analyzed:	10/22/12
Diln Fac:	5.000		

Analyte	Result	RL
Chloromethane	ND	5.0
Vinyl Chloride	ND	2.5
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
Freon 113	21	10
1,1-Dichloroethene	7.7	2.5
Methylene Chloride	ND	100
trans-1,2-Dichloroethene	3.1	2.5
1,1-Dichloroethane	6.7	2.5
cis-1,2-Dichloroethene	210	2.5
Chloroform	ND	2.5
1,1,1-Trichloroethane	6.6	2.5
Carbon Tetrachloride	ND	2.5
1,2-Dichloroethane	ND	2.5
Trichloroethene	350	2.5
1,2-Dichloropropane	ND	2.5
Bromodichloromethane	ND	2.5
cis-1,3-Dichloropropene	ND	2.5
trans-1,3-Dichloropropene	ND	2.5
1,1,2-Trichloroethane	ND	2.5
Tetrachloroethene	ND	2.5
Dibromochloromethane	ND	2.5
Chlorobenzene	ND	2.5
Bromoform	ND	2.5
1,1,2,2-Tetrachloroethane	ND	2.5
1,3-Dichlorobenzene	ND	2.5
1,4-Dichlorobenzene	ND	2.5
1,2-Dichlorobenzene	ND	2.5

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-127
1,2-Dichloroethane-d4	113	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	106	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	PB1-101612	Batch#:	191932
Lab ID:	240491-010	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L	Analyzed:	10/22/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-127
1,2-Dichloroethane-d4	111	69-148
Toluene-d8	97	80-120
Bromofluorobenzene	105	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	42B2-101612	Batch#:	191932
Lab ID:	240491-011	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L	Analyzed:	10/22/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	0.5	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	24	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-127
1,2-Dichloroethane-d4	111	69-148
Toluene-d8	100	80-120
Bromofluorobenzene	102	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	25B1-101612	Batch#:	191932
Lab ID:	240491-012	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L	Analyzed:	10/22/12
Diln Fac:	5.000		

Analyte	Result	RL
Chloromethane	ND	5.0
Vinyl Chloride	ND	2.5
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
Freon 113	ND	10
1,1-Dichloroethene	2.5	2.5
Methylene Chloride	ND	100
trans-1,2-Dichloroethene	ND	2.5
1,1-Dichloroethane	ND	2.5
cis-1,2-Dichloroethene	35	2.5
Chloroform	ND	2.5
1,1,1-Trichloroethane	ND	2.5
Carbon Tetrachloride	ND	2.5
1,2-Dichloroethane	ND	2.5
Trichloroethene	280	2.5
1,2-Dichloropropane	ND	2.5
Bromodichloromethane	ND	2.5
cis-1,3-Dichloropropene	ND	2.5
trans-1,3-Dichloropropene	ND	2.5
1,1,2-Trichloroethane	ND	2.5
Tetrachloroethene	ND	2.5
Dibromochloromethane	ND	2.5
Chlorobenzene	ND	2.5
Bromoform	ND	2.5
1,1,2,2-Tetrachloroethane	ND	2.5
1,3-Dichlorobenzene	ND	2.5
1,4-Dichlorobenzene	ND	2.5
1,2-Dichlorobenzene	ND	2.5

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-127
1,2-Dichloroethane-d4	114	69-148
Toluene-d8	99	80-120
Bromofluorobenzene	104	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	SIL1A-101612	Batch#:	191932
Lab ID:	240491-013	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L	Analyzed:	10/22/12
Diln Fac:	25.00		

Analyte	Result	RL
Chloromethane	ND	25
Vinyl Chloride	ND	13
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
Freon 113	ND	50
1,1-Dichloroethene	ND	13
Methylene Chloride	ND	500
trans-1,2-Dichloroethene	15	13
1,1-Dichloroethane	ND	13
cis-1,2-Dichloroethene	1,200	13
Chloroform	ND	13
1,1,1-Trichloroethane	ND	13
Carbon Tetrachloride	ND	13
1,2-Dichloroethane	ND	13
Trichloroethene	1,100	13
1,2-Dichloropropane	ND	13
Bromodichloromethane	ND	13
cis-1,3-Dichloropropene	ND	13
trans-1,3-Dichloropropene	ND	13
1,1,2-Trichloroethane	ND	13
Tetrachloroethene	25	13
Dibromochloromethane	ND	13
Chlorobenzene	ND	13
Bromoform	ND	13
1,1,2,2-Tetrachloroethane	ND	13
1,3-Dichlorobenzene	ND	13
1,4-Dichlorobenzene	ND	13
1,2-Dichlorobenzene	ND	13

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-127
1,2-Dichloroethane-d4	116	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	105	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	FB1-101612	Batch#:	191986
Lab ID:	240491-014	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L	Analyzed:	10/23/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-127
1,2-Dichloroethane-d4	109	69-148
Toluene-d8	99	80-120
Bromofluorobenzene	105	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	TB-101612	Batch#:	191986
Lab ID:	240491-015	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L	Analyzed:	10/23/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-127
1,2-Dichloroethane-d4	112	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	108	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	SIL14A-101612	Batch#:	192032
Lab ID:	240491-016	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L	Analyzed:	10/24/12
Diln Fac:	62.50		

Analyte	Result	RL
Chloromethane	ND	63
Vinyl Chloride	1,700	31
Bromomethane	ND	63
Chloroethane	ND	63
Trichlorofluoromethane	ND	63
Freon 113	ND	130
1,1-Dichloroethene	ND	31
Methylene Chloride	ND	1,300
trans-1,2-Dichloroethene	ND	31
1,1-Dichloroethane	ND	31
cis-1,2-Dichloroethene	4,500	31
Chloroform	ND	31
1,1,1-Trichloroethane	ND	31
Carbon Tetrachloride	ND	31
1,2-Dichloroethane	ND	31
Trichloroethene	1,400	31
1,2-Dichloropropane	ND	31
Bromodichloromethane	ND	31
cis-1,3-Dichloropropene	ND	31
trans-1,3-Dichloropropene	ND	31
1,1,2-Trichloroethane	ND	31
Tetrachloroethene	ND	31
Dibromochloromethane	ND	31
Chlorobenzene	ND	31
Bromoform	ND	31
1,1,2,2-Tetrachloroethane	ND	31
1,3-Dichlorobenzene	ND	31
1,4-Dichlorobenzene	ND	31
1,2-Dichlorobenzene	ND	31

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-127
1,2-Dichloroethane-d4	110	69-148
Toluene-d8	93	80-120
Bromofluorobenzene	99	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	PB2-101612	Batch#:	191986
Lab ID:	240491-017	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L	Analyzed:	10/23/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-127
1,2-Dichloroethane-d4	113	69-148
Toluene-d8	99	80-120
Bromofluorobenzene	105	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	104B1-101612	Diln Fac:	2.000
Lab ID:	240491-018	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Chloromethane	ND	2.0	192071	10/25/12
Vinyl Chloride	ND	1.0	192071	10/25/12
Bromomethane	ND	2.0	192071	10/25/12
Chloroethane	ND	2.0	192071	10/25/12
Trichlorofluoromethane	ND	2.0	192071	10/25/12
Freon 113	ND	4.0	192023	10/24/12
1,1-Dichloroethene	1.5	1.0	192071	10/25/12
Methylene Chloride	ND	40	192071	10/25/12
trans-1,2-Dichloroethene	ND	1.0	192071	10/25/12
1,1-Dichloroethane	ND	1.0	192071	10/25/12
cis-1,2-Dichloroethene	10	1.0	192071	10/25/12
Chloroform	ND	1.0	192071	10/25/12
1,1,1-Trichloroethane	ND	1.0	192071	10/25/12
Carbon Tetrachloride	ND	1.0	192071	10/25/12
1,2-Dichloroethane	ND	1.0	192071	10/25/12
Trichloroethene	110	1.0	192071	10/25/12
1,2-Dichloropropane	ND	1.0	192071	10/25/12
Bromodichloromethane	ND	1.0	192071	10/25/12
cis-1,3-Dichloropropene	ND	1.0	192071	10/25/12
trans-1,3-Dichloropropene	ND	1.0	192071	10/25/12
1,1,2-Trichloroethane	ND	1.0	192071	10/25/12
Tetrachloroethene	ND	1.0	192071	10/25/12
Dibromochloromethane	ND	1.0	192071	10/25/12
Chlorobenzene	ND	1.0	192071	10/25/12
Bromoform	ND	1.0	192071	10/25/12
1,1,2,2-Tetrachloroethane	ND	1.0	192071	10/25/12
1,3-Dichlorobenzene	ND	1.0	192071	10/25/12
1,4-Dichlorobenzene	ND	1.0	192071	10/25/12
1,2-Dichlorobenzene	ND	1.0	192071	10/25/12

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	92	80-127	192071	10/25/12
1,2-Dichloroethane-d4	102	69-148	192071	10/25/12
Toluene-d8	97	80-120	192071	10/25/12
Bromofluorobenzene	94	80-121	192071	10/25/12

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	108A-101612	Units:	ug/L
Lab ID:	240491-019	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Chloromethane	ND	2.0	2.000	191994	10/23/12
Vinyl Chloride	ND	1.0	2.000	191994	10/23/12
Bromomethane	ND	10	10.00	192023	10/24/12
Chloroethane	ND	2.0	2.000	191994	10/23/12
Trichlorofluoromethane	ND	2.0	2.000	191994	10/23/12
Freon 113	ND	4.0	2.000	191994	10/23/12
1,1-Dichloroethene	ND	1.0	2.000	191994	10/23/12
Methylene Chloride	ND	40	2.000	191994	10/23/12
trans-1,2-Dichloroethene	ND	1.0	2.000	191994	10/23/12
1,1-Dichloroethane	ND	1.0	2.000	191994	10/23/12
cis-1,2-Dichloroethene	3.0	1.0	2.000	191994	10/23/12
Chloroform	ND	1.0	2.000	191994	10/23/12
1,1,1-Trichloroethane	ND	1.0	2.000	191994	10/23/12
Carbon Tetrachloride	ND	1.0	2.000	191994	10/23/12
1,2-Dichloroethane	ND	1.0	2.000	191994	10/23/12
Trichloroethene	630	5.0	10.00	192023	10/24/12
1,2-Dichloropropane	ND	1.0	2.000	191994	10/23/12
Bromodichloromethane	ND	1.0	2.000	191994	10/23/12
cis-1,3-Dichloropropene	ND	1.0	2.000	191994	10/23/12
trans-1,3-Dichloropropene	ND	1.0	2.000	191994	10/23/12
1,1,2-Trichloroethane	ND	1.0	2.000	191994	10/23/12
Tetrachloroethene	ND	1.0	2.000	191994	10/23/12
Dibromochloromethane	ND	1.0	2.000	191994	10/23/12
Chlorobenzene	ND	1.0	2.000	191994	10/23/12
Bromoform	ND	1.0	2.000	191994	10/23/12
1,1,2,2-Tetrachloroethane	ND	1.0	2.000	191994	10/23/12
1,3-Dichlorobenzene	ND	1.0	2.000	191994	10/23/12
1,4-Dichlorobenzene	ND	1.0	2.000	191994	10/23/12
1,2-Dichlorobenzene	ND	1.0	2.000	191994	10/23/12

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	117	80-127	2.000	191994	10/23/12
1,2-Dichloroethane-d4	107	69-148	2.000	191994	10/23/12
Toluene-d8	102	80-120	2.000	191994	10/23/12
Bromofluorobenzene	96	80-121	2.000	191994	10/23/12

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	108B2-101612	Batch#:	192071
Lab ID:	240491-020	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L	Analyzed:	10/25/12
Diln Fac:	10.00		

Analyte	Result	RL
Chloromethane	ND	10
Vinyl Chloride	ND	5.0
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	10
Freon 113	ND	20
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	200
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	680	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-127
1,2-Dichloroethane-d4	104	69-148
Toluene-d8	103	80-120
Bromofluorobenzene	97	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	107B2-101612	Batch#:	192071
Lab ID:	240491-021	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L	Analyzed:	10/25/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	1.8	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	61	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-127
1,2-Dichloroethane-d4	104	69-148
Toluene-d8	100	80-120
Bromofluorobenzene	97	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	109B1-101612	Units:	ug/L
Lab ID:	240491-022	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Chloromethane	ND	8.3	8.333	191994	10/23/12
Vinyl Chloride	ND	4.2	8.333	191994	10/23/12
Bromomethane	ND	10	10.00	192071	10/25/12
Chloroethane	ND	8.3	8.333	191994	10/23/12
Trichlorofluoromethane	ND	8.3	8.333	191994	10/23/12
Freon 113	25	17	8.333	191994	10/23/12
1,1-Dichloroethene	ND	4.2	8.333	191994	10/23/12
Methylene Chloride	ND	170	8.333	191994	10/23/12
trans-1,2-Dichloroethene	ND	4.2	8.333	191994	10/23/12
1,1-Dichloroethane	ND	4.2	8.333	191994	10/23/12
cis-1,2-Dichloroethene	10	4.2	8.333	191994	10/23/12
Chloroform	ND	4.2	8.333	191994	10/23/12
1,1,1-Trichloroethane	ND	4.2	8.333	191994	10/23/12
Carbon Tetrachloride	ND	4.2	8.333	191994	10/23/12
1,2-Dichloroethane	ND	4.2	8.333	191994	10/23/12
Trichloroethene	1,100	13	25.00	192119	10/26/12
1,2-Dichloropropane	ND	4.2	8.333	191994	10/23/12
Bromodichloromethane	ND	4.2	8.333	191994	10/23/12
cis-1,3-Dichloropropene	ND	4.2	8.333	191994	10/23/12
trans-1,3-Dichloropropene	ND	4.2	8.333	191994	10/23/12
1,1,2-Trichloroethane	ND	4.2	8.333	191994	10/23/12
Tetrachloroethene	ND	4.2	8.333	191994	10/23/12
Dibromochloromethane	ND	4.2	8.333	191994	10/23/12
Chlorobenzene	ND	4.2	8.333	191994	10/23/12
Bromoform	ND	4.2	8.333	191994	10/23/12
1,1,2,2-Tetrachloroethane	ND	4.2	8.333	191994	10/23/12
1,3-Dichlorobenzene	ND	4.2	8.333	191994	10/23/12
1,4-Dichlorobenzene	ND	4.2	8.333	191994	10/23/12
1,2-Dichlorobenzene	ND	4.2	8.333	191994	10/23/12

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	117	80-127	8.333	191994	10/23/12
1,2-Dichloroethane-d4	108	69-148	8.333	191994	10/23/12
Toluene-d8	101	80-120	8.333	191994	10/23/12
Bromofluorobenzene	94	80-121	8.333	191994	10/23/12

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	116A-101612	Diln Fac:	625.0
Lab ID:	240491-023	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Chloromethane	ND	630	191994	10/23/12
Vinyl Chloride	ND	310	191994	10/23/12
Bromomethane	ND	630	192071	10/25/12
Chloroethane	ND	630	191994	10/23/12
Trichlorofluoromethane	ND	630	191994	10/23/12
Freon 113	1,600	1,300	191994	10/23/12
1,1-Dichloroethene	ND	310	191994	10/23/12
Methylene Chloride	ND	13,000	191994	10/23/12
trans-1,2-Dichloroethene	ND	310	191994	10/23/12
1,1-Dichloroethane	ND	310	191994	10/23/12
cis-1,2-Dichloroethene	4,900	310	191994	10/23/12
Chloroform	ND	310	191994	10/23/12
1,1,1-Trichloroethane	ND	310	191994	10/23/12
Carbon Tetrachloride	ND	310	191994	10/23/12
1,2-Dichloroethane	ND	310	191994	10/23/12
Trichloroethene	53,000	310	191994	10/23/12
1,2-Dichloropropane	ND	310	191994	10/23/12
Bromodichloromethane	ND	310	191994	10/23/12
cis-1,3-Dichloropropene	ND	310	191994	10/23/12
trans-1,3-Dichloropropene	ND	310	191994	10/23/12
1,1,2-Trichloroethane	ND	310	191994	10/23/12
Tetrachloroethene	ND	310	191994	10/23/12
Dibromochloromethane	ND	310	191994	10/23/12
Chlorobenzene	ND	310	191994	10/23/12
Bromoform	ND	310	191994	10/23/12
1,1,2,2-Tetrachloroethane	ND	310	191994	10/23/12
1,3-Dichlorobenzene	ND	310	191994	10/23/12
1,4-Dichlorobenzene	ND	310	191994	10/23/12
1,2-Dichlorobenzene	ND	310	191994	10/23/12

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	114	80-127	191994	10/23/12
1,2-Dichloroethane-d4	107	69-148	191994	10/23/12
Toluene-d8	101	80-120	191994	10/23/12
Bromofluorobenzene	96	80-121	191994	10/23/12

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	FB2-101612	Batch#:	191942
Lab ID:	240491-024	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L	Analyzed:	10/22/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-127
1,2-Dichloroethane-d4	102	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	95	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC662074	Batch#:	191926
Matrix:	Water	Analyzed:	10/22/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	125	80-127
1,2-Dichloroethane-d4	96	69-148
Toluene-d8	94	80-120
Bromofluorobenzene	100	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	191926
Units:	ug/L	Analyzed:	10/22/12
Diln Fac:	1.000		

Type: BS Lab ID: QC662075

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	17.31	87	65-130
Trichloroethene	20.00	19.02	95	76-121
Chlorobenzene	20.00	19.94	100	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	117	80-127
1,2-Dichloroethane-d4	93	69-148
Toluene-d8	93	80-120
Bromofluorobenzene	96	80-121

Type: BSD Lab ID: QC662076

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	18.48	92	65-130	7	22
Trichloroethene	20.00	20.06	100	76-121	5	20
Chlorobenzene	20.00	20.66	103	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	120	80-127
1,2-Dichloroethane-d4	92	69-148
Toluene-d8	94	80-120
Bromofluorobenzene	97	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	191932
Units:	ug/L	Analyzed:	10/22/12
Diln Fac:	1.000		

Type: BS Lab ID: QC662098

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	23.63	95	65-130
Trichloroethene	25.00	24.62	98	76-121
Chlorobenzene	25.00	26.31	105	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-127
1,2-Dichloroethane-d4	99	69-148
Toluene-d8	99	80-120
Bromofluorobenzene	103	80-121

Type: BSD Lab ID: QC662099

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	23.53	94	65-130	0	22
Trichloroethene	25.00	25.16	101	76-121	2	20
Chlorobenzene	25.00	26.22	105	80-120	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-127
1,2-Dichloroethane-d4	101	69-148
Toluene-d8	98	80-120
Bromofluorobenzene	104	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC662100	Batch#:	191932
Matrix:	Water	Analyzed:	10/22/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-127
1,2-Dichloroethane-d4	112	69-148
Toluene-d8	99	80-120
Bromofluorobenzene	103	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	191933
Units:	ug/L	Analyzed:	10/22/12
Diln Fac:	1.000		

Type: BS Lab ID: QC662101

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	23.78	95	65-130
Trichloroethene	25.00	23.06	92	76-121
Chlorobenzene	25.00	25.12	100	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-127
1,2-Dichloroethane-d4	103	69-148
Toluene-d8	96	80-120
Bromofluorobenzene	98	80-121

Type: BSD Lab ID: QC662102

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	21.83	87	65-130	9	22
Trichloroethene	25.00	20.89	84	76-121	10	20
Chlorobenzene	25.00	23.96	96	80-120	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-127
1,2-Dichloroethane-d4	97	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	100	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC662103	Batch#:	191933
Matrix:	Water	Analyzed:	10/22/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-127
1,2-Dichloroethane-d4	97	69-148
Toluene-d8	96	80-120
Bromofluorobenzene	96	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	191942
Units:	ug/L	Analyzed:	10/22/12
Diln Fac:	1.000		

Type: BS Lab ID: QC662135

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	9.452	76	65-130
Trichloroethene	12.50	11.48	92	76-121
Chlorobenzene	12.50	12.20	98	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-127
1,2-Dichloroethane-d4	105	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	95	80-121

Type: BSD Lab ID: QC662136

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	9.285	74	65-130	2	22
Trichloroethene	12.50	10.96	88	76-121	5	20
Chlorobenzene	12.50	11.76	94	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-127
1,2-Dichloroethane-d4	105	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	94	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC662137	Batch#:	191942
Matrix:	Water	Analyzed:	10/22/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-127
1,2-Dichloroethane-d4	102	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	95	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	191926
MSS Lab ID:	240489-017	Sampled:	10/17/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L	Analyzed:	10/22/12
Diln Fac:	1.000		

Type: MS Lab ID: QC662153

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	1.097	20.00	18.62	88	71-122
Trichloroethene	94.34	20.00	106.5 >LR	61 NM	69-121
Chlorobenzene	<0.1000	20.00	20.39	102	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	119	80-127
1,2-Dichloroethane-d4	95	69-148
Toluene-d8	94	80-120
Bromofluorobenzene	97	80-121

Type: MSD Lab ID: QC662154

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	17.87	84	71-122	4	21
Trichloroethene	20.00	103.8 >LR	47 NM	69-121	NC	20
Chlorobenzene	20.00	20.12	101	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	118	80-127
1,2-Dichloroethane-d4	95	69-148
Toluene-d8	94	80-120
Bromofluorobenzene	96	80-121

NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	42B2-101612	Batch#:	191932
MSS Lab ID:	240491-011	Sampled:	10/16/12
Matrix:	Water	Received:	10/17/12
Units:	ug/L	Analyzed:	10/22/12
Diln Fac:	1.000		

Type: MS Lab ID: QC662166

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	0.3659	25.00	27.44	108	71-122
Trichloroethene	24.44	25.00	46.61	89	69-121
Chlorobenzene	<0.1296	25.00	26.01	104	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-127
1,2-Dichloroethane-d4	104	69-148
Toluene-d8	99	80-120
Bromofluorobenzene	105	80-121

Type: MSD Lab ID: QC662167

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	26.15	103	71-122	5	21
Trichloroethene	25.00	45.08	83	69-121	3	20
Chlorobenzene	25.00	25.74	103	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-127
1,2-Dichloroethane-d4	106	69-148
Toluene-d8	99	80-120
Bromofluorobenzene	103	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	191986
Units:	ug/L	Analyzed:	10/23/12
Diln Fac:	1.000		

Type: BS Lab ID: QC662309

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	23.28	93	65-130
Trichloroethene	25.00	25.44	102	76-121
Chlorobenzene	25.00	26.35	105	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-127
1,2-Dichloroethane-d4	103	69-148
Toluene-d8	98	80-120
Bromofluorobenzene	104	80-121

Type: BSD Lab ID: QC662310

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	22.25	89	65-130	5	22
Trichloroethene	25.00	23.68	95	76-121	7	20
Chlorobenzene	25.00	25.30	101	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-127
1,2-Dichloroethane-d4	103	69-148
Toluene-d8	100	80-120
Bromofluorobenzene	104	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC662311	Batch#:	191986
Matrix:	Water	Analyzed:	10/23/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-127
1,2-Dichloroethane-d4	112	69-148
Toluene-d8	99	80-120
Bromofluorobenzene	105	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	191994
Units:	ug/L	Analyzed:	10/23/12
Diln Fac:	1.000		

Type: BS Lab ID: QC662337

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	9.270	74	65-130
Trichloroethene	12.50	11.17	89	76-121
Chlorobenzene	12.50	11.88	95	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-127
1,2-Dichloroethane-d4	107	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	95	80-121

Type: BSD Lab ID: QC662338

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	9.787	78	65-130	5	22
Trichloroethene	12.50	11.74	94	76-121	5	20
Chlorobenzene	12.50	12.36	99	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-127
1,2-Dichloroethane-d4	108	69-148
Toluene-d8	100	80-120
Bromofluorobenzene	94	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC662339	Batch#:	191994
Matrix:	Water	Analyzed:	10/23/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-127
1,2-Dichloroethane-d4	105	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	95	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC662454	Batch#:	192023
Matrix:	Water	Analyzed:	10/24/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	127	80-127
1,2-Dichloroethane-d4	96	69-148
Toluene-d8	93	80-120
Bromofluorobenzene	102	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	192023
Units:	ug/L	Analyzed:	10/24/12
Diln Fac:	1.000		

Type: BS Lab ID: QC662455

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	20.52	103	65-130
Trichloroethene	20.00	20.79	104	76-121
Chlorobenzene	20.00	20.68	103	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	120	80-127
1,2-Dichloroethane-d4	92	69-148
Toluene-d8	93	80-120
Bromofluorobenzene	100	80-121

Type: BSD Lab ID: QC662456

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	19.16	96	65-130	7	22
Trichloroethene	20.00	19.59	98	76-121	6	20
Chlorobenzene	20.00	20.04	100	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	118	80-127
1,2-Dichloroethane-d4	94	69-148
Toluene-d8	95	80-120
Bromofluorobenzene	100	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	192032
Units:	ug/L	Analyzed:	10/24/12
Diln Fac:	1.000		

Type: BS Lab ID: QC662487

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	31.18	125	65-130
Trichloroethene	25.00	26.15	105	76-121
Chlorobenzene	25.00	25.10	100	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-127
1,2-Dichloroethane-d4	109	69-148
Toluene-d8	91	80-120
Bromofluorobenzene	97	80-121

Type: BSD Lab ID: QC662488

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	28.74	115	65-130	8	22
Trichloroethene	25.00	24.09	96	76-121	8	20
Chlorobenzene	25.00	24.25	97	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-127
1,2-Dichloroethane-d4	103	69-148
Toluene-d8	91	80-120
Bromofluorobenzene	96	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC662489	Batch#:	192032
Matrix:	Water	Analyzed:	10/24/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-127
1,2-Dichloroethane-d4	106	69-148
Toluene-d8	92	80-120
Bromofluorobenzene	98	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	192071
Units:	ug/L	Analyzed:	10/25/12
Diln Fac:	1.000		

Type: BS Lab ID: QC662650

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	37.50	38.71	103	65-130
Trichloroethene	37.50	34.56	92	76-121
Chlorobenzene	37.50	36.52	97	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-127
1,2-Dichloroethane-d4	102	69-148
Toluene-d8	102	80-120
Bromofluorobenzene	94	80-121

Type: BSD Lab ID: QC662651

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	37.50	36.85	98	65-130	5	22
Trichloroethene	37.50	31.62	84	76-121	9	20
Chlorobenzene	37.50	35.44	95	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-127
1,2-Dichloroethane-d4	98	69-148
Toluene-d8	104	80-120
Bromofluorobenzene	96	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC662652	Batch#:	192071
Matrix:	Water	Analyzed:	10/25/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-127
1,2-Dichloroethane-d4	103	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	98	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	192119
Units:	ug/L	Analyzed:	10/26/12
Diln Fac:	1.000		

Type: BS Lab ID: QC662856

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	30.00	32.49	108	65-130
Trichloroethene	30.00	29.41	98	76-121
Chlorobenzene	30.00	32.19	107	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-127
1,2-Dichloroethane-d4	96	69-148
Toluene-d8	103	80-120
Bromofluorobenzene	99	80-121

Type: BSD Lab ID: QC662857

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	30.00	33.39	111	65-130	3	22
Trichloroethene	30.00	28.19	94	76-121	4	20
Chlorobenzene	30.00	30.16	101	80-120	7	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-127
1,2-Dichloroethane-d4	95	69-148
Toluene-d8	103	80-120
Bromofluorobenzene	98	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240491	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC662858	Batch#:	192119
Matrix:	Water	Analyzed:	10/26/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-127
1,2-Dichloroethane-d4	98	69-148
Toluene-d8	99	80-120
Bromofluorobenzene	93	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 240504
ANALYTICAL REPORT

AMEC Environmental & Infrastructure 2101 Webster Street Oakland, CA 94612	Project : 0014860012.02 Location : MEW Level : II

Sample ID	Lab ID
PB-101712	240504-001
SIL18A-101712	240504-002
SIL9A-101712	240504-003
FB-101712	240504-004
SIL13A-101712	240504-005
TB-101712	240504-006

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 10/25/2012

Tracy Babjar
Project Manager
(510) 204-2226

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**240504**
Client:	**AMEC Environmental & Infrastructure**
Project:	**0014860012.02**
Location:	**MEW**
Request Date:	**10/18/12**
Samples Received:	**10/18/12**

This data package contains sample and QC results for six water samples, requested for the above referenced project on 10/18/12. The samples were received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):
High surrogate recovery was observed for dibromofluoromethane in PB-101712 (lab # 240504-001); no target analytes were detected in the sample. SIL18A-101712 (lab # 240504-002) had pH greater than 2. No other analytical problems were encountered.

240504

OAK 17598

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: MEW

DATE: 10-17-12 PAGE 1 OF 1

PROJECT NUMBER: 0014860012

RESULTS TO: Rendell Camacho

TURNAROUND TIME: Standard

SAMPLE SHIPMENT METHOD: hand

LABORATORY NAME: Curtis & Tompkins

LABORATORY ADDRESS:

LABORATORY CONTACT: Tracy Babjar

LABORATORY PHONE NUMBER: 510 204-2226

CLIENT INFORMATION:

REPORTING REQUIREMENTS: Level 2 reporting

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

	DATE	TIME	SAMPLE NUMBER	VOCs (1)	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	10-17-12	0735	PB-101712	X		W		HCl	X		3	
2		0801	SIL18A-101712	X		W			X		3	
3		0833	SIL9A-101712	X		W			X		3	
4		0848	FB-101712	X		W			X		3	
5		1035	SIL13A-101712	X		W			X		3	
6			TB-101712	X		W			X		2	

TOTAL NUMBER OF CONTAINERS: 17

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: R David Pearson	10/17/12	1505	SIGNATURE:	10/18	1200
PRINTED NAME: R David Pearson			PRINTED NAME: Adnan Ahmed		
COMPANY: AMEC			COMPANY: C&T		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

SAMPLING COMMENTS:

(1) - VOCs by 8010ms; including cis-1,2 DCE + Freon 113

2101 Webster Street, 12th Floor
Oakland, California 94612-3066
Tel 510.663.4100 Fax 510.663.4141

amec

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 240504 Date Received 10/18/12 Number of coolers 1
Client Amec Project MEW

Date Opened 10/18/12 By (print) AH (sign) [signature]
Date Logged in [signature] By (print) [signature] (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☑ YES (circle) (on cooler) on samples ~~☐ NO~~ AH.
   How many 1 Name Signature Date 10/18/12
2B. Were custody seals intact upon arrival? _____ (YES) NO ~~N/A~~ AH.
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ___ (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☑ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☑ Wet ☐ Blue/Gel ☐ None Temp(°C) ~~5~~ 8

☑ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO (N/A)
17. Did you document your preservative check? _____ YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO (N/A)
21. Was the client contacted concerning this sample delivery? _____ (YES) NO
   If YES, Who was called? Randell. C By T. Babicz Date: 10-18-12

COMMENTS
called client to make sure vials are preserved. The vials did not come from us. Randell. He promises me that they do have HCl in them.

We will log in as preserved.

Rev 10, 11/11

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240504	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	PB-101712	Batch#:	192023
Lab ID:	240504-001	Sampled:	10/17/12
Matrix:	Water	Received:	10/18/12
Units:	ug/L	Analyzed:	10/24/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	129 *	80-127
1,2-Dichloroethane-d4	97	69-148
Toluene-d8	94	80-120
Bromofluorobenzene	103	80-121

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240504	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	SIL18A-101712	Batch#:	191987
Lab ID:	240504-002	Sampled:	10/17/12
Matrix:	Water	Received:	10/18/12
Units:	ug/L	Analyzed:	10/23/12
Diln Fac:	6.250		

Analyte	Result	RL
Chloromethane	ND	6.3
Vinyl Chloride	ND	3.1
Bromomethane	ND	6.3
Chloroethane	ND	6.3
Trichlorofluoromethane	ND	6.3
Freon 113	ND	13
1,1-Dichloroethene	ND	3.1
Methylene Chloride	ND	130
trans-1,2-Dichloroethene	ND	3.1
1,1-Dichloroethane	ND	3.1
cis-1,2-Dichloroethene	48	3.1
Chloroform	ND	3.1
1,1,1-Trichloroethane	ND	3.1
Carbon Tetrachloride	ND	3.1
1,2-Dichloroethane	ND	3.1
Trichloroethene	380	3.1
1,2-Dichloropropane	ND	3.1
Bromodichloromethane	ND	3.1
cis-1,3-Dichloropropene	ND	3.1
trans-1,3-Dichloropropene	ND	3.1
1,1,2-Trichloroethane	ND	3.1
Tetrachloroethene	ND	3.1
Dibromochloromethane	ND	3.1
Chlorobenzene	ND	3.1
Bromoform	ND	3.1
1,1,2,2-Tetrachloroethane	ND	3.1
1,3-Dichlorobenzene	ND	3.1
1,4-Dichlorobenzene	ND	3.1
1,2-Dichlorobenzene	ND	3.1

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-127
1,2-Dichloroethane-d4	101	69-148
Toluene-d8	100	80-120
Bromofluorobenzene	100	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240504	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	SIL9A-101712	Batch#:	191987
Lab ID:	240504-003	Sampled:	10/17/12
Matrix:	Water	Received:	10/18/12
Units:	ug/L	Analyzed:	10/23/12
Diln Fac:	6.250		

Analyte	Result	RL
Chloromethane	ND	6.3
Vinyl Chloride	ND	3.1
Bromomethane	ND	6.3
Chloroethane	ND	6.3
Trichlorofluoromethane	ND	6.3
Freon 113	ND	13
1,1-Dichloroethene	ND	3.1
Methylene Chloride	ND	130
trans-1,2-Dichloroethene	ND	3.1
1,1-Dichloroethane	ND	3.1
cis-1,2-Dichloroethene	45	3.1
Chloroform	ND	3.1
1,1,1-Trichloroethane	ND	3.1
Carbon Tetrachloride	ND	3.1
1,2-Dichloroethane	ND	3.1
Trichloroethene	370	3.1
1,2-Dichloropropane	ND	3.1
Bromodichloromethane	ND	3.1
cis-1,3-Dichloropropene	ND	3.1
trans-1,3-Dichloropropene	ND	3.1
1,1,2-Trichloroethane	ND	3.1
Tetrachloroethene	ND	3.1
Dibromochloromethane	ND	3.1
Chlorobenzene	ND	3.1
Bromoform	ND	3.1
1,1,2,2-Tetrachloroethane	ND	3.1
1,3-Dichlorobenzene	ND	3.1
1,4-Dichlorobenzene	ND	3.1
1,2-Dichlorobenzene	ND	3.1

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-127
1,2-Dichloroethane-d4	101	69-148
Toluene-d8	98	80-120
Bromofluorobenzene	95	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240504	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	FB-101712	Batch#:	191987
Lab ID:	240504-004	Sampled:	10/17/12
Matrix:	Water	Received:	10/18/12
Units:	ug/L	Analyzed:	10/23/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-127
1,2-Dichloroethane-d4	99	69-148
Toluene-d8	100	80-120
Bromofluorobenzene	97	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240504	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	SIL13A-101712	Batch#:	191987
Lab ID:	240504-005	Sampled:	10/17/12
Matrix:	Water	Received:	10/18/12
Units:	ug/L	Analyzed:	10/23/12
Diln Fac:	5.000		

Analyte	Result	RL
Chloromethane	ND	5.0
Vinyl Chloride	ND	2.5
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
Freon 113	ND	10
1,1-Dichloroethene	ND	2.5
Methylene Chloride	ND	100
trans-1,2-Dichloroethene	ND	2.5
1,1-Dichloroethane	ND	2.5
cis-1,2-Dichloroethene	49	2.5
Chloroform	ND	2.5
1,1,1-Trichloroethane	ND	2.5
Carbon Tetrachloride	ND	2.5
1,2-Dichloroethane	ND	2.5
Trichloroethene	280	2.5
1,2-Dichloropropane	ND	2.5
Bromodichloromethane	ND	2.5
cis-1,3-Dichloropropene	ND	2.5
trans-1,3-Dichloropropene	ND	2.5
1,1,2-Trichloroethane	ND	2.5
Tetrachloroethene	2.6	2.5
Dibromochloromethane	ND	2.5
Chlorobenzene	ND	2.5
Bromoform	ND	2.5
1,1,2,2-Tetrachloroethane	ND	2.5
1,3-Dichlorobenzene	ND	2.5
1,4-Dichlorobenzene	ND	2.5
1,2-Dichlorobenzene	ND	2.5

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-127
1,2-Dichloroethane-d4	98	69-148
Toluene-d8	97	80-120
Bromofluorobenzene	98	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	240504	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Field ID:	TB-101712	Batch#:	191987
Lab ID:	240504-006	Sampled:	10/17/12
Matrix:	Water	Received:	10/18/12
Units:	ug/L	Analyzed:	10/23/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-127
1,2-Dichloroethane-d4	97	69-148
Toluene-d8	102	80-120
Bromofluorobenzene	98	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240504	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	191987
Units:	ug/L	Analyzed:	10/23/12
Diln Fac:	1.000		

Type: BS Lab ID: QC662312

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	20.84	83	65-130
Trichloroethene	25.00	20.63	83	76-121
Chlorobenzene	25.00	23.44	94	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-127
1,2-Dichloroethane-d4	95	69-148
Toluene-d8	98	80-120
Bromofluorobenzene	97	80-121

Type: BSD Lab ID: QC662313

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	19.63	79	65-130	6	22
Trichloroethene	25.00	19.68	79	76-121	5	20
Chlorobenzene	25.00	23.58	94	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-127
1,2-Dichloroethane-d4	94	69-148
Toluene-d8	102	80-120
Bromofluorobenzene	97	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240504	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC662314	Batch#:	191987
Matrix:	Water	Analyzed:	10/23/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-127
1,2-Dichloroethane-d4	96	69-148
Toluene-d8	103	80-120
Bromofluorobenzene	94	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240504	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC662454	Batch#:	192023
Matrix:	Water	Analyzed:	10/24/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	127	80-127
1,2-Dichloroethane-d4	96	69-148
Toluene-d8	93	80-120
Bromofluorobenzene	102	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	240504	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	0014860012.02	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	192023
Units:	ug/L	Analyzed:	10/24/12
Diln Fac:	1.000		

Type: BS Lab ID: QC662455

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	20.52	103	65-130
Trichloroethene	20.00	20.79	104	76-121
Chlorobenzene	20.00	20.68	103	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	120	80-127
1,2-Dichloroethane-d4	92	69-148
Toluene-d8	93	80-120
Bromofluorobenzene	100	80-121

Type: BSD Lab ID: QC662456

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	19.16	96	65-130	7	22
Trichloroethene	20.00	19.59	98	76-121	6	20
Chlorobenzene	20.00	20.04	100	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	118	80-127
1,2-Dichloroethane-d4	94	69-148
Toluene-d8	95	80-120
Bromofluorobenzene	100	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 241334
ANALYTICAL REPORT

AMEC Environmental & Infrastructure 2101 Webster Street Oakland, CA 94612	Project : 1486 Location : MEW Level : II

Sample ID	Lab ID
EX5-111512	241334-001
EFF-111512	241334-002
MID-111512	241334-003
FB-111512	241334-004
INF-111512	241334-005
TRIP BLANK	241334-006

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 11/27/2012

Tracy Babjar
Project Manager
(510) 204-2226

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**241334**
Client:	**AMEC Environmental & Infrastructure**
Project:	**1486**
Location:	**MEW**
Request Date:	**11/16/12**
Samples Received:	**11/16/12**

This data package contains sample and QC results for six water samples, requested for the above referenced project on 11/16/12. The samples were received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):
High surrogate recoveries were observed for dibromofluoromethane in FB-111512 (lab # 241334-004), TRIP BLANK (lab # 241334-006), and the method blank for batch 192974; no target analytes were detected in these samples. No other analytical problems were encountered.

241334

OAK 17628

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: MEW

DATE: 11-15-12

PAGE 1 OF 1

PROJECT NUMBER: 1486

RESULTS TO: Randall Camacho

TURNAROUND TIME: Standard

SAMPLE SHIPMENT METHOD: Lab pick up

LABORATORY NAME: Curtis & Tompkins

LABORATORY ADDRESS:

LABORATORY CONTACT:

LABORATORY PHONE NUMBER:

CLIENT INFORMATION:

REPORTING REQUIREMENTS:

GEOTRACKER REQUIRED YES (NO)

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

	DATE	TIME	SAMPLE NUMBER	8260B*	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	11-15-12	1150	EX5-111512	X	40ml VOA	W		HCl	X	X	6	*8010 List
2		1241	EFF-111512	X		W			X		3	
3		1251	MID-111512	X		W			X		3	
4		1256	FB-111512	X		W			X		3	
5		1305	INF-111512	X		W			X		3	
6		trip blank		X		W			X		2	

RDP

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: RDavid Pearson PRINTED NAME: RDavid Pearson COMPANY: Amec	11/15/12	1715	SIGNATURE: Eileen Leury PRINTED NAME: Eileen Leury COMPANY: C&T	11/16/12	1500
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 20

SAMPLING COMMENTS:

2101 Webster Street, 12th Floor
Oakland, California 94612-3066
Tel 510.663.4100 Fax 510.663.4141

amec

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 241334 Date Received 11/16/12 Number of coolers 1
Client AMEC Project MEW 1486

Date Opened 11/16/12 By (print) EL (sign) E. Le
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) ____ YES (NO)
   Shipping info ____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many ____ Name ____ Date ____
2B. Were custody seals intact upon arrival? ____ YES NO (N/A)
3. Were custody papers dry and intact when received? ____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ____ (YES) NO
6. Indicate the packing in cooler: (if other, describe) ____

☐ Bubble Wrap ☒ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☐ Wet ☒ Blue/Gel ☐ None Temp(°C) 4.6

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ____ YES (NO)
   If YES, what time were they transferred to freezer? ____
9. Did all bottles arrive unbroken/unopened? ____ (YES) NO
10. Are there any missing / extra samples? ____ (YES) ~~NO~~ EL
11. Are samples in the appropriate containers for indicated tests? ____ (YES) NO
12. Are sample labels present, in good condition and complete? ____ (YES) NO
13. Do the sample labels agree with custody papers? ____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? ____ (YES) NO
15. Are the samples appropriately preserved? ____ (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? ____ YES NO (N/A)
17. Did you document your preservative check? ____ YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? ____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? ____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? ____ (YES) NO N/A
21. Was the client contacted concerning this sample delivery? ____ YES (NO)
   If YES, Who was called? ____ By ____ Date: ____

COMMENTS
10) Rec'd only 3 VOAs for -001 (EXS-111512), but rec'd 6 VOAs for -002 (EFF-111512).

Rev 10, 11/11

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	241334	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	1486	Analysis:	EPA 8260B
Field ID:	EX5-111512	Batch#:	193095
Lab ID:	241334-001	Sampled:	11/15/12
Matrix:	Water	Received:	11/16/12
Units:	ug/L	Analyzed:	11/21/12
Diln Fac:	25.00		

Analyte	Result	RL
Chloromethane	ND	25
Vinyl Chloride	ND	13
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
Freon 113	170	50
1,1-Dichloroethene	ND	13
Methylene Chloride	ND	500
trans-1,2-Dichloroethene	ND	13
1,1-Dichloroethane	ND	13
cis-1,2-Dichloroethene	150	13
Chloroform	ND	13
1,1,1-Trichloroethane	ND	13
Carbon Tetrachloride	ND	13
1,2-Dichloroethane	ND	13
Trichloroethene	1,500	13
1,2-Dichloropropane	ND	13
Bromodichloromethane	ND	13
cis-1,3-Dichloropropene	ND	13
trans-1,3-Dichloropropene	ND	13
1,1,2-Trichloroethane	ND	13
Tetrachloroethene	ND	13
Dibromochloromethane	ND	13
Chlorobenzene	ND	13
Bromoform	ND	13
1,1,2,2-Tetrachloroethane	ND	13
1,3-Dichlorobenzene	ND	13
1,4-Dichlorobenzene	ND	13
1,2-Dichlorobenzene	ND	13

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-127
1,2-Dichloroethane-d4	109	69-148
Toluene-d8	91	80-120
Bromofluorobenzene	87	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	241334	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	1486	Analysis:	EPA 8260B
Field ID:	EFF-111512	Batch#:	192968
Lab ID:	241334-002	Sampled:	11/15/12
Matrix:	Water	Received:	11/16/12
Units:	ug/L	Analyzed:	11/17/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-127
1,2-Dichloroethane-d4	91	69-148
Toluene-d8	96	80-120
Bromofluorobenzene	95	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	241334	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	1486	Analysis:	EPA 8260B
Field ID:	MID-111512	Batch#:	193095
Lab ID:	241334-003	Sampled:	11/15/12
Matrix:	Water	Received:	11/16/12
Units:	ug/L	Analyzed:	11/21/12
Diln Fac:	2.000		

Analyte	Result	RL
Chloromethane	ND	2.0
Vinyl Chloride	ND	1.0
Bromomethane	ND	2.0
Chloroethane	ND	2.0
Trichlorofluoromethane	ND	2.0
Freon 113	140	4.0
1,1-Dichloroethene	ND	1.0
Methylene Chloride	ND	40
trans-1,2-Dichloroethene	ND	1.0
1,1-Dichloroethane	1.9	1.0
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
1,1,1-Trichloroethane	3.3	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	ND	1.0
Trichloroethene	ND	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
Tetrachloroethene	ND	1.0
Dibromochloromethane	ND	1.0
Chlorobenzene	ND	1.0
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-127
1,2-Dichloroethane-d4	108	69-148
Toluene-d8	91	80-120
Bromofluorobenzene	87	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	241334	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	1486	Analysis:	EPA 8260B
Field ID:	FB-111512	Batch#:	192974
Lab ID:	241334-004	Sampled:	11/15/12
Matrix:	Water	Received:	11/16/12
Units:	ug/L	Analyzed:	11/18/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	134 *	80-127
1,2-Dichloroethane-d4	121	69-148
Toluene-d8	104	80-120
Bromofluorobenzene	110	80-121

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	241334	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	1486	Analysis:	EPA 8260B
Field ID:	INF-111512	Batch#:	193095
Lab ID:	241334-005	Sampled:	11/15/12
Matrix:	Water	Received:	11/16/12
Units:	ug/L	Analyzed:	11/21/12
Diln Fac:	25.00		

Analyte	Result	RL
Chloromethane	ND	25
Vinyl Chloride	ND	13
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
Freon 113	180	50
1,1-Dichloroethene	ND	13
Methylene Chloride	ND	500
trans-1,2-Dichloroethene	ND	13
1,1-Dichloroethane	ND	13
cis-1,2-Dichloroethene	160	13
Chloroform	ND	13
1,1,1-Trichloroethane	ND	13
Carbon Tetrachloride	ND	13
1,2-Dichloroethane	ND	13
Trichloroethene	1,600	13
1,2-Dichloropropane	ND	13
Bromodichloromethane	ND	13
cis-1,3-Dichloropropene	ND	13
trans-1,3-Dichloropropene	ND	13
1,1,2-Trichloroethane	ND	13
Tetrachloroethene	ND	13
Dibromochloromethane	ND	13
Chlorobenzene	ND	13
Bromoform	ND	13
1,1,2,2-Tetrachloroethane	ND	13
1,3-Dichlorobenzene	ND	13
1,4-Dichlorobenzene	ND	13
1,2-Dichlorobenzene	ND	13

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-127
1,2-Dichloroethane-d4	110	69-148
Toluene-d8	91	80-120
Bromofluorobenzene	87	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	241334	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	1486	Analysis:	EPA 8260B
Field ID:	TRIP BLANK	Batch#:	192974
Lab ID:	241334-006	Sampled:	11/15/12
Matrix:	Water	Received:	11/16/12
Units:	ug/L	Analyzed:	11/18/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	132 *	80-127
1,2-Dichloroethane-d4	121	69-148
Toluene-d8	105	80-120
Bromofluorobenzene	112	80-121

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	241334	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	1486	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC666513	Batch#:	192968
Matrix:	Water	Analyzed:	11/17/12
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	15.00	15.25	102	65-130
Trichloroethene	15.00	12.87	86	76-121
Chlorobenzene	15.00	14.09	94	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-127
1,2-Dichloroethane-d4	91	69-148
Toluene-d8	95	80-120
Bromofluorobenzene	96	80-121

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	241334	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	1486	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC666515	Batch#:	192968
Matrix:	Water	Analyzed:	11/17/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-127
1,2-Dichloroethane-d4	90	69-148
Toluene-d8	94	80-120
Bromofluorobenzene	97	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	241334	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	1486	Analysis:	EPA 8260B
Field ID:	EFF-111512	Batch#:	192968
MSS Lab ID:	241334-002	Sampled:	11/15/12
Matrix:	Water	Received:	11/16/12
Units:	ug/L	Analyzed:	11/18/12
Diln Fac:	1.000		

Type: MS Lab ID: QC666519

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1000	25.00	26.93	108	71-122
Trichloroethene	<0.1000	25.00	21.69	87	69-121
Chlorobenzene	<0.1136	25.00	23.36	93	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-127
1,2-Dichloroethane-d4	102	69-148
Toluene-d8	94	80-120
Bromofluorobenzene	97	80-121

Type: MSD Lab ID: QC666520

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	24.99	100	71-122	7	21
Trichloroethene	25.00	21.74	87	69-121	0	20
Chlorobenzene	25.00	23.30	93	80-120	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-127
1,2-Dichloroethane-d4	100	69-148
Toluene-d8	97	80-120
Bromofluorobenzene	95	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	241334	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	1486	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC666534	Batch#:	192974
Matrix:	Water	Analyzed:	11/18/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	131 *	80-127
1,2-Dichloroethane-d4	121	69-148
Toluene-d8	104	80-120
Bromofluorobenzene	113	80-121

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	241334	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	1486	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	192974
Units:	ug/L	Analyzed:	11/18/12
Diln Fac:	1.000		

Type: BS Lab ID: QC666535

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	18.84	94	65-130
Trichloroethene	20.00	20.50	103	76-121
Chlorobenzene	20.00	21.53	108	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	110	80-127
1,2-Dichloroethane-d4	118	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	109	80-121

Type: BSD Lab ID: QC666536

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	17.66	88	65-130	6	22
Trichloroethene	20.00	19.49	97	76-121	5	20
Chlorobenzene	20.00	20.37	102	80-120	6	20

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-127
1,2-Dichloroethane-d4	118	69-148
Toluene-d8	102	80-120
Bromofluorobenzene	110	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	241334	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	1486	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	193095
Units:	ug/L	Analyzed:	11/21/12
Diln Fac:	1.000		

Type: BS Lab ID: QC667042

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	11.97	96	65-130
Trichloroethene	12.50	11.19	90	76-121
Chlorobenzene	12.50	11.75	94	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-127
1,2-Dichloroethane-d4	110	69-148
Toluene-d8	90	80-120
Bromofluorobenzene	87	80-121

Type: BSD Lab ID: QC667043

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	11.92	95	65-130	0	22
Trichloroethene	12.50	11.49	92	76-121	3	20
Chlorobenzene	12.50	11.85	95	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-127
1,2-Dichloroethane-d4	111	69-148
Toluene-d8	90	80-120
Bromofluorobenzene	86	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	241334	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	1486	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC667044	Batch#:	193095
Matrix:	Water	Analyzed:	11/21/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-127
1,2-Dichloroethane-d4	111	69-148
Toluene-d8	90	80-120
Bromofluorobenzene	87	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 241721
ANALYTICAL REPORT

AMEC Environmental & Infrastructure 2101 Webster Street Oakland, CA 94612	Project : 001486 Location : MEW Level : II

Sample ID	Lab ID
EFF-120412	241721-001
MID-120412	241721-002
INF-120412	241721-003
TRIP BLANK	241721-004

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 12/17/2012

Tracy Babjar
Project Manager
(510) 204-2226

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**241721**
Client:	**AMEC Environmental & Infrastructure**
Project:	**001486**
Location:	**MEW**
Request Date:	**12/05/12**
Samples Received:	**12/05/12**

This data package contains sample and QC results for four water samples, requested for the above referenced project on 12/05/12. The samples were received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):
High surrogate recoveries were observed for dibromofluoromethane in EFF-120412 (lab # 241721-001), TRIP BLANK (lab # 241721-004), and the method blank for batch 193661; no target analytes were detected in these samples. No other analytical problems were encountered.

241721

OAK 17646

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: MEW			DATE: 12-4-12 / PAGE 1 OF 1
PROJECT NUMBER: 001486	LABORATORY NAME:	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: Randell Camacho	LABORATORY ADDRESS:		
TURNAROUND TIME: Standard			
SAMPLE SHIPMENT METHOD: Lab pick up	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): R David Pearson

ANALYSES: 8260B*

	DATE	TIME	SAMPLE NUMBER	8260B*	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	12-4-12	1211	EFF-120412	X	40 ml VOA	W			X		3	*8010 List
2		1217	MID-120412	X		W			X		3	
3		1224	INF-120412	X		W			X		3	
4		trip blank		X		W			X		2	

RDP

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: R David Pearson	12/4/12	1335	SIGNATURE: E. L	12/5/12	1220
PRINTED NAME: R David Pearson			PRINTED NAME: Eileen Lemley		
COMPANY: Amec			COMPANY: C&T		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 11

SAMPLING COMMENTS:

2101 Webster Street, 12th Floor
Oakland, California 94612-3066
Tel 510.663.4100 Fax 510.663.4141

amec

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 241721 Date Received 12/5/12 Number of coolers 1
Client AMEC Project 001486

Date Opened 12/5/12 By (print) ul (sign) [illegible]
Date Logged in ↓ By (print) ↓ (sign) [illegible]

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☒ YES (circle) (on cooler) on samples ☐ NO
   How many 1 Name signature Date 12/4/12
2B. Were custody seals intact upon arrival? _____ (YES) NO N/A
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☒ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 2.7

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are there any missing / extra samples? _____ (YES) (NO) - a
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO (N/A)
17. Did you document your preservative check? _____ YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ (YES) NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS
10) -004: only rec'd 1 VOA, but COC says 2.

Rev 10, 11/11

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	241721	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	001486	Analysis:	EPA 8260B
Field ID:	EFF-120412	Batch#:	193661
Lab ID:	241721-001	Sampled:	12/04/12
Matrix:	Water	Received:	12/05/12
Units:	ug/L	Analyzed:	12/10/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	146 *	80-127
1,2-Dichloroethane-d4	115	69-148
Toluene-d8	105	80-120
Bromofluorobenzene	113	80-121

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	241721	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	001486	Analysis:	EPA 8260B
Field ID:	MID-120412	Batch#:	193774
Lab ID:	241721-002	Sampled:	12/04/12
Matrix:	Water	Received:	12/05/12
Units:	ug/L	Analyzed:	12/12/12
Diln Fac:	2.000		

Analyte	Result	RL
Chloromethane	ND	2.0
Vinyl Chloride	ND	1.0
Bromomethane	ND	2.0
Chloroethane	ND	2.0
Trichlorofluoromethane	ND	2.0
Freon 113	170	4.0
1,1-Dichloroethene	ND	1.0
Methylene Chloride	ND	40
trans-1,2-Dichloroethene	ND	1.0
1,1-Dichloroethane	2.3	1.0
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
1,1,1-Trichloroethane	3.9	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	ND	1.0
Trichloroethene	ND	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
Tetrachloroethene	ND	1.0
Dibromochloromethane	ND	1.0
Chlorobenzene	ND	1.0
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-127
1,2-Dichloroethane-d4	96	69-148
Toluene-d8	91	80-120
Bromofluorobenzene	101	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	241721	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	001486	Analysis:	EPA 8260B
Field ID:	INF-120412	Batch#:	193774
Lab ID:	241721-003	Sampled:	12/04/12
Matrix:	Water	Received:	12/05/12
Units:	ug/L	Analyzed:	12/13/12
Diln Fac:	25.00		

Analyte	Result	RL
Chloromethane	ND	25
Vinyl Chloride	ND	13
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
Freon 113	190	50
1,1-Dichloroethene	ND	13
Methylene Chloride	ND	500
trans-1,2-Dichloroethene	ND	13
1,1-Dichloroethane	ND	13
cis-1,2-Dichloroethene	230	13
Chloroform	ND	13
1,1,1-Trichloroethane	ND	13
Carbon Tetrachloride	ND	13
1,2-Dichloroethane	ND	13
Trichloroethene	1,700	13
1,2-Dichloropropane	ND	13
Bromodichloromethane	ND	13
cis-1,3-Dichloropropene	ND	13
trans-1,3-Dichloropropene	ND	13
1,1,2-Trichloroethane	ND	13
Tetrachloroethene	ND	13
Dibromochloromethane	ND	13
Chlorobenzene	ND	13
Bromoform	ND	13
1,1,2,2-Tetrachloroethane	ND	13
1,3-Dichlorobenzene	ND	13
1,4-Dichlorobenzene	ND	13
1,2-Dichlorobenzene	ND	13

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-127
1,2-Dichloroethane-d4	95	69-148
Toluene-d8	95	80-120
Bromofluorobenzene	99	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	241721	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	001486	Analysis:	EPA 8260B
Field ID:	TRIP BLANK	Batch#:	193661
Lab ID:	241721-004	Sampled:	12/04/12
Matrix:	Water	Received:	12/05/12
Units:	ug/L	Analyzed:	12/10/12
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	142 *	80-127
1,2-Dichloroethane-d4	115	69-148
Toluene-d8	106	80-120
Bromofluorobenzene	113	80-121

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	241721	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	001486	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	193661
Units:	ug/L	Analyzed:	12/10/12
Diln Fac:	1.000		

Type: BS Lab ID: QC669372

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	10.72	86	65-130
Trichloroethene	12.50	11.49	92	76-121
Chlorobenzene	12.50	12.67	101	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	116	80-127
1,2-Dichloroethane-d4	111	69-148
Toluene-d8	103	80-120
Bromofluorobenzene	112	80-121

Type: BSD Lab ID: QC669373

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	10.74	86	65-130	0	22
Trichloroethene	12.50	11.89	95	76-121	3	20
Chlorobenzene	12.50	12.93	103	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	115	80-127
1,2-Dichloroethane-d4	110	69-148
Toluene-d8	102	80-120
Bromofluorobenzene	110	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	241721	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	001486	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC669374	Batch#:	193661
Matrix:	Water	Analyzed:	12/10/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	132 *	80-127
1,2-Dichloroethane-d4	113	69-148
Toluene-d8	104	80-120
Bromofluorobenzene	116	80-121

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	241721	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	001486	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	193774
Units:	ug/L	Analyzed:	12/12/12
Diln Fac:	1.000		

Type: BS Lab ID: QC669854

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	25.56	102	65-130
Trichloroethene	25.00	25.04	100	76-121
Chlorobenzene	25.00	25.56	102	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-127
1,2-Dichloroethane-d4	94	69-148
Toluene-d8	96	80-120
Bromofluorobenzene	97	80-121

Type: BSD Lab ID: QC669855

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	25.79	103	65-130	1	22
Trichloroethene	25.00	24.95	100	76-121	0	20
Chlorobenzene	25.00	25.84	103	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-127
1,2-Dichloroethane-d4	99	69-148
Toluene-d8	97	80-120
Bromofluorobenzene	99	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	241721	Location:	MEW
Client:	AMEC Environmental & Infrastructure	Prep:	EPA 5030B
Project#:	001486	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC669856	Batch#:	193774
Matrix:	Water	Analyzed:	12/12/12
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-127
1,2-Dichloroethane-d4	101	69-148
Toluene-d8	96	80-120
Bromofluorobenzene	99	80-121

ND= Not Detected
RL= Reporting Limit