LANCASTER LABORATORIES

Sample Number: 6850737MSACF ABNSTC5MS MS 123120023A 10736 Sample Weight: 30 SW-846 8082
Injected On: 11/8/2012 4:40:52 PM Dilution Factor: 10
Instrument ID: CP7-5088A
Oven Parameters: 140c to 300 @ 10c/min
Column A ID: ZB Multiresidue-1 30m x 0.32mm x 0.5um
Column B ID: ZB Multiresidue-2 30m x 0.32mm x 0.25um
Injection Volume: 1 ul

Threshold: 2
Calibration Type: external
Quantitation: Height

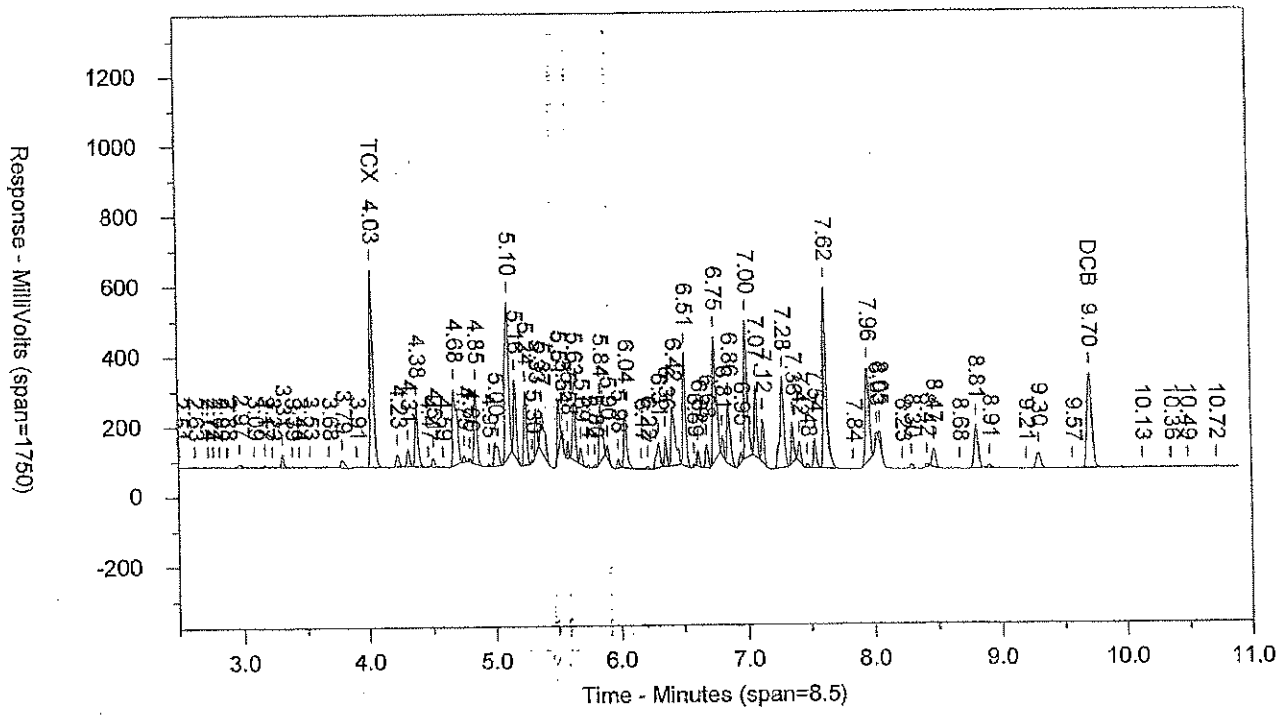
Analyst: 2855

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
4.029	564913	11.31	TCX	3.948	167655	11.201	TCX
9.705	269244	11.542	DCB	9.308	149442	10.88	DCB

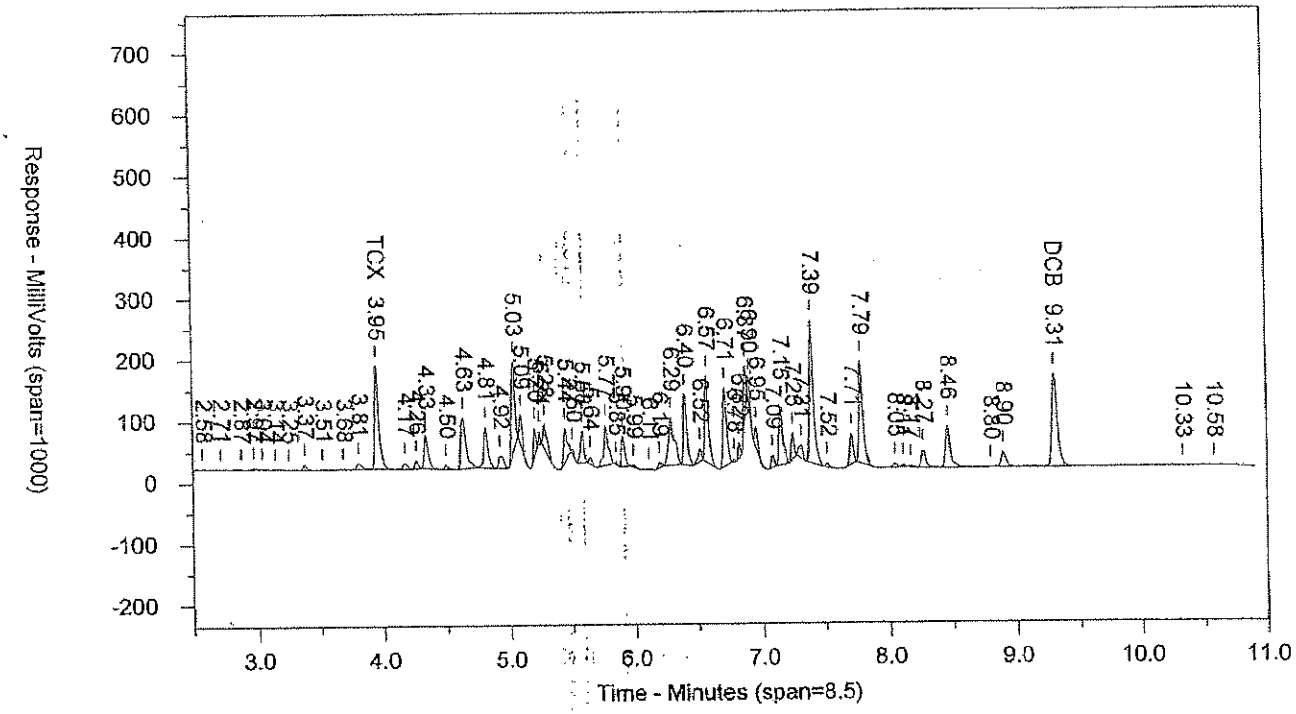
Files:
Area File: 5p7305.010.RAW
Area File: 5p7305B.010.RAW
Method A: PESTDI7.MET
Method B: PESTDI7B.MET
Calibration File A: 1p7305.CAL
Calibration File B: 1p7305b.CAL
Format A: pestD7.FMTA
Format B: pestD7.FMTB
Area File Created On: 11/8/2012 4:51:48 PM
File Reported On: 11/8/2012 at 4:51:51 PM

6850737MSACF ABNSTC5MS MS 123120023A 10736 SW-846 8082

\\USLAN-CHROMPERF\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP7\5p7305.010.RAW



\\USLAN-CHROMPERF\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP7\5p7305B.010.RAW



1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO.

NSTC5MSD

Lab Name: Lancaster Laboratories Contract: Batchnumber: 123120023A

Lab Code: Case No.: SAS No.: SDG No.: TAP03

Matrix: (soil/water) SOIL Lab Sample ID: 6850737

Sample wt/vol: 30 (g/ml) g Lab File ID: 5P7305.011.RAW

% Moisture: 3.6 Decanted: (Y/N) Date Received: 11/7/2012

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 11/8/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/8/2012

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
12674-11-2	Aroclor-1016	160	
11096-82-5	Aroclor-1260	170	
1336-36-3	Total PCBs	330	P

Data Summary

Sample Name: 6850737 MSDACF NSTC5MSD MSD Sample ID: AB **Batchnumber: 123120023A**
Sample Amount: 30 g Total Volume: 10 ml Analyst: 2855 SDG: TAP03 State: NY
Analyses: 10736

Analysis Report (A)

Injected on Nov 08, 2012 16:55:38
Instrument H5088A
Result file 5P7305.011.RAW
Calibration file 1P7305
Method file PESTDI7

%SSR(TCX) 110% (33 - 143) Conc: 11.304468
%SSR(DCB) 112% (24 - 164) Conc: 11.227865

Analysis Report (B)

Injected on Nov 08, 2012 16:55:38
Instrument H5088B
Result file 5P7305B.011.RAW
Calibration file 1P7305B
Method file PESTDI7B

%SSR(TCX) 108% (33 - 143) Conc: 11.159621
%SSR(DCB) 107% (24 - 164) Conc: 10.707765

Single Component Data

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	4.00	4.03	4.06	564616	11.304468
Decachlorobiphenyl	9.68	9.70	9.74	261925	11.227865

Compound	Min	RT	Max	Height	Amount
Tetrachloro-m-xylene	3.92	3.95	3.98	167043	11.159621
Decachlorobiphenyl	9.29	9.31	9.35	147080	10.707765

Single Component Summary

Compound Name	Column	Amount Found	LOQ	MDL	Qualifiers	%RPD	Comments
Tetrachloro-m-xylene	A	11.304468				1.29	
Decachlorobiphenyl	A	11.227865				4.74	

Multiple Component Data

Min	RT	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016						**1.45**	
4.35	4.38	4.41	177002.0468	158.413973			1
4.82	4.85	4.88	209558.75	154.31509			2
5.08	5.10	5.14	434226.1562	155.638724			3
5.22	5.24	5.28	209417.2343	158.660093			4
5.31	5.33	5.37	125621.5625	158.193153			5
5.60	5.63	5.66	160185.6875	160.650739			6
Height summation:			**1316011.4375**				
Concentration		CF:	**157.645295**	L:			
Aroclor-1260						**7.58**	
6.48	6.51	6.54	314423.5625	154.672735			1
6.72	6.75	6.78	353386.9375	158.183075			2
6.97	6.99	7.03	396328.0937	165.247546			3
7.05	7.07	7.11	203744.0468	167.040312			4
7.26	7.28	7.32	254869.9531	176.405812			5
7.60	7.62	7.66	502476.0937	189.527696			6
Height summation:			**2025228.6875**				
Concentration		CF:	**168.512863**	L:			

Min	RT	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016						**2.38**	
4.31	4.33	4.37	52896.49218	158.462305			1
4.61	4.63	4.67	81272.33593	155.450769			2
4.78	4.81	4.84	64385.96875	158.785276			3
5.01	5.03	5.07	143318.7968	158.054015			4
5.06	5.09	5.12	45413.60937	148.915047			5
5.26	5.28	5.32	37409.10156	156.325382			6
Height summation:			**424696.304689**				
Concentration		CF:	**155.998799**	L:			
Aroclor-1260						**6.60**	
6.37	6.40	6.43	113443.2187	158.140269			1
6.54	6.57	6.60	136608.625	155.784692			2
6.69	6.71	6.75	125580.2187	163.069126			3
6.85	6.87	6.91	80006.24218	162.062904			4
7.37	7.39	7.43	227833.5625	178.696102			5
7.77	7.79	7.83	164222.2968	182.015999			6
Height summation:			**847694.164063**				
Concentration		CF:	**166.628182**	L:			

Data Summary

Sample Name: 6850737 MSDACF NSTC5MSD MSD Sample ID: AB **Batchnumber: 123120023A**
Sample Amount: 30 g Total Volume: 10 ml Analyst: 2855 SDG: TAP03 State: NY
Analyses: 10736

Analysis Report (A)

Injected on Nov 08, 2012 16:55:38
Instrument H5088A
Result file 5P7305.011.RAW
Calibration file 1P7305
Method file PESTDI7

Analysis Report (B)

Injected on Nov 08, 2012 16:55:38
Instrument H5088B
Result file 5P7305B.011.RAW
Calibration file 1P7305B
Method file PESTDI7B

Multiple Component Summary

Compound Name	Column	Amount Found	LOQ	MDL	Qualifiers	%RPD	No. of Hits Required	Max %RSD	Comments
Aroclor-1016	A	157.645295	17	3.6		1.05	4	40	
Aroclor-1221			<17	<4.6			3	40	
Aroclor-1232			<17	<8			4	40	
Aroclor-1242			<17	<3.3			4	40	
Aroclor-1248			<17	<3.3			4	40	
Aroclor-1254			<17	<3.3			4	40	
Aroclor-1260	B A	168.512863	17	4.9		1.12	4	40	A005 SVLT 047 11/9/12
Aroclor-1262			<17	<3.3			4	40	
Aroclor-1268			<17	<3.3			4	40	
Total PCBs	A	326.158158	17	3.3		200.00			

Units: ug/kg

%RPD = High - Low Amount divided by the Average times 100

Reviewed by: Jessica L. Miller Chemist
Date: NOV 0 8 2012

Verified by: Valerie L. Tamarkin Principal Specialist
Date: NOV 0 9 2012

Lancaster Laboratories Multiple Component Peak Data Report

Sample Name: 6850737 MSDACF NSTC5MSD Sample ID: AB **Batchnumber: 123120023A**
Sample Amount: 30 g Total Volume: 10 ml Analyst: 2855 SDG: TAP03 State: NY
Analyses: 10736

Analysis Report (A)

Injected on : NOV 08, 2012 16:55:38
Instrument : CP 7--H5088A
Result file : 5p7305.011.RAW
Calibration file : 1p7305.CAL
Method file : PESTDI7.MET

%SSR(TCX) : 110% (33-143) Conc.: 11.304468
%SSR(DCB) : 112% (24-164) Conc.: 11.227865

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**6**	**1.45**	
4.35	4.38	4.41	177002.0468	158.413973			1
4.82	4.85	4.88	209558.75	154.31509			2
5.08	5.10	5.14	434226.1562	155.638724			3
5.22	5.24	5.28	209417.2343	158.660093			4
5.31	5.33	5.37	125621.5625	158.193153			5
5.60	5.63	5.66	160185.6875	160.650739			6
Height Summation:			**1316011.437500**				
Amount Avg CF:			**157.645295**	Linear:			
Aroclor-1221					**3**	**36.05**	
4.20	4.23	4.26	34289	47.968384			1
E 4.28	4.31	4.34	48400.05078	72.486635			2
E 4.35	4.38	4.41	177002.0468	101.176692			3
Height Summation:			**259691.097656**				
Amount Avg CF:			**73.877237**	Linear:			
Aroclor-1232					**6**	**28.47**	
E 4.35	4.38	4.41	177002.0468	129.414423			1
E 4.81	4.85	4.88	209558.75	322.29643			2
E 5.07	5.10	5.13	434226.1562	315.067593			3
E 5.21	5.24	5.27	209417.2343	329.824682			4
E 5.30	5.33	5.36	125621.5625	367.298401			5
E 5.60	5.63	5.66	160185.6875	334.043787			6
Height Summation:			**1316011.437500**				
Amount Avg CF:			**299.657553**	Linear:			
Aroclor-1242					**6**	**2.70**	
E 4.35	4.38	4.41	177002.0468	164.454956			1
E 4.82	4.85	4.88	209558.75	165.287358			2
E 5.07	5.10	5.13	434226.1562	172.252499			3
E 5.22	5.24	5.28	209417.2343	167.584733			4
E 5.30	5.33	5.36	125621.5625	175.494454			5
E 5.60	5.63	5.66	160185.6875	164.884059			6
Height Summation:			**1316011.437500**				
Amount Avg CF:			**168.326343**	Linear:			
Aroclor-1248					**6**	**51.74**	
E 5.07	5.10	5.13	434226.1562	299.153338			1
5.30	5.33	5.36	125621.5625	110.532524			2
5.34	5.37	5.40	110574.7109	129.914177			3
5.60	5.63	5.66	160185.6875	133.187735			4
6.33	6.36	6.39	83073.10937	100.292124			5
6.63	6.68	6.69	64697.33984	106.608446			6
Height Summation:			**978378.566407**				
Amount Avg CF:			**146.614724**	Linear:			
Aroclor-1254					**6**	**91.31**	
5.81	5.84	5.87	164813.9531	97.949378			1
6.01	6.04	6.07	165381.3906	68.963791			2
6.26	6.31	6.32	68992.98437	50.311771			3
6.33	6.36	6.39	83073.10937	31.647969			4
E 6.48	6.51	6.54	314423.5625	350.749182			5
6.97	6.99	7.03	396328.0937	206.225419			6
Height Summation:			**1193013.093750**				
Amount Avg CF:			**134.307918**	Linear:			

Jessica L. Miller
Chemist

NOV 0 8 2012

Analysis Report (B)

Injected on : NOV 08, 2012 16:55:38
Instrument : CP 7--H5088B
Result file : 5p7305B.011.RAW
Calibration file : 1p7305b.CAL
Method file : PESTDI7B.MET

%SSR(TCX) : 108% (33-143) Conc.: 11.159621
%SSR(DCB) : 107% (24-164) Conc.: 10.707765

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1016					**6**	**2.38**	
4.31	4.33	4.37	52896.49218	158.462305			1
4.61	4.63	4.67	81272.33593	155.450769			2
4.78	4.81	4.84	64385.96875	158.785276			3
5.01	5.03	5.07	143318.7968	158.054015			4
5.06	5.09	5.12	45413.60937	148.915047			5
5.26	5.28	5.32	37409.10156	156.325382			6
Height Summation:			**424696.304689**				
Amount Avg CF:			**155.998799**	Linear:			
Aroclor-1221					**3**	**37.42**	
4.14	4.17	4.20	9709.244141	45.802642			1
E 4.23	4.26	4.29	12602.46875	71.472955			2
E 4.30	4.33	4.36	52896.49218	99.966913			3
Height Summation:			**75208.205079**				
Amount Avg CF:			**72.41417**	Linear:			
Aroclor-1232					**6**	**28.05**	
E 4.30	4.33	4.36	52896.49218	129.391385			1
E 4.60	4.63	4.67	81272.33593	312.700163			2
E 4.78	4.81	4.84	64385.96875	321.937892			3
E 5.00	5.03	5.06	143318.7968	332.414378			4
E 5.06	5.09	5.12	45413.60937	292.602124			5
E 5.25	5.28	5.31	37409.10156	353.750369			6
Height Summation:			**424696.304689**				
Amount Avg CF:			**290.499385**	Linear:			
Aroclor-1242					**6**	**3.88**	
E 4.31	4.33	4.37	52896.49218	171.979167			1
E 4.61	4.63	4.67	81272.33593	166.722744			2
E 4.78	4.81	4.84	64385.96875	181.512091			3
E 5.01	5.03	5.07	143318.7968	175.994888			4
E 5.06	5.09	5.12	45413.60937	166.331939			5
E 5.25	5.28	5.31	37409.10156	164.356142			6
Height Summation:			**424696.304689**				
Amount Avg CF:			**171.149495**	Linear:			
Aroclor-1248					**6**	**66.58**	
E 5.00	5.03	5.06	143318.7968	313.235963			1
5.25	5.28	5.31	37409.10156	134.516726			2
5.42	5.44	5.48	53700.52734	114.258532			3
5.55	5.58	5.61	50150.08203	140.496727			4
5.74	5.77	5.80	64328.18359	155.845104			5
5.94	5.99	6.00	2691.553955	13.469785			6
Height Summation:			**351598.245362**				
Amount Avg CF:			**145.303806**	Linear:			
Aroclor-1254					**6**	**55.41**	
5.74	5.77	5.80	64328.18359	83.354887			1
5.88	5.90	5.94	47923.94140	84.846514			2
6.17	6.19	6.23	8589.170898	18.362817			3
6.25	6.29	6.31	50377.00390	51.800566			4
6.46	6.51	6.52	20682.51171	31.261061			5
6.85	6.87	6.91	80006.24218	108.667694			6
+ 6.85	6.90	6.91	39034.17187	53.017781			6
Height Summation:			**271907.053711**				
Amount Avg CF:			**63.048923**	Linear:			

Lancaster Laboratories-Multiple Component Peak Data Report

Sample Name: 6850737 MSDACF NSTC5MSDSample ID: AB **Batchnumber: 123120023A**
Sample Amount: 30 g Total Volume: 10 ml Analyst: 2855 SDG: TAP03 State: NY
Analyses: 10736

Analysis Report (A)

Injected on : NOV 08, 2012 16:55:38
Instrument : CP 7--H5088A
Result file : 5p7305.011.RAW
Calibration file : 1p7305.CAL
Method file : PESTDI7.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1260					6	7.58	
6.48	6.51	6.54	314423.5625	154.672735			1
6.72	6.75	6.78	353386.9375	158.183075			2
6.97	6.99	7.03	396328.0937!	165.247546			3
7.05	7.07	7.11	203744.0468:	167.040312			4
7.26	7.28	7.32	254869.9531:	176.405812			5
7.60	7.62	7.66	502476.0937!	189.527696			6
Height Summation:			2025228.687500				
Amount Avg CF:			168.512863	Linear:			
Aroclor-1262					6	43.77	
E 6.97	6.99	7.03	396328.0937!	253.617517			1
E 7.04	7.07	7.10	203744.0468:	84.637852			2
E 7.26	7.28	7.32	254869.9531:	141.383521			3
E 7.59	7.62	7.65	502476.0937!	134.490163			4
E 7.93	7.96	7.99	266911.9062!	129.575806			5
E 8.78	8.81	8.84	122031.1328·	90.823329			6
Height Summation:			1746361.226563				
Amount Avg CF:			139.088031	Linear:			
Aroclor-1268					6	120.65	
7.92	7.96	7.98	266911.9062!	64.949655			1
+ 8.02	8.03	8.08	14473.01855!	3.956744			2
8.02	8.05	8.08	30426.50195:	8.318229			2
8.27	8.30	8.33	12602.46777:	3.872458			3
8.40	8.42	8.46	8347.249023	9.09019			4
E 8.78	8.81	8.84	122031.1328·	79.669868			5
9.27	9.30	9.33	43237.21093!	4.86686			6
Height Summation:			483556.468750				
Amount Avg CF:			28.46121	Linear:			

Analysis Report (B)

Injected on : NOV 08, 2012 16:55:38
Instrument : CP 7--H5088B
Result file : 5p7305B.011.RAW
Calibration file : 1p7305b.CAL
Method file : PESTDI7B.MET

Min	R.T.	Max	Height	Amount	Pks	%RSD	Peak
Aroclor-1260					6	6.60	
6.37	6.40	6.43	113443.2187!	158.140269			1
6.54	6.57	6.60	136608.625	155.784692			2
6.69	6.71	6.75	126580.2187!	163.069126			3
6.85	6.87	6.91	80006.24218!	162.062904			4
+ 6.85	6.90	6.91	39034.17187!	79.068721			4
7.37	7.39	7.43	227833.5625	178.696102			5
7.77	7.79	7.83	164222.2968:	182.015999			6
Height Summation:			847694.164063				
Amount Avg CF:			166.628182	Linear:			
Aroclor-1262					6	37.40	
E 6.54	6.57	6.60	136608.625	180.031266			1
6.88	6.90	6.94	39034.17187!	62.895057			2
E 7.13	7.15	7.19	93945.53125	105.098594			3
E 7.37	7.39	7.43	227833.5625	125.877678			4
E 7.76	7.79	7.82	164222.2968:	131.096766			5
E 8.44	8.46	8.49	65286.85156:	90.867383			6
Height Summation:			726931.039063				
Amount Avg CF:			114.311124	Linear:			
Aroclor-1268					6	117.25	
7.68	7.71	7.74	48307.95312!	23.680021			1
E 7.76	7.79	7.82	164222.2968:	83.236928			2
8.02	8.05	8.08	5253.891602	2.827569			3
8.15	8.17	8.21	1714.843506	3.469903			4
E 8.43	8.46	8.49	65286.85156:	80.593589			5
8.87	8.90	8.93	22738.11132!	4.214098			6
Height Summation:			307523.947999				
Amount Avg CF:			33.003685	Linear:			

Summary Report

Compound Name	Column	Higher Amount Found	LOQ	MDL	Qualifiers	%Difference	No of Hits Required	Max %RSD	Comments
Aroclor-1016			17	3.6		1.05	4	40	
Aroclor-1221			17	4.6	E	2.00	3	40	
Aroclor-1232			17	8	E	3.10	4	40	
Aroclor-1242			17	3.3	E	1.66	4	40	
Aroclor-1248			17	3.3	E	0.90	4	40	
Aroclor-1254			17	3.3	E	**72.21	4	40	
Aroclor-1260			17	4.9		1.12	4	40	
Aroclor-1262			17	3.3	E	19.56	4	40	
Aroclor-1268			17	3.3	E	14.78	4	40	
Total PCBs			17	3.3					

Jessica L. Miller
Chemist
NOV 08 2012

Units: ug/kg

LANCASTER LABORATORIES

Sample Number: 6850737MSDACF ABNSTC5MSD MSD 123120023A 10736 Injection Volume: 1 ul SW-846 8082
Injected On: 11/8/2012 4:55:38 PM Analyst: 2855
Instrument ID: CP7-5088A
Oven Parameters: 140c to 250c @ 25c/min, 250c to 300c @20c/min, 300c for 4 min.
Column A ID: ZB Multiresidue-1 30m x 0.32mm x 0.5um
Column B ID: ZB Multiresidue-2 30m x 0.32mm x 0.25um
Data File: 5p7305.011.RAW
Method File: PESTDI7.MET
Calibration File: 1p7305.CAL

RT A	Compound A	Height A	Area A
1.93		4475	10361
2.248		803	1758
2.328		3273	7827
2.373		3289	6037
2.506		1186	4318
2.63		1802	4511
2.707		90	98
2.82		345	922
2.884		419	613
2.974		13773	27494
3.092		3107	5236
3.169		5262	8050
3.228		627	718
3.309		35493	51830
3.442		269	547
3.531		2682	7004
3.659		978	2101
3.721		195	181
3.79		28264	62586
3.887		3105	12781
4.029	TCX	564616	914678
4.228		34289	59033
4.308		48400	71861
4.376		177002	277990
4.466		1035	1045
4.509		25499	38320
4.592		735	1204
4.677		216707	509554
4.754		17473	21314
4.802		12925	13131
4.845		209559	314858
4.951		8206	10250
5.001		68120	158027
5.103		434226	915842
5.158		211611	306964
5.243		209417	308562
5.299		8260	6945
5.332		125622	145802
5.372		110575	265078
5.507		139593	173055
5.538		31508	30105
5.581		47502	50441
5.63		160186	261765
5.685		45840	61688
5.742		6259	7675
5.796		8114	9761
5.841		164814	293663
5.898		33878	37957
5.984		23658	32480
6.039		165381	272710
6.169		615	743
6.22		7037	10328
6.305		68993	140740

RT A	Compound A	Height A	Area A
6.361		83073	113919
6.417		161879	365088
6.51		314424	481369
6.585		5454	4922
6.619		46606	64737
6.684		64697	92737
6.746		353387	657415
6.81		53033	59924
6.858		171261	286372
6.952		30599	41542
6.995		396328	657302
7.071		203744	275819
7.124		120868	171709
7.283		254870	548998
7.364		115024	176533
7.42		55145	77095
7.479		10614	14309
7.538		80829	132610
7.62		502476	939965
7.852		532	1254
7.958		266912	514379
8.027		14473	28892
8.048		30427	42801
8.223		168	238
8.299		12602	25526
8.419		8347	13641
8.47		50489	96316
8.676		1270	4133
8.805		122031	269896
8.913		8139	18264
9.217		102	172
9.299		43237	105292
9.562		305	1163
9.703	DCB	261925	741819
9.953		214	872
10.149		89	465
10.553		87	359
10.726		371	1205

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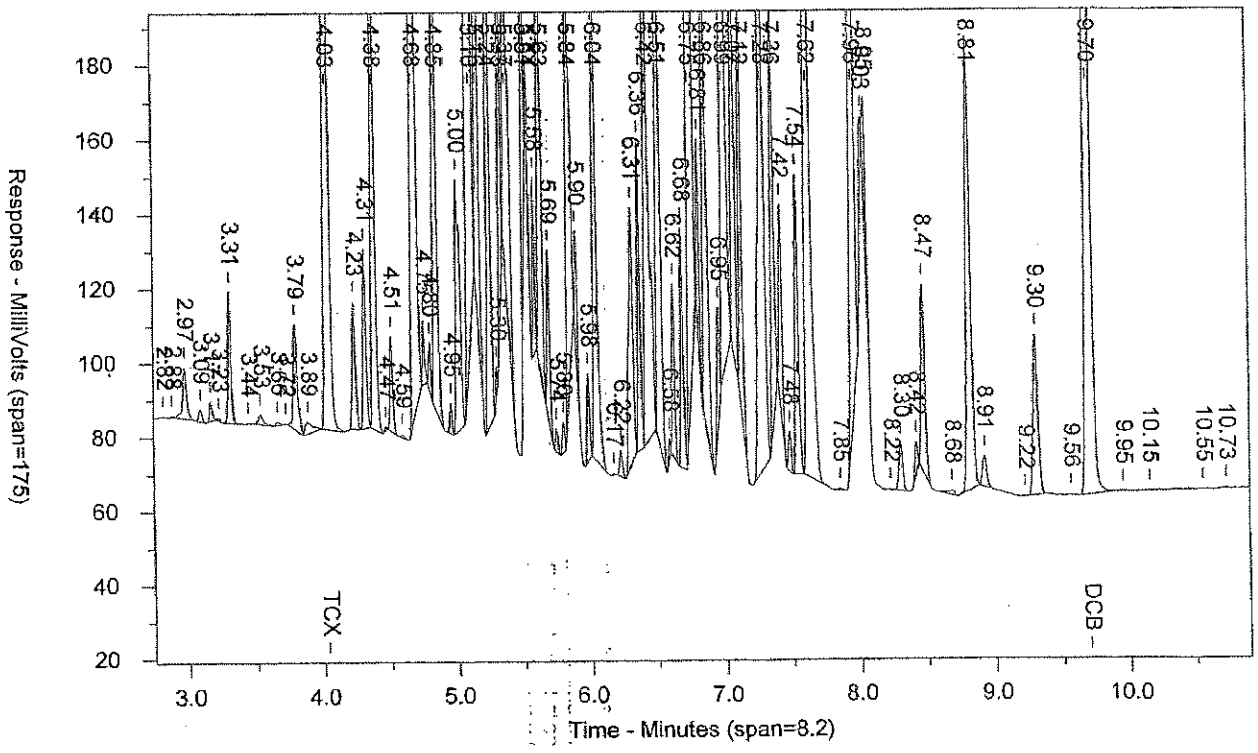
Sample Number: 6850737/MSDACF ABNSTC5MSD .MSD, 123120023A 10736 Injection Volume: 1 ul SW-846 8082
Injected On: 11/8/2012 4:55:38 PM Analyst: 2855
Instrument ID: CP7-5088A
Oven Parameters: 140c to 250c @ 25c/min, to 300c @ 20c/min, hold 4 min
Column A ID: ZB Multiresidue-1 30m x 0.32mm x 0.5um
Column B ID: ZB Multiresidue-2 30m x 0.32mm x 0.25um
Data File: 5p7305B.011.RAW
Method File: PESTDI7B.MET
Calibration File: 1p7305b.CAL

RT B	Compound B	Height B	Area A
1.765		128622	1674644
2.496		250	468
2.574		306	734
2.698		139	549
2.964		3265	7741
3.037		573	1139
3.129		260	680
3.192		170	275
3.249		645	1252
3.37		7264	12708
3.515		585	1557
3.616		134	254
3.678		414	834
3.805		12522	39655
3.948	TCX	167043	354350
4.17		9709	20617
4.257		12602	24600
4.333		52896	115015
4.495		7120	16100
4.633		81272	240037
4.807		64386	149971
4.937		20029	61561
5.032		143319	296450
5.087		45414	79096
5.202		43838	56116
5.24		20336	21547
5.279		37409	86527
5.442		53701	109547
5.503		7694	9141
5.579		50150	99285
5.644		11022	16824
5.698		435	308
5.768		64328	162057
5.847		2862	3719
5.904		47924	91698
5.988		2692	5269
6.114		1945	3649
6.194		8589	16223
6.287		50377	96690
6.321		7072	10976
6.395		113443	219517
6.514		20683	39861
6.567		136609	262945
6.71		125580	237777
6.782		4532	4495
6.821		22374	28518
6.87		80006	98448
6.899		39034	44234
6.951		31799	44602
7.087		18752	33745
7.15		93946	200408
7.247		40960	63450
7.312		19077	45131
7.394		227834	483753

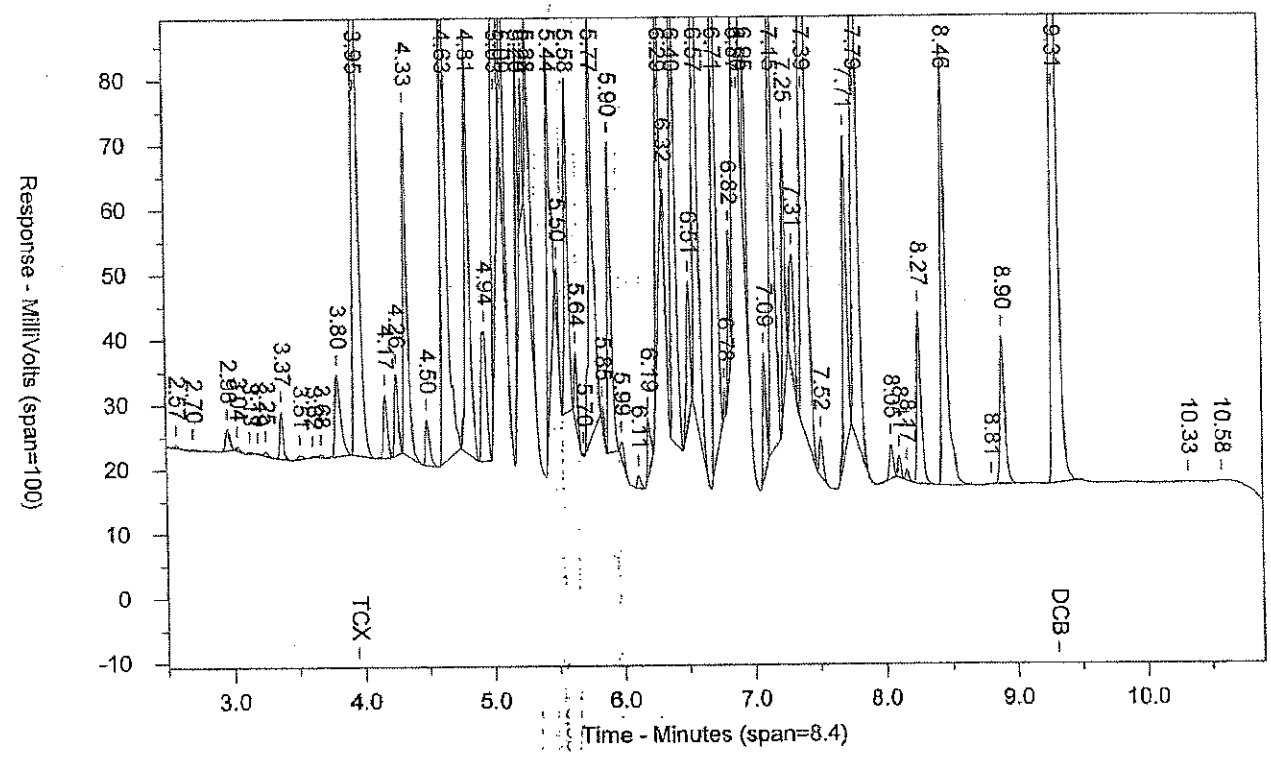
7.517		6071	11251
7.712		48308	94528
7.787		164222	366593
8.051		5254	10183
8.113		3293	5544
8.172		1715	3187
8.268		26462	62971
8.457		65287	169859
8.807		155	445
8.898		22738	59278
9.305	DCB	147080	428148
10.326		107	238
10.581		122	509

6850737MSDACF ABNSTC5MSD MSD 123120023A 10736 SW-846 8082

\\USLAN-CHROMPERF\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP7\5p7305.011.RAW



\\USLAN-CHROMPERF\CHROMPERFECT-DATA\DEPT-24\ACTIVE\CP7\5p7305B.011.RAW



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Sample Number: 6850737MSDACF ABNSTC5MSD MSD 123120023A 10736 Sample Weight: 30 SW-846 8082
Injected On: 11/8/2012 4:55:38 PM Dilution Factor: 10
Instrument ID: CP7-5088A
Oven Parameters: 140c to 300 @ 10c/min
Column A ID: ZB Multiresidue-1 30m x 0.32mm x 0.5um
Column B ID: ZB Multiresidue-2 30m x 0.32mm x 0.25um
Injection Volume: 1 ul

Threshold: 2
Calibration Type: external
Quantitation: Height

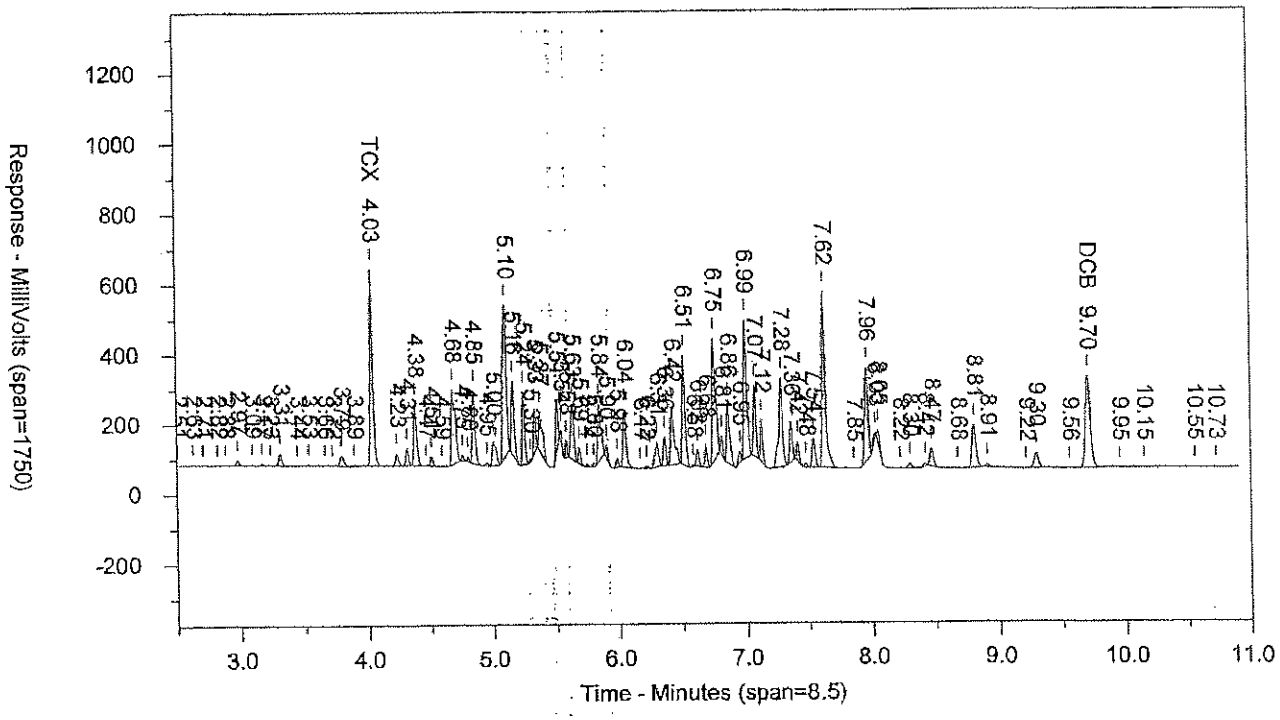
Analyst: 2855

RT A	Height A	Amount A - PPB	Compound A	RT B	Height B	Amount B - PPB	Compound B
4.029	564616	11.304	TCX	3.948	167043	11.16	TCX
9.703	261925	11.228	DCB	9.305	147080	10.708	DCB

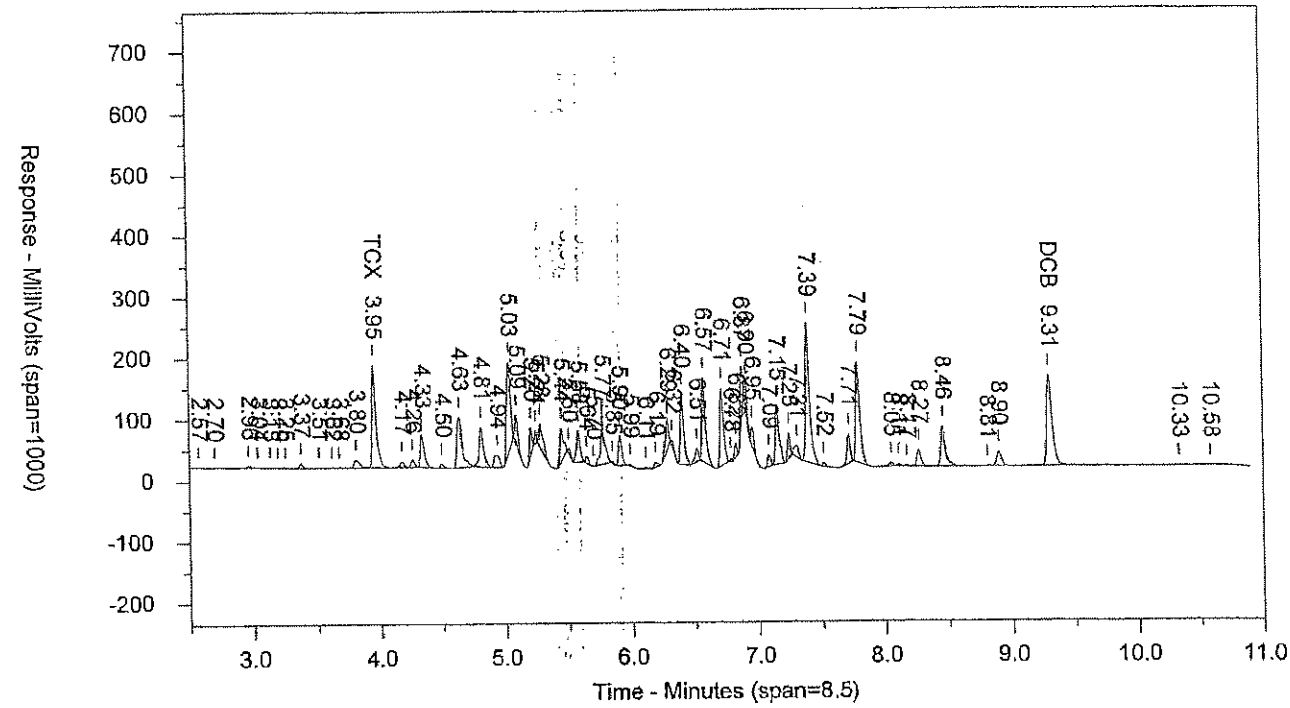
Files:
Area File: 5p7305.011.RAW
Area File: 5p7305B.011.RAW
Method A: PESTDI7.MET
Method B: PESTDI7B.MET
Calibration File A: 1p7305.CAL
Calibration File B: 1p7305b.CAL
Format A: pestD7.FMTA
Format B: pestD7.FMTB
Area File Created On: 11/8/2012 5:06:34 PM
File Reported On: 11/8/2012 at 5:06:39 PM

6850737MSDACF ABNSTC5MSD MSD 123120023A 10736 SW-846 8082

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Extraction/Distillation/Digestion Logs

Polychlorinated Biphenyls (PCBs)

Organic Extraction Batchlog Assigned to: 1785 Sherry Morrow Reviewed by: JM 2655 Start Date: 11/8/12 Start time: 2:30 Am

123120023A Tech 1: SLM 1785 Tech 2:

Dept: 24 Prep Analysis: 10497 PCB Microwave Soil Extraction PCBs in Soil (microwave)

QC	Sample Code	Amt (G)	SS/IS Sol.	Amt (mL)	MS Sol.	Amt (mL)	FV (mL)	pH	pH	BC	Comments
6850737MSD	NSTC5MSD	30.0	~~SS1228424A~~ +	1.0	MS1226124A	1.0	10	Z	Z	3bA	GRAY LOOSE SOIL
6850737MS	NSTC5MS	30.0	~~SS1228424A~~ +	1.0	MS1226124A	1.0	10	Z	Z	3bA	↓
BLANKA	PBLK23312	30.0	~~SS1228424A~~ +	1.0			10	Z	Z	N/A	Na2SO4
LCSA	LCS23312	30.0	~~SS1228424A~~ +	1.0	MS1226124A	1.0	10	Z	Z	N/A	↓

Solvent Used	Lot No.
1:1 Methylene Chloride/Acetone	185110212A
Hexane	L11E21
Sodium Sulfate	12313A

Spike Solutions: Witness: N/A
MS1226124A PCB SPIKE
+ SS12307248 ~~SS1228424A~~ SW846 SURROGATE STANDARI

Sample #	Sample Code	Amt (G)	SS/IS Sol.	Amt (mL)	FV (mL)	pH	pH	BC	Comments	Analyses	Due Date	Prio
1 6850737	NSTC5	30.0	~~SS1228424A~~ +	1.0	10	Z	Z	3bA	GRAY LOOSE SOIL	10736	11/09/2012	S
2 6850738	NSTC6	30.0	~~SS1228424A~~ +	1.0	10	Z	Z	3bA	↓	10736	11/09/2012	S
3 6850741	NSTC7	30.0	~~SS1228424A~~ +	1.0	10	Z	Z	3bA	↓	10736	11/09/2012	S
4 6850744	NSTC8	30.0	~~SS1228424A~~ +	1.0	10	Z	Z	3bA	↓	10736	11/09/2012	S
5 6850747	NSTC9	30.0	~~SS1228424A~~ +	1.0	10	Z	Z	3bA	↓	10736	11/09/2012	S
6 6850750	STC10	30.0	~~SS1228424A~~ +	1.0	10	Z	Z	3bA	↓	10736	11/09/2012	S
7 6850753	STC11	30.0	~~SS1228424A~~ +	1.0	10	Z	Z	3bA	↓	10736	11/09/2012	S
8 6850756	STC12	30.0	~~SS1228424A~~ +	1.0	10	Z	Z	3bA	GRAY, CLUMPY	10736	11/09/2012	S
9 6850759	CTCS2	30.0	~~SS1228424A~~ +	1.0	10	Z	Z	3bA	BROWN, CLUMPY	10736	11/09/2012	S
10 6850764	CTCS3	30.0	~~SS1228424A~~ +	1.0	10	Z	Z	3bA	↓	10736	11/09/2012	S
11 6850765	CTCS4	30.0	~~SS1228424A~~ +	1.0	10	Z	Z	3bA	↓	10736	11/09/2012	S
12 6850770	CTCS5	30.0	~~SS1228424A~~ +	1.0	10	Z	Z	3bA	↓	10736	11/09/2012	S
13 6850771	CTCS6	30.0	~~SS1228424A~~ +	1.0	10	Z	Z	3bA	↓	10736	11/09/2012	S

SLM 1785 11/8/12

Rack ID:		Work Station	11866
Internal Standard		Balance #	2910

DF = Dilution Factor FV = Final Volume Page 1 of 1

S-bath ID 6	98 C	S-bath ID	C	N-Evap	C	M-vap	C	123120023A

Documented temps are NIST corrected.

Prep-Process Worksheet

Acid

Prep: 10497 PCB Microwave Soil Extraction

Batch No: 123120023A

Verified: SLM 1785
Start Date: 11/8/12
Start Time: 645 Am
Tech 1: SLM 1785
Tech 2: _____

Sample #		QC	Aliquot (mL)	Final Volume (mL)	D.F. Aliq	D.F. F.V.	Comments	Analyses
1	6850737		10	10				10736
2	6850737	MS	10	10				10736
3	6850737	MSD	10	10				10736
4	6850738		10	10				10736
5	6850741		10	10				10736
6	6850744		10	10				10736
7	6850747		10	10				10736
8	6850750		10	10				10736
9	6850753		10	10				10736
10	6850756		10	10				10736
11	6850759		10	10				10736
12	6850764		10	10				10736
13	6850765		10	10				10736
14	6850770		10	10				10736
15	6850771		10	10				10736
16	BLANKA		10	10				
17	LCSA		10	10				

SLM 1785 11/8/12

Additional Comment: _____

DF = Dilution Factor FV = Final Volume

Solvent Used	Lot No.	Solvent Used	Lot No.
H2SO4	124865		

Prep-Process Worksheet

Florisil
Prep: 10497 PCB Microwave Soil Extraction
Batch: 123120023A

Verified: SLM285
Start Date: 11/8/12
Start Time: 700 Am
Tech 1: SLM 1785
Tech 2:

Sample #		QC	Aliquot (mL)	Final Volume (mL)	D.F.		Comments	Analyses
					Aliq	F.V.		
1	6850737		2	2				10736
2	6850737	MS	2	2				10736
3	6850737	MSD	2	2				10736
4	6850738		2	2				10736
5	6850741		2	2				10736
6	6850744		2	2				10736
7	6850747		2	2				10736
8	6850750		2	2				10736
9	6850753		2	2				10736
10	6850756		2	2				10736
11	6850759		2	2				10736
12	6850764		2	2				10736
13	6850765		2	2				10736
14	6850770		2	2				10736
15	6850771		2	2				10736
16	BLANKA		2	2				
17	LCSA		2	2				

SLM 1785 11/8/12

Additional Comment: _____ DF = Dilution Factor FV = Final Volume

Solvent Used	Lot No.	Solvent Used	Lot No.
FLORISIL	016180-BV		

S-Evap/bath	C	S-Evap/bath	C	N-Evap	C

The documented temperatures are NIST corrected.

Prep-Process Worksheet

Copper
Prep: 10497 PCB Microwave Soil Extraction
Batch No: 123120023A

Verified: JM 11/8/12
Start Date: 11/8/12
Start Time: 730 Am
Tech 1: Slm 1785
Tech 2:

Sample #		QC	Aliquot (mL)	Final Volume (mL)	D.F.		Comments	Analyses
					Aliq	F.V.		
1	6850737		1	1				10736
2	6850737	MS	1	1				10736
3	6850737	MSD	1	1				10736
4	6850738		1	1				10736
5	6850741		1	1				10736
6	6850744		1	1				10736
7	6850747		1	1				10736
8	6850750		1	1				10736
9	6850753		1	1				10736
10	6850756		1	1				10736
11	6850759		1	1				10736
12	6850764		1	1				10736
13	6850765		1	1				10736
14	6850770		1	1				10736
15	6850771		1	1				10736
16	BLANKA		1	1				
17	LCSA		1	1				

Slm 1785 11/8/12

Additional Comment: _____

DF = Dilution Factor FV = Final Volume

Solvent Used	Lot No.	Solvent Used	Lot No.
Copper	115050 AV		

Metals in Solid Data

Case Narrative/Conformance Summary

Metals in Solid

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Case Narrative/Conformance Summary

CLIENT: ExxonMobil Refining & Supply
SDG: TAP03

ICP Metals

Fraction: Metals in Solid

Sample #	Client ID	Matrix Liquid	Matrix Solid	Comments
6850737	TCN-STC5		X	
6850738	TCN-STC6		X	
6850741	TCN-STC7		X	
6850744	TCN-STC8		X	
6850747	TCN-STC9		X	
6850750	TCN-STC10		X	
6850753	TCN-STC11		X	
6850756	TCN-STC12		X	
6850759	POC-TSC2		X	
6850764	POC-TSC3		X	
6850765	POC-TSC4		X	
6850770	POC-TSC5		X	
6850771	POC-TSC6		X	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Method defined actions are taken for any failed matrix QC.

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Case Narrative/Conformance Summary

CLIENT: ExxonMobil Refining & Supply
SDG: TAP03

ICP Metals

Fraction: Metals in Solid

SAMPLE ANALYSIS:

The final concentration (mg/Kg) is obtained using the following calculation:

$$\text{Instrument reading (mg/l)} \times \text{dilution factor} \times \frac{\text{final volume}}{\text{initial weight}} \div \frac{\%\ \text{solids}}{100}$$

No problems were encountered with the analysis of the samples.

Refer to analysis run log for samples requiring dilutions.

The instrument detection limits (IDLs) are used for determining the U flags on the initial and continuing calibration blanks. The highest IDL is selected when multiple instruments are used for an analysis. The method detection limits (MDLs) are used for determining all other U flags.

Abbreviation Key

BKG – Background	AF - Cold Vapor Atomic Fluorescence
DUP – Duplicate	U - Below MDL
MS - Matrix Spike	B - Below LOQ
MSD - Matrix Spike Dup	N - Matrix Spike out of specifications
B – Blank	* - Duplicate out of specifications
Q - Laboratory Control Sample	E - Matrix Effects exist as proven by Serial Dilution or Spiked Dilution
Y - Laboratory Control Sample Duplicate	A - Post Digestion Spike
P - ICP Atomic Emission Spectrometer	L - Serial Dilution
MS - ICP Mass Spectrometry	R - Internal Standard Relative Intensity OOS
CV - Cold Vapor	NR - Not Required

Sample Data

Metals in Solid

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: TAP03
Matrix: SOIL Level (low/med): LOW

Lab Sample ID: 6850737, 6850737BKG % Solids: 96.4
Concentration Units: MG/KG Date Received: 11/07/2012

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	0.34	U		P
7440-39-3	Barium	16.4			P
7440-41-7	Beryllium	0.068	U		P
7440-43-9	Cadmium	0.056	B		P
7440-47-3	Chromium	4.5			P
7440-50-8	Copper	131			P
7439-92-1	Lead	2.6			P
7439-96-5	Manganese	251			P
7439-97-6	Mercury	0.010	U		CV
7440-02-0	Nickel	16.0			P
7782-49-2	Selenium	2.5			P
7440-22-4	Silver	0.27	B		P
7440-66-6	Zinc	48.7			P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: TAP03
Matrix: SOIL Level (low/med): LOW

Lab Sample ID: 6850738 % Solids: 96.7
Concentration Units: MG/KG Date Received: 11/07/2012

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	0.33	U		P
7440-39-3	Barium	18.0			P
7440-41-7	Beryllium	0.068	U		P
7440-43-9	Cadmium	0.033	U		P
7440-47-3	Chromium	5.3			P
7440-50-8	Copper	130			P
7439-92-1	Lead	1.4	B		P
7439-96-5	Manganese	272			P
7439-97-6	Mercury	0.010	U		CV
7440-02-0	Nickel	16.7			P
7782-49-2	Selenium	2.6			P
7440-22-4	Silver	0.38	B		P
7440-66-6	Zinc	53.4			P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: TAP03
Matrix: SOIL Level (low/med): LOW

Lab Sample ID: 6850741 % Solids: 95.8
Concentration Units: MG/KG Date Received: 11/07/2012

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	0.33	U		P
7440-39-3	Barium	16.5			P
7440-41-7	Beryllium	0.067	U		P
7440-43-9	Cadmium	0.095	B		P
7440-47-3	Chromium	4.3			P
7440-50-8	Copper	161			P
7439-92-1	Lead	3.1			P
7439-96-5	Manganese	249			P
7439-97-6	Mercury	0.0098	U		CV
7440-02-0	Nickel	16.6			P
7782-49-2	Selenium	2.7			P
7440-22-4	Silver	0.40	B		P
7440-66-6	Zinc	55.0			P

Comments:

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METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: TAP03
Matrix: SOIL Level (low/med): LOW

Lab Sample ID: 6850744 % Solids: 96.8
Concentration Units: MG/KG Date Received: 11/07/2012

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	1.3	B		P
7440-39-3	Barium	16.5			P
7440-41-7	Beryllium	0.068	U		P
7440-43-9	Cadmium	0.033	U		P
7440-47-3	Chromium	4.9			P
7440-50-8	Copper	145			P
7439-92-1	Lead	2.9			P
7439-96-5	Manganese	250			P
7439-97-6	Mercury	0.010	U		CV
7440-02-0	Nickel	16.9			P
7782-49-2	Selenium	3.2			P
7440-22-4	Silver	0.34	B		P
7440-66-6	Zinc	52.5			P

Comments:

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METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: TAP03
Matrix: SOIL Level (low/med): LOW

Lab Sample ID: 6850747 % Solids: 96.7
Concentration Units: MG/KG Date Received: 11/07/2012

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	0.34	U		P
7440-39-3	Barium	17.2			P
7440-41-7	Beryllium	0.069	U		P
7440-43-9	Cadmium	0.034	U		P
7440-47-3	Chromium	4.2			P
7440-50-8	Copper	141			P
7439-92-1	Lead	2.5			P
7439-96-5	Manganese	250			P
7439-97-6	Mercury	0.010	U		CV
7440-02-0	Nickel	16.2			P
7782-49-2	Selenium	2.9			P
7440-22-4	Silver	0.34	B		P
7440-66-6	Zinc	52.5			P

Comments:

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METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: TAP03
Matrix: SOIL Level (low/med): LOW

Lab Sample ID: 6850750 % Solids: 96.2
Concentration Units: MG/KG Date Received: 11/07/2012

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	0.33	U		P
7440-39-3	Barium	16.9			P
7440-41-7	Beryllium	0.068	U		P
7440-43-9	Cadmium	0.089	B		P
7440-47-3	Chromium	4.1			P
7440-50-8	Copper	136			P
7439-92-1	Lead	2.1			P
7439-96-5	Manganese	261			P
7439-97-6	Mercury	0.010	U		CV
7440-02-0	Nickel	16.1			P
7782-49-2	Selenium	2.7			P
7440-22-4	Silver	0.48	B		P
7440-66-6	Zinc	56.4			P

Comments:

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METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: TAP03
Matrix: SOIL Level (low/med): LOW

Lab Sample ID: 6850753 % Solids: 96.8
Concentration Units: MG/KG Date Received: 11/07/2012

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	0.33	U		P
7440-39-3	Barium	17.4			P
7440-41-7	Beryllium	0.067	U		P
7440-43-9	Cadmium	0.11	B		P
7440-47-3	Chromium	3.8			P
7440-50-8	Copper	138			P
7439-92-1	Lead	2.2			P
7439-96-5	Manganese	256			P
7439-97-6	Mercury	0.010	U		CV
7440-02-0	Nickel	16.5			P
7782-49-2	Selenium	3.0			P
7440-22-4	Silver	0.44	B		P
7440-66-6	Zinc	52.2			P

Comments:

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METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: TAP03
Matrix: SOIL Level (low/med): LOW

Lab Sample ID: 6850756 % Solids: 94.2
Concentration Units: MG/KG Date Received: 11/07/2012

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	0.35	U		P
7440-39-3	Barium	13.7			P
7440-41-7	Beryllium	0.071	U		P
7440-43-9	Cadmium	0.089	B		P
7440-47-3	Chromium	3.3			P
7440-50-8	Copper	132			P
7439-92-1	Lead	3.0			P
7439-96-5	Manganese	227			P
7439-97-6	Mercury	0.010	U		CV
7440-02-0	Nickel	14.7			P
7782-49-2	Selenium	2.4			P
7440-22-4	Silver	0.31	B		P
7440-66-6	Zinc	56.5			P

Comments:

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METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: TAP03
Matrix: SOIL Level (low/med): LOW

Lab Sample ID: 6850759 % Solids: 77.2
Concentration Units: MG/KG Date Received: 11/07/2012

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.6			P
7440-39-3	Barium	153			P
7440-41-7	Beryllium	1.1			P
7440-43-9	Cadmium	0.18	B		P
7440-47-3	Chromium	26.5			P
7440-50-8	Copper	25.4			P
7439-92-1	Lead	30.0			P
7439-96-5	Manganese	825			P
7439-97-6	Mercury	0.061	B		CV
7440-02-0	Nickel	22.4			P
7782-49-2	Selenium	2.9			P
7440-22-4	Silver	0.42	B		P
7440-66-6	Zinc	91.0			P

Comments:

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METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: TAP03
Matrix: SOIL Level (low/med): LOW

Lab Sample ID: 6850764 % Solids: 77.1
Concentration Units: MG/KG Date Received: 11/07/2012

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	5.2			P
7440-39-3	Barium	143			P
7440-41-7	Beryllium	1.1			P
7440-43-9	Cadmium	0.29	B		P
7440-47-3	Chromium	27.4			P
7440-50-8	Copper	20.4			P
7439-92-1	Lead	33.6			P
7439-96-5	Manganese	1070			P
7439-97-6	Mercury	0.069	B		CV
7440-02-0	Nickel	28.5			P
7782-49-2	Selenium	3.4			P
7440-22-4	Silver	0.45	B		P
7440-66-6	Zinc	108			P

Comments:

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METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: TAP03
Matrix: SOIL Level (low/med): LOW

Lab Sample ID: 6850765 % Solids: 77.7
Concentration Units: MG/KG Date Received: 11/07/2012

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	7.4			P
7440-39-3	Barium	142			P
7440-41-7	Beryllium	1.1			P
7440-43-9	Cadmium	0.19	B		P
7440-47-3	Chromium	26.9			P
7440-50-8	Copper	17.4			P
7439-92-1	Lead	30.5			P
7439-96-5	Manganese	567			P
7439-97-6	Mercury	0.069	B		CV
7440-02-0	Nickel	23.2			P
7782-49-2	Selenium	3.0			P
7440-22-4	Silver	0.33	B		P
7440-66-6	Zinc	91.6			P

Comments:

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METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: TAP03
Matrix: SOIL Level (low/med): LOW

Lab Sample ID: 6850770 % Solids: 77.3
Concentration Units: MG/KG Date Received: 11/07/2012

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	6.6			P
7440-39-3	Barium	164			P
7440-41-7	Beryllium	1.3			P
7440-43-9	Cadmium	0.16	B		P
7440-47-3	Chromium	29.2			P
7440-50-8	Copper	23.2			P
7439-92-1	Lead	24.2			P
7439-96-5	Manganese	649			P
7439-97-6	Mercury	0.055	B		CV
7440-02-0	Nickel	24.3			P
7782-49-2	Selenium	3.5			P
7440-22-4	Silver	0.51	B		P
7440-66-6	Zinc	92.6			P

Comments:

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METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: TAP03
Matrix: SOIL Level (low/med): LOW

Lab Sample ID: 6850771 % Solids: 79.8
Concentration Units: MG/KG Date Received: 11/07/2012

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	5.9			P
7440-39-3	Barium	124			P
7440-41-7	Beryllium	1.1			P
7440-43-9	Cadmium	0.46	B		P
7440-47-3	Chromium	29.7			P
7440-50-8	Copper	23.5			P
7439-92-1	Lead	34.6			P
7439-96-5	Manganese	1860			P
7439-97-6	Mercury	0.12	B		CV
7440-02-0	Nickel	25.4			P
7782-49-2	Selenium	4.1			P
7440-22-4	Silver	0.63			P
7440-66-6	Zinc	105			P

Comments:

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METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

Quality Control and Calibration Summary Forms

Metals in Solid

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QUALITY CONTROL REFERENCE LIST

SDG No.: TAP03
Matrix: SOIL

Analyte	Batch ID	Lab Sample ID
Arsenic	P31208A	6850737BKG
Barium		6850737MS
Beryllium		6850737MSD
Cadmium		6850737DUP
Chromium		6850738
Copper		6850741
Lead		6850744
Manganese		6850747
Nickel		6850750
Selenium		6850753
Silver		6850756
Zinc		6850759
		6850764
		6850765
		6850770
		6850771
		P31208AB
		P31208AQ

LEGEND:

BKG = Background	B = Blank
DUP = Duplicate	Q = Laboratory Control Sample
MS = Matrix Spike	Y = Laboratory Control Sample Duplicate
MSD = Matrix Spike Duplicate	

QUALITY CONTROL REFERENCE LIST

SDG No.: TAP03
Matrix: SOIL

Analyte	Batch ID	Lab Sample ID
Mercury	P31311A	*48628BKG
		*48628MS
		*48628MSD
		*48628DUP
		6850737
		6850738
		6850741
		6850744
		6850747
		6850750
		6850753
		6850756
		6850759
		6850764
		6850765
		6850770
		6850771
		P31311AB
		P31311AQ

LEGEND:

BKG = Background	B = Blank
DUP = Duplicate	Q = Laboratory Control Sample
MS = Matrix Spike	Y = Laboratory Control Sample Duplicate
MSD = Matrix Spike Duplicate	

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QUALITY ASSURANCE SUMMARY
FORM 2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION
SDG No.: TAP03

Method: P
Run Name: 1231402T72
Calibration Date(s): 11/09/2012
Concentration Units: UG/L

Analyte	Mass	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(2)	True	Found	%R(2)
Arsenic		600.0	612.90	102.2	500.0	501.90	100.4	500.0	509.98	102.0
Barium										
Beryllium										
Cadmium		600.0	612.68	102.1	500.0	504.59	100.9	500.0	514.54	102.9
Chromium										
Copper										
Lead		600.0	607.13	101.2	500.0	498.04	99.6	500.0	509.89	102.0
Manganese										
Nickel		600.0	616.87	102.8	500.0	504.18	100.8	500.0	512.49	102.5
Selenium		600.0	620.52	103.4	500.0	508.05	101.6	500.0	517.18	103.4
Silver										
Zinc		600.0	598.54	99.8	500.0	489.46	97.9	500.0	496.18	99.2

(1) Control Limits: 90 - 110
(2) Control Limits: 90 - 110

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION
SDG No.: TAP03

Method: P
Run Name: 1231402T72
Calibration Date(s): 11/09/2012
Concentration Units: UG/L

Analyte	Mass	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(2)	True	Found	%R(2)
Arsenic					500.0	506.11	101.2	500.0	495.84	99.2
Barium										
Beryllium										
Cadmium					500.0	512.04	102.4	500.0	502.50	100.5
Chromium										
Copper										
Lead					500.0	506.28	101.3	500.0	494.72	98.9
Manganese										
Nickel					500.0	511.17	102.2	500.0	495.10	99.0
Selenium					500.0	511.84	102.4	500.0	504.08	100.8
Silver										
Zinc					500.0	493.52	98.7	500.0	479.15	95.8

(1) Control Limits: 90 - 110
(2) Control Limits: 90 - 110

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

QUALITY ASSURANCE SUMMARY
FORM 2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION
SDG No.: TAP03

Method: P
Run Name: 1231403T73
Calibration Date(s): 11/09/2012
Concentration Units: UG/L

Analyte	Mass	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(2)	True	Found	%R(2)
Arsenic										
Barium		600.0	587.05	97.8	500.0	493.57	98.7	500.0	492.73	98.5
Beryllium		600.0	577.84	96.3	500.0	471.05	94.2	500.0	470.71	94.1
Cadmium										
Chromium		600.0	569.61	94.9	500.0	477.19	95.4	500.0	476.56	95.3
Copper		600.0	572.15	95.4	500.0	482.39	96.5	500.0	480.24	96.0
Lead										
Manganese		600.0	581.68	96.9	500.0	486.13	97.2	500.0	486.42	97.3
Nickel										
Selenium										
Silver		600.0	588.76	98.1	500.0	491.85	98.4	500.0	491.02	98.2
Zinc										

(1) Control Limits: 90 - 110
(2) Control Limits: 90 - 110

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

QUALITY ASSURANCE SUMMARY
FORM 2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION
SDG No.: TAP03

Method: P
Run Name: 1231403T73
Calibration Date(s): 11/09/2012
Concentration Units: UG/L

Analyte	Mass	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(2)	True	Found	%R(2)
Arsenic										
Barium					500.0	491.03	98.2	500.0	489.78	98.0
Beryllium					500.0	471.68	94.3	500.0	471.73	94.3
Cadmium										
Chromium					500.0	475.72	95.1	500.0	476.39	95.3
Copper					500.0	482.38	96.5	500.0	481.23	96.2
Lead										
Manganese					500.0	486.72	97.3	500.0	487.13	97.4
Nickel										
Selenium										
Silver					500.0	489.88	98.0	500.0	488.22	97.6
Zinc										

(1) Control Limits: 90 - 110
(2) Control Limits: 90 - 110

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

QUALITY ASSURANCE SUMMARY
FORM 2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION
SDG No.: TAP03

Method: CV
Run Name: 1231304M08
Calibration Date(s): 11/08/2012
Concentration Units: UG/L

		Initial Calibration			Continuing Calibration					
Analyte	Mass	True	Found	%R(1)	True	Found	%R(2)	True	Found	%R(2)
Mercury		2.5	2.38	95.2	1.0	0.94	94.0	1.0	0.96	96.0

(1) Control Limits: 90 - 110
(2) Control Limits: 80 - 120

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

QUALITY ASSURANCE SUMMARY
FORM 2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION
SDG No.: TAP03

Method: CV
Run Name: 1231304M08
Calibration Date(s): 11/08/2012
Concentration Units: UG/L

Analyte	Mass	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(2)	True	Found	%R(2)
Mercury					1.0	0.95	95.0	1.0	0.94	94.0

(1) Control Limits: 90 - 110
(2) Control Limits: 80 - 120

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 2B
LOW LEVEL CHECK STANDARD
SDG No.: TAP03

Method: P
Run Name: 1231402T72
Calibration Date(s): 11/09/2012
Concentration Units: UG/L

Analyte	Mass	Initial True	Initial Found	Initial %R	Final Found	Final %R
Arsenic		20.0	21.27	106.4	20.10	100.5
Barium						
Beryllium						
Cadmium		5.0	5.17	103.4	5.17	103.4
Chromium						
Copper						
Lead		15.0	13.57	90.5	13.91	92.7
Manganese						
Nickel		10.0	10.01	100.1	10.94	109.4
Selenium		20.0	19.69	98.5	21.29	106.5
Silver						
Zinc		20.0	20.00	100.0	19.63	98.2

Control limits: 50% - 150%

For 6010B - Control limits apply to values up to 10 times the true value of the low level check standard. If LLC is out of specification, high, results < RL are acceptable.
For 6010C - If Low Level Check (LLC) is out of specification, results > CCV are acceptable. If LLC is out of specification, high, results < RL are acceptable.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 2B
LOW LEVEL CHECK STANDARD
SDG No.: TAP03

Method: P
Run Name: 1231403T73
Calibration Date(s): 11/09/2012
Concentration Units: UG/L

Analyte	Mass	Initial True	Initial Found	Initial %R	Final Found	Final %R
Arsenic						
Barium		5.0	5.48	109.6	5.47	109.4
Beryllium		5.0	4.78	95.6	4.82	96.4
Cadmium						
Chromium		15.0	14.33	95.5	14.81	98.7
Copper		10.0	10.46	104.6	10.58	105.8
Lead						
Manganese		5.0	5.36	107.2	5.42	108.4
Nickel						
Selenium						
Silver		5.0	3.82	76.4	5.04	100.8
Zinc						

Control limits: 50% - 150%

For 6010B - Control limits apply to values up to 10 times the true value of the low level check standard. If LLC is out of specification, high, results < RL are acceptable.
For 6010C - If Low Level Check (LLC) is out of specification, results > CCV are acceptable. If LLC is out of specification, high, results < RL are acceptable.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 2B
LOW LEVEL CHECK STANDARD
SDG No.: TAP03

Method: CV
Run Name: 1231304M08
Calibration Date(s): 11/08/2012
Concentration Units: UG/L

		Initial			Final	
Analyte	Mass	True	Found	%R	Found	%R
Mercury		0.2	0.19	95.0	0.19	95.0

Control limits: 50% - 150%

For 6010B - Control limits apply to values up to 10 times the true value of the low level check standard. If LLC is out of specification, high, results < RL are acceptable.
For 6010C - If Low Level Check (LLC) is out of specification, results > CCV are acceptable. If LLC is out of specification, high, results < RL are acceptable.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 3
BLANKS
SDG No.: TAP03

Method: P
Run Name: 1231402T72
Calibration Date(s): 11/09/2012
Preparation Blank Matrix: SOIL

		Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank (MG/KG)			
Analyte	Mass		C	1	C	2	C	3	C	Mass		C	Lab Sample ID
Arsenic		3.4	U	3.4	U	3.4	U	3.4	U		0.330	U	P31208AB
Barium													
Beryllium													
Cadmium		0.33	U	0.58	B	0.33	U	0.33	U		0.033	U	P31208AB
Chromium													
Copper													
Lead		2.5	U	2.5	U	2.5	U	2.5	U		0.470	U	P31208AB
Manganese													
Nickel		1.0	U	1.0	U	1.0	U	1.0	U		0.110	U	P31208AB
Selenium		3.4	U	3.4	U	3.4	U	3.4	U		0.720	U	P31208AB
Silver													
Zinc		2.0	U	2.0	U	2.0	U	2.0	U		0.200	U	P31208AB

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below IDL/MDL
B= Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 3
BLANKS
SDG No.: TAP03

Method: P
Run Name: 1231402T72
Calibration Date(s): 11/09/2012

		Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank (MG/KG)			
Analyte	Mass		C	1	C	2	C	3	C	Mass		C	Lab Sample ID
Arsenic				3.4	U								
Barium													
Beryllium													
Cadmium				0.33	U								
Chromium													
Copper													
Lead				2.5	U								
Manganese													
Nickel				1.0	U								
Selenium				3.4	U								
Silver													
Zinc				2.0	U								

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below IDL/MDL
B= Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 3
BLANKS
SDG No.: TAP03

Method: P
Run Name: 1231403T73
Calibration Date(s): 11/09/2012
Preparation Blank Matrix: SOIL

		Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank (MG/KG)			
Analyte	Mass		C	1	C	2	C	3	C	Mass		C	Lab Sample ID
Arsenic													
Barium		0.33	U	0.33	U	0.33	U	0.33	U		0.209	B	P31208AB
Beryllium		0.67	U	0.67	U	0.67	U	0.67	U		0.067	U	P31208AB
Cadmium													
Chromium		0.78	U	0.78	U	0.78	U	0.78	U		-0.106	B	P31208AB
Copper		1.7	U	1.7	U	1.7	U	1.7	U		0.180	U	P31208AB
Lead													
Manganese		0.83	U	0.83	U	0.83	U	0.83	U		0.083	U	P31208AB
Nickel													
Selenium													
Silver		0.83	U	0.83	U	0.83	U	0.83	U		0.140	U	P31208AB
Zinc													

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below IDL/MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	
AF = Cold Vapor Atomic Fluorescence	

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QUALITY ASSURANCE SUMMARY
FORM 3
BLANKS
SDG No.: TAP03

Method: P
Run Name: 1231403T73
Calibration Date(s): 11/09/2012

		Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank (MG/KG)			
Analyte	Mass		C	1	C	2	C	3	C	Mass		C	Lab Sample ID
Arsenic													
Barium				0.33	U								
Beryllium				0.67	U								
Cadmium													
Chromium				0.78	U								
Copper				1.7	U								
Lead													
Manganese				0.83	U								
Nickel													
Selenium													
Silver				0.83	U								
Zinc													

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below IDL/MDL
B= Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 3
BLANKS
SDG No.: TAP03

Method: CV
Run Name: 1231304M08
Calibration Date(s): 11/08/2012
Preparation Blank Matrix: SOIL

		Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank (MG/KG)			
Analyte	Mass		C	1	C	2	C	3	C	Mass		C	Lab Sample ID
Mercury		0.060	U	0.060	U	0.060	U	0.060	U		0.010	U	P31311AB

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below IDL/MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	
AF = Cold Vapor Atomic Fluorescence	

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QUALITY ASSURANCE SUMMARY
FORM 3
BLANKS
SDG No.: TAP03

Method: CV
Run Name: 1231304M08
Calibration Date(s): 11/08/2012

		Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank (MG/KG)			
Analyte	Mass		C	1	C	2	C	3	C	Mass		C	Lab Sample ID
Mercury				0.060	U								

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence	U= Below IDL/MDL B= Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 4A
ICP-AES INTERFERENCE CHECK SAMPLE
SDG No.: TAP03

Instrument ID: 16417
Run Name: 1231402T72
Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	500000	500000	503525	100.7	507701.9	101.5	527790	105.6	502736.2	100.5
Arsenic	0	100	-10		96.6	96.6	-10		97.6	97.6
Barium										
Beryllium										
Cadmium	0	1000	2		988.9	98.9	2		983.2	98.3
Calcium	500000	500000	508120	101.6	524125.7	104.8	537995	107.6	514080.4	102.8
Chromium										
Copper										
Iron	200000	200000	201613	100.8	203161.2	101.6	211951	106.0	201843.8	100.9
Lead	0	50	-1		53.3	106.6	-4		52.4	104.8
Magnesium	500000	500000	476231	95.2	478316.6	95.7	506742	101.3	480245.1	96.0
Manganese										
Nickel	0	1000	4		963.9	96.4	4		943.8	94.4
Selenium	0	50	-7		54.9	109.8	2		51.3	102.6
Silver										
Zinc	0	1000	14		1057.5	105.8	13		1031.0	103.1

Control Limits: All Metals 80%-120%

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QUALITY ASSURANCE SUMMARY
FORM 4A
ICP-AES INTERFERENCE CHECK SAMPLE
SDG No.: TAP03

Instrument ID: 18255
Run Name: 1231403T73
Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	500000	500000	524398	104.9	525121.2	105.0	521058	104.2	522588.7	104.5
Arsenic										
Barium	0	500	1		512.7	102.5	1		507.9	101.6
Beryllium	0	500	-2		517.3	103.5	-2		518.6	103.7
Cadmium										
Calcium	500000	500000	529256	105.9	529279.1	105.9	529102	105.8	530880.5	106.2
Chromium	0	500	1		491.9	98.4	1		490.8	98.2
Copper	0	500	-1		528.2	105.6	-1		527.7	105.5
Iron	200000	200000	210581	105.3	210500.2	105.3	205437	102.7	206744.2	103.4
Lead										
Magnesium	500000	500000	583328	116.7	575772.0	115.2	569224	113.8	572766.0	114.6
Manganese	0	500	4		501.7	100.3	4		501.2	100.2
Nickel										
Selenium										
Silver	0	200	3		227.8	113.9	1		231.1	115.6
Zinc										

Control Limits: All Metals 80%-120%

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QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: TAP03
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: *48628BKG Matrix Spike Lab Sample ID: *48628MS Matrix Spike Duplicate Lab Sample ID: *48628MSD
Batch Id(s): P31311A

		BKG Sample		MS Sample		MSD Sample		MS Spike	MSD Spike		MS		MSD				Control Limit		
Analyte	Mass	Result	C	Result	C	Result	C	Added	Added	Units	%R	Q	%R	Q	RPD	Q	%R	RPD	M
Mercury		0.0100	U	0.1688		0.1637		0.1593	0.1600	MG/KG	106		102		3		80 - 120	20	CV

Note: Results shown are reported on an as-received basis.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

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QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: TAP03
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6850737BKG Matrix Spike Lab Sample ID: 6850737MS Matrix Spike Duplicate Lab Sample ID: 6850737MSD
Batch Id(s): P31208A

		BKG Sample		MS Sample		MSD Sample		MS Spike	MSD Spike		MS		MSD				Control Limit		
Analyte	Mass	Result	C	Result	C	Result	C	Added	Added	Units	%R	Q	%R	Q	RPD	Q	%R	RPD	M
Arsenic		0.3235	U	11.6127		13.2882		14.7059	14.7059	MG/KG	79		90		13		75 - 125	20	P
Barium		15.8245		195.1569		210.2990		196.0784	196.0784	MG/KG	91		99		7		75 - 125	20	P
Beryllium		0.0657	U	4.5539		4.8931		4.9020	4.9020	MG/KG	93		100		7		83 - 111	20	P
Cadmium		0.0539	B	4.2794		4.7716		4.9020	4.9020	MG/KG	86		96		11		75 - 125	20	P
Chromium		4.3137		23.0363		25.5422		19.6078	19.6078	MG/KG	95		108		10		75 - 125	20	P
Copper		126.2382		136.1343		149.7078		24.5098	24.5098	MG/KG	40		96		9			20	P
Lead		2.5255		14.5206		16.4745		14.7059	14.7059	MG/KG	82		95		13		75 - 125	20	P
Manganese		242.0147		332.2539		336.2029		49.0196	49.0196	MG/KG	184		192		1			20	P
Nickel		15.3882		57.6971		63.6265		49.0196	49.0196	MG/KG	86		98		10		75 - 125	20	P
Selenium		2.4353		15.6147		16.6873		14.7059	14.7059	MG/KG	90		97		7		75 - 125	20	P
Silver		0.2647	B	5.3941		5.8824		4.9020	4.9020	MG/KG	105		115		9		75 - 125	20	P
Zinc		46.9225		95.4951		98.7137		49.0196	49.0196	MG/KG	99		106		3		75 - 125	20	P

Note: Results shown are reported on an as-received basis.

METHODS:
P = ICP Atomic Emission Spectrometer CV = Cold Vapor
MS = ICP Mass Spectrometry AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

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QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: TAP03
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: *48628BKG Duplicate Lab Sample ID: *48628DUP
Batch ID(s): P31311A
Concentration Units: MG/KG

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Mercury			0.0100	U	0.0096	U			CV

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

Note: Results shown are reported on an as-received basis.

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

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QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: TAP03
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6850737BKG Duplicate Lab Sample ID: 6850737DUP
Batch ID(s): P31208A
Concentration Units: MG/KG

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Arsenic			-1.2520	B	-0.9343	B	-29		P
Barium			15.8245		16.8333		6		P
Beryllium			0.0657	U	0.0657	U			P
Cadmium			0.0539	B	0.0500	B	8		P
Chromium		1.5	4.3137		4.5980		6		P
Copper			126.2382		124.3275		2		P
Lead		1.5	2.5255		2.9716		16		P
Manganese			242.0147		251.2108		4		P
Nickel			15.3882		15.3735		0		P
Selenium		2.0	2.4353		2.7833		13		P
Silver			0.2647	B	0.4000	B	41		P
Zinc			46.9225		50.3706		7		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

Note: Results shown are reported on an as-received basis.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ

FLAGS:
* = Duplicate Out of Spec

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QUALITY ASSURANCE SUMMARY
FORM 7
LABORATORY CONTROL SAMPLE
SDG No.: TAP03
Matrix: SOIL

Analyte	Mass	Lab Sample ID	Units	True	Found	C	Control Limits (%)	%R	M	In Spec
Arsenic		P31208AQ	UG/L	15000.0	15176.0		80 - 120	101	P	Yes
Barium		P31208AQ	UG/L	200000.0	209368.0		80 - 120	105	P	Yes
Beryllium		P31208AQ	UG/L	5000.0	4993.0		80 - 120	100	P	Yes
Cadmium		P31208AQ	UG/L	5000.0	5245.0		80 - 120	105	P	Yes
Chromium		P31208AQ	UG/L	20000.0	20746.0		80 - 120	104	P	Yes
Copper		P31208AQ	UG/L	25000.0	25393.0		80 - 120	102	P	Yes
Lead		P31208AQ	UG/L	15000.0	15848.0		80 - 120	106	P	Yes
Manganese		P31208AQ	UG/L	50000.0	51999.0		80 - 120	104	P	Yes
Mercury		P31311AQ	UG/L	100.0	101.1		80 - 120	101	CV	Yes
Nickel		P31208AQ	UG/L	50000.0	53419.0		80 - 120	107	P	Yes
Selenium		P31208AQ	UG/L	15000.0	15724.0		80 - 120	105	P	Yes
Silver		P31208AQ	UG/L	5000.0	5504.0		80 - 120	110	P	Yes
Zinc		P31208AQ	UG/L	50000.0	50225.0		80 - 120	100	P	Yes

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: TAP03
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6850737BKG Serial Dilution Lab Sample ID: 6850737L
Batch ID(s): P31208A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Arsenic		3.3000	U	16.5000	U			P
Barium		161.4100		151.2000		6		P
Beryllium		0.6700	U	3.3500	U			P
Cadmium		0.5500	B	1.6500	U	100		P
Chromium		44.0000		38.9500	B	11		P
Copper		1287.6300		1198.0000		7		P
Lead		25.7600		28.4000	B	10		P
Manganese		2468.5500		2352.3500		5		P
Nickel		156.9600		151.6000		3		P
Selenium		24.8400		41.1500	B	66		P
Silver		2.7000	B	7.0000	U	100		P
Zinc		478.6100		442.3000		8		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

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QUALITY ASSURANCE SUMMARY
FORM 10
INSTRUMENT DETECTION LIMITS (QUARTERLY)
SDG No.: TAP03

Method: P
Instrument ID: 16417
Date: 10/2012

Analyte	Wavelength (nm)	Background	IDL (UG/L)
Arsenic	189.04		3.4
Barium			
Beryllium			
Cadmium	226.50		0.33
Chromium			
Copper			
Lead	220.35		2.5
Manganese			
Nickel	231.60		1.0
Selenium	196.09		3.4
Silver			
Zinc	213.86		2.0

Comments:
_____
_____
_____
_____

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 10
INSTRUMENT DETECTION LIMITS (QUARTERLY)
SDG No.: TAP03

Method: P
Instrument ID: 18255
Date: 10/2012

Analyte	Wavelength (nm)	Background	IDL (UG/L)
Arsenic			
Barium	455.40		0.33
Beryllium	313.04		0.67
Cadmium			
Chromium	267.72		0.78
Copper	327.40		1.7
Lead			
Manganese	257.61		0.83
Nickel			
Selenium			
Silver	328.06		0.83
Zinc			

Comments:
_____
_____
_____
_____

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 10
INSTRUMENT DETECTION LIMITS (QUARTERLY)
SDG No.: TAP03

Method: CV
Instrument ID: 19302
Date: 10/2012

Analyte	Wavelength (nm)	Background	IDL (UG/L)
Mercury			0.060

Comments:
_____
_____
_____
_____

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 10 MDL
METHOD DETECTION LIMITS (ANNUALLY)
SDG No.: TAP03
Matrix: SOIL

Method: P
Date: 06/2012

Analyte	Wavelength (nm)	Background	LOQ (UG/L)	MDL (UG/L)
Arsenic	189.04		20.0	3.3
Barium	455.40		5.0	0.33
Beryllium	313.04		5.0	0.67
Cadmium	226.50		5.0	0.33
Chromium	267.72		15.0	0.88
Copper	327.40		10.0	1.8
Lead	220.35		15.0	4.7
Manganese	257.61		5.0	0.83
Nickel	231.60		10.0	1.1
Selenium	196.09		20.0	7.2
Silver	328.06		5.0	1.4
Zinc	213.86		20.0	2.0

The LOQ/MDL must be adjusted for % Solids and Sample Weight for samples reporting in mg/kg and ug/L.

Comments:
_____
_____
_____
_____

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 10 MDL
METHOD DETECTION LIMITS (ANNUALLY)
SDG No.: TAP03
Matrix: SOIL

Method: CV
Date: 07/2012

Analyte	Wavelength (nm)	Background	LOQ (UG/L)	MDL (UG/L)
Mercury			0.60	0.060

The LOQ/MDL must be adjusted for % Solids and Sample Weight for samples reporting in mg/kg and ug/L.

Comments:

_____
_____
_____
_____

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 11
ICP INTERELEMENT CORRECTION FACTORS
(BIANNUALLY)
SDG No.: TAP03

Instrument ID: 16417
Date: 06/2012

Analyte	Wavelength (nm)	Interelement Correction Factor for: AL	CA	FE	MG	BE
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000810	0.0000000	0.0000000
Lead	220.35	0.0002200	0.0000000	0.0000260	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	-0.0000500	0.0000000	0.0000000
Selenium	196.09	0.0000000	0.0000000	-0.0000250	0.0000000	0.0000000
Zinc	213.86	0.0000000	0.0000000	0.0000800	0.0000000	0.0000000

Comments:
_____
_____
_____
_____

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QUALITY ASSURANCE SUMMARY
FORM 11
ICP INTERELEMENT CORRECTION FACTORS
(BIANNUALLY)
SDG No.: TAP03

Instrument ID: 16417
Date: 06/2012

Analyte	Wavelength (nm)	Interelement Correction Factor for: CO	CR	CU	MO	NI
Arsenic	189.04	0.0000000	0.0007400	0.0000000	0.0018000	0.0000000
Cadmium	226.50	-0.0000400	0.0000160	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000350	-0.0000520	0.0003180	-0.0016700	0.0002220
Nickel	231.60	-0.0005900	0.0000000	0.0000000	0.0001890	0.0000000
Selenium	196.09	-0.0000160	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.86	0.0000000	0.0000000	0.0010000	0.0000000	0.0046800

Comments:
_____
_____
_____
_____

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QUALITY ASSURANCE SUMMARY
FORM 11
ICP INTERELEMENT CORRECTION FACTORS
(BIANNUALLY)
SDG No.: TAP03

Instrument ID: 16417
Date: 06/2012

Analyte	Wavelength (nm)	Interelement Correction Factor for: SI	--	--	--	--
Arsenic	189.04	0.0000000				
Cadmium	226.50	0.0000000				
Lead	220.35	0.0000280				
Nickel	231.60	0.0000000				
Selenium	196.09	0.0000000				
Zinc	213.86	0.0000000				

Comments:
_____
_____
_____
_____

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QUALITY ASSURANCE SUMMARY
FORM 11
ICP INTERELEMENT CORRECTION FACTORS
(BIANNUALLY)
SDG No.: TAP03

Instrument ID: 18255
Date: 04/2012

Analyte	Wavelength (nm)	Interelement Correction Factor for: AL	CA	FE	MG	CO
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	327.40	0.0000000	0.0000230	0.0000000	0.0000000	0.0002960
Silver	328.06	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments:
_____
_____
_____
_____

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QUALITY ASSURANCE SUMMARY
FORM 11
ICP INTERELEMENT CORRECTION FACTORS
(BIANNUALLY)
SDG No.: TAP03

Instrument ID: 18255
Date: 04/2012

Analyte	Wavelength (nm)	Interelement Correction Factor for: TI	V	ZR	--	--
Beryllium	313.04	0.0000000	0.0000000	0.0000000		
Copper	327.40	-0.0004280	0.0000000	0.0000000		
Silver	328.06	0.0000000	0.0000000	0.0047570		

Comments:
_____
_____
_____
_____

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QUALITY ASSURANCE SUMMARY
FORM 12
LINEAR RANGES
SDG TAP03
No.:

Method: P
Instrument ID: 16417
Date: 10/2012

Analyte	Wavelength (nm)	Integration Time (Sec.)	Concentration (ug/L)
Arsenic	189.04	10.00	20000.0
Barium			
Beryllium			
Cadmium	226.5	10.00	20000.0
Chromium			
Copper			
Lead	220.35	10.00	10000.0
Manganese			
Nickel	231.6	10.00	10000.0
Selenium	196.09	10.00	20000.0
Silver			
Zinc	213.86	10.00	10000.0

Comments:
_____
_____
_____
_____

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 12
LINEAR RANGES
SDG TAP03
No.:

Method: P
Instrument ID: 18255
Date: 10/2012

Analyte	Wavelength (nm)	Integration Time (Sec.)	Concentration (ug/L)
Arsenic			
Barium	455.4	10.00	5000.0
Beryllium	313.04	10.00	10000.0
Cadmium			
Chromium	267.72	10.00	10000.0
Copper	327.4	10.00	10000.0
Lead			
Manganese	257.61	10.00	10000.0
Nickel			
Selenium			
Silver	328.06	10.00	10000.0
Zinc			

Comments:

_____
_____
_____
_____

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 13
PREPARATION LOG
SDG No.: TAP03

Method: P
Batch ID: P31208A

Lab Sample ID	Date	Sample Weight(gram)	Final Volume(ml)
6850738	11/07/2012	1.02	100
6850741	11/07/2012	1.04	100
6850744	11/07/2012	1.02	100
6850747	11/07/2012	1.01	100
6850750	11/07/2012	1.03	100
6850753	11/07/2012	1.03	100
6850756	11/07/2012	1.00	100
6850759	11/07/2012	1.02	100
6850764	11/07/2012	1.03	100
6850765	11/07/2012	1.02	100
6850770	11/07/2012	1.03	100
6850771	11/07/2012	1.01	100
6850737BKG	11/07/2012	1.02	100
6850737DUP	11/07/2012	1.02	100
6850737MSD	11/07/2012	1.02	100
6850737MS	11/07/2012	1.02	100
P31208AB	11/07/2012	1.00	100
P31208AQ	11/07/2012	1.00	100

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

LEGEND:
BKG = Background
DUP = Duplicate
MS = Matrix Spike
MSD = Matrix Spike Duplicate
B = Blank
Q = Laboratory Control Sample
Y = Laboratory Control Sample Duplicate

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QUALITY ASSURANCE SUMMARY
FORM 13
PREPARATION LOG
SDG No.: TAP03

Method: CV
Batch ID: P31311A

Lab Sample ID	Date	Sample Weight(gram)	Final Volume(ml)
6850737	11/08/2012	0.60	100
6850738	11/08/2012	0.60	100
6850741	11/08/2012	0.64	100
6850744	11/08/2012	0.61	100
6850747	11/08/2012	0.62	100
6850750	11/08/2012	0.61	100
6850753	11/08/2012	0.60	100
6850756	11/08/2012	0.61	100
6850759	11/08/2012	0.62	100
6850764	11/08/2012	0.61	100
6850765	11/08/2012	0.61	100
6850770	11/08/2012	0.64	100
6850771	11/08/2012	0.61	100
*48628BKG	11/08/2012	0.60	100
*48628DUP	11/08/2012	0.62	100
*48628MSD	11/08/2012	0.62	100
*48628MS	11/08/2012	0.63	100
P31311AB	11/08/2012	0.63	100
P31311AQ	11/08/2012	1.00	100

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

LEGEND:
BKG = Background
DUP = Duplicate
MS = Matrix Spike
MSD = Matrix Spike Duplicate
B = Blank
Q = Laboratory Control Sample
Y = Laboratory Control Sample Duplicate

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QUALITY ASSURANCE SUMMARY
FORM 14
ANALYSIS RUN LOG
SDG No.: TAP03

Method: P
Instrument ID: 16417
Run Name: 1231402T72

Run Start Date: 11/09/2012
Run End Date: 11/09/2012

Lab Sample ID	D/F	Time	Analytes																														
			AS	BA	BE	CD	CR	CU	PB	MN	HG	NI	SE	AG	ZN																		
S0	1.00	03:50	X			X			X			X	X		X																		
S	1.00	03:54																															
S	1.00	03:58	X			X			X			X	X		X																		
S	1.00	04:02																															
ICV	1.00	04:06	X			X			X			X	X		X																		
ICB	1.00	04:10	X			X			X			X	X		X																		
LLC	1.00	04:14	X			X			X			X	X		X																		
ICSA	1.00	04:18	X			X			X			X	X		X																		
ICSAB	1.00	04:22	X			X			X			X	X		X																		
CCV	1.00	04:26	X			X			X			X	X		X																		
CCB	1.00	04:30	X			X			X			X	X		X																		
P31208AB	1.00	04:34	X			X			X			X	X		X																		
P31208AQ	1.00	04:39	X			X			X			X	X		X																		
6850737BKG	1.00	04:43	X			X			X			X	X		X																		
6850737A	1.00	04:47																															
6850737DUP	1.00	04:51	X			X			X			X	X		X																		
6850737MS	1.00	04:55	X			X			X			X	X		X																		
6850737MSD	1.00	04:59	X			X			X			X	X		X																		
6850737L	5.00	05:04	X			X			X			X	X		X																		
6850738	1.00	05:08	X			X			X			X	X		X																		
6850741	1.00	05:12	X			X			X			X	X		X																		
CCV	1.00	05:16	X			X			X			X	X		X																		
CCB	1.00	05:20	X			X			X			X	X		X																		
6850744	1.00	05:24	X			X			X			X	X		X																		
6850747	1.00	05:28	X			X			X			X	X		X																		
6850750	1.00	05:32	X			X			X			X	X		X																		
6850753	1.00	05:36	X			X			X			X	X		X																		
6850756	1.00	05:40	X			X			X			X	X		X																		
6850759	1.00	05:44	X			X			X			X	X		X																		
6850764	1.00	05:48	X			X			X			X	X		X																		
6850765	1.00	05:53	X			X			X			X	X		X																		
6850770	1.00	05:57	X			X			X			X	X		X																		
6850771	1.00	06:01	X			X			X			X	X		X																		
CCV	1.00	06:05	X			X			X			X	X		X																		
CCB	1.00	06:09	X			X			X			X	X		X																		
ZZZZZZ	1.00	06:13																															
ZZZZZZ	1.00	06:17																															
ZZZZZZ	1.00	06:21																															

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

LEGEND:
BKG = Background
DUP = Duplicate
MS = Matrix Spike
MSD = Matrix Spike Duplicate
A = Post Digest Spike
L = Serial Dilution
B = Blank
Q = Laboratory Control Sample
Y = Laboratory Control Sample Duplicate

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QUALITY ASSURANCE SUMMARY
FORM 14
ANALYSIS RUN LOG
SDG TAP03
No.:

Method: P
Instrument ID: 16417
Run Name: 1231402T72

Run Start Date: 11/09/2012
Run End Date: 11/09/2012

Lab Sample ID	D/F	Time	Analytes																													
			AS	BA	BE	CD	CR	CU	PB	MN	HG	NI	SE	AG	ZN																	
ZZZZZZ	1.00	06:26																														
ZZZZZZ	1.00	06:30																														
ZZZZZZ	1.00	06:34																														
ZZZZZZ	1.00	06:38																														
LLC	1.00	06:43	X			X			X			X	X		X																	
ICSA	1.00	06:47	X			X			X			X	X		X																	
ICSAB	1.00	06:51	X			X			X			X	X		X																	
CCV	1.00	06:55	X			X			X			X	X		X																	
CCB	1.00	06:59	X			X			X			X	X		X																	

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

LEGEND:
BKG = Background
DUP = Duplicate
MS = Matrix Spike
MSD = Matrix Spike Duplicate
A = Post Digest Spike
L = Serial Dilution
B = Blank
Q = Laboratory Control Sample
Y = Laboratory Control Sample Duplicate

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QUALITY ASSURANCE SUMMARY
FORM 14
ANALYSIS RUN LOG
SDG TAP03
No.:

Method: P
Instrument ID: 18255
Run Name: 1231403T73

Run Start Date: 11/09/2012
Run End Date: 11/09/2012

Lab Sample ID	D/F	Time	Analytes																																					
			AS	BA	BE	CD	CR	CU	PB	MN	HG	NI	SE	AG	ZN																									
S0	1.00	09:07		X	X		X	X		X				X																										
S	1.00	09:11																																						
S	1.00	09:14		X	X			X		X				X																										
S	1.00	09:19					X																																	
ICV	1.00	09:23		X	X		X	X		X				X																										
ICB	1.00	09:27		X	X		X	X		X				X																										
LLC	1.00	09:31		X	X		X	X		X				X																										
ICSA	1.00	09:35		X	X		X	X		X				X																										
ICSAB	1.00	09:39		X	X		X	X		X				X																										
CCV	1.00	09:43		X	X		X	X		X				X																										
CCB	1.00	09:47		X	X		X	X		X				X																										
P31208AB	1.00	09:51		X	X		X	X		X				X																										
P31208AQ	1.00	09:55		X	X		X	X		X				X																										
6850737BKG	1.00	09:59		X	X		X	X		X				X																										
6850737A	1.00	10:03																																						
6850737DUP	1.00	10:07		X	X		X	X		X				X																										
6850737MS	1.00	10:11		X	X		X	X		X				X																										
6850737MSD	1.00	10:16		X	X		X	X		X				X																										
6850737L	5.00	10:20		X	X		X	X		X				X																										
6850738	1.00	10:24		X	X		X	X		X				X																										
6850741	1.00	10:28		X	X		X	X		X				X																										
CCV	1.00	10:32		X	X		X	X		X				X																										
CCB	1.00	10:36		X	X		X	X		X				X																										
6850744	1.00	10:40		X	X		X	X		X				X																										
6850747	1.00	10:44		X	X		X	X		X				X																										
6850750	1.00	10:48		X	X		X	X		X				X																										
6850753	1.00	10:53		X	X		X	X		X				X																										
6850756	1.00	10:57		X	X		X	X		X				X																										
6850759	1.00	11:01		X	X		X	X		X				X																										
6850764	1.00	11:05		X	X		X	X		X				X																										
6850765	1.00	11:09		X	X		X	X		X				X																										
6850770	1.00	11:13		X	X		X	X		X				X																										
6850771	5.00	11:17								X																														
CCV	1.00	11:21		X	X		X	X		X				X																										
CCB	1.00	11:25		X	X		X	X		X				X																										
6850771	1.00	11:29		X	X		X	X						X																										
ZZZZZZ	5.00	11:34																																						
ZZZZZZ	100.00	11:38																																						

METHODS:
- P = ICP Atomic Emission Spectrometer
- MS = ICP Mass Spectrometry
- CV = Cold Vapor
- AF = Cold Vapor Atomic Fluorescence

LEGEND:
- BKG = Background
- DUP = Duplicate
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- A = Post Digest Spike
- L = Serial Dilution
- B = Blank
- Q = Laboratory Control Sample
- Y = Laboratory Control Sample Duplicate

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QUALITY ASSURANCE SUMMARY
FORM 14
ANALYSIS RUN LOG
SDG No.: TAP03

Method: P
Instrument ID: 18255
Run Name: 1231403T73

Run Start Date: 11/09/2012
Run End Date: 11/09/2012

Lab Sample ID	D/F	Time	Analytes																													
			AS	BA	BE	CD	CR	CU	PB	MN	HG	NI	SE	AG	ZN																	
ZZZZZZ	1.00	11:42																														
LLC	1.00	11:46		X	X		X	X		X				X																		
ICSA	1.00	11:50		X	X		X	X		X				X																		
ICSAB	1.00	11:54		X	X		X	X		X				X																		
CCV	1.00	11:58		X	X		X	X		X				X																		
CCB	1.00	12:02		X	X		X	X		X				X																		

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

LEGEND:
BKG = Background
DUP = Duplicate
MS = Matrix Spike
MSD = Matrix Spike Duplicate
A = Post Digest Spike
L = Serial Dilution
B = Blank
Q = Laboratory Control Sample
Y = Laboratory Control Sample Duplicate

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QUALITY ASSURANCE SUMMARY
FORM 14
ANALYSIS RUN LOG
SDG TAP03
No.:

Method: CV
Instrument ID: 19302
Run Name: 1231304M08

Run Start Date: 11/08/2012
Run End Date: 11/08/2012

Lab Sample ID	D/F	Time	Analytes																													
			AS	BA	BE	CD	CR	CU	PB	MN	HG	NI	SE	AG	ZN																	
S0	1.00	12:05									X																					
S0.2	1.00	12:07									X																					
S0.5	1.00	12:09									X																					
S1.0	1.00	12:11									X																					
S2.5	1.00	12:13									X																					
S5.0	1.00	12:16									X																					
ICV	1.00	12:18									X																					
ICB	1.00	12:20									X																					
CRA	1.00	12:22									X																					
CCV	1.00	12:24									X																					
CCB	1.00	12:26									X																					
P31311AB	1.00	12:28									X																					
P31311AQ	1.00	12:30									X																					
*48628BKG	1.00	12:32									X																					
*48628A	1.00	12:34																														
*48628DUP	1.00	12:36									X																					
*48628MS	1.00	12:38									X																					
*48628MSD	1.00	12:40									X																					
ZZZZZZ	1.00	12:42																														
ZZZZZZ	1.00	12:44																														
6850737	1.00	12:46									X																					
CCV	1.00	12:48									X																					
CCB	1.00	12:50									X																					
6850738	1.00	12:52									X																					
6850741	1.00	12:54									X																					
6850744	1.00	12:56									X																					
6850747	1.00	12:58									X																					
6850750	1.00	13:00									X																					
6850753	1.00	13:02									X																					
6850756	1.00	13:04									X																					
6850759	1.00	13:06									X																					
6850764	1.00	13:08									X																					
6850765	1.00	13:10									X																					
CCV	1.00	13:12									X																					
CCB	1.00	13:14									X																					
6850770	1.00	13:16									X																					
6850771	1.00	13:19									X																					
CRA	1.00	13:21									X																					

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

LEGEND:
BKG = Background
DUP = Duplicate
MS = Matrix Spike
MSD = Matrix Spike Duplicate
A = Post Digest Spike
L = Serial Dilution
B = Blank
Q = Laboratory Control Sample
Y = Laboratory Control Sample Duplicate

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QUALITY ASSURANCE SUMMARY
FORM 14
ANALYSIS RUN LOG
SDG TAP03
No.:

Method: CV
Instrument ID: 19302
Run Name: 1231304M08

Run Start Date: 11/08/2012
Run End Date: 11/08/2012

Lab Sample ID	D/F	Time	Analytes																													
			AS	BA	BE	CD	CR	CU	PB	MN	HG	NI	SE	AG	ZN																	
CCV	1.00	13:23									X																					
CCB	1.00	13:25									X																					

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

LEGEND:
BKG = Background
DUP = Duplicate
MS = Matrix Spike
MSD = Matrix Spike Duplicate
A = Post Digest Spike
L = Serial Dilution
B = Blank
Q = Laboratory Control Sample
Y = Laboratory Control Sample Duplicate

Raw Data

Metals in Solid

ICP Data

Metals in Solid

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ICP-AES Run Data Report

1231402T72

Reviewed By
Joanne M Gates

Reviewed Date
11/09/2012 7:22AM

Data File Name 1231402T72.TXT
Run Name: 1231402T72

Verified By:
Jennifer L Moyer

Verified Date
11/12/2012 8:51AM

Method Reference Name(s):
SW-846 6010B

Analyst Employee: 2106

Instrument Parameters:

Individual Integration Time: 10.00 sec Total Integration Time: 30.00 sec Rinse Time: 15.00 sec

Element	Analyte Name	Wavelength Value
AG	Silver	328.06
AL	Aluminum	308.21
AS	Arsenic	189.04
AU	Gold	242.80
B	Boron	249.67
BA	Barium	455.40
BE	Beryllium	313.04
CA	Calcium	317.93
CD	Cadmium	226.50
CO	Cobalt	228.62
CR	Chromium	267.72
CU	Copper	327.40
FE	Iron	261.19
K	Potassium	766.49
LI	Lithium	670.78
MG	Magnesium	285.21
MN	Manganese	257.61
MO	Molybdenum	202.03
NA	Sodium	589.59
NI	Nickel	231.60
P	Phosphorus	177.49
PB	Lead	220.35
SB	Antimony	206.83
SE	Selenium	196.09
SI	Silicon	251.60
SN	Tin	189.99
SR	Strontium	421.55
TI	Titanium	334.94
TL	Thallium	190.86
V	Vanadium	292.40
Y1	Yttrium	224.31
Y2	Yttrium	371.03
ZN	Zinc	213.86
ZR	Zirconium	339.19

The TRACE ICP utilizes Yttrium as an internal standard to compensate for fluctuations in nebulization and plasma conditions. All Yttrium readings are expressed in counts.

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 1 Date/Time: 11/09/2012 03:50

Sample Number: **S0**

ELEMENT	CONC (ppm)	AVERAGE INTENSITY	% RSD	INTEGRATIONS #1	#2	#3
AG	0.000	-0.00044	176.345	-0.00122	0.00032	-0.00042
AL	0.000	0.02935	117.972	0.06897	0.00493	0.01414
AS	0.000	-0.00093	50.160	-0.00133	-0.00042	-0.00104
B	0.000	0.00007	20.114	0.00008	0.00006	0.00008
BA	0.000	-0.00003	173.708	-0.00004	-0.00006	0.00002
BE	0.000	0.13271	2.864	0.12858	0.13348	0.13606
CA	0.000	0.00609	104.516	0.01344	0.00266	0.00218
CD	0.000	-0.02319	78.764	-0.03203	-0.03537	-0.00219
CO	0.000	0.01377	48.713	0.01224	0.00796	0.02110
CR	0.000	0.00001	75.282	0.00000	0.00001	0.00002
CU	0.000	-0.00826	2.181	-0.00816	-0.00847	-0.00815
FE	0.000	0.00079	174.987	0.00238	0.00004	-0.00005
K	0.000	0.06355	53.855	0.09412	0.02657	0.06997
LI	0.000	0.00142	61.633	0.00243	0.00081	0.00103
MG	0.000	0.00780	167.625	0.02291	0.00021	0.00029
MN	0.000	0.00280	14.637	0.00238	0.00320	0.00281
MO	0.000	0.01516	32.815	0.01003	0.01549	0.01996
NA	0.000	0.00421	40.648	0.00616	0.00349	0.00297
NI	0.000	0.04039	11.652	0.03520	0.04161	0.04437
P	0.000	0.00006	74.909	0.00004	0.00002	0.00010
PB	0.000	0.01301	16.058	0.01207	0.01155	0.01540
S	0.000	0.00004	371.030	-0.00008	-0.00001	0.00021
SB	0.000	-0.00004	124.622	0.00002	-0.00009	-0.00005
SE	0.000	-0.00359	20.349	-0.00321	-0.00313	-0.00444
SI	0.000	0.00016	54.008	0.00026	0.00011	0.00011
SN	0.000	0.00734	28.953	0.00520	0.00737	0.00945
SR	0.000	-0.00025	12.371	-0.00028	-0.00026	-0.00022
TI	0.000	0.00064	125.220	0.00147	-0.00013	0.00058
TL	0.000	-0.01372	12.507	-0.01177	-0.01497	-0.01444
V	0.000	0.00240	28.327	0.00317	0.00217	0.00187
Y1	0.000	16174.49040	1.170	16274.02291	15956.18070	16293.26759
Y2A	0.000	368508.45987	2.909	380771.34794	363841.42384	360912.60783
Y2R	0.000	32490.08068	2.598	31709.51810	32374.81548	33385.90845
ZN	0.000	0.03476	42.203	0.02578	0.02681	0.05169
ZR	0.000	0.00031	41.034	0.00045	0.00022	0.00024

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 2 Date/Time: 11/09/2012 03:54

Sample Number: **S1**

ELEMENT	CONC (ppm)	AVERAGE INTENSITY	% RSD	INTEGRATIONS #1	#2	#3
AL	50.000	12.97112	1.662	13.05198	13.13456	12.72682
CA	50.000	2.21238	1.890	2.22953	2.24290	2.16471
FE	50.000	0.82934	1.865	0.83506	0.84114	0.81184
K	50.000	29.16866	1.870	29.45358	29.51268	28.53971
MG	50.000	4.38802	1.873	4.42734	4.44316	4.29355
NA	50.000	2.04078	1.784	2.05379	2.06889	1.99965
S	50.000	0.58041	1.756	0.58379	0.56896	0.58849
SI	50.000	0.64421	1.589	0.64816	0.65189	0.63259
Y1	50.000	15575.15806	1.633	15484.88140	15862.32127	15378.27152
Y2R	50.000	32048.20995	1.598	31762.14271	31743.18499	32639.30214

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 3 Date/Time: 11/09/2012 03:58

Sample Number: **S2**

ELEMENT	CONC (ppm)	AVERAGE INTENSITY	% RSD	INTEGRATIONS #1	#2	#3
AG	1.000	2.23104	5.099	2.17918	2.15245	2.36149
AS	1.000	1.30824	2.082	1.32948	1.27753	1.31770
B	1.000	0.02694	5.396	0.02624	0.02596	0.02861
BA	1.000	1.71827	4.807	1.66465	1.67678	1.81338
BE	1.000	25.42131	6.174	24.33580	24.70721	27.22093
CD	1.000	42.84481	2.026	43.54455	41.87360	43.11629
CO	1.000	17.88514	2.053	18.17783	17.47323	18.00436
CU	1.000	1.47360	5.205	1.43906	1.42023	1.56150
LI	1.000	0.22217	1.541	0.22537	0.22259	0.21856
MN	1.000	9.67894	5.128	9.43703	9.34998	10.24981
NI	1.000	9.52962	1.986	9.66327	9.31302	9.61258
P	1.000	0.02770	1.975	0.02796	0.02708	0.02807
PB	1.000	3.60920	2.006	3.66337	3.52698	3.63726
SE	1.000	0.92110	2.255	0.93260	0.89712	0.93358
SR	1.000	1.84168	6.473	1.77327	1.77244	1.97934
TL	1.000	1.66926	1.878	1.69367	1.63391	1.68020
Y1	1.000	15367.87335	2.088	15093.56734	15720.81763	15289.23507
Y2A	1.000	343130.53528	5.419	353277.30591	354445.15594	321669.14399
Y2R	1.000	32095.11457	1.582	31634.67307	32011.00000	32639.67066
ZN	1.000	32.03912	2.143	32.54412	31.25751	32.31573

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 4 Date/Time: 11/09/2012 04:02

Sample Number: **S3**

ELEMENT	CONC (ppm)	AVERAGE INTENSITY	% RSD	INTEGRATIONS #1	#2	#3
CR	1.000	0.03045	2.088	0.02974	0.03097	0.03063
MO	1.000	11.06271	3.449	10.89573	10.79313	11.49926
SB	1.000	0.03872	3.506	0.03795	0.03792	0.04028
SN	1.000	3.17733	3.649	3.11469	3.10620	3.31110
TI	1.000	6.46828	2.130	6.31691	6.58640	6.50155
V	1.000	1.94997	2.230	1.90310	1.98903	1.95777
Y1	1.000	15784.37402	2.802	15907.97014	16151.65912	15293.49280
Y2A	1.000	363502.07054	3.014	376110.88977	356296.11812	358099.20372
Y2R	1.000	31566.68302	1.978	32268.23000	31359.98203	31071.83702
ZR	1.000	0.09146	3.236	0.08809	0.09264	0.09365

LANCASTER LABORATORIES

Run Name: 1231402T72

Instrument ID: 16417

Tube: 5

Date/Time: 11/09/2012 04:06

Sample Number: **ICV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.59293	9,192.12	6.083	0.60006	0.55383	0.62490
AL	30.49712	5,018.62	2.365	30.98551	30.83710	29.66875
AS	0.61290	246.82	1.179	0.61803	0.60464	0.61603
B	0.57236	5,683.99	6.223	0.58134	0.53312	0.60263
BA	0.58962	349,911.73	4.800	0.59673	0.55844	0.61368
BE	0.58013	102,194.49	6.568	0.58662	0.53919	0.61456
CA	30.05076	42,272.08	2.363	30.54848	30.36605	29.23776
CD	0.61268	8,084.49	1.400	0.62004	0.60326	0.61474
CO	0.61277	3,376.45	1.466	0.62058	0.60295	0.61478
CR	0.60735	6,385.75	6.147	0.61575	0.56653	0.63977
CU	0.59440	6,048.60	6.152	0.60537	0.55361	0.62423
FE	30.22489	15,968.35	2.310	30.71420	30.53522	29.42524
K	30.22552	11,179.93	2.343	30.66158	30.60667	29.40832
LI	0.61603	4,351.85	2.522	0.62482	0.62518	0.59809
MG	29.83657	83,562.85	2.235	30.33774	30.09220	29.07977
MN	0.58631	39,190.41	6.093	0.59544	0.54691	0.61659
MO	0.59685	2,029.76	1.501	0.60508	0.58731	0.59817
NA	30.07098	38,907.98	2.303	30.59364	30.33364	29.28567
NI	0.61687	1,806.13	1.604	0.62653	0.60676	0.61733
P	0.62136	264.62	1.522	0.62890	0.61075	0.62443
PB	0.60713	682.34	1.630	0.61615	0.59654	0.60869
S	29.93216	5,334.41	1.293	30.27575	29.51283	30.00790
SB	0.61594	366.73	1.633	0.62593	0.60581	0.61607
SE	0.62052	174.13	1.372	0.62569	0.61069	0.62518
SI	0.01225	11.66	19.484	0.01496	0.01048	0.01131
SN	0.58836	575.09	1.285	0.59404	0.57978	0.59127
SR	0.58249	370,402.82	5.552	0.59844	0.54527	0.60375
TI	0.61606	27,551.10	5.734	0.62444	0.57730	0.64643
TL	0.61793	299.66	1.627	0.62672	0.60697	0.62009
V	0.62323	8,402.42	6.272	0.63189	0.58054	0.65727
Y1	15358.01512	15,358.02	1.149	15181.82473	15534.81023	15357.41042
Y2A	345969.59648	345,969.60	5.302	340147.57797	366518.11258	331243.09887
Y2R	31663.07521	31,663.08	1.224	31431.83539	31446.88125	32110.50898
ZN	0.59854	5,918.30	1.651	0.60756	0.58798	0.60007
ZR	0.59928	1,739.06	2.149	0.61091	0.60149	0.58543

LANCASTER LABORATORIES

Run Name: 1231402T72

Instrument ID: 16417

Tube: 6

Date/Time: 11/09/2012 04:10

Sample Number: **ICB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00139	-5.47	42.497	0.00188	0.00073	0.00156
AL	-0.05694	9.45	47.458	-0.03357	-0.08653	-0.05072
AS	0.00190	0.65	125.514	-0.00077	0.00384	0.00264
B	0.00115	36.47	28.030	0.00099	0.00093	0.00151
BA	0.00009	44.63	13.147	0.00009	0.00010	0.00008
BE	0.00030	1,006.63	34.618	0.00035	0.00037	0.00018
CA	-0.07467	90.00	10.276	-0.06632	-0.07628	-0.08141
CD	0.00004	-10.38	187.580	0.00007	-0.00004	0.00009
CO	-0.00025	3.00	62.659	-0.00013	-0.00043	-0.00020
CR	-0.00062	-1.77	68.650	-0.00065	-0.00101	-0.00017
CU	-0.00570	-66.63	7.716	-0.00599	-0.00591	-0.00519
FE	-0.02832	10.10	35.560	-0.01739	-0.03035	-0.03722
K	0.02775	51.61	222.435	0.04891	0.07610	-0.04177
LI	-0.00177	33.74	145.810	-0.00476	-0.00030	-0.00026
MG	0.07640	47.73	10.258	0.08544	0.07213	0.07162
MN	-0.00001	19.67	2030.119	-0.00005	-0.00014	0.00017
MO	0.00092	8.19	9.747	0.00085	0.00102	0.00088
NA	-0.03283	92.98	42.317	-0.02497	-0.02464	-0.04887
NI	-0.00016	12.60	42.710	-0.00012	-0.00024	-0.00012
P	-0.00084	0.51	108.066	-0.00087	-0.00174	0.00008
PB	-0.00063	3.46	82.969	-0.00043	-0.00023	-0.00122
S	0.00343	-0.73	43.703	0.00307	0.00215	0.00508
SB	0.00146	0.24	99.205	0.00104	0.00027	0.00307
SE	0.00179	-0.81	82.404	0.00105	0.00348	0.00083
SI	0.00536	7.41	26.747	0.00602	0.00634	0.00371
SN	0.00017	2.54	443.825	0.00044	0.00075	-0.00068
SR	0.00004	-19.84	117.773	0.00010	0.00003	0.00000
TI	0.00023	15.53	81.460	0.00045	0.00008	0.00017
TL	-0.00220	-4.87	14.350	-0.00214	-0.00254	-0.00192
V	0.00001	17.23	3681.354	0.00029	0.00008	-0.00035
Y1	16204.63319	16,204.63	1.580	16102.55362	16015.45442	16495.89152
Y2A	358796.57701	358,796.58	1.842	356850.00000	353381.28733	366158.44371
Y2R	32451.95413	32,451.95	2.257	31607.72301	32830.86974	32917.26964
ZN	-0.00032	7.84	38.996	-0.00021	-0.00030	-0.00046
ZR	0.00291	18.40	112.157	0.00583	-0.00061	0.00351

LANCASTER LABORATORIES

Run Name: 1231402T72

Instrument ID: 16417

Tube: 7

Date/Time: 11/09/2012 04:14

Sample Number: **LLC**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00682	89.13	6.490	0.00633	0.00719	0.00693
AL	0.16036	46.21	45.402	0.17824	0.08028	0.22256
AS	0.02127	8.85	5.965	0.02268	0.02023	0.02089
B	0.04584	477.82	2.649	0.04571	0.04711	0.04469
BA	0.00526	3,288.20	2.301	0.00529	0.00537	0.00513
BE	0.00488	1,867.28	6.553	0.00503	0.00510	0.00452
CA	0.15563	423.44	29.005	0.13511	0.12439	0.20738
CD	0.00517	61.02	1.375	0.00520	0.00509	0.00523
CO	0.00512	34.22	1.011	0.00513	0.00517	0.00507
CR	0.01531	174.82	2.787	0.01575	0.01527	0.01490
CU	0.00532	50.75	14.166	0.00598	0.00450	0.00549
FE	0.19904	134.66	24.022	0.18234	0.16182	0.25297
K	0.53667	244.69	5.336	0.52921	0.51251	0.56830
LI	0.02155	201.09	5.979	0.02013	0.02188	0.02264
MG	0.20102	413.30	25.578	0.17929	0.16404	0.25974
MN	0.00507	377.75	2.945	0.00506	0.00522	0.00492
MO	0.00991	40.28	2.147	0.00975	0.00983	0.01015
NA	1.02141	1,490.67	4.299	0.98815	1.00490	1.07119
NI	0.01001	43.75	6.671	0.01025	0.00926	0.01053
P	0.10046	45.62	0.367	0.10037	0.10014	0.10086
PB	0.01357	20.02	10.079	0.01303	0.01512	0.01255
S	0.48966	90.49	1.867	0.49315	0.47929	0.49654
SB	0.02068	12.29	5.857	0.02204	0.01972	0.02028
SE	0.01969	4.55	13.768	0.01958	0.02246	0.01704
SI	0.06001	30.38	13.086	0.05536	0.05560	0.06908
SN	0.01956	22.42	1.143	0.01973	0.01964	0.01931
SR	0.00499	3,303.35	2.798	0.00500	0.00513	0.00485
TI	0.01037	494.08	3.466	0.01057	0.01059	0.00996
TL	0.03272	13.91	2.329	0.03348	0.03196	0.03272
V	0.00502	88.38	6.882	0.00540	0.00473	0.00493
Y1	16163.45597	16,163.46	0.840	16115.41722	16316.77639	16058.17431
Y2A	364792.36786	364,792.37	4.617	356124.05441	354050.59721	384202.45195
Y2R	32531.87498	32,531.87	1.075	32436.21034	32239.87632	32919.53828
ZN	0.02000	217.69	1.488	0.02011	0.01966	0.02023
ZR	0.05081	160.61	2.654	0.04926	0.05143	0.05174

LANCASTER LABORATORIES

Run Name: 1231402T72

Instrument ID: 16417

Tube: 8

Date/Time: 11/09/2012 04:18

Sample Number: **ICSA**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00456	11.68	17.748	0.00452	0.00539	0.00377
AL	503.52518	80,304.87	0.988	498.70907	503.22073	508.64575
AS	-0.00999	-3.77	26.980	-0.01288	-0.00954	-0.00754
B	0.06882	2,719.02	12.435	0.07813	0.06705	0.06129
BA	0.00079	416.97	5.029	0.00082	0.00075	0.00080
BE	0.00085	965.27	9.971	0.00094	0.00084	0.00077
CA	508.11967	644,567.68	3.966	485.72866	513.83848	524.79188
CD	0.00220	175.47	15.828	0.00260	0.00206	0.00194
CO	0.00474	27.43	12.973	0.00541	0.00458	0.00421
CR	0.00175	20.88	16.689	0.00194	0.00189	0.00141
CU	-0.00954	64.78	16.773	-0.00859	-0.01138	-0.00863
FE	201.61348	97,410.56	0.945	199.76522	201.50363	203.57159
K	0.02328	47.14	332.170	0.07159	0.06418	-0.06592
LI	0.00474	105.78	40.658	0.00291	0.00455	0.00675
MG	476.23091	1,034,138.74	1.374	468.86292	478.47127	481.35853
MN	0.00368	240.43	1.044	0.00372	0.00365	0.00366
MO	-0.00077	1.86	1.276	-0.00077	-0.00077	-0.00076
NA	0.07424	220.14	8.578	0.07357	0.08092	0.06823
NI	0.00415	-4.41	24.689	0.00304	0.00436	0.00506
P	0.01181	5.28	21.133	0.01222	0.01408	0.00913
PB	-0.00096	116.83	478.845	0.00291	0.00027	-0.00606
S	-0.04103	-8.74	9.458	-0.04145	-0.03695	-0.04468
SB	0.00339	5.61	70.282	0.00122	0.00302	0.00594
SE	-0.00727	-8.70	112.037	-0.00649	0.00046	-0.01577
SI	0.05559	26.65	7.909	0.05227	0.06058	0.05392
SN	0.00444	5.94	63.628	0.00733	0.00429	0.00169
SR	0.00244	1,363.55	1.076	0.00247	0.00242	0.00243
TI	0.00282	118.37	0.654	0.00283	0.00283	0.00280
TL	-0.00500	-5.48	30.398	-0.00389	-0.00437	-0.00673
V	-0.00084	24.17	32.446	-0.00057	-0.00111	-0.00082
Y1	13939.28774	13,939.29	1.783	13652.70475	14070.36514	14094.79333
Y2A	313037.99728	313,038.00	0.994	310312.30000	312373.63333	316428.05851
Y2R	30440.82675	30,440.83	1.149	30765.59505	30486.22957	30070.65564
ZN	0.01423	279.06	3.698	0.01480	0.01411	0.01377
ZR	0.00610	26.15	42.791	0.00475	0.00443	0.00910

LANCASTER LABORATORIES

Run Name: 1231402T72

Instrument ID: 16417

Tube: 9

Date/Time: 11/09/2012 04:22

Sample Number: **ICSAB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.22930	3,127.35	1.084	0.23217	0.22796	0.22778
AL	507.70194	81,597.66	0.370	505.69219	508.00493	509.40870
AS	0.09656	35.00	3.230	0.09441	0.09513	0.10014
B	0.07549	2,762.85	10.047	0.08380	0.07372	0.06894
BA	0.52352	278,998.61	1.528	0.53236	0.52145	0.51677
BE	0.51330	81,342.07	1.601	0.52255	0.51053	0.50682
CA	524.12566	668,730.81	0.614	525.83058	520.41546	526.13095
CD	0.98894	11,895.14	0.360	0.98550	0.99261	0.98871
CO	0.49297	2,444.94	0.505	0.49112	0.49580	0.49198
CR	0.51057	4,823.62	1.574	0.51843	0.51092	0.50237
CU	0.53980	5,092.94	1.386	0.54740	0.53956	0.53244
FE	203.16116	98,860.15	0.432	202.28551	203.15569	204.04229
K	0.04422	54.78	59.810	0.07203	0.04124	0.01939
LI	0.00962	140.66	33.083	0.00610	0.01044	0.01231
MG	478.31659	1,045,394.71	0.805	474.57284	482.26795	478.10898
MN	0.49114	29,497.22	1.470	0.49843	0.49102	0.48399
MO	-0.00095	1.28	37.006	-0.00078	-0.00072	-0.00136
NA	0.09941	253.20	4.658	0.09407	0.10237	0.10178
NI	0.96388	2,518.65	0.474	0.95980	0.96881	0.96304
P	0.01050	5.54	17.318	0.01085	0.00853	0.01211
PB	0.05329	171.43	10.126	0.05776	0.05480	0.04730
S	-0.05046	-10.15	21.768	-0.04008	-0.04933	-0.06196
SB	0.65235	355.12	1.051	0.64701	0.66008	0.64996
SE	0.05489	7.25	15.409	0.06096	0.05848	0.04523
SI	0.04642	23.23	7.177	0.04683	0.04290	0.04952
SN	0.00352	5.13	15.118	0.00409	0.00304	0.00344
SR	0.00252	1,398.91	1.515	0.00256	0.00249	0.00251
TI	0.00326	149.98	14.628	0.00372	0.00277	0.00328
TL	0.09318	29.05	2.805	0.09139	0.09618	0.09197
V	0.54137	6,621.27	1.355	0.54822	0.54226	0.53363
Y1	13849.42595	13,849.43	0.392	13906.69687	13798.74609	13842.83488
Y2A	310213.44431	310,213.44	1.805	304209.81432	311134.00931	315296.50931
Y2R	30670.22963	30,670.23	0.339	30738.01917	30550.37000	30722.29972
ZN	1.05745	9,518.51	0.497	1.05376	1.06347	1.05513
ZR	0.00614	26.54	51.002	0.00763	0.00254	0.00825

LANCASTER LABORATORIES

Run Name: 1231402T72

Instrument ID: 16417

Tube: 10

Date/Time: 11/09/2012 04:26

Sample Number: **CCV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.49878	7,875.67	1.333	0.50628	0.49645	0.49361
AL	26.05256	4,366.19	5.771	26.92094	26.92023	24.31652
AS	0.50190	209.99	0.772	0.50373	0.49745	0.50452
B	0.48367	4,900.20	0.926	0.48881	0.48062	0.48158
BA	0.50547	305,525.69	2.205	0.51741	0.50365	0.49534
BE	0.48158	86,628.97	0.613	0.48360	0.48295	0.47819
CA	25.80729	37,002.00	5.599	26.65461	26.62835	24.13889
CD	0.50459	6,916.88	1.384	0.50730	0.49666	0.50981
CO	0.50331	2,882.65	1.178	0.50675	0.49647	0.50673
CR	0.51080	5,473.95	1.256	0.51821	0.50714	0.50706
CU	0.50238	5,209.20	1.172	0.50913	0.49830	0.49971
FE	25.70144	13,843.79	5.556	26.52942	26.52227	24.05265
K	25.45293	9,591.05	5.353	26.09740	26.37368	23.88771
LI	0.51749	3,728.79	5.727	0.53442	0.53478	0.48327
MG	25.52953	72,891.31	5.803	26.33628	26.43255	23.81977
MN	0.49163	33,492.32	1.027	0.49745	0.48852	0.48890
MO	0.48724	1,722.57	1.427	0.49147	0.47921	0.49104
NA	25.29770	33,341.89	5.569	26.10152	26.12051	23.67107
NI	0.50418	1,536.01	1.336	0.50806	0.49640	0.50808
P	0.51096	226.27	1.564	0.51328	0.50206	0.51753
PB	0.49804	583.48	0.862	0.49841	0.49358	0.50214
S	24.59609	4,554.31	1.086	24.72500	24.28888	24.77440
SB	0.50594	312.99	0.675	0.50712	0.50209	0.50861
SE	0.50805	147.87	0.807	0.51225	0.50407	0.50784
SI	25.26300	10,493.80	5.417	25.98620	26.11817	23.68463
SN	0.48601	493.99	1.061	0.48851	0.48008	0.48944
SR	0.49474	320,569.56	0.044	0.49456	0.49498	0.49468
TI	0.52268	23,818.15	1.388	0.53104	0.51882	0.51816
TL	0.51047	256.30	1.233	0.51175	0.50364	0.51603
V	0.52574	7,228.30	0.998	0.53173	0.52356	0.52194
Y1	15957.17010	15,957.17	1.013	15902.93040	16138.96118	15829.61872
Y2A	351851.32714	351,851.33	1.388	346730.72329	352368.97810	356454.28003
Y2R	32278.66290	32,278.66	4.387	31491.28962	31431.25747	33913.44161
ZN	0.48946	5,031.75	1.367	0.49354	0.48174	0.49311
ZR	0.50681	1,498.61	5.675	0.52181	0.52497	0.47365

LANCASTER LABORATORIES

Run Name: 1231402T72

Instrument ID: 16417

Tube: 11

Date/Time: 11/09/2012 04:30

Sample Number: **CCB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00196	3.12	4.529	0.00204	0.00186	0.00198
AL	-0.06820	7.57	53.422	-0.03012	-0.07176	-0.10273
AS	0.00122	0.35	82.597	0.00043	0.00088	0.00236
B	0.00016	27.18	417.349	0.00029	-0.00056	0.00074
BA	0.00004	13.85	72.162	0.00005	0.00006	0.00001
BE	0.00003	971.42	158.303	0.00003	-0.00001	0.00006
CA	-0.08418	76.64	2.084	-0.08535	-0.08502	-0.08216
CD	0.00058	-2.70	135.122	0.00144	0.00043	-0.00011
CO	0.00017	5.39	457.293	0.00103	0.00003	-0.00054
CR	-0.00026	2.10	123.314	-0.00045	0.00011	-0.00044
CU	-0.00557	-66.28	5.235	-0.00531	-0.00550	-0.00588
FE	-0.03699	5.46	5.939	-0.03488	-0.03927	-0.03682
K	-0.01412	36.02	290.770	-0.05787	0.02360	-0.00810
LI	-0.00209	31.27	53.822	-0.00285	-0.00080	-0.00260
MG	0.06709	21.01	2.288	0.06654	0.06590	0.06882
MN	-0.00001	19.65	971.322	-0.00011	-0.00002	0.00010
MO	0.00036	6.09	118.668	0.00083	0.00022	0.00002
NA	-0.03362	92.30	11.552	-0.03234	-0.03798	-0.03054
NI	0.00089	15.53	28.210	0.00117	0.00069	0.00081
P	-0.00045	0.66	206.702	-0.00122	-0.00070	0.00058
PB	-0.00136	2.58	157.497	-0.00026	-0.00383	0.00001
S	0.01029	0.56	136.005	0.02528	0.00803	-0.00244
SB	0.00351	1.49	44.384	0.00455	0.00425	0.00172
SE	0.00040	-1.19	646.903	0.00284	-0.00235	0.00072
SI	0.00493	7.26	49.853	0.00246	0.00496	0.00737
SN	-0.00023	2.11	326.655	-0.00021	-0.00097	0.00050
SR	-0.00005	-80.34	16.353	-0.00005	-0.00004	-0.00006
TI	0.00002	5.58	1335.707	0.00027	-0.00023	0.00001
TL	-0.00069	-3.98	226.194	-0.00209	0.00100	-0.00099
V	-0.00016	15.17	199.880	-0.00053	-0.00004	0.00008
Y1	15886.73331	15,886.73	1.543	16151.41868	15667.70656	15841.07471
Y2A	364298.20537	364,298.21	1.048	360474.66887	368109.71391	364310.23333
Y2R	32519.59804	32,519.60	1.326	32219.57608	32325.61341	33013.60463
ZN	0.00024	13.52	276.150	0.00101	-0.00004	-0.00024
ZR	-0.00143	5.75	154.914	-0.00333	-0.00194	0.00100

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 12 Date/Time: 11/09/2012 04:34

Sample Number: **PBS** Class: **** Batch: 123125708001

Initial Vol: 1.00 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00147	-4.58	33.076	0.00184	0.00164	0.00092
AL	0.35996	86.22	31.670	0.36366	0.24416	0.47207
AS	-0.00049	-0.37	524.509	-0.00317	0.00188	-0.00016
B	0.00348	61.88	4.297	0.00335	0.00364	0.00345
BA	0.00202	1,288.65	3.117	0.00195	0.00207	0.00204
BE	0.00019	1,028.32	122.959	-0.00006	0.00022	0.00040
CA	0.44452	910.39	17.675	0.45812	0.36004	0.51540
CD	0.00008	-9.77	77.733	0.00002	0.00007	0.00015
CO	-0.00018	3.52	215.694	-0.00039	0.00026	-0.00040
CR	0.00044	10.10	99.808	0.00040	0.00088	0.00002
CU	-0.00551	-67.27	9.384	-0.00498	-0.00601	-0.00553
FE	0.00090	28.35	3072.819	-0.00587	-0.02280	0.03138
K	0.02946	56.90	79.509	0.04689	0.03865	0.00283
LI	-0.00102	42.14	105.378	-0.00059	-0.00225	-0.00023
MG	0.26409	646.93	24.415	0.24807	0.20914	0.33507
MN	0.00028	41.47	11.947	0.00025	0.00032	0.00029
MO	-0.00010	4.55	214.450	0.00010	-0.00007	-0.00034
NA	-0.00971	134.58	68.413	-0.01025	-0.01606	-0.00281
NI	0.00012	13.46	200.215	-0.00015	0.00029	0.00023
P	0.78001	349.06	1.265	0.78231	0.78853	0.76920
PB	-0.00150	2.55	30.647	-0.00197	-0.00105	-0.00148
S	0.01358	1.18	39.626	0.01925	0.00855	0.01295
SB	0.00159	0.32	6.721	0.00146	0.00165	0.00165
SE	0.00127	-0.96	238.953	0.00465	-0.00122	0.00038
SI	0.07905	41.59	1.817	0.08060	0.07776	0.07879
SN	0.01489	17.68	5.687	0.01488	0.01575	0.01405
SR	0.00068	420.18	4.267	0.00065	0.00069	0.00070
TI	0.00638	313.60	5.682	0.00596	0.00658	0.00660
TL	0.00005	-3.66	1175.912	0.00068	-0.00038	-0.00016
V	-0.00019	15.43	117.815	0.00006	-0.00028	-0.00033
Y1	16206.46917	16,206.47	0.942	16218.37885	16048.17153	16352.85714
Y2A	374592.67241	374,592.67	4.459	392656.66004	371408.81570	359712.54147
Y2R	35332.24060	35,332.24	5.468	33225.09479	37020.55767	35751.06936
ZN	0.00182	30.00	3.183	0.00179	0.00189	0.00178
ZR	0.00030	11.74	31.075	0.00026	0.00040	0.00023

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 13 Date/Time: 11/09/2012 04:39

Sample Number: **LCSW** Class: **** Batch: 123125708001

Initial Vol: 1.00 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.04965	905.80	3.762	0.04755	0.05026	0.05113
AL	2.03182	380.42	6.545	2.18531	1.95108	1.95907
AS	0.15176	66.28	1.020	0.15323	0.15191	0.15014
B	1.86500	18,145.25	2.574	1.81040	1.88401	1.90058
BA	2.03169	1,260,695.57	3.402	1.95462	2.05225	2.08819
BE	0.05268	10,582.31	2.029	0.05145	0.05322	0.05337
CA	4.19559	6,398.13	5.392	4.45482	4.09393	4.03801
CD	0.05245	723.83	0.184	0.05251	0.05234	0.05250
CO	0.53221	3,124.74	0.360	0.53345	0.53000	0.53318
CR	0.21437	2,361.05	3.154	0.20671	0.21690	0.21951
CU	0.25653	2,703.71	2.568	0.24897	0.25961	0.26101
FE	1.01790	595.23	5.924	1.08657	0.99359	0.97355
K	10.33988	4,049.26	4.483	10.87241	10.11991	10.02731
LI	1.05709	7,812.10	5.916	1.12907	1.02609	1.01612
MG	2.14032	6,211.78	5.057	2.26415	2.09304	2.06376
MN	0.50551	35,357.82	2.025	0.49373	0.51053	0.51227
MO	1.99689	7,206.11	0.448	1.99470	1.98926	2.00672
NA	10.24393	14,026.97	4.989	10.83317	9.97750	9.92112
NI	0.53419	1,668.85	0.367	0.53523	0.53193	0.53541
P	1.36093	613.16	0.120	1.35990	1.36006	1.36282
PB	0.15848	187.06	1.105	0.15820	0.15689	0.16036
S	0.00902	-2.70	4.656	0.00928	0.00924	0.00853
SB	0.50271	311.25	0.697	0.49984	0.50168	0.50662
SE	0.15724	46.11	2.320	0.15330	0.16050	0.15792
SI	0.03445	25.81	6.579	0.03198	0.03644	0.03492
SN	3.95003	4,089.72	0.341	3.95285	3.93538	3.96187
SR	1.01570	675,535.51	3.302	0.97818	1.02619	1.04274
TI	1.05899	49,471.01	3.088	1.02286	1.06753	1.08658
TL	0.16027	70.26	1.235	0.16069	0.15812	0.16201
V	0.52594	7,265.63	2.122	0.51313	0.53116	0.53354
Y1	16321.25596	16,321.26	0.507	16235.53587	16400.75499	16327.47701
Y2A	361359.04276	361,359.04	2.847	372926.46471	357925.48109	353225.18248
Y2R	33326.85750	33,326.86	4.095	31771.01059	33887.82626	34321.73565
ZN	0.50225	5,258.18	0.455	0.50260	0.49981	0.50434
ZR	1.02805	3,128.80	5.329	1.09043	1.00598	0.98775

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 14 Date/Time: 11/09/2012 04:43

Sample Number: **6850737** Class: U*** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00421	4.17	18.495	0.00421	0.00343	0.00499
AL	204.57690	36,735.36	2.894	205.39870	198.28915	210.04284
AS	-0.01277	-5.46	18.595	-0.01088	-0.01543	-0.01199
B	0.29790	7,619.24	8.237	0.30067	0.32093	0.27209
BA	0.15578	96,910.97	1.351	0.15715	0.15683	0.15336
BE	0.01243	3,233.83	1.900	0.01260	0.01253	0.01216
CA	147.69160	222,536.09	2.990	148.03656	143.11388	151.92435
CD	0.00055	343.85	192.047	0.00038	0.00167	-0.00041
CO	0.16938	1,225.81	1.096	0.16736	0.17102	0.16975
CR	0.04554	506.81	0.673	0.04571	0.04572	0.04519
CU	1.32378	14,075.67	1.381	1.33523	1.33341	1.30269
FE	386.39514	200,288.04	3.403	387.58388	372.69102	398.91052
K	6.54094	2,672.99	2.705	6.57952	6.34788	6.69543
LI	0.06347	543.19	3.550	0.06107	0.06381	0.06554
MG	74.20740	222,509.26	3.287	74.55373	71.61375	76.45473
MN	2.37318	166,311.12	1.184	2.38879	2.39002	2.34074
MO	0.00316	15.93	15.234	0.00352	0.00334	0.00261
NA	30.71964	43,342.94	3.014	30.87083	29.72760	31.56049
NI	0.15696	428.75	0.400	0.15765	0.15641	0.15682
P	8.30847	3,647.12	0.831	8.27454	8.38795	8.26291
PB	0.02576	110.26	23.513	0.02434	0.03240	0.02054
S	1.41860	257.32	0.976	1.41236	1.43447	1.40897
SB	0.00296	11.22	77.081	0.00056	0.00323	0.00511
SE	0.02484	-6.41	7.747	0.02332	0.02420	0.02700
SI	6.01250	2,679.24	3.084	6.08032	5.80271	6.15446
SN	0.02514	27.71	1.113	0.02546	0.02501	0.02495
SR	0.57104	380,776.69	1.069	0.57561	0.57340	0.56410
TI	19.33111	905,075.14	2.671	19.55180	19.70041	18.74110
TL	-0.01146	-56.89	17.259	-0.01140	-0.00951	-0.01346
V	1.16493	16,699.34	1.226	1.17179	1.17448	1.14851
Y1	15923.10957	15,923.11	0.360	15952.60788	15856.96982	15959.75100
Y2A	362124.14307	362,124.14	1.619	360846.02649	357006.03849	368520.36424
Y2R	34540.10023	34,540.10	2.405	34307.77000	35462.28070	33850.25000
ZN	0.47861	5,195.66	1.191	0.47605	0.48514	0.47464
ZR	0.20767	664.03	3.917	0.20611	0.20043	0.21648

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 15 Date/Time: 11/09/2012 04:47

Sample Number: **6850737** Class: UP** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.02055	386.52	5.112	0.02127	0.01934	0.02103
AL	203.30439	36,243.71	2.508	200.39625	209.19193	200.32501
AS	0.49128	202.23	1.229	0.48431	0.49500	0.49453
B	0.47680	9,257.31	5.239	0.48493	0.44877	0.49671
BA	0.20260	124,747.06	0.956	0.20307	0.20047	0.20426
BE	0.03194	6,736.32	0.995	0.03199	0.03159	0.03222
CA	148.48863	222,109.32	2.259	146.76905	152.35356	146.34327
CD	0.04883	989.99	3.207	0.04793	0.04792	0.05064
CO	0.26372	1,740.51	1.950	0.25810	0.26486	0.26820
CR	0.23768	2,597.06	0.984	0.23828	0.23509	0.23965
CU	1.80197	18,981.98	1.289	1.80895	1.77605	1.82091
FE	385.85278	198,612.44	2.617	380.85722	397.47584	379.22528
K	8.49347	3,432.89	2.220	8.44962	8.70009	8.33071
LI	1.07686	8,206.73	2.477	1.06589	1.10727	1.05742
MG	75.00965	223,235.43	2.273	74.09500	76.97655	73.95740
MN	2.39578	166,169.98	1.071	2.40552	2.36666	2.41514
MO	0.18871	660.19	2.495	0.18483	0.18736	0.19395
NA	32.45994	45,462.57	2.150	32.08713	33.26514	32.02753
NI	0.29957	849.02	1.799	0.29389	0.30019	0.30461
P	9.21569	3,994.38	1.902	9.02770	9.24478	9.37459
PB	0.49761	641.57	2.370	0.48821	0.49378	0.51084
S	1.41342	252.84	1.986	1.39488	1.39966	1.44571
SB	0.39690	250.67	1.833	0.39035	0.39563	0.40473
SE	0.86900	239.29	1.047	0.85849	0.87421	0.87431
SI	6.01700	2,662.63	2.163	5.94582	6.16721	5.93797
SN	0.57738	577.77	1.685	0.56926	0.57471	0.58816
SR	0.58275	384,568.00	1.621	0.58520	0.57232	0.59073
TI	19.31863	895,244.80	2.371	19.22025	18.91779	19.81786
TL	0.93478	439.93	1.748	0.91766	0.93644	0.95022
V	1.25037	17,709.83	0.979	1.25442	1.23661	1.26007
Y1	15724.25497	15,724.25	2.038	16015.52653	15776.21359	15381.02479
Y2A	358400.15717	358,400.16	1.513	357415.46358	364247.68212	353537.32581
Y2R	34284.87669	34,284.88	1.692	34586.77760	33615.99840	34651.85407
ZN	0.59253	6,280.43	1.915	0.58134	0.59221	0.60403
ZR	1.15021	3,604.39	1.950	1.13813	1.17609	1.13641

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 16 Date/Time: 11/09/2012 04:51

Sample Number: **6850737** Class: D*** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00412	3.52	16.932	0.00421	0.00477	0.00338
AL	212.07355	37,563.89	2.588	207.89152	210.04100	218.28814
AS	-0.00953	-4.08	22.853	-0.00760	-0.01189	-0.00909
B	0.24376	6,998.39	5.500	0.25862	0.23258	0.24008
BA	0.17048	104,561.35	1.768	0.17103	0.16723	0.17318
BE	0.01328	3,342.17	1.982	0.01343	0.01298	0.01344
CA	153.70710	228,243.51	2.256	150.86941	152.68022	157.57167
CD	0.00051	341.60	207.026	0.00079	0.00141	-0.00066
CO	0.16818	1,228.28	2.076	0.16430	0.17108	0.16915
CR	0.04983	546.24	2.603	0.04975	0.04858	0.05117
CU	1.33824	14,021.24	1.814	1.34766	1.31067	1.35640
FE	386.93981	197,788.54	2.696	378.72578	383.41708	398.67656
K	6.55953	2,643.60	2.080	6.47566	6.48594	6.71698
LI	0.06152	521.20	3.884	0.06074	0.05962	0.06420
MG	71.76667	212,471.33	2.335	70.41000	71.24968	73.64034
MN	2.51762	173,939.15	1.729	2.52904	2.46951	2.55431
MO	0.00139	9.67	20.128	0.00145	0.00164	0.00109
NA	32.12966	44,703.58	2.301	31.53930	31.89066	32.95901
NI	0.15681	425.39	1.512	0.15414	0.15865	0.15765
P	7.78564	3,395.15	1.685	7.63869	7.89098	7.82727
PB	0.03031	116.43	7.511	0.02958	0.03286	0.02848
S	1.53571	277.13	1.256	1.51354	1.54854	1.54505
SB	0.00469	12.28	68.056	0.00826	0.00209	0.00374
SE	0.02839	-5.34	12.529	0.02933	0.02445	0.03138
SI	5.15173	2,264.91	2.556	5.05293	5.10106	5.30121
SN	0.02532	27.72	2.083	0.02563	0.02471	0.02562
SR	0.60906	400,381.59	1.171	0.61711	0.60655	0.60353
TI	20.64321	953,002.38	0.887	20.85373	20.52166	20.55423
TL	-0.01223	-60.77	12.452	-0.01048	-0.01304	-0.01319
V	1.26932	17,931.75	1.962	1.27507	1.24204	1.29085
Y1	15818.99205	15,818.99	1.063	16010.76369	15696.65801	15749.55445
Y2A	356992.51547	356,992.52	1.412	351382.94625	361145.86093	358448.73922
Y2R	34057.38088	34,057.38	1.476	34442.18657	34241.29567	33488.66041
ZN	0.51378	5,515.90	1.383	0.50626	0.52038	0.51470
ZR	0.21559	679.65	0.778	0.21447	0.21477	0.21752

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 17 Date/Time: 11/09/2012 04:55

Sample Number: **6850737** Class: R*** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.04401	776.89	0.267	0.04411	0.04403	0.04388
AL	228.66949	40,642.48	1.243	231.94978	226.96774	227.09096
AS	0.11845	49.53	1.492	0.11975	0.11644	0.11916
B	1.87227	23,559.21	0.918	1.89199	1.86047	1.86437
BA	1.88859	1,200,371.55	1.520	1.92050	1.86487	1.88041
BE	0.05903	12,020.77	1.377	0.05997	0.05860	0.05852
CA	180.93597	268,483.15	1.393	183.39495	178.35734	181.05563
CD	0.04365	922.47	1.410	0.04345	0.04435	0.04317
CO	0.58959	3,561.28	0.765	0.59019	0.59377	0.58481
CR	0.23122	2,608.03	1.254	0.23457	0.22956	0.22953
CU	1.38833	15,075.51	0.817	1.40113	1.37952	1.38435
FE	396.06507	202,447.50	1.608	403.41288	392.60163	392.18068
K	16.87134	6,749.89	1.164	17.09690	16.73784	16.77927
LI	0.98153	7,458.88	1.344	0.99675	0.97331	0.97454
MG	72.10790	214,037.18	1.528	73.37971	71.48280	71.46118
MN	3.10233	222,106.10	1.083	3.14074	3.07836	3.08788
MO	1.65414	5,709.72	0.693	1.66220	1.65921	1.64101
NA	45.52993	63,462.58	1.406	46.26868	45.17453	45.14657
NI	0.58851	1,698.27	0.726	0.59273	0.58863	0.58418
P	7.84214	3,374.92	0.578	7.86363	7.87272	7.79006
PB	0.14811	248.80	1.716	0.14907	0.15002	0.14523
S	1.35411	238.17	0.319	1.35861	1.35373	1.34999
SB	0.26315	164.23	1.057	0.26012	0.26558	0.26374
SE	0.15927	32.25	1.227	0.16153	0.15819	0.15810
SI	14.20010	6,255.65	1.188	14.39387	14.08597	14.12045
SN	3.26554	3,233.97	0.340	3.27677	3.26528	3.25456
SR	1.49523	1,018,702.56	0.885	1.50765	1.48131	1.49673
TI	20.42544	977,071.71	2.697	20.89343	19.81822	20.56467
TL	0.11268	-7.54	2.307	0.11466	0.10973	0.11363
V	1.83224	26,573.23	1.123	1.85597	1.82134	1.81941
Y1	15609.24816	15,609.25	0.553	15706.83242	15543.10513	15577.80694
Y2A	369951.26954	369,951.27	1.425	363867.94702	373206.71989	372779.14172
Y2R	34147.28111	34,147.28	1.195	33676.15431	34384.97901	34380.71000
ZN	0.97405	10,043.92	0.601	0.97685	0.97798	0.96732
ZR	1.08668	3,392.64	1.278	1.10263	1.07721	1.08021

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 18 Date/Time: 11/09/2012 04:59

Sample Number: **6850737** Class: M*** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.04962	873.85	4.828	0.04728	0.04951	0.05207
AL	246.74698	43,844.77	4.500	254.02694	233.96659	252.24740
AS	0.13554	57.46	1.189	0.13455	0.13467	0.13740
B	2.06777	25,211.92	4.626	1.96000	2.10074	2.14258
BA	2.09639	1,316,913.73	4.811	1.99638	2.09470	2.19810
BE	0.06268	12,560.44	3.356	0.06063	0.06258	0.06483
CA	191.15020	283,169.22	3.253	194.47508	183.97631	194.99921
CD	0.04867	1,003.78	4.027	0.04690	0.05078	0.04833
CO	0.64958	3,929.10	0.926	0.64279	0.65423	0.65173
CR	0.26155	2,916.01	3.374	0.25314	0.26078	0.27073
CU	1.55470	16,713.31	3.145	1.50638	1.55359	1.60414
FE	396.00967	202,241.92	5.284	410.05643	371.96127	406.01130
K	17.85267	7,135.56	4.305	18.28254	16.96541	18.31007
LI	1.08914	8,265.40	4.454	1.12262	1.03351	1.11129
MG	81.38543	240,409.83	5.045	84.02667	76.65527	83.47434
MN	3.24249	229,620.10	1.124	3.20945	3.23645	3.28158
MO	1.82868	6,402.16	1.304	1.80311	1.85034	1.83260
NA	49.16217	68,468.14	4.598	50.70110	46.56683	50.21859
NI	0.64899	1,904.46	1.016	0.64140	0.65321	0.65238
P	8.72467	3,808.49	1.241	8.61043	8.82582	8.73777
PB	0.16804	278.64	3.170	0.16214	0.17249	0.16950
S	1.40676	251.00	1.035	1.39000	1.41389	1.41639
SB	0.24897	157.49	3.655	0.24675	0.25897	0.24118
SE	0.17021	35.91	2.872	0.16725	0.16753	0.17585
SI	5.79852	2,559.08	4.908	5.96374	5.46990	5.96192
SN	3.47445	3,490.10	1.040	3.43293	3.49864	3.49179
SR	1.59391	1,073,553.56	3.400	1.54381	1.58649	1.65143
TI	18.69347	884,110.96	3.507	18.01822	18.73494	19.32725
TL	0.12937	7.34	3.456	0.12420	0.13194	0.13195
V	1.66245	23,809.03	3.248	1.60992	1.65962	1.71781
Y1	15834.47091	15,834.47	0.993	16009.85469	15705.90367	15787.65439
Y2A	365991.31187	365,991.31	3.449	378730.31208	365753.11258	353490.51095
Y2R	34158.90333	34,158.90	3.680	33418.34396	35610.18131	33448.18472
ZN	1.00688	10,523.24	1.391	0.99230	1.02024	1.00808
ZR	1.19568	3,728.77	5.219	1.23459	1.12370	1.22875

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 19 Date/Time: 11/09/2012 05:04

Sample Number: **6850737** Class: UL** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 5.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00214	1.68	16.285	0.00189	0.00254	0.00200
AL	39.26379	6,846.94	0.567	39.39409	39.39072	39.00657
AS	-0.00417	-1.92	75.498	-0.00384	-0.00120	-0.00747
B	0.06549	1,558.29	16.795	0.06575	0.05436	0.07635
BA	0.02926	18,903.42	6.111	0.02922	0.02749	0.03107
BE	0.00215	1,407.28	17.184	0.00220	0.00175	0.00249
CA	28.13990	42,029.76	0.619	28.17057	28.29680	27.95235
CD	0.00033	57.23	75.655	0.00005	0.00040	0.00054
CO	0.03273	247.51	1.194	0.03256	0.03246	0.03318
CR	0.00944	113.42	3.465	0.00966	0.00907	0.00960
CU	0.24545	2,704.71	6.146	0.24336	0.23152	0.26147
FE	68.89248	38,176.61	0.648	68.97259	69.29358	68.41129
K	1.25668	534.09	5.386	1.32513	1.25512	1.18978
LI	0.01307	146.62	11.024	0.01258	0.01193	0.01469
MG	14.26542	42,592.36	0.816	14.31895	14.34538	14.13192
MN	0.44784	32,624.32	6.204	0.44542	0.42134	0.47675
MO	0.00315	16.38	10.954	0.00353	0.00308	0.00285
NA	5.77982	8,050.18	0.665	5.79179	5.81083	5.73684
NI	0.03032	96.65	3.282	0.02948	0.03006	0.03142
P	1.53013	690.90	2.592	1.51110	1.50357	1.57571
PB	0.00568	25.65	16.421	0.00661	0.00474	0.00571
S	0.25313	46.03	2.147	0.25025	0.24974	0.25940
SB	0.00230	2.61	55.465	0.00352	0.00098	0.00241
SE	0.00823	-1.13	36.573	0.00529	0.01131	0.00810
SI	1.16915	511.30	1.045	1.16622	1.18257	1.15866
SN	0.00508	7.68	9.285	0.00545	0.00524	0.00455
SR	0.10719	74,215.27	6.301	0.10650	0.10080	0.11426
TI	3.76782	183,307.82	6.307	3.75148	3.53877	4.01322
TL	-0.00332	-14.82	50.969	-0.00503	-0.00329	-0.00164
V	0.22041	3,296.82	6.492	0.21886	0.20693	0.23542
Y1	16367.38305	16,367.38	2.201	16514.05867	16631.12118	15956.96929
Y2A	377211.46823	377,211.47	6.550	377938.37981	401547.58118	352148.44371
Y2R	33595.61198	33,595.61	0.742	33399.71041	33511.09116	33876.03438
ZN	0.08846	994.04	2.628	0.08718	0.08707	0.09115
ZR	0.04894	160.08	5.680	0.05113	0.04987	0.04581

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 20 Date/Time: 11/09/2012 05:08

Sample Number: **6850738** Class: **** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00380	-6.08	11.722	0.00358	0.00431	0.00351
AL	216.85104	37,190.91	3.066	209.18586	221.05386	220.31339
AS	-0.01046	-4.46	26.878	-0.00879	-0.00888	-0.01371
B	0.45799	9,594.80	6.593	0.48315	0.46632	0.42451
BA	0.17647	107,272.10	2.335	0.17773	0.17981	0.17186
BE	0.01539	3,689.80	2.363	0.01559	0.01561	0.01497
CA	158.76197	228,079.57	3.138	153.01036	161.67873	161.59681
CD	-0.00130	363.27	69.230	-0.00026	-0.00185	-0.00180
CO	0.17236	1,281.80	1.152	0.17464	0.17102	0.17142
CR	0.05541	601.43	1.817	0.05527	0.05647	0.05447
CU	1.37821	14,305.27	2.168	1.38848	1.40160	1.34455
FE	439.18698	213,819.07	3.570	421.08251	448.30702	448.17142
K	7.74252	3,013.32	3.042	7.47686	7.82496	7.92572
LI	0.07277	586.94	1.480	0.07153	0.07349	0.07328
MG	80.14679	228,876.36	3.114	77.26553	81.53781	81.63702
MN	2.64720	181,275.78	1.986	2.66749	2.68661	2.58751
MO	0.00286	14.76	72.429	0.00522	0.00203	0.00133
NA	33.15629	44,658.02	2.846	32.06710	33.67542	33.72636
NI	0.16435	439.74	0.743	0.16554	0.16310	0.16442
P	8.09156	3,525.15	0.709	8.15073	8.08770	8.03627
PB	0.01401	102.81	30.081	0.01737	0.01539	0.00928
S	1.52620	274.63	0.423	1.53277	1.51988	1.52595
SB	0.00286	12.48	149.493	0.00775	0.00105	-0.00021
SE	0.02565	-7.80	13.131	0.02414	0.02951	0.02331
SI	5.07876	2,161.69	3.330	4.88442	5.15930	5.19255
SN	0.02673	29.09	8.122	0.02901	0.02649	0.02469
SR	0.64824	422,437.92	1.074	0.64102	0.65492	0.64879
TI	22.99723	1,052,305.59	1.947	23.02693	23.42949	22.53527
TL	-0.01392	-68.29	22.508	-0.01752	-0.01235	-0.01188
V	1.44665	20,251.01	2.141	1.45502	1.47258	1.41235
Y1	15802.45268	15,802.45	0.499	15719.15923	15812.20068	15875.99814
Y2A	353865.79297	353,865.79	1.163	353187.49171	350131.65229	358278.23490
Y2R	32979.01036	32,979.01	2.273	33835.13082	32440.86000	32661.04026
ZN	0.52653	5,681.57	1.108	0.53295	0.52508	0.52156
ZR	0.24568	748.34	2.691	0.23809	0.25017	0.24878

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 21 Date/Time: 11/09/2012 05:12

Sample Number: **6850741** Class: **** Batch: 123125708001

Initial Vol: 1.04 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00378	-4.36	9.707	0.00378	0.00414	0.00341
AL	196.87403	34,389.99	1.300	194.14792	197.25023	199.22393
AS	-0.01159	-4.79	2.976	-0.01171	-0.01119	-0.01185
B	0.29590	7,534.47	8.058	0.31687	0.26996	0.30085
BA	0.16493	99,699.55	2.802	0.16852	0.15972	0.16655
BE	0.01382	3,389.04	3.270	0.01423	0.01333	0.01389
CA	146.33615	214,569.40	1.165	144.51211	146.60675	147.88959
CD	0.00095	347.67	53.905	0.00105	0.00140	0.00039
CO	0.18118	1,259.20	2.209	0.17786	0.18562	0.18005
CR	0.04636	501.20	2.302	0.04704	0.04513	0.04690
CU	1.69824	17,555.52	2.786	1.73357	1.64449	1.71666
FE	399.07031	200,492.77	1.364	393.24036	399.94934	404.02125
K	7.22297	2,867.26	1.616	7.11264	7.21115	7.34512
LI	0.06403	532.25	3.355	0.06155	0.06523	0.06531
MG	70.98184	207,380.85	1.384	69.89682	71.23693	71.81177
MN	2.45579	167,231.29	2.689	2.51060	2.38246	2.47432
MO	0.00156	9.95	14.221	0.00161	0.00176	0.00132
NA	28.98975	39,804.27	1.208	28.60584	29.07148	29.29194
NI	0.16516	435.28	1.197	0.16391	0.16744	0.16413
P	8.59383	3,636.44	1.319	8.48652	8.71241	8.58256
PB	0.03060	110.97	2.627	0.03152	0.03003	0.03025
S	1.78555	313.32	0.587	1.77627	1.79693	1.78346
SB	0.00078	9.87	75.408	0.00075	0.00139	0.00021
SE	0.02667	-6.05	26.027	0.02917	0.03201	0.01882
SI	5.59227	2,424.96	1.483	5.49746	5.65131	5.62804
SN	0.02743	28.94	2.933	0.02655	0.02812	0.02762
SR	0.54271	351,676.33	3.081	0.54522	0.52488	0.55804
TI	20.34343	925,668.16	3.078	20.63636	19.62450	20.76942
TL	-0.01355	-60.21	43.872	-0.01013	-0.02041	-0.01010
V	1.30416	18,154.98	2.789	1.33006	1.26258	1.31985
Y1	15348.30410	15,348.30	1.037	15500.32099	15182.73993	15361.85138
Y2A	352028.84754	352,028.85	3.032	342438.18845	363526.75497	350121.59920
Y2R	33592.68351	33,592.68	0.996	33979.08000	33402.73000	33396.24053
ZN	0.54822	5,701.64	1.179	0.54280	0.55537	0.54649
ZR	0.21088	655.92	1.879	0.20633	0.21356	0.21275

LANCASTER LABORATORIES

Run Name: 1231402T72

Instrument ID: 16417

Tube: 22

Date/Time: 11/09/2012 05:16

Sample Number: **CCV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.49514	7,799.40	1.258	0.49195	0.50232	0.49116
AL	24.92612	4,163.95	4.733	24.57606	23.96096	26.24134
AS	0.50998	208.99	1.198	0.51429	0.50299	0.51267
B	0.48134	4,858.38	1.824	0.47623	0.49148	0.47632
BA	0.50333	303,513.90	3.088	0.49291	0.52120	0.49588
BE	0.48852	87,655.59	1.445	0.48692	0.49624	0.48240
CA	24.96101	35,675.70	4.501	24.63712	24.03513	26.21080
CD	0.51454	6,907.98	1.158	0.51814	0.50766	0.51783
CO	0.51218	2,873.05	1.471	0.51772	0.50360	0.51521
CR	0.50904	5,442.66	1.127	0.50561	0.51566	0.50584
CU	0.49472	5,117.72	1.042	0.49041	0.50043	0.49332
FE	24.98435	13,414.68	4.449	24.67354	24.06132	26.21818
K	24.95803	9,372.79	4.262	24.71229	24.03873	26.12309
LI	0.50633	3,636.92	4.463	0.50191	0.48626	0.53081
MG	24.73521	70,406.29	4.396	24.40484	23.85144	25.94934
MN	0.48877	33,221.57	1.113	0.48526	0.49504	0.48601
MO	0.49543	1,715.58	1.174	0.49883	0.48872	0.49875
NA	24.92247	32,736.86	4.398	24.64549	23.99155	26.13036
NI	0.51249	1,529.27	1.386	0.51682	0.50429	0.51635
P	0.51896	225.07	1.133	0.52103	0.51233	0.52352
PB	0.50989	584.47	1.318	0.51485	0.50225	0.51258
S	24.95971	4,526.87	1.313	25.13953	24.58132	25.15828
SB	0.51466	311.77	1.606	0.51928	0.50512	0.51959
SE	0.51718	147.49	1.561	0.52443	0.50848	0.51863
SI	24.58017	10,175.31	4.247	24.30924	23.69850	25.73276
SN	0.49496	492.74	1.131	0.49755	0.48854	0.49879
SR	0.49154	317,684.89	2.971	0.48038	0.50807	0.48617
TI	0.52574	23,902.46	1.590	0.51921	0.53516	0.52285
TL	0.51394	252.89	1.218	0.51778	0.50672	0.51732
V	0.52486	7,198.59	1.276	0.51997	0.53249	0.52211
Y1	15630.13711	15,630.14	1.045	15513.32934	15816.77033	15560.31167
Y2A	351055.56293	351,055.56	1.561	353007.46516	344866.35700	355292.86662
Y2R	32147.00955	32,147.01	3.315	32338.11042	33104.36302	30998.55520
ZN	0.49618	4,995.14	1.452	0.50055	0.48787	0.50013
ZR	0.49488	1,458.63	4.312	0.48949	0.47675	0.51839

LANCASTER LABORATORIES

Run Name: 1231402T72

Instrument ID: 16417

Tube: 23

Date/Time: 11/09/2012 05:20

Sample Number: **CCB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00187	1.95	50.849	0.00114	0.00153	0.00295
AL	-0.05147	10.43	68.080	-0.08783	-0.01792	-0.04866
AS	0.00132	0.39	155.112	0.00346	-0.00063	0.00114
B	0.00166	41.98	32.059	0.00115	0.00221	0.00162
BA	0.00008	39.82	58.107	0.00010	0.00003	0.00010
BE	0.00015	994.38	112.496	0.00030	0.00020	-0.00004
CA	-0.08373	77.05	6.033	-0.07967	-0.08939	-0.08213
CD	0.00025	-7.30	66.224	0.00044	0.00020	0.00012
CO	0.00013	5.11	535.790	0.00094	-0.00028	-0.00026
CR	-0.00035	1.10	91.668	-0.00007	-0.00027	-0.00069
CU	-0.00494	-59.57	7.599	-0.00478	-0.00467	-0.00537
FE	-0.03106	8.68	8.660	-0.03318	-0.02803	-0.03196
K	-0.02173	33.03	136.313	-0.05074	-0.02292	0.00847
LI	-0.00114	37.92	208.736	-0.00026	-0.00384	0.00067
MG	0.06591	17.49	1.372	0.06693	0.06520	0.06559
MN	0.00003	22.28	198.943	0.00003	0.00008	-0.00003
MO	0.00076	7.48	66.375	0.00130	0.00030	0.00068
NA	-0.08376	25.78	7.268	-0.07677	-0.08664	-0.08787
NI	0.00079	15.22	143.426	0.00205	-0.00017	0.00050
P	0.00539	3.20	169.492	0.01592	-0.00028	0.00052
PB	-0.00203	1.80	30.357	-0.00138	-0.00210	-0.00261
S	0.00602	-0.26	225.279	0.02148	-0.00382	0.00039
SB	0.00023	-0.53	296.948	0.00060	-0.00055	0.00064
SE	0.00264	-0.54	109.192	0.00534	-0.00039	0.00296
SI	0.00512	7.31	52.996	0.00641	0.00694	0.00200
SN	-0.00017	2.16	350.539	0.00040	-0.00012	-0.00079
SR	-0.00001	-52.19	149.999	0.00000	0.00000	-0.00002
TI	0.00081	43.10	24.531	0.00058	0.00096	0.00090
TL	-0.00146	-4.39	80.068	-0.00245	-0.00176	-0.00017
V	0.00001	17.67	3219.607	-0.00084	0.00081	0.00006
Y1	15893.05900	15,893.06	0.780	15757.10744	15999.76812	15922.30144
Y2A	364140.10828	364,140.11	1.738	358777.30591	362520.36424	371122.65469
Y2R	32436.42346	32,436.42	0.394	32326.87463	32576.92998	32405.46579
ZN	0.00029	13.94	311.734	0.00135	-0.00026	-0.00021
ZR	-0.00108	6.71	305.726	-0.00012	0.00164	-0.00476

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 24 Date/Time: 11/09/2012 05:24

Sample Number: **6850744** Class: **** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00393	-3.11	12.265	0.00337	0.00425	0.00417
AL	218.40689	37,524.05	8.865	200.63579	239.03968	215.54522
AS	0.01256	4.94	17.612	0.01001	0.01367	0.01400
B	0.19733	6,805.06	30.050	0.23076	0.12887	0.23237
BA	0.16258	99,560.50	2.946	0.16006	0.15956	0.16810
BE	0.01287	3,262.92	4.388	0.01264	0.01246	0.01351
CA	157.48591	226,667.83	8.956	144.65331	172.58597	155.21844
CD	-0.00058	337.93	535.218	0.00249	-0.00368	-0.00054
CO	0.18020	1,255.74	2.119	0.18278	0.18201	0.17582
CR	0.05125	560.82	2.990	0.05114	0.04978	0.05283
CU	1.51311	15,845.47	3.294	1.49116	1.47801	1.57016
FE	408.90083	201,159.17	10.225	370.70247	453.56816	402.43185
K	7.11026	2,775.35	9.132	6.56992	7.83057	6.93028
LI	0.06839	556.62	6.308	0.06525	0.07331	0.06661
MG	78.24950	224,009.44	9.040	71.96611	85.91095	76.87145
MN	2.43825	168,190.53	3.218	2.40372	2.38297	2.52805
MO	0.00183	10.91	17.154	0.00216	0.00153	0.00180
NA	32.79285	44,248.38	8.752	30.20180	35.87761	32.29915
NI	0.16682	441.04	1.355	0.16654	0.16920	0.16470
P	8.17760	3,478.93	1.156	8.24851	8.21404	8.07025
PB	0.02867	114.81	32.196	0.03807	0.01962	0.02831
S	1.65268	291.09	1.149	1.67042	1.65497	1.63265
SB	0.00239	11.11	54.138	0.00296	0.00091	0.00331
SE	0.03199	-4.87	4.913	0.03132	0.03087	0.03379
SI	4.21870	1,799.87	8.701	3.89704	4.61855	4.14052
SN	0.02539	27.10	0.882	0.02553	0.02551	0.02513
SR	0.61988	406,657.26	5.041	0.60164	0.60204	0.65597
TI	19.96221	920,232.61	2.802	19.59709	19.68338	20.60616
TL	-0.01315	-57.26	32.587	-0.01610	-0.01513	-0.00824
V	1.19387	16,847.88	3.233	1.17489	1.16844	1.23829
Y1	15430.85327	15,430.85	0.715	15340.79632	15397.80813	15553.95535
Y2A	356720.52621	356,720.53	4.162	363786.02649	366714.30464	339661.24751
Y2R	33150.68735	33,150.69	6.601	35189.41482	30838.65043	33423.99681
ZN	0.51877	5,449.31	1.375	0.52688	0.51597	0.51347
ZR	0.21596	660.18	8.790	0.19823	0.23598	0.21365

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 25 Date/Time: 11/09/2012 05:28

Sample Number: **6850747** Class: **** Batch: 123125708001

Initial Vol: 1.01 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00479	12.28	10.786	0.00530	0.00480	0.00427
AL	214.96500	37,622.44	1.885	219.28627	214.35661	211.25213
AS	-0.01089	-4.62	25.391	-0.01378	-0.00827	-0.01062
B	0.23827	6,882.89	10.640	0.24277	0.26107	0.21097
BA	0.16698	100,351.59	4.362	0.16985	0.17239	0.15870
BE	0.01367	3,343.64	5.163	0.01402	0.01412	0.01285
CA	158.09918	231,811.06	2.035	161.50682	157.67509	155.11563
CD	-0.00016	336.98	251.522	-0.00007	-0.00058	0.00019
CO	0.16858	1,220.89	2.158	0.17225	0.16497	0.16852
CR	0.04445	477.92	4.599	0.04540	0.04585	0.04210
CU	1.44902	14,887.08	4.303	1.47191	1.49670	1.37847
FE	393.47845	198,319.95	2.150	402.56256	392.05045	385.82235
K	6.81819	2,713.07	2.026	6.97729	6.74849	6.72880
LI	0.06511	541.61	7.896	0.07032	0.06496	0.06004
MG	72.83118	212,929.00	2.202	74.53736	72.60171	71.35445
MN	2.40826	163,058.90	3.999	2.44462	2.48108	2.29906
MO	0.00070	7.23	54.945	0.00047	0.00049	0.00115
NA	32.85139	45,155.73	1.904	33.50213	32.79737	32.25468
NI	0.15801	426.24	1.580	0.16087	0.15683	0.15632
P	8.17617	3,550.78	2.048	8.36729	8.10605	8.05518
PB	0.02434	110.38	13.651	0.02196	0.02292	0.02813
S	1.60006	287.67	2.809	1.65054	1.58525	1.56439
SB	0.00235	10.92	109.912	0.00411	-0.00061	0.00354
SE	0.02875	-5.43	9.710	0.03069	0.03001	0.02555
SI	4.01157	1,743.60	2.373	4.11587	3.98943	3.92940
SN	0.02562	27.89	3.874	0.02674	0.02487	0.02525
SR	0.61178	394,079.44	4.550	0.61800	0.63597	0.58136
TI	20.29431	917,966.45	4.741	20.58856	21.07507	19.21931
TL	-0.01050	-59.58	27.135	-0.01354	-0.00790	-0.01006
V	1.28044	17,724.60	4.094	1.30158	1.31899	1.22074
Y1	15755.47785	15,755.48	1.669	15456.58338	15859.03531	15950.81484
Y2A	350277.95606	350,277.96	4.814	342327.73723	338858.79230	369647.33866
Y2R	33647.94853	33,647.95	1.694	33015.13184	33807.53000	34121.18374
ZN	0.51324	5,493.97	2.075	0.52537	0.50889	0.50545
ZR	0.21249	661.88	2.135	0.21657	0.21330	0.20761

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 26 Date/Time: 11/09/2012 05:32

Sample Number: **6850750** Class: **** Batch: 123125708001

Initial Vol: 1.03 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00456	6.03	22.875	0.00361	0.00439	0.00567
AL	203.59371	36,184.68	0.643	203.20992	202.51867	205.05256
AS	-0.01243	-5.23	10.996	-0.01342	-0.01300	-0.01087
B	0.23913	7,208.68	5.365	0.24641	0.24666	0.22432
BA	0.16565	101,405.63	2.213	0.16853	0.16689	0.16152
BE	0.01388	3,442.87	3.233	0.01419	0.01408	0.01336
CA	150.01060	223,654.98	0.588	149.64448	149.36994	151.01736
CD	0.00088	362.61	92.335	0.00041	0.00181	0.00041
CO	0.17765	1,259.01	2.829	0.17265	0.18270	0.17761
CR	0.04320	473.34	1.951	0.04354	0.04382	0.04224
CU	1.42137	14,875.48	2.302	1.44618	1.43365	1.38429
FE	409.27372	208,516.40	0.693	408.61134	406.82750	412.38232
K	6.70552	2,711.05	1.081	6.73536	6.62287	6.75833
LI	0.06195	526.06	6.510	0.06179	0.05799	0.06605
MG	72.14396	214,317.03	0.512	72.05339	71.82803	72.55045
MN	2.53887	175,078.89	2.377	2.58697	2.55848	2.47117
MO	0.00092	7.91	46.505	0.00048	0.00134	0.00093
NA	30.67729	42,841.57	0.674	30.58871	30.52967	30.91349
NI	0.15924	424.78	2.190	0.15749	0.16326	0.15697
P	8.08569	3,489.04	2.293	7.95215	8.29739	8.00755
PB	0.02112	104.61	14.385	0.01975	0.02461	0.01902
S	1.59589	284.97	1.742	1.59057	1.62597	1.57113
SB	0.00342	11.89	60.337	0.00256	0.00578	0.00193
SE	0.02645	-6.56	3.131	0.02616	0.02739	0.02581
SI	3.80854	1,681.83	0.589	3.81022	3.78533	3.83007
SN	0.02625	28.35	2.726	0.02543	0.02655	0.02676
SR	0.62265	408,550.11	2.359	0.62462	0.63625	0.60707
TI	19.92778	918,134.72	3.654	20.41944	20.27258	19.09132
TL	-0.01109	-60.09	26.074	-0.00782	-0.01215	-0.01331
V	1.31990	18,604.83	2.076	1.34197	1.32851	1.28923
Y1	15655.57054	15,655.57	1.862	15793.87701	15320.68267	15852.15195
Y2A	356372.45137	356,372.45	1.467	354228.46715	352556.43663	362332.45033
Y2R	34171.24983	34,171.25	0.105	34210.94686	34161.16756	34141.63506
ZN	0.55852	5,922.59	2.139	0.55027	0.57222	0.55307
ZR	0.20781	657.75	0.531	0.20908	0.20706	0.20730

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 27 Date/Time: 11/09/2012 05:36

Sample Number: **6850753** Class: **** Batch: 123125708001

Initial Vol: 1.03 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00391	-4.02	14.613	0.00325	0.00422	0.00427
AL	197.48322	35,860.42	3.063	200.84694	190.50014	201.10257
AS	-0.01164	-4.94	60.751	-0.01975	-0.00685	-0.00830
B	0.29837	7,825.62	6.023	0.29071	0.31890	0.28549
BA	0.17079	106,182.24	0.725	0.17221	0.17021	0.16995
BE	0.01297	3,329.93	1.243	0.01314	0.01282	0.01293
CA	144.04436	219,619.85	3.108	146.48706	138.87775	146.76828
CD	0.00114	365.35	66.828	0.00115	0.00189	0.00037
CO	0.18324	1,320.20	1.884	0.18688	0.18001	0.18283
CR	0.04026	448.26	2.246	0.04122	0.04013	0.03943
CU	1.42858	15,173.65	0.714	1.43856	1.41817	1.42900
FE	403.41716	210,382.24	3.574	410.89288	386.79601	412.56258
K	7.64288	3,151.41	2.976	7.76338	7.38051	7.78474
LI	0.06897	591.04	5.990	0.07170	0.06422	0.07099
MG	76.20317	230,903.00	3.314	77.54713	73.28964	77.77275
MN	2.48465	174,009.10	0.818	2.50810	2.47240	2.47345
MO	0.00079	7.58	21.599	0.00062	0.00097	0.00079
NA	29.71016	42,403.09	2.969	30.18145	28.69238	30.25666
NI	0.16410	445.49	1.198	0.16624	0.16238	0.16368
P	8.44737	3,689.41	1.445	8.58696	8.39420	8.36094
PB	0.02186	104.92	14.399	0.02004	0.02549	0.02004
S	1.67407	302.85	1.551	1.70393	1.65679	1.66148
SB	0.00260	11.35	75.214	0.00475	0.00095	0.00209
SE	0.03022	-5.33	16.842	0.02447	0.03203	0.03415
SI	3.91285	1,765.46	3.293	3.95701	3.76772	4.01383
SN	0.02655	28.99	0.853	0.02659	0.02675	0.02630
SR	0.54887	365,724.02	2.207	0.55948	0.55146	0.53567
TI	21.00269	982,774.14	2.596	21.49948	21.08911	20.41949
TL	-0.01316	-61.25	38.457	-0.01850	-0.01254	-0.00843
V	1.25250	17,942.18	0.524	1.25988	1.24731	1.25031
Y1	15843.90490	15,843.90	1.219	15621.32765	15943.66977	15966.71728
Y2A	361859.18322	361,859.18	0.741	359036.85430	362168.47682	364372.21854
Y2R	34937.15959	34,937.16	2.719	34315.72113	36030.56498	34465.19265
ZN	0.52015	5,603.18	1.607	0.52976	0.51616	0.51453
ZR	0.20335	657.83	3.949	0.20572	0.19440	0.20993

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 28 Date/Time: 11/09/2012 05:40

Sample Number: **6850756** Class: **** Batch: 123125708001

Initial Vol: 1.00 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00345	-5.61	5.994	0.00329	0.00368	0.00338
AL	172.78562	30,966.43	4.583	174.44581	164.16775	179.74329
AS	-0.01025	-4.34	33.676	-0.01305	-0.00639	-0.01129
B	0.27688	6,727.82	28.483	0.23882	0.36755	0.22426
BA	0.13397	79,528.25	7.655	0.12799	0.14581	0.12811
BE	0.01340	3,256.05	10.047	0.01252	0.01495	0.01273
CA	120.21437	181,557.98	4.612	121.43987	114.16011	125.04314
CD	0.00084	315.74	111.805	0.00015	0.00191	0.00046
CO	0.15610	1,109.92	3.244	0.15529	0.15149	0.16152
CR	0.03576	380.63	8.493	0.03406	0.03927	0.03396
CU	1.36075	13,808.75	7.640	1.30071	1.48079	1.30074
FE	356.47768	186,239.95	5.109	360.57450	336.56714	372.29139
K	5.66605	2,318.99	3.544	5.75731	5.43583	5.80502
LI	0.05308	461.25	6.397	0.05306	0.04970	0.05649
MG	63.89856	192,225.26	4.582	64.61750	60.67853	66.39966
MN	2.20133	147,215.58	7.588	2.10202	2.39417	2.10781
MO	0.00352	16.92	3.844	0.00353	0.00338	0.00365
NA	30.76979	43,362.52	4.374	31.07981	29.29604	31.93351
NI	0.13806	370.01	1.854	0.13662	0.13655	0.14102
P	7.62673	3,293.42	1.881	7.52872	7.56009	7.79136
PB	0.02824	101.76	14.989	0.02339	0.03014	0.03119
S	1.68455	301.71	2.240	1.66080	1.66477	1.72807
SB	0.00217	9.80	166.403	-0.00140	0.00581	0.00210
SE	0.02236	-6.07	12.499	0.02553	0.02131	0.02024
SI	2.91445	1,300.04	4.430	2.93682	2.77562	3.03091
SN	0.02395	26.06	8.727	0.02324	0.02230	0.02630
SR	0.56475	359,349.23	7.638	0.54109	0.61454	0.53862
TI	17.68785	790,732.52	6.762	16.97691	19.06866	17.01799
TL	-0.00498	-53.17	159.212	-0.00934	0.00417	-0.00978
V	1.24859	17,058.27	7.735	1.18844	1.35999	1.19735
Y1	15665.49559	15,665.50	1.575	15841.97656	15770.95816	15383.55206
Y2A	346856.53332	346,856.53	7.594	362077.11921	316440.99069	362051.49007
Y2R	34519.65295	34,519.65	3.659	34124.51510	35932.97405	33501.46971
ZN	0.53263	5,624.89	1.675	0.52589	0.52926	0.54275
ZR	0.19074	610.11	4.160	0.19241	0.18210	0.19770

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 29 Date/Time: 11/09/2012 05:44

Sample Number: **6850759** Class: **** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00349	-14.63	5.268	0.00337	0.00341	0.00370
AL	196.16679	33,992.78	5.165	190.85061	207.85146	189.79828
AS	0.03617	15.07	3.480	0.03747	0.03496	0.03606
B	0.16563	5,048.10	19.203	0.14584	0.14873	0.20232
BA	1.21027	745,012.22	4.604	1.14685	1.23259	1.25137
BE	0.01271	3,253.51	6.764	0.01174	0.01305	0.01336
CA	98.64669	144,402.32	5.299	95.91910	104.67307	95.34790
CD	0.00138	265.77	72.764	0.00221	0.00026	0.00165
CO	0.11848	726.88	2.435	0.12142	0.11836	0.11566
CR	0.21702	2,370.41	5.487	0.20370	0.22073	0.22663
CU	0.20954	2,248.28	5.849	0.19555	0.21467	0.21839
FE	285.24762	147,163.17	5.831	276.71986	304.41614	274.60687
K	29.07228	11,321.48	5.261	28.34658	30.82941	28.04084
LI	0.31029	2,336.80	5.002	0.30231	0.32818	0.30039
MG	46.68386	136,714.67	5.318	45.39847	49.54549	45.10762
MN	6.34769	440,135.41	4.323	6.04354	6.42277	6.57677
MO	0.00586	25.58	6.259	0.00585	0.00623	0.00550
NA	0.96198	1,445.92	5.897	0.92676	1.02742	0.93176
NI	0.17606	504.58	2.146	0.17829	0.17820	0.17170
P	6.63172	2,925.43	2.176	6.77466	6.63443	6.48608
PB	0.23643	343.29	2.114	0.24209	0.23263	0.23456
S	3.93438	727.04	1.934	3.98712	3.96883	3.84717
SB	-0.00245	6.03	244.836	0.00371	-0.00828	-0.00278
SE	0.02306	-3.71	25.826	0.02972	0.01825	0.02121
SI	6.16218	2,650.52	5.219	5.98189	6.53349	5.97116
SN	0.02862	31.39	4.741	0.02908	0.02969	0.02709
SR	0.34299	226,287.35	4.345	0.32753	0.34417	0.35727
TI	3.30479	153,088.15	5.362	3.10638	3.36072	3.44728
TL	0.00408	-10.61	73.958	0.00157	0.00323	0.00743
V	0.36071	5,132.20	5.049	0.34023	0.36681	0.37508
Y1	16011.32198	16,011.32	1.477	15818.58037	15940.11460	16275.27098
Y2A	358729.17558	358,729.18	4.379	376052.78884	354725.61380	345409.12409
Y2R	33369.18818	33,369.19	3.817	34049.40120	31899.73032	34158.43301
ZN	0.71640	7,553.44	1.963	0.72916	0.71871	0.70133
ZR	0.02603	89.31	3.273	0.02643	0.02661	0.02505

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 30 Date/Time: 11/09/2012 05:48

Sample Number: **6850764** Class: **** Batch: 123125708001

Initial Vol: 1.03 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00363	-12.28	6.839	0.00370	0.00383	0.00335
AL	191.88611	33,942.01	5.440	203.67887	183.82907	188.15038
AS	0.04101	17.00	4.164	0.04008	0.04298	0.03996
B	0.17513	5,119.78	14.986	0.15186	0.16996	0.20358
BA	1.15348	711,264.71	1.772	1.14853	1.13597	1.17594
BE	0.01302	3,313.02	6.477	0.01286	0.01227	0.01394
CA	96.11306	143,687.71	5.383	102.02498	92.41313	93.90108
CD	0.00228	274.49	56.731	0.00087	0.00342	0.00254
CO	0.12196	744.49	1.581	0.12174	0.12400	0.12016
CR	0.22925	2,506.68	4.922	0.22658	0.21954	0.24163
CU	0.16992	1,830.64	3.984	0.16815	0.16421	0.17740
FE	283.00375	149,153.46	6.063	302.53768	270.36279	276.11080
K	29.05729	11,552.41	5.359	30.83888	27.95611	28.37688
LI	0.29997	2,307.88	5.319	0.31777	0.28696	0.29517
MG	48.29561	144,286.54	5.680	51.42588	46.31196	47.14900
MN	8.52366	591,668.49	3.849	8.44629	8.24118	8.88351
MO	0.00590	25.58	6.166	0.00630	0.00559	0.00582
NA	0.98730	1,511.17	6.179	1.05687	0.94292	0.96212
NI	0.22648	654.37	0.768	0.22743	0.22753	0.22447
P	7.31042	3,205.97	1.064	7.30234	7.39196	7.23695
PB	0.26690	374.96	3.088	0.26301	0.27636	0.26131
S	4.36050	801.57	1.080	4.34347	4.41373	4.32430
SB	0.00342	9.62	86.948	0.00012	0.00589	0.00426
SE	0.02712	-2.41	13.223	0.02729	0.02345	0.03061
SI	6.20986	2,726.80	5.432	6.59179	5.95279	6.08500
SN	0.03124	33.86	3.376	0.03004	0.03201	0.03168
SR	0.35805	236,479.21	4.014	0.35527	0.34528	0.37361
TI	3.45320	160,153.04	4.771	3.42536	3.30414	3.63009
TL	0.00143	-11.17	87.314	0.00109	0.00039	0.00282
V	0.36522	5,201.88	4.654	0.36363	0.34907	0.38295
Y1	15916.43594	15,916.44	1.056	15993.21874	15723.74775	16032.34133
Y2A	359020.25348	359,020.25	3.724	360812.57465	371403.99202	344844.19376
Y2R	34074.49170	34,074.49	4.331	32380.87765	35086.05836	34756.53907
ZN	0.85731	8,937.02	1.349	0.85527	0.86976	0.84691
ZR	0.02357	83.57	2.245	0.02417	0.02339	0.02316

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 31 Date/Time: 11/09/2012 05:53

Sample Number: **6850765** Class: **** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00292	-24.32	4.570	0.00277	0.00296	0.00303
AL	197.54791	34,971.25	4.938	188.03521	207.52645	197.08207
AS	0.05887	24.80	6.302	0.06018	0.06175	0.05468
B	0.16418	5,073.53	15.183	0.17103	0.13654	0.18496
BA	1.13045	707,198.19	2.744	1.12938	1.09998	1.16199
BE	0.01210	3,193.31	3.406	0.01176	0.01197	0.01256
CA	73.25707	109,943.01	4.997	69.75225	77.05574	72.96321
CD	0.00154	267.22	74.423	0.00277	0.00052	0.00132
CO	0.09263	579.55	2.254	0.09371	0.09395	0.09022
CR	0.21805	2,421.15	2.508	0.21354	0.21648	0.22413
CU	0.14110	1,545.26	2.548	0.13827	0.13988	0.14514
FE	281.69921	148,634.47	5.387	267.04607	297.34635	280.70522
K	26.78284	10,658.49	4.941	25.55809	28.18665	26.60378
LI	0.32554	2,499.60	5.430	0.30916	0.34427	0.32318
MG	43.82471	131,260.07	5.178	41.69183	46.20942	43.57288
MN	4.45517	313,944.04	2.117	4.43876	4.37012	4.55663
MO	0.00540	24.17	10.366	0.00503	0.00604	0.00513
NA	0.87182	1,352.00	5.910	0.82051	0.92355	0.87140
NI	0.18421	534.76	1.766	0.18519	0.18686	0.18058
P	6.11452	2,721.89	1.786	6.18146	6.17358	5.98852
PB	0.24193	352.83	2.723	0.24909	0.24057	0.23613
S	3.54170	659.94	1.395	3.57810	3.56154	3.48547
SB	-0.00170	6.49	99.968	-0.00172	-0.00339	0.00001
SE	0.02400	-3.34	12.781	0.02046	0.02597	0.02555
SI	6.64801	2,920.82	4.869	6.35282	6.99421	6.59700
SN	0.03183	34.96	3.653	0.03273	0.03224	0.03052
SR	0.29423	197,249.35	2.838	0.28806	0.29089	0.30373
TI	2.95564	139,178.03	2.486	2.91288	2.91356	3.04048
TL	0.00254	-12.02	13.240	0.00285	0.00218	0.00260
V	0.35466	5,127.73	3.205	0.34671	0.34960	0.36768
Y1	16156.60183	16,156.60	1.292	16032.82745	16039.36855	16397.60949
Y2A	364203.55630	364,203.56	1.933	366895.50898	369499.00200	356216.15793
Y2R	34089.93532	34,089.94	4.107	35468.75000	32669.67639	34131.37959
ZN	0.72633	7,721.10	1.902	0.73485	0.73375	0.71039
ZR	0.02014	73.03	2.752	0.02030	0.01953	0.02060

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 32 Date/Time: 11/09/2012 05:57

Sample Number: **6850770** Class: **** Batch: 123125708001

Initial Vol: 1.03 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00349	-24.12	8.511	0.00381	0.00345	0.00322
AL	221.41711	39,379.43	2.551	224.06441	225.25663	214.93030
AS	0.05219	21.91	4.617	0.05498	0.05073	0.05087
B	0.14854	5,937.56	26.642	0.11257	0.14212	0.19093
BA	1.25869	824,919.57	6.186	1.18696	1.24762	1.34151
BE	0.01351	3,618.85	7.541	0.01246	0.01357	0.01450
CA	54.00882	81,634.95	2.378	54.77780	54.72273	52.52594
CD	0.00127	318.10	47.963	0.00111	0.00076	0.00195
CO	0.10182	646.74	2.123	0.10417	0.09993	0.10134
CR	0.23255	2,704.75	6.039	0.21846	0.23266	0.24654
CU	0.18869	2,146.53	6.216	0.17738	0.18787	0.20080
FE	342.65364	178,246.01	2.771	347.96923	348.30041	331.69126
K	31.31085	12,503.93	2.623	31.93315	31.61943	30.37995
LI	0.27484	2,126.43	1.485	0.27788	0.27643	0.27020
MG	45.54418	136,883.10	2.429	46.30160	46.05633	44.27462
MN	4.86356	358,995.19	6.285	4.55510	4.86922	5.16636
MO	0.00529	23.69	10.559	0.00586	0.00475	0.00526
NA	0.89333	1,387.65	2.609	0.90605	0.90752	0.86644
NI	0.19361	552.49	1.076	0.19596	0.19197	0.19292
P	5.87523	2,607.13	1.555	5.97338	5.79273	5.85958
PB	0.19231	304.48	2.337	0.19689	0.18791	0.19212
S	3.68556	683.97	1.256	3.73460	3.64265	3.67943
SB	-0.00297	7.25	162.725	0.00247	-0.00674	-0.00464
SE	0.02753	-4.26	22.791	0.03155	0.03073	0.02030
SI	7.51518	3,314.59	2.365	7.63540	7.59906	7.31106
SN	0.03161	34.62	6.063	0.03369	0.02992	0.03122
SR	0.26628	187,048.49	5.558	0.25137	0.26650	0.28096
TI	4.15547	205,073.66	4.957	3.95342	4.14784	4.36515
TL	-0.00113	-15.75	556.226	-0.00280	-0.00644	0.00584
V	0.38604	5,856.94	5.250	0.36574	0.38611	0.40627
Y1	16104.40574	16,104.41	1.197	15928.59807	16310.60822	16074.01093
Y2A	382255.25055	382,255.25	5.365	402771.96819	382234.16170	361759.62177
Y2R	34192.19297	34,192.19	1.543	33849.88019	33926.92846	34799.77028
ZN	0.73722	7,858.90	1.646	0.74947	0.72521	0.73697
ZR	0.03367	115.36	1.673	0.03428	0.03355	0.03318

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 33 Date/Time: 11/09/2012 06:01

Sample Number: **6850771** Class: **** Batch: 123125708001

Initial Vol: 1.01 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00408	-5.35	11.142	0.00456	0.00366	0.00401
AL	177.90355	30,809.15	1.661	178.08763	174.86173	180.76128
AS	0.04787	19.68	4.000	0.04567	0.04919	0.04874
B	0.16005	5,002.68	14.394	0.14243	0.18612	0.15158
BA	1.00770	619,213.08	3.279	0.98266	1.04516	0.99529
BE	0.01290	3,280.17	5.333	0.01226	0.01362	0.01280
CA	131.95654	192,276.28	1.847	132.01702	129.48934	134.36324
CD	0.00371	294.63	11.551	0.00372	0.00413	0.00328
CO	0.18090	1,074.75	0.394	0.18101	0.18014	0.18155
CR	0.25301	2,758.28	3.654	0.24515	0.26320	0.25069
CU	0.20261	2,178.64	3.570	0.19525	0.20971	0.20288
FE	286.66438	147,831.50	1.975	286.71573	280.97736	292.30005
K	29.66714	11,549.82	2.027	29.68620	29.05653	30.25869
LI	0.26462	2,002.55	1.350	0.26629	0.26052	0.26706
MG	50.51998	147,686.78	2.019	50.55616	49.48213	51.52165
MN	14.25758	986,316.91	5.338	13.50273	15.02481	14.24520
MO	0.00689	28.77	5.289	0.00730	0.00663	0.00672
NA	0.85037	1,294.35	1.157	0.85887	0.83959	0.85266
NI	0.20437	581.49	0.297	0.20499	0.20432	0.20378
P	9.05330	3,933.67	0.327	9.04873	9.02628	9.08490
PB	0.27855	381.86	0.996	0.27534	0.28007	0.28022
S	5.63107	1,027.03	0.410	5.61871	5.61677	5.65773
SB	-0.00090	7.10	339.353	-0.00066	0.00203	-0.00408
SE	0.03317	-0.75	16.614	0.02707	0.03780	0.03464
SI	6.41380	2,757.96	1.896	6.42252	6.28808	6.53081
SN	0.03433	36.63	1.170	0.03468	0.03389	0.03441
SR	0.37482	246,825.29	3.331	0.36219	0.38715	0.37511
TI	3.82692	176,997.51	3.265	3.71377	3.96101	3.80597
TL	-0.00086	-9.51	185.706	-0.00182	0.00099	-0.00175
V	0.35362	5,026.15	3.899	0.34067	0.36812	0.35206
Y1	15769.33467	15,769.33	0.263	15817.23518	15747.47950	15743.28933
Y2A	357844.39090	357,844.39	3.010	368110.31271	346630.95554	358791.90445
Y2R	33324.08210	33,324.08	1.422	33339.91630	33789.74000	32842.59000
ZN	0.84724	8,756.26	0.232	0.84628	0.84594	0.84950
ZR	0.02543	87.41	4.248	0.02665	0.02461	0.02503

LANCASTER LABORATORIES

Run Name: 1231402T72

Instrument ID: 16417

Tube: 34

Date/Time: 11/09/2012 06:05

Sample Number: **CCV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.50178	7,806.50	0.203	0.50295	0.50130	0.50109
AL	24.70849	4,183.06	3.525	24.21147	24.19972	25.71429
AS	0.50611	207.01	3.936	0.48818	0.50260	0.52755
B	0.48744	4,852.60	0.884	0.49074	0.48902	0.48257
BA	0.50108	298,553.21	0.780	0.50547	0.49798	0.49980
BE	0.49203	87,214.16	0.269	0.49353	0.49149	0.49105
CA	24.56588	35,585.91	3.183	24.02275	24.21287	25.46203
CD	0.51204	6,861.26	3.549	0.49545	0.50920	0.53146
CO	0.50935	2,851.98	3.593	0.49257	0.50661	0.52886
CR	0.51304	5,419.08	0.565	0.51511	0.51427	0.50972
CU	0.50081	5,118.05	0.651	0.50096	0.50400	0.49748
FE	24.63228	13,404.81	2.965	24.15642	24.26737	25.47304
K	24.68747	9,395.13	3.299	24.13565	24.30375	25.62300
LI	0.50081	3,646.14	2.812	0.49166	0.49373	0.51703
MG	24.33938	70,213.51	3.335	23.79542	23.95032	25.27241
MN	0.49537	33,263.35	0.398	0.49534	0.49735	0.49341
MO	0.49172	1,699.62	3.433	0.47623	0.48922	0.50971
NA	24.64132	32,801.98	3.158	24.10312	24.28717	25.53367
NI	0.51117	1,522.64	3.425	0.49520	0.50843	0.52989
P	0.51646	223.58	3.928	0.49749	0.51404	0.53785
PB	0.50628	579.32	2.886	0.49377	0.50273	0.52234
S	24.80757	4,491.00	3.459	24.01637	24.68656	25.71979
SB	0.51152	309.34	3.471	0.49677	0.50657	0.53122
SE	0.51184	145.67	4.440	0.49061	0.50910	0.53581
SI	24.13796	10,125.94	2.997	23.65130	23.79330	24.96928
SN	0.49276	489.66	3.269	0.47781	0.49065	0.50982
SR	0.49707	317,436.88	0.226	0.49611	0.49831	0.49679
TI	0.52632	23,640.48	0.700	0.52923	0.52755	0.52217
TL	0.51269	251.61	3.588	0.49575	0.51006	0.53225
V	0.53044	7,187.97	0.251	0.53126	0.53115	0.52890
Y1	15608.78406	15,608.78	2.439	15966.37351	15651.49713	15208.48154
Y2A	346777.06260	346,777.06	1.013	342975.91241	349907.19973	347448.07565
Y2R	32562.33427	32,562.33	2.478	33176.90234	32861.67796	31648.42252
ZN	0.49352	4,959.38	3.370	0.47810	0.49131	0.51115
ZR	0.48155	1,438.59	3.086	0.47342	0.47253	0.49870

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 35 Date/Time: 11/09/2012 06:09

Sample Number: **CCB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00153	-3.60	18.554	0.00146	0.00129	0.00184
AL	-0.08192	5.14	26.751	-0.10723	-0.06921	-0.06933
AS	0.00075	0.16	74.162	0.00090	0.00121	0.00013
B	0.00064	30.58	110.711	0.00057	0.00139	-0.00003
BA	0.00003	10.77	99.351	0.00005	0.00006	0.00000
BE	0.00023	964.68	58.618	0.00036	0.00023	0.00009
CA	-0.08424	74.53	6.473	-0.08163	-0.08058	-0.09051
CD	0.00003	-10.34	329.414	-0.00005	0.00000	0.00012
CO	-0.00013	3.65	29.346	-0.00013	-0.00016	-0.00009
CR	0.00019	6.77	139.809	0.00038	0.00031	-0.00012
CU	-0.00635	-71.50	5.075	-0.00611	-0.00622	-0.00672
FE	-0.03812	4.69	10.897	-0.04282	-0.03496	-0.03656
K	0.00203	41.21	3512.954	0.01639	-0.07518	0.06486
LI	-0.00399	17.30	77.519	-0.00057	-0.00483	-0.00659
MG	0.06451	13.08	1.307	0.06431	0.06543	0.06378
MN	0.00015	29.38	30.799	0.00019	0.00016	0.00010
MO	0.00009	5.12	235.857	-0.00007	0.00001	0.00032
NA	-0.09230	14.25	6.569	-0.08690	-0.09886	-0.09116
NI	-0.00016	12.33	297.332	0.00037	-0.00027	-0.00059
P	0.00025	0.97	304.898	-0.00062	0.00083	0.00056
PB	-0.00078	3.22	133.619	-0.00186	0.00020	-0.00067
S	-0.00089	-1.52	531.257	0.00455	-0.00421	-0.00301
SB	-0.00003	-0.68	2138.355	-0.00022	-0.00065	0.00076
SE	0.00242	-0.60	96.661	0.00297	-0.00015	0.00443
SI	0.00720	8.00	25.481	0.00878	0.00519	0.00762
SN	-0.00020	2.13	348.200	-0.00094	-0.00006	0.00041
SR	-0.00002	-56.25	148.313	0.00000	0.00000	-0.00004
TI	0.00044	24.48	43.672	0.00050	0.00023	0.00060
TL	-0.00069	-3.98	260.272	-0.00194	0.00138	-0.00152
V	0.00007	17.70	687.182	-0.00012	-0.00028	0.00060
Y1	15869.93402	15,869.93	0.862	15838.43213	15751.69909	16019.67084
Y2A	348536.05397	348,536.05	1.498	342513.43729	351803.25149	351291.47313
Y2R	31674.60855	31,674.61	1.719	32211.16777	31122.26212	31690.39576
ZN	-0.00035	7.41	46.855	-0.00021	-0.00053	-0.00031
ZR	-0.00075	7.47	123.778	-0.00181	-0.00032	-0.00011

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 36 Date/Time: 11/09/2012 06:13

Sample Number: **6849595** Class: **** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT		AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG		0.06326	863.91	2.876	0.06358	0.06130	0.06490
AL	k	3034.27461	541,226.64	3.131	3016.45647	2949.42873	3136.93863
AS		0.80593	588.40	1.332	0.81006	0.79375	0.81399
B		55.42566	461,344.39	2.808	56.19565	53.63453	56.44680
BA		0.01572	8,387.04	2.074	0.01584	0.01536	0.01598
BE	k	0.00000	3,053.54	0.000	0.01435	0.01378	0.01442
CA		0.73413	1,230.49	5.137	0.73935	0.69407	0.76895
CD		-0.04436	-647.43	0.637	-0.04439	-0.04406	-0.04462
CO	k	278.12880	1,340,822.41	0.772	278.08875	276.00152	280.29615
CR		0.11284	1,071.32	2.128	0.11271	0.11051	0.11531
CU	k	-0.93674	-12,024.78	3.518	-0.95025	-0.89917	-0.96079
FE		4.42858	2,389.48	4.140	4.44014	4.23972	4.60588
K		1.01221	415.39	3.882	1.02394	0.96838	1.04429
LI		17.33625	121,788.70	4.266	17.31733	16.60636	18.08505
MG		0.12374	182.29	3.660	0.12100	0.12125	0.12897
MN		0.08299	5,007.78	2.286	0.08369	0.08085	0.08444
MO		478.37549	1,425,607.56	0.717	474.85582	478.56683	481.70382
NA		5.54809	7,323.05	4.136	5.52888	5.32884	5.78656
NI	k	0.75534	2,176.25	0.615	0.75230	0.75303	0.76068
P	k	0.82730	308.09	0.856	0.82250	0.82395	0.83543
PB	k	0.03804	-733.62	16.524	0.03134	0.04381	0.03895
S	k	1059.07939	165,248.06	0.595	1055.98912	1054.92157	1066.32749
SB	k	0.00000	3,266.48	0.000	8.61153	8.64832	8.72654
SE	k	0.80637	200.01	2.468	0.79120	0.79901	0.82891
SI		9.59146	5,235.32	5.210	9.56670	9.10457	10.10311
SN		0.05131	45.85	3.394	0.05323	0.04983	0.05086
SR		0.00425	2,391.92	2.155	0.00427	0.00415	0.00433
TI		1.63629	65,760.26	2.304	1.64231	1.59593	1.67062
TL	k	0.39677	174.80	2.164	0.40434	0.38744	0.39853
V	k	0.00000	3,162.11	0.000	3.77393	3.79155	3.82733
Y1		13487.83822	13,487.84	0.527	13519.02533	13538.02000	13406.46933
Y2A		310815.17081	310,815.17	2.154	308590.49202	318338.48706	305516.53333
Y2R		31840.70711	31,840.71	3.185	31849.43216	32850.32941	30822.35975
ZN	k	0.50951	4,386.26	0.608	0.50663	0.50910	0.51279
ZR		0.09350	280.81	5.112	0.09397	0.08851	0.09803

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 37 Date/Time: 11/09/2012 06:17

Sample Number: **6850625** Class: **** Batch: 123125708001

Initial Vol: 1.04 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00156	-20.50	17.543	0.00135	0.00187	0.00146
AL	164.42056	29,130.28	2.823	159.06370	166.95645	167.24155
AS	0.09202	39.30	3.034	0.08944	0.09164	0.09499
B	0.28503	5,323.91	3.097	0.29071	0.28952	0.27486
BA	1.86072	1,166,021.99	1.865	1.82258	1.89043	1.86915
BE	0.01055	2,912.50	2.607	0.01026	0.01081	0.01057
CA	79.76301	119,779.03	2.750	77.23167	80.94912	81.10823
CD	0.00649	267.69	4.364	0.00673	0.00618	0.00658
CO	0.10102	697.19	1.116	0.10225	0.10075	0.10005
CR	0.29769	3,309.16	1.867	0.29224	0.30336	0.29748
CU	0.18490	1,974.12	1.471	0.18195	0.18730	0.18544
FE	204.53694	110,599.46	2.889	197.71477	207.90698	207.98906
K	28.03583	11,172.67	2.465	27.23921	28.47249	28.39579
LI	0.15949	1,254.35	2.925	0.15419	0.16131	0.16298
MG	46.98718	140,775.74	2.691	45.52744	47.68663	47.74747
MN	2.96741	209,463.99	1.338	2.92620	3.00541	2.97063
MO	0.19371	702.22	4.399	0.20202	0.19412	0.18499
NA	8.82349	12,397.55	2.646	8.55406	8.95112	8.96528
NI	0.29472	892.82	1.134	0.29152	0.29445	0.29818
P	5.53735	2,484.99	1.205	5.48250	5.51790	5.61166
PB	0.15554	240.44	1.952	0.15300	0.15473	0.15890
S	26.58103	5,021.76	1.364	26.33147	26.41455	26.99707
SB	-0.00182	4.32	265.328	-0.00231	-0.00640	0.00324
SE	0.02345	-1.01	20.799	0.02263	0.01903	0.02868
SI	4.38918	1,933.71	2.728	4.25095	4.45633	4.46026
SN	0.02608	29.31	5.139	0.02540	0.02521	0.02762
SR	0.63284	425,015.69	2.314	0.61658	0.64497	0.63698
TI	7.64037	360,378.73	1.890	7.51964	7.60118	7.80031
TL	-0.00333	-20.75	36.207	-0.00347	-0.00446	-0.00206
V	0.35571	5,146.35	1.142	0.35160	0.35972	0.35583
Y1	16285.72759	16,285.73	1.178	16460.22250	16316.63135	16080.32892
Y2A	364761.99323	364,761.99	1.551	371282.33732	361863.41060	361140.23179
Y2R	34110.45794	34,110.46	2.349	35014.31134	33829.41000	33487.65247
ZN	0.56153	6,017.06	1.125	0.55704	0.55879	0.56875
ZR	0.12373	394.93	3.204	0.11929	0.12499	0.12691

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 38 Date/Time: 11/09/2012 06:21

Sample Number: **6847383** Class: **** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00218	4.30	29.082	0.00202	0.00165	0.00288
AL	180.26702	31,571.18	5.593	189.01754	182.54105	169.24247
AS	0.00746	3.24	28.509	0.00902	0.00832	0.00504
B	0.17878	4,873.54	4.357	0.17419	0.17438	0.18778
BA	1.24891	799,178.90	3.865	1.30264	1.23487	1.20921
BE	0.01034	2,935.77	3.368	0.01069	0.01033	0.01000
CA	51.65244	76,978.92	5.774	54.25378	52.30620	48.39735
CD	0.00031	218.30	289.402	-0.00016	-0.00025	0.00133
CO	0.11415	840.43	1.480	0.11500	0.11220	0.11524
CR	0.62736	7,116.99	2.716	0.64500	0.62610	0.61099
CU	0.13209	1,396.71	4.453	0.13828	0.13141	0.12657
FE	244.58035	129,130.82	6.152	257.84295	247.66984	228.22827
K	12.03346	4,762.88	5.808	12.56905	12.28846	11.24288
LI	0.13063	1,022.43	7.757	0.13928	0.13313	0.11948
MG	63.98085	188,059.45	5.688	67.19722	64.71453	60.03079
MN	2.50442	180,547.98	2.837	2.57698	2.50130	2.43497
MO	0.03174	119.24	0.887	0.03162	0.03153	0.03206
NA	1.42294	2,094.28	6.431	1.50430	1.44064	1.32388
NI	0.74872	2,292.30	1.632	0.76182	0.73762	0.74672
P	2.44225	1,097.48	1.667	2.48607	2.40557	2.43511
PB	0.04877	122.78	6.773	0.04819	0.04580	0.05233
S	0.22616	38.67	1.407	0.22923	0.22288	0.22636
SB	-0.00267	7.05	46.119	-0.00316	-0.00359	-0.00127
SE	0.01582	-4.62	19.276	0.01713	0.01800	0.01234
SI	5.07356	2,207.28	5.806	5.31968	5.15379	4.74721
SN	0.02539	28.61	7.474	0.02744	0.02369	0.02504
SR	0.18259	125,217.70	2.680	0.18750	0.18254	0.17772
TI	12.45320	599,783.95	3.976	13.01212	12.27820	12.06927
TL	-0.00958	-31.77	16.907	-0.00776	-0.01013	-0.01086
V	0.45548	6,759.67	2.626	0.46765	0.45503	0.44374
Y1	16299.59958	16,299.60	1.249	16069.33422	16455.86483	16373.59968
Y2A	372673.85982	372,673.86	2.758	361608.11258	374490.50465	381922.96223
Y2R	33747.41601	33,747.42	4.337	32429.08855	33490.99720	35322.16227
ZN	0.38125	4,206.65	1.586	0.38694	0.37490	0.38190
ZR	0.28379	882.04	5.044	0.29715	0.28552	0.26869

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 39 Date/Time: 11/09/2012 06:26

Sample Number: **6847414** Class: **** Batch: 123125708001

Initial Vol: 1.01 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00390	12.72	16.307	0.00383	0.00330	0.00456
AL	165.04112	29,303.03	2.423	161.96172	169.56159	163.60004
AS	0.01298	5.55	11.542	0.01204	0.01218	0.01470
B	0.23046	5,952.12	1.874	0.22727	0.22872	0.23537
BA	1.39408	857,633.01	3.564	1.33701	1.42772	1.41751
BE	0.01124	2,984.54	3.419	0.01081	0.01154	0.01137
CA	91.70886	137,775.21	2.451	90.20418	94.29276	90.62963
CD	0.00106	286.67	53.171	0.00134	0.00041	0.00141
CO	0.11994	942.65	6.183	0.11617	0.12849	0.11517
CR	0.52804	5,759.35	2.205	0.51615	0.53942	0.52855
CU	0.17962	1,826.52	2.153	0.17557	0.18327	0.18002
FE	308.61634	162,133.06	2.588	303.40444	317.81070	304.63387
K	12.65428	5,077.22	2.334	12.40404	12.98015	12.57865
LI	0.14173	1,123.74	3.222	0.13818	0.14688	0.14012
MG	103.81567	304,107.46	2.382	101.62739	106.49888	103.32075
MN	6.64240	460,300.47	2.646	6.48198	6.83031	6.61492
MO	0.03512	130.97	88.225	0.01720	0.07090	0.01727
NA	1.57751	2,339.10	2.863	1.54416	1.62891	1.55946
NI	0.90053	2,742.63	0.394	0.89862	0.90462	0.89835
P	5.92489	2,651.72	0.422	5.91452	5.95343	5.90672
PB	0.02999	101.83	3.846	0.03008	0.02880	0.03110
S	0.36264	63.90	7.804	0.35021	0.39503	0.34268
SB	-0.00087	9.34	272.170	0.00176	-0.00156	-0.00280
SE	0.02078	-5.21	21.174	0.02584	0.01778	0.01874
SI	4.60646	2,032.90	2.689	4.50738	4.74533	4.56669
SN	0.02750	30.70	3.740	0.02708	0.02868	0.02676
SR	0.18123	119,478.97	2.101	0.17722	0.18479	0.18167
TI	17.71964	820,635.31	1.946	17.35654	18.04263	17.75974
TL	-0.01440	-43.37	7.199	-0.01479	-0.01519	-0.01323
V	0.68139	9,703.97	1.784	0.66958	0.69386	0.68073
Y1	16240.78549	16,240.79	0.086	16253.44533	16243.19760	16225.71352
Y2A	358183.77269	358,183.77	1.891	365320.60000	351844.75780	357385.96026
Y2R	34177.02499	34,177.02	1.762	34419.82449	33491.33040	34619.92008
ZN	0.46362	5,104.31	0.078	0.46340	0.46404	0.46343
ZR	0.21725	687.01	3.274	0.21276	0.22545	0.21354

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 40 Date/Time: 11/09/2012 06:30

Sample Number: **6847415** Class: **** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00323	5.04	7.755	0.00345	0.00296	0.00328
AL	150.18454	26,130.91	0.515	149.71203	151.07757	149.76403
AS	0.02248	9.48	2.758	0.02225	0.02202	0.02319
B	0.19537	5,382.99	8.577	0.19182	0.21362	0.18067
BA	1.53246	943,813.72	3.452	1.54578	1.57743	1.47417
BE	0.01023	2,805.06	5.465	0.01033	0.01074	0.00963
CA	54.49088	80,694.28	0.524	54.44062	54.79844	54.23357
CD	0.00147	266.89	14.542	0.00144	0.00170	0.00128
CO	0.19220	1,265.96	19.304	0.23495	0.17327	0.16838
CR	0.83778	9,142.83	3.887	0.83930	0.86955	0.80448
CU	0.18761	1,931.99	4.020	0.18813	0.19488	0.17982
FE	288.97484	149,706.07	0.631	288.57252	290.96472	287.38728
K	14.12531	5,550.59	0.309	14.13241	14.16489	14.07861
LI	0.15327	1,184.60	0.649	0.15289	0.15252	0.15440
MG	113.06652	323,324.31	0.543	112.83278	113.76327	112.60351
MN	3.85297	267,343.10	2.752	3.92926	3.89773	3.73191
MO	0.10575	378.20	158.072	0.29876	0.00927	0.00921
NA	1.24131	1,834.29	1.637	1.22860	1.26474	1.23059
NI	1.21097	3,599.77	2.252	1.19128	1.24209	1.19954
P	4.29893	1,870.68	2.413	4.21496	4.41488	4.26696
PB	0.05197	118.97	2.424	0.05100	0.05339	0.05152
S	0.30180	51.13	50.454	0.47758	0.21717	0.21064
SB	-0.00285	8.68	110.368	-0.00423	-0.00506	0.00075
SE	0.02055	-4.50	12.729	0.02252	0.02156	0.01758
SI	2.42367	1,051.30	0.571	2.42088	2.43869	2.41145
SN	0.02621	28.56	3.743	0.02722	0.02615	0.02526
SR	0.18885	124,609.56	3.959	0.18915	0.19617	0.18122
TI	13.13749	609,090.47	2.845	13.24637	13.44478	12.72131
TL	-0.01106	-33.89	45.984	-0.00732	-0.01685	-0.00901
V	0.55459	7,898.39	3.602	0.55611	0.57376	0.53389
Y1	15791.88268	15,791.88	1.601	15999.81748	15510.34248	15865.48808
Y2A	358736.74213	358,736.74	3.717	355266.65561	347482.41539	373461.15538
Y2R	33494.66294	33,494.66	0.846	33453.01000	33234.55309	33796.42572
ZN	0.45455	4,869.64	2.554	0.44574	0.46771	0.45019
ZR	0.21575	668.95	1.154	0.21330	0.21828	0.21568

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 41 Date/Time: 11/09/2012 06:34

Sample Number: **6847416** Class: **** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00266	-10.72	23.440	0.00232	0.00227	0.00337
AL	172.02744	30,234.15	2.833	169.02799	177.65076	169.40356
AS	0.01575	6.82	21.262	0.01567	0.01914	0.01244
B	0.16579	5,524.59	2.807	0.16153	0.17075	0.16508
BA	1.38241	865,379.34	2.434	1.36788	1.42089	1.35848
BE	0.01126	3,040.57	3.412	0.01095	0.01169	0.01114
CA	38.75683	58,118.33	2.927	38.10177	40.06658	38.10213
CD	0.00009	283.81	1282.791	0.00051	-0.00120	0.00096
CO	0.15532	1,009.92	2.716	0.15617	0.15074	0.15904
CR	0.61083	6,777.45	2.333	0.59921	0.62673	0.60654
CU	0.20665	2,215.62	1.789	0.20348	0.21071	0.20577
FE	317.07939	164,449.45	3.060	311.59127	328.28298	311.36392
K	9.21999	3,672.88	2.994	9.07218	9.53843	9.04935
LI	0.12234	964.14	2.617	0.11913	0.12554	0.12236
MG	69.62480	204,919.90	2.706	68.67862	71.79436	68.40141
MN	2.94724	207,811.05	2.241	2.89257	3.02063	2.92851
MO	0.00574	25.77	16.367	0.00485	0.00564	0.00672
NA	1.37326	2,034.08	2.173	1.35638	1.40771	1.35569
NI	0.98702	3,038.71	2.175	0.99037	0.96407	1.00662
P	1.46516	663.38	2.435	1.47028	1.42719	1.49800
PB	0.05668	136.66	10.062	0.05559	0.05160	0.06285
S	0.10281	14.73	3.350	0.10268	0.09944	0.10632
SB	-0.00260	9.01	80.055	-0.00080	-0.00489	-0.00212
SE	0.02311	-4.83	15.684	0.02660	0.02335	0.01937
SI	2.64818	1,158.99	2.776	2.61602	2.73229	2.59623
SN	0.02558	29.02	3.991	0.02661	0.02457	0.02556
SR	0.19373	129,948.30	2.257	0.19008	0.19858	0.19254
TI	6.79235	320,033.38	2.774	6.75039	6.99819	6.62845
TL	-0.00242	-23.13	53.258	-0.00368	-0.00110	-0.00248
V	0.49713	7,190.01	2.179	0.48835	0.50924	0.49381
Y1	16411.45097	16,411.45	1.918	16344.16311	16754.45295	16135.73685
Y2A	364400.87290	364,400.87	1.560	368682.66800	357953.41739	366566.53333
Y2R	33831.39076	33,831.39	2.155	34187.96333	32992.54535	34313.66360
ZN	0.38735	4,371.53	2.662	0.38879	0.37639	0.39687
ZR	0.20143	631.28	2.762	0.19787	0.20784	0.19857

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 42 Date/Time: 11/09/2012 06:38

Sample Number: **6847417** Class: **** Batch: 123125708001

Initial Vol: 1.01 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00242	4.82	20.647	0.00249	0.00288	0.00189
AL	151.07845	26,538.47	0.657	151.88433	151.38068	149.97036
AS	0.00702	3.06	20.402	0.00867	0.00610	0.00628
B	0.15251	4,321.60	7.771	0.16571	0.14278	0.14905
BA	1.26357	784,861.59	2.835	1.30363	1.23462	1.25247
BE	0.00922	2,643.70	5.412	0.00980	0.00895	0.00892
CA	64.10479	95,694.64	0.557	64.39686	64.21091	63.70660
CD	0.00107	215.64	8.256	0.00102	0.00101	0.00117
CO	0.11682	884.74	1.673	0.11469	0.11722	0.11854
CR	0.77334	8,511.36	3.509	0.80467	0.75823	0.75712
CU	0.09963	992.83	3.106	0.10314	0.09732	0.09841
FE	232.01763	123,427.52	0.539	232.91989	232.54225	230.59074
K	9.84162	3,917.44	1.045	9.94406	9.73838	9.84244
LI	0.11652	922.18	0.955	0.11775	0.11557	0.11623
MG	60.58597	178,994.42	0.709	61.05300	60.49632	60.20859
MN	3.48096	243,494.92	3.662	3.62458	3.38127	3.43704
MO	0.00531	23.86	4.217	0.00513	0.00556	0.00523
NA	1.84283	2,680.42	0.966	1.86050	1.84311	1.82489
NI	0.69380	2,106.79	0.471	0.69046	0.69700	0.69394
P	5.06276	2,255.11	0.505	5.03599	5.08697	5.06533
PB	0.03242	94.97	9.873	0.02876	0.03469	0.03380
S	0.24480	42.17	0.590	0.24645	0.24418	0.24377
SB	-0.00160	8.18	107.230	-0.00048	-0.00357	-0.00074
SE	0.01414	-4.68	44.522	0.00830	0.02081	0.01331
SI	3.15979	1,381.73	0.880	3.19187	3.14235	3.14515
SN	0.02643	29.45	2.341	0.02629	0.02710	0.02589
SR	0.19973	132,902.83	3.669	0.20818	0.19586	0.19514
TI	15.09237	705,294.02	4.700	15.88986	14.85533	14.53193
TL	-0.01009	-36.13	22.346	-0.00753	-0.01179	-0.01095
V	0.54182	7,797.43	3.384	0.56298	0.53184	0.53065
Y1	16163.62606	16,163.63	0.380	16227.57867	16105.08558	16158.21393
Y2A	361704.34384	361,704.34	3.267	348094.80132	367646.17432	369372.05589
Y2R	33815.94295	33,815.94	0.585	33636.53693	33783.23682	34028.05511
ZN	0.46949	5,066.54	0.653	0.46626	0.47236	0.46986
ZR	0.24479	764.87	0.996	0.24705	0.24512	0.24221

LANCASTER LABORATORIES

Run Name: 1231402T72

Instrument ID: 16417

Tube: 43

Date/Time: 11/09/2012 06:43

Sample Number: **LLC**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00630	79.05	1.544	0.00619	0.00632	0.00639
AL	0.27701	64.29	23.995	0.35140	0.22347	0.25614
AS	0.02010	8.44	8.463	0.01924	0.01899	0.02205
B	0.05328	535.77	4.534	0.05069	0.05367	0.05547
BA	0.00561	3,400.38	2.236	0.00550	0.00558	0.00574
BE	0.00519	1,866.32	7.382	0.00482	0.00515	0.00558
CA	0.16758	430.50	13.089	0.19280	0.15296	0.15697
CD	0.00517	61.78	1.744	0.00520	0.00507	0.00525
CO	0.00543	36.46	3.432	0.00546	0.00524	0.00561
CR	0.01542	170.88	2.490	0.01512	0.01529	0.01585
CU	0.00438	39.17	13.305	0.00437	0.00380	0.00496
FE	0.32549	199.11	26.557	0.42253	0.29719	0.25674
K	0.51127	229.79	3.278	0.50764	0.49662	0.52955
LI	0.02041	188.71	11.181	0.01954	0.02300	0.01869
MG	0.20574	416.65	9.440	0.22790	0.19768	0.19165
MN	0.00589	423.00	0.331	0.00587	0.00588	0.00591
MO	0.01269	50.73	8.257	0.01369	0.01160	0.01279
NA	0.97798	1,401.17	1.394	0.98677	0.96227	0.98489
NI	0.01094	47.06	7.131	0.01124	0.01005	0.01152
P	0.09958	45.71	3.539	0.10083	0.09560	0.10231
PB	0.01391	20.66	11.845	0.01571	0.01354	0.01248
S	0.50712	94.75	3.757	0.51626	0.48521	0.51987
SB	0.02059	12.35	5.169	0.02046	0.01959	0.02171
SE	0.02129	5.07	4.101	0.02222	0.02048	0.02118
SI	0.05828	28.99	5.466	0.06123	0.05490	0.05871
SN	0.02013	23.24	5.065	0.02058	0.01896	0.02084
SR	0.00515	3,310.60	3.485	0.00500	0.00511	0.00535
TI	0.01528	705.30	3.229	0.01585	0.01505	0.01495
TL	0.03162	13.43	4.746	0.03152	0.03017	0.03317
V	0.00574	95.60	4.760	0.00598	0.00545	0.00580
Y1	16343.14845	16,343.15	2.554	16190.69135	16815.35448	16023.39952
Y2A	354032.00442	354,032.00	3.948	366478.39547	356707.49834	338910.11944
Y2R	31817.41541	31,817.42	0.915	31743.91122	32138.23706	31570.09794
ZN	0.01963	216.30	3.096	0.01995	0.01893	0.02002
ZR	0.05732	175.95	2.616	0.05904	0.05666	0.05626

LANCASTER LABORATORIES

Run Name: 1231402T72

Instrument ID: 16417

Tube: 44

Date/Time: 11/09/2012 06:47

Sample Number: **ICSA**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00440	8.18	14.343	0.00492	0.00458	0.00370
AL	527.79035	80,520.92	2.397	540.54246	527.58875	515.23984
AS	-0.00954	-3.67	12.179	-0.00874	-0.00901	-0.01088
B	0.08211	2,868.95	37.859	0.04691	0.10580	0.09362
BA	0.00085	437.62	12.928	0.00073	0.00094	0.00088
BE	0.00083	940.00	45.160	0.00046	0.00121	0.00083
CA	537.99521	650,105.12	2.291	551.35205	535.57093	527.06265
CD	0.00183	181.88	30.612	0.00123	0.00190	0.00235
CO	0.00427	25.57	3.430	0.00435	0.00437	0.00411
CR	0.00201	22.93	40.580	0.00234	0.00261	0.00108
CU	-0.01140	55.38	10.346	-0.01243	-0.01165	-0.01011
FE	211.95139	97,598.76	2.651	217.70394	211.67182	206.47841
K	0.01348	41.49	135.808	0.03309	0.01052	-0.00317
LI	0.00631	112.77	53.214	0.00931	0.00693	0.00268
MG	506.74170	1,034,537.49	2.521	519.71450	506.33849	494.17211
MN	0.00385	244.88	8.597	0.00349	0.00415	0.00392
MO	0.00149	8.95	29.521	0.00146	0.00107	0.00195
NA	-0.03128	85.29	15.971	-0.02832	-0.02847	-0.03705
NI	0.00388	-6.64	5.878	0.00411	0.00387	0.00365
P	0.01110	5.09	11.251	0.01027	0.01254	0.01050
PB	-0.00383	121.29	238.395	-0.01436	0.00163	0.00125
S	-0.02921	-6.96	17.703	-0.02849	-0.02444	-0.03470
SB	0.00345	5.92	93.767	-0.00016	0.00442	0.00609
SE	0.00160	-6.80	86.843	0.00315	0.00115	0.00049
SI	0.05315	24.54	12.417	0.05794	0.05589	0.04562
SN	0.00523	6.77	18.516	0.00481	0.00455	0.00634
SR	0.00250	1,367.92	6.589	0.00231	0.00263	0.00256
TI	0.00375	152.47	11.791	0.00368	0.00422	0.00335
TL	-0.00558	-5.85	19.691	-0.00646	-0.00594	-0.00435
V	-0.00047	28.77	71.481	-0.00084	-0.00034	-0.00021
Y1	14151.27336	14,151.27	1.651	14407.44040	14096.63023	13949.74943
Y2A	306626.13064	306,626.13	7.437	331382.74718	286479.11141	302016.53333
Y2R	29108.15522	29,108.16	1.968	28601.24800	28993.44360	29729.77405
ZN	0.01308	280.33	9.016	0.01177	0.01340	0.01406
ZR	0.00779	29.53	9.462	0.00856	0.00710	0.00770

LANCASTER LABORATORIES

Run Name: 1231402T72

Instrument ID: 16417

Tube: 45

Date/Time: 11/09/2012 06:51

Sample Number: **ICSAB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.22368	3,111.04	2.086	0.22008	0.22200	0.22895
AL	502.73620	80,093.65	10.575	452.08524	558.10115	498.02221
AS	0.09756	35.93	5.561	0.09340	0.10370	0.09559
B	0.08620	2,896.25	31.914	0.10728	0.05508	0.09623
BA	0.51387	279,413.43	2.088	0.50669	0.50871	0.52620
BE	0.51846	83,820.08	2.137	0.50988	0.51454	0.53097
CA	514.08040	651,821.06	8.624	476.22133	562.85357	503.16630
CD	0.98318	12,013.05	1.916	0.96462	0.98262	1.00229
CO	0.48577	2,447.43	2.005	0.47600	0.48583	0.49547
CR	0.49884	4,808.60	2.086	0.49041	0.49566	0.51047
CU	0.52504	5,055.35	2.676	0.51635	0.51753	0.54125
FE	201.84378	97,353.93	11.354	179.86509	225.59584	200.07041
K	-0.00619	37.05	366.283	0.01996	-0.02018	-0.01833
LI	0.00530	111.66	66.674	0.00775	0.00125	0.00691
MG	480.24511	1,038,858.05	10.935	436.05927	538.30106	466.37500
MN	0.48077	29,460.33	2.184	0.47368	0.47580	0.49283
MO	0.00059	6.09	25.102	0.00047	0.00075	0.00054
NA	-0.02128	101.68	46.926	-0.03251	-0.01793	-0.01340
NI	0.94383	2,505.21	1.811	0.92662	0.94405	0.96081
P	0.01017	5.47	21.864	0.00765	0.01188	0.01096
PB	0.05238	172.10	14.629	0.05721	0.04354	0.05638
S	-0.03840	-8.37	17.382	-0.04290	-0.03073	-0.04156
SB	0.64296	355.55	2.097	0.63045	0.64119	0.65724
SE	0.05127	6.46	12.961	0.05014	0.05841	0.04526
SI	0.04704	23.14	26.211	0.03449	0.05914	0.04748
SN	0.00338	5.08	6.204	0.00349	0.00352	0.00314
SR	0.00245	1,384.59	3.175	0.00239	0.00241	0.00254
TI	0.00338	157.70	5.189	0.00323	0.00357	0.00334
TL	0.09161	28.91	4.147	0.08782	0.09542	0.09159
V	0.53410	6,665.06	2.087	0.52584	0.52968	0.54678
Y1	14071.26824	14,071.27	1.394	14273.51722	14058.57743	13881.71006
Y2A	316551.19474	316,551.19	2.220	322612.93962	318190.17916	308850.46543
Y2R	30584.51397	30,584.51	8.306	33005.94859	27940.18000	30807.41331
ZN	1.03102	9,431.02	1.641	1.01551	1.02850	1.04906
ZR	0.00415	20.65	47.604	0.00187	0.00523	0.00535

LANCASTER LABORATORIES

Run Name: 1231402T72

Instrument ID: 16417

Tube: 46

Date/Time: 11/09/2012 06:55

Sample Number: **CCV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.46683	7,793.34	5.862	0.49821	0.45435	0.44792
AL	26.58108	4,312.42	3.274	27.48682	25.75114	26.50528
AS	0.49584	207.36	1.192	0.49201	0.50265	0.49287
B	0.45574	4,907.55	5.497	0.48383	0.44769	0.43571
BA	0.47722	304,863.18	6.267	0.50638	0.47866	0.44662
BE	0.46766	88,944.61	5.273	0.49610	0.45451	0.45235
CA	26.59956	36,912.63	3.261	27.48320	25.74954	26.56595
CD	0.50250	6,886.03	1.651	0.49677	0.51201	0.49870
CO	0.49656	2,842.58	1.629	0.49115	0.50586	0.49267
CR	0.47573	5,388.03	5.730	0.50691	0.46392	0.45638
CU	0.46503	5,097.33	5.164	0.49197	0.45723	0.44588
FE	26.28289	13,703.42	2.932	27.06250	25.52161	26.26455
K	26.14415	9,536.33	2.746	26.86385	25.42823	26.14037
LI	0.52859	3,686.76	2.780	0.54074	0.51225	0.53277
MG	26.23998	72,519.64	3.186	27.11623	25.45102	26.15269
MN	0.46330	33,365.19	5.136	0.48891	0.45911	0.44188
MO	0.47791	1,688.97	1.812	0.47158	0.48778	0.47436
NA	26.00777	33,183.07	2.805	26.71388	25.25667	26.05278
NI	0.49510	1,507.82	1.736	0.48912	0.50495	0.49124
P	0.49765	220.28	1.651	0.49468	0.50693	0.49133
PB	0.49472	579.59	1.801	0.48931	0.50501	0.48984
S	24.37230	4,511.04	1.510	24.12979	24.79566	24.19145
SB	0.50034	309.26	1.807	0.49332	0.51054	0.49715
SE	0.50408	146.61	1.693	0.50249	0.51330	0.49645
SI	25.58669	10,289.77	2.601	26.22296	24.89526	25.64185
SN	0.48319	490.94	1.538	0.47759	0.49162	0.48035
SR	0.46146	315,956.84	5.699	0.49180	0.44740	0.44518
TI	0.49775	23,987.39	5.487	0.51701	0.50974	0.46649
TL	0.49356	247.92	1.504	0.49028	0.50206	0.48834
V	0.49560	7,200.67	5.477	0.52670	0.48342	0.47668
Y1	15951.54539	15,951.55	1.228	16096.96316	15728.74817	16028.92486
Y2A	372664.73175	372,664.73	6.116	346645.32183	382247.77999	389101.09344
Y2R	31213.75710	31,213.76	2.264	30551.33519	31957.80751	31132.12859
ZN	0.47915	4,924.74	1.602	0.47404	0.48798	0.47544
ZR	0.51973	1,487.74	2.691	0.53455	0.50676	0.51788

LANCASTER LABORATORIES

Run Name: 1231402T72 Instrument ID: 16417

Tube: 47 Date/Time: 11/09/2012 06:59

Sample Number: **CCB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00198	2.87	44.649	0.00259	0.00097	0.00237
AL	0.00480	19.76	2179.215	-0.02879	-0.07893	0.12213
AS	-0.00026	-0.27	645.963	0.00163	-0.00169	-0.00074
B	0.00408	63.08	29.327	0.00541	0.00308	0.00376
BA	0.00032	186.62	121.926	0.00016	0.00004	0.00077
BE	0.00024	968.53	235.772	0.00083	-0.00030	0.00019
CA	-0.00876	183.66	974.791	-0.04801	-0.06742	0.08916
CD	0.00002	-10.63	386.804	-0.00006	0.00003	0.00009
CO	0.00005	4.80	653.912	-0.00034	0.00019	0.00030
CR	-0.00076	-3.15	75.138	-0.00116	-0.00100	-0.00011
CU	-0.00653	-73.55	6.716	-0.00703	-0.00627	-0.00627
FE	0.00626	28.85	608.080	-0.01398	-0.01742	0.05018
K	0.03534	53.51	34.585	0.03554	0.02301	0.04745
LI	-0.00166	33.82	143.627	-0.00415	0.00060	-0.00143
MG	0.13966	232.56	59.967	0.09553	0.08719	0.23624
MN	0.00059	60.60	153.211	0.00007	0.00006	0.00163
MO	0.00198	12.02	10.512	0.00205	0.00174	0.00213
NA	-0.06100	54.59	7.123	-0.05868	-0.05831	-0.06601
NI	-0.00013	12.71	232.888	-0.00030	-0.00032	0.00022
P	-0.00145	0.23	78.134	-0.00232	-0.00186	-0.00017
PB	-0.00109	2.95	221.044	0.00115	-0.00078	-0.00365
S	0.01039	0.57	17.880	0.01236	0.01014	0.00867
SB	0.00069	-0.26	118.704	0.00089	-0.00021	0.00138
SE	0.00191	-0.77	246.743	0.00721	0.00027	-0.00176
SI	0.02181	13.95	37.847	0.03040	0.01395	0.02107
SN	-0.00069	1.67	40.218	-0.00037	-0.00083	-0.00087
SR	0.00009	10.26	148.406	0.00001	0.00001	0.00023
TI	0.00184	89.83	136.478	0.00055	0.00023	0.00474
TL	-0.00098	-4.23	82.430	-0.00023	-0.00087	-0.00184
V	0.00018	19.47	195.231	-0.00023	0.00036	0.00041
Y1	16244.90303	16,244.90	1.099	16150.30638	16450.89892	16133.50380
Y2A	351110.30213	351,110.30	9.325	314387.75713	377255.36779	361687.78146
Y2R	31771.29189	31,771.29	3.787	30559.99800	31787.61743	32966.26024
ZN	-0.00026	8.49	26.409	-0.00021	-0.00034	-0.00024
ZR	0.00074	11.84	25.938	0.00064	0.00062	0.00096

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ICP-AES Run Data Report

1231403T73

Reviewed By
Eric L Eby

Reviewed Date
11/09/2012 1:00PM

Data File Name 1231403T73.TXT
Run Name: 1231403T73

Verified By:
Jennifer L Moyer

Verified Date
11/09/2012 1:26PM

Method Reference Name(s):
SW-846 6010B

Analyst Employee: 1170

Instrument Parameters:

Individual Integration Time: 10.00 sec Total Integration Time: 30.00 sec Rinse Time: 15.00 sec

Element	Analyte Name	Wavelength Value
AG	Silver	328.06
AL	Aluminum	308.21
AS	Arsenic	189.04
AU	Gold	242.80
B	Boron	249.67
BA	Barium	455.40
BE	Beryllium	313.04
CA	Calcium	317.93
CD	Cadmium	226.50
CO	Cobalt	228.62
CR	Chromium	267.72
CU	Copper	327.40
FE	Iron	261.19
K	Potassium	766.49
LI	Lithium	670.78
MG	Magnesium	285.21
MN	Manganese	257.61
MO	Molybdenum	202.03
NA	Sodium	589.59
NI	Nickel	231.60
P	Phosphorus	177.49
PB	Lead	220.35
SB	Antimony	206.83
SE	Selenium	196.09
SI	Silicon	251.60
SN	Tin	189.99
SR	Strontium	421.55
TI	Titanium	334.94
TL	Thallium	190.86
V	Vanadium	292.40
Y1	Yttrium	224.31
Y2	Yttrium	371.03
ZN	Zinc	213.86
ZR	Zirconium	339.19

The TRACE ICP utilizes Yttrium as an internal standard to compensate for fluctuations in nebulization and plasma conditions. All Yttrium readings are expressed in counts.

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 1 Date/Time: 11/09/2012 09:07

Sample Number: **S0**

ELEMENT	CONC (ppm)	AVERAGE INTENSITY	% RSD	INTEGRATIONS #1	#2	#3
AG	0.000	-0.00563	13.742	-0.00625	-0.00586	-0.00476
AL	0.000	0.02664	21.985	0.02446	0.02219	0.03327
AS	0.000	0.00734	104.127	0.00874	-0.00091	0.01419
B	0.000	0.00004	17.232	0.00004	0.00004	0.00003
BA	0.000	0.00061	6.012	0.00057	0.00064	0.00062
BE	0.000	0.00169	63.331	0.00093	0.00291	0.00122
CA	0.000	0.00496	3.997	0.00517	0.00494	0.00478
CD	0.000	-0.01446	4.890	-0.01483	-0.01490	-0.01364
CO	0.000	-0.00015	2675.135	-0.00449	0.00317	0.00088
CR	0.000	0.00005	19.733	0.00005	0.00005	0.00003
CU	0.000	0.00118	12.508	0.00116	0.00105	0.00134
FE	0.000	0.00021	51.149	0.00015	0.00033	0.00014
K	0.000	0.34130	8.156	0.31582	0.37100	0.33706
LI	0.000	-0.00316	35.576	-0.00359	-0.00188	-0.00399
MG	0.000	0.00055	29.307	0.00064	0.00036	0.00065
MN	0.000	0.00006	235.917	-0.00007	0.00021	0.00004
MO	0.000	-0.00018	2091.924	-0.00404	0.00338	0.00012
NA	0.000	-0.00272	25.216	-0.00231	-0.00351	-0.00233
NI	0.000	0.03337	1.358	0.03286	0.03373	0.03351
P	0.000	0.00001	386.928	0.00004	-0.00004	0.00003
PB	0.000	-0.01084	36.545	-0.00628	-0.01284	-0.01341
S	0.000	0.00006	58.286	0.00007	0.00010	0.00003
SB	0.000	0.00032	20.764	0.00035	0.00036	0.00024
SI	0.000	0.00025	14.801	0.00026	0.00021	0.00029
SN	0.000	0.00910	49.036	0.00428	0.01309	0.00992
SR	0.000	-0.00017	17.855	-0.00020	-0.00017	-0.00014
TI	0.000	0.00696	4.546	0.00686	0.00731	0.00670
TL	0.000	0.00791	67.596	0.01194	0.00184	0.00995
V	0.000	0.00298	33.014	0.00406	0.00215	0.00272
Y1	0.000	11028.82476	0.138	11046.36721	11021.38956	11018.71750
Y2A	0.000	317008.04045	0.312	318147.38064	316394.56233	316482.17838
Y2R	0.000	8100.54333	0.281	8074.27000	8113.12000	8114.24000
ZN	0.000	0.05738	2.593	0.05691	0.05618	0.05904
ZR	0.000	-0.00180	17.977	-0.00155	-0.00168	-0.00216

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 2 Date/Time: 11/09/2012 09:11

Sample Number: **S1**

ELEMENT	CONC (ppm)	AVERAGE INTENSITY	% RSD	INTEGRATIONS #1	#2	#3
AL	50.000	8.56848	0.716	8.60002	8.60760	8.49781
CA	50.000	1.75102	0.110	1.75041	1.74947	1.75318
FE	50.000	0.36737	0.322	0.36651	0.36689	0.36872
K	50.000	83.72221	0.223	83.53058	83.73295	83.90309
MG	50.000	2.24138	0.304	2.23882	2.24910	2.23622
NA	50.000	4.77583	0.275	4.76357	4.78973	4.77420
S	50.000	0.85765	0.320	0.85870	0.85971	0.85452
SI	50.000	0.21526	0.753	0.21339	0.21631	0.21608
Y1	50.000	10505.05228	0.123	10494.24242	10501.58291	10519.33151
Y2R	50.000	7990.17862	0.326	8002.58483	7960.26795	8007.68310

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 3 Date/Time: 11/09/2012 09:14

Sample Number: **S2**

ELEMENT	CONC (ppm)	AVERAGE INTENSITY	% RSD	INTEGRATIONS #1	#2	#3
AG	1.000	1.22709	0.823	1.23872	1.22055	1.22200
AS	1.000	1.42884	0.482	1.42194	1.43573	1.42884
B	1.000	0.01692	0.625	0.01704	0.01685	0.01686
BA	1.000	2.31735	0.532	2.33157	2.30994	2.31054
BE	1.000	34.79111	0.828	35.12220	34.65194	34.59921
CD	1.000	41.34174	0.158	41.41103	41.33236	41.28182
CO	1.000	16.42658	0.359	16.40555	16.38110	16.49311
CU	1.000	1.27804	0.869	1.29082	1.27063	1.27268
LI	1.000	0.71324	0.474	0.70947	0.71600	0.71425
MN	1.000	6.75586	0.667	6.80786	6.73132	6.72840
NI	1.000	10.58950	0.063	10.59561	10.59047	10.58242
P	1.000	0.03991	0.256	0.03996	0.03997	0.03979
PB	1.000	3.75658	0.326	3.75981	3.76691	3.74302
SR	1.000	1.88879	0.846	1.90303	1.87151	1.89183
TL	1.000	1.69031	0.303	1.69210	1.69430	1.68454
Y1	1.000	10710.84679	0.098	10706.38447	10703.31379	10722.84210
Y2A	1.000	305016.15590	0.636	302817.28847	306493.42105	305737.75816
Y2R	1.000	8022.00285	0.198	8033.69544	8003.87000	8028.44311
ZN	1.000	29.30782	0.194	29.35690	29.32123	29.24532

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 4 Date/Time: 11/09/2012 09:19

Sample Number: **S3**

ELEMENT	CONC (ppm)	AVERAGE INTENSITY	% RSD	INTEGRATIONS #1	#2	#3
CR	1.000	0.02469	0.367	0.02470	0.02460	0.02478
MO	1.000	10.22786	5.008	10.31957	9.67597	10.68804
SB	1.000	0.03225	4.679	0.03242	0.03067	0.03367
SN	1.000	4.13872	5.102	4.17631	3.91131	4.32855
TI	1.000	4.80060	0.340	4.81797	4.78552	4.79831
V	1.000	1.42558	0.257	1.42735	1.42802	1.42138
Y1	1.000	11252.46871	3.904	11178.24552	11724.13598	10855.02464
Y2A	1.000	319408.68148	0.286	318744.28050	320449.43634	319032.32759
Y2R	1.000	8072.76333	0.215	8071.19000	8056.24000	8090.86000
ZR	1.000	0.07456	0.608	0.07442	0.07507	0.07420

LANCASTER LABORATORIES

Run Name: 1231403T73

Instrument ID: 18255

Tube: 5

Date/Time: 11/09/2012 09:23

Sample Number: **ICV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.58876	4,393.64	0.391	0.59056	0.58617	0.58955
AL	30.39451	835.56	0.315	30.46927	30.28661	30.42765
AS	0.57573	178.08	0.260	0.57618	0.57695	0.57406
B	0.57033	3,149.55	0.155	0.57103	0.57062	0.56933
BA	0.58705	413,473.64	0.953	0.59307	0.58201	0.58606
BE	0.57784	122,187.88	0.112	0.57792	0.57716	0.57845
CA	30.32212	8,525.82	0.383	30.44386	30.31023	30.21229
CD	0.58061	5,148.08	0.010	0.58058	0.58057	0.58067
CO	0.57744	2,031.52	0.165	0.57690	0.57854	0.57687
CR	0.56961	4,280.11	0.195	0.56897	0.56896	0.57089
CU	0.57215	4,450.70	0.344	0.57130	0.57074	0.57440
FE	30.62198	1,811.86	0.372	30.74239	30.60773	30.51584
K	30.03448	8,059.30	0.843	30.29611	30.01699	29.79034
LI	0.58621	3,347.28	1.069	0.58934	0.59029	0.57899
MG	30.33661	10,965.07	0.422	30.48388	30.27411	30.25183
MN	0.58168	23,883.58	0.135	0.58158	0.58251	0.58095
MO	0.58794	1,284.96	0.233	0.58850	0.58893	0.58638
NA	29.75905	22,705.60	0.300	29.83044	29.65898	29.78772
NI	0.58157	1,317.23	0.219	0.58240	0.58222	0.58011
P	0.58785	250.64	0.333	0.58903	0.58894	0.58559
PB	0.57615	465.36	0.704	0.57346	0.58082	0.57418
S	29.43213	5,395.26	0.067	29.45022	29.41127	29.43490
SB	0.60548	209.01	0.625	0.60443	0.60232	0.60968
SI	-0.02042	1.57	203.896	0.00323	0.00401	-0.06850
SN	0.57952	513.34	0.320	0.58033	0.58083	0.57739
SR	0.58289	334,534.34	0.818	0.58668	0.57753	0.58444
TI	0.58459	17,073.57	0.415	0.58358	0.58283	0.58735
TL	0.57599	208.58	0.340	0.57511	0.57824	0.57464
V	0.59018	5,124.91	0.301	0.59084	0.58817	0.59154
Y1	10684.39470	10,684.39	0.033	10681.51009	10683.38661	10688.28739
Y2A	303883.54986	303,883.55	0.294	303339.44037	304915.05663	303396.15256
Y2R	7991.10397	7,991.10	0.428	7957.18706	8025.58835	7990.53650
ZN	0.56791	3,576.21	0.054	0.56777	0.56827	0.56770
ZR	0.58993	346.53	0.420	0.59045	0.58723	0.59210

LANCASTER LABORATORIES

Run Name: 1231403T73

Instrument ID: 18255

Tube: 6

Date/Time: 11/09/2012 09:27

Sample Number: **ICB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00067	-30.55	123.013	0.00163	0.00015	0.00024
AL	0.00011	4.27	1246.497	0.04998	-0.03868	-0.01097
AS	0.00211	2.27	36.548	0.00232	0.00276	0.00126
B	0.00117	17.47	25.497	0.00149	0.00113	0.00089
BA	0.00002	210.47	143.949	0.00004	-0.00002	0.00004
BE	0.00002	15.55	78.335	0.00001	0.00002	0.00004
CA	-0.00532	38.20	226.293	0.00784	-0.00802	-0.01577
CD	-0.00041	-3.94	29.240	-0.00039	-0.00030	-0.00054
CO	-0.00020	-0.74	202.249	0.00018	-0.00062	-0.00015
CR	-0.00074	8.55	32.581	-0.00089	-0.00046	-0.00086
CU	0.00056	12.08	205.645	0.00152	0.00090	-0.00073
FE	-0.01078	1.00	40.415	-0.00584	-0.01243	-0.01408
K	0.06293	71.33	119.681	-0.01920	0.12876	0.07923
LI	-0.00580	-31.68	8.103	-0.00621	-0.00592	-0.00529
MG	-0.00562	2.33	20.247	-0.00492	-0.00694	-0.00501
MN	0.00014	5.57	44.678	0.00015	0.00007	0.00020
MO	0.00127	2.81	21.129	0.00097	0.00148	0.00137
NA	-0.00711	-27.18	172.907	-0.01132	0.00674	-0.01676
NI	0.00008	7.49	848.539	0.00066	-0.00061	0.00018
P	0.00070	0.42	82.082	0.00004	0.00098	0.00107
PB	-0.00063	-1.40	433.637	0.00163	-0.00365	0.00013
S	0.00164	1.02	275.319	0.00676	-0.00174	-0.00011
SB	-0.00016	3.41	1303.587	-0.00088	0.00223	-0.00184
SI	-0.00527	1.85	713.269	-0.04814	0.01011	0.02221
SN	0.00033	2.29	93.088	0.00009	0.00068	0.00022
SR	0.00002	-37.17	39.281	0.00003	0.00002	0.00002
TI	0.00013	47.97	166.424	0.00014	0.00033	-0.00009
TL	-0.00109	1.33	236.841	-0.00359	0.00156	-0.00124
V	-0.00009	17.97	309.569	-0.00041	-0.00003	0.00016
Y1	10957.65054	10,957.65	0.072	10966.50340	10955.08599	10951.36224
Y2A	317033.95778	317,033.96	0.318	317211.62135	317940.15252	315950.09947
Y2R	7996.88000	7,996.88	0.340	8026.87000	7989.93000	7973.84000
ZN	-0.00030	10.66	63.954	-0.00008	-0.00039	-0.00043
ZR	-0.00648	-16.08	23.575	-0.00747	-0.00472	-0.00724

LANCASTER LABORATORIES

Run Name: 1231403T73

Instrument ID: 18255

Tube: 7

Date/Time: 11/09/2012 09:31

Sample Number: **LLC**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00382	-4.12	10.550	0.00337	0.00394	0.00415
AL	0.15635	8.55	40.043	0.20685	0.08630	0.17590
AS	0.01967	7.78	7.797	0.01942	0.01827	0.02131
B	0.04787	269.02	2.198	0.04766	0.04902	0.04695
BA	0.00548	4,210.15	0.766	0.00552	0.00549	0.00544
BE	0.00478	1,062.15	0.383	0.00476	0.00480	0.00477
CA	0.25100	110.22	3.020	0.24622	0.25974	0.24704
CD	0.00485	44.08	3.320	0.00476	0.00475	0.00504
CO	0.00546	19.77	5.311	0.00526	0.00532	0.00579
CR	0.01433	126.05	4.298	0.01382	0.01502	0.01416
CU	0.01046	91.98	5.327	0.01106	0.01037	0.00995
FE	0.22441	15.07	6.675	0.24057	0.21099	0.22167
K	0.47106	180.02	17.121	0.38333	0.48788	0.54198
LI	0.01337	77.65	24.091	0.01337	0.01659	0.01015
MG	0.09565	39.42	2.473	0.09344	0.09537	0.09815
MN	0.00536	228.52	1.808	0.00541	0.00541	0.00524
MO	0.01097	24.65	2.838	0.01100	0.01064	0.01126
NA	0.99093	735.10	1.372	0.99270	1.00356	0.97654
NI	0.01060	31.97	4.353	0.01007	0.01092	0.01081
P	0.09967	43.60	1.419	0.09827	0.09965	0.10110
PB	0.01545	11.91	17.274	0.01780	0.01601	0.01255
S	0.48674	92.60	0.339	0.48577	0.48865	0.48581
SB	0.02095	10.83	12.589	0.02347	0.02117	0.01821
SI	0.03519	3.25	23.581	0.03893	0.04097	0.02568
SN	0.02040	20.54	2.551	0.02005	0.02015	0.02099
SR	0.00529	3,113.48	0.810	0.00529	0.00534	0.00525
TI	0.01034	357.48	2.614	0.01033	0.01061	0.01007
TL	0.03417	14.36	2.665	0.03313	0.03460	0.03479
V	0.00488	62.48	8.691	0.00458	0.00469	0.00536
Y1	11005.46892	11,005.47	0.192	11020.72123	11014.38849	10981.29705
Y2A	316359.58370	316,359.58	0.462	317323.72008	314677.94215	317077.08886
Y2R	7991.41333	7,991.41	0.655	8051.65000	7957.43000	7965.16000
ZN	0.01979	139.75	1.316	0.01952	0.02004	0.01981
ZR	0.04381	14.50	1.507	0.04346	0.04457	0.04339

LANCASTER LABORATORIES

Run Name: 1231403T73

Instrument ID: 18255

Tube: 8

Date/Time: 11/09/2012 09:35

Sample Number: **ICSA**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00295	-36.90	17.341	0.00346	0.00296	0.00244
AL	524.39781	13,547.81	0.582	527.87607	523.14288	522.17449
AS	-0.01010	7.40	50.466	-0.00884	-0.00574	-0.01570
B	0.10806	1,786.93	1.641	0.10831	0.10969	0.10617
BA	0.00099	776.85	0.701	0.00100	0.00099	0.00099
BE	-0.00161	-290.55	1.108	-0.00163	-0.00161	-0.00159
CA	529.25594	131,942.08	0.532	532.50008	527.83105	527.43668
CD	0.00059	121.48	43.099	0.00037	0.00086	0.00053
CO	0.00345	10.85	9.689	0.00383	0.00319	0.00333
CR	0.00076	17.03	105.568	-0.00006	0.00153	0.00080
CU	-0.00084	83.60	136.428	0.00048	-0.00138	-0.00160
FE	210.58078	11,149.93	0.604	211.92415	209.39464	210.42355
K	0.07271	71.10	83.080	0.00620	0.12418	0.08776
LI	-0.01952	-12.82	2.160	-0.01911	-0.01995	-0.01951
MG	583.32833	152,550.24	1.006	589.30309	577.57771	583.10418
MN	0.00395	142.25	2.197	0.00394	0.00387	0.00404
MO	-0.01241	-24.40	3.902	-0.01294	-0.01199	-0.01230
NA	0.08821	43.88	12.607	0.07694	0.08850	0.09918
NI	-0.00527	-18.56	14.858	-0.00617	-0.00486	-0.00477
P	0.00847	3.32	21.017	0.00944	0.00642	0.00956
PB	0.01381	79.37	23.964	0.01011	0.01482	0.01649
S	-0.02228	2.84	40.715	-0.03010	-0.01233	-0.02439
SB	-0.00266	-2.81	116.443	-0.00131	-0.00047	-0.00620
SI	0.04363	3.39	36.542	0.06178	0.03189	0.03722
SN	0.00646	6.86	22.186	0.00508	0.00794	0.00635
SR	0.00243	1,183.33	2.603	0.00248	0.00246	0.00236
TI	-0.00121	6.27	31.162	-0.00078	-0.00148	-0.00137
TL	0.00978	1.28	18.673	0.00802	0.00965	0.01166
V	-0.00021	38.93	274.011	-0.00059	0.00044	-0.00047
Y1	9599.12122	9,599.12	0.065	9596.65489	9594.54327	9606.16548
Y2A	267013.95349	267,013.95	0.674	266857.97342	265297.50831	268886.37874
Y2R	7680.20266	7,680.20	0.471	7642.75030	7714.97604	7682.88163
ZN	0.01045	154.01	1.500	0.01056	0.01052	0.01027
ZR	-0.02781	-27.91	1.344	-0.02780	-0.02818	-0.02743

LANCASTER LABORATORIES

Run Name: 1231403T73

Instrument ID: 18255

Tube: 9

Date/Time: 11/09/2012 09:39

Sample Number: **ICSAB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.22784	1,452.17	0.422	0.22805	0.22868	0.22679
AL	525.12115	13,623.10	0.669	523.72427	522.52339	529.11581
AS	0.09328	35.69	3.702	0.09579	0.08934	0.09471
B	0.10504	1,778.44	1.686	0.10317	0.10669	0.10526
BA	0.51266	319,157.67	0.787	0.51105	0.50968	0.51725
BE	0.51732	96,686.54	0.331	0.51929	0.51618	0.51648
CA	529.27905	132,496.03	0.781	526.28594	527.55532	533.99590
CD	0.95981	7,739.06	0.109	0.95958	0.95889	0.96095
CO	0.47327	1,493.12	0.202	0.47361	0.47219	0.47401
CR	0.49187	3,268.35	0.597	0.49478	0.48891	0.49192
CU	0.52821	3,712.71	0.393	0.53052	0.52650	0.52760
FE	210.50023	11,192.48	0.558	210.32086	209.42571	211.75413
K	0.13004	86.06	24.105	0.13423	0.09681	0.15907
LI	-0.02077	-19.72	19.869	-0.02553	-0.01859	-0.01819
MG	575.77204	151,879.99	0.860	574.93091	571.29553	581.08968
MN	0.50167	18,206.01	0.093	0.50210	0.50173	0.50117
MO	-0.01299	-25.55	7.939	-0.01199	-0.01405	-0.01292
NA	0.10223	54.38	10.413	0.11428	0.09411	0.09828
NI	0.92789	1,874.35	0.375	0.92717	0.92483	0.93168
P	0.00528	3.68	36.903	0.00657	0.00624	0.00304
PB	0.05660	110.43	4.637	0.05362	0.05856	0.05762
S	-0.02305	3.19	15.994	-0.02633	-0.02377	-0.01906
SB	0.64980	200.02	1.069	0.65748	0.64794	0.64396
SI	0.07498	4.44	8.376	0.07114	0.07156	0.08222
SN	0.00714	7.41	15.840	0.00679	0.00840	0.00622
SR	0.00242	1,186.95	0.187	0.00242	0.00243	0.00242
TI	-0.00109	11.62	16.562	-0.00093	-0.00128	-0.00106
TL	0.10097	31.46	2.807	0.09951	0.10424	0.09916
V	0.52013	4,034.96	0.177	0.52119	0.51953	0.51968
Y1	9604.38170	9,604.38	0.171	9616.44132	9611.02897	9585.67481
Y2A	268589.92248	268,589.92	0.493	268934.96678	269706.89369	267127.90698
Y2R	7712.21551	7,712.22	0.564	7713.25939	7755.19169	7668.19544
ZN	1.02009	5,822.10	0.198	1.01780	1.02165	1.02081
ZR	-0.02479	-26.26	12.411	-0.02125	-0.02632	-0.02680

LANCASTER LABORATORIES

Run Name: 1231403T73

Instrument ID: 18255

Tube: 10

Date/Time: 11/09/2012 09:43

Sample Number: **CCV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.49185	3,654.69	0.476	0.49161	0.48963	0.49430
AL	25.34566	694.47	0.761	25.53920	25.34426	25.15353
AS	0.47743	147.94	0.470	0.47608	0.48002	0.47619
B	0.46488	2,562.86	0.446	0.46652	0.46255	0.46558
BA	0.49357	346,659.78	1.140	0.49969	0.49239	0.48862
BE	0.47105	99,320.64	0.553	0.47298	0.46809	0.47209
CA	25.27511	7,086.79	0.285	25.35765	25.22545	25.24221
CD	0.48428	4,293.97	0.021	0.48416	0.48431	0.48435
CO	0.47973	1,687.92	0.071	0.48001	0.47982	0.47935
CR	0.47719	3,577.51	0.483	0.47891	0.47457	0.47807
CU	0.48239	3,742.73	0.456	0.48306	0.47993	0.48418
FE	25.12654	1,483.44	0.132	25.15784	25.12989	25.09187
K	24.72400	6,614.37	0.407	24.69806	24.63896	24.83499
LI	0.48321	2,747.16	0.715	0.47923	0.48500	0.48541
MG	25.13884	9,067.60	0.292	25.11140	25.08325	25.22189
MN	0.48613	19,902.50	0.501	0.48880	0.48404	0.48553
MO	0.48842	1,067.53	0.350	0.49037	0.48720	0.48769
NA	24.62218	18,698.78	0.018	24.62099	24.61847	24.62708
NI	0.48182	1,092.61	0.170	0.48275	0.48153	0.48119
P	0.48704	207.71	0.059	0.48676	0.48700	0.48734
PB	0.47600	385.37	0.502	0.47867	0.47407	0.47525
S	24.35428	4,464.88	0.163	24.39676	24.34766	24.31840
SB	0.50506	174.94	0.584	0.50485	0.50812	0.50223
SI	24.91500	854.54	0.520	24.89281	24.79785	25.05435
SN	0.48398	429.06	0.285	0.48366	0.48279	0.48549
SR	0.48732	278,879.40	0.690	0.48943	0.48909	0.48345
TI	0.49071	14,297.18	0.494	0.49146	0.48800	0.49267
TL	0.48659	176.48	0.618	0.48829	0.48311	0.48836
V	0.49392	4,279.71	0.442	0.49281	0.49251	0.49643
Y1	10685.18452	10,685.18	0.149	10667.12201	10697.12372	10691.30783
Y2A	303007.74484	303,007.74	0.242	302268.82079	303735.25983	303019.15390
Y2R	7955.41181	7,955.41	0.271	7931.21635	7972.73907	7962.28000
ZN	0.46974	2,960.31	0.288	0.47090	0.47006	0.46826
ZR	0.50303	292.38	0.641	0.50646	0.50006	0.50255

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 11 Date/Time: 11/09/2012 09:47

Sample Number: **CCB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	-0.00001	-36.22	9551.478	-0.00014	-0.00129	0.00138
AL	-0.02799	3.50	170.341	0.00178	-0.00277	-0.08298
AS	0.00306	2.57	100.171	-0.00029	0.00572	0.00376
B	0.00190	21.47	2.524	0.00189	0.00195	0.00185
BA	-0.00004	164.67	100.287	-0.00003	-0.00008	0.00000
BE	0.00000	10.38	3100.468	0.00004	0.00000	-0.00005
CA	-0.01160	36.50	70.169	-0.00284	-0.01893	-0.01302
CD	-0.00025	-2.49	69.353	-0.00045	-0.00011	-0.00020
CO	0.00005	0.13	840.080	-0.00006	-0.00027	0.00046
CR	-0.00011	13.50	181.863	-0.00005	-0.00032	0.00005
CU	0.00086	14.47	71.739	0.00157	0.00059	0.00043
FE	0.00087	1.70	2294.991	0.00769	-0.02166	0.01659
K	0.06434	71.88	82.727	0.10424	0.00390	0.08489
LI	-0.00445	-23.98	28.838	-0.00506	-0.00297	-0.00531
MG	-0.00536	2.43	32.966	-0.00406	-0.00465	-0.00737
MN	-0.00005	-2.50	287.421	-0.00003	0.00008	-0.00020
MO	0.00085	1.88	25.616	0.00060	0.00096	0.00100
NA	0.03132	2.21	8.249	0.02834	0.03261	0.03300
NI	0.00000	7.34	5619.778	-0.00073	0.00027	0.00047
P	0.00098	0.55	21.740	0.00074	0.00102	0.00116
PB	-0.00235	-2.83	75.828	-0.00061	-0.00417	-0.00227
S	-0.00265	0.22	113.840	-0.00298	-0.00549	0.00052
SB	-0.00333	2.32	77.391	-0.00144	-0.00229	-0.00626
SI	0.00557	2.23	117.540	0.01313	0.00167	0.00191
SN	0.00014	2.12	742.327	0.00105	-0.00098	0.00034
SR	-0.00001	-56.58	248.972	0.00002	-0.00001	-0.00004
TI	0.00028	52.68	16.255	0.00023	0.00030	0.00031
TL	-0.00015	1.68	857.361	0.00025	0.00086	-0.00154
V	-0.00076	11.90	161.327	-0.00014	-0.00218	0.00003
Y1	10984.31755	10,984.32	0.169	10964.58111	10987.04839	11001.32316
Y2A	317216.48431	317,216.48	0.384	317554.29377	318228.61406	315866.54509
Y2R	8014.36667	8,014.37	0.387	7978.71000	8028.98000	8035.41000
ZN	-0.00043	9.88	54.298	-0.00058	-0.00054	-0.00016
ZR	-0.01329	-20.27	22.324	-0.01653	-0.01262	-0.01071

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 12 Date/Time: 11/09/2012 09:51

Sample Number: **PBS** Class: **** Batch: 123125708001

Initial Vol: 1.00 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00048	-33.60	154.313	0.00062	-0.00032	0.00114
AL	0.41220	16.62	8.997	0.45461	0.38584	0.39616
AS	0.00129	2.09	158.124	-0.00015	0.00040	0.00363
B	0.00513	40.90	6.911	0.00521	0.00474	0.00543
BA	0.00209	1,815.38	0.644	0.00210	0.00210	0.00208
BE	0.00000	11.15	6381.115	-0.00001	-0.00002	0.00003
CA	0.49021	189.88	0.713	0.49405	0.48722	0.48936
CD	-0.00021	-2.15	26.662	-0.00017	-0.00018	-0.00027
CO	0.00030	1.16	99.348	0.00048	0.00047	-0.00004
CR	-0.00106	6.32	49.989	-0.00064	-0.00088	-0.00166
CU	0.00038	11.18	133.071	0.00080	0.00054	-0.00019
FE	0.03238	3.83	60.490	0.03994	0.04705	0.01014
K	0.11362	90.70	59.488	0.13608	0.03766	0.16711
LI	-0.00407	-23.13	61.155	-0.00580	-0.00122	-0.00518
MG	0.14224	60.43	2.312	0.14550	0.14232	0.13892
MN	0.00036	15.77	23.570	0.00042	0.00040	0.00026
MO	0.00046	1.03	24.147	0.00058	0.00036	0.00045
NA	0.06099	26.58	15.877	0.05533	0.05547	0.07217
NI	0.00009	7.80	392.942	-0.00027	0.00044	0.00010
P	0.76304	344.00	0.165	0.76353	0.76160	0.76398
PB	0.00047	-0.45	316.546	-0.00050	-0.00026	0.00216
S	0.01509	3.69	5.192	0.01478	0.01451	0.01598
SB	-0.00310	2.37	57.861	-0.00515	-0.00183	-0.00231
SI	0.06347	4.51	21.727	0.07402	0.04786	0.06852
SN	0.01524	16.38	3.276	0.01543	0.01561	0.01467
SR	0.00076	425.22	2.463	0.00074	0.00076	0.00078
TI	0.00629	246.70	4.579	0.00627	0.00659	0.00601
TL	-0.00037	1.66	213.444	-0.00066	-0.00097	0.00052
V	0.00023	22.00	161.506	-0.00005	0.00066	0.00009
Y1	11376.56457	11,376.56	0.212	11402.02586	11354.05342	11373.61444
Y2A	332529.12246	332,529.12	0.642	332139.25729	330617.29111	334830.81897
Y2R	8550.85333	8,550.85	0.556	8522.13000	8605.77000	8524.66000
ZN	0.00153	23.16	7.414	0.00166	0.00147	0.00145
ZR	-0.00657	-17.25	69.410	-0.01181	-0.00356	-0.00433

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 13 Date/Time: 11/09/2012 09:55

Sample Number: **LCSW** Class: **** Batch: 123125708001

Initial Vol: 1.00 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.05504	437.06	1.807	0.05476	0.05615	0.05422
AL	2.08535	67.42	2.763	2.04556	2.05905	2.15143
AS	0.15152	50.28	2.164	0.15350	0.14774	0.15334
B	1.90209	10,290.53	0.146	1.90504	1.89955	1.90167
BA	2.09368	1,549,421.04	0.242	2.09570	2.08791	2.09744
BE	0.04993	11,105.75	0.234	0.04998	0.05000	0.04979
CA	4.24211	1,321.22	0.382	4.25613	4.24585	4.22434
CD	0.05133	473.95	0.399	0.05125	0.05156	0.05117
CO	0.52467	1,932.01	0.235	0.52603	0.52363	0.52434
CR	0.20746	1,647.67	0.934	0.20523	0.20856	0.20861
CU	0.25393	2,076.57	1.154	0.25056	0.25588	0.25535
FE	1.06241	69.90	2.048	1.08747	1.04827	1.05149
K	10.01083	2,921.12	0.601	10.05430	10.03600	9.94219
LI	0.99658	6,095.03	0.243	0.99937	0.99503	0.99535
MG	2.07280	818.37	0.834	2.06928	2.05753	2.09158
MN	0.51999	22,440.12	0.124	0.52070	0.51944	0.51982
MO	2.08173	4,750.86	0.423	2.09168	2.07858	2.07493
NA	10.12479	8,272.87	0.098	10.12932	10.13166	10.11338
NI	0.52657	1,249.61	0.313	0.52847	0.52568	0.52556
P	1.34275	594.45	0.531	1.34983	1.33557	1.34286
PB	0.15837	127.50	0.372	0.15893	0.15776	0.15843
S	-0.00510	1.77	128.913	0.00094	-0.01211	-0.00414
SB	0.52051	162.57	0.639	0.52430	0.51913	0.51809
SI	-0.02054	2.34	92.548	-0.00193	-0.01976	-0.03992
SN	4.12054	3,798.89	0.343	4.13688	4.11219	4.11256
SR	1.04205	628,632.67	0.307	1.03837	1.04421	1.04355
TI	1.04208	31,949.35	0.214	1.03974	1.04418	1.04231
TL	0.15351	60.14	0.617	0.15241	0.15406	0.15405
V	0.51221	4,598.98	0.433	0.50966	0.51369	0.51328
Y1	11156.64190	11,156.64	0.400	11105.04697	11182.43603	11182.44270
Y2A	319392.65584	319,392.66	0.216	319003.31565	318984.00199	320190.64987
Y2R	8573.66333	8,573.66	0.191	8560.75000	8568.14000	8592.10000
ZN	0.49658	3,253.93	0.286	0.49817	0.49613	0.49544
ZR	1.05792	677.07	0.379	1.06015	1.06032	1.05329

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 14 Date/Time: 11/09/2012 09:59

Sample Number: **6850737** Class: U*** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00270	-63.70	18.191	0.00238	0.00245	0.00326
AL	213.06110	6,279.15	0.180	212.81021	212.87159	213.50150
AS	-0.04458	6.94	6.504	-0.04791	-0.04326	-0.04258
B	0.37031	4,736.62	2.444	0.36548	0.38075	0.36470
BA	0.16141	113,273.07	0.921	0.16049	0.16312	0.16061
BE	0.00058	132.57	3.603	0.00060	0.00056	0.00059
CA	149.70277	44,672.17	0.088	149.81025	149.55683	149.74122
CD	0.00035	256.04	13.354	0.00030	0.00039	0.00034
CO	0.17077	765.96	0.317	0.17095	0.17119	0.17016
CR	0.04400	341.60	2.748	0.04355	0.04537	0.04308
CU	1.28763	9,909.90	1.107	1.28313	1.30359	1.27617
FE	408.54343	22,438.54	0.465	408.52408	406.65288	410.45334
K	7.02961	2,090.56	0.224	7.04700	7.02559	7.01624
LI	0.05290	357.92	4.018	0.05317	0.05065	0.05487
MG	76.66438	29,416.54	0.382	76.62762	76.39161	76.97391
MN	2.46855	100,871.15	0.882	2.45672	2.49369	2.45525
MO	-0.00435	-9.56	14.324	-0.00383	-0.00417	-0.00504
NA	31.85660	26,355.76	0.245	31.90674	31.76658	31.89649
NI	0.14506	304.13	0.317	0.14551	0.14508	0.14459
P	8.41714	3,573.66	0.138	8.40809	8.43021	8.41312
PB	0.04242	65.40	6.577	0.04547	0.04181	0.03999
S	1.46100	273.43	0.487	1.46080	1.46821	1.45397
SB	0.02932	0.64	22.191	0.02271	0.02952	0.03572
SI	7.29833	274.12	0.988	7.24026	7.27571	7.37903
SN	0.02666	25.52	3.901	0.02567	0.02774	0.02656
SR	0.59042	337,240.47	0.970	0.59405	0.59340	0.58382
TI	19.82700	574,793.46	1.181	19.75950	20.08749	19.63403
TL	0.01207	0.28	29.718	0.01203	0.00850	0.01567
V	1.14614	10,077.85	1.068	1.14501	1.15890	1.13450
Y1	10707.24667	10,707.25	0.056	10709.39000	10711.86684	10700.48317
Y2A	302434.25580	302,434.26	0.759	303426.54897	299811.01190	304065.20653
Y2R	8664.43804	8,664.44	0.393	8665.11164	8698.11453	8630.08796
ZN	0.47544	3,167.57	0.070	0.47551	0.47572	0.47507
ZR	0.17394	101.50	5.287	0.18227	0.16407	0.17547

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 15 Date/Time: 11/09/2012 10:03

Sample Number: **6850737** Class: UP** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.02675	152.72	6.814	0.02876	0.02522	0.02625
AL	207.55542	6,098.21	0.624	208.60327	206.10849	207.95449
AS	0.44664	156.71	0.705	0.44927	0.44749	0.44315
B	0.54934	5,610.91	2.043	0.55881	0.55228	0.53694
BA	0.20610	145,723.12	1.279	0.20914	0.20480	0.20437
BE	0.01979	4,206.77	0.835	0.01997	0.01966	0.01972
CA	145.97330	43,441.49	0.443	146.43801	145.23567	146.24623
CD	0.04759	669.87	0.676	0.04722	0.04784	0.04770
CO	0.25922	1,076.58	0.322	0.25846	0.26012	0.25907
CR	0.23281	1,762.86	1.093	0.23574	0.23158	0.23112
CU	1.74982	13,586.75	0.881	1.76732	1.74397	1.73819
FE	396.36623	21,814.47	1.140	401.08597	392.07973	395.93300
K	8.79537	2,592.21	0.911	8.88383	8.72766	8.77463
LI	1.05330	6,516.55	0.536	1.05617	1.04680	1.05693
MG	75.44286	28,868.35	0.973	76.22406	74.76714	75.33740
MN	2.44937	100,875.48	1.248	2.48464	2.43018	2.43331
MO	0.18341	403.58	0.289	0.18382	0.18281	0.18360
NA	32.98271	27,198.40	0.566	33.19024	32.82790	32.92998
NI	0.28110	615.72	0.211	0.28089	0.28177	0.28064
P	9.15215	3,904.95	0.114	9.16396	9.14415	9.14834
PB	0.49491	430.52	0.508	0.49776	0.49301	0.49395
S	1.41655	266.57	0.642	1.41443	1.42652	1.40870
SB	0.44392	141.43	1.359	0.44776	0.44704	0.43697
SI	6.06931	227.65	2.010	6.18251	5.94006	6.08536
SN	0.57755	515.10	0.213	0.57834	0.57613	0.57817
SR	0.59090	340,173.25	1.086	0.59788	0.58956	0.58527
TI	19.16924	560,128.62	0.888	19.35908	19.11877	19.02986
TL	0.92100	328.51	0.564	0.92695	0.91860	0.91743
V	1.20652	10,669.95	1.074	1.22064	1.20376	1.19516
Y1	10757.60121	10,757.60	0.072	10759.34333	10764.32330	10749.13701
Y2A	304834.58250	304,834.58	1.296	300281.81213	306854.09727	307367.83811
Y2R	8636.05908	8,636.06	0.633	8572.98186	8665.48452	8669.71087
ZN	0.57885	3,830.95	0.142	0.57955	0.57795	0.57907
ZR	1.14234	737.47	0.203	1.14201	1.14481	1.14021

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 16 Date/Time: 11/09/2012 10:07

Sample Number: **6850737** Class: D*** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00408	-52.79	27.830	0.00536	0.00318	0.00371
AL	219.37585	6,386.17	0.554	220.66175	218.24487	219.22094
AS	-0.04237	7.44	3.380	-0.04292	-0.04074	-0.04344
B	0.28347	4,280.95	0.624	0.28241	0.28552	0.28250
BA	0.17170	120,737.93	0.198	0.17139	0.17207	0.17165
BE	0.00059	135.47	5.855	0.00058	0.00057	0.00063
CA	153.45161	45,214.56	0.409	154.15247	153.25997	152.94239
CD	-0.00017	248.45	71.758	-0.00025	-0.00024	-0.00003
CO	0.16840	759.92	0.067	0.16853	0.16834	0.16833
CR	0.04690	364.00	1.558	0.04745	0.04717	0.04607
CU	1.26814	9,778.32	0.782	1.26192	1.27957	1.26292
FE	405.61144	22,038.76	0.348	406.49578	403.98382	406.35471
K	6.91272	2,032.03	1.534	7.01965	6.80762	6.91088
LI	0.05229	350.68	1.933	0.05312	0.05258	0.05117
MG	73.24572	27,811.00	0.304	73.40698	72.99177	73.33839
MN	2.56235	104,923.50	0.264	2.55561	2.56915	2.56230
MO	-0.00745	-16.28	5.636	-0.00793	-0.00719	-0.00723
NA	32.83163	26,837.03	0.437	32.99670	32.73780	32.76038
NI	0.14301	298.30	1.073	0.14311	0.14449	0.14143
P	7.75444	3,276.90	0.229	7.74462	7.77497	7.74372
PB	0.04160	65.30	5.885	0.04433	0.04090	0.03959
S	1.53230	285.30	0.164	1.53030	1.53512	1.53149
SB	0.03140	1.31	19.472	0.03283	0.02470	0.03668
SI	5.31934	197.98	1.051	5.36518	5.33576	5.25707
SN	0.02710	25.79	2.310	0.02697	0.02654	0.02778
SR	0.61101	349,724.36	0.755	0.61602	0.61003	0.60696
TI	20.53727	596,640.18	0.391	20.48519	20.62986	20.49675
TL	0.01321	0.81	16.461	0.01192	0.01573	0.01200
V	1.22204	10,759.89	0.338	1.21953	1.22680	1.21977
Y1	10656.45188	10,656.45	0.125	10671.48945	10646.32108	10651.54512
Y2A	303054.51921	303,054.52	0.065	302936.37575	303283.14457	302944.03731
Y2R	8560.42781	8,560.43	0.278	8538.27517	8585.65443	8557.35382
ZN	0.50462	3,331.88	0.314	0.50535	0.50572	0.50280
ZR	0.18194	105.50	0.519	0.18211	0.18093	0.18279

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 17 Date/Time: 11/09/2012 10:11

Sample Number: **6850737** Class: R*** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.05502	350.52	1.659	0.05583	0.05403	0.05519
AL	237.60506	6,880.09	0.765	238.70269	238.60586	235.50662
AS	0.08628	47.12	9.147	0.09310	0.07763	0.08809
B	2.12460	13,481.28	0.400	2.11489	2.13059	2.12833
BA	1.99060	1,366,200.09	0.742	1.97564	1.99100	2.00516
BE	0.04645	9,582.65	0.926	0.04595	0.04669	0.04670
CA	180.96715	52,835.99	0.555	181.50695	181.58669	179.80782
CD	0.04229	626.37	0.702	0.04247	0.04194	0.04244
CO	0.58542	2,215.18	0.238	0.58658	0.58582	0.58387
CR	0.23497	1,728.90	0.688	0.23332	0.23506	0.23655
CU	1.38857	10,471.36	1.013	1.37394	1.38980	1.40197
FE	416.72921	22,422.00	0.381	415.92727	418.55802	415.70235
K	17.53715	5,040.79	0.515	17.51615	17.63618	17.45912
LI	0.97708	5,971.86	0.753	0.97575	0.98502	0.97048
MG	73.66854	27,830.10	0.472	73.41252	74.06428	73.52884
MN	3.38899	135,636.97	0.625	3.36523	3.40592	3.39582
MO	1.71426	3,718.71	0.297	1.72005	1.71045	1.71228
NA	46.43179	37,778.91	0.336	46.44523	46.58050	46.26965
NI	0.56586	1,244.29	0.453	0.56822	0.56623	0.56314
P	7.77051	3,268.21	0.257	7.79298	7.75480	7.76374
PB	0.16116	159.60	3.006	0.16459	0.15562	0.16328
S	1.35280	253.56	0.581	1.35557	1.34393	1.35889
SB	0.29507	69.73	0.966	0.29691	0.29651	0.29178
SI	14.39867	530.37	0.273	14.40134	14.35816	14.43650
SN	3.34225	2,929.30	0.221	3.35072	3.33874	3.33729
SR	1.58849	888,741.47	0.645	1.57674	1.59557	1.59316
TI	21.27486	604,100.36	0.696	21.10416	21.35129	21.36914
TL	0.13531	45.04	1.883	0.13676	0.13681	0.13237
V	1.88805	16,083.07	0.882	1.87136	1.88814	1.90466
Y1	10604.71051	10,604.71	0.142	10591.76722	10621.26816	10601.09616
Y2A	296209.04982	296,209.05	0.200	296884.09392	295784.55688	295958.49868
Y2R	8518.75088	8,518.75	0.243	8502.27137	8511.97688	8542.00439
ZN	0.95616	6,119.05	0.154	0.95785	0.95544	0.95518
ZR	1.09272	695.28	0.455	1.09637	1.09474	1.08705

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 18 Date/Time: 11/09/2012 10:16

Sample Number: **6850737** Class: M*** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.06000	399.14	2.202	0.06152	0.05933	0.05915
AL	254.05910	7,389.61	0.109	253.91903	254.37796	253.88031
AS	0.09539	50.48	1.226	0.09619	0.09405	0.09593
B	2.25371	14,433.49	1.074	2.28009	2.24850	2.23254
BA	2.14505	1,503,949.76	0.908	2.16023	2.15183	2.12309
BE	0.04991	10,517.86	0.752	0.05026	0.04995	0.04951
CA	193.79025	56,757.52	0.387	193.02921	194.52680	193.81475
CD	0.04665	672.32	1.598	0.04689	0.04725	0.04582
CO	0.63844	2,407.03	0.433	0.63976	0.64030	0.63527
CR	0.26053	1,956.76	0.892	0.26249	0.26112	0.25796
CU	1.52702	11,777.15	1.064	1.54500	1.52270	1.51337
FE	416.88582	22,544.10	0.280	416.88520	415.71786	418.05441
K	18.98196	5,479.22	0.538	18.95770	19.09403	18.89414
LI	1.07666	6,613.00	0.257	1.07409	1.07629	1.07959
MG	83.37233	31,517.14	0.196	83.22938	83.33727	83.55035
MN	3.42927	140,210.61	0.726	3.45534	3.42668	3.40577
MO	1.86637	4,094.86	0.109	1.86871	1.86533	1.86508
NA	50.28874	41,128.91	0.235	50.17421	50.41036	50.28164
NI	0.61853	1,377.86	0.363	0.62110	0.61698	0.61749
P	8.55491	3,639.14	0.166	8.57131	8.54748	8.54594
PB	0.18003	178.42	1.798	0.17650	0.18285	0.18074
S	1.38367	262.43	0.319	1.37857	1.38630	1.38615
SB	0.28093	65.14	2.122	0.28759	0.27610	0.27910
SI	5.78951	216.17	0.884	5.74985	5.77137	5.84730
SN	3.51874	3,119.05	0.179	3.52597	3.51577	3.51448
SR	1.62760	930,254.46	1.230	1.64844	1.62583	1.60852
TI	18.85440	546,942.55	0.410	18.92285	18.77049	18.86985
TL	0.14405	48.64	0.844	0.14270	0.14506	0.14437
V	1.66379	14,471.05	0.744	1.67378	1.66766	1.64994
Y1	10725.62120	10,725.62	0.024	10724.32171	10724.00093	10728.54096
Y2A	302607.92805	302,607.93	0.646	300560.45969	302810.37642	304452.94803
Y2R	8562.45980	8,562.46	0.359	8585.72569	8527.66487	8573.98884
ZN	0.97608	6,315.71	0.321	0.97802	0.97776	0.97247
ZR	1.20386	771.25	0.420	1.19951	1.20940	1.20267

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 19 Date/Time: 11/09/2012 10:20

Sample Number: **6850737** Class: UL** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 5.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00091	-36.78	69.905	0.00040	0.00071	0.00162
AL	39.67915	1,142.13	0.305	39.81389	39.57991	39.64366
AS	-0.00830	2.36	36.635	-0.00850	-0.00517	-0.01124
B	0.08260	955.15	1.272	0.08362	0.08152	0.08266
BA	0.03024	22,238.10	0.186	0.03030	0.03018	0.03024
BE	0.00009	31.22	49.139	0.00014	0.00009	0.00005
CA	28.42060	8,392.02	0.237	28.46183	28.34301	28.45695
CD	-0.00042	40.69	52.070	-0.00031	-0.00066	-0.00027
CO	0.03313	152.48	1.792	0.03328	0.03247	0.03363
CR	0.00779	74.63	9.530	0.00794	0.00844	0.00698
CU	0.23960	1,924.73	0.478	0.24031	0.23828	0.24022
FE	69.93119	4,275.93	0.047	69.95761	69.89419	69.94177
K	1.26416	410.87	3.429	1.30472	1.26926	1.21848
LI	0.00728	50.50	32.526	0.00488	0.00961	0.00735
MG	14.48920	5,537.85	0.202	14.48989	14.45961	14.51809
MN	0.47047	20,003.63	0.153	0.47126	0.46987	0.47027
MO	0.00006	0.10	1038.548	-0.00062	0.00022	0.00057
NA	5.72547	4,566.51	0.323	5.70415	5.73558	5.73669
NI	0.02750	66.01	0.496	0.02765	0.02745	0.02739
P	1.50946	661.01	0.133	1.51145	1.50743	1.50949
PB	0.00529	9.65	14.013	0.00585	0.00556	0.00445
S	0.25646	50.15	1.686	0.26085	0.25633	0.25220
SB	-0.00007	1.18	3925.998	0.00049	0.00229	-0.00298
SI	1.16045	43.98	1.990	1.15245	1.14242	1.18648
SN	0.00567	7.18	9.955	0.00591	0.00503	0.00608
SR	0.11179	66,402.39	0.117	0.11169	0.11175	0.11194
TI	3.76243	113,534.07	0.375	3.77660	3.74838	3.76230
TL	-0.00181	0.10	66.931	-0.00320	-0.00120	-0.00102
V	0.21489	1,980.66	0.535	0.21505	0.21367	0.21595
Y1	11041.73830	11,041.74	0.206	11023.46905	11034.47391	11067.27194
Y2A	314685.00665	314,685.01	0.296	313664.89362	315486.78524	314903.34109
Y2R	8387.01667	8,387.02	0.414	8362.88000	8426.78000	8371.39000
ZN	0.08603	599.66	0.065	0.08599	0.08609	0.08600
ZR	0.03902	12.17	12.122	0.04031	0.04296	0.03377

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 20 Date/Time: 11/09/2012 10:24

Sample Number: **6850738** Class: **** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00379	-60.58	35.202	0.00531	0.00320	0.00284
AL	218.52982	6,224.18	0.430	217.63243	219.50733	218.44971
AS	-0.04855	7.58	4.529	-0.05084	-0.04645	-0.04835
B	0.51543	5,771.80	1.465	0.50676	0.51895	0.52057
BA	0.17715	124,340.31	0.794	0.17552	0.17796	0.17796
BE	0.00058	132.17	1.854	0.00057	0.00059	0.00058
CA	155.06573	44,689.38	0.467	154.51532	155.88695	154.79491
CD	-0.00053	270.92	24.688	-0.00059	-0.00038	-0.00063
CO	0.17747	804.55	0.495	0.17832	0.17752	0.17657
CR	0.05262	406.09	1.055	0.05319	0.05208	0.05260
CU	1.28509	9,885.19	0.231	1.28545	1.28786	1.28196
FE	450.49015	23,472.41	0.209	449.44989	450.74235	451.27822
K	7.99159	2,289.44	0.453	8.02981	7.98713	7.95782
LI	0.06209	401.86	4.638	0.05941	0.06171	0.06513
MG	79.92203	29,598.16	0.142	79.82697	79.89193	80.04720
MN	2.68316	109,676.32	0.906	2.65579	2.69139	2.70228
MO	-0.00699	-15.17	8.991	-0.00703	-0.00634	-0.00760
NA	32.87094	26,287.34	0.277	32.79069	32.96992	32.85220
NI	0.15053	309.50	0.772	0.15001	0.15187	0.14973
P	8.15469	3,419.91	0.031	8.15658	8.15178	8.15572
PB	0.03421	58.79	5.632	0.03583	0.03208	0.03473
S	1.54761	286.07	0.222	1.54718	1.54440	1.55124
SB	0.04026	2.84	13.457	0.04228	0.04439	0.03413
SI	5.07224	184.79	0.536	5.04161	5.09340	5.08170
SN	0.02657	25.13	2.572	0.02578	0.02700	0.02693
SR	0.67151	383,671.29	1.498	0.66012	0.67525	0.67916
TI	22.82499	661,942.35	0.553	22.75846	22.74600	22.97051
TL	0.01478	0.71	21.000	0.01152	0.01770	0.01511
V	1.40205	12,315.25	0.298	1.39755	1.40581	1.40279
Y1	10576.06485	10,576.06	0.140	10590.22586	10577.31935	10560.64935
Y2A	302533.11681	302,533.12	0.716	304860.67622	302166.38907	300572.28514
Y2R	8375.00865	8,375.01	0.197	8392.74322	8372.17678	8360.10596
ZN	0.52478	3,450.91	0.082	0.52487	0.52430	0.52515
ZR	0.19464	111.31	2.163	0.19636	0.19772	0.18984

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 21 Date/Time: 11/09/2012 10:28

Sample Number: **6850741** Class: **** Batch: 123125708001

Initial Vol: 1.04 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00397	-55.72	23.145	0.00417	0.00296	0.00477
AL	203.47484	5,741.39	0.572	204.11523	202.13212	204.17718
AS	-0.04788	6.34	3.809	-0.04609	-0.04781	-0.04973
B	0.32866	4,578.05	1.519	0.33173	0.32290	0.33135
BA	0.16420	114,795.47	0.642	0.16501	0.16300	0.16457
BE	0.00053	121.92	3.137	0.00051	0.00054	0.00054
CA	146.72342	41,922.82	0.404	147.05198	146.03874	147.07954
CD	-0.00054	251.59	36.642	-0.00053	-0.00075	-0.00035
CO	0.17673	776.72	0.384	0.17614	0.17747	0.17657
CR	0.04262	330.14	1.845	0.04340	0.04263	0.04183
CU	1.60860	12,341.73	0.746	1.61416	1.59483	1.61679
FE	418.88997	21,918.27	0.345	420.22402	419.08820	417.35767
K	7.50633	2,132.66	0.683	7.44789	7.52746	7.54364
LI	0.05427	350.13	3.840	0.05368	0.05254	0.05658
MG	72.70327	26,747.28	0.361	72.92320	72.77366	72.41294
MN	2.48175	101,032.88	0.443	2.48888	2.46908	2.48727
MO	-0.00671	-14.57	3.240	-0.00696	-0.00660	-0.00657
NA	29.50326	23,359.22	0.328	29.55662	29.39152	29.56165
NI	0.14669	303.38	0.451	0.14664	0.14605	0.14737
P	8.30951	3,487.02	0.176	8.30287	8.32625	8.29942
PB	0.04333	63.87	9.614	0.04640	0.04501	0.03859
S	1.72895	318.78	0.184	1.72775	1.73257	1.72655
SB	0.03472	1.99	14.940	0.03585	0.02906	0.03925
SI	5.75395	207.28	1.039	5.78992	5.68494	5.78698
SN	0.02642	25.01	5.167	0.02791	0.02611	0.02523
SR	0.54376	309,411.63	1.411	0.55231	0.53746	0.54151
TI	19.72068	569,574.10	1.193	19.92447	19.46317	19.77441
TL	0.01153	-0.03	9.890	0.01188	0.01245	0.01025
V	1.24916	10,928.77	0.536	1.25404	1.24152	1.25193
Y1	10580.34791	10,580.35	0.111	10570.22438	10577.60573	10593.21362
Y2A	301300.96602	301,300.97	0.633	299583.36109	303352.09860	300967.43837
Y2R	8292.39887	8,292.40	0.334	8271.60408	8281.79728	8323.79524
ZN	0.52119	3,417.90	0.208	0.52041	0.52243	0.52073
ZR	0.16670	92.58	0.536	0.16732	0.16710	0.16567

LANCASTER LABORATORIES

Run Name: 1231403T73

Instrument ID: 18255

Tube: 22

Date/Time: 11/09/2012 10:32

Sample Number: **CCV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.49102	3,677.47	0.442	0.48872	0.49130	0.49304
AL	24.96862	690.68	0.439	24.96909	24.85889	25.07787
AS	0.48455	150.15	1.122	0.48666	0.48862	0.47838
B	0.46728	2,595.90	0.508	0.46526	0.46990	0.46667
BA	0.49273	348,844.91	0.308	0.49134	0.49249	0.49435
BE	0.47071	100,044.67	0.531	0.46808	0.47306	0.47100
CA	25.08431	7,100.20	0.541	25.01072	25.00142	25.24080
CD	0.48765	4,325.12	0.859	0.48955	0.49054	0.48284
CO	0.48362	1,702.16	0.674	0.48495	0.48600	0.47990
CR	0.47656	3,601.48	0.163	0.47718	0.47681	0.47569
CU	0.48024	3,755.94	0.423	0.47880	0.48257	0.47936
FE	25.15311	1,498.99	0.752	25.09608	24.99913	25.36413
K	24.69475	6,668.77	0.997	24.64423	24.47778	24.96224
LI	0.48019	2,755.76	0.386	0.47824	0.48041	0.48192
MG	25.11907	9,145.97	0.519	25.17603	24.96994	25.21123
MN	0.48642	20,073.82	0.426	0.48435	0.48849	0.48641
MO	0.49260	1,077.01	1.084	0.49437	0.49683	0.48660
NA	24.54686	18,817.52	0.272	24.57891	24.47003	24.59163
NI	0.48648	1,103.48	0.806	0.48762	0.48970	0.48211
P	0.49414	210.78	1.204	0.49276	0.50065	0.48899
PB	0.48244	390.60	0.701	0.48463	0.48415	0.47854
S	24.64607	4,519.86	0.512	24.68203	24.75043	24.50573
SB	0.51169	177.24	0.311	0.51036	0.51345	0.51125
SI	24.68843	854.79	0.561	24.56815	24.65716	24.83998
SN	0.48747	432.29	0.809	0.48802	0.49111	0.48328
SR	0.48829	281,665.75	0.671	0.48635	0.49207	0.48643
TI	0.49385	14,503.83	0.202	0.49428	0.49271	0.49457
TL	0.48560	176.19	0.312	0.48395	0.48593	0.48693
V	0.49121	4,290.15	0.425	0.49358	0.48965	0.49039
Y1	10688.94476	10,688.94	0.599	10649.18049	10654.82807	10762.82572
Y2A	305433.32223	305,433.32	0.065	305600.84943	305213.19121	305485.92605
Y2R	8030.63784	8,030.64	0.780	8010.52002	8100.88840	7980.50509
ZN	0.47420	2,989.14	0.602	0.47520	0.47641	0.47098
ZR	0.49601	290.87	0.942	0.49080	0.49984	0.49738

LANCASTER LABORATORIES

Run Name: 1231403T73

Instrument ID: 18255

Tube: 23

Date/Time: 11/09/2012 10:36

Sample Number: **CCB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	-0.00018	-37.28	191.176	0.00011	-0.00057	-0.00009
AL	0.03127	5.18	392.238	-0.06534	0.16929	-0.01013
AS	0.00144	2.08	53.289	0.00227	0.00132	0.00074
B	0.00247	24.58	43.639	0.00281	0.00126	0.00334
BA	-0.00001	186.57	257.228	-0.00003	-0.00002	0.00002
BE	0.00002	15.38	71.483	0.00001	0.00004	0.00002
CA	-0.00462	38.90	134.902	-0.01101	-0.00426	0.00142
CD	-0.00042	-4.02	43.253	-0.00053	-0.00021	-0.00051
CO	0.00018	0.64	65.989	0.00028	0.00022	0.00005
CR	-0.00032	11.85	221.396	-0.00113	-0.00009	0.00025
CU	0.00011	8.40	740.004	-0.00016	0.00102	-0.00053
FE	0.00190	1.78	1006.899	-0.02005	0.01050	0.01526
K	0.03765	65.50	170.016	-0.03614	0.07823	0.07087
LI	-0.00599	-33.17	11.336	-0.00640	-0.00520	-0.00636
MG	-0.00316	3.28	244.360	-0.01159	-0.00147	0.00358
MN	0.00003	1.07	443.511	0.00021	-0.00006	-0.00004
MO	0.00093	2.06	38.895	0.00131	0.00086	0.00060
NA	-0.00719	-27.58	160.633	-0.02001	0.00236	-0.00390
NI	-0.00016	7.01	71.367	-0.00004	-0.00027	-0.00017
P	0.00026	0.23	652.743	-0.00131	0.00004	0.00204
PB	-0.00275	-3.18	18.974	-0.00218	-0.00320	-0.00286
S	0.00020	0.76	1464.114	-0.00078	0.00344	-0.00207
SB	-0.00150	2.98	155.009	-0.00228	0.00112	-0.00334
SI	-0.00920	1.74	134.849	0.00469	-0.01921	-0.01309
SN	0.00052	2.49	90.629	0.00028	0.00022	0.00107
SR	0.00001	-45.70	436.848	0.00004	-0.00002	0.00000
TI	0.00059	62.12	47.543	0.00081	0.00069	0.00027
TL	-0.00101	1.37	137.970	-0.00201	0.00058	-0.00161
V	-0.00041	15.15	156.177	-0.00088	-0.00067	0.00032
Y1	11064.89181	11,064.89	0.107	11077.90217	11054.87610	11061.89715
Y2A	317632.85439	317,632.85	0.645	315320.81117	318360.99138	319216.76061
Y2R	8102.53333	8,102.53	0.283	8086.53000	8092.30000	8128.77000
ZN	-0.00041	10.08	24.803	-0.00049	-0.00043	-0.00030
ZR	-0.00536	-15.60	102.209	-0.00824	-0.00879	0.00096

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 24 Date/Time: 11/09/2012 10:40

Sample Number: **6850744** Class: **** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00338	-57.98	19.516	0.00394	0.00265	0.00356
AL	213.78282	6,211.30	0.172	213.83775	213.39001	214.12070
AS	-0.02079	13.67	4.686	-0.02035	-0.02012	-0.02191
B	0.28844	4,269.25	2.054	0.28769	0.28292	0.29469
BA	0.16334	115,212.25	0.655	0.16266	0.16279	0.16457
BE	0.00058	133.07	5.936	0.00059	0.00054	0.00061
CA	148.98874	43,836.02	0.219	148.63357	149.27448	149.05818
CD	0.00038	249.23	66.920	0.00035	0.00065	0.00014
CO	0.17621	779.71	0.805	0.17678	0.17724	0.17459
CR	0.04858	377.70	1.056	0.04862	0.04805	0.04907
CU	1.43360	11,094.44	0.420	1.43210	1.42848	1.44022
FE	398.44385	21,671.41	0.192	397.83529	398.19131	399.30495
K	7.16338	2,099.15	0.502	7.15892	7.12987	7.20134
LI	0.05239	349.64	4.386	0.05006	0.05244	0.05466
MG	75.22134	28,474.33	0.360	75.01188	75.12464	75.52751
MN	2.46596	101,279.57	0.700	2.45294	2.45941	2.48553
MO	-0.00696	-15.23	3.305	-0.00687	-0.00722	-0.00679
NA	31.81995	25,953.81	0.232	31.85976	31.73467	31.86541
NI	0.14677	307.69	1.125	0.14661	0.14850	0.14521
P	7.97361	3,374.22	0.206	7.97780	7.98755	7.95548
PB	0.04774	69.45	3.394	0.04604	0.04927	0.04791
S	1.61952	301.48	0.413	1.62641	1.61908	1.61306
SB	0.03048	1.35	11.998	0.03089	0.02664	0.03392
SI	4.63368	172.37	0.615	4.64963	4.60079	4.65061
SN	0.02563	24.53	8.907	0.02738	0.02305	0.02646
SR	0.62183	356,985.87	1.086	0.61625	0.61991	0.62933
TI	19.50626	568,399.91	0.386	19.52545	19.42320	19.57013
TL	0.01328	0.90	23.291	0.01603	0.00993	0.01388
V	1.14482	10,115.30	0.281	1.14232	1.14369	1.14845
Y1	10670.29119	10,670.29	0.144	10668.53319	10655.83356	10686.50683
Y2A	303972.99023	303,972.99	0.586	304929.88008	305070.86942	301918.22119
Y2R	8542.05975	8,542.06	0.229	8547.40829	8520.42099	8558.34996
ZN	0.49753	3,290.06	0.182	0.49744	0.49848	0.49668
ZR	0.16055	91.37	0.984	0.15891	0.16069	0.16206

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 25 Date/Time: 11/09/2012 10:44

Sample Number: **6850747** Class: **** Batch: 123125708001

Initial Vol: 1.01 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00332	-58.46	23.113	0.00248	0.00349	0.00399
AL	218.60254	6,323.64	0.534	219.17880	217.25855	219.37028
AS	-0.04323	7.07	7.130	-0.04117	-0.04678	-0.04175
B	0.29233	4,303.83	2.458	0.29128	0.29997	0.28572
BA	0.16761	117,813.97	0.907	0.16684	0.16936	0.16663
BE	0.00055	125.55	6.915	0.00056	0.00058	0.00051
CA	155.78967	45,595.64	0.770	155.36027	154.86339	157.14534
CD	-0.00005	248.90	375.645	0.00016	-0.00011	-0.00019
CO	0.16916	757.54	0.579	0.16991	0.16805	0.16951
CR	0.04142	322.93	1.694	0.04094	0.04222	0.04108
CU	1.37355	10,593.21	1.327	1.35716	1.39319	1.37031
FE	402.62582	21,766.27	0.847	399.22649	402.60195	406.04903
K	7.08771	2,068.92	1.575	7.02558	7.21661	7.02095
LI	0.05312	353.91	1.984	0.05201	0.05410	0.05324
MG	73.03070	27,555.98	0.862	72.40393	73.02591	73.66227
MN	2.43868	99,818.58	0.821	2.42488	2.46164	2.42950
MO	-0.00774	-16.98	10.479	-0.00801	-0.00837	-0.00682
NA	32.98463	26,791.54	0.388	32.87968	32.94709	33.12712
NI	0.14126	295.99	0.622	0.14054	0.14099	0.14224
P	8.05834	3,421.78	0.125	8.06976	8.05072	8.05454
PB	0.03990	64.09	1.814	0.04063	0.03918	0.03988
S	1.59199	297.53	0.491	1.60019	1.58462	1.59117
SB	0.03062	1.09	23.427	0.02246	0.03595	0.03345
SI	4.45712	165.18	1.815	4.37979	4.45045	4.54113
SN	0.02466	23.75	9.682	0.02736	0.02284	0.02377
SR	0.61229	350,311.66	1.160	0.60696	0.62035	0.60956
TI	19.49406	566,104.46	0.830	19.38842	19.68038	19.41337
TL	0.01292	0.72	7.279	0.01335	0.01184	0.01356
V	1.22314	10,759.43	1.235	1.21267	1.24047	1.21630
Y1	10707.52325	10,707.52	0.093	10713.22873	10713.28890	10696.05211
Y2A	302943.91974	302,943.92	0.743	304276.14923	300343.58466	304212.02532
Y2R	8506.32192	8,506.32	0.631	8551.06659	8521.06158	8446.83759
ZN	0.49733	3,301.62	0.048	0.49754	0.49737	0.49707
ZR	0.17014	97.21	3.326	0.17103	0.17530	0.16409

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 26 Date/Time: 11/09/2012 10:48

Sample Number: **6850750** Class: **** Batch: 123125708001

Initial Vol: 1.03 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00473	-51.91	14.820	0.00493	0.00395	0.00531
AL	211.49849	6,131.85	0.396	212.35782	210.68685	211.45079
AS	-0.04741	6.91	2.684	-0.04618	-0.04872	-0.04732
B	0.28557	4,486.77	0.540	0.28396	0.28572	0.28703
BA	0.16739	119,010.02	0.604	0.16723	0.16647	0.16847
BE	0.00056	128.91	2.525	0.00054	0.00055	0.00057
CA	150.83639	44,267.82	0.344	151.38275	150.34924	150.77717
CD	0.00010	264.72	73.687	0.00002	0.00011	0.00017
CO	0.17635	782.81	0.523	0.17730	0.17630	0.17546
CR	0.04052	319.85	0.545	0.04057	0.04070	0.04027
CU	1.35087	10,535.93	0.976	1.34325	1.34325	1.36610
FE	426.63728	22,865.32	0.699	429.19600	423.36519	427.35065
K	7.08689	2,072.72	0.658	7.11236	7.11526	7.03304
LI	0.05466	363.00	2.024	0.05495	0.05343	0.05559
MG	73.22853	27,683.17	0.393	73.53130	72.95819	73.19610
MN	2.58652	107,082.96	0.687	2.57864	2.57407	2.60687
MO	-0.00805	-17.65	7.444	-0.00867	-0.00802	-0.00747
NA	31.30954	25,479.96	0.422	31.42964	31.16796	31.33103
NI	0.14332	298.39	0.226	0.14352	0.14349	0.14294
P	8.06195	3,418.31	0.305	8.09022	8.04560	8.05002
PB	0.03635	60.13	3.306	0.03633	0.03756	0.03516
S	1.57689	294.42	0.507	1.58315	1.56788	1.57963
SB	0.03101	0.48	9.015	0.03323	0.02787	0.03192
SI	5.61104	207.81	1.615	5.51186	5.63172	5.68955
SN	0.02548	24.45	2.945	0.02465	0.02611	0.02568
SR	0.62596	362,241.10	0.855	0.62534	0.62094	0.63159
TI	19.62388	576,404.11	0.566	19.56716	19.55270	19.75178
TL	0.01424	0.85	25.042	0.01826	0.01147	0.01299
V	1.27219	11,316.33	0.805	1.26676	1.26582	1.28400
Y1	10692.07733	10,692.08	0.150	10678.79606	10709.88012	10687.55581
Y2A	306407.33955	306,407.34	0.412	306950.94937	307306.62891	304964.44037
Y2R	8523.05130	8,523.05	0.379	8487.83892	8551.38695	8529.92803
ZN	0.54250	3,588.36	0.236	0.54339	0.54308	0.54103
ZR	0.16883	96.53	3.036	0.17424	0.16404	0.16821

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 27 Date/Time: 11/09/2012 10:53

Sample Number: **6850753** Class: **** Batch: 123125708001

Initial Vol: 1.03 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00434	-55.53	27.513	0.00554	0.00315	0.00434
AL	208.95031	6,021.92	0.180	209.16943	209.16575	208.51574
AS	-0.04425	8.08	6.049	-0.04718	-0.04366	-0.04192
B	0.34453	4,810.78	1.354	0.34063	0.34969	0.34325
BA	0.17379	123,174.90	0.262	0.17332	0.17381	0.17423
BE	0.00055	127.68	2.816	0.00056	0.00053	0.00056
CA	147.43158	43,029.94	0.206	147.21292	147.77889	147.30294
CD	0.00046	270.71	66.616	0.00073	0.00051	0.00013
CO	0.18202	811.75	0.203	0.18225	0.18160	0.18223
CR	0.03818	301.25	1.384	0.03761	0.03826	0.03866
CU	1.37538	10,690.86	0.515	1.36756	1.38140	1.37718
FE	431.35984	22,930.06	0.726	430.66018	428.63883	434.78051
K	8.11010	2,349.32	0.650	8.12240	8.15555	8.05235
LI	0.06374	415.02	2.288	0.06524	0.06233	0.06364
MG	79.24557	29,694.32	0.679	78.95669	78.91383	79.86620
MN	2.55474	105,446.04	0.335	2.54876	2.55093	2.56455
MO	-0.00737	-16.15	9.145	-0.00815	-0.00696	-0.00700
NA	30.92675	25,015.95	0.171	30.90683	30.88673	30.98670
NI	0.14877	310.26	0.222	0.14858	0.14916	0.14858
P	8.41362	3,566.27	0.114	8.42455	8.40653	8.40976
PB	0.03881	61.67	3.484	0.03732	0.03995	0.03916
S	1.68346	313.80	0.611	1.68376	1.69360	1.67303
SB	0.03640	2.28	18.472	0.02902	0.04217	0.03801
SI	4.61853	170.39	1.573	4.57729	4.57592	4.70240
SN	0.02482	23.86	3.873	0.02556	0.02374	0.02517
SR	0.55590	320,709.64	0.888	0.55181	0.55450	0.56138
TI	20.73712	607,244.25	0.852	20.53717	20.87211	20.80207
TL	0.01140	-0.28	14.484	0.01074	0.01328	0.01018
V	1.22371	10,864.71	0.460	1.21848	1.22967	1.22300
Y1	10688.92048	10,688.92	0.169	10675.27798	10709.44722	10682.03625
Y2A	305473.37886	305,473.38	0.350	306525.89940	305507.41173	304386.82545
Y2R	8471.45822	8,471.46	0.408	8496.00199	8486.46541	8431.90724
ZN	0.50638	3,365.28	0.122	0.50691	0.50653	0.50570
ZR	0.16165	91.32	2.523	0.15700	0.16463	0.16331

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 28 Date/Time: 11/09/2012 10:57

Sample Number: **6850756** Class: **** Batch: 123125708001

Initial Vol: 1.00 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00296	-57.45	1.836	0.00290	0.00298	0.00300
AL	176.23119	5,092.97	0.606	175.27728	177.38428	176.03201
AS	-0.03847	6.85	5.339	-0.03647	-0.03837	-0.04057
B	0.29514	4,107.49	3.082	0.28693	0.29356	0.30492
BA	0.12878	91,561.43	1.120	0.12732	0.12882	0.13020
BE	0.00044	103.40	4.982	0.00046	0.00044	0.00041
CA	119.57700	35,106.52	0.348	119.20685	120.02673	119.49743
CD	0.00028	230.10	69.672	0.00041	0.00006	0.00038
CO	0.15438	686.29	0.161	0.15465	0.15429	0.15418
CR	0.03133	250.39	1.418	0.03101	0.03184	0.03115
CU	1.24445	9,703.35	0.911	1.23320	1.24428	1.25588
FE	365.82503	20,046.42	0.496	364.00557	367.63162	365.83789
K	5.90422	1,728.68	1.086	5.97782	5.86035	5.87450
LI	0.04655	306.27	5.020	0.04688	0.04406	0.04869
MG	64.37212	24,322.72	0.462	64.10242	64.69104	64.32291
MN	2.13958	88,541.24	1.087	2.11713	2.13805	2.16356
MO	-0.00429	-9.47	15.969	-0.00504	-0.00370	-0.00413
NA	30.82836	24,974.02	0.436	30.72643	30.98052	30.77812
NI	0.12249	257.53	0.179	0.12265	0.12257	0.12224
P	7.49231	3,196.27	0.214	7.50890	7.47689	7.49113
PB	0.03937	57.55	11.059	0.04437	0.03729	0.03645
S	1.66754	312.10	0.175	1.66941	1.66903	1.66419
SB	0.02578	0.48	11.653	0.02234	0.02790	0.02710
SI	3.26834	121.39	1.394	3.28280	3.30493	3.21729
SN	0.02364	22.96	1.744	0.02319	0.02400	0.02374
SR	0.54116	313,025.49	1.263	0.53670	0.53774	0.54903
TI	16.80026	493,253.95	1.418	16.66796	16.65749	17.07533
TL	0.00931	-0.06	20.200	0.00728	0.01100	0.00965
V	1.15258	10,242.15	0.946	1.14316	1.15007	1.16453
Y1	10757.76823	10,757.77	0.181	10744.80645	10780.18378	10748.31446
Y2A	306293.60982	306,293.61	1.068	309484.34377	306451.28248	302945.20320
Y2R	8484.33744	8,484.34	0.385	8511.06901	8447.92332	8494.02000
ZN	0.51364	3,401.15	0.132	0.51421	0.51289	0.51382
ZR	0.15014	84.04	2.710	0.15447	0.14640	0.14955

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 29 Date/Time: 11/09/2012 11:01

Sample Number: **6850759** Class: **** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00334	-49.12	10.873	0.00360	0.00349	0.00292
AL	195.95669	5,637.85	0.324	195.91125	195.34484	196.61399
AS	0.01349	19.09	30.175	0.00975	0.01289	0.01782
B	0.21027	3,112.53	0.630	0.21165	0.21015	0.20900
BA	1.20831	865,717.97	0.598	1.21632	1.20231	1.20629
BE	0.00848	1,833.78	0.509	0.00851	0.00843	0.00849
CA	95.42409	28,025.18	0.637	95.50445	94.77984	95.98796
CD	0.00127	189.01	20.803	0.00144	0.00097	0.00141
CO	0.11626	442.53	0.513	0.11693	0.11581	0.11603
CR	0.20888	1,605.84	0.808	0.21063	0.20727	0.20875
CU	0.20040	1,595.83	0.544	0.20089	0.19915	0.20116
FE	282.51077	15,984.43	0.391	283.63280	282.47313	281.42638
K	28.62149	8,128.06	0.422	28.73824	28.49686	28.62937
LI	0.28859	1,759.67	0.554	0.28893	0.28685	0.29000
MG	45.71552	17,359.38	0.268	45.83855	45.71470	45.59330
MN	6.49495	271,342.65	0.451	6.52877	6.47722	6.47886
MO	-0.00126	-2.84	15.249	-0.00106	-0.00128	-0.00144
NA	1.00506	789.07	1.245	1.01934	0.99984	0.99599
NI	0.16192	357.32	0.219	0.16219	0.16151	0.16205
P	6.53140	2,813.67	0.149	6.53273	6.54042	6.52104
PB	0.24309	227.91	1.215	0.23968	0.24481	0.24477
S	3.84592	725.93	0.230	3.83999	3.84169	3.85609
SB	0.01682	2.45	7.710	0.01550	0.01688	0.01809
SI	7.89000	288.98	0.673	7.94997	7.84882	7.87121
SN	0.02928	28.27	3.998	0.02865	0.02857	0.03064
SR	0.34787	203,124.94	0.216	0.34839	0.34821	0.34701
TI	3.23436	95,904.09	0.200	3.24148	3.23274	3.22886
TL	0.00292	0.19	96.097	0.00383	-0.00023	0.00515
V	0.34304	3,104.54	0.549	0.34474	0.34101	0.34337
Y1	10872.14729	10,872.15	0.218	10899.51026	10859.36646	10857.56515
Y2A	309195.82296	309,195.82	0.398	307820.78614	310196.95203	309569.73072
Y2R	8454.34598	8,454.35	0.531	8412.05794	8501.42000	8449.56000
ZN	0.69996	4,572.23	0.107	0.69968	0.70081	0.69940
ZR	-0.00711	-17.41	6.988	-0.00767	-0.00694	-0.00672

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 30 Date/Time: 11/09/2012 11:05

Sample Number: **6850764** Class: **** Batch: 123125708001

Initial Vol: 1.03 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00356	-48.14	4.233	0.00342	0.00354	0.00372
AL	193.82495	5,565.86	0.370	194.54191	193.10681	193.82615
AS	0.01924	20.98	6.215	0.01932	0.02040	0.01801
B	0.20870	3,119.40	3.072	0.20468	0.20533	0.21610
BA	1.13834	814,969.01	0.138	1.13984	1.13671	1.13849
BE	0.00889	1,921.99	0.995	0.00895	0.00879	0.00894
CA	94.66799	27,751.52	0.425	94.99554	94.21874	94.78968
CD	0.00163	193.73	2.982	0.00167	0.00157	0.00165
CO	0.11728	446.79	0.456	0.11771	0.11744	0.11668
CR	0.21757	1,670.74	0.799	0.21574	0.21778	0.21919
CU	0.16175	1,289.37	0.110	0.16156	0.16191	0.16179
FE	284.98636	16,075.66	0.221	285.67275	284.85029	284.43603
K	29.04893	8,232.22	0.425	29.17270	28.92604	29.04805
LI	0.28269	1,720.57	0.696	0.28077	0.28261	0.28470
MG	48.11368	18,213.69	0.161	48.20191	48.08306	48.05606
MN	8.47804	353,911.75	0.834	8.55494	8.41580	8.46336
MO	-0.00207	-4.65	5.735	-0.00197	-0.00220	-0.00205
NA	1.05113	824.66	1.312	1.06585	1.03849	1.04906
NI	0.20813	463.21	0.230	0.20792	0.20868	0.20780
P	7.08108	3,049.70	0.535	7.11047	7.09440	7.03836
PB	0.26175	242.79	0.834	0.26206	0.26376	0.25943
S	4.20641	795.08	0.554	4.23019	4.20544	4.18360
SB	0.01548	1.97	53.148	0.01520	0.00740	0.02384
SI	7.40204	270.70	0.699	7.45096	7.34786	7.40729
SN	0.03081	29.64	3.377	0.03133	0.02961	0.03148
SR	0.35714	208,374.93	0.443	0.35863	0.35548	0.35732
TI	3.31999	98,363.42	0.581	3.31962	3.30088	3.33947
TL	0.00287	0.82	40.807	0.00164	0.00299	0.00397
V	0.34559	3,125.39	0.419	0.34490	0.34461	0.34725
Y1	10870.06877	10,870.07	0.343	10835.47441	10865.11357	10909.61833
Y2A	308951.19920	308,951.20	0.319	308737.75816	310025.81612	308090.02332
Y2R	8437.49594	8,437.50	0.539	8396.49053	8429.64000	8486.35729
ZN	0.81820	5,321.00	0.411	0.82129	0.81869	0.81462
ZR	-0.01744	-24.01	37.013	-0.01040	-0.02308	-0.01884

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 31 Date/Time: 11/09/2012 11:09

Sample Number: **6850765** Class: **** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00259	-55.54	19.161	0.00218	0.00246	0.00314
AL	200.95176	5,746.01	0.178	201.14336	201.17230	200.53963
AS	0.03447	25.71	6.270	0.03657	0.03226	0.03456
B	0.19883	3,076.43	1.649	0.20037	0.19507	0.20106
BA	1.12630	808,602.57	0.916	1.12199	1.11883	1.13807
BE	0.00836	1,813.53	0.924	0.00833	0.00831	0.00845
CA	72.28264	21,184.87	0.214	72.24026	72.15350	72.45418
CD	0.00112	189.32	16.412	0.00102	0.00100	0.00133
CO	0.09034	347.66	0.463	0.09074	0.09038	0.08990
CR	0.21304	1,640.87	0.787	0.21311	0.21134	0.21469
CU	0.13823	1,104.11	2.032	0.13850	0.13530	0.14089
FE	284.93474	16,009.11	0.174	284.45872	284.89625	285.44926
K	26.75692	7,557.04	0.111	26.76171	26.72525	26.78381
LI	0.30879	1,865.75	0.165	0.30838	0.30862	0.30936
MG	43.90555	16,586.28	0.072	43.90201	43.87598	43.93868
MN	4.49463	188,153.66	0.649	4.50245	4.46236	4.51907
MO	-0.00116	-2.62	6.088	-0.00119	-0.00121	-0.00108
NA	0.94482	736.02	2.019	0.95205	0.95922	0.92319
NI	0.17045	377.17	0.691	0.17180	0.16988	0.16966
P	5.97559	2,576.77	0.211	5.98833	5.97528	5.96314
PB	0.24192	227.95	0.595	0.24087	0.24356	0.24134
S	3.45813	651.88	0.092	3.46182	3.45621	3.45636
SB	0.01974	3.42	23.927	0.01436	0.02163	0.02321
SI	7.82048	284.75	0.949	7.77156	7.90587	7.78400
SN	0.03235	31.06	0.611	0.03216	0.03255	0.03235
SR	0.29904	174,959.03	0.608	0.30005	0.29694	0.30013
TI	2.92263	86,840.31	0.388	2.91524	2.91695	2.93570
TL	0.00289	-0.58	44.275	0.00161	0.00289	0.00417
V	0.33990	3,081.73	0.767	0.33963	0.33744	0.34263
Y1	10883.37945	10,883.38	0.356	10853.17640	10869.95868	10927.00326
Y2A	309821.64668	309,821.65	0.349	310042.55496	310776.31579	308646.06929
Y2R	8403.87823	8,403.88	0.314	8432.30309	8399.20160	8380.13000
ZN	0.70691	4,621.95	0.154	0.70806	0.70679	0.70589
ZR	-0.01478	-22.21	16.522	-0.01346	-0.01760	-0.01329

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 32 Date/Time: 11/09/2012 11:13

Sample Number: **6850770** Class: **** Batch: 123125708001

Initial Vol: 1.03 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00409	-52.69	17.808	0.00431	0.00468	0.00328
AL	224.62612	6,432.62	0.713	225.85249	222.81394	225.21192
AS	0.01972	24.07	9.872	0.02176	0.01952	0.01788
B	0.21660	3,612.41	1.563	0.21528	0.22045	0.21408
BA	1.30309	934,340.46	0.268	1.30695	1.30016	1.30215
BE	0.01024	2,214.20	0.592	0.01028	0.01026	0.01017
CA	53.50856	15,774.49	0.426	53.65057	53.24574	53.62938
CD	0.00151	232.04	22.833	0.00114	0.00156	0.00182
CO	0.09891	388.43	0.460	0.09941	0.09879	0.09852
CR	0.23237	1,786.22	0.280	0.23307	0.23225	0.23179
CU	0.18451	1,460.64	0.767	0.18505	0.18559	0.18291
FE	347.91625	19,076.51	0.858	350.72701	344.78296	348.23877
K	31.27519	8,844.55	0.486	31.43257	31.12906	31.26393
LI	0.26018	1,574.62	0.947	0.26282	0.25976	0.25794
MG	45.52148	17,225.03	0.672	45.78449	45.18584	45.59410
MN	5.16602	215,988.58	0.566	5.19944	5.15345	5.14516
MO	-0.00034	-0.79	81.717	-0.00010	-0.00064	-0.00027
NA	0.96659	755.27	1.247	0.96941	0.95338	0.97698
NI	0.17901	391.23	0.414	0.17867	0.17849	0.17986
P	5.72187	2,462.73	0.044	5.72398	5.72255	5.71907
PB	0.19886	195.93	0.955	0.19733	0.20098	0.19825
S	3.62475	682.13	0.047	3.62377	3.62377	3.62671
SB	0.02970	5.25	3.973	0.03067	0.02839	0.03004
SI	8.35848	304.92	0.170	8.35271	8.37467	8.34805
SN	0.03146	30.20	6.254	0.02928	0.03312	0.03197
SR	0.28040	163,846.92	0.465	0.28191	0.27965	0.27965
TI	4.20868	124,877.06	0.268	4.21928	4.20992	4.19682
TL	0.00683	-0.02	35.844	0.00567	0.00518	0.00965
V	0.38505	3,492.15	0.370	0.38417	0.38669	0.38429
Y1	10862.22824	10,862.23	0.145	10858.53545	10879.50170	10848.64757
Y2A	309434.68243	309,434.68	0.454	307864.50700	309861.34244	310578.19787
Y2R	8424.07836	8,424.08	0.478	8394.84515	8470.03992	8407.35000
ZN	0.71596	4,699.41	0.070	0.71554	0.71652	0.71582
ZR	-0.00915	-18.66	65.694	-0.00835	-0.01551	-0.00357

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 33 Date/Time: 11/09/2012 11:17

Sample Number: **6850771** Class: **** Batch: 123125708001

Initial Vol: 1.01 Final Vol: 100.00 DF: 5.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00105	-35.16	100.834	0.00224	0.00069	0.00022
AL	34.28958	988.33	0.412	34.34877	34.39168	34.12829
AS	0.00408	5.39	26.292	0.00419	0.00295	0.00509
B	0.04720	640.95	1.006	0.04768	0.04719	0.04673
BA	0.19954	147,156.77	0.447	0.19898	0.20057	0.19908
BE	0.00166	376.83	1.224	0.00168	0.00165	0.00164
CA	25.13002	7,433.88	0.255	25.20411	25.09328	25.09266
CD	0.00012	33.95	52.470	0.00013	0.00005	0.00017
CO	0.03524	134.33	0.908	0.03502	0.03510	0.03561
CR	0.04601	374.87	0.417	0.04616	0.04579	0.04608
CU	0.03664	307.21	0.790	0.03686	0.03631	0.03675
FE	51.60892	3,180.48	0.566	51.60153	51.90444	51.32078
K	5.41578	1,573.20	1.416	5.50072	5.35166	5.39496
LI	0.04379	268.28	7.699	0.04764	0.04239	0.04135
MG	9.60052	3,681.37	0.449	9.65032	9.57701	9.57422
MN	2.99954	128,842.21	0.458	2.98760	3.01456	2.99648
MO	-0.00209	-4.77	11.076	-0.00192	-0.00200	-0.00235
NA	0.15869	104.46	4.013	0.16264	0.16209	0.15135
NI	0.03789	91.94	1.463	0.03757	0.03757	0.03853
P	1.70138	746.52	1.341	1.68942	1.68704	1.72768
PB	0.05546	50.66	3.507	0.05342	0.05729	0.05568
S	1.02953	199.80	1.350	1.01868	1.02471	1.04519
SB	-0.00795	-0.52	6.467	-0.00746	-0.00848	-0.00790
SI	1.48292	55.65	1.363	1.49211	1.49689	1.45974
SN	0.00639	7.86	5.186	0.00667	0.00603	0.00648
SR	0.07447	44,671.80	0.578	0.07399	0.07482	0.07461
TI	0.71548	21,847.05	0.414	0.71336	0.71887	0.71423
TL	-0.00382	0.51	58.642	-0.00147	-0.00406	-0.00593
V	0.06464	617.20	0.984	0.06392	0.06486	0.06513
Y1	11074.06802	11,074.07	1.114	11155.66478	11134.43808	10932.10119
Y2A	317901.27652	317,901.28	0.189	318300.56366	317208.72016	318194.54576
Y2R	8392.82000	8,392.82	0.615	8335.27000	8408.32000	8434.87000
ZN	0.15749	1,052.04	1.281	0.15607	0.15660	0.15980
ZR	-0.00782	-17.73	31.986	-0.00732	-0.01053	-0.00560

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 34 Date/Time: 11/09/2012 11:21

Sample Number: **CCV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.48988	3,671.63	0.489	0.48886	0.48817	0.49262
AL	25.09744	692.44	0.095	25.09950	25.12019	25.07263
AS	0.47489	148.09	0.673	0.47701	0.47645	0.47121
B	0.46529	2,585.01	0.447	0.46730	0.46314	0.46544
BA	0.49103	347,899.68	0.612	0.49273	0.48756	0.49281
BE	0.47168	100,323.32	0.327	0.47325	0.47016	0.47164
CA	25.07434	7,079.28	0.341	25.01228	25.17184	25.03889
CD	0.48443	4,322.27	0.123	0.48426	0.48509	0.48394
CO	0.48077	1,702.27	0.123	0.48041	0.48045	0.48145
CR	0.47572	3,597.71	0.476	0.47833	0.47437	0.47446
CU	0.48238	3,775.33	0.335	0.48405	0.48083	0.48226
FE	24.78982	1,473.83	0.737	24.58839	24.94485	24.83622
K	24.60949	6,629.12	0.504	24.57198	24.74801	24.50850
LI	0.47120	2,697.30	0.190	0.47136	0.47200	0.47023
MG	24.81016	9,011.79	0.188	24.79325	24.86280	24.77441
MN	0.48672	20,100.85	0.392	0.48890	0.48532	0.48595
MO	0.48715	1,071.50	0.058	0.48748	0.48698	0.48700
NA	24.45145	18,696.30	0.186	24.46639	24.48759	24.40037
NI	0.48165	1,099.16	0.215	0.48239	0.48210	0.48047
P	0.48653	208.81	0.267	0.48523	0.48783	0.48651
PB	0.47991	390.91	0.491	0.48262	0.47842	0.47868
S	24.38952	4,499.61	0.129	24.36970	24.42579	24.37307
SB	0.50827	177.15	0.122	0.50758	0.50848	0.50876
SI	24.33885	840.56	0.061	24.33774	24.32468	24.35412
SN	0.48379	431.61	0.429	0.48568	0.48412	0.48157
SR	0.48791	281,651.40	0.020	0.48802	0.48784	0.48786
TI	0.48961	14,390.05	0.347	0.49106	0.48774	0.49004
TL	0.48253	176.14	0.341	0.48341	0.48354	0.48063
V	0.49397	4,317.57	0.048	0.49424	0.49385	0.49382
Y1	10752.74343	10,752.74	0.108	10761.95949	10739.77341	10756.49740
Y2A	305654.73018	305,654.73	0.530	304073.28448	305582.61159	307308.29447
Y2R	8009.99050	8,009.99	0.286	7992.41063	8001.69000	8035.87086
ZN	0.47067	2,984.69	0.110	0.47116	0.47072	0.47013
ZR	0.49512	289.57	0.785	0.49554	0.49878	0.49104

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 35 Date/Time: 11/09/2012 11:25

Sample Number: **CCB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	-0.00081	-42.38	56.866	-0.00103	-0.00028	-0.00111
AL	0.02312	4.90	187.797	0.07305	0.00202	-0.00572
AS	0.00085	1.88	73.362	0.00054	0.00156	0.00044
B	0.00199	21.98	54.443	0.00095	0.00311	0.00190
BA	-0.00002	181.53	417.542	-0.00006	0.00007	-0.00006
BE	0.00002	14.47	218.995	-0.00002	0.00005	0.00002
CA	-0.00721	37.67	148.065	-0.01849	0.00273	-0.00586
CD	-0.00013	-1.41	45.609	-0.00006	-0.00016	-0.00018
CO	0.00050	1.76	59.647	0.00084	0.00031	0.00034
CR	-0.00049	10.53	127.220	0.00001	-0.00030	-0.00118
CU	0.00016	8.85	878.562	0.00125	-0.00142	0.00065
FE	-0.00499	1.35	307.934	0.00988	-0.02077	-0.00406
K	0.03374	63.63	67.199	0.05842	0.01383	0.02898
LI	-0.00262	-13.48	181.769	0.00125	-0.00117	-0.00794
MG	-0.00466	2.68	55.466	-0.00657	-0.00172	-0.00571
MN	0.00012	4.92	32.669	0.00008	0.00016	0.00013
MO	0.00077	1.70	45.267	0.00076	0.00113	0.00043
NA	-0.01062	-29.88	132.726	-0.00901	0.00260	-0.02546
NI	0.00020	7.80	209.367	0.00066	0.00008	-0.00015
P	-0.00071	-0.19	132.267	-0.00170	0.00018	-0.00062
PB	-0.00180	-2.37	139.692	-0.00099	-0.00461	0.00021
S	0.00048	0.81	148.588	0.00044	0.00121	-0.00021
SB	-0.00375	2.17	13.260	-0.00322	-0.00421	-0.00383
SI	0.01108	2.42	146.675	0.02178	0.01908	-0.00762
SN	-0.00011	1.90	522.073	0.00023	-0.00075	0.00020
SR	0.00000	-50.39	681.933	0.00000	0.00000	-0.00001
TI	0.00027	52.67	27.469	0.00019	0.00034	0.00030
TL	-0.00052	1.55	283.394	-0.00218	0.00066	-0.00004
V	0.00014	20.18	400.164	0.00078	-0.00009	-0.00027
Y1	10994.41739	10,994.42	0.303	11013.62455	11013.69571	10955.93192
Y2A	318399.39545	318,399.40	0.788	317060.00665	316845.24204	321292.93767
Y2R	8000.28667	8,000.29	0.516	8046.21000	7966.24000	7988.41000
ZN	-0.00049	9.47	41.016	-0.00027	-0.00066	-0.00055
ZR	-0.00835	-17.22	72.704	-0.00201	-0.01411	-0.00892

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 36 Date/Time: 11/09/2012 11:29

Sample Number: **6850771** Class: **** Batch: 123125708001

Initial Vol: 1.01 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00510	-34.64	8.058	0.00506	0.00470	0.00552
AL	174.19376	4,968.73	0.188	174.41374	173.81769	174.34984
AS	0.02019	20.73	3.640	0.02063	0.01934	0.02060
B	0.21167	3,043.00	3.949	0.22066	0.20413	0.21022
BA	0.99610	703,819.34	0.690	1.00208	0.98859	0.99764
BE	0.00860	1,835.65	0.490	0.00863	0.00856	0.00863
CA	125.84650	36,434.29	0.300	126.21797	125.46251	125.85901
CD	0.00331	202.22	14.605	0.00380	0.00330	0.00283
CO	0.17351	643.99	0.206	0.17316	0.17387	0.17350
CR	0.23928	1,812.02	1.046	0.24215	0.23755	0.23815
CU	0.18905	1,489.48	1.026	0.19084	0.18931	0.18699
FE	277.82788	15,602.20	0.478	278.96398	276.36836	278.15129
K	28.74864	8,087.21	0.412	28.88044	28.65077	28.71471
LI	0.24251	1,473.76	1.381	0.24052	0.24637	0.24062
MG	48.56880	18,245.63	0.527	48.83074	48.31906	48.55661
MN	14.46135	595,768.65	1.048	14.59586	14.29706	14.49112
MO	-0.00142	-3.16	24.680	-0.00102	-0.00162	-0.00163
NA	0.87561	678.05	2.112	0.89622	0.86047	0.87015
NI	0.18586	408.27	0.296	0.18623	0.18612	0.18523
P	8.80566	3,753.52	0.439	8.82626	8.82968	8.76105
PB	0.27542	248.43	0.892	0.27826	0.27386	0.27416
S	5.42127	1,017.79	0.133	5.42720	5.42341	5.41322
SB	0.01548	2.31	17.517	0.01603	0.01788	0.01254
SI	7.42319	269.46	0.692	7.44479	7.36453	7.46025
SN	0.03392	32.10	2.535	0.03304	0.03476	0.03396
SR	0.37202	214,201.94	1.557	0.37730	0.36583	0.37291
TI	3.68012	107,599.76	1.035	3.72115	3.64583	3.67340
TL	-0.00638	-0.29	37.995	-0.00799	-0.00757	-0.00359
V	0.33220	2,968.64	0.684	0.33280	0.32969	0.33411
Y1	10758.72254	10,758.72	0.308	10754.13834	10728.16184	10793.86742
Y2A	304918.66533	304,918.67	0.972	301924.80013	307849.43371	304981.76216
Y2R	8374.84996	8,374.85	0.240	8354.17913	8394.38908	8375.98166
ZN	0.81313	5,230.96	0.307	0.81354	0.81540	0.81045
ZR	-0.00859	-18.19	24.225	-0.00641	-0.01055	-0.00882

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 37 Date/Time: 11/09/2012 11:34

Sample Number: **6849595** Class: **** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 5.00 Protocol Symbol: S

ELEMENT		AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG		0.01378	77.03	6.645	0.01325	0.01483	0.01325
AL	k	615.54407	17,339.98	0.444	616.22583	617.87251	612.53385
AS		0.33100	144.38	1.507	0.32561	0.33545	0.33195
B		10.36656	51,810.27	0.257	10.34156	10.36354	10.39457
BA		0.00284	2,145.66	2.143	0.00277	0.00289	0.00285
BE	k	-0.01286	-2,663.47	0.065	-0.01285	-0.01287	-0.01285
CA		0.11627	75.62	3.872	0.11114	0.11955	0.11811
CD		-0.00043	-3.40	24.100	-0.00035	-0.00038	-0.00054
CO		54.24138	188,066.70	0.096	54.20308	54.22024	54.30083
CR		0.02412	191.21	1.301	0.02382	0.02410	0.02445
CU		-0.21285	-1,495.33	0.985	-0.21084	-0.21502	-0.21268
FE		0.82067	53.00	3.089	0.84873	0.81388	0.79940
K		0.22287	119.05	43.194	0.20863	0.13451	0.32546
LI		3.01663	17,968.63	0.324	3.02770	3.01304	3.00916
MG		-0.00322	3.36	137.257	-0.00687	-0.00447	0.00169
MN		0.01571	634.06	1.631	0.01550	0.01600	0.01564
MO		190.17095	410,544.64	0.359	189.65890	189.90706	190.94688
NA		0.87101	672.63	1.289	0.85837	0.87483	0.87982
NI		0.08473	268.29	0.129	0.08464	0.08485	0.08470
P		0.14408	59.83	2.692	0.13960	0.14617	0.14647
PB	k	0.32192	-161.93	0.383	0.32169	0.32324	0.32081
S		190.66181	34,630.47	0.226	190.33688	190.49824	191.15031
SB	k	0.13578	49.26	4.598	0.12879	0.14081	0.13773
SI		0.37693	97.63	9.838	0.40663	0.38879	0.33537
SN		0.01154	11.98	10.443	0.01056	0.01288	0.01117
SR		-0.00006	-81.51	27.105	-0.00005	-0.00008	-0.00005
TI		0.28799	8,291.91	1.140	0.28468	0.29125	0.28804
TL	k	-0.12280	5.81	1.460	-0.12258	-0.12113	-0.12469
V	k	0.00000	-17,023.36	0.000	-0.90611	-1.01707	-0.97199
Y1		10553.46083	10,553.46	0.104	10564.67236	10552.89865	10542.81148
Y2A		298875.55519	298,875.56	0.538	300612.00866	297442.12192	298572.53498
Y2R		8352.78576	8,352.79	0.652	8301.56906	8409.97803	8346.81021
ZN		0.08337	525.53	0.218	0.08316	0.08351	0.08342
ZR		0.26154	153.53	1.629	0.26300	0.26488	0.25674

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 38 Date/Time: 11/09/2012 11:38

Sample Number: **6849595** Class: **** Batch: 123125708001

Initial Vol: 1.02 Final Vol: 100.00 DF: 100.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00149	-23.87	15.224	0.00133	0.00175	0.00140
AL	32.09057	899.78	0.176	32.14188	32.09961	32.03022
AS	0.01592	9.72	7.953	0.01737	0.01536	0.01503
B	0.53264	2,855.75	0.858	0.52996	0.53006	0.53792
BA	0.00016	309.98	24.911	0.00019	0.00016	0.00011
BE	-0.00068	-140.95	1.337	-0.00068	-0.00067	-0.00069
CA	-0.00325	39.30	256.923	-0.00701	-0.00903	0.00631
CD	-0.00039	-3.81	28.903	-0.00038	-0.00051	-0.00029
CO	2.92686	10,743.84	0.112	2.92763	2.92967	2.92328
CR	0.00083	21.00	29.270	0.00077	0.00110	0.00062
CU	-0.00988	-66.05	10.114	-0.00959	-0.01099	-0.00905
FE	0.03902	4.03	36.082	0.02277	0.04661	0.04767
K	0.06681	73.38	108.905	0.13602	-0.00905	0.07346
LI	0.15042	870.83	1.103	0.15208	0.14876	0.15042
MG	-0.00705	1.83	56.445	-0.00701	-0.01105	-0.00309
MN	0.00119	51.07	17.649	0.00130	0.00132	0.00095
MO	12.48128	28,526.81	0.200	12.49229	12.49891	12.45264
NA	0.02494	-2.71	41.857	0.03554	0.02461	0.01467
NI	0.00292	20.56	6.078	0.00302	0.00301	0.00271
P	0.00757	3.44	9.335	0.00714	0.00718	0.00838
PB	0.01613	-11.30	10.947	0.01807	0.01569	0.01462
S	9.44514	1,819.02	0.200	9.44105	9.46575	9.42861
SB	0.00697	6.16	39.567	0.01014	0.00511	0.00567
SI	-0.01738	6.68	154.756	0.01203	-0.02345	-0.04071
SN	0.00063	2.62	233.425	0.00008	-0.00049	0.00231
SR	0.00000	-50.99	1767.284	0.00003	-0.00001	-0.00003
TI	0.01503	504.88	1.210	0.01508	0.01518	0.01483
TL	-0.00517	2.52	28.046	-0.00366	-0.00655	-0.00530
V	-0.06335	-1,177.20	3.981	-0.06475	-0.06044	-0.06487
Y1	11173.07935	11,173.08	0.133	11157.13334	11175.67595	11186.42876
Y2A	319619.14235	319,619.14	0.871	319729.19430	322345.73939	316782.49337
Y2R	8105.58000	8,105.58	0.163	8110.02000	8115.99000	8090.73000
ZN	0.00354	35.86	2.758	0.00351	0.00345	0.00365
ZR	0.00607	-8.57	47.791	0.00294	0.00660	0.00867

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 39 Date/Time: 11/09/2012 11:42

Sample Number: **6850625** Class: **** Batch: 123125708001

Initial Vol: 1.04 Final Vol: 100.00 DF: 1.00 Protocol Symbol: S

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00025	-58.51	269.252	-0.00051	0.00051	0.00074
AL	164.80702	4,744.55	0.217	164.66626	165.21408	164.54073
AS	0.07649	35.22	2.791	0.07873	0.07627	0.07448
B	0.24613	2,760.01	1.264	0.24790	0.24796	0.24254
BA	1.83619	1,331,470.40	0.585	1.83848	1.84559	1.82450
BE	0.00667	1,463.76	0.713	0.00668	0.00662	0.00672
CA	78.06482	22,980.28	0.107	78.07054	78.14514	77.97877
CD	0.00581	181.14	2.899	0.00592	0.00561	0.00588
CO	0.08854	383.98	0.545	0.08838	0.08908	0.08815
CR	0.28521	2,214.10	0.341	0.28435	0.28627	0.28501
CU	0.15732	1,253.41	1.093	0.15565	0.15908	0.15723
FE	201.61022	11,787.08	0.234	201.81798	201.94279	201.06988
K	27.88005	7,914.38	0.343	27.81148	27.98931	27.83937
LI	0.14715	903.10	1.511	0.14542	0.14637	0.14965
MG	46.14576	17,508.97	0.261	46.24370	46.18214	46.01145
MN	2.98459	126,204.35	0.142	2.97986	2.98808	2.98582
MO	0.02887	65.00	2.228	0.02820	0.02895	0.02948
NA	8.82307	7,101.69	0.522	8.79494	8.87625	8.79801
NI	0.28022	643.48	0.162	0.28030	0.27973	0.28062
P	5.41865	2,364.18	0.148	5.41928	5.42636	5.41030
PB	0.15817	155.53	0.760	0.15908	0.15681	0.15863
S	26.05441	4,925.17	0.148	26.08640	26.06524	26.01158
SB	0.00793	2.18	32.109	0.00887	0.00988	0.00505
SI	4.92455	181.08	0.702	4.96259	4.91600	4.89505
SN	0.02538	25.08	4.718	0.02412	0.02552	0.02650
SR	0.63181	373,444.72	0.335	0.63119	0.63418	0.63008
TI	7.44748	223,453.70	0.529	7.43481	7.49164	7.41600
TL	0.00520	1.28	40.974	0.00741	0.00316	0.00504
V	0.33571	3,085.60	0.645	0.33465	0.33820	0.33428
Y1	11011.04454	11,011.04	0.018	11008.87667	11011.46875	11012.78822
Y2A	312952.27807	312,952.28	0.337	313429.35505	311742.93551	313684.54364
Y2R	8449.33132	8,449.33	0.245	8457.55396	8425.77000	8464.67000
ZN	0.54848	3,627.40	0.328	0.55055	0.54728	0.54762
ZR	0.09023	45.17	4.896	0.08945	0.09499	0.08626

LANCASTER LABORATORIES

Run Name: 1231403T73

Instrument ID: 18255

Tube: 40

Date/Time: 11/09/2012 11:46

Sample Number: **LLC**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00504	5.15	3.647	0.00524	0.00488	0.00501
AL	0.28657	11.98	8.850	0.27918	0.26572	0.31480
AS	0.02225	8.63	6.728	0.02054	0.02335	0.02285
B	0.05135	288.62	1.485	0.05203	0.05052	0.05150
BA	0.00547	4,220.10	0.445	0.00549	0.00545	0.00549
BE	0.00482	1,074.72	0.761	0.00480	0.00479	0.00486
CA	0.24995	108.77	4.624	0.25566	0.23665	0.25755
CD	0.00493	44.94	1.232	0.00499	0.00486	0.00493
CO	0.00535	19.46	6.850	0.00565	0.00494	0.00545
CR	0.01481	130.28	3.914	0.01513	0.01516	0.01414
CU	0.01058	93.32	7.717	0.00964	0.01098	0.01112
FE	0.21191	14.17	15.171	0.17504	0.23406	0.22664
K	0.55476	200.25	9.000	0.61209	0.52075	0.53145
LI	0.01468	84.22	10.263	0.01330	0.01445	0.01628
MG	0.10058	40.78	6.260	0.09719	0.10784	0.09670
MN	0.00542	232.02	1.790	0.00541	0.00532	0.00551
MO	0.01764	39.84	2.967	0.01704	0.01800	0.01788
NA	0.96541	708.03	2.161	0.94450	0.98622	0.96550
NI	0.01030	31.42	4.383	0.00987	0.01077	0.01026
P	0.09883	43.43	0.563	0.09823	0.09934	0.09892
PB	0.01447	11.14	16.440	0.01633	0.01530	0.01179
S	0.48529	92.73	1.145	0.48567	0.49066	0.47956
SB	0.01788	9.80	17.565	0.01427	0.01996	0.01942
SI	0.02384	2.83	115.701	0.05331	0.01959	-0.00137
SN	0.02021	20.46	1.704	0.01982	0.02044	0.02038
SR	0.00533	3,148.00	0.786	0.00530	0.00532	0.00538
TI	0.01088	375.37	0.857	0.01084	0.01081	0.01098
TL	0.03259	13.84	3.674	0.03334	0.03121	0.03323
V	0.00570	69.90	6.745	0.00607	0.00574	0.00530
Y1	11053.13074	11,053.13	0.215	11051.03556	11030.43565	11077.92100
Y2A	317532.10926	317,532.11	0.058	317343.25265	317709.02593	317544.04920
Y2R	7906.80333	7,906.80	0.375	7885.34000	7894.45000	7940.62000
ZN	0.01976	140.16	1.154	0.01977	0.01953	0.01998
ZR	0.03564	9.43	1.408	0.03521	0.03619	0.03552

LANCASTER LABORATORIES

Run Name: 1231403T73

Instrument ID: 18255

Tube: 41

Date/Time: 11/09/2012 11:50

Sample Number: **ICSA**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00149	-46.11	13.986	0.00174	0.00138	0.00137
AL	521.05783	13,166.80	0.198	522.23441	520.29894	520.64014
AS	-0.01076	6.99	23.485	-0.00813	-0.01097	-0.01317
B	0.10657	1,757.51	3.175	0.10368	0.10575	0.11029
BA	0.00101	793.21	2.611	0.00103	0.00102	0.00098
BE	-0.00161	-290.68	1.475	-0.00159	-0.00159	-0.00163
CA	529.10245	129,004.20	0.192	530.20512	528.89394	528.20829
CD	0.00085	120.36	37.113	0.00085	0.00116	0.00054
CO	0.00407	12.75	17.379	0.00488	0.00376	0.00356
CR	0.00051	15.49	139.545	-0.00020	0.00050	0.00122
CU	-0.00136	80.43	27.193	-0.00126	-0.00177	-0.00105
FE	205.43727	10,660.54	0.258	205.87561	204.84800	205.58821
K	0.07813	70.85	81.203	0.11330	0.11619	0.00489
LI	-0.01830	-5.96	14.250	-0.01529	-0.01996	-0.01964
MG	569.22418	146,807.17	0.226	570.28210	567.79103	569.59942
MN	0.00378	136.80	1.992	0.00379	0.00370	0.00385
MO	-0.00892	-17.50	7.441	-0.00930	-0.00931	-0.00815
NA	0.04594	12.55	29.623	0.03250	0.05971	0.04561
NI	-0.00478	-17.18	4.411	-0.00500	-0.00476	-0.00458
P	0.00661	2.61	10.320	0.00600	0.00735	0.00650
PB	0.01316	78.23	10.786	0.01364	0.01427	0.01156
S	-0.01930	3.32	52.283	-0.02789	-0.00819	-0.02182
SB	0.00134	-1.47	309.269	-0.00336	0.00451	0.00289
SI	0.06561	4.03	48.796	0.04825	0.04603	0.10256
SN	0.00779	7.90	11.293	0.00846	0.00679	0.00810
SR	0.00243	1,191.48	1.219	0.00242	0.00241	0.00247
TI	-0.00144	0.43	2.942	-0.00139	-0.00147	-0.00145
TL	0.00811	0.82	55.544	0.00324	0.01213	0.00897
V	-0.00052	36.03	191.071	0.00036	-0.00160	-0.00032
Y1	9572.45813	9,572.46	0.190	9586.25558	9551.83557	9579.28324
Y2A	268350.06036	268,350.06	0.599	269600.01496	266536.87708	268913.28904
Y2R	7511.06643	7,511.07	0.135	7522.68648	7503.90000	7506.61281
ZN	0.01096	154.35	3.439	0.01067	0.01138	0.01081
ZR	-0.02827	-27.55	24.678	-0.02047	-0.03390	-0.03043

LANCASTER LABORATORIES

Run Name: 1231403T73

Instrument ID: 18255

Tube: 42

Date/Time: 11/09/2012 11:54

Sample Number: **ICSAB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.23105	1,472.23	1.209	0.22794	0.23335	0.23185
AL	522.58871	13,133.08	0.240	522.27613	521.51998	523.97000
AS	0.09456	35.69	5.949	0.09424	0.08911	0.10034
B	0.10376	1,747.61	1.059	0.10287	0.10499	0.10341
BA	0.50788	315,858.86	0.190	0.50752	0.50897	0.50714
BE	0.51860	96,822.62	0.685	0.51457	0.51995	0.52128
CA	530.88051	128,693.65	0.169	531.21036	529.86702	531.56414
CD	0.95990	7,697.05	0.103	0.95877	0.96033	0.96061
CO	0.47601	1,493.89	0.194	0.47686	0.47614	0.47503
CR	0.49075	3,257.47	0.723	0.48686	0.49382	0.49157
CU	0.52767	3,705.28	0.984	0.52185	0.53184	0.52932
FE	206.74420	10,664.03	0.316	206.93310	206.01784	207.28166
K	0.12789	82.87	69.073	0.12814	0.21609	0.03942
LI	-0.01645	4.20	15.393	-0.01444	-0.01562	-0.01929
MG	572.76598	146,607.16	0.239	572.85448	571.35239	574.09108
MN	0.50117	18,168.49	0.862	0.49619	0.50389	0.50345
MO	-0.01080	-21.14	8.201	-0.01134	-0.01128	-0.00978
NA	0.09971	50.88	3.713	0.09658	0.09875	0.10380
NI	0.92890	1,866.78	0.217	0.92694	0.92880	0.93096
P	0.00704	4.33	11.807	0.00711	0.00618	0.00784
PB	0.06059	112.37	3.104	0.06048	0.06252	0.05876
S	-0.02320	3.16	42.402	-0.01878	-0.01635	-0.03447
SB	0.64221	196.73	0.319	0.64254	0.64407	0.64001
SI	0.03640	3.07	66.048	0.06376	0.02673	0.01869
SN	0.00603	6.50	31.912	0.00381	0.00717	0.00712
SR	0.00243	1,187.82	0.620	0.00242	0.00242	0.00244
TI	-0.00080	18.92	12.565	-0.00071	-0.00079	-0.00091
TL	0.10212	31.73	2.598	0.10506	0.09990	0.10140
V	0.52102	4,037.00	0.640	0.51767	0.52105	0.52434
Y1	9553.87499	9,553.87	0.086	9562.91461	9551.72873	9546.98161
Y2A	268307.39203	268,307.39	0.429	269419.01993	267118.77076	268384.38538
Y2R	7470.02096	7,470.02	0.118	7476.19904	7473.89177	7459.97208
ZN	1.01751	5,775.69	0.135	1.01611	1.01885	1.01757
ZR	-0.02527	-25.71	17.256	-0.02721	-0.02833	-0.02028

LANCASTER LABORATORIES

Run Name: 1231403T73

Instrument ID: 18255

Tube: 43

Date/Time: 11/09/2012 11:58

Sample Number: **CCV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.48822	3,631.57	1.653	0.49626	0.48827	0.48012
AL	25.06246	671.08	0.298	25.10063	25.11026	24.97648
AS	0.47415	146.99	0.624	0.47530	0.47637	0.47079
B	0.46747	2,576.86	0.568	0.47044	0.46666	0.46532
BA	0.48978	344,445.21	0.496	0.49258	0.48860	0.48817
BE	0.47173	99,585.56	1.289	0.47698	0.47314	0.46506
CA	25.24663	6,917.07	0.405	25.32885	25.13218	25.27886
CD	0.48505	4,302.22	0.366	0.48533	0.48666	0.48315
CO	0.48161	1,695.16	0.232	0.48171	0.48267	0.48044
CR	0.47639	3,576.08	0.843	0.47969	0.47756	0.47192
CU	0.48123	3,738.38	1.183	0.48685	0.48138	0.47546
FE	24.76150	1,428.66	0.969	24.99368	24.77614	24.51467
K	24.93065	6,516.66	0.523	25.06771	24.80830	24.91594
LI	0.48135	2,674.02	0.873	0.48130	0.47717	0.48558
MG	24.87222	8,767.26	0.655	25.05533	24.74284	24.81847
MN	0.48713	19,968.42	1.082	0.49222	0.48749	0.48169
MO	0.48805	1,067.15	0.315	0.48914	0.48872	0.48629
NA	24.64123	18,285.20	0.546	24.79640	24.55940	24.56788
NI	0.48283	1,095.36	0.104	0.48302	0.48322	0.48227
P	0.48565	207.20	0.245	0.48509	0.48701	0.48483
PB	0.47790	386.99	0.491	0.47689	0.48058	0.47622
S	24.27301	4,451.75	0.317	24.20627	24.35702	24.25574
SB	0.50137	173.76	0.304	0.50040	0.50313	0.50059
SI	24.38959	817.42	1.147	24.64179	24.43843	24.08854
SN	0.48278	428.18	0.195	0.48304	0.48357	0.48174
SR	0.48860	279,958.67	0.916	0.49376	0.48595	0.48608
TI	0.48607	14,180.25	0.888	0.49023	0.48637	0.48161
TL	0.48189	174.88	0.461	0.48340	0.47934	0.48293
V	0.49071	4,257.07	1.348	0.49597	0.49287	0.48329
Y1	10689.43170	10,689.43	0.190	10693.03085	10667.54246	10707.72179
Y2A	303401.85260	303,401.85	0.896	300632.52315	303505.57961	306067.45503
Y2R	7773.61345	7,773.61	0.625	7717.50748	7800.24965	7803.08322
ZN	0.46894	2,956.39	0.120	0.46907	0.46943	0.46833
ZR	0.49152	278.89	1.068	0.49752	0.48925	0.48778

LANCASTER LABORATORIES

Run Name: 1231403T73 Instrument ID: 18255

Tube: 44 Date/Time: 11/09/2012 12:02

Sample Number: **CCB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
AG	0.00031	-33.52	320.811	-0.00009	0.00146	-0.00043
AL	-0.04431	2.97	206.541	0.06072	-0.10691	-0.08674
AS	0.00010	1.65	753.129	-0.00005	-0.00057	0.00092
B	0.00240	24.28	43.512	0.00168	0.00359	0.00191
BA	0.00001	200.28	91.473	0.00002	0.00001	0.00000
BE	0.00001	13.28	131.257	0.00003	0.00001	0.00000
CA	-0.01119	35.62	40.204	-0.01583	-0.00685	-0.01087
CD	-0.00038	-3.61	30.818	-0.00032	-0.00030	-0.00051
CO	0.00005	0.17	1066.143	0.00071	-0.00035	-0.00020
CR	-0.00048	10.60	38.369	-0.00044	-0.00032	-0.00068
CU	0.00068	13.03	71.927	0.00078	0.00112	0.00015
FE	0.02274	2.93	91.342	0.00264	0.02145	0.04413
K	0.10275	79.90	12.927	0.11093	0.10989	0.08742
LI	-0.00251	-12.60	64.272	-0.00243	-0.00094	-0.00417
MG	-0.00696	1.80	58.679	-0.01157	-0.00554	-0.00378
MN	0.00001	0.02	1119.733	-0.00010	0.00008	0.00005
MO	0.00224	5.00	13.711	0.00191	0.00251	0.00231
NA	0.04139	9.67	24.153	0.02999	0.04552	0.04867
NI	-0.00008	7.16	467.221	-0.00040	-0.00013	0.00030
P	-0.00062	-0.15	193.006	0.00073	-0.00106	-0.00152
PB	-0.00042	-1.24	413.263	0.00100	0.00009	-0.00235
S	0.00015	0.74	862.176	0.00101	0.00076	-0.00132
SB	-0.00224	2.70	136.085	-0.00170	0.00050	-0.00553
SI	-0.02019	1.31	28.628	-0.02591	-0.01435	-0.02030
SN	0.00025	2.23	199.380	0.00073	0.00028	-0.00026
SR	-0.00003	-65.35	87.123	-0.00003	0.00000	-0.00005
TI	0.00030	53.27	49.354	0.00046	0.00028	0.00017
TL	-0.00003	1.73	7871.432	0.00039	0.00208	-0.00256
V	-0.00015	17.37	300.615	0.00038	-0.00041	-0.00044
Y1	10992.04776	10,992.05	0.160	10999.57017	11004.66271	10971.91041
Y2A	317116.87335	317,116.87	0.187	316479.36008	317216.50598	317654.75399
Y2R	7794.15667	7,794.16	0.500	7762.03000	7782.92000	7837.52000
ZN	-0.00054	9.17	19.701	-0.00045	-0.00066	-0.00051
ZR	-0.01049	-18.05	39.438	-0.00832	-0.01525	-0.00788

Mercury Data

Metals in Solid

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1231304M08

Mercury Run Data Report

Data File Name: 1231314.M08

Run Name: 1231304M08

Instrument No.: 19302

Element: Hg

Analyst Employee ID: 0354

Reviewed By
Damary Valentin

Reviewed Date
11/08/2012 1:29PM

Method Reference Name(s):
SW-846 7471A

Verified By:
Jennifer L Moyer

Verified Date
11/08/2012 1:39PM

LANCASTER LABORATORIES

Run Name: 1231304M08

Analyst ID: 0354

Instrument ID: 19302

CV Element: Hg

1 Burn Date/Time: 11/08/2012 12:05

Sample Number	Class	Initial Vol / Wt	Final Vol	DF
S0		1	1	1.00

AVG (ppb)	Intensity
0.0000	335.0

2 Burn Date/Time: 11/08/2012 12:07

Sample Number	Class	Initial Vol / Wt	Final Vol	DF
S0.2		1	1	1.00

AVG (ppb)	Intensity
0.0000	2152.0

3 Burn Date/Time: 11/08/2012 12:09

Sample Number	Class	Initial Vol / Wt	Final Vol	DF
S0.5		1	1	1.00

AVG (ppb)	Intensity
0.0000	5402.0

4 Burn Date/Time: 11/08/2012 12:11

Sample Number	Class	Initial Vol / Wt	Final Vol	DF
S1.0		1	1	1.00

AVG (ppb)	Intensity
0.0000	9822.0

5 Burn Date/Time: 11/08/2012 12:13

Sample Number	Class	Initial Vol / Wt	Final Vol	DF
S2.5		1	1	1.00

AVG (ppb)	Intensity
0.0000	24710.0

6 Burn Date/Time: 11/08/2012 12:16

Sample Number	Class	Initial Vol / Wt	Final Vol	DF
S5.0		1	1	1.00

AVG (ppb)	Intensity
0.0000	51211.0

CorrelationCoefficient = 1.00000
Slope = 10156.2929500000
Y-Intercept = 32.3508100000

LANCASTER LABORATORIES

Run Name: 1231304M08

Analyst ID: 0354

Instrument ID: 19302

CV Element: Hg

7 Burn Date/Time: 11/08/2012 12:18

Sample Number	Class	Initial Vol / Wt	Final Vol	DF
ICV		1	1	1.00

AVG (ppb)	Intensity
2.3841	24250.0

8 Burn Date/Time: 11/08/2012 12:20

Sample Number	Class	Initial Vol / Wt	Final Vol	DF
ICB		1	1	1.00

AVG (ppb)	Intensity
-0.0168	-146.0

9 Burn Date/Time: 11/08/2012 12:22

Sample Number	Class	Initial Vol / Wt	Final Vol	DF
CRA		1	1	1.00

AVG (ppb)	Intensity
0.1918	1973.0

10 Burn Date/Time: 11/08/2012 12:24

Sample Number	Class	Initial Vol / Wt	Final Vol	DF
CCV 1		1	1	1.00

AVG (ppb)	Intensity
0.9397	9573.0

11 Burn Date/Time: 11/08/2012 12:26

Sample Number	Class	Initial Vol / Wt	Final Vol	DF
CCB 1		1	1	1.00

AVG (ppb)	Intensity
-0.0065	-42.0

12 Burn Date/Time: 11/08/2012 12:28

Sample Number	Class	Initial Vol / Wt	Final Vol	DF	Batch Number
PBS	**********	0.6279	100	1.00	123135711001

V	AVG (ppb)	Intensity	Re-read	Re-digest
	0.0079	105.0		

LANCASTER LABORATORIES

Run Name: 1231304M08

Analyst ID: 0354

Instrument ID: 19302

CV Element: Hg

13 Burn Date/Time: 11/08/2012 12:30

Sample Number	Class	Initial Vol / Wt	Final Vol	DF	Batch Number
LCSW	**********	1.0000	100	1.00	123135711001

V	AVG (ppb)	Intensity	Re-read	Re-digest
	1.0112	10300.0		

14 Burn Date/Time: 11/08/2012 12:32

Sample Number	Class	Initial Vol / Wt	Final Vol	DF	Batch Number
6848628	U*********	0.6008	100	1.00	123135711001

V	AVG (ppb)	Intensity	Re-read	Re-digest
	0.0052	77.0		

15 Burn Date/Time: 11/08/2012 12:34

Sample Number	Class	Initial Vol / Wt	Final Vol	DF	Batch Number
6848628	UP********	0.6008	100	1.00	123135711001

V	AVG (ppb)	Intensity	Re-read	Re-digest
	1.0113	10301.0		

16 Burn Date/Time: 11/08/2012 12:36

Sample Number	Class	Initial Vol / Wt	Final Vol	DF	Batch Number
6848628	D*********	0.6222	100	1.00	123135711001

V	AVG (ppb)	Intensity	Re-read	Re-digest
	-0.0012	12.0		

17 Burn Date/Time: 11/08/2012 12:38

Sample Number	Class	Initial Vol / Wt	Final Vol	DF	Batch Number
6848628	R*********	0.6277	100	1.00	123135711001

V	AVG (ppb)	Intensity	Re-read	Re-digest
	1.0598	10794.0		

18 Burn Date/Time: 11/08/2012 12:40

Sample Number	Class	Initial Vol / Wt	Final Vol	DF	Batch Number
6848628	M*********	0.6249	100	1.00	123135711001

V	AVG (ppb)	Intensity	Re-read	Re-digest
	1.0228	10418.0		

LANCASTER LABORATORIES

Run Name: 1231304M08

Analyst ID: 0354

Instrument ID: 19302

CV Element: Hg

19 Burn Date/Time: 11/08/2012 12:42

Sample Number	Class	Initial Vol / Wt	Final Vol	DF	Batch Number
6848633	**********	0.6210	100	1.00	123135711001

V	AVG (ppb)	Intensity	Re-read	Re-digest
	-0.0030	-6.0		

20 Burn Date/Time: 11/08/2012 12:44

Sample Number	Class	Initial Vol / Wt	Final Vol	DF	Batch Number
6848634	**********	0.6418	100	1.00	123135711001

V	AVG (ppb)	Intensity	Re-read	Re-digest
	0.0002	26.0		

21 Burn Date/Time: 11/08/2012 12:46

Sample Number	Class	Initial Vol / Wt	Final Vol	DF	Batch Number
6850737	**********	0.6036	100	1.00	123135711001

V	AVG (ppb)	Intensity	Re-read	Re-digest
	-0.0001	23.0		

22 Burn Date/Time: 11/08/2012 12:48

Sample Number	Class	Initial Vol / Wt	Final Vol	DF
CCV 2		1	1	1.00

AVG (ppb)	Intensity
0.9594	9773.0

23 Burn Date/Time: 11/08/2012 12:50

Sample Number	Class	Initial Vol / Wt	Final Vol	DF
CCB 2		1	1	1.00

AVG (ppb)	Intensity
-0.0057	-34.0

24 Burn Date/Time: 11/08/2012 12:52

Sample Number	Class	Initial Vol / Wt	Final Vol	DF	Batch Number
6850738	**********	0.6031	100	1.00	123135711001

V	AVG (ppb)	Intensity	Re-read	Re-digest
	-0.0022	2.0		

LANCASTER LABORATORIES

Run Name: 1231304M08

Analyst ID: 0354

Instrument ID: 19302

CV Element: Hg

25 Burn Date/Time: 11/08/2012 12:54

Sample Number	Class	Initial Vol / Wt	Final Vol	DF	Batch Number
6850741	**********	0.6367	100	1.00	123135711001

V	AVG (ppb)	Intensity	Re-read	Re-digest
	-0.0024	0.0		

26 Burn Date/Time: 11/08/2012 12:56

Sample Number	Class	Initial Vol / Wt	Final Vol	DF	Batch Number
6850744	**********	0.6119	100	1.00	123135711001

V	AVG (ppb)	Intensity	Re-read	Re-digest
	0.0009	33.0		

27 Burn Date/Time: 11/08/2012 12:58

Sample Number	Class	Initial Vol / Wt	Final Vol	DF	Batch Number
6850747	**********	0.6171	100	1.00	123135711001

V	AVG (ppb)	Intensity	Re-read	Re-digest
	0.0066	91.0		

28 Burn Date/Time: 11/08/2012 13:00

Sample Number	Class	Initial Vol / Wt	Final Vol	DF	Batch Number
6850750	**********	0.6057	100	1.00	123135711001

V	AVG (ppb)	Intensity	Re-read	Re-digest
	0.0089	115.0		

29 Burn Date/Time: 11/08/2012 13:02

Sample Number	Class	Initial Vol / Wt	Final Vol	DF	Batch Number
6850753	**********	0.6020	100	1.00	123135711001

V	AVG (ppb)	Intensity	Re-read	Re-digest
	-0.0011	13.0		

30 Burn Date/Time: 11/08/2012 13:04

Sample Number	Class	Initial Vol / Wt	Final Vol	DF	Batch Number
6850756	**********	0.6094	100	1.00	123135711001

V	AVG (ppb)	Intensity	Re-read	Re-digest
	-0.0013	11.0		

LANCASTER LABORATORIES

Run Name: 1231304M08

Analyst ID: 0354

Instrument ID: 19302

CV Element: Hg

31 Burn Date/Time: 11/08/2012 13:06

Sample Number	Class	Initial Vol / Wt	Final Vol	DF	Batch Number
6850759	**********	0.6197	100	1.00	123135711001

V	AVG (ppb)	Intensity	Re-read	Re-digest
	0.2939	3011.0		

32 Burn Date/Time: 11/08/2012 13:08

Sample Number	Class	Initial Vol / Wt	Final Vol	DF	Batch Number
6850764	**********	0.6129	100	1.00	123135711001

V	AVG (ppb)	Intensity	Re-read	Re-digest
	0.3244	3321.0		

33 Burn Date/Time: 11/08/2012 13:10

Sample Number	Class	Initial Vol / Wt	Final Vol	DF	Batch Number
6850765	**********	0.6115	100	1.00	123135711001

V	AVG (ppb)	Intensity	Re-read	Re-digest
	0.3274	3351.0		

34 Burn Date/Time: 11/08/2012 13:12

Sample Number	Class	Initial Vol / Wt	Final Vol	DF
CCV 3		1	1	1.00

AVG (ppb)	Intensity
0.9505	9683.0

35 Burn Date/Time: 11/08/2012 13:14

Sample Number	Class	Initial Vol / Wt	Final Vol	DF
CCB 3		1	1	1.00

AVG (ppb)	Intensity
-0.0022	2.0

36 Burn Date/Time: 11/08/2012 13:16

Sample Number	Class	Initial Vol / Wt	Final Vol	DF	Batch Number
6850770	**********	0.6410	100	1.00	123135711001

V	AVG (ppb)	Intensity	Re-read	Re-digest
	0.2724	2792.0		

LANCASTER LABORATORIES

Run Name: 1231304M08

Analyst ID: 0354

Instrument ID: 19302

CV Element: Hg

37 Burn Date/Time: 11/08/2012 13:19

Sample Number	Class	Initial Vol / Wt	Final Vol	DF	Batch Number
6850771	**********	0.6115	100	1.00	123135711001

V	AVG (ppb)	Intensity	Re-read	Re-digest
	0.5692	5808.0		

38 Burn Date/Time: 11/08/2012 13:21

Sample Number	Class	Initial Vol / Wt	Final Vol	DF
CRA		1	1	1.00

AVG (ppb)	Intensity
0.1919	1974.0

39 Burn Date/Time: 11/08/2012 13:23

Sample Number	Class	Initial Vol / Wt	Final Vol	DF
CCV 4		1	1	1.00

AVG (ppb)	Intensity
0.9405	9581.0

40 Burn Date/Time: 11/08/2012 13:25

Sample Number	Class	Initial Vol / Wt	Final Vol	DF
CCB 4		1	1	1.00

AVG (ppb)	Intensity
-0.0009	15.0

Extraction/Distillation/Digestion Logs

Metals in Solid

LLENS Worksheet for 5708 SW846 ICP/ICP MS Digest

Batch# 12 312 5708 001

Balance ID#: 10685 **Start Time:** 11/7/12 22:49 **End Time:** 11/8/12 3:50 **Hot Block:** 8

Pipette ID:

Spike/Reagent	Lot#	Volume Added(mL)
1:1 HNO3	P12-307C	10.00
30% H2O2	124183	4.00
HCL	4111100	10.00
HNO3	C251199	5.00
ICP Spike 1A	1223307#9	2.00
ICP Spike 1B	1223320#9	2.00
ICP/MS Spike	1224819#3	2.00
LCS 2 ICP/MS Spike	1224819#3	1.00
LCS A1	1223307#9	2.00
LCS B1	1223320#9	2.00

Method Ref: SW-846 3050B

	SampleID	Date Due	C	ST	P	H	PH<2	BC	Vessel Lot#	Comments
1)	PBS	.							MF06LKK01	Teflon chips used, Lot: F556-2F007
2)	LCSW	.							MF06LKK01	Teflon chips used, Lot: F556-2F007
3)	LCSW2	.							MF06LKK01	Teflon chips used, Lot: F556-2F007
4)	**6850737U**	11/09/12 09:30		SW	S2			036a	MF06LKK01	
5)	**6850737D**	11/09/12 09:30		SW	S2			036a	MF06LKK01	
6)	**6850737R**	11/09/12 09:30		SW	S2			036a	MF06LKK01	
7)	**6850737M**	11/09/12 09:30		SW	S2			036a	MF06LKK01	
8)	**6850737R2**	11/09/12 09:30		SW	S2			036a	MF06LKK01	
9)	**6850737M2**	11/09/12 09:30		SW	S2			036a	MF06LKK01	
10)	6850738	11/09/12 09:30		SW	S2			036a	MF06LKK01	
11)	6850741	11/09/12 09:30		SW	S2			036a	MF06LKK01	
12)	6850744	11/09/12 09:30		SW	S2			036a	MF06LKK01	
13)	6850747	11/09/12 09:30		SW	S2			036a	MF06LKK01	
14)	6850750	11/09/12 09:30		SW	S2			036a	MF06LKK01	
15)	6850753	11/09/12 09:30		SW	S2			036a	MF06LKK01	
16)	6850756	11/09/12 09:30		SW	S2			036a	MF06LKK01	
17)	6850759	11/09/12 09:30		SW	S2			036a	MF06LKK01	
18)	6850764	11/09/12 09:30		SW	S2			036a	MF06LKK01	
19)	6850765	11/09/12 09:30		SW	S2			036a	MF06LKK01	
20)	6850770	11/09/12 09:30		SW	S2			036a	MF06LKK01	
21)	6850771	11/09/12 09:30		SW	S2			036a	MF06LKK01	
22)	6849595	11/12/12 00:00		SW	S4			021a	MF06LKK01	

Prep Employee: AMS00862

11/8/2012

SampleID	Date Due	C	ST	P	H	PH<2	BC	Vessel Lot#	Comments
23) 6850625	11/12/12 09:20		SW	S3			062a	MF06LKK01	
24) 6847383	11/15/12 10:00		SW	P8			590a	MF06LKK01	
25) 6847414	11/15/12 10:00		SW	P8			099a	MF06LKK01	
26) 6847415	11/15/12 10:00		SW	P8			099a	MF06LKK01	
27) 6847416	11/15/12 10:00		SW	P8			099a	MF06LKK01	
28) 6847417	11/15/12 10:00		SW	P8			099a	MF06LKK01	

Batch# 12 312 5708 001

LLENS Batch Chronology and Change Log - SW846 ICP/ICP MS Digest

	Operation	Instrument	Operation Date	Analyst
1)	Batch Creation		11/7/12 12:45	00862
2)	Sample Wt		11/7/12 22:29	00862
3)	Final Vol	10685	11/7/12 22:49	00862
4)	Trial		11/7/12 22:49	00862
5)	Upload Prep	US19VDIELJ01I	11/8/12 4:24	00862

Sample ID	Analysis	D	Operation	Measurement	Original Entry				Data Changed		
					Date/Time	Data	Units	Analyst	Date/Time	Analyst	Reason

Analysis: 5708 SW846 ICP/ICP MS Digest

Batch# 12 312 5708 001

Sample ID	Due Date	P	EPA#	SDG#	Sample Wt	Final Volume	Trial
PBS					1.0000	100.0000	1
LCSW					1.0000	100.0000	1
LCSW2					1.0000	100.0000	1
6850737U	11/09/12	S2	NSTC5	TAP03-05	1.0200	100.0000	1
6850737D	11/09/12	S2	NSTC5	TAP03-05	1.0200	100.0000	1
6850737R	11/09/12	S2	NSTC5	TAP03-05	1.0200	100.0000	1
6850737M	11/09/12	S2	NSTC5	TAP03-05	1.0200	100.0000	1
6850737R2	11/09/12	S2	NSTC5	TAP03-05	1.0200	100.0000	1
6850737M2	11/09/12	S2	NSTC5	TAP03-05	1.0200	100.0000	1
6850738	11/09/12	S2	NSTC6	TAP03-06	1.0200	100.0000	1
6850741	11/09/12	S2	NSTC7	TAP03-09	1.0400	100.0000	1
6850744	11/09/12	S2	NSTC8	TAP03-12	1.0200	100.0000	1
6850747	11/09/12	S2	NSTC9	TAP03-15	1.0100	100.0000	1
6850750	11/09/12	S2	STC10	TAP03-18	1.0300	100.0000	1
6850753	11/09/12	S2	STC11	TAP03-21	1.0300	100.0000	1
6850756	11/09/12	S2	STC12	TAP03-24	1.0000	100.0000	1
6850759	11/09/12	S2	CTCS2	TAP03-27	1.0200	100.0000	1
6850764	11/09/12	S2	CTCS3	TAP03-32	1.0300	100.0000	1
6850765	11/09/12	S2	CTCS4	TAP03-33	1.0200	100.0000	1
6850770	11/09/12	S2	CTCS5	TAP03-38	1.0300	100.0000	1
6850771	11/09/12	S2	CTCS6	TAP03-39*	1.0100	100.0000	1
6849595	11/12/12	S4	2F201		1.0200	100.0000	1
6850625	11/12/12	S3	23424		1.0400	100.0000	1
6847383	11/15/12	P8	8B235		1.0200	100.0000	1
6847414	11/15/12	P8	CM311		1.0100	100.0000	1
6847415	11/15/12	P8	CM315		1.0200	100.0000	1
6847416	11/15/12	P8	CM319		1.0200	100.0000	1
6847417	11/15/12	P8	CM323		1.0100	100.0000	1

LLENS Worksheet for 5711 SW SW846 Hg Digest

Batch# 12 313 5711 001

Balance ID#: 19119 **Start Time:** 11/8/12 11:32 **End Time:** 11/8/12 12:02 **Hot Block:** 1

Pipette ID: S/100

Spike/Reagent	Lot#	Volume Added(mL)
5%KMnO4	H12304F	15.00
Aqua Regia	P12313C	5.00
LCS	P12313A	0.10
Spike 1ppm Hg	P12313A	0.10

Method Ref: SW-846 7471A modified

	SampleID	Date Due	C	ST	P	H	PH<2	BC	Vessel Lot#	Comments
1)	PBS	.							MF06LKK01	0.6279gboiling stoneslot#F5562F007 added
2)	LCSW	.							MF06LKK01	0.6339g boilingstones lot#F5562F007 added
3)	**6848628U**	11/08/12 00:00		SW	S2			036a	MF06LKK01	
4)	**6848628D**	11/08/12 00:00		SW	S2			036a	MF06LKK01	
5)	**6848628R**	11/08/12 00:00		SW	S2			036a	MF06LKK01	
6)	**6848628M**	11/08/12 00:00		SW	S2			036a	MF06LKK01	
7)	6848633	11/08/12 00:00		SW	S2			036a	MF06LKK01	
8)	6848634	11/08/12 00:00		SW	S2			036a	MF06LKK01	
9)	6850737	11/08/12 00:00		SW	S1			036a	MF06LKK01	
10)	6850738	11/08/12 00:00		SW	S1			036a	MF06LKK01	
11)	6850741	11/08/12 00:00		SW	S1			036a	MF06LKK01	
12)	6850744	11/08/12 00:00		SW	S1			036a	MF06LKK01	
13)	6850747	11/08/12 00:00		SW	S1			036a	MF06LKK01	
14)	6850750	11/08/12 00:00		SW	S1			036a	MF06LKK01	
15)	6850753	11/08/12 00:00		SW	S1			036a	MF06LKK01	
16)	6850756	11/08/12 00:00		SW	S1			036a	MF06LKK01	
17)	6850759	11/08/12 00:00		SW	S1			036a	MF06LKK01	
18)	6850764	11/08/12 00:00		SW	S1			036a	MF06LKK01	
19)	6850765	11/08/12 00:00		SW	S1			036a	MF06LKK01	
20)	6850770	11/08/12 00:00		SW	S1			036a	MF06LKK01	
21)	6850771	11/08/12 00:00		SW	S1			036a	MF06LKK01	

Prep Employee: DSV00354

11/8/2012

v 1.0.1

Batch# 12 313 5711 001

LLENS Batch Chronology and Change Log - SW SW846 Hg Digest

	Operation	Instrument	Operation Date	Analyst
1)	Batch Creation		11/8/12 9:09	00354
2)	Sample Wt	19119	11/8/12 10:37	01184
3)	Sample Wt	19119	11/8/12 11:04	01184
4)	Final Vol	19119	11/8/12 11:04	01184
5)	Trial		11/8/12 11:04	01184
6)	Upload Prep	US19VDIELJ02	11/8/12 11:39	00354

					Original Entry				Data Changed		
Sample ID	Analysis	D	Operation	Measurement	Date/Time	Data	Units	Analyst	Date/Time	Analyst	Reason
LCSW		1	Sample Wt	Sample Wt	11/8/12 10:37	0.6339	(g)	01184	11/8/12 11:04	01184	Wrong entry

Analysis: 5711 SW SW846 Hg Digest

Batch# 12 313 5711 001

Sample ID	Due Date	P	EPA#	SDG#	Sample Wt	Final Volume	Trial
PBS					.6279	100.0000	1
LCSW					1.0000	100.0000	1
6848628U	11/08/12	S2	NSTC2	TAP02-03	.6008	100.0000	1
6848628D	11/08/12	S2	NSTC2	TAP02-03	.6222	100.0000	1
6848628R	11/08/12	S2	NSTC2	TAP02-03	.6277	100.0000	1
6848628M	11/08/12	S2	NSTC2	TAP02-03	.6249	100.0000	1
6848633	11/08/12	S2	NSTC3	TAP02-08	.6210	100.0000	1
6848634	11/08/12	S2	NSTC4	TAP02-09*	.6418	100.0000	1
6850737	11/08/12	S1	NSTC5	TAP03-05	.6036	100.0000	1
6850738	11/08/12	S1	NSTC6	TAP03-06	.6031	100.0000	1
6850741	11/08/12	S1	NSTC7	TAP03-09	.6367	100.0000	1
6850744	11/08/12	S1	NSTC8	TAP03-12	.6119	100.0000	1
6850747	11/08/12	S1	NSTC9	TAP03-15	.6171	100.0000	1
6850750	11/08/12	S1	STC10	TAP03-18	.6057	100.0000	1
6850753	11/08/12	S1	STC11	TAP03-21	.6020	100.0000	1
6850756	11/08/12	S1	STC12	TAP03-24	.6094	100.0000	1
6850759	11/08/12	S1	CTCS2	TAP03-27	.6197	100.0000	1
6850764	11/08/12	S1	CTCS3	TAP03-32	.6129	100.0000	1
6850765	11/08/12	S1	CTCS4	TAP03-33	.6115	100.0000	1
6850770	11/08/12	S1	CTCS5	TAP03-38	.6410	100.0000	1
6850771	11/08/12	S1	CTCS6	TAP03-39*	.6115	100.0000	1

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Standards/Reagent Preparation Log

	Standard/Reagent Prepared		Standards/Reagents Used					HNO_3 Used		
	Name	Lot #	Identification	M•	Expire Date (MM/YY)	Lot #	Init. Wt/Vol (Write g or mL)	Vol (mL)	M•	Lot #
1	Hg-0.1mg/L InterCal	HI2-306 B	Hg-1.0mg/L Cal	7	11-08-12	HI2-306A	1.0ml			
2	1.0mg/L InterCont	C	10mg/L Cont		4-16-13	HI2-270F	↓			
3	0.1mg/L InterCont	D	1.0mg/L Cont		11-08-12	HI2-306C	↓			
4	Hg-5701 solids ICV	E					.25ml			
5	CCV	F					.10			
6	CCV	G	↓		↓	↓	.10			
7	CRA	H	Hg-0.1mg/L Cont			HI2-306D	.20			
8	Std Cal	I	Hg-0.1mg/L Cal			HI2-306B	.20			
9	↓	J	↓			↓	.50			
10		K	Hg-1.0mg/L Cal			HI2-306A	.10			
11		L	↓			↓	.25			
12		M	↓		↓	↓	.50			
13	↓ ↓	N								
14	Aqua Regia	O						12.5	4	C251199
15	Hg 1.0mg/L Cal	HI2-307A	Hg ③ 10 1.0mg/L Cal	7	4-16-13	HI2-270E	1.0ml			
16	0.1mg/L InterCal	B	HI2-270E 1.0mg/L Cal		11-09-12	HI2-307A	↓			
17	1.0mg/L InterCont	C	③ 10 1.0mg/L Cont		4-16-13	HI2-270F	↓			
18	0.1mg/L InterCont	D	1.0mg/L Cont		11-09-12	HI2-307C	↓			
19	Stannous Chloride	E	$SnCl_2 \cdot 2H_2O$	6	9-13-13	0000143294	200.02g			
20	↓	F	↓	6	↓	↓	200.06g			

Key – Manufacturer (M•)

1 – Aldrich Chemical
2 – Conostan Specialty Products
3 – EM Science
4 – Fisher Scientific
5 – High-Purity Standards
6 – J. T. Baker
7 – Johnson Matthey
8 – Leeman Labs
9 – Mallinckrodt
10 – Plasma Pure
11 – Solutions Plus
12 – SPEX Industries
13 – VWR Scientific
XX – Other (footnote Manuf.)

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Standards/Reagent Preparation Log

	HCl Used			Other Used			Final Vol (mL)	Final Conc (mg/L**)	Init/ Emp #	Prep Date (MM/DD/YY)	Expire Date (MM/DD/YY)	Storage
	Vol (mL)	M•	Lot #	Vol (mL*)	•• M•	Lot #						
1				To vol w/ 0.15% HNO3		HI2-178N	10	0.1	DW354	11-01-12	11-08-12	RT
2								1.0				
3								0.1				
4				5ml Aqua Regia 15ml bmNO4		HI2-3060 HI2-3078	100	2.5 ug/L				
5								1.0				
6								1.0				
7								0.2				
8								0.2				
9								0.5				
10								1.0				
11								2.5				
12								5.0				
13								0.0				
14	37.5	4	411100				50	1:3			11-01-12	
15				To vol w/ 0.15% HNO3		HI2-178N	10	1.0	DW354	11-02-12	11-09-12	RT
16								0.1				
17								1.0				
18								0.1				
19	200	4	411100				2000	10%			5-02-13	
20												

Footnotes

Key (••) – Other Used

A = $CaCl_2$ (0.053%)
B = CsCl (10%)
C = KCl
D = La_2O_3 (10%)
E = Al $(NO_3)_3$ (40%)
F = Element Specific

RT = Room Temperature Storage

* units are mL unless otherwise specified
* * units are mg/L unless otherwise specified

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Standards/Reagent Preparation Log

	Standard/Reagent Prepared			Standards/Reagents Used				HNO_3 Used		
	Name	Lot #	Identification	M•	Expire Date (MM/YY)	Lot #	Init. Wt/Vol (Write g or mL)	Vol (mL)	M•	Lot #
1	Hg-5700 waters ICV	H12-307G	Hg-1.0mg/L Cont	7	11-09-12	H12-307C	.25 ml	1	4	C251199
2	CCV	H	↓	↓	↓	↓	.20	↓	↓	↓
3	CRA	I	Hg-0.1mg/L Cont			H12-307D	.20			
4	Std Cal	J	Hg-0.1mg/L Cal			H12-307D	.20			
5	↓	K	↓			↓	.50			
6		L	Hg-1.0mg/L Cal			H12-307A	.20			
7		M	↓			↓	.25			
8		N	↓	L	↓	↓	.50 ↓			
9	↓	O	—	—	—	—	—	↓	↓	↓
10	Potassium Permanganate	H12-307P	$KMnO_4$ #5	6	9-14-13	121666	100.02g	—	—	—
11	↓	R	↓	↓	↓	↓	100.04g	—	—	—
12	Hg-1.0mg/L Inter Cal	H12-310H	Hg-10mg/L Cal	7	4-16-13	H12-270E	1.0 ml	—	—	—
13	0.1mg/L Inter Cal	B	1.0mg/L Cal		11-12-12	H12-310A	↓	—	—	—
14	1.0mg/L Inter Cont	C	10mg/L Cont		4-16-13	H12-270F		—	—	—
15	0.1mg/L Inter Cont	D	1.0mg/L Cont	L	11-12-12	H12-310C	↓	—	—	—
16	Hg-5701 soils ICV	E	↓	7	↓	↓	.25 ml	—	—	—
17	CCV	F					.10	—	—	—
18	~~CCV~~ ③	G	↓			↓	.10	—	—	—
19	~~3~~CRA	H	Hg-0.1mg/L Cont	L	↓	H12-310D	.20 ↓	—	—	—
20	↓ Std Cal	I	—	—	—	—	—	—	—	—

Key – Manufacturer (M•)

1 – Aldrich Chemical
2 – Conostan Specialty Products
3 – EM Science
4 – Fisher Scientific
5 – High-Purity Standards
6 – J. T. Baker
7 – Johnson Matthey
8 – Leeman Labs
9 – Mallinckrodt
10 – Plasma Pure
11 – Solutions Plus
12 – SPEX Industries
13 – VWR Scientific
XX – Other (footnote Manuf.)

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Standards/Reagent Preparation Log

	HCl Used			Other Used			Final Vol (mL)	Final Conc (mg/L**)	Init/ Emp #	Prep Date (MM/DD/YY)	Expire Date (MM/DD/YY)	Storage
	Vol (mL)	M•	Lot #	Vol (mL*)	•• M•	Lot #						
1	2ml H_2SO_4	4	123751	3.2ml $K_2S_2O_8$ 1ml $KMnO_4$		HI2-2556 HI2-2976	100	2.5ug/L	DL1354	11-02-12	11-09-12	RT
2							200	1.0				
3							100	0.2				
4								0.2				
5								0.5				
6							200	1.0				
7							100	2.5				
8								5.0				
9								0.0				
10				to volume w/ DI H_2O			2000	5%	NSM823	11-02-12	5-02-13	RT
11												
12				To volume 0.5% HNO_3		HI2-178W	10	1.0	DL1354	11-05-12	11-12-12	RT
13								0.1				
14								1.0				
15								0.1				
16				5ml Aqua Regia 15ml $KMnO_4$		HI2-310 HI2-2975	100	2.5ug/L				
17								1.0				
18								1.0				
19								0.2				
20								0.0				

TAP03 Page 2581 of 2648

Footnotes

Key (••) – Other Used

A = $CaCl_2$ (0.053%)
B = CsCl (10%)
C = KCl
D = La_2O_3 (10%)
E = Al $(NO_3)_3$ (40%)
F = Element Specific

RT = Room Temperature Storage

* units are mL unless otherwise specified
** units are mg/L unless otherwise specified

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Standards/Reagent Preparation Log

	Standard/Reagent Prepared		Standards/Reagents Used					HNO_3 Used		
	Name	Lot #	Identification	Mo	Expire Date (MM/YY)	Lot #	Init. Wt/Vol (Write g or mL)	Vol (mL)	Mo	Lot #
1	Hg-5701 Std. Cal	H12-310.1	Hg-0.1mg/L Cal		11-12-12	H12-310B	.25 ml			
2		K					.50			
3		L	Hg-1.0mg/L Cal			H12-310A	.10			
4		M					.25			
5		N					.50			
6	Aqua Regia	O						12.5	4	C251199
7	HCl - Rinse	P								
8	Hg-5700 waters ICV	Q	Hg 1.0mg/L Cont		11-12-12	H12-310C	.25 ml	1	4	C251199
9	CCV	R					.20			
10	CRA	S	Hg-0.1mg/L Cont			H12-310D	.20			
11	Std. Cal	T	Hg-0.1mg/L Cal			H12-310A	.20			
12		U					.50			
13		V	Hg-1.0mg/L Cal			H12-310A	.20			
14		W					.25			
15		X					.50			
16		Y								
17	Hg-1.0mg/L InterCal	H12-311A	Hg-10mg/L Cal		4-16-13	H12-270E	1.0ml			
18	0.1mg/L InterCal	B	1.0mg/L Cal		11-13-12	H12-311A				
19	1.0mg/L InterCont	C	10mg/L Cont		4-16-13	H12-270F				
20	0.1mg/L InterCont	D	1.0mg/L Cont		11-13-12	H12-311C				

Key – Manufacturer (Mo)

1 – Aldrich Chemical
2 – Conostan Specialty Products
3 – EM Science
4 – Fisher Scientific
5 – High-Purity Standards
6 – J. T. Baker
7 – Johnson Matthey
8 – Leeman Labs
9 – Mallinckrodt
10 – Plasma Pure
11 – Solutions Plus
12 – SPEX Industries
13 – VWR Scientific
XX – Other (footnote Manuf.)

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Standards/Reagent Preparation Log

	HCl Used			Other Used			Final Vol (mL)	Final Conc (mg/L**)	Init/ Emp #	Prep Date (MM/DD/YY)	Expire Date (MM/DD/YY)	Storage
	Vol (mL)	M•	Lot #	Vol (mL*)	•• M•	Lot #						
1				5ml Aqua Regia 15ml HNO_3		H12-3150 H12-297S	100	0.2 ug/L	DU354	11-05-12	11-12-12	RT
2								0.5				
3								1.0				
4								2.5				
5								5.0				
6	37.5	4	4111100				50	1.3			11-05-12	
7	400						20,000	2%			5-05-13	
8	2ml H_2SO_4	4	123751	3.2ml H_2SO_3 1ml HNO_3		H12-255G H12-297S	100	2.5 ug/L			11-12-12	
9							200	1.0				
10							100	0.2				
11								0.2				
12								0.5				
13							200	1.0				
14							100	2.5				
15								5.0				
16								0.0				
17				To vol w/ 0.15% HNO_3		H12-178N	10	1.0	DU354	11-06-12	11-13-12	RT
18				To vol w/ 0.15% HNO_3		H12-178N		0.1				
19								1.0				
20								0.1				

TAP03 Page 2583 of 2648

Footnotes

Key (••) – Other Used

A = $CaCl_2$ (0.053%)
B = CsCl (10%)
C = KCl
D = La_2O_3 (10%)
E = Al $(NO_3)_3$ (40%)
F = Element Specific

RT = Room Temperature Storage

* units are mL unless otherwise specified
* * units are mg/L unless otherwise specified

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Standards/Reagent Preparation Log

	Standard/Reagent Prepared		Standards/Reagents Used					HNO_3 Used		
	Name	Lot #	Identification	M•	Expire Date (MM/YY)	Lot #	Init. Wt/Vol (Write g or mL)	Vol (mL)	M•	Lot #
1	Hg-5701 CRA	HI2-311F	Hg-0.1mg/L Cont	—	11-13-12	HI2-311D	.1 ml			
2	↓ SQ	↓ G								
3	Aqua Regia	↓ H						4	4	C251199
4	Hydroxylamine	HI2-311I	$NH_2OH \cdot HCl$	4	10-19-13	125507 #3	240.05g			
5		↓	NaCl		8-31-13	120350 #1	240.03g			
6		HI2-311J	$NH_2OH \cdot HCl$		10-19-13	125507 #3	240.06g			
7		↓	NaCl		8-31-13	120350 #1	240.01g			
8		HI2-311K	$NH_2OH \cdot HCl$	↓	10-19-13	125507 #3+4	240.00g			
9	↓	↓	NaCl	6	9-06-13	00000134591	240.02g			
10	Stannous Chloride	HI2-311L	$SnCl_2 \cdot 2H_2O$	4	9-14-13	122972 #1	~~240.0~~ 200.02g			
11	Hg-1.0mg/L InterCal	HI2-312A	Hg-10mg/L Cal		4-16-13	HI2-270E	1.0ml			
12	0.1mg/L InterCal	B	1.0mg/L Cal		11-14-12	HI2-312A				
13	1.0mg/L InterCont	C	10mg/L Cont		4-16-13	HI2-270F				
14	0.1mg/L InterCont	D	1.0mg/L Cont		11-14-12	HI2-312C				
15	Hg-1.0mg/L InterCal	HI2-313A	Hg-10mg/L Cal		4-16-13	HI2-270E	1.0ml			
16	0.1mg/L InterCal	B	10mg/L Cal		11-15-12	HI2-313A				
17	1.0mg/L InterCont	C	10mg/L Cont		4-16-13	HI2-270F				
18	0.1mg/L InterCont	D	1.0mg/L Cont		11-15-12	HI2-313C				
19	Hg-5700 waters ICV	E					③ ~~.20~~ .25ml	1	4	C251199
20	↓ CCV	↓ F	↓		↓	↓	.20 ml	↓	↓	↓

Key – Manufacturer (M•)

1 – Aldrich Chemical
2 – Conostan Specialty Products
3 – EM Science
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6 – J. T. Baker
7 – Johnson Matthey
8 – Leeman Labs
9 – Mallinckrodt
10 – Plasma Pure
11 – Solutions Plus
12 – SPEX Industries
13 – VWR Scientific
XX – Other (footnote Manuf.)

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Standards/Reagent Preparation Log

	HCl Used			Other Used			Final Vol (mL)	Final Conc (mg/L**)	Init/ Emp #	Prep Date (MM/DD/YY)	Expire Date (MM/DD/YY)	Storage
	Vol (mL)	M•	Lot #	Vol (mL*)	•• M•	Lot #						
1				5ml Aqua Regia 15ml KMnO4		HI2-3116 HI2-3044E	100	0.1ug/L	DLJ35Y	11-06-12	11-13-12	RT
2				↓	↓	↓	100	0.01g/L				
3	12	4	411100				16	1:3			11-06-12	
4							3000	12%			5-06-13	
5												
6												
7												
8												
9							↓	↓				
10	200	4	411100				↓	10%	↓	↓	↓	↓
11				To vol w/ 0.15% HNO3		HI2-178N	10	1.0	DLJ35Y	11-07-12	11-14-12	RT
12				↓	↓	↓	↓	0.1	↓	↓	↓	↓
13								1.0				
14								0.1				
15				To vol w/ 0.15% HNO3		HI2-178N	10	1.0	DLJ35Y	11-08-12	11-15-12	RT
16				↓	↓	↓	↓	0.1	↓	↓	↓	↓
17								1.0				
18							↓	0.1				
19	2ml H2SO4	4	123751	3.2ml H_2SO_4 6ml KMnO4	=	HI2-3041H HI2-3041F	100	2.5ug/L	↓	↓	↓	↓
20	↓	↓	↓	↓	↓	↓	200	1.0 ug/L				

TAP03 Page 2585 of 2648

Footnotes

Key (••) – Other Used

A = $CaCl_2$ (0.053%)
B = CsCl (10%)
C = KCl
D = La_2O_3 (10%)
E = Al $(NO_3)_3$ (40%)
F = Element Specific

RT = Room Temperature Storage

* units are mL unless otherwise specified
* * units are mg/L unless otherwise specified

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Standards/Reagent Preparation Log

	Standard/Reagent Prepared		Standards/Reagents Used					HNO_3 Used		
	Name	Lot #	Identification	M•	Expire Date (MM/YY)	Lot #	Init. Wt/Vol (Write g or mL)	Vol (mL)	M•	Lot #
1	Hg-5700 Matrix CRA	Hg-313 G	Hg 0.1 mg/L Cont		11-15-12	H12-313D	.20 ml	1	4	C351199
2	CRA	H					.10			
3	Std Cal	I	Hg 0.1 mg/L Cal			H12-313B	.20			
4		J					.50			
5		K	Hg 1.0 mg/L Cal			H12-313A	.20			
6		L					.35			
7		M					.50			
8		N								
9	Hg-1.0 mg/L InterCal	H12-314A	Hg-10 mg/L Cal		11-16-13	H12-270E	1.0 ml			
10	0.1 mg/L InterCal	B	1.0 mg/L Cal		11-16-12	H12-314A				
11	10 mg/L InterCont	C	10 mg/L Cont		11-16-13	H12-270F				
12	0.1 mg/L InterCont	D	1.0 mg/L Cont		11-16-12	H12-314C				
13	Hg-5701/soil ICV	E					.25 ml			
14	CCV	F					.10			
15	CCV	G					.10			
16	CRA	H	Hg-0.1 mg/L Cont			H12-314D	.20			
17	Std Cal	I	Hg 0.1 mg/L Cal			H12-314B	.20			
18		J					.50			
19		K	Hg 1.0 mg/L Cal			H12-314A	.10			
20		L					.25			

Key – Manufacturer (M•)

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8 – Leeman Labs
9 – Mallinckrodt
10 – Plasma Pure
11 – Solutions Plus
12 – SPEX Industries
13 – VWR Scientific
XX – Other (footnote Manuf.)

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Standards/Reagent Preparation Log

	HCl Used			Other Used			Final Vol (mL)	Final Conc (mg/L**)	Init/ Emp #	Prep Date (MM/DD/YY)	Expire Date (MM/DD/YY)	Storage
	Vol (mL)	M•	Lot #	Vol (mL*)	•• M•	Lot #						
1	2mL HCl	4	133751	3.2mL H2SO4 1mL HNO3	- -	HA-304H HA-304F	100	0.2	DW354	11-08-12	11-15-12	RT
2								0.1				
3								0.2				
4								0.5				
5							200	1.0				
6							100	2.5				
7								5.0				
8								0.0				
9				To vol w/ 0.15% HNO3		HA-178N	10	1.0	DW354	11-09-12	11-16-12	RT
10								0.1				
11								1.0				
12								0.1				
13				5mL Aqua Regia 15mL HNO3		HA-314 © HA-304F	100	2.5				
14								1.0				
15								1.0				
16								0.2				
17								0.2				
18								0.5				
19								1.0				
20								2.5				

TAP03 Page 2587 of 2648

Footnotes

Key (••) – Other Used

A = $CaCl_2$ (0.053%)
B = CsCl (10%)
C = KCl
D = La_2O_3 (10%)
E = Al $(NO_3)_3$ (40%)
F = Element Specific

RT = Room Temperature Storage

* units are mL unless otherwise specified
* * units are mg/L unless otherwise specified

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Instrumental Wet Chemistry Data

Case Narrative/Conformance Summary

Instrumental Wet Chemistry

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Case Narrative/Conformance Summary

CLIENT: ExxonMobil Refining & Supply
SDG: TAP03

Instrumental Water Quality

Fraction: Instrumental Wet Chemistry

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
6850737	TCN-STC5		X	1	
6850738	TCN-STC6		X	1	
6850741	TCN-STC7		X	1	
6850744	TCN-STC8		X	1	
6850747	TCN-STC9		X	1	
6850750	TCN-STC10		X	1	
6850753	TCN-STC11		X	1	
6850756	TCN-STC12		X	1	
6850759	POC-TSC2		X	1	
6850764	POC-TSC3		X	1	
6850765	POC-TSC4		X	1	
6850770	POC-TSC5		X	1	
6850771	POC-TSC6		X	1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

All QC is within specification.

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Case Narrative/Conformance Summary

CLIENT: ExxonMobil Refining & Supply
SDG: TAP03

Instrumental Water Quality

Fraction: Instrumental Wet Chemistry

SAMPLE ANALYSIS:

Due to the limitations of the data package software, form I's are not available for the Instrumental Analysis data. Please refer to the analysis reports for this information.

Amenable Cyanide = total cyanide result – amenable cyanide result

Total Cyanide (soil) = result X dilution factor X 50 ml / weight of sample (g)

Abbreviation Key

U = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
R = Matrix Spike (MS)	MDL = Method Detection Limit
M = Matrix Spike Duplicate (MSD)	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	NA = Not Applicable
HS = High Spike	ME = Method
LS = Low Spike	CO = Colorimetric
SS = Soluble Spike	G = Gravimetric
IS = Insoluble Spike	IR = Infrared Spectrophotometry
ISD = Insoluble Spike Duplicate	MTR = Meter
PDS = Post Digestion Spike	OD = Oven Dried
* = Out of Specification	TI = Titration
V = Visual	TOC = Total Organic Carbon
AK = Alpkem	IC = Ion Chromatography
TC = Total Carbon	RA = Rapid Analyzer

Quality Control and Calibration Summary Forms

Instrumental Wet Chemistry

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Quality Control Reference List
Instrumental Water Quality

CLIENT: ExxonMobil Refining & Supply
SDG: TAP03

Fraction: Instrumental Wet Chemistry

Analysis	Batch Number	Sample Number	Analysis Date
Amenable Cyanide (solid)	12314103201A	P31403AB	11/12/2012 07:10:00
		P31403AQ	11/12/2012 07:09:00
		6850737 U	11/12/2012 07:11:00
		6850738	11/12/2012 07:15:00
		6850741	11/12/2012 07:16:00
		6850744	11/12/2012 07:17:00
		6850747	11/12/2012 07:18:00
		6850750	11/12/2012 07:20:00
		6850753	11/12/2012 07:23:00
		6850756	11/12/2012 07:24:00
		6850759	11/12/2012 07:25:00
		6850764	11/12/2012 07:27:00
		6850737D	11/12/2012 07:13:00
		6850737R	11/12/2012 07:14:00
Amenable Cyanide (solid)	12314103201B	6850765 U	11/12/2012 07:28:00
		6850770	11/12/2012 07:31:00
		6850771	11/12/2012 07:32:00
		6850765D DUP	11/12/2012 07:29:00
		6850765R MS	11/12/2012 07:30:00
Total Cyanide (solid)	12313102201A	P31302AB	11/09/2012 07:28:00
		P31302AQ	11/09/2012 07:27:00
		6850737 U	11/09/2012 07:29:00
		6850738	11/09/2012 07:33:00
		6850741	11/09/2012 07:34:00
		6850744	11/09/2012 07:35:00
		6850747	11/09/2012 07:36:00
		6850750	11/09/2012 07:40:00
		6850753	11/09/2012 07:41:00
		6850756	11/09/2012 07:42:00
		6850759	11/09/2012 07:43:00
		6850764	11/09/2012 07:44:00
		6850737D DUP	11/09/2012 07:30:00
		6850737R MS	11/09/2012 07:31:00
Total Cyanide (solid)	12313102201B	6850765 U	11/09/2012 07:45:00
		6850770	11/09/2012 07:49:00
		6850771	11/09/2012 07:50:00
		6850765D DUP	11/09/2012 07:47:00
		6850765R MS	11/09/2012 07:48:00

Fraction: Instrumental Wet Chemistry

12313102201A / P31302AB Parameter	ME	Analysis Date	Blank Results	Units	MDL	LOQ
Total Cyanide (solid)	AK	11/09/12	N.D.	mg/kg	0.18	0.50

12314103201A / P31403AB Parameter	ME	Analysis Date	Blank Results	Units	MDL	LOQ
Amenable Cyanide (solid)	AK	11/12/12	N.D.	mg/kg	0.18	0.50

Instrumental Water Quality

Fraction: Instrumental Wet Chemistry

UNSPK: 6850737U MS: 6850737R	Batch: **12313102201A** (Sample number(s): 6850737-6850738, 6850741, 6850744, 6850747, 6850750, 6850753, 6850756, 6850759, 6850764)									
Parameter	**ME**	**Spike Added mg/kg**	**Unspiked Conc mg/kg**	**MS Conc mg/kg**	**MSD Conc mg/kg**	**MS %Rec**	**MSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Total Cyanide (solid)	AK	4.83	N.D.	5.13	NA	106	NA	68-134	NA	NA

UNSPK: 6850765U MS: 6850765R	Batch: **12313102201B** (Sample number(s): 6850765, 6850770-6850771)									
Parameter	**ME**	**Spike Added mg/kg**	**Unspiked Conc mg/kg**	**MS Conc mg/kg**	**MSD Conc mg/kg**	**MS %Rec**	**MSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Total Cyanide (solid)	AK	4.95	N.D.	5.	NA	101	NA	68-134	NA	NA

UNSPK: 6850737U MS: 6850737R	Batch: **12314103201A** (Sample number(s): 6850737-6850738, 6850741, 6850744, 6850747, 6850750, 6850753, 6850756, 6850759, 6850764)									
Parameter	**ME**	**Spike Added mg/kg**	**Unspiked Conc mg/kg**	**MS Conc mg/kg**	**MSD Conc mg/kg**	**MS %Rec**	**MSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Amenable Cyanide (solid)	AK	4.81	N.D.	N.D.	NA	0	NA	-20-20	NA	NA

UNSPK: 6850765U MS: 6850765R	Batch: **12314103201B** (Sample number(s): 6850765, 6850770-6850771)									
Parameter	**ME**	**Spike Added mg/kg**	**Unspiked Conc mg/kg**	**MS Conc mg/kg**	**MSD Conc mg/kg**	**MS %Rec**	**MSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Amenable Cyanide (solid)	AK	4.88	N.D.	N.D.	NA	0	NA	-20-20	NA	NA

Comments:
(2) The unspiked sample result is greater than four times the spike added.
* = Out of Specification

Results are being reported on an as received basis.

Instrumental Water Quality

Fraction: Instrumental Wet Chemistry

BKG: 6850737U DUP: 6850737D	Batch: **12313102201A** (Sample number(s): 6850737-6850738, 6850741, 6850744, 6850747, 6850750, 6850753, 6850756, 6850759, 6850764)				
Parameter	**ME**	**Unspiked Conc mg/kg**	**DUP Conc mg/kg**	**%RPD**	**%RPD Limits**
Total Cyanide (solid)	AK	N.D.	N.D.	0 (1)	20

BKG: 6850765U DUP: 6850765D	Batch: **12313102201B** (Sample number(s): 6850765, 6850770-6850771)				
Parameter	**ME**	**Unspiked Conc mg/kg**	**DUP Conc mg/kg**	**%RPD**	**%RPD Limits**
Total Cyanide (solid)	AK	N.D.	N.D.	0 (1)	20

BKG: 6850737U DUP: 6850737D	Batch: **12314103201A** (Sample number(s): 6850737-6850738, 6850741, 6850744, 6850747, 6850750, 6850753, 6850756, 6850759, 6850764)				
Parameter	**ME**	**Unspiked Conc mg/kg**	**DUP Conc mg/kg**	**%RPD**	**%RPD Limits**
Amenable Cyanide (solid)	AK	N.D.	N.D.	0 (1)	20

BKG: 6850765U DUP: 6850765D	Batch: **12314103201B** (Sample number(s): 6850765, 6850770-6850771)				
Parameter	**ME**	**Unspiked Conc mg/kg**	**DUP Conc mg/kg**	**%RPD**	**%RPD Limits**
Amenable Cyanide (solid)	AK	N.D.	N.D.	0 (1)	20

Comments:
(1) The sample and/or duplicate result is less than five times the LOQ.
* = Out of Specification

Results are being reported on an as received basis.

Instrumental Water Quality

Fraction: Instrumental Wet Chemistry

LCS: P31302AQ	Batch: **12313102201A** (Sample number(s): 6850737-6850738, 6850741, 6850744, 6850747, 6850750, 6850753, 6850756, 6850759, 6850764) Batch: **12313102201B** (Sample number(s): 6850765, 6850770-6850771)								
Parameter	**ME**	**Spike Added mg/kg**	**LCS Conc mg/kg**	**LCSD Conc mg/kg**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Total Cyanide (solid)	AK	10	10.12	NA	101	NA	90-110	NA	NA

LCS: P31403AQ	Batch: **12314103201A** (Sample number(s): 6850737-6850738, 6850741, 6850744, 6850747, 6850750, 6850753, 6850756, 6850759, 6850764) Batch: **12314103201B** (Sample number(s): 6850765, 6850770-6850771)								
Parameter	**ME**	**Spike Added mg/kg**	**LCS Conc mg/kg**	**LCSD Conc mg/kg**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Amenable Cyanide (solid)	AK	10	N.D	NA	0	NA	-20-20	NA	NA

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Quality Control Summary
Initial And Continuing Calibration
Instrumental Analysis/TCN

SDG: TAP03

Instrument ID: 09106
Calibration Date: 11/09/2012

Analysis	AUTO CAL1	AUTO CAL2	AUTO CAL3	AUTO CAL4	AUTO CAL5	AUTO CAL6	CC
Total Cyanide	0.4057	0.4691	0.6410	1.0331	1.7289	2.7896	0.9998

Acceptance Range:
ICV/CCV: +/- 10%
ICB/CCB: < MDL

Concentration units: mg/L

Batch Numbers: 12313102201A, 12313102201B
Run Start Dates: 11/09/2012
Run Names: 1231401C02

	Total Cyanide		
Sample	True	Result	%Rec
ICV	0.15	0.15980	107
ICB	0	ND	NA
CCV2	0.15	0.15190	101
CCB 1	0	ND	NA
CCV2	0.15	0.16320	109
CCB 2	0	ND	NA
CCV2	0.15	0.15500	103
CCB 3	0	ND	NA

* = Out of Specifications

Instrument ID: 09106
Calibration Date: 11/12/2012

Analysis	AUTO CAL1	AUTO CAL2	AUTO CAL3	AUTO CAL4	AUTO CAL5	AUTO CAL6	CC
Amenable Cyanide	0.4047	0.4752	0.6800	1.0606	1.7588	2.7826	0.9999

Acceptance Range:
ICV/CCV: +/- 10%
ICB/CCB: < MDL

Concentration units: mg/L

Batch Numbers: 12314103201A, 12314103201B
Run Start Dates: 11/12/2012
Run Names: 1231701C02

	Amenable Cyanide		
Sample	True	Result	%Rec
ICV	0.15	0.15150	101
ICB	0	ND	NA
CCV2	0.15	0.15300	102
CCB 1	0	ND	NA
CCV2	0.15	0.15180	101
CCB 2	0	ND	NA

* = Out of Specifications

Raw Data

Instrumental Wet Chemistry

Fraction: Instrumental Wet Chemistry

05898: Amenable Cyanide (solid) Analyte Name	Default MDL	Default LOQ	Units
Amenable Cyanide (solid)	0.18	0.50	mg/kg

05895: Total Cyanide (solid) Analyte Name	Default MDL	Default LOQ	Units
Total Cyanide (solid)	0.18	0.50	mg/kg

Instrumental Water Quality Report

Analyte: Total Cyanide
Run Start Date/Time: 11/9/2012 6:56:59AM
Instrument Name: 09106

Calibration Information

Curve Information Location:
Book # 159875
Page # 13

Sample Names	Volts	Detected Result	True Result
S1	0.4057	0.01210	0.01
S2	0.4691	0.02110	0.02
S3	0.6410	0.04550	0.05
S4	1.0331	0.10110	0.1
S5	1.7289	0.19980	0.2
S6	2.7896	0.35030	0.35

Number of Calibrants: 6

Correlation Coefficient: 0.99984
Y-Intercept: -0.01420
Slope: 7.05020

QC Information

QC Names	Units	True Values	QC Ranges
ICV	mg/L	0.15	0.13 - 0.17
ICB/CCB	mg/L	0	0 - 0.01
CCV2	mg/L	0.15	0.13 - 0.17
PB Soils	mg/kg	0	0 - 0.01
PB Waters	mg/L	0	0 - 0.01
LCS Waters	mg/L	0.2	0.16 - 0.24
LCS Waters	mg/L	0.2	0.18 - 0.22
LCS Soils	mg/kg	10	8 - 12
LCS Soils	mg/kg	10	8.95 - 11.04

Analyst: KAC5 #290 Date: 11/9/12

Verifier: [signature] Date: 11/9/12

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
SYNC	1			11/9/2012 6:56:59AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.34740		2.7699	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
RINSE	2			11/9/2012 6:58:08AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.00280		0.3397	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
SBLANK0	3			11/9/2012 6:59:18AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.00200	0.100	0.3346	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
S1	4			11/9/2012 7:00:28AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.01210	0.605	0.4057	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
S2	5			11/9/2012 7:01:38AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.02110	1.055	0.4691	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
S3	6			11/9/2012 7:02:48AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.04550	2.275	0.6410	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
S4	7			11/9/2012 7:03:58AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.10110	5.055	1.0331	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
S5	8			11/9/2012 7:05:08AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.19980	9.990	1.7289	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
S6	9			11/9/2012 7:06:18AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.35030	17.515	2.7896	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
RINSE	10			11/9/2012 7:07:28AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.00300		0.3413	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
W	11			11/9/2012 7:08:38AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.00200	0.100	0.3341	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
ICV	12			11/9/2012 7:09:48AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	%Rec	Verified
0.15980		1.4456	1.0000	50.0	1	107	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
ICB	13			11/9/2012 7:10:57AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.00200	0.100	0.3320	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
LCS	14	Q	12313117101A	11/9/2012 7:12:07AM		SCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	%Rec	SPK	Verified
0.21490	0.215	1.8309	50.0000	50.0	1	107	0.2	☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
PB	15	B	12313117101A	11/9/2012 7:13:17AM		SCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
-0.00010	0.000	0.3130	50.0000	50.0	1	☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6844682	16		12313117101A	11/9/2012 7:14:27AM	DWP13	SCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
-0.00040	0.000	0.3086	50.0000	50.0	1	☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6844683	17	U	12313117101A	11/9/2012 7:15:37AM	DWP13	SCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
0.00060	0.001	0.3138	50.0000	50.0	1

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6844683	18	D	12313117101A	11/9/2012 7:16:47AM		SCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	RPD
0.00070	0.001	0.3129	50.0000	50.0	1	15

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6844683	19	R	12313117101A	11/9/2012 7:17:57AM		SCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	%Rec	SPK
0.22120	0.221	1.8653	50.0000	50.0	1	111	0.2

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6844684	20		12313117101A	11/9/2012 7:19:07AM	DWP13	SCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
0.00130	0.001	0.3130	50.0000	50.0	1

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6844685	21		12313117101A	11/9/2012 7:20:17AM	DWP13	SCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
0.00140	0.001	0.3117	50.0000	50.0	1

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6844686	22		12313117101A	11/9/2012 7:21:27AM	DWP13	SCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
0.00090	0.001	0.3066	50.0000	50.0	1

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6844687	23		12313117101A	11/9/2012 7:22:37AM	DWP13	SCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
0.00120	0.001	0.3065	50.0000	50.0	1

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
CCV2	24			11/9/2012 7:23:46AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	%Rec
0.15190		1.3667	1.0000	50.0	1	101

Verified ☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
CCB 1	25			11/9/2012 7:24:56AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
0.00200	0.100	0.3083	1.0000	50.0	1

Verified ☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6844688	26		12313117101A	11/9/2012 7:26:06AM	DWP13	SCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
0.00180	0.002	0.3066	50.0000	50.0	1

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
LCS	27	Q	12313102201A	11/9/2012 7:27:16AM		TCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	%Rec	SPK
0.20230	10.115	1.7201	1.0000	50.0	1	101	10

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
PB	28	B	12313102201A	11/9/2012 7:28:26AM		TCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
0.00230	0.058	0.3104	2.0000	50.0	1

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850737	29	U	12313102201A	11/9/2012 7:29:36AM	TAP03	TCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
0.00220	0.055	0.3097	2.0000	50.0	1

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850737	30	D	12313102201A	11/9/2012 7:30:46AM		TCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	RPD
0.00210	0.052	0.3089	2.0100	50.0	1	5

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850737	31	R	12313102201A	11/9/2012 7:31:56AM		TCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	%Rec	SPK
0.21250	5.133	1.7924	2.0700	50.0	1	106	4.83

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850738	32		12313102201A	11/9/2012 7:33:06AM	TAP03	TCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
0.00260	0.065	0.3123	2.0100	50.0	1

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850741	33		12313102201A	11/9/2012 7:34:16AM	TAP03	TCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
0.00200	0.047	0.3086	2.1200	50.0	1

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850744	34		12313102201A	11/9/2012 7:35:25AM	TAP03	TCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
0.00210	0.052	0.3092	2.0100	50.0	1

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850747	35		12313102201A	11/9/2012 7:36:35AM	TAP03	TCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
0.00200	0.049	0.3086	2.0400	50.0	1

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
CCV2	36			11/9/2012 7:37:45AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	%Rec
0.16320		1.4451	1.0000	50.0	1	109

Verified ☑

(IS) ↓

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
CCB 2	37			11/9/2012 7:38:55AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
0.00200	0.100	0.3086	1.0000	50.0	1

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850750	38		12313102201A	11/9/2012 7:40:05AM	TAP03	TCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
0.00200	0.048	0.3088	2.0900	50.0	1

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850753	39		12313102201A	11/9/2012 7:41:15AM	TAP03	TCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
0.00200	0.047	0.3083	2.1300	50.0	1

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850756	40		12313102201A	11/9/2012 7:42:25AM	TAP03	TCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
0.00190	0.045	0.3074	2.1100	50.0	1

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850759	41		12313102201A	11/9/2012 7:43:35AM	TAP03	TCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.00640	0.159	0.3396	2.0100	50.0	1	☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850764	42		12313102201A	11/9/2012 7:44:45AM	TAP03	TCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.00590	0.147	0.3355	2.0100	50.0	1	☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850765	43	U	12313102201B	11/9/2012 7:45:55AM	TAP03	TCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.00570	0.137	0.3346	2.0800	50.0	1	☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850765	44	D	12313102201B	11/9/2012 7:47:04AM		TCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	RPD	Verified
0.00550	0.129	0.3327	2.1300	50.0	1	4	☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850765	45	R	12313102201B	11/9/2012 7:48:14AM		TCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	%Rec	SPK	Verified
0.20180	4.995	1.7164	2.0200	50.0	1	101	4.95	☑

(IS)

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850770	46		12313102201B	11/9/2012 7:49:24AM	TAP03	TCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.00800	0.195	0.3504	2.0500	50.0	1	☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850771	47		12313102201B	11/9/2012 7:50:34AM	TAP03	TCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.00580	0.144	0.3349	2.0200	50.0	1	☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
CCV2	48			11/9/2012 7:51:44AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	%Rec	Verified
0.15500		1.3862	1.0000	50.0	1	103	☐

(CCV)

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
CCB 3	49			11/9/2012 7:52:54AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.00200	0.100	0.3080	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
PAUSE	50			11/9/2012 7:54:04AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.00070		0.3045	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
SYNC	51			11/9/2012 9:28:00AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.36050		2.8637	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
RINSE	52			11/9/2012 9:33:09AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.00380		0.3548	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
W	53			11/9/2012 9:34:19AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.00200	0.100	0.3484	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
CCV2	54			11/9/2012 9:35:29AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	%Rec	Verified
0.15500		1.4283	1.0000	50.0	1	103	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
CCB 4	55			11/9/2012 9:36:39AM		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.00200	0.100	0.3512	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
LCS	56	Q	12314102101A	11/9/2012 9:37:49AM		TCN

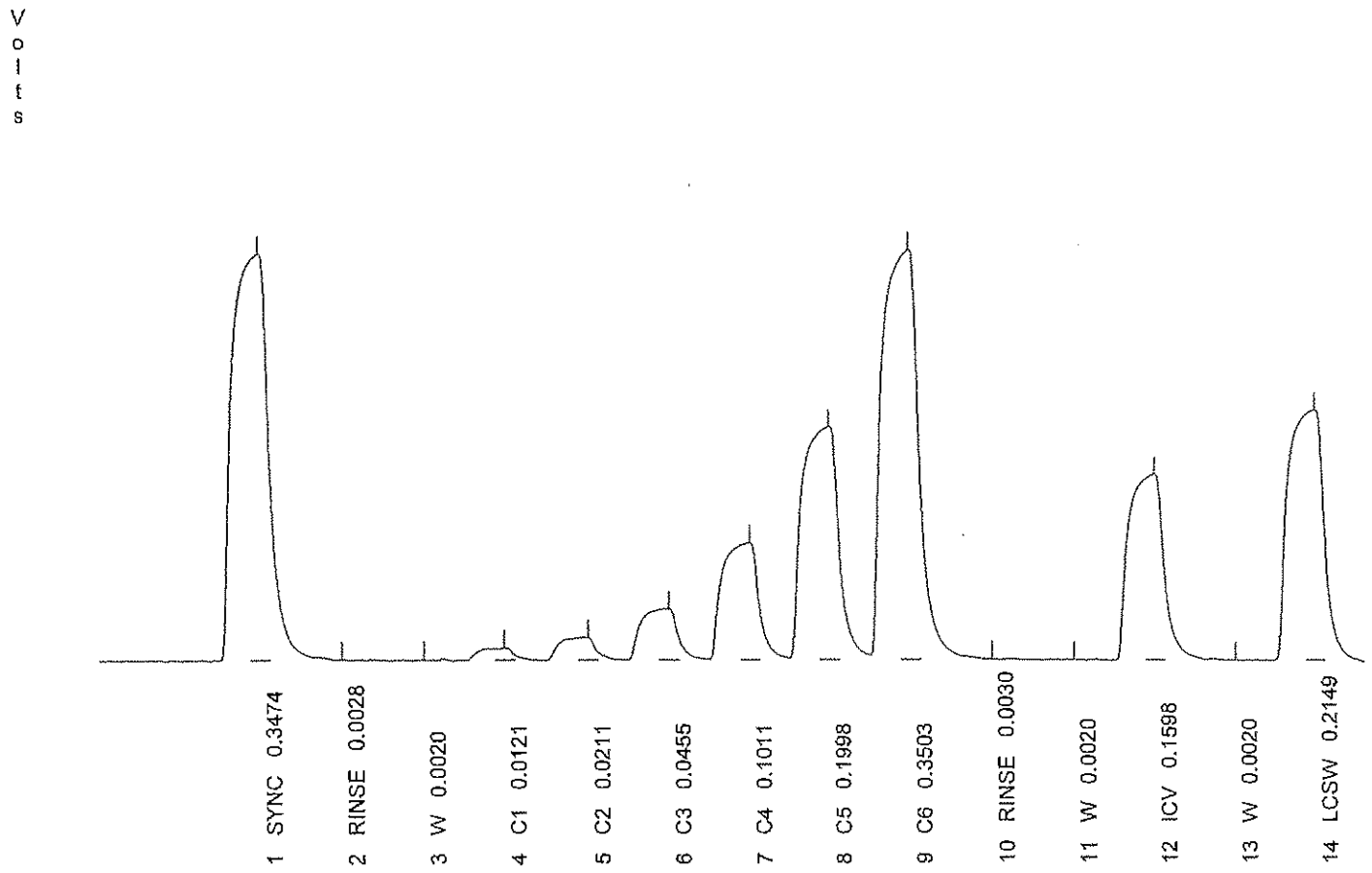
Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	%Rec	SPK	Verified
0.00180	0.002	0.3506	50.0000	50.0	1	1	0.2	☐

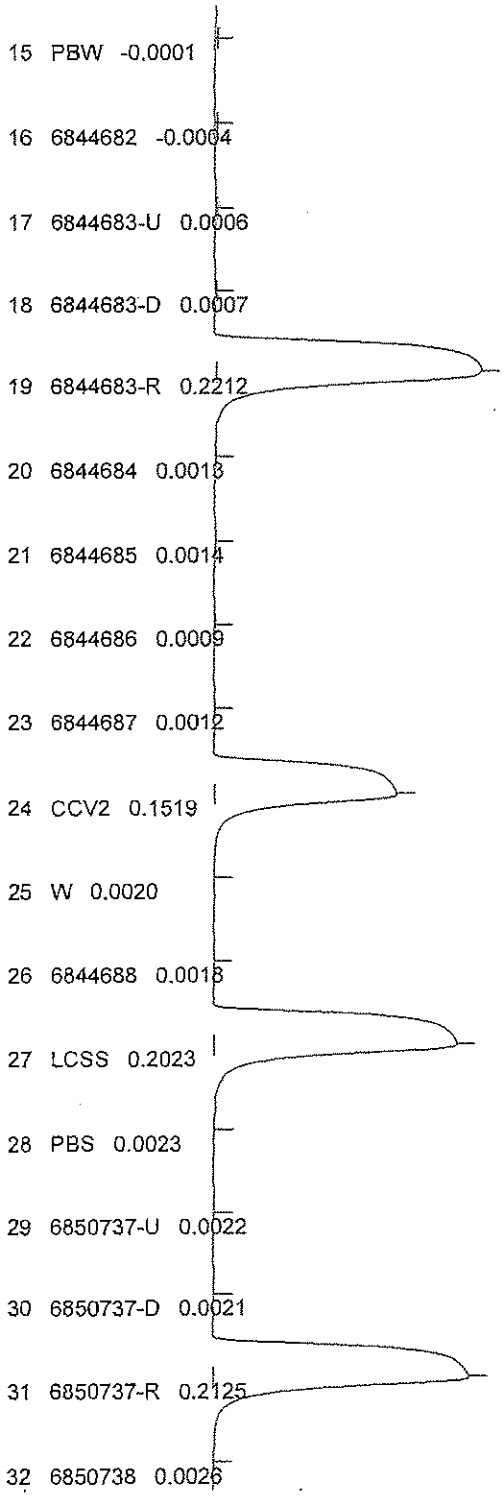
Comments: Analyst Decision

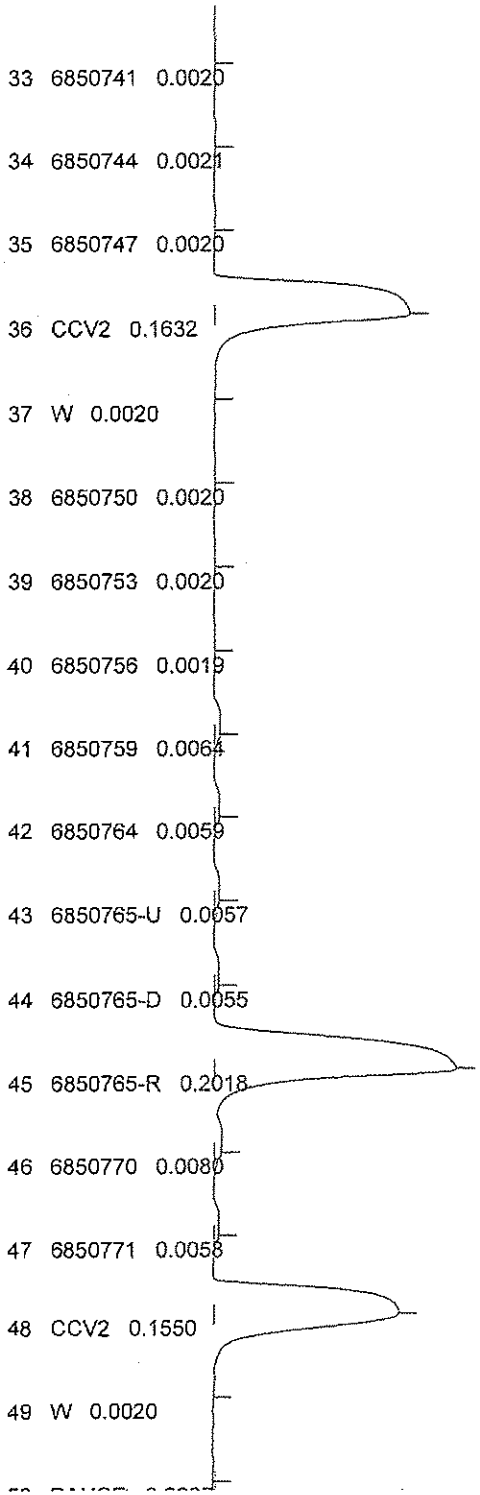
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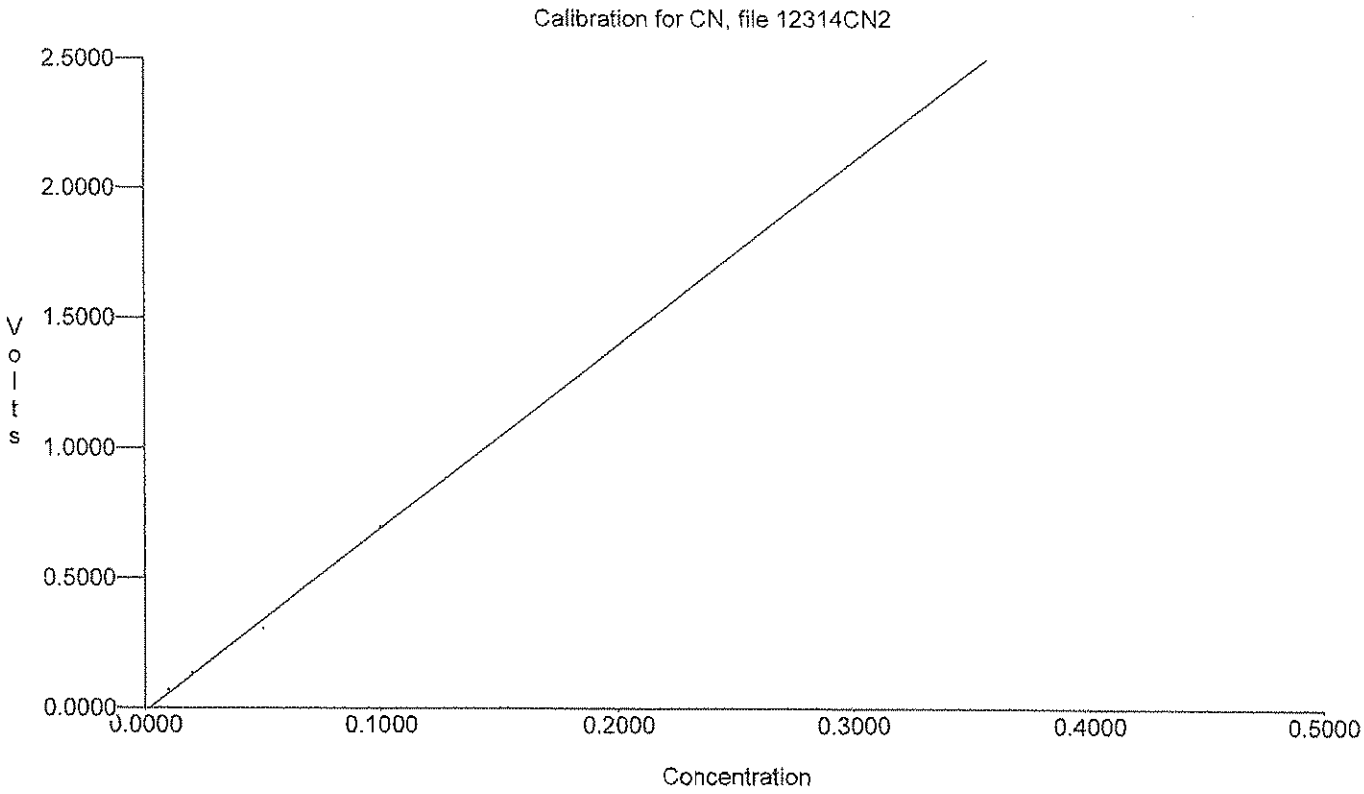
70

C:\FASPAC\12314CN2.ACF System 1 Channel 1 [CN]




15 PBW -0.0001
16 6844682 -0.0004
17 6844683-U 0.0006
18 6844683-D 0.0007
19 6844683-R 0.2212
20 6844684 0.0013
21 6844685 0.0014
22 6844686 0.0009
23 6844687 0.0012
24 CCV2 0.1519
25 W 0.0020
26 6844688 0.0013
27 LCSS 0.2023
28 PBS 0.0023
29 6850737-U 0.0022
30 6850737-D 0.0021
31 6850737-R 0.2125
32 6850738 0.0026


33 6850741 0.0020
34 6850744 0.0021
35 6850747 0.0020
36 CCV2 0.1632
37 W 0.0020
38 6850750 0.0020
39 6850753 0.0020
40 6850756 0.0019
41 6850759 0.0064
42 6850764 0.0059
43 6850765-U 0.0057
44 6850765-D 0.0055
45 6850765-R 0.2018
46 6850770 0.0080
47 6850771 0.0058
48 CCV2 0.1550
49 W 0.0020



1st Order Y=BX+A
B=7.0502 A=-0.0142
Correlation=0.999842

Instrumental Water Quality Report

Analyte: Amenable Cyanide
Run Start Date/Time: 11/12/2012 6:54:28AM
Instrument Name: 09106

Calibration Information

Curve Information Location:
Book # 159875
Page # 14

Sample Names	Volts	Detected Result	True Result
S1	0.4047	0.00920	0.01
S2	0.4752	0.01920	0.02
S3	0.6800	0.04840	0.05
S4	1.0606	0.10270	0.1
S5	1.7588	0.20230	0.2
S6	2.7826	0.34820	0.35

Number of Calibrants: 6

Correlation Coefficient: 0.99989
Y-Intercept: 0.01080
Slope: 7.01220

QC Information

QC Names	Units	True Values	QC Ranges
ICV	mg/L	0.15	0.13 - 0.17
ICB/CCB	mg/L	0	0 - 0.02
CCV2	mg/L	0.15	0.13 - 0.17
PB Soils	mg/kg	0	0 - 0.18
LCS Soils	mg/kg	10	-2 - 2
LCS Soils	mg/kg	1000	765 - 1,134

Analyst: KAC-5 #240 Date: 11/12/12

Verifier: [signature] Date: 11/12/12

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
SYNC	1			11/12/2012 6:54:28A		WCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.33420		2.6837	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
RINSE	2			11/12/2012 6:55:37A		WAD

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
-0.00060		0.3361	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
SBLANK0	3			11/12/2012 6:56:48A		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
-0.00150	-0.075	0.3295	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
S1	4			11/12/2012 6:57:57A		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.00920	0.460	0.4047	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
S2	5			11/12/2012 6:59:07A		WCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.01920	0.960	0.4752	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
S3	6			11/12/2012 7:00:17A		TCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.04840	2.420	0.6800	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
S4	7			11/12/2012 7:01:27A		WAD

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.10270	5.135	1.0606	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
S5	8			11/12/2012 7:02:37A		SCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.20230	10.115	1.7588	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
S6	9			11/12/2012 7:03:47A		RCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
0.34820	17.410	2.7826	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
RINSE	10			11/12/2012 7:04:57A		FCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
-0.00070		0.3358	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
W	11			11/12/2012 7:06:07A		RCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
-0.00150	-0.075	0.3300	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
ICV	12			11/12/2012 7:07:16A		WCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	%Rec	Verified
0.15150		1.4036	1.0000	50.0	1	101	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
ICB	13			11/12/2012 7:08:26A		TCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
-0.00150	-0.075	0.3313	1.0000	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
LCS	14	Q	12314103201A	11/12/2012 7:09:36A		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	%Rec	SPK	Verified
-0.00170	-0.085	0.3297	1.0000	50.0	1	-1	10	☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
PB	15	B	12314103201A	11/12/2012 7:10:46A		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
-0.00190	-0.048	0.3285	2.0000	50.0	1	☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850737	16	U	12314103201A	11/12/2012 7:11:56A	TAP03	ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
-0.00150	-0.036	0.3309	2.0900	50.0	1	☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850737	17	D	12314103201A	11/12/2012 7:13:06A		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	RPD	Verified
-0.00140	-0.035	0.3313	2.0100	50.0	1	0	☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850737	18	R	12314103201A	11/12/2012 7:14:16A		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	%Rec	SPK	Verified
-0.00190	-0.046	0.3277	2.0800	50.0	1	-1 (JA)	4.81	☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850738	19		12314103201A	11/12/2012 7:15:26A	TAP03	ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
-0.00120	-0.029	0.3321	2.0600	50.0	1	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850741	20		12314103201A	11/12/2012 7:16:36A	TAP03	ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
-0.00170	-0.041	0.3286	2.0500	50.0	1	☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850744	21		12314103201A	11/12/2012 7:17:46A	TAP03	ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
-0.00160	-0.039	0.3292	2.0500	50.0	1	☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850747	22		12314103201A	11/12/2012 7:18:56A	TAP03	ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
-0.00160	-0.040	0.3291	2.0200	50.0	1	☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850750	23		12314103201A	11/12/2012 7:20:05A	TAP03	ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	Verified
-0.00150	-0.037	0.3297	2.0400	50.0	1	☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
CCV2	24			11/12/2012 7:21:15A		WAD

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	%Rec	Verified
0.15300		1.4121	1.0000	50.0	1	102 (JA)	☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
CCB 1	25			11/12/2012 7:22:25A		FCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
-0.00150	-0.075	0.3286	1.0000	50.0	1

Verified ☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850753	26		12314103201A	11/12/2012 7:23:35A	TAP03	ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
-0.00120	-0.030	0.3312	2.0300	50.0	1

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850756	27		12314103201A	11/12/2012 7:24:45A	TAP03	ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
-0.00140	-0.034	0.3300	2.0300	50.0	1

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850759	28		12314103201A	11/12/2012 7:25:55A	TAP03	ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
0.00290	0.069	0.3603	2.1000	50.0	1

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850764	29		12314103201A	11/12/2012 7:27:05A	TAP03	ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
0.00830	0.201	0.3980	2.0600	50.0	1

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850765	30	U	12314103201B	11/12/2012 7:28:15A	TAP03	ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
0.00400	0.097	0.3681	2.0700	50.0	1

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850765	31	D	12314103201B	11/12/2012 7:29:25A		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	RPD
0.00450	0.113	0.3715	2.0000	50.0	1	12

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850765	32	R	12314103201B	11/12/2012 7:30:35A		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	%Rec	SPK
0.00290	0.071	0.3603	2.0500	50.0	1	1	4.88

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850770	33		12314103201B	11/12/2012 7:31:44A	TAP03	ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
0.00510	0.121	0.3761	2.1000	50.0	1

Verified ☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6850771	34		12314103201B	11/12/2012 7:32:54A	TAP03	ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
0.00380	0.092	0.3672	2.0600	50.0	1

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
CCV2	35			11/12/2012 7:34:04A		ACN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	%Rec
0.15180		1.4054	1.0000	50.0	1	101

(1)

Verified ☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
CCB 2	36			11/12/2012 7:35:14A		WCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
-0.00150	-0.075	0.3301	1.0000	50.0	1

Verified ☐

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
PB	37	B	12317104201A	11/12/2012 7:36:24A		RCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
-0.00210	-0.105	0.3263	10.0000	500.0	1

Verified ☑

Comments:

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
LCS	38	Q	12317104201A	11/12/2012 7:37:34A		RCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	SPK
0.14663	953.095	1.3691	10.0000	260.0	250	1000

(2)

Verified ☐

Comments: Analyst Decision or failed QC Review

Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
LCS	39	Q	12317104201A	11/12/2012 7:38:44A		RCN

Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF	%Rec	SPK
0.06035	30.175	0.7642	10.0000	500.0	10	98	1000

(3)

Verified ☑

Comments:

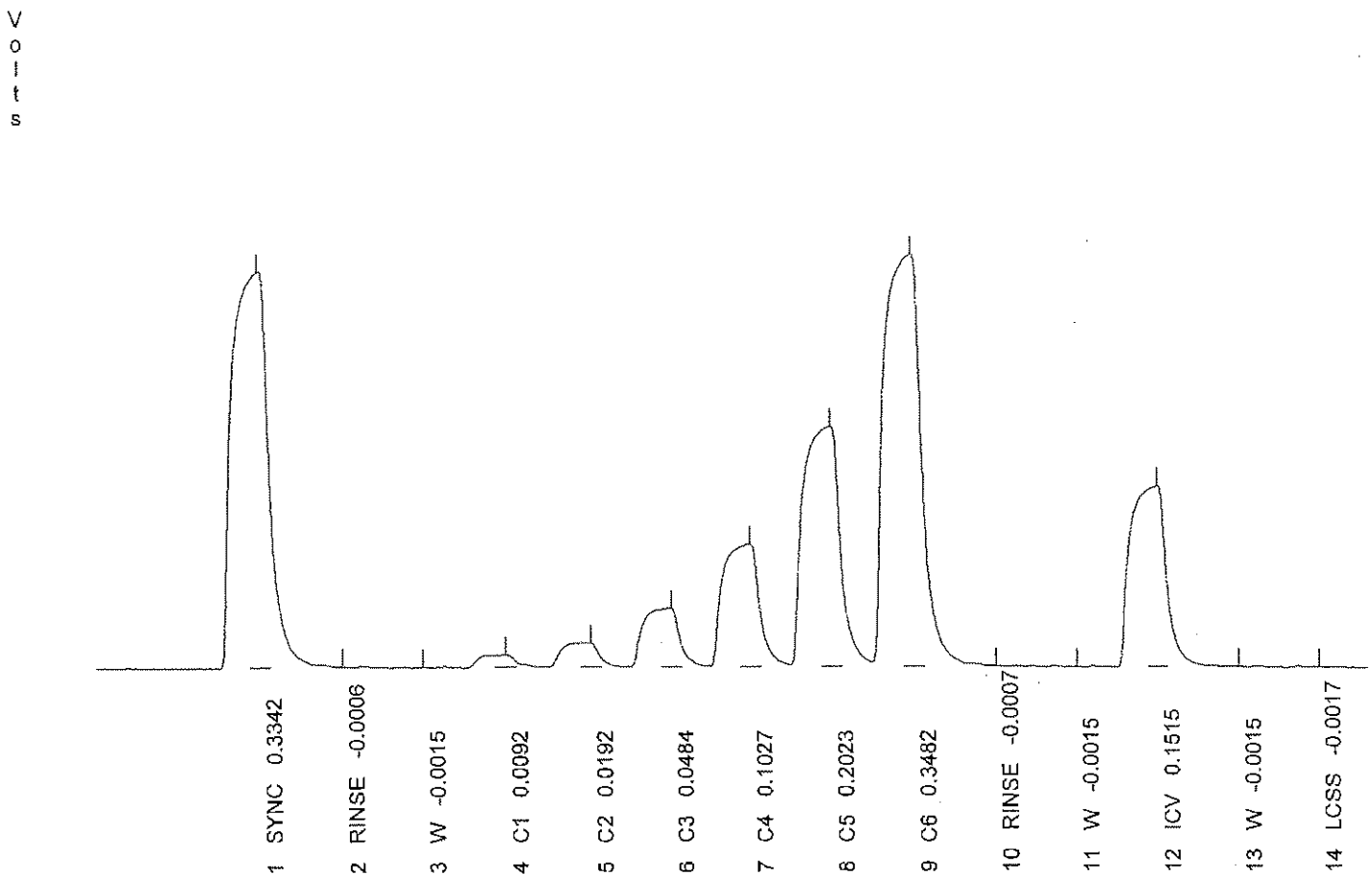
Sample	Cup	QC?	Batch Number	Analysis Date/Time	SDG	Analyte
6849395	40		12317104201A	11/12/2012 7:39:54A		RCN

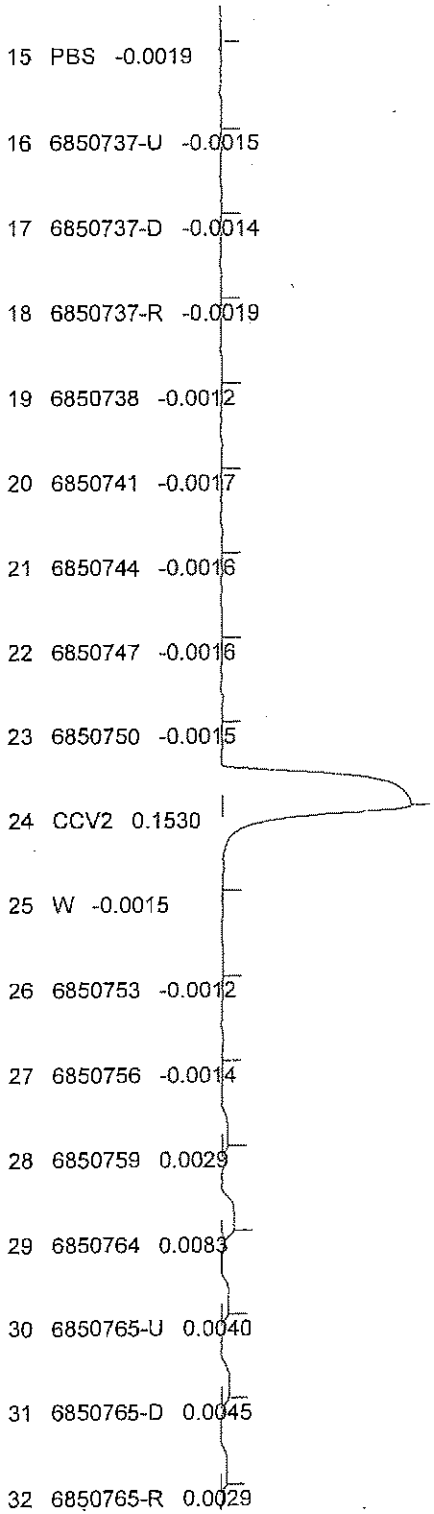
Raw Result	Calc Result	Volts	Init Vol	Fin Vol	DF
-0.00180	-0.090	0.3285	10.0400	500.0	1

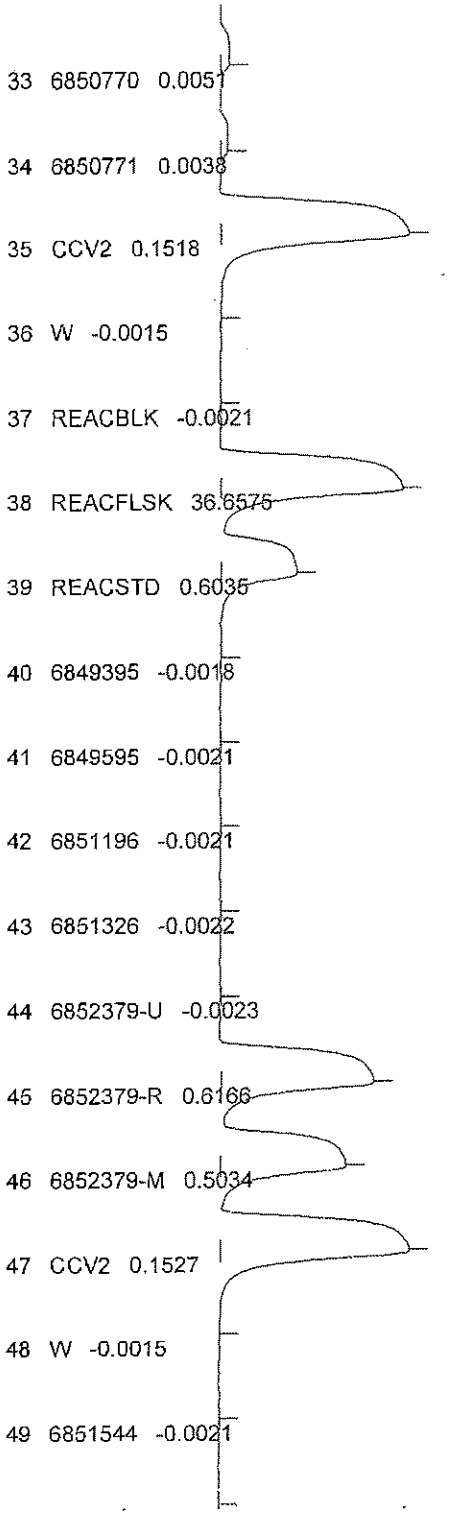
Verified ☑

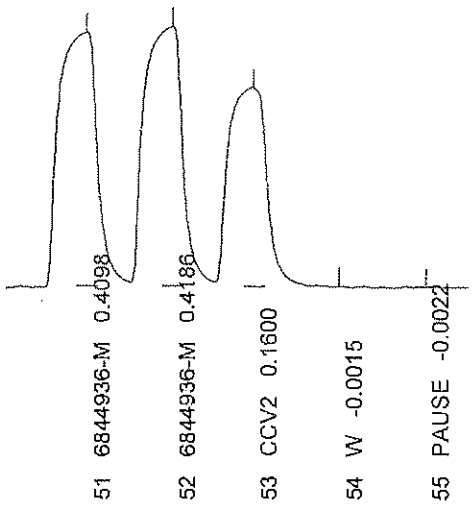
Comments:

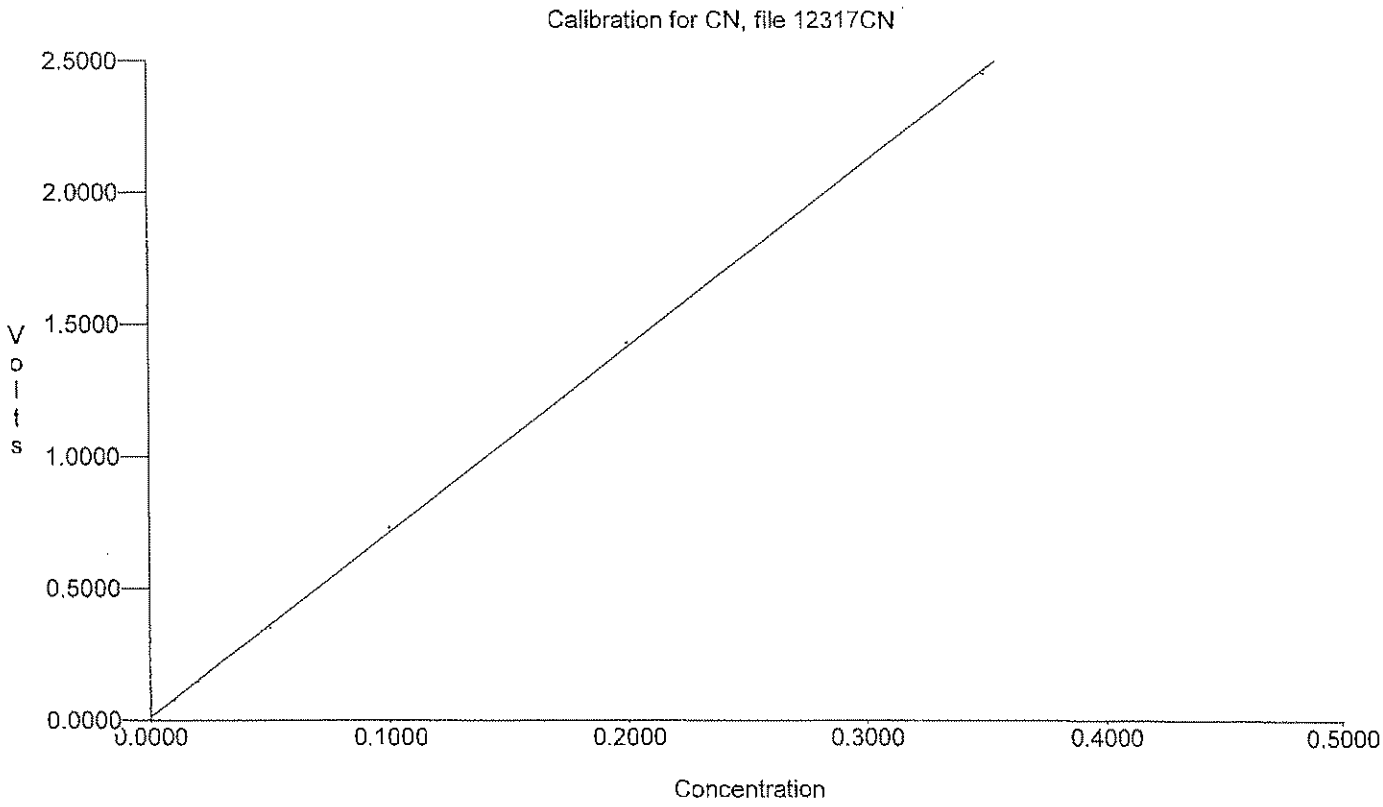
C:\FASPAC\12317CN.ACF System 1 Channel 1 [CN]




15 PBS -0.0019
16 6850737-U -0.0015
17 6850737-D -0.0014
18 6850737-R -0.0019
19 6850738 -0.0012
20 6850741 -0.0017
21 6850744 -0.0016
22 6850747 -0.0016
23 6850750 -0.0015
24 CCV2 0.1530
25 W -0.0015
26 6850753 -0.0012
27 6850756 -0.0014
28 6850759 0.0029
29 6850764 0.0083
30 6850765-U 0.0040
31 6850765-D 0.0045
32 6850765-R 0.0029


33 6850770 0.0051
34 6850771 0.0038
35 CCV2 0.1518
36 W -0.0015
37 REACBLK -0.0021
38 REACFLSK 36.6575
39 REACSTD 0.6035
40 6849395 -0.0018
41 6849595 -0.0021
42 6851196 -0.0021
43 6851326 -0.0022
44 6852379-U -0.0023
45 6852379-R 0.6166
46 6852379-M 0.5034
47 CCV2 0.1527
48 W -0.0015
49 6851544 -0.0021


51 6844936-M 0.4098
52 6844936-M 0.4186
53 CCV2 0.1600
54 W -0.0015
55 PAUSE -0.0022



1st Order Y=BX+A
B=7.0122A=0.0108
Correlation=0.999890

Extraction/Distillation/Digestion Logs

Instrumental Wet Chemistry

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Raw Data Logbook
Amenable Cyanide Distillations
Analysis #1548, 5897

(3) NJS 11-8-12

Batch No. | 1 | 2 | 3 | 1 | 4 | | 1 | 0 | 3 | | ~~2~~ 2 | 0 | 1 | |

Analysis: 5897 Date: 11-9-12 Analyst: NJS 12a

Std. Ref.: 151342 p.51 l. 3-4 Time: 0940 1125 1140

Bottle Code	Sample Number	Initial Volume (mL)	Initial Weight (g)	Comments/True Values	SDG
	LCSS		1.00	+.5ml 20 mg/L KCN	
	PBS		2.00		
36A	6850737 (4)		2.09	A	TAP03
	6850737 (D)		2.01		
	6850737 (M)		2.08	+.5ml 20 mg/L KCN	
	6850738		2.06		
	6850741		2.05		
	6850744		2.05		
	6850747		2.02		
	6850750		2.04		
	6850753		2.03		
	6850756		2.03		
	6850759		2.10		
	6850764		2.06		
	6850765 (4)		2.07	B	
	6850765 (D)		2.00		
	6850765 (M)		2.05	+.5ml 20 mg/L KCN	
	6850770		2.10		
	6850771		2.06		

Please Note: Final extraction volume is 50 mL.

Verified: [signature] Date: 11.11.12

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Raw Data Logbook
Total Cyanide/Distillations
Analysis #492, 5896, 8256

Start Time: 13:45
Cool Time: 15:30
Finish: 15:45

Batch No. 123131 102 201

Enter 102 for Analysis 492, 5896
Enter 117 for Analysis 8256

Analysis: 5896 Date: 11-8-12 Analyst: [illegible]

Std. Ref. (Book/Page/Line): 151342 p-51 L-1-2

Bottle Code	Sample Number	Initial Volume (mL)	Initial Weight (g)	Comments/True Values	SDG
	LCSS		1.00	+5mL 20mg/L CN	
	PBS		2.00		
240A	16850737 M		2.00		TAP03
	D		2.01		
	R		2.07	+5mL 20mg/L CN	
	16850738		2.01		
	16850741		2.12		
	16850744		2.01		
	16850747		2.04		
	16850750		2.09		
	16850753		2.13		
	16850756		2.11		
	16850759		2.01		A
	16850764		2.01		
	16850765 M		2.08		
	D		2.13		
	R		2.02	+5mL 20mg/L CN	
	16850770		2.05		B
	16850771		2.02		

Please Note: Final extraction volume is 50 mL

Verified: [signature] Date: 11.8.12

Wet Chemistry Data

Case Narrative/Conformance Summary

Wet Chemistry

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Case Narrative/Conformance Summary

CLIENT: ExxonMobil Refining & Supply
SDG: TAP03

Water Quality

Fraction: Wet Chemistry

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
6850737	TCN-STC5		X	1	
6850738	TCN-STC6		X	1	
6850741	TCN-STC7		X	1	
6850744	TCN-STC8		X	1	
6850747	TCN-STC9		X	1	
6850750	TCN-STC10		X	1	
6850753	TCN-STC11		X	1	
6850756	TCN-STC12		X	1	
6850759	POC-TSC2		X	5	
6850764	POC-TSC3		X	5	
6850765	POC-TSC4		X	5	
6850770	POC-TSC5		X	5	
6850771	POC-TSC6		X	5	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

All QC is within specification.

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Case Narrative/Conformance Summary

CLIENT: ExxonMobil Refining & Supply
SDG: TAP03

Water Quality

Fraction: Wet Chemistry

SAMPLE ANALYSIS:

Due to the limitations of the data package software, there are no form 1's available for the Wet Chemistry data. Please refer to the analysis reports for this information.

0425
Hexavalent Chromium calculation is:

$$mg/kgCr^{+6} = (CV/W) \times DF$$

Where:

C = mg/l Cr^{+6} in digestate
V = Volume of digestate in milliliters
W = Sample weight digested in grams
DF = Dilution factor

(Sample number(s): 6850759, 6850764-6850765, 6850770-6850771: Analysis: 00425)
Reporting limits were raised due to interference from the sample matrix.

Abbreviation Key

U = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
R = Matrix Spike (MS)	MDL = Method Detection Limit
M = Matrix Spike Duplicate (MSD)	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	NA = Not Applicable
HS = High Spike	ME = Method
LS = Low Spike	CO = Colorimetric
SS = Soluble Spike	G = Gravimetric
IS = Insoluble Spike	IR = Infrared Spectrophotometry
ISD = Insoluble Spike Duplicate	MTR = Meter
PDS = Post Digestion Spike	OD = Oven Dried
* = Out of Specification	TI = Titration
V = Visual	TOC = Total Organic Carbon
AK = Alpkem	IC = Ion Chromatography
TC = Total Carbon	RA = Rapid Analyzer

QC Summary

Wet Chemistry

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Quality Control Reference List
Water Quality

CLIENT: ExxonMobil Refining & Supply
SDG: TAP03

Fraction: Wet Chemistry

Analysis	Batch Number	Sample Number	Analysis Date
Hexavalent Chromium (SOLIDS)	12313042501A	P313042B	11/10/2012 10:30:00
		P313042Q	11/10/2012 10:30:00
		LCS-IS	11/10/2012 10:30:00
		6850737	11/10/2012 10:30:00
		6850738 UNSPK/BKG,SS,IS,PDS,DUP	11/10/2012 10:30:00
		6850741	11/10/2012 10:30:00
		6850744	11/10/2012 10:30:00
		6850747	11/10/2012 10:30:00
		6850750	11/10/2012 10:30:00
		6850753	11/10/2012 10:30:00
		6850756	11/10/2012 10:30:00
		6850759	11/10/2012 10:30:00
		6850764	11/10/2012 10:30:00
		6850765	11/10/2012 10:30:00
		6850770	11/10/2012 10:30:00
		6850771	11/10/2012 10:30:00

Quality Control Summary
Method Blank
Water Quality
SDG: TAP03
Matrix: SOLID

Fraction: Wet Chemistry

12313042501A / P313042B Parameter	ME	Analysis Date	Blank Results	Units	MDL	LOQ
Hexavalent Chromium (SOLIDS)	CO	11/10/12	N.D.	mg/kg	0.50	1.5

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Quality Control Summary
Matrix Spike/Matrix Spike Duplicate

SDG: TAP03
Matrix: SOLID

Water Quality
Fraction: Wet Chemistry

Hexavalent Chromium (SOLIDS)	Batch: **12313042501A** (Sample number(s): 6850737-6850738, 6850741, 6850744, 6850747, 6850750, 6850753, 6850756, 6850759, 6850764-6850765, 6850770-6850771)									
	ME	**Spike Added mg/kg**	**Unspiked Conc mg/kg**	**MS Conc mg/kg**	**MSD Conc mg/kg**	**MS %Rec**	**MSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
UNSPK: 6850738 SS: 6850738	CO	40.3	N.D.	35.67	NA	89	NA	75-125	NA	NA
UNSPK: 6850738 IS: 6850738	CO	925	N.D.	834	NA	90	NA	75-125	NA	NA
UNSPK: 6850738 PDS: 6850738	CO	39.7	N.D.	39.9	NA	100	NA	85-115	NA	NA

Comments:
(2) The unspiked sample result is greater than four times the spike added.
* = Out of Specification

Results are being reported on an as received basis.

Water Quality
Fraction: Wet Chemistry

BKG: 6850738 DUP: 6850738	Batch: **12313042501A** (Sample number(s): 6850737-6850738, 6850741, 6850744, 6850747, 6850750, 6850753, 6850756, 6850759, 6850764-6850765, 6850770-6850771)				
Parameter	**ME**	**Unspiked Conc mg/kg**	**DUP Conc mg/kg**	**%RPD**	**%RPD Limits**
Hexavalent Chromium (SOLIDS)	CO	N.D.	N.D.	0 (1)	20

Comments:
(1) The sample and/or duplicate result is less than five times the LOQ.
* = Out of Specification

Results are being reported on an as received basis.

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Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: TAP03
Matrix: SOLID

Water Quality
Fraction: Wet Chemistry

Hexavalent Chromium (SOLIDS)	Batch: **12313042501A** (Sample number(s): 6850737-6850738, 6850741, 6850744, 6850747, 6850750, 6850753, 6850756, 6850759, 6850764-6850765, 6850770-6850771)								
	ME	**Spike Added mg/kg**	**LCS Conc mg/kg**	**LCSD Conc mg/kg**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
LCS: P313042	CO	5	4.56	NA	91	NA	80-120	NA	NA
LCS-IS	CO	733	673	NA	92	NA	85-115	NA	NA

Raw Data

Wet Chemistry

Fraction: Wet Chemistry

00425: Hexavalent Chromium (SOLIDS) Analyte Name	Default MDL	Default LOQ	Units
Hexavalent Chromium (SOLIDS)	0.50	1.5	mg/kg

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Raw Data Logbook
Hexavalent Chromium (Solids)
Analysis #0425 and #7825 (prep)

Analysis #7825
Date: _____ Digest Start: _____
Init./Emp.#: _____ Digest End: _____
Balance#: _____ Temp @ 30 min.: _____
End Temp.: _____

Analysis #0425
Date: _____ Time: _____
Init./Emp.#: _____
Inst.#: _____

c
Batch No.: [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

Curve Name: _____ $MgCl_2$ Lot # _____
Std. Ref. (Bk/pg): _____ Auto. pipette #: _____
Digest Sol'n pH = _____ 0.45µm Filter Paper Lot#: _____

Sample Number	Sample Wt. (g)	Sample pH 1st	Sample pH 2nd	Digest Vol. (mL)	Dil. on Digest	SB pH	Absorbance at 540 nm: Sample (A)	Sample Bl. (B)	Reagent Bl. (C)	Corr. Value (A-B)-C	Calc. Value (mg/kg)	LOQ (mg/kg)	Comments
Std	ml of Std		pH						ABS				
.00	0		1.88						.000				
.01	0.2		193						.009				
.05	1		184						.036				
.10	2		193						.074				CorrCoeff .999975
.20	4		190						.146				intercept .002698
.50	10		194						.359				slope .704634
1.00	20		180						.708				
1.25	25		176						.881				

Verified by: ICA 6/9 57 Date: 11/12/12

154817 35

LAP-03 Page 9940 of 9948

10 NOV 2012 09:52:24
Application: ABS/%T/CONC
Test name:
Wavelength: 540.0
High limit: 99999.000
Low limit: -99999.000

ID: 1 0.000 A .00
ID: 1 0.009 A .05
ID: 1 0.036 A .10
ID: 1 0.074 A .20
ID: 1 0.146 A .50
ID: 1 0.359 A 1.00
ID: 1 0.708 A 1.25
ID: 1 0.881 A

425 curve

855/237

11-10-12

#9322

855/2-27

11-11-12

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Raw Data Logbook
Hexavalent Chromium (Solids)
Analysis #0425 and #7825 (prep)

Analysis #7825
Date: 11-8-12
Init./Emp.#: 855/237
Balance#: 12071
Digest Start: 1940
Digest End: 2040
Temp @ 30 min.: 92°
End Temp.: 91°

Analysis #0425
Date: 11-10-12 Time: 1030
Init./Emp.#: 855/237
Inst.#: 9322

Batch No. 123130 042 501A

Curve Name: 425 - 11-10-12 9322 855/237 @ 11-12-12 $MgCl_2$ Lot # MKBG3136V

Std. Ref. (Bk/pg): ~~158~~ 159580 f Auto. pipette #: 401

Digest Sol'n pH = 13.00 0.45µm Filter Paper Lot#: F2DA 79083

Sample Number	Sample Wt. (g)	Sample pH 1st	Sample pH 2nd	Digest Vol. (mL)	Dil. on Digest	SB pH	Absorbance at 540 nm: Sample (A)	Absorbance at 540 nm: Sample Bl. (B)	Absorbance at 540 nm: Reagent Bl. (C)	Corr. Value (A-B)-C	Calc. Value (mg/kg)	LOQ (mg/kg)	Comments
Blank	2.50	7.38	194	100	1	—	—	—	.003	.003	N.D	1.5	
5mg/kg LCS	2.50	7.83	197		1	—	.086	—		.083	4.6 (25)	1.5	+2.5ml of 5g (91%)
Insoluble LCS	2.50	7.61	188		25	—	.480	—		.477	673	37.5	SA=733 mg/kg 92% +.0114 PbCrO4
6850737	2.48	7.82	176		1	190	.005	.003		.001	N.D	1.5	
6850738 BK	2.52	7.56	183		1	182	.008	.001		.007	N.D	1.5	
6850738 SS	2.48	7.34	186		1	193	.637	.008		.626	35.7 (25)	1.5	SA=40.3mg/kg 89% +2ml of 50ml
6850738 IS	2.52	7.62	194		25	184	.588	.001		.584	832	37.5	SA=925mg/kg 90% +.0145 PbCrO4
6850738 PDS	2.52	7.56	1.90		4	192	.181	.001		.177	39.4 (25)	6.0	SA=39.7mg/kg 100% +1.5ml of 50ml
6850738 Dup	2.45	7.70	1.92		1	185	.003	.003		.000	ND	1.5	
6850741	2.53	7.96	193		1	181	.004	.002		.001	ND	1.5	
6850744	2.44	7.82	182		1	195	.016	.007		.006	ND	1.5	
6850747	2.47	7.48	175		1	188	.004	.002		.001	ND	1.5	
6850750	2.46	7.51	186		1	185	.002	.003		.001	ND	1.5	
5mg/kg ccv	2.50	7.83	197		1	—	.085	—		.082	4.5 (25)	1.5	+2.5ml of 5g (90%)
prep blk	2.50	7.38	194		1	—	.003	—		.000	ND	1.5	
6850753	2.46	7.56	183		~~1~~ 5	180	.006	.020		.007	ND	1.5	
6850756	2.59	7.69	182		~~1~~ 5	176	.006	.002		.001	ND	1.5	
6850759	2.49	7.73	193		5	182	.018	.014		.004	ND	7.5	matrix

Verified by: 855/237 @ 11-11-12 KAS/957 Date: 11/12/12

HP03 Page 1642 of 2648

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Raw Data Logbook
Hexavalent Chromium (Solids)
Analysis #0425 and #7825 (prep)

Analysis #7825
Date: 11-8-12
Init./Emp.#: DSS/237
Balance#: 12071
Digest Start: 1940
Digest End: 2040
Temp @ 30 min.: 420
End Temp.: 91°

Analysis #0425
Date: 11-10-12 Time: 1030
Init./Emp.#: DSS/237
Inst.#: 9322

Batch No. 12313 042 501A

Curve Name: 425 11-10-12 9322
Std. Ref. (Bk/pg): 159580 p
Digest Sol'n pH = 13.00
$MgCl_2$ Lot # MKBC3136V
Auto. pipette #: 401
0.45µm Filter Paper Lot#: F2DA 79083

Sample Number	Sample Wt. (g)	Sample pH 1st	Sample pH 2nd	Digest Vol. (mL)	Dil. on Digest	SB pH	Absorbance at 540 nm: Sample (A)	Absorbance at 540 nm: Sample Bl. (B)	Absorbance at 540 nm: Reagent Bl. (C)	Corr. Value (A-B)-C	Calc. Value (mg/kg)	LOQ (mg/kg)	Comments
6850764	2.50	7.53	1.90	100	5	1.90	.020	.016	.003	.001	ND	7.5	matrix
6850765	2.43	7.90	1.76		5	1.88	.012	.011		-.002	ND	7.5	matrix
6850770	2.45	7.54	1.83		5	1.76	~~.013~~ ~~.012~~	~~.030~~ .013		~~-.021~~ -.002	ND	7.5	matrix
6850771	2.42	7.07	1.76		5	1.81	.030	.031		-.004	ND	7.5	matrix (91%)
5mg/kg CCV	2.50	7.83	1.97		1	—	.086	—		.083	4.6 (25)	1.5	+2.5 of 5
prep blk	2.50	7.38	1.94		1	—	.004	—		.001	ND	1.5	

DSS/237 11-12-12

Verified by: KAB/957 Date: 11/12/12

1577.04

154817 34

AP03 Page 2643 of 2648

12313 042501 A 955/237

10 NOV 2012 10:45:30 11-10-12
Application: ABS/%T/CONC
Test name: #9322
Wavelength: 540.0
High limit: 99999.000
Low limit: -99999.000

ID: 1 0.003 A Blank
ID: 1 0.086 A 5mg/Kg LCJ
ID: 1 0.480 A Insoluble LCJ

ID: 1 0.005 A
ID: 1 0.003 A) 6850737
ID: 1 0.008 A
ID: 1 0.001 A) 6850738 BK
ID: 1 0.637 A
ID: 1 0.008 A) 6850738 SS
ID: 1 0.588 A
ID: 1 0.001 A) 6850738 IJ
ID: 1 0.181 A
ID: 1 0.001 A) 6850738 PDJ
ID: 1 0.003 A
ID: 1 0.003 A) 6850738 AP
ID: 1 0.004 A
ID: 1 0.002 A) 6850741
ID: 1 0.016 A
ID: 1 0.007 A) 6850744
ID: 1 0.006 A
ID: 1 0.002 A) 6850747
ID: 1 0.002 A
ID: 1 0.003 A) 6850750

955/237
11-14-12

ID: 1 0.085 A 5mg/Kg ccv
ID: 1 0.003 A prep blk

ID: 1 0.006 A
ID: 1 0.010 A) 6850753
ID: 1 0.006 A
ID: 1 0.002 A) 6850756
ID: 1 0.018 A
ID: 1 0.011 A) 6850759
ID: 1 0.020 A
ID: 1 0.016 A) 6850764
ID: 1 0.012 A
ID: 1 0.011 A) 6850765
ID: 1 0.013 A
ID: 1 0.012 A) 6850770
ID: 1 0.030 A
ID: 1 0.031 A) 6850771

ID: 1 0.086 A 5mg/kg ccv
ID: 1 0.004 A prep blk

Moisture Data

MOISTURE

SAMPLE NUMBERS:

Sample #	Sample Code
6850733	CNST9
6850734	NST10
6850735	NST11
6850736	NST12
6850737	NSTC5
6850738	NSTC6
6850739	NST13
6850740	NST14
6850741	NSTC7
6850742	NST15
6850743	NST16
6850744	NSTC8
6850745	NST17
6850746	NST18
6850747	NSTC9
6850748	NST19
6850749	NST20
6850750	STC10
6850751	NST21
6850752	NST22
6850753	STC11
6850754	NST23
6850755	NST24
6850756	STC12
6850757	OCTS3
6850758	OCTS4
6850759	CTCS2
6850760	OCTS5
6850761	OCTS6
6850762	OCTS7
6850763	OCTS8
6850764	CTCS3
6850765	CTCS4
6850766	OCTS9
6850767	CTS10
6850768	CTS11
6850769	CTS12
6850770	CTCS5
6850771	CTCS6

COMMENTS:

MOISTURE

The moisture value calculation is:

$$\% \text{ moisture} = \frac{A - B}{C} \times 100$$

Where: A = weight of sample and container before drying
B = weight of sample and container after drying
C = weight of sample before drying

Method defined actions are taken for any failed matrix QC.

Laboratory Compliance Quality Control

Analysis Name		LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number:	12312820001A	Sample number(s):		6850733-6850740		
Moisture		100		99-101		
Batch number:	12312820001B	Sample number(s):		6850741-6850752		
Moisture		100		99-101		
Batch number:	12312820002B	Sample number(s):		6850753-6850771		
Moisture		100		99-101		

Sample Matrix Quality Control

Analysis Name		BKG Conc	DUP Conc	RPD	RPD Max
Batch number:	12312820001A	Sample number(s):		6850733-6850740	
Moisture		3.6	3.5	1	13
Batch number:	12312820001B	Sample number(s):		6850741-6850752	
Moisture		4.2	4.2	1	13
Batch number:	12312820002B	Sample number(s):		6850753-6850771	
Moisture		20.7	23.1	11	13

* - Outside of specification
(1) - The result for one or both determinations was less than five times the LOQ.

Moisture Data Report

Batch #: 12312820001

Sample ID	Batch ID	Analysis#	Tare Wt	Sample Wt	Dry Wt	%Moisture	Analysis Date (Emp#)	Verified Date (Emp#)
LCS 89.5% Std.			1.0996	5.0183	1.6369	89.29	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850733	A	00111	1.1050	8.9000	9.7617	2.73	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850734	A	00111	1.0805	8.1855	8.9753	3.55	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850735	A	00111	1.0516	7.7285	8.5212	3.35	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850736	A	00111	1.0980	8.2480	9.1128	2.83	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850737BKG	A	00111	1.0836	8.5133	9.2946	3.55	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850737DUP	A	00111	1.0779	8.8916	9.6562	3.52	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850738	A	00111	1.1293	8.1896	9.0495	3.29	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850739	A	00111	1.1214	8.8640	9.6921	3.31	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850740	A	00111	1.0855	8.1906	9.0346	2.95	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850741BKG	B	00111	1.1354	8.0211	8.8157	4.25	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850741DUP	B	00111	1.0643	8.5908	9.2948	4.19	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850742	B	00111	1.0777	7.1496	7.9923	3.29	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850743	B	00111	1.1058	8.4453	9.3175	2.77	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850744	B	00111	1.1027	7.8774	8.7316	3.15	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850745	B	00111	1.1103	8.1868	9.0053	3.56	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850746	B	00111	1.1285	9.7120	10.5503	2.99	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850747	B	00111	1.0982	9.7362	10.5116	3.32	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850748	B	00111	1.1326	8.9538	9.8137	3.05	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850749	B	00111	1.0924	7.4866	8.3013	3.71	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850750	B	00111	1.0909	9.8852	10.6009	3.80	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850751	B	00111	1.0902	8.3883	9.2156	3.13	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850752	B	00111	1.1148	9.2944	10.1251	3.06	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)

Batch #: 12312820002

Sample ID	Batch ID	Analysis#	Tare Wt	Sample Wt	Dry Wt	%Moisture	Analysis Date (Emp#)	Verified Date (Emp#)
LCS 89.5% Std.			1.0904	5.0104	1.6236	89.36	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850753	B	00111	1.0788	7.3316	8.1730	3.24	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850754	B	00111	1.1023	9.1493	9.9798	2.97	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850755	B	00111	1.0685	7.8412	8.6677	3.09	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850756	B	00111	1.1305	9.1829	9.7833	5.77	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850757	B	00111	1.1010	7.1631	6.6752	22.18	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850758	B	00111	1.1295	7.0503	6.6142	22.21	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850759	B	00111	1.0890	8.5264	7.6738	22.77	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850760	B	00111	1.0930	8.4640	7.6968	21.98	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850761BKG	B	00111	1.0810	7.4543	6.9905	20.72	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850761DUP	B	00111	1.0737	7.5616	6.8899	23.08	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850762	B	00111	1.1032	7.6521	7.0380	22.44	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850763	B	00111	1.0748	8.6001	7.7260	22.66	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850764	B	00111	1.0987	9.3733	8.3265	22.89	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850765	B	00111	1.0868	7.4214	6.8537	22.29	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850766	B	00111	1.0804	7.0056	6.5094	22.50	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850767	B	00111	1.0879	9.8806	8.8295	21.65	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850768	B	00111	1.1039	7.5776	6.9842	22.40	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850769	B	00111	1.0882	9.4439	8.5252	21.25	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850770	B	00111	1.1151	7.4592	6.8841	22.66	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)
6850771	B	00111	1.1075	8.5622	7.9386	20.22	11/ 7/12 (1201/SWF)	11/ 8/12 (0236/CW)

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2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

ExxonMobil Refining & Supply
188 Long Island Avenue
Wyandanch NY 11798

January 16, 2013

Project: Tappan Terminal

Submittal Date: 01/11/2013
Group Number: 1361387
SDG: TAP04
PO Number: 15249
State of Sample Origin: NY

Client Sample Description	Lancaster Labs (LLI) #
AGC-TSC1 Composite Soil	6918863
AGC-TS1 Grab Soil	6918864
AGC-TS2 Grab Soil	6918865

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

1 COPY TO	Data Package Group	
ELECTRONIC COPY TO	Roux Associates	Attn: Tracy Bispham
ELECTRONIC COPY TO	Exxon Mobil: Woodard & Curran	Attn: Anne Proctor
ELECTRONIC COPY TO	Roux	Attn: Noelle Clarke

Respectfully Submitted,

Barbara Weyandt

Barbara A. Weyandt
Specialist

(717) 556-7264

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681• www.lancasterlabs.com

Sample Description: **AGC-TSC1 Composite Soil**
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6918863
LLI Group # 1361387
Account # 01907

Project Name: Tappan Terminal

Collected: 01/10/2013 11:25 by AH

Submitted: 01/11/2013 08:35
Reported: 01/16/2013 15:34

ExxonMobil Refining & Supply
188 Long Island Avenue
Wyandanch NY 11798

TTSC1 SDG#: TAP04-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	
10727	Acenaphthene	83-32-9	14	J	4	1
10727	Acenaphthylene	208-96-8	14	J	4	1
10727	Anthracene	120-12-7	69		4	1
10727	Benzo(a)anthracene	56-55-3	280		4	1
10727	Benzo(a)pyrene	50-32-8	190		4	1
10727	Benzo(b)fluoranthene	205-99-2	270		4	1
10727	Benzo(g,h,i)perylene	191-24-2	97		4	1
10727	Benzo(k)fluoranthene	207-08-9	140		4	1
10727	Chrysene	218-01-9	290		4	1
10727	Dibenz(a,h)anthracene	53-70-3	26		4	1
10727	Dibenzofuran	132-64-9	N.D.		20	1
10727	Fluoranthene	206-44-0	500		4	1
10727	Fluorene	86-73-7	17	J	4	1
10727	Indeno(1,2,3-cd)pyrene	193-39-5	95		4	1
10727	2-Methylphenol	95-48-7	N.D.		20	1
10727	4-Methylphenol	106-44-5	N.D.		20	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10727	Naphthalene	91-20-3	8	J	4	1
10727	Pentachlorophenol	87-86-5	N.D.		39	1
10727	Phenanthrene	85-01-8	210		4	1
10727	Phenol	108-95-2	N.D.		20	1
10727	Pyrene	129-00-0	430		4	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	
10401	2,4,5-TP	93-72-1	N.D.		0.88	1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	
10738	Aldrin	309-00-2	N.D.		1.0	5
10738	Alpha BHC	319-84-6	N.D.		1.0	5
10738	Beta BHC	319-85-7	N.D.		5.7	5
10738	Gamma BHC - Lindane	58-89-9	N.D.		1.0	5
10738	Alpha Chlordane	5103-71-9	20		1.0	5
10738	p,p-DDD	72-54-8	N.D.		7.7	5
10738	p,p-DDE	72-55-9	47		2.0	5
10738	p,p-DDT	50-29-3	63		2.1	5
10738	Delta BHC	319-86-8	N.D.		2.7	5
10738	Dieldrin	60-57-1	N.D.		2.8	5
10738	Endosulfan I	959-98-8	N.D.		1.3	5
10738	Endosulfan II	33213-65-9	N.D.		2.0	5
10738	Endosulfan Sulfate	1031-07-8	N.D.		2.0	5
10738	Endrin	72-20-8	N.D.		2.0	5
10738	HCB	118-74-1	N.D.		1.2	5
10738	Heptachlor	76-44-8	N.D.		4.0	5
	Reporting limits were raised due to interference from the sample matrix.					
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	
10736	PCB-1016	12674-11-2	N.D.		4.3	1

Sample Description: AGC-TSC1 Composite Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6918863
LLI Group # 1361387
Account # 01907

Project Name: Tappan Terminal

Collected: 01/10/2013 11:25 by AH

Submitted: 01/11/2013 08:35
Reported: 01/16/2013 15:34

ExxonMobil Refining & Supply
188 Long Island Avenue
Wyandanch NY 11798

TTSC1 SDG#: TAP04-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**	**ug/kg**	
10736	PCB-1221	11104-28-2	N.D.	5.4	1
10736	PCB-1232	11141-16-5	N.D.	9.5	1
10736	PCB-1242	53469-21-9	N.D.	3.9	1
10736	PCB-1248	12672-29-6	N.D.	3.9	1
10736	PCB-1254	11097-69-1	N.D.	3.9	1
10736	PCB-1260	11096-82-5	N.D.	5.8	1
	The % difference for the calibration verification standard is outside the +/- 15% criteria for the analyte(s) listed below. Since the average of the % difference values meets the criteria, the results are reported. This applies to the following analyte(s): decachlorobiphenyl surrogate				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06935	Arsenic	7440-38-2	3.46	0.383	1
06946	Barium	7440-39-3	103	0.0383	1
06947	Beryllium	7440-41-7	0.392 J	0.0777	1
06949	Cadmium	7440-43-9	N.D.	0.191	5
06951	Chromium	7440-47-3	24.1	0.102	1
06953	Copper	7440-50-8	23.7	0.209	1
06955	Lead	7439-92-1	13.7	0.545	1
06958	Manganese	7439-96-5	471	0.0963	1
06961	Nickel	7440-02-0	15.3	0.128	1
06936	Selenium	7782-49-2	N.D.	0.835	1
06966	Silver	7440-22-4	0.195 J	0.162	1
06972	Zinc	7440-66-6	49.1	0.232	1
	SW-846 6010B modified		**mg/kg**	**mg/kg**	
02829	Trivalent Chromium soils	16065-83-1	24.1	0.59	1
	The Trivalent Chromium result is calculated by subtracting Hexavalent Chromium from Total Chromium.				
	SW-846 7471A		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0224 J	0.0115	1
Wet Chemistry	**SW-846 9012B**		**mg/kg**	**mg/kg**	
05898	Amenable Cyanide (solid)	n.a.	N.D.	0.20	1
05895	Total Cyanide (solid)	57-12-5	N.D.	0.21	1
	SW-846 7196A		**mg/kg**	**mg/kg**	
00425	Hexavalent Chromium (SOLIDS)	18540-29-9	N.D.	0.59	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	15.5	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.				

Sample Description: AGC-TSC1 Composite Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6918863
LLI Group # 1361387
Account # 01907

Project Name: Tappan Terminal

Collected: 01/10/2013 11:25 by AH

Submitted: 01/11/2013 08:35
Reported: 01/16/2013 15:34

ExxonMobil Refining & Supply
188 Long Island Avenue
Wyandanch NY 11798

TTSC1 SDG#: TAP04-01

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10727	Table 375-6.8(a) SVOCs	SW-846 8270C	1	13011SLA026	01/14/2013 03:59	Holly Berry	1
10809	BNA Soil Microwave	SW-846 3546	1	13011SLA026	01/12/2013 06:40	Katheryne V Sponheimer	1
10401	Table 375-6.8(a) Herbicides	SW-846 8151A	1	130110007A	01/14/2013 11:54	Matthew S Listner	1
10738	Table 375-6.8(a) Pesticides	SW-846 8081A	1	130110005A	01/15/2013 08:16	Jamie L Brillhart	5
10736	PCBs 8082 Soil	SW-846 8082	1	130110006A	01/14/2013 13:47	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	130110006A	01/11/2013 18:05	Sally L Appleyard	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	130110005A	01/11/2013 18:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	130110007A	01/12/2013 06:15	Karen L Beyer	1
06935	Arsenic	SW-846 6010B	1	130115708001	01/14/2013 21:53	Katlin N Cataldi	1
06946	Barium	SW-846 6010B	1	130115708001	01/14/2013 21:53	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010B	1	130115708001	01/14/2013 21:53	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010B	1	130115708001	01/15/2013 09:20	Joanne M Gates	5
06951	Chromium	SW-846 6010B	1	130115708001	01/14/2013 21:53	Katlin N Cataldi	1
06953	Copper	SW-846 6010B	1	130115708001	01/14/2013 21:53	Katlin N Cataldi	1
06955	Lead	SW-846 6010B	1	130115708001	01/15/2013 09:12	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	130115708001	01/14/2013 21:53	Katlin N Cataldi	1
06961	Nickel	SW-846 6010B	1	130115708001	01/14/2013 21:53	Katlin N Cataldi	1
06936	Selenium	SW-846 6010B	1	130115708001	01/14/2013 21:53	Katlin N Cataldi	1
06966	Silver	SW-846 6010B	1	130115708001	01/14/2013 21:53	Katlin N Cataldi	1
06972	Zinc	SW-846 6010B	1	130115708001	01/14/2013 21:53	Katlin N Cataldi	1
02829	Trivalent Chromium soils	SW-846 6010B modified	1	130162829001	01/16/2013 12:35	Nina C Haller	1
00159	Mercury	SW-846 7471A	1	130115711001	01/15/2013 07:22	Damary Valentin	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	130115708001	01/14/2013 08:55	Denise K Conners	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	130115711001	01/14/2013 11:45	Denise K Conners	1
05898	Amenable Cyanide (solid)	SW-846 9012B	1	13015103201A	01/15/2013 14:24	Carolyn M Mastropietro	1
05895	Total Cyanide (solid)	SW-846 9012B	1	13015102201A	01/15/2013 14:17	Carolyn M Mastropietro	1
05897	Amenable Cyanide Solid Distill	SW-846 9012B	1	13015103201A	01/15/2013 10:20	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	13015102201A	01/15/2013 10:20	Nancy J Shoop	1

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Analysis Report

Sample Description: AGC-TSC1 Composite Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6918863
LLI Group # 1361387
Account # 01907

Project Name: Tappan Terminal

Collected: 01/10/2013 11:25 by AH

Submitted: 01/11/2013 08:35
Reported: 01/16/2013 15:34

ExxonMobil Refining & Supply
188 Long Island Avenue
Wyandanch NY 11798

TTSC1 SDG#: TAP04-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00425	Hexavalent Chromium (SOLIDS)	SW-846 7196A	1	13014042501A	01/15/2013 01:10	Daniel S Smith	1
07825	Hexavalent Cr (Extraction)	SW-846 3060A	1	13014042501A	01/14/2013 01:10	Daniel S Smith	1
00111	Moisture	SM 2540 G-1997	1	13011820002B	01/11/2013 21:49	Scott W Freisher	1

Sample Description: AGC-TS1 Grab Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6918864
LLI Group # 1361387
Account # 01907

Project Name: Tappan Terminal

Collected: 01/10/2013 11:15 by AH

Submitted: 01/11/2013 08:35
Reported: 01/16/2013 15:34

ExxonMobil Refining & Supply
188 Long Island Avenue
Wyandanch NY 11798

TTTS1 SDG#: TAP04-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Acetone	67-64-1	N.D.	0.008	0.92
10237	Benzene	71-43-2	N.D.	0.0006	0.92
10237	2-Butanone	78-93-3	N.D.	0.004	0.92
10237	n-Butylbenzene	104-51-8	N.D.	0.001	0.92
10237	sec-Butylbenzene	135-98-8	N.D.	0.001	0.92
10237	tert-Butylbenzene	98-06-6	N.D.	0.001	0.92
10237	Carbon Tetrachloride	56-23-5	N.D.	0.001	0.92
10237	Chlorobenzene	108-90-7	N.D.	0.001	0.92
10237	Chloroform	67-66-3	N.D.	0.001	0.92
10237	1,2-Dichlorobenzene	95-50-1	N.D.	0.001	0.92
10237	1,3-Dichlorobenzene	541-73-1	N.D.	0.001	0.92
10237	1,4-Dichlorobenzene	106-46-7	N.D.	0.001	0.92
10237	1,1-Dichloroethane	75-34-3	N.D.	0.001	0.92
10237	1,2-Dichloroethane	107-06-2	N.D.	0.001	0.92
10237	1,1-Dichloroethene	75-35-4	N.D.	0.001	0.92
10237	cis-1,2-Dichloroethene	156-59-2	N.D.	0.001	0.92
10237	trans-1,2-Dichloroethene	156-60-5	N.D.	0.001	0.92
10237	1,4-Dioxane	123-91-1	N.D.	0.077	0.92
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.92
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0006	0.92
10237	Methylene Chloride	75-09-2	0.002 J	0.002	0.92
10237	n-Propylbenzene	103-65-1	N.D.	0.001	0.92
10237	Tetrachloroethene	127-18-4	N.D.	0.001	0.92
10237	Toluene	108-88-3	0.001 J	0.001	0.92
10237	1,1,1-Trichloroethane	71-55-6	N.D.	0.001	0.92
10237	Trichloroethene	79-01-6	N.D.	0.001	0.92
10237	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.001	0.92
10237	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.001	0.92
10237	Vinyl Chloride	75-01-4	N.D.	0.001	0.92
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.92
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	17.1	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of New York Certification No. 10670

Lancaster Laboratories is responsible only for the certified testing of samples. We are not directly responsible for the integrity of the sample prior to laboratory receipt. Any reported concentrations less than 200 ug/kg may be biased low if they were not collected according to EPA 5035/5035A specifications.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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Analysis Report

Sample Description: AGC-TS1 Grab Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6918864
LLI Group # 1361387
Account # 01907

Project Name: Tappan Terminal

Collected: 01/10/2013 11:15 by AH

Submitted: 01/11/2013 08:35
Reported: 01/16/2013 15:34

ExxonMobil Refining & Supply
188 Long Island Avenue
Wyandanch NY 11798

TTTS1 SDG#: TAP04-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	Table 375-6.8(a) VOCs	SW-846 8260B	1	B130111AA	01/11/2013 14:26	Emily R Styer	0.92
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201301129894	01/11/2013 09:28	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201301129894	01/11/2013 09:28	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201301129894	01/11/2013 09:25	Larry E Bevins	n.a.
00111	Moisture	SM 2540 G-1997	1	13011820002B	01/11/2013 21:49	Scott W Freisher	1

Sample Description: AGC-TS2 Grab Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6918865
LLI Group # 1361387
Account # 01907

Project Name: Tappan Terminal

Collected: 01/10/2013 11:20 by AH

Submitted: 01/11/2013 08:35
Reported: 01/16/2013 15:34

ExxonMobil Refining & Supply
188 Long Island Avenue
Wyandanch NY 11798

TTTS2 SDG#: TAP04-03*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		mg/kg	mg/kg	
10237	Acetone	67-64-1	N.D.	0.008	1
10237	Benzene	71-43-2	N.D.	0.0006	1
10237	2-Butanone	78-93-3	N.D.	0.005	1
10237	n-Butylbenzene	104-51-8	N.D.	0.001	1
10237	sec-Butylbenzene	135-98-8	N.D.	0.001	1
10237	tert-Butylbenzene	98-06-6	N.D.	0.001	1
10237	Carbon Tetrachloride	56-23-5	N.D.	0.001	1
10237	Chlorobenzene	108-90-7	N.D.	0.001	1
10237	Chloroform	67-66-3	N.D.	0.001	1
10237	1,2-Dichlorobenzene	95-50-1	N.D.	0.001	1
10237	1,3-Dichlorobenzene	541-73-1	N.D.	0.001	1
10237	1,4-Dichlorobenzene	106-46-7	N.D.	0.001	1
10237	1,1-Dichloroethane	75-34-3	N.D.	0.001	1
10237	1,2-Dichloroethane	107-06-2	N.D.	0.001	1
10237	1,1-Dichloroethene	75-35-4	N.D.	0.001	1
10237	cis-1,2-Dichloroethene	156-59-2	N.D.	0.001	1
10237	trans-1,2-Dichloroethene	156-60-5	N.D.	0.001	1
10237	1,4-Dioxane	123-91-1	N.D.	0.082	1
10237	Ethylbenzene	100-41-4	N.D.	0.001	1
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0006	1
10237	Methylene Chloride	75-09-2	N.D.	0.002	1
10237	n-Propylbenzene	103-65-1	N.D.	0.001	1
10237	Tetrachloroethene	127-18-4	N.D.	0.001	1
10237	Toluene	108-88-3	0.001 J	0.001	1
10237	1,1,1-Trichloroethane	71-55-6	N.D.	0.001	1
10237	Trichloroethene	79-01-6	N.D.	0.001	1
10237	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.001	1
10237	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.001	1
10237	Vinyl Chloride	75-01-4	N.D.	0.001	1
10237	Xylene (Total)	1330-20-7	N.D.	0.001	1
Wet Chemistry	**SM 2540 G-1997**		%	%	
00111	Moisture	n.a.	14.9	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of New York Certification No. 10670

Lancaster Laboratories is responsible only for the certified testing of samples. We are not directly responsible for the integrity of the sample prior to laboratory receipt. Any reported concentrations less than 200 ug/kg may be biased low if they were not collected according to EPA 5035/5035A specifications.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Sample Description: AGC-TS2 Grab Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6918865
LLI Group # 1361387
Account # 01907

Project Name: Tappan Terminal

Collected: 01/10/2013 11:20 by AH

Submitted: 01/11/2013 08:35
Reported: 01/16/2013 15:34

ExxonMobil Refining & Supply
188 Long Island Avenue
Wyandanch NY 11798

TTTS2 SDG#: TAP04-03*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	Table 375-6.8(a) VOCs	SW-846 8260B	1	B130111AA	01/11/2013 12:56	Emily R Styer	1
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201301129894	01/11/2013 09:28	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201301129894	01/11/2013 09:28	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201301129894	01/11/2013 09:22	Larry E Bevins	n.a.
00111	Moisture	SM 2540 G-1997	1	13011820002B	01/11/2013 21:49	Scott W Freisher	1

Quality Control Summary

Client Name: ExxonMobil Refining & Supply Group Number: 1361387
Reported: 01/16/13 at 03:34 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B130111AA	Sample number(s): 6918864-6918865							
Acetone	N.D.	0.007	mg/kg	125	108	32-209	14	30
Benzene	N.D.	0.0005	mg/kg	104	103	80-120	1	30
2-Butanone	N.D.	0.004	mg/kg	100	91	37-155	10	30
n-Butylbenzene	N.D.	0.001	mg/kg	96	95	72-120	1	30
sec-Butylbenzene	N.D.	0.001	mg/kg	100	99	75-120	1	30
tert-Butylbenzene	N.D.	0.001	mg/kg	95	93	75-120	3	30
Carbon Tetrachloride	N.D.	0.001	mg/kg	101	101	69-122	0	30
Chlorobenzene	N.D.	0.001	mg/kg	100	98	80-120	2	30
Chloroform	N.D.	0.001	mg/kg	99	97	80-120	2	30
1,2-Dichlorobenzene	N.D.	0.001	mg/kg	97	96	79-120	1	30
1,3-Dichlorobenzene	N.D.	0.001	mg/kg	99	99	78-120	0	30
1,4-Dichlorobenzene	N.D.	0.001	mg/kg	98	96	79-120	2	30
1,1-Dichloroethane	N.D.	0.001	mg/kg	102	101	80-120	1	30
1,2-Dichloroethane	N.D.	0.001	mg/kg	100	96	70-137	4	30
1,1-Dichloroethene	N.D.	0.001	mg/kg	105	103	73-129	1	30
cis-1,2-Dichloroethene	N.D.	0.001	mg/kg	108	106	80-120	2	30
trans-1,2-Dichloroethene	N.D.	0.001	mg/kg	103	102	79-120	1	30
1,4-Dioxane	N.D.	0.070	mg/kg	106	105	48-129	1	30
Ethylbenzene	N.D.	0.001	mg/kg	100	99	80-120	2	30
Methyl Tertiary Butyl Ether	N.D.	0.0005	mg/kg	100	99	74-121	1	30
Methylene Chloride	N.D.	0.002	mg/kg	103	100	76-124	3	30
n-Propylbenzene	N.D.	0.001	mg/kg	87	86	77-120	1	30
Tetrachloroethene	N.D.	0.001	mg/kg	105	100	78-126	5	30
Toluene	N.D.	0.001	mg/kg	98	94	80-120	4	30
1,1,1-Trichloroethane	N.D.	0.001	mg/kg	98	96	71-125	2	30
Trichloroethene	N.D.	0.001	mg/kg	103	102	80-120	1	30
1,2,4-Trimethylbenzene	N.D.	0.001	mg/kg	99	98	79-120	1	30
1,3,5-Trimethylbenzene	N.D.	0.001	mg/kg	98	96	78-120	2	30
Vinyl Chloride	N.D.	0.001	mg/kg	64	62	53-120	2	30
Xylene (Total)	N.D.	0.001	mg/kg	101	98	80-120	2	30
Batch number: 13011SLA026	Sample number(s): 6918863							
Acenaphthene	N.D.	3.	ug/kg	101		83-111		
Acenaphthylene	N.D.	3.	ug/kg	105		83-127		
Anthracene	N.D.	3.	ug/kg	105		83-111		
Benzo(a)anthracene	N.D.	3.	ug/kg	102		73-123		
Benzo(a)pyrene	N.D.	3.	ug/kg	99		80-123		
Benzo(b)fluoranthene	N.D.	3.	ug/kg	107		76-124		
Benzo(g,h,i)perylene	N.D.	3.	ug/kg	95		77-122		
Benzo(k)fluoranthene	N.D.	3.	ug/kg	105		71-135		
Chrysene	N.D.	3.	ug/kg	104		73-119		
Dibenz(a,h)anthracene	N.D.	3.	ug/kg	99		67-129		
Dibenzofuran	N.D.	17.	ug/kg	101		78-116		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil Refining & Supply Group Number: 1361387
Reported: 01/16/13 at 03:34 PM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Fluoranthene	N.D.	3.	ug/kg	107		80-120		
Fluorene	N.D.	3.	ug/kg	106		81-117		
Indeno(1,2,3-cd)pyrene	N.D.	3.	ug/kg	96		64-128		
2-Methylphenol	N.D.	17.	ug/kg	104		75-126		
4-Methylphenol	N.D.	17.	ug/kg	105		74-116		
Naphthalene	N.D.	3.	ug/kg	95		77-115		
Pentachlorophenol	N.D.	33.	ug/kg	112		60-134		
Phenanthrene	N.D.	3.	ug/kg	103		77-119		
Phenol	N.D.	17.	ug/kg	100		69-126		
Pyrene	N.D.	3.	ug/kg	100		80-121		
Batch number: 130110007A	Sample number(s): 6918863							
2,4,5-TP	N.D.	0.75	ug/kg	118*		60-111		
Batch number: 130110005A	Sample number(s): 6918863							
Aldrin	N.D.	0.17	ug/kg	102		62-134		
Alpha BHC	N.D.	0.17	ug/kg	103		67-131		
Beta BHC	N.D.	0.96	ug/kg	104		59-161		
Gamma BHC - Lindane	N.D.	0.17	ug/kg	105		66-132		
Alpha Chlordane	N.D.	0.17	ug/kg	103		64-140		
p,p-DDD	N.D.	0.33	ug/kg	111		73-131		
p,p-DDE	N.D.	0.33	ug/kg	103		72-132		
p,p-DDT	N.D.	0.35	ug/kg	98		65-131		
Delta BHC	N.D.	0.45	ug/kg	107		44-145		
Dieldrin	N.D.	0.33	ug/kg	102		71-134		
Endosulfan I	N.D.	0.22	ug/kg	99		57-127		
Endosulfan II	N.D.	0.33	ug/kg	102		63-127		
Endosulfan Sulfate	N.D.	0.33	ug/kg	106		80-137		
Endrin	N.D.	0.33	ug/kg	101		66-136		
HCB	N.D.	0.21	ug/kg					
Heptachlor	N.D.	0.17	ug/kg	99		68-132		
Batch number: 130110006A	Sample number(s): 6918863							
PCB-1016	N.D.	3.6	ug/kg	98		64-121		
PCB-1221	N.D.	4.6	ug/kg					
PCB-1232	N.D.	8.0	ug/kg					
PCB-1242	N.D.	3.3	ug/kg					
PCB-1248	N.D.	3.3	ug/kg					
PCB-1254	N.D.	3.3	ug/kg					
PCB-1260	N.D.	4.9	ug/kg	112		72-123		
Batch number: 130115708001	Sample number(s): 6918863							
Arsenic	N.D.	0.330	mg/kg	97		80-120		
Barium	N.D.	0.0330	mg/kg	102		80-120		
Beryllium	N.D.	0.0670	mg/kg	97		80-120		
Cadmium	N.D.	0.0330	mg/kg	100		80-120		
Chromium	N.D.	0.0880	mg/kg	104		80-120		
Copper	N.D.	0.180	mg/kg	102		80-120		
Lead	N.D.	0.470	mg/kg	102		80-120		
Manganese	N.D.	0.0830	mg/kg	99		80-120		
Nickel	N.D.	0.110	mg/kg	104		80-120		
Selenium	N.D.	0.720	mg/kg	103		80-120		
Silver	N.D.	0.140	mg/kg	102		80-120		
Zinc	0.248 J	0.200	mg/kg	100		80-120		
Batch number: 130115711001	Sample number(s): 6918863							

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil Refining & Supply Group Number: 1361387
Reported: 01/16/13 at 03:34 PM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Mercury	N.D.	0.0103	mg/kg	107		80-120		
Batch number: 13015102201A	Sample number(s): 6918863							
Total Cyanide (solid)	N.D.	0.18	mg/kg	98		90-110		
Batch number: 13015103201A	Sample number(s): 6918863							
Amenable Cyanide (solid)	N.D.	0.18	mg/kg	0		-20-20		
Batch number: 13014042501A	Sample number(s): 6918863							
Hexavalent Chromium (SOLIDS)	N.D.	0.50	mg/kg	89		80-120		
Batch number: 13011820002B	Sample number(s): 6918863-6918865							
Moisture				100		99-101		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: B130111AA	Sample number(s): 6918864-6918865 UNSPK: 6918865								
Acetone	147		31-195						
Benzene	108		55-143						
2-Butanone	86		37-163						
n-Butylbenzene	90		30-146						
sec-Butylbenzene	114		33-157						
tert-Butylbenzene	118		41-152						
Carbon Tetrachloride	104		45-153						
Chlorobenzene	98		49-135						
Chloroform	101		61-142						
1,2-Dichlorobenzene	85		36-133						
1,3-Dichlorobenzene	97		34-134						
1,4-Dichlorobenzene	93		35-136						
1,1-Dichloroethane	107		63-142						
1,2-Dichloroethane	95		68-131						
1,1-Dichloroethene	112		61-149						
cis-1,2-Dichloroethene	109		60-136						
trans-1,2-Dichloroethene	108		59-142						
1,4-Dioxane	209*		39-180						
Ethylbenzene	105		44-141						
Methyl Tertiary Butyl Ether	94		55-129						
Methylene Chloride	110		61-141						
n-Propylbenzene	111		39-157						
Tetrachloroethene	109		42-149						
Toluene	108		50-146						
1,1,1-Trichloroethane	101		64-142						
Trichloroethene	106		53-144						
1,2,4-Trimethylbenzene	118		37-149						
1,3,5-Trimethylbenzene	121		38-150						
Vinyl Chloride	71		50-154						
Xylene (Total)	101		44-136						

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil Refining & Supply Group Number: 1361387
Reported: 01/16/13 at 03:34 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Batch number: 13011SLA026	Sample number(s): 6918863			UNSPK: P920250							
Acenaphthene	95	98	33-140	2	30						
Acenaphthylene	97	98	47-137	1	30						
Anthracene	97	95	40-147	2	30						
Benzo(a)anthracene	96	93	32-150	2	30						
Benzo(a)pyrene	94	91	30-150	4	30						
Benzo(b)fluoranthene	92	84	29-150	9	30						
Benzo(g,h,i)perylene	91	90	31-152	2	30						
Benzo(k)fluoranthene	102	99	35-148	4	30						
Chrysene	97	98	33-142	1	30						
Dibenz(a,h)anthracene	88	90	37-151	2	30						
Dibenzofuran	98	99	38-148	0	30						
Fluoranthene	104	100	30-151	3	30						
Fluorene	107	102	36-140	5	30						
Indeno(1,2,3-cd)pyrene	90	91	31-154	1	30						
2-Methylphenol	93	99	32-146	6	30						
4-Methylphenol	91	100	36-149	9	30						
Naphthalene	93	93	35-141	0	30						
Pentachlorophenol	70	71	23-145	2	30						
Phenanthrene	102	93	34-147	9	30						
Phenol	96	98	39-151	2	30						
Pyrene	99	93	29-148	7	30						
Batch number: 130110007A	Sample number(s): 6918863			UNSPK: 6918863							
2,4,5-TP	126	119	10-142	6	35						
Batch number: 130110005A	Sample number(s): 6918863			UNSPK: P914016							
Aldrin	84	83	18-138	1	50						
Alpha BHC	86	87	9-143	1	50						
Beta BHC	90	88	14-168	1	50						
Gamma BHC - Lindane	88	88	14-143	0	50						
Alpha Chlordane	-107*	-51*	15-153	48	50						
p,p-DDD	98	95	17-163	3	50						
p,p-DDE	93	97	22-169	5	50						
p,p-DDT	107	98	4-159	9	50						
Delta BHC	100	97	30-144	3	50						
Dieldrin	94	94	17-163	1	50						
Endosulfan I	85	88	8-137	3	50						
Endosulfan II	92	90	17-146	2	50						
Endosulfan Sulfate	98	95	6-190	2	50						
Endrin	91	88	25-166	3	50						
Heptachlor	86	101	25-148	16	50						
Batch number: 130110006A	Sample number(s): 6918863			UNSPK: P916912							
PCB-1016	53	29	29-146	58*	50						
PCB-1260	64	34*	39-149	61*	50						
Batch number: 130115708001	Sample number(s): 6918863			UNSPK: P917623		BKG: P917623					
Arsenic	100	101	75-125	2	20	0.679	J	0.707	J	4 (1)	20
Barium	107	107	75-125	1	20	24.0		23.5		2	20
Beryllium	101	100	83-111	0	20	0.141	J	0.142	J	1 (1)	20
Cadmium	96	96	75-125	2	20	N.D.		N.D.		0 (1)	20

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil Refining & Supply Group Number: 1361387
Reported: 01/16/13 at 03:34 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc		DUP RPD	Dup RPD Max
Chromium	120	119	75-125	0	20	6.82	6.30		8 (1)	20
Copper	101	98	75-125	2	20	7.10	5.67		22*	20
Lead	97	96	75-125	0	20	1.60	1.72		7 (1)	20
Manganese	128*	160*	75-125	7	20	147	149		2	20
Nickel	98	97	75-125	1	20	6.24	5.29		16	20
Selenium	101	101	75-125	1	20	N.D.	N.D.		0 (1)	20
Silver	107	106	75-125	0	20	N.D.	N.D.		0 (1)	20
Zinc	103	100	75-125	1	20	12.9	12.3		5	20
Batch number: 130115711001	Sample number(s): 6918863 UNSPK: P917623 BKG: P917623									
Mercury	107	103	80-120	4	20	N.D.	N.D.		0 (1)	20
Batch number: 13015102201A	Sample number(s): 6918863 UNSPK: 6918863 BKG: 6918863									
Total Cyanide (solid)	91		68-134			N.D.	N.D.		0 (1)	20
Batch number: 13015103201A	Sample number(s): 6918863 UNSPK: 6918863 BKG: 6918863									
Amenable Cyanide (solid)	0		-20-20			N.D.	N.D.		0 (1)	20
Batch number: 13014042501A	Sample number(s): 6918863 UNSPK: 6918863 BKG: 6918863									
Hexavalent Chromium (SOLIDS)	72*		75-125			N.D.	0.84	J	200* (1)	20
Batch number: 13011820002B	Sample number(s): 6918863-6918865 BKG: P916650									
Moisture						14.4	12.5		14*	13

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 8260 Benzene and Toluene
Batch number: B130111AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6918864	103	99	100	82
6918865	105	101	98	86
Blank	104	105	92	91
LCS	101	97	96	96
LCSD	101	101	96	97
MS	102	98	106	85
Limits:	50-141	54-135	52-141	50-131

Analysis Name: TCL 8270 (microwave)
Batch number: 13011SLA026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6918863	98	99	97	89	93	101
Blank	94	100	109	92	97	110
LCS	103	105	107	94	97	107

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil Refining & Supply Group Number: 1361387
Reported: 01/16/13 at 03:34 PM

Surrogate Quality Control

MS	95	94	90	85	91	105
MSD	100	99	92	86	91	105
Limits:	42-130	48-136	28-139	45-123	47-126	46-143

Analysis Name: TCL Pesticides 8081A Soil
Batch number: 130110005A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6918863	83	99
Blank	87	95
LCS	101	102
MS	82	92
MSD	84	88
Limits:	33-140	45-150

Analysis Name: PCBs in Soil (microwave)
Batch number: 130110006A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6918863	83	69
Blank	110	106
LCS	108	104
MS	57	58
MSD	29*	31
Limits:	33-143	24-164

Analysis Name: Herbicide soils 8151A Master
Batch number: 130110007A

	2,4-Dichlorophenylacetic acid
6918863	116
Blank	84
LCS	118
MS	133
MSD	133
Limits:	36-156

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Exxon Mobil Analysis Request/Environmental Services Chain of Custody

Lancaster Laboratories

For Lancaster Laboratories use only Acct. #: 10620
Group #: _____ Sample #: _____
1361387 6918863-6

Provide MRN for retail or AFE for major projects

Client: ExxonMobil Acct. #:
Project Name: Former Tappan Terminal MRN:
Project Manager: T. Bispham AFE:
Sampler: A. Hoffman
Name of State where samples were collected: NY

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water	Matrix: Other	Total # of Containers	VOCs	SVOCs	TAL Metals	Hex & Trivalent Chromium	Mercury	Pesticides	PCBs	Herbicides	Cyanide	Remarks	Temperature of samples upon receipt (if requested)
AGC-TSC1	1-10-13	1125		X	X			1		X	X	X	X	X	X	XX			
AGC-TS1	1-10-13	1115	X		X			1	X										
AGC-TS2	1-10-13	1120	X		X			1	X										

Matrix: Potable, NPDES

Analyses Requested / Preservation Codes

For Lab Use Only
FSC:
SCR#:

Preservation Codes
H=HCl T=Thiosulfate
N=HNO3 B=NaOH
S=H2SO4 O=Other

Turnaround Time Requested (TAT) (please circle): Normal (Rush)
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed: _____
Rush results requested by (please circle): Phone Fax E-mail
Phone #: _____ Fax #: _____
E-mail address: tbispham@rouxinc.com

Data Package Options (please circle if required)
Type I (validation/NJ reg) TX-TRRP-13
Type II (Tier II) MA MCP CT RCP
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)

SDG Complete? Yes No

State-specific QC (MS/MSD/Dup)? Yes No
(If yes, indicated QC sample and submit triplecate volume)
Internal COC required? Yes No

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	1-10-13	1500			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: [signature]	1/11/13	0835

Lancaster Laboratories, Inc. 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 717-656-2300

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Grp # 1361387

Environmental Sample Administration
Receipt Documentation Log

Client/Project: ExxonMobil

Date of Receipt: 1/11/13

Time of Receipt: 0835

Source Code: E50

Shipping Container Sealed: (YES) NO

Custody Seal Present * : YES (NO)

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	2737	2.0	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: 3647 **Date/Time:** 1/11/13 0840

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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NYSDEC ASP Category A Data Package

Prepared for:

ExxonMobil Refining & Supply
188 Long Island Avenue
Wyandanch NY 11798

Project: Tappan Terminal
Soil Samples
Collected on 01/10/13

SDG# TAP04

GROUP	SAMPLE NUMBERS
1361387	6918863-6918865

PA Cert. # 36-00037
NY Cert. # 10670
NJ Cert. # PA011
NC Cert. # 521
TX Cert. # T104704194-08A-TX

Through our technical processes and second person review of data, we have established that our data/deliverables are in compliance with the methods and project requirements unless otherwise noted or previously resolved with the client.

Authorized by: Dana M Kauffman **Date:** **01/31/2013**

Dana M. Kauffman
Manager

Any questions or concerns you might have regarding this data package should be directed to your client representative, Barbara Weyandt at Ext. 1576.

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Table of Contents for SDG# TAP04

1. Sample Reference List.....4

2. Methodology Summary/Reference.....5

3. Analysis Reports / Field Chain of Custody.....9

4. Volatiles by GC/MS Data.....29

   a. Case Narrative/Conformance Summary.....30

   b. Sample Data.....33

5. Semivolatiles by GC/MS Data.....49

   a. Case Narrative/Conformance Summary.....50

   b. Sample Data.....53

6. Herbicides Data.....59

   a. Case Narrative/Conformance Summary.....60

   b. Sample Data.....63

7. Pesticides Data.....69

   a. Case Narrative/Conformance Summary.....70

   b. Sample Data.....73

8. Polychlorinated Biphenyls (PCBs) Data.....77

   a. Case Narrative/Conformance Summary.....78

   b. Sample Data.....81

9. Metals in Solid Data.....85

a. Case Narrative/Conformance Summary.....86

b. Sample Data.....89

10. Instrumental Wet Chemistry Data.....91

a. Case Narrative/Conformance Summary.....92

11. Wet Chemistry Data.....94

a. Case Narrative/Conformance Summary.....95

12. Moisture Data.....98

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Sample Reference List for SDG Number TAP04
with a Data Package Type of NYSDEC A

01907 - ExxonMobil Refining & Supply

Project: Tappan Terminal

Lab Sample Number	Lab Sample Code	Client Sample Description
6918863	TTSC1	AGC-TSC1 Composite Soil S2010L4632
6918864	TTTS1	AGC-TS1 Grab Soil S2010L4632
6918865	TTTS2	AGC-TS2 Grab Soil S2010L4632

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10237 8260 Ext. Soil Master w/GRO

The soil sample is purged and the volatile compounds are collected on a sorbent trap that is subsequently desorbed onto the GC/MS system for chromatographic and mass spectral analysis.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8260B, December 1996

00159 Mercury

The solution resulting from the mercury digestion is analyzed by Cold Vapor AA.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 7471A, September 1994

02829 Trivalent Chromium soils

Calculation performed by subtracting hexavalent chromium from total chromium.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 6010B Modified, December 1996.

05711 SW SW846 Hg Digest

The sample is heated at 95 c with nitric acid, sulfuric acid, potassium persulfate, and potassium permanganate. Excess potassium permanganate is reduced with sodium chloride/hydroxylamine hydrochloride. Mercuric ions are reduced to mercury metal using stannous chloride.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 7471A Modified, September 1994.

06935 Arsenic
06946 Barium
06947 Beryllium
06949 Cadmium
06951 Chromium
06953 Copper
06955 Lead
06958 Manganese
06961 Nickel
06936 Selenium
06966 Silver
06972 Zinc

The solution resulting from the metals digestion is analyzed by Trace ICP.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 6010B, December 1996.

05708 SW SW846 ICP/ICP MS Digest

The sample is digested with nitric acid, hydrochloric acid and hydrogen peroxide.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 3050B, December 1996

10738 Pesticides in Soil (microwave)

The sample is solvent extracted and exchanged to hexane. Florisil cleanup is performed to reduce potential matrix interferences. The extract is analyzed using gas chromatography on two capillary columns (primary and confirmation) with electron capture detectors.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8081A, December 1996.

10401 Herbicide soils 8151A Master

The sample is acidified and solvent extracted. The extract is then hydrolyzed, solvent washed, and acidified for final extraction. The chlorophenoxy acids, phenols and related target compounds are converted to the methyl esters using diazomethane. Florisil cleanup is performed to reduce potential matrix interferences.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8151A, December 1996.

04181 Herbicide Soil Extraction

The sample is acidified and solvent extracted. The extract is then hydrolyzed, solvent washed, and acidified for final extraction. The chlorophenoxy acids, phenols and related target compounds are converted to the methyl esters using diazomethane. Florisil cleanup is performed to reduce potential matrix interferences.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Methods 3550B & 8151A, December 1996.

10736 PCBs in Soil (microwave)

The sample is solvent-extracted and exchanged to hexane. Sulfuric acid and Florisil cleanups are performed to reduce potential matrix interferences. The extract is analyzed using gas chromatography on two capillary columns (primary and confirmation) with electron capture detectors.

Reference: Test Methods for Evaluating Solid Waste, SW-846 Method 8082, December 1996.

10497 PCB Microwave Soil Extraction
10809 BNA Soil Microwave

The sample aliquot is extracted using microwave extraction with 1:1 methylene chloride and acetone. The extract is concentrated prior to analysis.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 3546, Revision 0, February 2007.

10496 PPL Pest. Microwave Extraction

The sample aliquot is extracted using microwave extraction with 1:1 hexane and acetone. The extract is concentrated prior to analysis.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 3546, Revision 0, February 2007.

10727 TCL 8270 (microwave)

The sample extract is analyzed by capillary column Gas Chromatography/Mass Spectrometry.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8270C, December 1996

05895 Total Cyanide (solid)

During the distillation step, complex cyanides are converted to hydrogen cyanide which readily reacts with chloramine T. Simple cyanides are converted to cyanogen chloride by reaction with chloramine T. This reacts with pyridine and barbituric acid to give a red colored complex determined colorimetrically.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 9012B, August 2002.

05896 Cyanide Solid Distillation

The sample is acidified and distilled. Cyanide is released as hydrogen cyanide and is absorbed in a sodium hydroxide solution.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 9012B, August 2002.

05898 Amenable Cyanide (solid)
05897 Amenable Cyanide Solid Distill

A portion of the sample is pretreated with chlorine to release the dissociable cyanide. Both treated and untreated portions of the sample are acidified and distilled. Cyanide is released as hydrogen cyanide and is absorbed in a sodium hydroxide solution. The amenable cyanide is calculated as the difference between the untreated and chlorine treated portions.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 9012B, August 2002.

00425 Hexavalent Chromium (SOLIDS)

The filtrate from method #7825 is analyzed colorimetrically using diphenylcarbazide to produce a red-violet color. The absorbance is read at 540 nm and compared to a standard curve.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 7196A, July 1992.

07825 Hexavalent Cr (Extraction)

The sample is digested using a 3% sodium carbonate - 2% sodium hydroxide solution and then filtered through a 0.45 micron filter.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 3060A, December 1996

00111 Moisture

A well-mixed sample is placed in a tared container and dried to a constant weight in an oven at 103-105C. The increase in weight is the total solids.

Reference: Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998, Method 2540 G

00374 GC/MS - Bulk Soil Prep

Samples are field collected in glass containers, and preserved within 48 hours. An aliquot of the soil sample is prepared in reagent water and is purged at 40oC with helium.

Reference: Test Methods for Evaluating Solid Waste, SW-846, Method 5035A Modified, July 2002.

06646 GC/MS HL Bulk Sample Prep

Samples are field collected in glass containers, and preserved within 48 hours. An aliquot of the methanolic extract of the sample is diluted in reagent water and purged at ambient temperature with helium.

Reference: Test Methods for Evaluating Solid Waste, SW-846, Method 5035A Modified, July 2002.

Analysis Reports / Field Chain of Custody

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ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

ExxonMobil Refining & Supply
188 Long Island Avenue
Wyandanch NY 11798

January 16, 2013

Project: Tappan Terminal

Submittal Date: 01/11/2013
Group Number: 1361387
SDG: TAP04
PO Number: 15249
State of Sample Origin: NY

Client Sample Description	Lancaster Labs (LLI) #
AGC-TSC1 Composite Soil	6918863
AGC-TS1 Grab Soil	6918864
AGC-TS2 Grab Soil	6918865

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

1 COPY TO	Data Package Group	
ELECTRONIC COPY TO	Roux Associates	Attn: Tracy Bispham
ELECTRONIC COPY TO	Exxon Mobil: Woodard & Curran	Attn: Anne Proctor
ELECTRONIC COPY TO	Roux	Attn: Noelle Clarke

Respectfully Submitted,

Barbara Weyandt

Barbara A. Weyandt
Specialist

(717) 556-7264

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Sample Description: AGC-TSC1 Composite Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6918863
LLI Group # 1361387
Account # 01907

Project Name: Tappan Terminal

Collected: 01/10/2013 11:25 by AH

Submitted: 01/11/2013 08:35
Reported: 01/16/2013 15:34

ExxonMobil Refining & Supply
188 Long Island Avenue
Wyandanch NY 11798

TTSC1 SDG#: TAP04-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	
10727	Acenaphthene	83-32-9	14	J	4	1
10727	Acenaphthylene	208-96-8	14	J	4	1
10727	Anthracene	120-12-7	69		4	1
10727	Benzo(a)anthracene	56-55-3	280		4	1
10727	Benzo(a)pyrene	50-32-8	190		4	1
10727	Benzo(b)fluoranthene	205-99-2	270		4	1
10727	Benzo(g,h,i)perylene	191-24-2	97		4	1
10727	Benzo(k)fluoranthene	207-08-9	140		4	1
10727	Chrysene	218-01-9	290		4	1
10727	Dibenz(a,h)anthracene	53-70-3	26		4	1
10727	Dibenzofuran	132-64-9	N.D.		20	1
10727	Fluoranthene	206-44-0	500		4	1
10727	Fluorene	86-73-7	17	J	4	1
10727	Indeno(1,2,3-cd)pyrene	193-39-5	95		4	1
10727	2-Methylphenol	95-48-7	N.D.		20	1
10727	4-Methylphenol	106-44-5	N.D.		20	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10727	Naphthalene	91-20-3	8	J	4	1
10727	Pentachlorophenol	87-86-5	N.D.		39	1
10727	Phenanthrene	85-01-8	210		4	1
10727	Phenol	108-95-2	N.D.		20	1
10727	Pyrene	129-00-0	430		4	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	
10401	2,4,5-TP	93-72-1	N.D.		0.88	1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	
10738	Aldrin	309-00-2	N.D.		1.0	5
10738	Alpha BHC	319-84-6	N.D.		1.0	5
10738	Beta BHC	319-85-7	N.D.		5.7	5
10738	Gamma BHC - Lindane	58-89-9	N.D.		1.0	5
10738	Alpha Chlordane	5103-71-9	20		1.0	5
10738	p,p-DDD	72-54-8	N.D.		7.7	5
10738	p,p-DDE	72-55-9	47		2.0	5
10738	p,p-DDT	50-29-3	63		2.1	5
10738	Delta BHC	319-86-8	N.D.		2.7	5
10738	Dieldrin	60-57-1	N.D.		2.8	5
10738	Endosulfan I	959-98-8	N.D.		1.3	5
10738	Endosulfan II	33213-65-9	N.D.		2.0	5
10738	Endosulfan Sulfate	1031-07-8	N.D.		2.0	5
10738	Endrin	72-20-8	N.D.		2.0	5
10738	HCB	118-74-1	N.D.		1.2	5
10738	Heptachlor	76-44-8	N.D.		4.0	5
	Reporting limits were raised due to interference from the sample matrix.					
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	
10736	PCB-1016	12674-11-2	N.D.		4.3	1

Sample Description: AGC-TSC1 Composite Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6918863
LLI Group # 1361387
Account # 01907

Project Name: Tappan Terminal

Collected: 01/10/2013 11:25 by AH

Submitted: 01/11/2013 08:35
Reported: 01/16/2013 15:34

ExxonMobil Refining & Supply
188 Long Island Avenue
Wyandanch NY 11798

TTSC1 SDG#: TAP04-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**	**ug/kg**	
10736	PCB-1221	11104-28-2	N.D.	5.4	1
10736	PCB-1232	11141-16-5	N.D.	9.5	1
10736	PCB-1242	53469-21-9	N.D.	3.9	1
10736	PCB-1248	12672-29-6	N.D.	3.9	1
10736	PCB-1254	11097-69-1	N.D.	3.9	1
10736	PCB-1260	11096-82-5	N.D.	5.8	1
	The % difference for the calibration verification standard is outside the +/- 15% criteria for the analyte(s) listed below. Since the average of the % difference values meets the criteria, the results are reported. This applies to the following analyte(s): decachlorobiphenyl surrogate				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06935	Arsenic	7440-38-2	3.46	0.383	1
06946	Barium	7440-39-3	103	0.0383	1
06947	Beryllium	7440-41-7	0.392 J	0.0777	1
06949	Cadmium	7440-43-9	N.D.	0.191	5
06951	Chromium	7440-47-3	24.1	0.102	1
06953	Copper	7440-50-8	23.7	0.209	1
06955	Lead	7439-92-1	13.7	0.545	1
06958	Manganese	7439-96-5	471	0.0963	1
06961	Nickel	7440-02-0	15.3	0.128	1
06936	Selenium	7782-49-2	N.D.	0.835	1
06966	Silver	7440-22-4	0.195 J	0.162	1
06972	Zinc	7440-66-6	49.1	0.232	1
	SW-846 6010B modified		**mg/kg**	**mg/kg**	
02829	Trivalent Chromium soils	16065-83-1	24.1	0.59	1
	The Trivalent Chromium result is calculated by subtracting Hexavalent Chromium from Total Chromium.				
	SW-846 7471A		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0224 J	0.0115	1
Wet Chemistry	**SW-846 9012B**		**mg/kg**	**mg/kg**	
05898	Amenable Cyanide (solid)	n.a.	N.D.	0.20	1
05895	Total Cyanide (solid)	57-12-5	N.D.	0.21	1
	SW-846 7196A		**mg/kg**	**mg/kg**	
00425	Hexavalent Chromium (SOLIDS)	18540-29-9	N.D.	0.59	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	15.5	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.				

Sample Description: AGC-TSC1 Composite Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6918863
LLI Group # 1361387
Account # 01907

Project Name: Tappan Terminal

Collected: 01/10/2013 11:25 by AH

Submitted: 01/11/2013 08:35
Reported: 01/16/2013 15:34

ExxonMobil Refining & Supply
188 Long Island Avenue
Wyandanch NY 11798

TTSC1 SDG#: TAP04-01

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10727	Table 375-6.8(a) SVOCs	SW-846 8270C	1	13011SLA026	01/14/2013 03:59	Holly Berry	1
10809	BNA Soil Microwave	SW-846 3546	1	13011SLA026	01/12/2013 06:40	Katheryne V Sponheimer	1
10401	Table 375-6.8(a) Herbicides	SW-846 8151A	1	130110007A	01/14/2013 11:54	Matthew S Listner	1
10738	Table 375-6.8(a) Pesticides	SW-846 8081A	1	130110005A	01/15/2013 08:16	Jamie L Brillhart	5
10736	PCBs 8082 Soil	SW-846 8082	1	130110006A	01/14/2013 13:47	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	130110006A	01/11/2013 18:05	Sally L Appleyard	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	130110005A	01/11/2013 18:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	130110007A	01/12/2013 06:15	Karen L Beyer	1
06935	Arsenic	SW-846 6010B	1	130115708001	01/14/2013 21:53	Katlin N Cataldi	1
06946	Barium	SW-846 6010B	1	130115708001	01/14/2013 21:53	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010B	1	130115708001	01/14/2013 21:53	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010B	1	130115708001	01/15/2013 09:20	Joanne M Gates	5
06951	Chromium	SW-846 6010B	1	130115708001	01/14/2013 21:53	Katlin N Cataldi	1
06953	Copper	SW-846 6010B	1	130115708001	01/14/2013 21:53	Katlin N Cataldi	1
06955	Lead	SW-846 6010B	1	130115708001	01/15/2013 09:12	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	130115708001	01/14/2013 21:53	Katlin N Cataldi	1
06961	Nickel	SW-846 6010B	1	130115708001	01/14/2013 21:53	Katlin N Cataldi	1
06936	Selenium	SW-846 6010B	1	130115708001	01/14/2013 21:53	Katlin N Cataldi	1
06966	Silver	SW-846 6010B	1	130115708001	01/14/2013 21:53	Katlin N Cataldi	1
06972	Zinc	SW-846 6010B	1	130115708001	01/14/2013 21:53	Katlin N Cataldi	1
02829	Trivalent Chromium soils	SW-846 6010B modified	1	130162829001	01/16/2013 12:35	Nina C Haller	1
00159	Mercury	SW-846 7471A	1	130115711001	01/15/2013 07:22	Damary Valentin	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	130115708001	01/14/2013 08:55	Denise K Conners	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	130115711001	01/14/2013 11:45	Denise K Conners	1
05898	Amenable Cyanide (solid)	SW-846 9012B	1	13015103201A	01/15/2013 14:24	Carolyn M Mastropietro	1
05895	Total Cyanide (solid)	SW-846 9012B	1	13015102201A	01/15/2013 14:17	Carolyn M Mastropietro	1
05897	Amenable Cyanide Solid Distill	SW-846 9012B	1	13015103201A	01/15/2013 10:20	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	13015102201A	01/15/2013 10:20	Nancy J Shoop	1

Sample Description: AGC-TSC1 Composite Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6918863
LLI Group # 1361387
Account # 01907

Project Name: Tappan Terminal

Collected: 01/10/2013 11:25 by AH

Submitted: 01/11/2013 08:35
Reported: 01/16/2013 15:34

ExxonMobil Refining & Supply
188 Long Island Avenue
Wyandanch NY 11798

TTSC1 SDG#: TAP04-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00425	Hexavalent Chromium (SOLIDS)	SW-846 7196A	1	13014042501A	01/15/2013 01:10	Daniel S Smith	1
07825	Hexavalent Cr (Extraction)	SW-846 3060A	1	13014042501A	01/14/2013 01:10	Daniel S Smith	1
00111	Moisture	SM 2540 G-1997	1	13011820002B	01/11/2013 21:49	Scott W Freisher	1

Sample Description: AGC-TS1 Grab Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6918864
LLI Group # 1361387
Account # 01907

Project Name: Tappan Terminal

Collected: 01/10/2013 11:15 by AH

Submitted: 01/11/2013 08:35
Reported: 01/16/2013 15:34

ExxonMobil Refining & Supply
188 Long Island Avenue
Wyandanch NY 11798

TTTS1 SDG#: TAP04-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		mg/kg	mg/kg	
10237	Acetone	67-64-1	N.D.	0.008	0.92
10237	Benzene	71-43-2	N.D.	0.0006	0.92
10237	2-Butanone	78-93-3	N.D.	0.004	0.92
10237	n-Butylbenzene	104-51-8	N.D.	0.001	0.92
10237	sec-Butylbenzene	135-98-8	N.D.	0.001	0.92
10237	tert-Butylbenzene	98-06-6	N.D.	0.001	0.92
10237	Carbon Tetrachloride	56-23-5	N.D.	0.001	0.92
10237	Chlorobenzene	108-90-7	N.D.	0.001	0.92
10237	Chloroform	67-66-3	N.D.	0.001	0.92
10237	1,2-Dichlorobenzene	95-50-1	N.D.	0.001	0.92
10237	1,3-Dichlorobenzene	541-73-1	N.D.	0.001	0.92
10237	1,4-Dichlorobenzene	106-46-7	N.D.	0.001	0.92
10237	1,1-Dichloroethane	75-34-3	N.D.	0.001	0.92
10237	1,2-Dichloroethane	107-06-2	N.D.	0.001	0.92
10237	1,1-Dichloroethene	75-35-4	N.D.	0.001	0.92
10237	cis-1,2-Dichloroethene	156-59-2	N.D.	0.001	0.92
10237	trans-1,2-Dichloroethene	156-60-5	N.D.	0.001	0.92
10237	1,4-Dioxane	123-91-1	N.D.	0.077	0.92
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.92
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0006	0.92
10237	Methylene Chloride	75-09-2	0.002 J	0.002	0.92
10237	n-Propylbenzene	103-65-1	N.D.	0.001	0.92
10237	Tetrachloroethene	127-18-4	N.D.	0.001	0.92
10237	Toluene	108-88-3	0.001 J	0.001	0.92
10237	1,1,1-Trichloroethane	71-55-6	N.D.	0.001	0.92
10237	Trichloroethene	79-01-6	N.D.	0.001	0.92
10237	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.001	0.92
10237	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.001	0.92
10237	Vinyl Chloride	75-01-4	N.D.	0.001	0.92
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.92
Wet Chemistry	**SM 2540 G-1997**		%	%	
00111	Moisture	n.a.	17.1	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of New York Certification No. 10670

Lancaster Laboratories is responsible only for the certified testing of samples. We are not directly responsible for the integrity of the sample prior to laboratory receipt. Any reported concentrations less than 200 ug/kg may be biased low if they were not collected according to EPA 5035/5035A specifications.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Sample Description: AGC-TS1 Grab Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6918864
LLI Group # 1361387
Account # 01907

Project Name: Tappan Terminal

Collected: 01/10/2013 11:15 by AH

Submitted: 01/11/2013 08:35
Reported: 01/16/2013 15:34

ExxonMobil Refining & Supply
188 Long Island Avenue
Wyandanch NY 11798

TTTS1 SDG#: TAP04-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	Table 375-6.8(a) VOCs	SW-846 8260B	1	B130111AA	01/11/2013 14:26	Emily R Styer	0.92
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201301129894	01/11/2013 09:28	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201301129894	01/11/2013 09:28	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201301129894	01/11/2013 09:25	Larry E Bevins	n.a.
00111	Moisture	SM 2540 G-1997	1	13011820002B	01/11/2013 21:49	Scott W Freisher	1

Sample Description: AGC-TS2 Grab Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6918865
LLI Group # 1361387
Account # 01907

Project Name: Tappan Terminal

Collected: 01/10/2013 11:20 by AH

Submitted: 01/11/2013 08:35
Reported: 01/16/2013 15:34

ExxonMobil Refining & Supply
188 Long Island Avenue
Wyandanch NY 11798

TTTS2 SDG#: TAP04-03*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		mg/kg	mg/kg	
10237	Acetone	67-64-1	N.D.	0.008	1
10237	Benzene	71-43-2	N.D.	0.0006	1
10237	2-Butanone	78-93-3	N.D.	0.005	1
10237	n-Butylbenzene	104-51-8	N.D.	0.001	1
10237	sec-Butylbenzene	135-98-8	N.D.	0.001	1
10237	tert-Butylbenzene	98-06-6	N.D.	0.001	1
10237	Carbon Tetrachloride	56-23-5	N.D.	0.001	1
10237	Chlorobenzene	108-90-7	N.D.	0.001	1
10237	Chloroform	67-66-3	N.D.	0.001	1
10237	1,2-Dichlorobenzene	95-50-1	N.D.	0.001	1
10237	1,3-Dichlorobenzene	541-73-1	N.D.	0.001	1
10237	1,4-Dichlorobenzene	106-46-7	N.D.	0.001	1
10237	1,1-Dichloroethane	75-34-3	N.D.	0.001	1
10237	1,2-Dichloroethane	107-06-2	N.D.	0.001	1
10237	1,1-Dichloroethene	75-35-4	N.D.	0.001	1
10237	cis-1,2-Dichloroethene	156-59-2	N.D.	0.001	1
10237	trans-1,2-Dichloroethene	156-60-5	N.D.	0.001	1
10237	1,4-Dioxane	123-91-1	N.D.	0.082	1
10237	Ethylbenzene	100-41-4	N.D.	0.001	1
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0006	1
10237	Methylene Chloride	75-09-2	N.D.	0.002	1
10237	n-Propylbenzene	103-65-1	N.D.	0.001	1
10237	Tetrachloroethene	127-18-4	N.D.	0.001	1
10237	Toluene	108-88-3	0.001 J	0.001	1
10237	1,1,1-Trichloroethane	71-55-6	N.D.	0.001	1
10237	Trichloroethene	79-01-6	N.D.	0.001	1
10237	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.001	1
10237	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.001	1
10237	Vinyl Chloride	75-01-4	N.D.	0.001	1
10237	Xylene (Total)	1330-20-7	N.D.	0.001	1
Wet Chemistry	**SM 2540 G-1997**		%	%	
00111	Moisture	n.a.	14.9	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of New York Certification No. 10670

Lancaster Laboratories is responsible only for the certified testing of samples. We are not directly responsible for the integrity of the sample prior to laboratory receipt. Any reported concentrations less than 200 ug/kg may be biased low if they were not collected according to EPA 5035/5035A specifications.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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Analysis Report

Sample Description: AGC-TS2 Grab Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6918865
LLI Group # 1361387
Account # 01907

Project Name: Tappan Terminal

Collected: 01/10/2013 11:20 by AH

Submitted: 01/11/2013 08:35
Reported: 01/16/2013 15:34

ExxonMobil Refining & Supply
188 Long Island Avenue
Wyandanch NY 11798

TTTS2 SDG#: TAP04-03*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	Table 375-6.8(a) VOCs	SW-846 8260B	1	B130111AA	01/11/2013 12:56	Emily R Styer	1
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201301129894	01/11/2013 09:28	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201301129894	01/11/2013 09:28	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201301129894	01/11/2013 09:22	Larry E Bevins	n.a.
00111	Moisture	SM 2540 G-1997	1	13011820002B	01/11/2013 21:49	Scott W Freisher	1

Quality Control Summary

Client Name: ExxonMobil Refining & Supply Group Number: 1361387
Reported: 01/16/13 at 03:34 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B130111AA	Sample number(s): 6918864-6918865							
Acetone	N.D.	0.007	mg/kg	125	108	32-209	14	30
Benzene	N.D.	0.0005	mg/kg	104	103	80-120	1	30
2-Butanone	N.D.	0.004	mg/kg	100	91	37-155	10	30
n-Butylbenzene	N.D.	0.001	mg/kg	96	95	72-120	1	30
sec-Butylbenzene	N.D.	0.001	mg/kg	100	99	75-120	1	30
tert-Butylbenzene	N.D.	0.001	mg/kg	95	93	75-120	3	30
Carbon Tetrachloride	N.D.	0.001	mg/kg	101	101	69-122	0	30
Chlorobenzene	N.D.	0.001	mg/kg	100	98	80-120	2	30
Chloroform	N.D.	0.001	mg/kg	99	97	80-120	2	30
1,2-Dichlorobenzene	N.D.	0.001	mg/kg	97	96	79-120	1	30
1,3-Dichlorobenzene	N.D.	0.001	mg/kg	99	99	78-120	0	30
1,4-Dichlorobenzene	N.D.	0.001	mg/kg	98	96	79-120	2	30
1,1-Dichloroethane	N.D.	0.001	mg/kg	102	101	80-120	1	30
1,2-Dichloroethane	N.D.	0.001	mg/kg	100	96	70-137	4	30
1,1-Dichloroethene	N.D.	0.001	mg/kg	105	103	73-129	1	30
cis-1,2-Dichloroethene	N.D.	0.001	mg/kg	108	106	80-120	2	30
trans-1,2-Dichloroethene	N.D.	0.001	mg/kg	103	102	79-120	1	30
1,4-Dioxane	N.D.	0.070	mg/kg	106	105	48-129	1	30
Ethylbenzene	N.D.	0.001	mg/kg	100	99	80-120	2	30
Methyl Tertiary Butyl Ether	N.D.	0.0005	mg/kg	100	99	74-121	1	30
Methylene Chloride	N.D.	0.002	mg/kg	103	100	76-124	3	30
n-Propylbenzene	N.D.	0.001	mg/kg	87	86	77-120	1	30
Tetrachloroethene	N.D.	0.001	mg/kg	105	100	78-126	5	30
Toluene	N.D.	0.001	mg/kg	98	94	80-120	4	30
1,1,1-Trichloroethane	N.D.	0.001	mg/kg	98	96	71-125	2	30
Trichloroethene	N.D.	0.001	mg/kg	103	102	80-120	1	30
1,2,4-Trimethylbenzene	N.D.	0.001	mg/kg	99	98	79-120	1	30
1,3,5-Trimethylbenzene	N.D.	0.001	mg/kg	98	96	78-120	2	30
Vinyl Chloride	N.D.	0.001	mg/kg	64	62	53-120	2	30
Xylene (Total)	N.D.	0.001	mg/kg	101	98	80-120	2	30
Batch number: 13011SLA026	Sample number(s): 6918863							
Acenaphthene	N.D.	3.	ug/kg	101		83-111		
Acenaphthylene	N.D.	3.	ug/kg	105		83-127		
Anthracene	N.D.	3.	ug/kg	105		83-111		
Benzo(a)anthracene	N.D.	3.	ug/kg	102		73-123		
Benzo(a)pyrene	N.D.	3.	ug/kg	99		80-123		
Benzo(b)fluoranthene	N.D.	3.	ug/kg	107		76-124		
Benzo(g,h,i)perylene	N.D.	3.	ug/kg	95		77-122		
Benzo(k)fluoranthene	N.D.	3.	ug/kg	105		71-135		
Chrysene	N.D.	3.	ug/kg	104		73-119		
Dibenz(a,h)anthracene	N.D.	3.	ug/kg	99		67-129		
Dibenzofuran	N.D.	17.	ug/kg	101		78-116		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil Refining & Supply Group Number: 1361387
Reported: 01/16/13 at 03:34 PM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Fluoranthene	N.D.	3.	ug/kg	107		80-120		
Fluorene	N.D.	3.	ug/kg	106		81-117		
Indeno(1,2,3-cd)pyrene	N.D.	3.	ug/kg	96		64-128		
2-Methylphenol	N.D.	17.	ug/kg	104		75-126		
4-Methylphenol	N.D.	17.	ug/kg	105		74-116		
Naphthalene	N.D.	3.	ug/kg	95		77-115		
Pentachlorophenol	N.D.	33.	ug/kg	112		60-134		
Phenanthrene	N.D.	3.	ug/kg	103		77-119		
Phenol	N.D.	17.	ug/kg	100		69-126		
Pyrene	N.D.	3.	ug/kg	100		80-121		
Batch number: 130110007A	Sample number(s): 6918863							
2,4,5-TP	N.D.	0.75	ug/kg	118*		60-111		
Batch number: 130110005A	Sample number(s): 6918863							
Aldrin	N.D.	0.17	ug/kg	102		62-134		
Alpha BHC	N.D.	0.17	ug/kg	103		67-131		
Beta BHC	N.D.	0.96	ug/kg	104		59-161		
Gamma BHC - Lindane	N.D.	0.17	ug/kg	105		66-132		
Alpha Chlordane	N.D.	0.17	ug/kg	103		64-140		
p,p-DDD	N.D.	0.33	ug/kg	111		73-131		
p,p-DDE	N.D.	0.33	ug/kg	103		72-132		
p,p-DDT	N.D.	0.35	ug/kg	98		65-131		
Delta BHC	N.D.	0.45	ug/kg	107		44-145		
Dieldrin	N.D.	0.33	ug/kg	102		71-134		
Endosulfan I	N.D.	0.22	ug/kg	99		57-127		
Endosulfan II	N.D.	0.33	ug/kg	102		63-127		
Endosulfan Sulfate	N.D.	0.33	ug/kg	106		80-137		
Endrin	N.D.	0.33	ug/kg	101		66-136		
HCB	N.D.	0.21	ug/kg					
Heptachlor	N.D.	0.17	ug/kg	99		68-132		
Batch number: 130110006A	Sample number(s): 6918863							
PCB-1016	N.D.	3.6	ug/kg	98		64-121		
PCB-1221	N.D.	4.6	ug/kg					
PCB-1232	N.D.	8.0	ug/kg					
PCB-1242	N.D.	3.3	ug/kg					
PCB-1248	N.D.	3.3	ug/kg					
PCB-1254	N.D.	3.3	ug/kg					
PCB-1260	N.D.	4.9	ug/kg	112		72-123		
Batch number: 130115708001	Sample number(s): 6918863							
Arsenic	N.D.	0.330	mg/kg	97		80-120		
Barium	N.D.	0.0330	mg/kg	102		80-120		
Beryllium	N.D.	0.0670	mg/kg	97		80-120		
Cadmium	N.D.	0.0330	mg/kg	100		80-120		
Chromium	N.D.	0.0880	mg/kg	104		80-120		
Copper	N.D.	0.180	mg/kg	102		80-120		
Lead	N.D.	0.470	mg/kg	102		80-120		
Manganese	N.D.	0.0830	mg/kg	99		80-120		
Nickel	N.D.	0.110	mg/kg	104		80-120		
Selenium	N.D.	0.720	mg/kg	103		80-120		
Silver	N.D.	0.140	mg/kg	102		80-120		
Zinc	0.248 J	0.200	mg/kg	100		80-120		
Batch number: 130115711001	Sample number(s): 6918863							

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil Refining & Supply Group Number: 1361387
Reported: 01/16/13 at 03:34 PM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Mercury	N.D.	0.0103	mg/kg	107		80-120		
Batch number: 13015102201A	Sample number(s): 6918863							
Total Cyanide (solid)	N.D.	0.18	mg/kg	98		90-110		
Batch number: 13015103201A	Sample number(s): 6918863							
Amenable Cyanide (solid)	N.D.	0.18	mg/kg	0		-20-20		
Batch number: 13014042501A	Sample number(s): 6918863							
Hexavalent Chromium (SOLIDS)	N.D.	0.50	mg/kg	89		80-120		
Batch number: 13011820002B	Sample number(s): 6918863-6918865							
Moisture				100		99-101		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: B130111AA	Sample number(s): 6918864-6918865 UNSPK: 6918865								
Acetone	147		31-195						
Benzene	108		55-143						
2-Butanone	86		37-163						
n-Butylbenzene	90		30-146						
sec-Butylbenzene	114		33-157						
tert-Butylbenzene	118		41-152						
Carbon Tetrachloride	104		45-153						
Chlorobenzene	98		49-135						
Chloroform	101		61-142						
1,2-Dichlorobenzene	85		36-133						
1,3-Dichlorobenzene	97		34-134						
1,4-Dichlorobenzene	93		35-136						
1,1-Dichloroethane	107		63-142						
1,2-Dichloroethane	95		68-131						
1,1-Dichloroethene	112		61-149						
cis-1,2-Dichloroethene	109		60-136						
trans-1,2-Dichloroethene	108		59-142						
1,4-Dioxane	209*		39-180						
Ethylbenzene	105		44-141						
Methyl Tertiary Butyl Ether	94		55-129						
Methylene Chloride	110		61-141						
n-Propylbenzene	111		39-157						
Tetrachloroethene	109		42-149						
Toluene	108		50-146						
1,1,1-Trichloroethane	101		64-142						
Trichloroethene	106		53-144						
1,2,4-Trimethylbenzene	118		37-149						
1,3,5-Trimethylbenzene	121		38-150						
Vinyl Chloride	71		50-154						
Xylene (Total)	101		44-136						

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil Refining & Supply Group Number: 1361387
Reported: 01/16/13 at 03:34 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Batch number: 13011SLA026	Sample number(s): 6918863			UNSPK: P920250							
Acenaphthene	95	98	33-140	2	30						
Acenaphthylene	97	98	47-137	1	30						
Anthracene	97	95	40-147	2	30						
Benzo(a)anthracene	96	93	32-150	2	30						
Benzo(a)pyrene	94	91	30-150	4	30						
Benzo(b)fluoranthene	92	84	29-150	9	30						
Benzo(g,h,i)perylene	91	90	31-152	2	30						
Benzo(k)fluoranthene	102	99	35-148	4	30						
Chrysene	97	98	33-142	1	30						
Dibenz(a,h)anthracene	88	90	37-151	2	30						
Dibenzofuran	98	99	38-148	0	30						
Fluoranthene	104	100	30-151	3	30						
Fluorene	107	102	36-140	5	30						
Indeno(1,2,3-cd)pyrene	90	91	31-154	1	30						
2-Methylphenol	93	99	32-146	6	30						
4-Methylphenol	91	100	36-149	9	30						
Naphthalene	93	93	35-141	0	30						
Pentachlorophenol	70	71	23-145	2	30						
Phenanthrene	102	93	34-147	9	30						
Phenol	96	98	39-151	2	30						
Pyrene	99	93	29-148	7	30						
Batch number: 130110007A	Sample number(s): 6918863			UNSPK: 6918863							
2,4,5-TP	126	119	10-142	6	35						
Batch number: 130110005A	Sample number(s): 6918863			UNSPK: P914016							
Aldrin	84	83	18-138	1	50						
Alpha BHC	86	87	9-143	1	50						
Beta BHC	90	88	14-168	1	50						
Gamma BHC - Lindane	88	88	14-143	0	50						
Alpha Chlordane	-107*	-51*	15-153	48	50						
p,p-DDD	98	95	17-163	3	50						
p,p-DDE	93	97	22-169	5	50						
p,p-DDT	107	98	4-159	9	50						
Delta BHC	100	97	30-144	3	50						
Dieldrin	94	94	17-163	1	50						
Endosulfan I	85	88	8-137	3	50						
Endosulfan II	92	90	17-146	2	50						
Endosulfan Sulfate	98	95	6-190	2	50						
Endrin	91	88	25-166	3	50						
Heptachlor	86	101	25-148	16	50						
Batch number: 130110006A	Sample number(s): 6918863			UNSPK: P916912							
PCB-1016	53	29	29-146	58*	50						
PCB-1260	64	34*	39-149	61*	50						
Batch number: 130115708001	Sample number(s): 6918863			UNSPK: P917623		BKG: P917623					
Arsenic	100	101	75-125	2	20	0.679	J	0.707	J	4 (1)	20
Barium	107	107	75-125	1	20	24.0		23.5		2	20
Beryllium	101	100	83-111	0	20	0.141	J	0.142	J	1 (1)	20
Cadmium	96	96	75-125	2	20	N.D.		N.D.		0 (1)	20

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil Refining & Supply Group Number: 1361387
Reported: 01/16/13 at 03:34 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc		DUP RPD	Dup RPD Max
Chromium	120	119	75-125	0	20	6.82	6.30		8 (1)	20
Copper	101	98	75-125	2	20	7.10	5.67		22*	20
Lead	97	96	75-125	0	20	1.60	1.72		7 (1)	20
Manganese	128*	160*	75-125	7	20	147	149		2	20
Nickel	98	97	75-125	1	20	6.24	5.29		16	20
Selenium	101	101	75-125	1	20	N.D.	N.D.		0 (1)	20
Silver	107	106	75-125	0	20	N.D.	N.D.		0 (1)	20
Zinc	103	100	75-125	1	20	12.9	12.3		5	20
Batch number: 130115711001	Sample number(s): 6918863 UNSPK: P917623 BKG: P917623									
Mercury	107	103	80-120	4	20	N.D.	N.D.		0 (1)	20
Batch number: 13015102201A	Sample number(s): 6918863 UNSPK: 6918863 BKG: 6918863									
Total Cyanide (solid)	91		68-134			N.D.	N.D.		0 (1)	20
Batch number: 13015103201A	Sample number(s): 6918863 UNSPK: 6918863 BKG: 6918863									
Amenable Cyanide (solid)	0		-20-20			N.D.	N.D.		0 (1)	20
Batch number: 13014042501A	Sample number(s): 6918863 UNSPK: 6918863 BKG: 6918863									
Hexavalent Chromium (SOLIDS)	72*		75-125			N.D.	0.84	J	200* (1)	20
Batch number: 13011820002B	Sample number(s): 6918863-6918865 BKG: P916650									
Moisture						14.4	12.5		14*	13

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 8260 Benzene and Toluene
Batch number: B130111AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6918864	103	99	100	82
6918865	105	101	98	86
Blank	104	105	92	91
LCS	101	97	96	96
LCSD	101	101	96	97
MS	102	98	106	85
Limits:	50-141	54-135	52-141	50-131

Analysis Name: TCL 8270 (microwave)
Batch number: 13011SLA026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6918863	98	99	97	89	93	101
Blank	94	100	109	92	97	110
LCS	103	105	107	94	97	107

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil Refining & Supply Group Number: 1361387
Reported: 01/16/13 at 03:34 PM

Surrogate Quality Control

MS	95	94	90	85	91	105
MSD	100	99	92	86	91	105
Limits:	42-130	48-136	28-139	45-123	47-126	46-143

Analysis Name: TCL Pesticides 8081A Soil
Batch number: 130110005A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6918863	83	99
Blank	87	95
LCS	101	102
MS	82	92
MSD	84	88
Limits:	33-140	45-150

Analysis Name: PCBs in Soil (microwave)
Batch number: 130110006A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6918863	83	69
Blank	110	106
LCS	108	104
MS	57	58
MSD	29*	31
Limits:	33-143	24-164

Analysis Name: Herbicide soils 8151A Master
Batch number: 130110007A

	2,4-Dichlorophenylacetic acid
6918863	116
Blank	84
LCS	118
MS	133
MSD	133
Limits:	36-156

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Lancaster Laboratories

Exxon Mobil Analysis Request/Environmental Services Chain of Custody

For Lancaster Laboratories use only Acct. #: 10620
Group #: _____ Sample #: _____
1361387 6918863-6

Provide MRN for retail or AFE for major projects

Client: ExxonMobil Acct. #:
Project Name: Former Tappan Terminal MRN:
Project Manager: T. Bispham AFE:
Sampler: A. Hoffman
Name of State where samples were collected: NY

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Water	Other	Potable	NPDES	Total # of Containers	VOCs	SVOCs	TAL Metals	Hex & Trivalent Chromium	Mercury	Pesticides	PCBs	Herbicides	Cyanide	Remarks	Temperature of samples upon receipt (if requested)
AGC-TSC1	1-10-13	1125		X	X					1		X	X	X	X	X	X	XX	X		
AGC-TS1	1-10-13	1115	X		X					1	X										
AGC-TS2	1-10-13	1120	X		X					1	X										

Analyses Requested / Preservation Codes

Preservation Codes: H=HCl T=Thiosulfate N=HNO3 B=NaOH S=H2SO4 O=Other

For Lab Use Only
FSC:
SCR#:

Turnaround Time Requested (TAT) (please circle): Normal (Rush)
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail
Phone #: Fax #:
E-mail address: tbispham@rouxinc.com

Data Package Options (please circle if required)
Type I (validation/NJ reg) TX-TRRP-13
Type II (Tier II) MA MCP CT RCP
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)

SDG Complete? Yes No

State-specific QC (MS/MSD/Dup)? Yes No
(If yes, indicated QC sample and submit triplecate volume)
Internal COC required? Yes No

Relinquished by:	Date	Time	Received by:	Date	Time
	1-10-13	1500			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	1/11/13	0835

Lancaster Laboratories, Inc. 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 717-656-2300

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Grp # 1361387

Environmental Sample Administration
Receipt Documentation Log

Client/Project: ExxonMobil

Date of Receipt: 1/11/13

Time of Receipt: 0835

Source Code: E50

Shipping Container Sealed: (YES) NO

Custody Seal Present * : YES (NO)

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	2737	2.0	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: 3647 **Date/Time:** 1/11/13 0840

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Volatiles by GC/MS Data

Case Narrative/Conformance Summary

Volatiles by GC/MS

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Case Narrative/Conformance Summary

CLIENT: ExxonMobil Refining & Supply
SDG: TAP04

GC/MS Volatiles

Fraction: Volatiles by GC/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
6918864	AGC-TS1		X	0.92	
6918865	AGC-TS2		X	0.91; 1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Please note that US EPA Methods for organic compounds do not require action by the laboratory based on out-of-specification MS/MSD results.

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

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Case Narrative/Conformance Summary

CLIENT: ExxonMobil Refining & Supply
SDG: TAP04

GC/MS Volatiles

Fraction: Volatiles by GC/MS

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

Narrative Reviewed and Approved 1/23/13 (Date) by

Kathy J. Fair
Specialist

Sample Data

Volatiles by GC/MS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TTTS1

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: 6918864

Sample wt/vol: 5.46 (g/mL) g Lab File ID: HP09953.i/13jan11a.b/bj11s20a.d

Level: (low/med) LOW Date Received: 01/11/13

Moisture: not dec. 17 Date Analyzed: 01/11/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg) mg/Kg	Q
75-01-4	Vinyl Chloride	0.006	U
75-35-4	1,1-Dichloroethene	0.006	U
67-64-1	Acetone	0.022	U
75-09-2	Methylene Chloride	0.002	J
1634-04-4	Methyl Tertiary Butyl Ether	0.006	U
156-60-5	trans-1,2-Dichloroethene	0.006	U
75-34-3	1,1-Dichloroethane	0.006	U
78-93-3	2-Butanone	0.011	U
156-59-2	cis-1,2-Dichloroethene	0.006	U
67-66-3	Chloroform	0.006	U
71-55-6	1,1,1-Trichloroethane	0.006	U
56-23-5	Carbon Tetrachloride	0.006	U
71-43-2	Benzene	0.006	U
107-06-2	1,2-Dichloroethane	0.006	U
79-01-6	Trichloroethene	0.006	U
123-91-1	1,4-Dioxane	0.280	U
108-88-3	Toluene	0.001	J
127-18-4	Tetrachloroethene	0.006	U
108-90-7	Chlorobenzene	0.006	U
100-41-4	Ethylbenzene	0.006	U
1330-20-7	Xylene (Total)	0.006	U
103-65-1	n-Propylbenzene	0.006	U
108-67-8	1,3,5-Trimethylbenzene	0.006	U
98-06-6	tert-Butylbenzene	0.006	U
95-63-6	1,2,4-Trimethylbenzene	0.006	U
135-98-8	sec-Butylbenzene	0.006	U
541-73-1	1,3-Dichlorobenzene	0.006	U
106-46-7	1,4-Dichlorobenzene	0.006	U
104-51-8	n-Butylbenzene	0.006	U
95-50-1	1,2-Dichlorobenzene	0.006	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TTTS2

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: 6918865

Sample wt/vol: 5.02 (g/mL) g Lab File ID: HP09953.i/13jan11a.b/bj11s21.d

Level: (low/med) LOW Date Received: 01/11/13

Moisture: not dec. 15 Date Analyzed: 01/11/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg) mg/Kg	Q
75-01-4	Vinyl Chloride	0.006	U
75-35-4	1,1-Dichloroethene	0.006	U
67-64-1	Acetone	0.023	U
75-09-2	Methylene Chloride	0.006	U
1634-04-4	Methyl Tertiary Butyl Ether	0.006	U
156-60-5	trans-1,2-Dichloroethene	0.006	U
75-34-3	1,1-Dichloroethane	0.006	U
78-93-3	2-Butanone	0.012	U
156-59-2	cis-1,2-Dichloroethene	0.006	U
67-66-3	Chloroform	0.006	U
71-55-6	1,1,1-Trichloroethane	0.006	U
56-23-5	Carbon Tetrachloride	0.006	U
71-43-2	Benzene	0.006	U
107-06-2	1,2-Dichloroethane	0.006	U
79-01-6	Trichloroethene	0.006	U
123-91-1	1,4-Dioxane	0.290	U
108-88-3	Toluene	0.001	J
127-18-4	Tetrachloroethene	0.006	U
108-90-7	Chlorobenzene	0.006	U
100-41-4	Ethylbenzene	0.006	U
1330-20-7	Xylene (Total)	0.006	U
103-65-1	n-Propylbenzene	0.006	U
108-67-8	1,3,5-Trimethylbenzene	0.006	U
98-06-6	tert-Butylbenzene	0.006	U
95-63-6	1,2,4-Trimethylbenzene	0.006	U
135-98-8	sec-Butylbenzene	0.006	U
541-73-1	1,3-Dichlorobenzene	0.006	U
106-46-7	1,4-Dichlorobenzene	0.006	U
104-51-8	n-Butylbenzene	0.006	U
95-50-1	1,2-Dichlorobenzene	0.006	U

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Quality Control Summary
Method Blank
GC/MS Volatiles
SDG: TAP04
Matrix: SOLID

Fraction: Volatiles by GC/MS

B130111AA / VBLKB47 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Vinyl Chloride	01/11/13	N.D.	mg/kg	0.001	0.005
1,1-Dichloroethene	01/11/13	N.D.	mg/kg	0.001	0.005
Acetone	01/11/13	N.D.	mg/kg	0.007	0.020
Benzene	01/11/13	N.D.	mg/kg	0.0005	0.005
2-Butanone	01/11/13	N.D.	mg/kg	0.004	0.010
Carbon Tetrachloride	01/11/13	N.D.	mg/kg	0.001	0.005
Chloroform	01/11/13	N.D.	mg/kg	0.001	0.005
1,1-Dichloroethane	01/11/13	N.D.	mg/kg	0.001	0.005
1,2-Dichloroethane	01/11/13	N.D.	mg/kg	0.001	0.005
cis-1,2-Dichloroethene	01/11/13	N.D.	mg/kg	0.001	0.005
trans-1,2-Dichloroethene	01/11/13	N.D.	mg/kg	0.001	0.005
1,4-Dioxane	01/11/13	N.D.	mg/kg	0.070	0.25
Methyl Tertiary Butyl Ether	01/11/13	N.D.	mg/kg	0.0005	0.005
Methylene Chloride	01/11/13	N.D.	mg/kg	0.002	0.005
Toluene	01/11/13	N.D.	mg/kg	0.001	0.005
1,1,1-Trichloroethane	01/11/13	N.D.	mg/kg	0.001	0.005
Trichloroethene	01/11/13	N.D.	mg/kg	0.001	0.005
Chlorobenzene	01/11/13	N.D.	mg/kg	0.001	0.005
Ethylbenzene	01/11/13	N.D.	mg/kg	0.001	0.005
n-Propylbenzene	01/11/13	N.D.	mg/kg	0.001	0.005
Tetrachloroethene	01/11/13	N.D.	mg/kg	0.001	0.005
Xylene (Total)	01/11/13	N.D.	mg/kg	0.001	0.005
1,3,5-Trimethylbenzene	01/11/13	N.D.	mg/kg	0.001	0.005
sec-Butylbenzene	01/11/13	N.D.	mg/kg	0.001	0.005
tert-Butylbenzene	01/11/13	N.D.	mg/kg	0.001	0.005
1,2,4-Trimethylbenzene	01/11/13	N.D.	mg/kg	0.001	0.005
n-Butylbenzene	01/11/13	N.D.	mg/kg	0.001	0.005
1,2-Dichlorobenzene	01/11/13	N.D.	mg/kg	0.001	0.005
1,3-Dichlorobenzene	01/11/13	N.D.	mg/kg	0.001	0.005
1,4-Dichlorobenzene	01/11/13	N.D.	mg/kg	0.001	0.005

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

TTTS2MS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: 6918865

Sample wt/vol: 5.50 (g/mL) g Lab File ID: HP09953.i/13jan11a.b/bj11s21a.d

Level: (low/med) LOW Date Received: 01/11/13

Moisture: not dec. 15 Date Analyzed: 01/11/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg) mg/Kg	Q
75-71-8	Dichlorodifluoromethane	0.006	
74-87-3	Chloromethane	0.011	
75-01-4	Vinyl Chloride	0.015	
74-83-9	Bromomethane	0.019	
75-00-3	Chloroethane	0.020	
75-69-4	Trichlorofluoromethane	0.021	
64-17-5	Ethanol	2.900	
107-02-8	Acrolein	0.052	J
75-35-4	1,1-Dichloroethene	0.024	
67-64-1	Acetone	0.240	
76-13-1	Freon 113	0.026	
67-63-0	2-Propanol	0.180	
74-88-4	Methyl Iodide	0.023	
75-15-0	Carbon Disulfide	0.022	
79-20-9	Methyl Acetate	0.018	
107-05-1	Allyl Chloride	0.022	
75-09-2	Methylene Chloride	0.024	
75-65-0	t-Butyl alcohol	0.300	
107-13-1	Acrylonitrile	0.071	
1634-04-4	Methyl Tertiary Butyl Ether	0.020	
156-60-5	trans-1,2-Dichloroethene	0.023	
110-54-3	n-Hexane	0.023	
75-34-3	1,1-Dichloroethane	0.023	
108-20-3	di-Isopropyl ether	0.022	
126-99-8	2-Chloro-1,3-butadiene	0.022	
637-92-3	Ethyl t-butyl ether	0.022	
78-93-3	2-Butanone	0.140	
156-59-2	cis-1,2-Dichloroethene	0.023	
540-59-0	1,2-Dichloroethene (Total)	0.046	
594-20-7	2,2-Dichloropropane	0.022	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TTTS2MS

Lab Name: Lancaster Laboratories Contract:

Lab Code: LANCAS Case No.: SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 6918865

Sample wt/vol: 5.50 (g/mL) g Lab File ID: HP09953.i/13jan11a.b/bj11s21a.d

Level: (low/med) LOW Date Received: 01/11/13

Moisture: not dec. 15 Date Analyzed: 01/11/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg) mg/Kg	Q
107-12-0	Propionitrile	0.240	
126-98-7	Methacrylonitrile	0.120	
74-97-5	Bromochloromethane	0.025	
109-99-9	Tetrahydrofuran	0.150	
67-66-3	Chloroform	0.022	
71-55-6	1,1,1-Trichloroethane	0.022	
110-82-7	Cyclohexane	0.024	
563-58-6	1,1-Dichloropropene	0.022	
56-23-5	Carbon Tetrachloride	0.022	
78-83-1	Isobutyl Alcohol	0.780	
71-43-2	Benzene	0.023	
107-06-2	1,2-Dichloroethane	0.020	
994-05-8	t-Amyl methyl ether	0.021	
142-82-5	n-Heptane	0.017	
71-36-3	n-Butanol	1.600	
79-01-6	Trichloroethene	0.023	
108-87-2	Methylcyclohexane	0.025	
78-87-5	1,2-Dichloropropane	0.021	
80-62-6	Methyl Methacrylate	0.025	
123-91-1	1,4-Dioxane	1.100	
74-95-3	Dibromomethane	0.020	
75-27-4	Bromodichloromethane	0.020	
79-46-9	2-Nitropropane	0.023	
10061-01-5	cis-1,3-Dichloropropene	0.021	
108-10-1	4-Methyl-2-pentanone	0.064	
108-88-3	Toluene	0.024	
10061-02-6	trans-1,3-Dichloropropene	0.018	
97-63-2	Ethyl Methacrylate	0.009	
79-00-5	1,1,2-Trichloroethane	0.020	
127-18-4	Tetrachloroethene	0.023	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TTTS2MS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: 6918865

Sample wt/vol: 5.50 (g/mL) g Lab File ID: HP09953.i/13jan11a.b/bj11s21a.d

Level: (low/med) LOW Date Received: 01/11/13

Moisture: not dec. 15 Date Analyzed: 01/11/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg) mg/Kg	Q
142-28-9	1,3-Dichloropropane	0.020	
591-78-6	2-Hexanone	0.074	
124-48-1	Dibromochloromethane	0.019	
106-93-4	1,2-Dibromoethane	0.019	
108-90-7	Chlorobenzene	0.021	
630-20-6	1,1,1,2-Tetrachloroethane	0.020	
100-41-4	Ethylbenzene	0.022	
179601-23-1	m+p-Xylene	0.044	
95-47-6	o-Xylene	0.021	
1330-20-7	Xylene (Total)	0.065	
100-42-5	Styrene	0.019	
75-25-2	Bromoform	0.015	
98-82-8	Isopropylbenzene	0.025	
108-94-1	Cyclohexanone	0.650	
79-34-5	1,1,2,2-Tetrachloroethane	0.021	
108-86-1	Bromobenzene	0.025	
110-57-6	trans-1,4-Dichloro-2-butene	0.100	
96-18-4	1,2,3-Trichloropropane	0.022	
103-65-1	n-Propylbenzene	0.024	
95-49-8	2-Chlorotoluene	0.025	
108-67-8	1,3,5-Trimethylbenzene	0.026	
106-43-4	4-Chlorotoluene	0.024	
98-06-6	tert-Butylbenzene	0.025	
76-01-7	Pentachloroethane	0.023	
95-63-6	1,2,4-Trimethylbenzene	0.025	
135-98-8	sec-Butylbenzene	0.024	
541-73-1	1,3-Dichlorobenzene	0.021	
99-87-6	p-Isopropyltoluene	0.030	
106-46-7	1,4-Dichlorobenzene	0.020	
526-73-8	1,2,3-Trimethylbenzene	0.025	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TTTS2MS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: 6918865

Sample wt/vol: 5.50 (g/mL) g Lab File ID: HP09953.i/13jan11a.b/bj11s21a.d

Level: (low/med) LOW Date Received: 01/11/13

Moisture: not dec. 15 Date Analyzed: 01/11/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg) mg/Kg	Q
100-44-7	Benzyl Chloride	0.015	
141-93-5	1,3-Diethylbenzene	0.023	
105-05-5	1,4-Diethylbenzene	0.022	
104-51-8	n-Butylbenzene	0.019	
95-50-1	1,2-Dichlorobenzene	0.018	
135-01-3	1,2-Diethylbenzene	0.022	
96-12-8	1,2-Dibromo-3-chloropropane	0.014	
108-70-3	1,3,5-Trichlorobenzene	0.013	
120-82-1	1,2,4-Trichlorobenzene	0.010	
87-68-3	Hexachlorobutadiene	0.012	
91-20-3	Naphthalene	0.009	
87-61-6	1,2,3-Trichlorobenzene	0.008	
91-57-6	2-Methylnaphthalene	0.007	
25340-17-4	Diethylbenzene (total)	0.067	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSB47

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: LCSB47

Sample wt/vol: 5.00 (g/mL) g Lab File ID: HP09953.i/13jan11a.b/bj11s01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 01/11/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg) mg/Kg	Q
75-71-8	Dichlorodifluoromethane	0.005	
74-87-3	Chloromethane	0.010	
75-01-4	Vinyl Chloride	0.013	
74-83-9	Bromomethane	0.017	
75-00-3	Chloroethane	0.017	
75-69-4	Trichlorofluoromethane	0.018	
64-17-5	Ethanol	0.900	
107-02-8	Acrolein	0.150	
75-35-4	1,1-Dichloroethene	0.021	
67-64-1	Acetone	0.190	
76-13-1	Freon 113	0.022	
67-63-0	2-Propanol	0.140	
74-88-4	Methyl Iodide	0.021	
75-15-0	Carbon Disulfide	0.020	
79-20-9	Methyl Acetate	0.018	
107-05-1	Allyl Chloride	0.019	
75-09-2	Methylene Chloride	0.021	
75-65-0	t-Butyl alcohol	0.190	
107-13-1	Acrylonitrile	0.078	
1634-04-4	Methyl Tertiary Butyl Ether	0.020	
156-60-5	trans-1,2-Dichloroethene	0.021	
110-54-3	n-Hexane	0.022	
75-34-3	1,1-Dichloroethane	0.020	
108-20-3	di-Isopropyl ether	0.020	
126-99-8	2-Chloro-1,3-butadiene	0.021	
637-92-3	Ethyl t-butyl ether	0.020	
78-93-3	2-Butanone	0.150	
156-59-2	cis-1,2-Dichloroethene	0.022	
540-59-0	1,2-Dichloroethene (Total)	0.042	
594-20-7	2,2-Dichloropropane	0.019	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSB47

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: LCSB47

Sample wt/vol: 5.00 (g/mL) g Lab File ID: HP09953.i/13jan11a.b/bj11s01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 01/11/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg) mg/Kg	Q
107-12-0	Propionitrile	0.170	
126-98-7	Methacrylonitrile	0.140	
74-97-5	Bromochloromethane	0.022	
109-99-9	Tetrahydrofuran	0.110	
67-66-3	Chloroform	0.020	
71-55-6	1,1,1-Trichloroethane	0.020	
110-82-7	Cyclohexane	0.022	
563-58-6	1,1-Dichloropropene	0.020	
56-23-5	Carbon Tetrachloride	0.020	
78-83-1	Isobutyl Alcohol	0.490	
71-43-2	Benzene	0.021	
107-06-2	1,2-Dichloroethane	0.020	
994-05-8	t-Amyl methyl ether	0.020	
142-82-5	n-Heptane	0.021	
71-36-3	n-Butanol	0.940	
79-01-6	Trichloroethene	0.021	
108-87-2	Methylcyclohexane	0.024	
78-87-5	1,2-Dichloropropane	0.020	
80-62-6	Methyl Methacrylate	0.019	
123-91-1	1,4-Dioxane	0.530	
74-95-3	Dibromomethane	0.020	
75-27-4	Bromodichloromethane	0.020	
79-46-9	2-Nitropropane	0.016	
10061-01-5	cis-1,3-Dichloropropene	0.021	
108-10-1	4-Methyl-2-pentanone	0.073	
108-88-3	Toluene	0.020	
10061-02-6	trans-1,3-Dichloropropene	0.018	
97-63-2	Ethyl Methacrylate	0.019	
79-00-5	1,1,2-Trichloroethane	0.019	
127-18-4	Tetrachloroethene	0.021	

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSB47

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: LCSB47

Sample wt/vol: 5.00 (g/mL) g Lab File ID: HP09953.i/13jan11a.b/bj11s01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 01/11/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg) mg/Kg	Q
142-28-9	1,3-Dichloropropane	0.019	
591-78-6	2-Hexanone	0.075	
124-48-1	Dibromochloromethane	0.019	
106-93-4	1,2-Dibromoethane	0.019	
108-90-7	Chlorobenzene	0.020	
630-20-6	1,1,1,2-Tetrachloroethane	0.019	
100-41-4	Ethylbenzene	0.020	
179601-23-1	m+p-Xylene	0.041	
95-47-6	o-Xylene	0.020	
1330-20-7	Xylene (Total)	0.060	
100-42-5	Styrene	0.020	
75-25-2	Bromoform	0.018	
98-82-8	Isopropylbenzene	0.020	
108-94-1	Cyclohexanone	0.450	
79-34-5	1,1,2,2-Tetrachloroethane	0.018	
108-86-1	Bromobenzene	0.020	
110-57-6	trans-1,4-Dichloro-2-butene	0.091	
96-18-4	1,2,3-Trichloropropane	0.018	
103-65-1	n-Propylbenzene	0.017	
95-49-8	2-Chlorotoluene	0.019	
108-67-8	1,3,5-Trimethylbenzene	0.020	
106-43-4	4-Chlorotoluene	0.019	
98-06-6	tert-Butylbenzene	0.019	
76-01-7	Pentachloroethane	0.017	
95-63-6	1,2,4-Trimethylbenzene	0.020	
135-98-8	sec-Butylbenzene	0.020	
541-73-1	1,3-Dichlorobenzene	0.020	
99-87-6	p-Isopropyltoluene	0.020	
106-46-7	1,4-Dichlorobenzene	0.020	
526-73-8	1,2,3-Trimethylbenzene	0.019	

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSB47

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: LCSB47

Sample wt/vol: 5.00 (g/mL) g Lab File ID: HP09953.i/13jan11a.b/bj11s01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 01/11/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg) mg/Kg	Q
100-44-7	Benzyl Chloride	0.016	
141-93-5	1,3-Diethylbenzene	0.020	
105-05-5	1,4-Diethylbenzene	0.019	
104-51-8	n-Butylbenzene	0.019	
95-50-1	1,2-Dichlorobenzene	0.019	
135-01-3	1,2-Diethylbenzene	0.019	
96-12-8	1,2-Dibromo-3-chloropropane	0.015	
108-70-3	1,3,5-Trichlorobenzene	0.020	
120-82-1	1,2,4-Trichlorobenzene	0.021	
87-68-3	Hexachlorobutadiene	0.021	
91-20-3	Naphthalene	0.020	
87-61-6	1,2,3-Trichlorobenzene	0.020	
91-57-6	2-Methylnaphthalene	0.016	
25340-17-4	Diethylbenzene (total)	0.058	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCDB47

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: LCDB47

Sample wt/vol: 5.00 (g/mL) g Lab File ID: HP09953.i/13jan11a.b/bj11s02.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 01/11/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg) mg/Kg	Q
75-71-8	Dichlorodifluoromethane	0.005	J
74-87-3	Chloromethane	0.010	
75-01-4	Vinyl Chloride	0.012	
74-83-9	Bromomethane	0.016	
75-00-3	Chloroethane	0.017	
75-69-4	Trichlorofluoromethane	0.017	
64-17-5	Ethanol	0.900	
107-02-8	Acrolein	0.140	
75-35-4	1,1-Dichloroethene	0.021	
67-64-1	Acetone	0.160	
76-13-1	Freon 113	0.022	
67-63-0	2-Propanol	0.140	
74-88-4	Methyl Iodide	0.021	
75-15-0	Carbon Disulfide	0.019	
79-20-9	Methyl Acetate	0.018	
107-05-1	Allyl Chloride	0.018	
75-09-2	Methylene Chloride	0.020	
75-65-0	t-Butyl alcohol	0.180	
107-13-1	Acrylonitrile	0.076	
1634-04-4	Methyl Tertiary Butyl Ether	0.020	
156-60-5	trans-1,2-Dichloroethene	0.020	
110-54-3	n-Hexane	0.022	
75-34-3	1,1-Dichloroethane	0.020	
108-20-3	di-Isopropyl ether	0.020	
126-99-8	2-Chloro-1,3-butadiene	0.020	
637-92-3	Ethyl t-butyl ether	0.020	
78-93-3	2-Butanone	0.140	
156-59-2	cis-1,2-Dichloroethene	0.021	
540-59-0	1,2-Dichloroethene (Total)	0.042	
594-20-7	2,2-Dichloropropane	0.019	

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCDB47

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: LCDB47

Sample wt/vol: 5.00 (g/mL) g Lab File ID: HP09953.i/13jan11a.b/bj11s02.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 01/11/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg) mg/Kg	Q
107-12-0	Propionitrile	0.170	
126-98-7	Methacrylonitrile	0.140	
74-97-5	Bromochloromethane	0.022	
109-99-9	Tetrahydrofuran	0.100	
67-66-3	Chloroform	0.019	
71-55-6	1,1,1-Trichloroethane	0.019	
110-82-7	Cyclohexane	0.022	
563-58-6	1,1-Dichloropropene	0.020	
56-23-5	Carbon Tetrachloride	0.020	
78-83-1	Isobutyl Alcohol	0.470	
71-43-2	Benzene	0.021	
107-06-2	1,2-Dichloroethane	0.019	
994-05-8	t-Amyl methyl ether	0.020	
142-82-5	n-Heptane	0.021	
71-36-3	n-Butanol	0.920	
79-01-6	Trichloroethene	0.020	
108-87-2	Methylcyclohexane	0.023	
78-87-5	1,2-Dichloropropane	0.020	
80-62-6	Methyl Methacrylate	0.018	
123-91-1	1,4-Dioxane	0.520	
74-95-3	Dibromomethane	0.019	
75-27-4	Bromodichloromethane	0.019	
79-46-9	2-Nitropropane	0.015	
10061-01-5	cis-1,3-Dichloropropene	0.021	
108-10-1	4-Methyl-2-pentanone	0.070	
108-88-3	Toluene	0.019	
10061-02-6	trans-1,3-Dichloropropene	0.017	
97-63-2	Ethyl Methacrylate	0.018	
79-00-5	1,1,2-Trichloroethane	0.019	
127-18-4	Tetrachloroethene	0.020	

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCDB47

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: LCDB47

Sample wt/vol: 5.00 (g/mL) g Lab File ID: HP09953.i/13jan11a.b/bj11s02.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 01/11/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg) mg/Kg	Q
142-28-9	1,3-Dichloropropane	0.018	
591-78-6	2-Hexanone	0.068	
124-48-1	Dibromochloromethane	0.019	
106-93-4	1,2-Dibromoethane	0.018	
108-90-7	Chlorobenzene	0.020	
630-20-6	1,1,1,2-Tetrachloroethane	0.018	
100-41-4	Ethylbenzene	0.020	
179601-23-1	m+p-Xylene	0.040	
95-47-6	o-Xylene	0.019	
1330-20-7	Xylene (Total)	0.059	
100-42-5	Styrene	0.020	
75-25-2	Bromoform	0.017	
98-82-8	Isopropylbenzene	0.020	
108-94-1	Cyclohexanone	0.440	
79-34-5	1,1,2,2-Tetrachloroethane	0.017	
108-86-1	Bromobenzene	0.020	
110-57-6	trans-1,4-Dichloro-2-butene	0.088	
96-18-4	1,2,3-Trichloropropane	0.017	
103-65-1	n-Propylbenzene	0.017	
95-49-8	2-Chlorotoluene	0.019	
108-67-8	1,3,5-Trimethylbenzene	0.019	
106-43-4	4-Chlorotoluene	0.019	
98-06-6	tert-Butylbenzene	0.019	
76-01-7	Pentachloroethane	0.017	
95-63-6	1,2,4-Trimethylbenzene	0.020	
135-98-8	sec-Butylbenzene	0.020	
541-73-1	1,3-Dichlorobenzene	0.020	
99-87-6	p-Isopropyltoluene	0.020	
106-46-7	1,4-Dichlorobenzene	0.019	
526-73-8	1,2,3-Trimethylbenzene	0.019	

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCDB47

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: LCDB47

Sample wt/vol: 5.00 (g/mL) g Lab File ID: HP09953.i/13jan11a.b/bj11s02.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 01/11/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg) mg/Kg	Q
100-44-7	Benzyl Chloride	0.016	
141-93-5	1,3-Diethylbenzene	0.019	
105-05-5	1,4-Diethylbenzene	0.019	
104-51-8	n-Butylbenzene	0.019	
95-50-1	1,2-Dichlorobenzene	0.019	
135-01-3	1,2-Diethylbenzene	0.019	
96-12-8	1,2-Dibromo-3-chloropropane	0.015	
108-70-3	1,3,5-Trichlorobenzene	0.020	
120-82-1	1,2,4-Trichlorobenzene	0.021	
87-68-3	Hexachlorobutadiene	0.021	
91-20-3	Naphthalene	0.019	
87-61-6	1,2,3-Trichlorobenzene	0.020	
91-57-6	2-Methylnaphthalene	0.016	
25340-17-4	Diethylbenzene (total)	0.057	

Semivolatiles by GC/MS Data

Case Narrative/Conformance Summary

Semivolatiles by GC/MS

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Case Narrative/Conformance Summary

CLIENT: ExxonMobil Refining & Supply
SDG: TAP04

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
6918863	AGC-TSC1		X	1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

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Case Narrative/Conformance Summary

CLIENT: ExxonMobil Refining & Supply
SDG: TAP04

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

Narrative Reviewed and Approved 1/17/13 (Date) by Lydia C. Steinke Specialist

Sample Data

Semivolatiles by GC/MS

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TTSC1

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: 6918863

Sample wt/vol: 30.3 (g/mL) G Lab File ID: oa0326.d

Level: (low/med) LOW Date Received: 01/11/13

% Moisture: not dec: 16 dec: Date Extracted: 01/12/13

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/14/13

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Mic

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	LOQ	UG/KG	Q
108-95-2	Phenol			39	U
95-48-7	2-Methylphenol			39	U
106-44-5	4-Methylphenol			39	U
91-20-3	Naphthalene			8	J
208-96-8	Acenaphthylene			14	J
83-32-9	Acenaphthene			14	J
132-64-9	Dibenzofuran			39	U
86-73-7	Fluorene			17	J
87-86-5	Pentachlorophenol			200	U
85-01-8	Phenanthrene			220	
120-12-7	Anthracene			69	
206-44-0	Fluoranthene			500	
129-00-0	Pyrene			440	
56-55-3	Benzo(a)anthracene			280	
218-01-9	Chrysene			290	
205-99-2	Benzo(b)fluoranthene			270	
207-08-9	Benzo(k)fluoranthene			140	
50-32-8	Benzo(a)pyrene			200	
193-39-5	Indeno(1,2,3-cd)pyrene			95	
53-70-3	Dibenz(a,h)anthracene			26	
191-24-2	Benzo(g,h,i)perylene			97	

FORM I SV-1

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Quality Control Summary
Method Blank
GC/MS Semivolatiles
SDG: TAP04
Matrix: SOLID

Fraction: Semivolatiles by GC/MS

13011SLA026 / SBLKLA011 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Phenol	01/13/13	N.D.	ug/kg	17	33
2-Methylphenol	01/13/13	N.D.	ug/kg	17	33
4-Methylphenol	01/13/13	N.D.	ug/kg	17	33
Naphthalene	01/13/13	N.D.	ug/kg	3	17
Acenaphthylene	01/13/13	N.D.	ug/kg	3	17
Acenaphthene	01/13/13	N.D.	ug/kg	3	17
Dibenzofuran	01/13/13	N.D.	ug/kg	17	33
Fluorene	01/13/13	N.D.	ug/kg	3	17
Pentachlorophenol	01/13/13	N.D.	ug/kg	33	170
Phenanthrene	01/13/13	N.D.	ug/kg	3	17
Anthracene	01/13/13	N.D.	ug/kg	3	17
Fluoranthene	01/13/13	N.D.	ug/kg	3	17
Pyrene	01/13/13	N.D.	ug/kg	3	17
Benzo(a)anthracene	01/13/13	N.D.	ug/kg	3	17
Chrysene	01/13/13	N.D.	ug/kg	3	17
Benzo(b)fluoranthene	01/13/13	N.D.	ug/kg	3	17
Benzo(k)fluoranthene	01/13/13	N.D.	ug/kg	3	17
Benzo(a)pyrene	01/13/13	N.D.	ug/kg	3	17
Indeno(1,2,3-cd)pyrene	01/13/13	N.D.	ug/kg	3	17
Dibenz(a,h)anthracene	01/13/13	N.D.	ug/kg	3	17
Benzo(g,h,i)perylene	01/13/13	N.D.	ug/kg	3	17

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

011LALCS15

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: 011LALCS

Sample wt/vol: 30.0 (g/mL) G Lab File ID: oa0306.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 01/01/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/13/13

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Mic

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) LOQ UG/KG	Q
100-52-7	Benzaldehyde	920	
108-95-2	Phenol	1700	
111-44-4	bis(2-Chloroethyl)ether	1600	
95-57-8	2-Chlorophenol	1800	
541-73-1	1,3-Dichlorobenzene	1500	
106-46-7	1,4-Dichlorobenzene	1600	
95-50-1	1,2-Dichlorobenzene	1600	
95-48-7	2-Methylphenol	1700	
108-60-1	2,2'-oxybis(1-Chloropropane)	1400	
98-86-2	Acetophenone	1600	
106-44-5	4-Methylphenol	1700	
621-64-7	N-Nitroso-di-n-propylamine	1500	
67-72-1	Hexachloroethane	1500	
98-95-3	Nitrobenzene	1600	
78-59-1	Isophorone	1600	
88-75-5	2-Nitrophenol	1700	
105-67-9	2,4-Dimethylphenol	1700	
111-91-1	bis(2-Chloroethoxy)methane	1500	
120-83-2	2,4-Dichlorophenol	1800	
120-82-1	1,2,4-Trichlorobenzene	1700	
91-20-3	Naphthalene	1600	
106-47-8	4-Chloroaniline	1000	
87-68-3	Hexachlorobutadiene	1600	
105-60-2	Caprolactam	1800	
59-50-7	4-Chloro-3-methylphenol	1800	
91-57-6	2-Methylnaphthalene	1700	
77-47-4	Hexachlorocyclopentadiene	3000	
88-06-2	2,4,6-Trichlorophenol	1800	
95-95-4	2,4,5-Trichlorophenol	1800	
92-52-4	1,1'-Biphenyl	1700	

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

011LALCS15

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: 011LALCS

Sample wt/vol: 30.0 (g/mL) G Lab File ID: oa0306.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 01/01/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/13/13

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Mic

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) LOQ	UG/KG	Q
91-58-7	2-Chloronaphthalene		1800	
88-74-4	2-Nitroaniline		1800	
131-11-3	Dimethylphthalate		1700	
606-20-2	2,6-Dinitrotoluene		1800	
208-96-8	Acenaphthylene		1800	
99-09-2	3-Nitroaniline		1800	
83-32-9	Acenaphthene		1700	
51-28-5	2,4-Dinitrophenol		3500	
100-02-7	4-Nitrophenol		1600	
121-14-2	2,4-Dinitrotoluene		1800	
132-64-9	Dibenzofuran		1700	
84-66-2	Diethylphthalate		1700	
86-73-7	Fluorene		1800	
7005-72-3	4-Chlorophenyl-phenylether		1700	
100-01-6	4-Nitroaniline		1500	
534-52-1	4,6-Dinitro-2-methylphenol		1600	
86-30-6	N-Nitrosodiphenylamine		1700	
101-55-3	4-Bromophenyl-phenylether		1700	
118-74-1	Hexachlorobenzene		1700	
1912-24-9	Atrazine		1900	E
87-86-5	Pentachlorophenol		1900	
85-01-8	Phenanthrene		1700	
120-12-7	Anthracene		1800	
86-74-8	Carbazole		1800	
84-74-2	Di-n-butylphthalate		1700	
206-44-0	Fluoranthene		1800	
129-00-0	Pyrene		1700	
85-68-7	Butylbenzylphthalate		1700	
91-94-1	3,3'-Dichlorobenzidine		1000	
56-55-3	Benzo(a)anthracene		1700	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

011LALCS15

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: 011LALCS

Sample wt/vol: 30.0 (g/mL) G Lab File ID: oa0306.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 01/01/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/13/13

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Mic

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) LOQ	UG/KG	Q
218-01-9	Chrysene		1700	
117-81-7	bis(2-Ethylhexyl)phthalate		1700	
117-84-0	Di-n-octylphthalate		1700	
205-99-2	Benzo(b)fluoranthene		1800	
207-08-9	Benzo(k)fluoranthene		1800	
50-32-8	Benzo(a)pyrene		1700	
193-39-5	Indeno(1,2,3-cd)pyrene		1600	
53-70-3	Dibenz(a,h)anthracene		1600	
191-24-2	Benzo(g,h,i)perylene		1600	

FORM I SV-3

Herbicides Data

Case Narrative/Conformance Summary

Herbicides

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Case Narrative/Conformance Summary

CLIENT: ExxonMobil Refining & Supply
SDG: TAP04

Pesticide Residue Analysis

Fraction: Herbicides

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
6918863	AGC-TSC1		X	1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

(Sample number(s): 6918863: Analysis: 10401)
For dual column analyses in which the calibration (initial and/or continuing) response is outside the acceptance criteria on one column and within criteria on the second column affected analytes are reported from the compliant column. The sample raw data identifies the column used to report each analyte.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

LCS/LCSD

(Sample number(s): 6918863: Analysis: 10401)
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

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Case Narrative/Conformance Summary

CLIENT: ExxonMobil Refining & Supply
SDG: TAP04

Pesticide Residue Analysis

Fraction: Herbicides

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

Narrative Reviewed and Approved 1/16/2013 by
(Date)

M. Susan Kreider
M. Susan Kreider
Senior Specialist

Sample Data

Herbicides

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO. PBLK07011

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130110007A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:**

Matrix: (soil/water) SOIL **Lab Sample ID:** BLANKA

Sample wt/vol: 30 (g/ml) g **Lab File ID:** 11H15360.006.RAW

% Moisture: **Decanted: (Y/N)** **Date Received:**

Extraction: (SepF/Cont/Sonc) SONC **Date Extracted:** 1/12/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/14/2013

Injection Volume: 2 (uL) **Dilution Factor:** 1

GPC Cleanup: (Y/N) N **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
75-99-0	Dalapon	44	U
1918-00-9	Dicamba	4.0	U
93-65-2	Mcpp	750	U
94-74-6	Mcpa	760	U
120-36-5	2,4-DP	9.0	U
94-75-7	2,4-D	12	U
87-86-5	PCP	0.33	U
93-72-1	2,4,5-TP	0.75	U
93-76-5	2,4,5-T	0.82	U
94-82-6	2,4-DB	6.2	U
88-85-7	Dinoseb	8.0	U
1918-02-1	Picloram	50	U
70-30-4	Hexachlorophene	8.0	U

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO. TTSC1

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130110007A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:** TAP04

Matrix: (soil/water) SOIL **Lab Sample ID:** 6918863

Sample wt/vol: 30.3 (g/ml) g **Lab File ID:** 11H15360.008.RAW

% Moisture: 15.5 **Decanted: (Y/N)** **Date Received:** 1/11/2013

Extraction: (SepF/Cont/Sonc) SONC **Date Extracted:** 1/12/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/14/2013

Injection Volume: 2 (uL) **Dilution Factor:** 1

GPC Cleanup: (Y/N) N **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
93-72-1	2,4,5-TP	0.88	U

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO.

TTSC1MS

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130110007A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:** TAP04

Matrix: (soil/water) SOIL **Lab Sample ID:** 6918863

Sample wt/vol: 30.4 (g/ml) g **Lab File ID:** 11H15360.009.RAW

% Moisture: 15.5 **Decanted: (Y/N)** **Date Received:** 1/11/2013

Extraction: (SepF/Cont/Sonc) SONC **Date Extracted:** 1/12/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/14/2013

Injection Volume: 2 (uL) **Dilution Factor:** 1

GPC Cleanup: (Y/N) N **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
75-99-0	Dalapon	110	
1918-00-9	Dicamba	13	J
93-65-2	Mcpp	11000	
94-74-6	Mcpa	11000	
120-36-5	2,4-DP	140	
94-75-7	2,4-D	130	
87-86-5	PCP	42	
93-72-1	2,4,5-TP	12	
93-76-5	2,4,5-T	13	
94-82-6	2,4-DB	180	
88-85-7	Dinoseb	77	
1918-02-1	Picloram	58	U

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO. TTSC1MSD

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130110007A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:** TAP04

Matrix: (soil/water) SOIL **Lab Sample ID:** 6918863

Sample wt/vol: 30.5 (g/ml) g **Lab File ID:** 11H15360.010.RAW

% Moisture: 15.5 **Decanted: (Y/N)** **Date Received:** 1/11/2013

Extraction: (SepF/Cont/Sonc) SONC **Date Extracted:** 1/12/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/14/2013

Injection Volume: 2 (uL) **Dilution Factor:** 1

GPC Cleanup: (Y/N) N **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
75-99-0	Dalapon	120	
1918-00-9	Dicamba	12	J
93-65-2	Mcpp	9900	
94-74-6	Mcpa	11000	
120-36-5	2,4-DP	130	
94-75-7	2,4-D	130	
87-86-5	PCP	40	
93-72-1	2,4,5-TP	12	
93-76-5	2,4,5-T	13	
94-82-6	2,4-DB	160	
88-85-7	Dinoseb	78	
1918-02-1	Picloram	58	U

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO. LCS07011

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130110007A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:**

Matrix: (soil/water) SOIL **Lab Sample ID:** LCSA

Sample wt/vol: 30 (g/ml) g **Lab File ID:** 11H15360.007.RAW

% Moisture: **Decanted: (Y/N)** **Date Received:**

Extraction: (SepF/Cont/Sonc) SONC **Date Extracted:** 1/12/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/14/2013

Injection Volume: 2 (uL) **Dilution Factor:** 1

GPC Cleanup: (Y/N) N **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
75-99-0	Dalapon	110	
1918-00-9	Dicamba	9.8	J
93-65-2	Mcpp	8800	
94-74-6	Mcpa	7500	
120-36-5	2,4-DP	110	
94-75-7	2,4-D	97	
87-86-5	PCP	33	
93-72-1	2,4,5-TP	9.8	
93-76-5	2,4,5-T	8.1	
94-82-6	2,4-DB	110	
88-85-7	Dinoseb	51	
1918-02-1	Picloram	50	U

Pesticides Data

Case Narrative/Conformance Summary

Pesticides

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Case Narrative/Conformance Summary

CLIENT: ExxonMobil Refining & Supply
SDG: TAP04

Pesticide Residue Analysis

Fraction: Pesticides

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
6918863	AGC-TSC1		X	5	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

(Sample number(s): 6918863: Analysis: 10738)
For dual column analyses in which the calibration (initial and/or continuing) response is outside the acceptance criteria on one column and within criteria on the second column affected analytes are reported from the compliant column. The sample raw data identifies the column used to report each analyte.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

SAMPLE ANALYSIS:

(Sample number(s): 6918863: Analysis: 10738)
Reporting limits were raised due to interference from the sample matrix.

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Case Narrative/Conformance Summary

CLIENT: ExxonMobil Refining & Supply
SDG: TAP04

Pesticide Residue Analysis

Fraction: Pesticides

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

Narrative Reviewed and Approved 1/16/2013 by
(Date)

M. Susan Kreider
M. Susan Kreider
Senior Specialist

Sample Data

Pesticides

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO.

TTSC1

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130110005A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:** TAP04

Matrix: (soil/water) SOIL **Lab Sample ID:** 6918863

Sample wt/vol: 30 (g/ml) g **Lab File ID:** 1P10014.0045.RAW

% Moisture: 15.5 **Decanted: (Y/N)** **Date Received:** 1/11/2013

Extraction: (SepF/Cont/Sonc) MICRO **Date Extracted:** 1/11/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/15/2013

Injection Volume: 1 (uL) **Dilution Factor:** 5

GPC Cleanup: (Y/N) Y **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
118-74-1	Hcb	1.2	U
319-84-6	alpha-BHC	1.0	U
58-89-9	gamma-BHC (Lindane)	1.0	U
319-85-7	beta-BHC	5.7	U
319-86-8	delta-BHC	2.7	U
76-44-8	Heptachlor	4.0	U
309-00-2	Aldrin	1.0	U
5103-71-9	alpha-Chlordane	20	
72-55-9	4,4'-DDE	47	
959-98-8	Endosulfan I	1.3	U
60-57-1	Dieldrin	2.8	U
72-20-8	Endrin	2.0	U
72-54-8	4,4'-DDD	7.7	U
33213-65-9	Endosulfan II	2.0	U
50-29-3	4,4'-DDT	63	
1031-07-8	Endosulfan sulfate	2.0	U

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO. PBLK05011

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130110005A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:**

Matrix: (soil/water) SOIL **Lab Sample ID:** BLANKA

Sample wt/vol: 30 **(g/ml)** g **Lab File ID:** 1P10014.0040.RAW

% Moisture: **Decanted: (Y/N)** **Date Received:**

Extraction: (SepF/Cont/Sonc) MICRO **Date Extracted:** 1/11/2013

Concentrated Extract Volume: 10000 **(uL)** **Date Analyzed:** 1/15/2013

Injection Volume: 1 **(uL)** **Dilution Factor:** 1

GPC Cleanup: (Y/N) Y **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
118-74-1	Hcb	0.21	U
319-84-6	alpha-BHC	0.17	U
58-89-9	gamma-BHC (Lindane)	0.17	U
319-85-7	beta-BHC	0.96	U
319-86-8	delta-BHC	0.45	U
76-44-8	Heptachlor	0.17	U
309-00-2	Aldrin	0.17	U
297-78-9	Telodrin	0.40	U
3424-82-6	o,p-DDE	0.33	U
1024-57-3	Heptachlor epoxide	0.17	U
5103-74-2	gamma-Chlordane	0.17	U
5103-71-9	alpha-Chlordane	0.17	U
72-55-9	4,4'-DDE	0.33	U
959-98-8	Endosulfan I	0.22	U
53-19-0	o,p-DDD	0.33	U
60-57-1	Dieldrin	0.33	U
789-02-6	o,p-DDT	0.33	U
72-20-8	Endrin	0.33	U
143-50-0	Kepone	2.3	U
72-54-8	4,4'-DDD	0.33	U
33213-65-9	Endosulfan II	0.33	U
50-29-3	4,4'-DDT	0.35	U
7421-93-4	Endrin aldehyde	0.33	U
72-43-5	Methoxychlor	1.7	U
2385-85-5	Mirex	0.35	U
1031-07-8	Endosulfan sulfate	0.33	U
53494-70-5	Endrin ketone	0.60	U
57-74-9	Chlordane	4.0	U
8001-35-2	Toxaphene	12	U

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO. LCS05011

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130110005A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:**

Matrix: (soil/water) SOIL **Lab Sample ID:** LCSA

Sample wt/vol: 30 (g/ml) g **Lab File ID:** 1P10014.0041.RAW

% Moisture: **Decanted: (Y/N)** **Date Received:**

Extraction: (SepF/Cont/Sonc) MICRO **Date Extracted:** 1/11/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/15/2013

Injection Volume: 1 (uL) **Dilution Factor:** 1

GPC Cleanup: (Y/N) Y **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
319-84-6	alpha-BHC	3.5	
58-89-9	gamma-BHC (Lindane)	3.6	
319-85-7	beta-BHC	3.5	
319-86-8	delta-BHC	3.6	
76-44-8	Heptachlor	3.4	
309-00-2	Aldrin	3.4	
1024-57-3	Heptachlor epoxide	3.3	
5103-74-2	gamma-Chlordane	3.5	
5103-71-9	alpha-Chlordane	3.5	
72-55-9	4,4'-DDE	6.9	
959-98-8	Endosulfan I	3.3	
60-57-1	Dieldrin	7.0	
72-20-8	Endrin	6.8	
72-54-8	4,4'-DDD	7.5	
33213-65-9	Endosulfan II	6.9	
50-29-3	4,4'-DDT	7.0	
7421-93-4	Endrin aldehyde	7.0	
72-43-5	Methoxychlor	34	
1031-07-8	Endosulfan sulfate	7.1	
53494-70-5	Endrin ketone	6.7	

Polychlorinated Biphenyls (PCBs) Data

Case Narrative/Conformance Summary

Polychlorinated Biphenyls (PCBs)

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Case Narrative/Conformance Summary

CLIENT: ExxonMobil Refining & Supply
SDG: TAP04

Pesticide Residue Analysis

Fraction: Polychlorinated Biphenyls (PCBs)

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
6918863	AGC-TSC1		X	1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

(Sample number(s): 6918863: Analysis: 10736)
For dual column analyses in which the calibration (initial and/or continuing) response is outside the acceptance criteria on one column and within criteria on the second column affected analytes are reported from the compliant column. The sample raw data identifies the column used to report each analyte.

(Sample number(s): 6918863: Analysis: 10736)
The % difference for the calibration verification standard is outside the +/- 15% criteria for the analyte(s) listed below. Since the average of the % difference values meets the criteria, the results are reported.
This applies to the following analyte(s): decachlorobiphenyl surrogate

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

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Case Narrative/Conformance Summary

CLIENT: ExxonMobil Refining & Supply
SDG: TAP04

Pesticide Residue Analysis

Fraction: Polychlorinated Biphenyls (PCBs)

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

Narrative Reviewed and Approved 1/16/2013 by (Date)

M. Susan Kreider

M. Susan Kreider
Senior Specialist

Sample Data

Polychlorinated Biphenyls (PCBs)

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO.

TTSC1

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130110006A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:** TAP04

Matrix: (soil/water) SOIL **Lab Sample ID:** 6918863

Sample wt/vol: 30 (g/ml) g **Lab File ID:** 3P20010.0031.RAW

% Moisture: 15.5 **Decanted: (Y/N)** **Date Received:** 1/11/2013

Extraction: (SepF/Cont/Sonc) MICRO **Date Extracted:** 1/11/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/14/2013

Injection Volume: 1 (uL) **Dilution Factor:** 1

GPC Cleanup: (Y/N) N **pH:** **Sulfur Cleanup: (Y/N)** Y

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
12674-11-2	Aroclor-1016	4.3	U
11104-28-2	Aroclor-1221	5.4	U
11141-16-5	Aroclor-1232	9.5	U
53469-21-9	Aroclor-1242	3.9	U
12672-29-6	Aroclor-1248	3.9	U
11097-69-1	Aroclor-1254	3.9	U
11096-82-5	Aroclor-1260	5.8	U

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO. PBLK06011

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130110006A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:**

Matrix: (soil/water) SOIL **Lab Sample ID:** BLANKA

Sample wt/vol: 30 (g/ml) g **Lab File ID:** 3P20010.0016.RAW

% Moisture: **Decanted: (Y/N)** **Date Received:**

Extraction: (SepF/Cont/Sonc) MICRO **Date Extracted:** 1/11/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/14/2013

Injection Volume: 1 (uL) **Dilution Factor:** 1

GPC Cleanup: (Y/N) N **pH:** **Sulfur Cleanup: (Y/N)** Y

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
12674-11-2	Aroclor-1016	3.6	U
11104-28-2	Aroclor-1221	4.6	U
11141-16-5	Aroclor-1232	8.0	U
53469-21-9	Aroclor-1242	3.3	U
12672-29-6	Aroclor-1248	3.3	U
11097-69-1	Aroclor-1254	3.3	U
11096-82-5	Aroclor-1260	4.9	U
37324-23-5	Aroclor-1262	3.3	U
11100-14-4	Aroclor-1268	3.3	U
1336-36-3	Total PCBs	3.3	U

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO.

LCS06011

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130110006A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:**

Matrix: (soil/water) SOIL **Lab Sample ID:** LCSA

Sample wt/vol: 30 (g/ml) g **Lab File ID:** 3P20010.0017.RAW

% Moisture: **Decanted: (Y/N)** **Date Received:**

Extraction: (SepF/Cont/Sonc) MICRO **Date Extracted:** 1/11/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/14/2013

Injection Volume: 1 (uL) **Dilution Factor:** 1

GPC Cleanup: (Y/N) N **pH:** **Sulfur Cleanup: (Y/N)** Y

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
12674-11-2	Aroclor-1016	160	
11096-82-5	Aroclor-1260	190	
1336-36-3	Total PCBs	350	P

Metals in Solid Data

Case Narrative/Conformance Summary

Metals in Solid

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Case Narrative/Conformance Summary

CLIENT: ExxonMobil Refining & Supply
SDG: TAP04

ICP Metals

Fraction: Metals in Solid

Sample #	Client ID	Matrix Liquid	Matrix Solid	Comments
6918863	AGC-TSC1		X	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

Method defined actions are taken for any failed matrix QC.

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

Refer to analysis run log for samples requiring dilutions.

The instrument detection limits (IDLs) are used for determining the U flags on the initial and continuing calibration blanks. The highest IDL is selected when multiple instruments are used for an analysis. The method detection limits (MDLs) are used for determining all other U flags.

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Case Narrative/Conformance Summary

CLIENT: ExxonMobil Refining & Supply
SDG: TAP04

ICP Metals

Fraction: Metals in Solid

Abbreviation Key

BKG – Background	AF - Cold Vapor Atomic Fluorescence
DUP – Duplicate	U - Below MDL
MS - Matrix Spike	B - Below LOQ
MSD - Matrix Spike Dup	N - Matrix Spike out of specifications
B – Blank	* - Duplicate out of specifications
Q - Laboratory Control Sample	E - Matrix Effects exist as proven by Serial Dilution or Spiked Dilution
Y - Laboratory Control Sample Duplicate	A - Post Digestion Spike
P - ICP Atomic Emission Spectrometer	L - Serial Dilution
MS - ICP Mass Spectrometry	R - Internal Standard Relative Intensity OOS
CV - Cold Vapor	NR - Not Required

Narrative Reviewed and Approved 01.22.13 by
(Date)

Betty L. Umble
Specialist

Sample Data

Metals in Solid

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: TAP04
Matrix: SOIL Level (low/med): LOW

Lab Sample ID: 6918863 % Solids: 84.5
Concentration Units: MG/KG Date Received: 01/11/2013

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	3.5			P
7440-39-3	Barium	103			P
7440-41-7	Beryllium	0.39	B		P
7440-43-9	Cadmium	0.19	U		P
7440-47-3	Chromium	24.1			P
7440-50-8	Copper	23.7			P
7439-92-1	Lead	13.7			P
7439-96-5	Manganese	471			P
7439-97-6	Mercury	0.022	B		CV
7440-02-0	Nickel	15.3			P
7782-49-2	Selenium	0.84	U		P
7440-22-4	Silver	0.19	B		P
7440-66-6	Zinc	49.1			P

Comments:

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U = Below MDL,
MS = ICP Mass Spectrometry	B = Below LOQ
CV = Cold Vapor	
AF = Cold Vapor Atomic Fluorescence	
NR = Not Required	

Instrumental Wet Chemistry Data

Case Narrative/Conformance Summary

Instrumental Wet Chemistry

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CLIENT: ExxonMobil Refining & Supply
SDG: TAP04

Instrumental Water Quality

Sample #	Matrix Liquid	Solid	Comments
6918863		X	

ANALYSIS:
There were no dilutions performed for analyses associated with samples in this SDG.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:
Method defined actions are taken for any failed matrix QC.

DATA INTERPRETATION:
Due to the limitations of the data package software, form I's are not available for the Instrumental Analysis data. Please refer to the analysis reports for this information.

Total Cyanide (soil) = result X dilution factor X 50 ml / weight of sample (g)

Amenable Cyanide = total cyanide result – amenable cyanide result

Abbreviation Key

U = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
R = Matrix Spike (MS)	MDL = Method Detection Limit
M = Matrix Spike Duplicate (MSD)	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	NA = Not Applicable
HS = High Spike	ME = Method
LS = Low Spike	CO = Colorimetric
SS = Soluble Spike	G = Gravimetric
IS = Insoluble Spike	IR = Infrared Spectrophotometry
ISD = Insoluble Spike Duplicate	MTR = Meter
PDS = Post Digestion Spike	OD = Oven Dried
* = Out of Specification	TI = Titration
V = Visual	TOC = Total Organic Carbon
AK = Alpkem	IC = Ion Chromatography
TC = Total Carbon	RA = Rapid Analyzer

Narrative Reviewed and Approved by:

_____ Date _____

Dana Kauffman
Manager of Data Deliverables

Wet Chemistry Data

Case Narrative/Conformance Summary

Wet Chemistry

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CLIENT: ExxonMobil Refining & Supply
SDG: TAP04

Miscellaneous Wet Chemistry

Sample #	Matrix: Liquid	Matrix: Solid	Comments
6918863		X	

ANALYSIS:

Dilutions are listed in the table below:

Samples	Hexavalent Chromium (SOLIDS)
6918863	IS/ DF25, PDS/ DF4
LCS-IS	DF25

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

Method defined actions are taken for any failed matrix QC.

DATA INTERPRETATION:

Due to the limitations of the data package software, there are no form 1's available for the Wet Chemistry data. Please refer to the analysis reports for this information.

0425

Hexavalent Chromium calculation is:

$$mg/kg Cr^{+6} = (CV/W) \times DF$$

Where:

C = mg/l Cr^{+6} in digestate
V = Volume of digestate in milliliters
W = Sample weight digested in grams
DF = Dilution factor

Abbreviation Key

U = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
R = Matrix Spike (MS)	MDL = Method Detection Limit
M = Matrix Spike Duplicate (MSD)	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	NA = Not Applicable
HS = High Spike	ME = Method
LS = Low Spike	CO = Colorimetric
SS = Soluble Spike	G = Gravimetric
IS = Insoluble Spike	IR = Infrared Spectrophotometry
ISD = Insoluble Spike Duplicate	MTR = Meter
PDS = Post Digestion Spike	OD = Oven Dried
* = Out of Specification	TI = Titration

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CLIENT: ExxonMobil Refining & Supply
SDG: TAP04

V = Visual	TOC = Total Organic Carbon
AK = Alpkem	IC = Ion Chromatography
TC = Total Carbon	RA = Rapid Analyzer

Narrative Reviewed and Approved by:

Patricia Weirich

Patricia Weirich
Senior Administrator

Date 1-17-13

Dana Kauffman
Manager of Data Deliverables

Moisture Data

MOISTURE

SAMPLE NUMBERS:

Sample #	Sample Code
6918863	TTSC1
6918864	TTTS1
6918865	TTTS2

COMMENTS:

The moisture value calculation is:

$$\% \text{ moisture} = \frac{A - B}{C} \times 100$$

Where: A = weight of sample and container before drying
B = weight of sample and container after drying
C = weight of sample before drying

Laboratory Compliance Quality Control

Analysis Name		LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number:	13011820002B	Sample number(s):	6918863-6918865			
Moisture		100		99-101		

Sample Matrix Quality Control

Analysis Name		BKG Conc	DUP Conc	RPD	RPD Max
Batch number:	13011820002B	Sample number(s):	6918863-6918865		
Moisture		14.4	12.5	14*	13

* - Outside of specification
(1) - The result for one or both determinations was less than five times the LOQ.

Moisture Data Report

Batch #: 13011820002

Sample ID	Batch ID	Analysis#	Tare Wt	Sample Wt	Dry Wt	%Moisture	Analysis Date (Emp#)	Verified Date (Emp#)
LCS 89.5% Std.			1.0613	5.0349	1.6028	89.25	1/11/13 (1201/SWF)	1/14/13 (1382/SAS)
6918863	B	00111	1.0579	7.2858	7.2142	15.50	1/11/13 (1201/SWF)	1/14/13 (1382/SAS)
6918864	B	00111	1.0658	6.8889	6.7742	17.14	1/11/13 (1201/SWF)	1/14/13 (1382/SAS)
6918865	B	00111	1.0794	7.3770	7.3599	14.86	1/11/13 (1201/SWF)	1/14/13 (1382/SAS)

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2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

January 23, 2013

Project: Tappan Terminal

Submittal Date: 01/17/2013
Group Number: 1362782
SDG: TAP05
PO Number: 15249
State of Sample Origin: NY

Client Sample Description	Lancaster Labs (LLI) #
AGC-TSC-2 Composite Soil	6925518
AGC-TS3 Grab Soil	6925519
AGC-TS4 Grab Soil	6925520

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	Roux Associates	Attn: Tracy Bispham
ELECTRONIC COPY TO	Exxon Mobil: Woodard & Curran	Attn: Anne Proctor
ELECTRONIC COPY TO	Roux	Attn: Noelle Clarke
1 COPY TO	Data Package Group	

Respectfully Submitted,

Barbara Weyandt

Barbara A. Weyandt
Specialist

(717) 556-7264

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681• www.lancasterlabs.com

Sample Description: **AGC-TSC-2 Composite Soil**
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6925518
LLI Group # 1362782
Account # 01907

Project Name: Tappan Terminal

Collected: 01/14/2013 16:30 by KC

Submitted: 01/17/2013 13:00
Reported: 01/23/2013 12:36

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

TSC-2 SDG#: TAP05-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	
10727	Acenaphthene	83-32-9	6	J	4	1
10727	Acenaphthylene	208-96-8	16	J	4	1
10727	Anthracene	120-12-7	21		4	1
10727	Benzo(a)anthracene	56-55-3	65		4	1
10727	Benzo(a)pyrene	50-32-8	63		4	1
10727	Benzo(b)fluoranthene	205-99-2	89		4	1
10727	Benzo(g,h,i)perylene	191-24-2	53		4	1
10727	Benzo(k)fluoranthene	207-08-9	39		4	1
10727	Chrysene	218-01-9	76		4	1
10727	Dibenz(a,h)anthracene	53-70-3	10	J	4	1
10727	Dibenzofuran	132-64-9	N.D.		20	1
10727	Fluoranthene	206-44-0	120		4	1
10727	Fluorene	86-73-7	7	J	4	1
10727	Indeno(1,2,3-cd)pyrene	193-39-5	42		4	1
10727	2-Methylphenol	95-48-7	N.D.		20	1
10727	4-Methylphenol	106-44-5	N.D.		20	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10727	Naphthalene	91-20-3	7	J	4	1
10727	Pentachlorophenol	87-86-5	N.D.		39	1
10727	Phenanthrene	85-01-8	64		4	1
10727	Phenol	108-95-2	N.D.		20	1
10727	Pyrene	129-00-0	110		4	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	
10401	2,4,5-TP	93-72-1	N.D.		0.88	1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	
10738	Aldrin	309-00-2	N.D.		0.98	5
10738	Alpha BHC	319-84-6	N.D.		0.98	5
10738	Beta BHC	319-85-7	N.D.		5.5	5
10738	Gamma BHC - Lindane	58-89-9	N.D.		0.98	5
10738	Alpha Chlordane	5103-71-9	21		0.98	5
10738	p,p-DDD	72-54-8	7.8	J	1.9	5
10738	p,p-DDE	72-55-9	44		1.9	5
10738	p,p-DDT	50-29-3	49		2.0	5
10738	Delta BHC	319-86-8	N.D.		2.6	5
10738	Dieldrin	60-57-1	N.D.		1.9	5
10738	Endosulfan I	959-98-8	N.D.		1.3	5
10738	Endosulfan II	33213-65-9	N.D.		1.9	5
10738	Endosulfan Sulfate	1031-07-8	N.D.		1.9	5
10738	Endrin	72-20-8	N.D.		1.9	5
10738	HCB	118-74-1	N.D.		1.2	5
10738	Heptachlor	76-44-8	N.D.		2.3	5
	Reporting limits were raised due to interference from the sample matrix.					
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	
10736	PCB-1016	12674-11-2	N.D.		21	5

Sample Description: **AGC-TSC-2 Composite Soil**
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6925518
LLI Group # 1362782
Account # 01907

Project Name: Tappan Terminal

Collected: 01/14/2013 16:30 by KC

Submitted: 01/17/2013 13:00
Reported: 01/23/2013 12:36

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

TSC-2 SDG#: TAP05-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	
10736	PCB-1221	11104-28-2	N.D.		27	5
10736	PCB-1232	11141-16-5	N.D.		47	5
10736	PCB-1242	53469-21-9	N.D.		19	5
10736	PCB-1248	12672-29-6	N.D.		19	5
10736	PCB-1254	11097-69-1	N.D.		19	5
10736	PCB-1260	11096-82-5	N.D.		29	5
	The % difference for the calibration verification standard is outside the +/- 15% criteria for the analyte(s) listed below. Since the average of the % difference values meets the criteria, the results are reported. This applies to the following analyte(s): decachlorobiphenyl surrogate Reporting limits were raised due to interference from the sample matrix.					
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	
06935	Arsenic	7440-38-2	2.99		0.383	1
06946	Barium	7440-39-3	107		0.0383	1
06947	Beryllium	7440-41-7	0.452	J	0.0779	1
06949	Cadmium	7440-43-9	N.D.		0.0383	1
06951	Chromium	7440-47-3	27.7		0.102	1
06953	Copper	7440-50-8	29.6		0.209	1
06955	Lead	7439-92-1	15.7		0.546	1
06958	Manganese	7439-96-5	473		0.0965	1
06961	Nickel	7440-02-0	16.0		0.128	1
06936	Selenium	7782-49-2	1.01	J	0.837	1
06966	Silver	7440-22-4	N.D.		0.163	1
06972	Zinc	7440-66-6	54.2		0.232	1
	SW-846 6010B modified		**mg/kg**		**mg/kg**	
02829	Trivalent Chromium soils	16065-83-1	27.7		0.59	1
	The Trivalent Chromium result is calculated by subtracting Hexavalent Chromium from Total Chromium.					
	SW-846 7471A		**mg/kg**		**mg/kg**	
00159	Mercury	7439-97-6	0.0298	J	0.0119	1
Wet Chemistry	**SW-846 9012B**		**mg/kg**		**mg/kg**	
05898	Amenable Cyanide (solid)	n.a.	N.D.		0.21	1
05895	Total Cyanide (solid)	57-12-5	N.D.		0.21	1
	SW-846 7196A		**mg/kg**		**mg/kg**	
00425	Hexavalent Chromium (SOLIDS)	18540-29-9	N.D.		0.59	1
Wet Chemistry	**SM 2540 G-1997**		**%**		**%**	
00111	Moisture	n.a.	14.8		0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

Sample Description: AGC-TSC-2 Composite Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6925518
LLI Group # 1362782
Account # 01907

Project Name: Tappan Terminal

Collected: 01/14/2013 16:30 by KC

Submitted: 01/17/2013 13:00
Reported: 01/23/2013 12:36

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

TSC-2 SDG#: TAP05-01

General Sample Comments

State of New York Certification No. 10670
This sample was originally submitted to the laboratory on 01/16/13 at 10:05. We received authorization for testing on 01/17/13.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10727	Table 375-6.8(a) SVOCs	SW-846 8270C	1	13017SLD026	01/18/2013 11:34	Brian K Graham	1
10809	BNA Soil Microwave	SW-846 3546	1	13017SLD026	01/17/2013 18:00	Sally L Appleyard	1
10401	Table 375-6.8(a) Herbicides	SW-846 8151A	1	130170017A	01/21/2013 16:19	Matthew S Listner	1
10738	Table 375-6.8(a) Pesticides	SW-846 8081A	1	130170016A	01/22/2013 04:19	Jamie L Brillhart	5
10736	PCBs 8082 Soil	SW-846 8082	1	130180006A	01/21/2013 15:50	Monica M Souders	5
10497	PCB Microwave Soil Extraction	SW-846 3546	1	130180006A	01/19/2013 02:10	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	130170016A	01/18/2013 10:00	Olivia Arosemena	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	130170017A	01/18/2013 07:50	Katheryne V Sponheimer	1
06935	Arsenic	SW-846 6010B	1	130175708001	01/18/2013 07:39	Joanne M Gates	1
06946	Barium	SW-846 6010B	1	130175708001	01/18/2013 07:39	Joanne M Gates	1
06947	Beryllium	SW-846 6010B	1	130175708001	01/18/2013 07:39	Joanne M Gates	1
06949	Cadmium	SW-846 6010B	1	130175708001	01/18/2013 07:39	Joanne M Gates	1
06951	Chromium	SW-846 6010B	1	130175708001	01/18/2013 07:39	Joanne M Gates	1
06953	Copper	SW-846 6010B	1	130175708001	01/18/2013 07:39	Joanne M Gates	1
06955	Lead	SW-846 6010B	1	130175708001	01/18/2013 17:44	John P Hook	1
06958	Manganese	SW-846 6010B	1	130175708001	01/18/2013 07:39	Joanne M Gates	1
06961	Nickel	SW-846 6010B	1	130175708001	01/18/2013 07:39	Joanne M Gates	1
06936	Selenium	SW-846 6010B	1	130175708001	01/18/2013 07:39	Joanne M Gates	1
06966	Silver	SW-846 6010B	1	130175708001	01/18/2013 07:39	Joanne M Gates	1
06972	Zinc	SW-846 6010B	1	130175708001	01/18/2013 07:39	Joanne M Gates	1
02829	Trivalent Chromium soils	SW-846 6010B modified	1	130232829001	01/23/2013 05:14	Deborah A Krady	1
00159	Mercury	SW-846 7471A	2	130175711001	01/18/2013 09:38	Damary Valentin	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	130175708001	01/17/2013 23:52	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	130175711001	01/18/2013 01:40	Annamaria Stipkovits	1
05898	Amenable Cyanide (solid)	SW-846 9012B	1	13018103201A	01/21/2013 08:08	K Robert Caulfeild-James	1
05895	Total Cyanide (solid)	SW-846 9012B	1	13018102201A	01/21/2013 07:56	K Robert Caulfeild-James	1
05897	Amenable Cyanide Solid Distill	SW-846 9012B	1	13018103201A	01/18/2013 13:20	Carolyn M Mastropietro	1

Sample Description: **AGC-TSC-2 Composite Soil**
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6925518
LLI Group # 1362782
Account # 01907

Project Name: Tappan Terminal

Collected: 01/14/2013 16:30 by KC

Submitted: 01/17/2013 13:00
Reported: 01/23/2013 12:36

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

TSC-2 SDG#: TAP05-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05896	Cyanide Solid Distillation	SW-846 9012B	1	13018102201A	01/18/2013 13:20	Carolyn M Mastropietro	1
00425	Hexavalent Chromium (SOLIDS)	SW-846 7196A	1	13019042501A	01/21/2013 22:15	Daniel S Smith	1
07825	Hexavalent Cr (Extraction)	SW-846 3060A	1	13019042501A	01/19/2013 06:10	Daniel S Smith	1
00111	Moisture	SM 2540 G-1997	1	13017820003B	01/17/2013 19:18	Scott W Freisher	1

Sample Description: AGC-TS3 Grab Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6925519
LLI Group # 1362782
Account # 01907

Project Name: Tappan Terminal

Collected: 01/14/2013 16:20 by KC

Submitted: 01/17/2013 13:00
Reported: 01/23/2013 12:36

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

TS3-- SDG#: TAP05-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg	ug/kg	
10237	Acetone	67-64-1	N.D.	8	0.98
10237	Benzene	71-43-2	N.D.	0.6	0.98
10237	2-Butanone	78-93-3	N.D.	5	0.98
10237	n-Butylbenzene	104-51-8	N.D.	1	0.98
10237	sec-Butylbenzene	135-98-8	N.D.	1	0.98
10237	tert-Butylbenzene	98-06-6	N.D.	1	0.98
10237	Carbon Tetrachloride	56-23-5	N.D.	1	0.98
10237	Chlorobenzene	108-90-7	N.D.	1	0.98
10237	Chloroform	67-66-3	N.D.	1	0.98
10237	1,2-Dichlorobenzene	95-50-1	N.D.	1	0.98
10237	1,3-Dichlorobenzene	541-73-1	N.D.	1	0.98
10237	1,4-Dichlorobenzene	106-46-7	N.D.	1	0.98
10237	1,1-Dichloroethane	75-34-3	N.D.	1	0.98
10237	1,2-Dichloroethane	107-06-2	N.D.	1	0.98
10237	1,1-Dichloroethene	75-35-4	N.D.	1	0.98
10237	cis-1,2-Dichloroethene	156-59-2	N.D.	1	0.98
10237	trans-1,2-Dichloroethene	156-60-5	N.D.	1	0.98
10237	1,4-Dioxane	123-91-1	N.D.	80	0.98
10237	Ethylbenzene	100-41-4	N.D.	1	0.98
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.6	0.98
10237	Methylene Chloride	75-09-2	N.D.	2	0.98
10237	n-Propylbenzene	103-65-1	N.D.	1	0.98
10237	Tetrachloroethene	127-18-4	N.D.	1	0.98
10237	Toluene	108-88-3	N.D.	1	0.98
10237	1,1,1-Trichloroethane	71-55-6	N.D.	1	0.98
10237	Trichloroethene	79-01-6	N.D.	1	0.98
10237	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	0.98
10237	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	0.98
10237	Vinyl Chloride	75-01-4	N.D.	1	0.98
10237	Xylene (Total)	1330-20-7	N.D.	1	0.98
Wet Chemistry	**SM 2540 G-1997**		%	%	
00111	Moisture	n.a.	14.0	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

Sample Description: AGC-TS3 Grab Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6925519
LLI Group # 1362782
Account # 01907

Project Name: Tappan Terminal

Collected: 01/14/2013 16:20 by KC

Submitted: 01/17/2013 13:00
Reported: 01/23/2013 12:36

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

TS3-- SDG#: TAP05-02

General Sample Comments

State of New York Certification No. 10670
This sample was originally submitted to the laboratory on 01/16/13 at 10:05. We received authorization for testing on 01/17/13.

Lancaster Laboratories is responsible only for the certified testing of samples. We are not directly responsible for the integrity of the sample prior to laboratory receipt. Any reported concentrations less than 200 ug/kg may be biased low if they were not collected according to EPA 5035/5035A specifications.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	Table 375-6.8(a) VOCs	SW-846 8260B	1	B130171AA	01/17/2013 15:57	Chelsea B Stong	0.98
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201301729951	01/17/2013 14:28	Mitchell R Washel	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201301729951	01/17/2013 14:28	Mitchell R Washel	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201301729949	01/17/2013 14:26	Mitchell R Washel	n.a.
00111	Moisture	SM 2540 G-1997	1	13017820003B	01/17/2013 19:18	Scott W Freisher	1

Sample Description: AGC-TS4 Grab Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6925520
LLI Group # 1362782
Account # 01907

Project Name: Tappan Terminal

Collected: 01/14/2013 16:25 by KC

Submitted: 01/17/2013 13:00
Reported: 01/23/2013 12:36

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

TS4-- SDG#: TAP05-03*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg	ug/kg	
10237	Acetone	67-64-1	N.D.	8	1.01
10237	Benzene	71-43-2	N.D.	0.6	1.01
10237	2-Butanone	78-93-3	N.D.	5	1.01
10237	n-Butylbenzene	104-51-8	N.D.	1	1.01
10237	sec-Butylbenzene	135-98-8	N.D.	1	1.01
10237	tert-Butylbenzene	98-06-6	N.D.	1	1.01
10237	Carbon Tetrachloride	56-23-5	N.D.	1	1.01
10237	Chlorobenzene	108-90-7	N.D.	1	1.01
10237	Chloroform	67-66-3	N.D.	1	1.01
10237	1,2-Dichlorobenzene	95-50-1	N.D.	1	1.01
10237	1,3-Dichlorobenzene	541-73-1	N.D.	1	1.01
10237	1,4-Dichlorobenzene	106-46-7	N.D.	1	1.01
10237	1,1-Dichloroethane	75-34-3	N.D.	1	1.01
10237	1,2-Dichloroethane	107-06-2	N.D.	1	1.01
10237	1,1-Dichloroethene	75-35-4	N.D.	1	1.01
10237	cis-1,2-Dichloroethene	156-59-2	N.D.	1	1.01
10237	trans-1,2-Dichloroethene	156-60-5	N.D.	1	1.01
10237	1,4-Dioxane	123-91-1	N.D.	83	1.01
10237	Ethylbenzene	100-41-4	N.D.	1	1.01
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.6	1.01
10237	Methylene Chloride	75-09-2	N.D.	2	1.01
10237	n-Propylbenzene	103-65-1	N.D.	1	1.01
10237	Tetrachloroethene	127-18-4	N.D.	1	1.01
10237	Toluene	108-88-3	N.D.	1	1.01
10237	1,1,1-Trichloroethane	71-55-6	N.D.	1	1.01
10237	Trichloroethene	79-01-6	N.D.	1	1.01
10237	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1.01
10237	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1.01
10237	Vinyl Chloride	75-01-4	N.D.	1	1.01
10237	Xylene (Total)	1330-20-7	N.D.	1	1.01
Wet Chemistry	**SM 2540 G-1997**		%	%	
00111	Moisture	n.a.	14.7	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

Sample Description: AGC-TS4 Grab Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6925520
LLI Group # 1362782
Account # 01907

Project Name: Tappan Terminal

Collected: 01/14/2013 16:25 by KC

Submitted: 01/17/2013 13:00
Reported: 01/23/2013 12:36

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

TS4-- SDG#: TAP05-03*

General Sample Comments

State of New York Certification No. 10670
This sample was originally submitted to the laboratory on 01/16/13 at 10:05. We received authorization for testing on 01/17/13.

Lancaster Laboratories is responsible only for the certified testing of samples. We are not directly responsible for the integrity of the sample prior to laboratory receipt. Any reported concentrations less than 200 ug/kg may be biased low if they were not collected according to EPA 5035/5035A specifications.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	Table 375-6.8(a) VOCs	SW-846 8260B	1	B130171AA	01/17/2013 16:20	Chelsea B Stong	1.01
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201301729951	01/17/2013 14:28	Mitchell R Washel	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201301729951	01/17/2013 14:28	Mitchell R Washel	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201301729949	01/17/2013 14:23	Mitchell R Washel	n.a.
00111	Moisture	SM 2540 G-1997	1	13017820003B	01/17/2013 19:18	Scott W Freisher	1

Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1362782
Reported: 01/23/13 at 12:36 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B130171AA	Sample number(s): 6925519-6925520							
Acetone	N.D.	7.	ug/kg	95		32-209		
Benzene	N.D.	0.5	ug/kg	103		80-120		
2-Butanone	N.D.	4.	ug/kg	76		37-155		
n-Butylbenzene	N.D.	1.	ug/kg	95		72-120		
sec-Butylbenzene	N.D.	1.	ug/kg	98		75-120		
tert-Butylbenzene	N.D.	1.	ug/kg	92		75-120		
Carbon Tetrachloride	N.D.	1.	ug/kg	101		69-122		
Chlorobenzene	N.D.	1.	ug/kg	99		80-120		
Chloroform	N.D.	1.	ug/kg	99		80-120		
1,2-Dichlorobenzene	N.D.	1.	ug/kg	93		79-120		
1,3-Dichlorobenzene	N.D.	1.	ug/kg	97		78-120		
1,4-Dichlorobenzene	N.D.	1.	ug/kg	95		79-120		
1,1-Dichloroethane	N.D.	1.	ug/kg	102		80-120		
1,2-Dichloroethane	N.D.	1.	ug/kg	96		70-137		
1,1-Dichloroethene	N.D.	1.	ug/kg	108		73-129		
cis-1,2-Dichloroethene	N.D.	1.	ug/kg	107		80-120		
trans-1,2-Dichloroethene	N.D.	1.	ug/kg	104		79-120		
1,4-Dioxane	N.D.	70.	ug/kg	110		48-129		
Ethylbenzene	N.D.	1.	ug/kg	100		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/kg	94		74-121		
Methylene Chloride	N.D.	2.	ug/kg	102		76-124		
n-Propylbenzene	N.D.	1.	ug/kg	85		77-120		
Tetrachloroethene	N.D.	1.	ug/kg	106		78-126		
Toluene	N.D.	1.	ug/kg	97		80-120		
1,1,1-Trichloroethane	N.D.	1.	ug/kg	95		71-125		
Trichloroethene	N.D.	1.	ug/kg	102		80-120		
1,2,4-Trimethylbenzene	N.D.	1.	ug/kg	96		79-120		
1,3,5-Trimethylbenzene	N.D.	1.	ug/kg	95		78-120		
Vinyl Chloride	N.D.	1.	ug/kg	88		53-120		
Xylene (Total)	N.D.	1.	ug/kg	99		80-120		
Batch number: 13017SLD026	Sample number(s): 6925518							
Acenaphthene	N.D.	3.	ug/kg	90		83-111		
Acenaphthylene	N.D.	3.	ug/kg	95		83-127		
Anthracene	N.D.	3.	ug/kg	92		83-111		
Benzo(a)anthracene	N.D.	3.	ug/kg	89		73-123		
Benzo(a)pyrene	N.D.	3.	ug/kg	88		80-123		
Benzo(b)fluoranthene	N.D.	3.	ug/kg	84		76-124		
Benzo(g,h,i)perylene	N.D.	3.	ug/kg	86		77-122		
Benzo(k)fluoranthene	N.D.	3.	ug/kg	93		71-135		
Chrysene	N.D.	3.	ug/kg	92		73-119		
Dibenz(a,h)anthracene	N.D.	3.	ug/kg	89		67-129		
Dibenzofuran	N.D.	17.	ug/kg	91		78-116		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1362782
Reported: 01/23/13 at 12:36 PM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Fluoranthene	N.D.	3.	ug/kg	92		80-120		
Fluorene	N.D.	3.	ug/kg	95		81-117		
Indeno(1,2,3-cd)pyrene	N.D.	3.	ug/kg	88		64-128		
2-Methylphenol	N.D.	17.	ug/kg	92		75-126		
4-Methylphenol	N.D.	17.	ug/kg	89		74-116		
Naphthalene	N.D.	3.	ug/kg	88		77-115		
Pentachlorophenol	N.D.	33.	ug/kg	95		60-134		
Phenanthrene	N.D.	3.	ug/kg	91		77-119		
Phenol	N.D.	17.	ug/kg	87		69-126		
Pyrene	N.D.	3.	ug/kg	89		80-121		
Batch number: 130170017A	Sample number(s): 6925518							
2,4,5-TP	N.D.	0.75	ug/kg	108		60-111		
Batch number: 130170016A	Sample number(s): 6925518							
Aldrin	N.D.	0.17	ug/kg	88		62-134		
Alpha BHC	N.D.	0.17	ug/kg	87		67-131		
Beta BHC	N.D.	0.96	ug/kg	89		59-161		
Gamma BHC - Lindane	N.D.	0.17	ug/kg	90		66-132		
Alpha Chlordane	N.D.	0.17	ug/kg	99		64-140		
p,p-DDD	N.D.	0.33	ug/kg	96		73-131		
p,p-DDE	N.D.	0.33	ug/kg	96		72-132		
p,p-DDT	N.D.	0.35	ug/kg	93		65-131		
Delta BHC	N.D.	0.45	ug/kg	91		44-145		
Dieldrin	N.D.	0.33	ug/kg	101		71-134		
Endosulfan I	N.D.	0.22	ug/kg	91		57-127		
Endosulfan II	N.D.	0.33	ug/kg	98		63-127		
Endosulfan Sulfate	N.D.	0.33	ug/kg	101		80-137		
Endrin	N.D.	0.33	ug/kg	100		66-136		
HCB	N.D.	0.21	ug/kg					
Heptachlor	N.D.	0.17	ug/kg	91		68-132		
Batch number: 130180006A	Sample number(s): 6925518							
PCB-1016	N.D.	3.6	ug/kg	112		64-121		
PCB-1221	N.D.	4.6	ug/kg					
PCB-1232	N.D.	8.0	ug/kg					
PCB-1242	N.D.	3.3	ug/kg					
PCB-1248	N.D.	3.3	ug/kg					
PCB-1254	N.D.	3.3	ug/kg					
PCB-1260	N.D.	4.9	ug/kg	118		72-123		
Batch number: 130175708001	Sample number(s): 6925518							
Arsenic	N.D.	0.330	mg/kg	108		80-120		
Barium	N.D.	0.0330	mg/kg	99		80-120		
Beryllium	N.D.	0.0670	mg/kg	99		80-120		
Cadmium	N.D.	0.0330	mg/kg	101		80-120		
Chromium	N.D.	0.0880	mg/kg	104		80-120		
Copper	N.D.	0.180	mg/kg	105		80-120		
Lead	N.D.	0.470	mg/kg	104		80-120		
Manganese	N.D.	0.0830	mg/kg	100		80-120		
Nickel	N.D.	0.110	mg/kg	104		80-120		
Selenium	N.D.	0.720	mg/kg	101		80-120		
Silver	N.D.	0.140	mg/kg	110		80-120		
Zinc	0.305 J	0.200	mg/kg	103		80-120		
Batch number: 130175711001	Sample number(s): 6925518							

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1362782
Reported: 01/23/13 at 12:36 PM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Mercury	N.D.	0.0103	mg/kg	107		80-120		
Batch number: 13018102201A	Sample number(s): 6925518							
Total Cyanide (solid)	N.D.	0.18	mg/kg	90		90-110		
Batch number: 13018103201A	Sample number(s): 6925518							
Amenable Cyanide (solid)	N.D.	0.18	mg/kg	0		-20-20		
Batch number: 13019042501A	Sample number(s): 6925518							
Hexavalent Chromium (SOLIDS)	N.D.	0.50	mg/kg	99		80-120		
Batch number: 13017820003B	Sample number(s): 6925518-6925520							
Moisture				100		99-101		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: B130171AA	Sample number(s): 6925519-6925520 UNSPK: P924131								
Acetone	103	121	31-195	20	30				
Benzene	101	120	55-143	20	30				
2-Butanone	75	88	37-163	19	30				
n-Butylbenzene	74	97	30-146	30	30				
sec-Butylbenzene	84	109	33-157	29	30				
tert-Butylbenzene	82	102	41-152	24	30				
Carbon Tetrachloride	101	121	45-153	21	30				
Chlorobenzene	91	110	49-135	22	30				
Chloroform	97	110	61-142	15	30				
1,2-Dichlorobenzene	82	101	36-133	23	30				
1,3-Dichlorobenzene	84	102	34-134	22	30				
1,4-Dichlorobenzene	82	101	35-136	23	30				
1,1-Dichloroethane	102	119	63-142	19	30				
1,2-Dichloroethane	92	105	68-131	15	30				
1,1-Dichloroethene	111	134	61-149	22	30				
cis-1,2-Dichloroethene	107	123	60-136	16	30				
trans-1,2-Dichloroethene	104	124	59-142	20	30				
1,4-Dioxane	130	125	39-180	2	30				
Ethylbenzene	91	109	44-141	21	30				
Methyl Tertiary Butyl Ether	90	101	55-129	15	30				
Methylene Chloride	107	117	61-141	12	30				
n-Propylbenzene	76	94	39-157	24	30				
Tetrachloroethene	102	125	42-149	23	30				
Toluene	94	112	50-146	21	30				
1,1,1-Trichloroethane	94	112	64-142	20	30				
Trichloroethene	99	120	53-144	21	30				
1,2,4-Trimethylbenzene	84	104	37-149	23	30				
1,3,5-Trimethylbenzene	84	104	38-150	24	30				
Vinyl Chloride	87	108	50-154	24	30				
Xylene (Total)	90	109	44-136	22	30				

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1362782
Reported: 01/23/13 at 12:36 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13017SLD026	Sample number(s): 6925518 UNSPK: P924711								
Acenaphthene	85	84	33-140	1	30				
Acenaphthylene	87	89	47-137	2	30				
Anthracene	86	88	40-147	2	30				
Benzo(a)anthracene	82	84	32-150	2	30				
Benzo(a)pyrene	81	82	30-150	1	30				
Benzo(b)fluoranthene	80	77	29-150	4	30				
Benzo(g,h,i)perylene	82	82	31-152	1	30				
Benzo(k)fluoranthene	90	87	35-148	4	30				
Chrysene	83	85	33-142	2	30				
Dibenz(a,h)anthracene	87	88	37-151	1	30				
Dibenzofuran	85	86	38-148	2	30				
Fluoranthene	80	81	30-151	2	30				
Fluorene	86	86	36-140	0	30				
Indeno(1,2,3-cd)pyrene	85	86	31-154	1	30				
2-Methylphenol	83	89	32-146	6	30				
4-Methylphenol	79	83	36-149	5	30				
Naphthalene	85	86	35-141	2	30				
Pentachlorophenol	86	89	23-145	4	30				
Phenanthrene	85	86	34-147	1	30				
Phenol	84	86	39-151	2	30				
Pyrene	85	86	29-148	1	30				
Batch number: 130170017A	Sample number(s): 6925518 UNSPK: P921662								
2,4,5-TP	94	109	10-142	15	35				
Batch number: 130170016A	Sample number(s): 6925518 UNSPK: 6925518								
Aldrin	95	87	18-138	9	50				
Alpha BHC	91	83	9-143	9	50				
Beta BHC	0*	0*	14-168	0	50				
Gamma BHC - Lindane	92	82	14-143	12	50				
Alpha Chlordane	-69 (2)	-99 (2)	15-153	7	50				
p,p-DDD	50	42	17-163	5	50				
p,p-DDE	101 (2)	65 (2)	22-169	6	50				
p,p-DDT	111 (2)	85 (2)	4-159	4	50				
Delta BHC	95	88	30-144	9	50				
Dieldrin	130	119	17-163	9	50				
Endosulfan I	99	90	8-137	10	50				
Endosulfan II	104	95	17-146	8	50				
Endosulfan Sulfate	107	98	6-190	9	50				
Endrin	112	102	25-166	9	50				
Heptachlor	121	111	25-148	9	50				
Batch number: 130180006A	Sample number(s): 6925518 UNSPK: P924129								
PCB-1016	95	102	29-146	6	50				
PCB-1260	85	96	39-149	12	50				
Batch number: 130175708001	Sample number(s): 6925518 UNSPK: P924566 BKG: P924566								
Arsenic	112	120	75-125	6	20	4.35	5.42	22* (1)	20
Barium	62 (2)	164 (2)	75-125	17	20	966	829	15	20
Beryllium	101	103	83-111	2	20	0.297 J	0.196 J	41* (1)	20
Cadmium	97	104	75-125	6	20	0.638	0.745	15 (1)	20

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1362782
Reported: 01/23/13 at 12:36 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Chromium	171*	260*	75-125	20	20	46.0	42.3	8	20
Copper	17 (2)	44 (2)	75-125	5	20	115	153	28*	20
Lead	0 (2)	62 (2)	75-125	7	20	129	102	23*	20
Manganese	28*	46*	75-125	5	20	166	116	36*	20
Nickel	78	136*	75-125	27*	20	51.5	46.0	11	20
Selenium	103	102	75-125	1	20	2.00	1.50 J	29* (1)	20
Silver	108	111	75-125	3	20	0.399 J	0.228 J	54* (1)	20
Zinc	-87 (2)	54 (2)	75-125	20	20	350	378	8	20
Batch number: 130175711001	Sample number(s): 6925518 UNSPK: P924566 BKG: P924566								
Mercury	137 (2)	193 (2)	80-120	9	20	0.770	0.606	24* (1)	20
Batch number: 13018102201A	Sample number(s): 6925518 UNSPK: P926232 BKG: P926232								
Total Cyanide (solid)	91		68-134			N.D.	N.D.	0 (1)	20
Batch number: 13018103201A	Sample number(s): 6925518 UNSPK: 6925518 BKG: 6925518								
Amenable Cyanide (solid)	0		-20-20			N.D.	N.D.	0 (1)	20
Batch number: 13019042501A	Sample number(s): 6925518 UNSPK: P922862 BKG: P922862								
Hexavalent Chromium (SOLIDS)	138 (2)		75-125			471	478	1	20
Batch number: 13017820003B	Sample number(s): 6925518-6925520 BKG: P924702								
Moisture						21.9	21.7	1	13

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 8260 Benzene and Toluene
Batch number: B130171AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6925519	104	97	98	82
6925520	105	99	97	80
Blank	105	102	94	90
LCS	102	102	98	98
MS	100	98	98	96
MSD	98	99	98	97
Limits:	50-141	54-135	52-141	50-131

Analysis Name: TCL 8270 (microwave)
Batch number: 13017SLD026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6925518	90	95	90	87	92	98
Blank	89	93	99	84	88	98
LCS	91	95	97	89	91	100

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1362782
Reported: 01/23/13 at 12:36 PM

Surrogate Quality Control

MS	83	89	83	83	88	96
MSD	87	92	86	80	89	97
Limits:	42-130	48-136	28-139	45-123	47-126	46-143

Analysis Name: TCL Pesticides 8081A Soil
Batch number: 130170016A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6925518	89	98
Blank	83	98
LCS	83	100
MS	88	99
MSD	82	96
Limits:	33-140	45-150

Analysis Name: Herbicide soils 8151A Master
Batch number: 130170017A

	2,4-Dichlorophenylacetic acid
6925518	112
Blank	95
LCS	104
MS	71
MSD	71
Limits:	36-156

Analysis Name: PCBs in Soil (microwave)
Batch number: 130180006A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6925518	123	80
Blank	122	114
LCS	123	119
MS	110	94
MSD	116	107
Limits:	33-143	24-164

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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NYSDEC ASP Category A Data Package

Prepared for:

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

Project: Tappan Terminal
Soil Samples
Collected on 01/14/13

SDG# TAP05

GROUP	SAMPLE NUMBERS
1362782	6925518-6925520

PA Cert. # 36-00037
NY Cert. # 10670
NJ Cert. # PA011
NC Cert. # 521
TX Cert. # T104704194-08A-TX

Through our technical processes and second person review of data, we have established that our data/deliverables are in compliance with the methods and project requirements unless otherwise noted or previously resolved with the client.

Authorized by: Dana M Kauffman **Date:** **02/27/2013**

Dana M. Kauffman
Manager

Any questions or concerns you might have regarding this data package should be directed to your client representative, Barbara Weyandt at Ext. 1576.

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Table of Contents for SDG# TAP05

1. Sample Reference List 4

2. Methodology Summary/Reference 5

3. Analysis Reports / Field Chain of Custody 9

4. Sample Receipt Documentation Log 28

5. Volatiles by GC/MS Data 29

   a. Case Narrative/Conformance Summary 30

   b. Sample Data 33

6. Semivolatiles by GC/MS Data 41

   a. Case Narrative/Conformance Summary 42

   b. Sample Data 45

7. Herbicides Data 51

   a. Case Narrative/Conformance Summary 52

   b. Sample Data 55

8. Pesticides Data 59

   a. Case Narrative/Conformance Summary 60

   b. Sample Data 63

9. Polychlorinated Biphenyls (PCBs) Data 71

   a. Case Narrative/Conformance Summary 72

   b. Sample Data 75

10. Metals in Solid Data 79

   a. Case Narrative/Conformance Summary 80

   b. Sample Data 83

11. Instrumental Wet Chemistry Data 85

a. Case Narrative/Conformance Summary 86

12. Wet Chemistry Data 88

a. Case Narrative/Conformance Summary 89

13. Moisture Data 91

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Sample Reference List for SDG Number TAP05
with a Data Package Type of NYSDEC A

01907 - American Environmental Assess.

Project: Tappan Terminal

Lab Sample Number	Lab Sample Code	Client Sample Description
6925518	TSC-2	AGC-TSC-2 Composite Soil S2010L4632
6925519	TS3--	AGC-TS3 Grab Soil S2010L4632
6925520	TS4--	AGC-TS4 Grab Soil S2010L4632

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10237 8260 Ext. Soil Master w/GRO

The soil sample is purged and the volatile compounds are collected on a sorbent trap that is subsequently desorbed onto the GC/MS system for chromatographic and mass spectral analysis.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8260B, December 1996

00159 Mercury

The solution resulting from the mercury digestion is analyzed by Cold Vapor AA.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 7471A, September 1994

02829 Trivalent Chromium soils

Calculation performed by subtracting hexavalent chromium from total chromium.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 6010B Modified, December 1996.

05711 SW SW846 Hg Digest

The sample is heated at 95 c with nitric acid, sulfuric acid, potassium persulfate, and potassium permanganate. Excess potassium permanganate is reduced with sodium chloride/hydroxylamine hydrochloride. Mercuric ions are reduced to mercury metal using stannous chloride.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 7471A Modified, September 1994.

06935 Arsenic
06946 Barium
06947 Beryllium
06949 Cadmium
06951 Chromium
06953 Copper
06955 Lead
06958 Manganese
06961 Nickel
06936 Selenium
06966 Silver
06972 Zinc

The solution resulting from the metals digestion is analyzed by Trace ICP.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 6010B, December 1996.

05708 SW SW846 ICP/ICP MS Digest

The sample is digested with nitric acid, hydrochloric acid and hydrogen peroxide.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 3050B, December 1996

10738 Pesticides in Soil (microwave)

The sample is solvent extracted and exchanged to hexane. Florisil cleanup is performed to reduce potential matrix interferences. The extract is analyzed using gas chromatography on two capillary columns (primary and confirmation) with electron capture detectors.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8081A, December 1996.

10401 Herbicide soils 8151A Master

The sample is acidified and solvent extracted. The extract is then hydrolyzed, solvent washed, and acidified for final extraction. The chlorophenoxy acids, phenols and related target compounds are converted to the methyl esters using diazomethane. Florisil cleanup is performed to reduce potential matrix interferences.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8151A, December 1996.

04181 Herbicide Soil Extraction

The sample is acidified and solvent extracted. The extract is then hydrolyzed, solvent washed, and acidified for final extraction. The chlorophenoxy acids, phenols and related target compounds are converted to the methyl esters using diazomethane. Florisil cleanup is performed to reduce potential matrix interferences.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Methods 3550B & 8151A, December 1996.

10736 PCBs in Soil (microwave)

The sample is solvent-extracted and exchanged to hexane. Sulfuric acid and Florisil cleanups are performed to reduce potential matrix interferences. The extract is analyzed using gas chromatography on two capillary columns (primary and confirmation) with electron capture detectors.

Reference: Test Methods for Evaluating Solid Waste, SW-846 Method 8082, December 1996.

10497 PCB Microwave Soil Extraction
10809 BNA Soil Microwave

The sample aliquot is extracted using microwave extraction with 1:1 methylene chloride and acetone. The extract is concentrated prior to analysis.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 3546, Revision 0, February 2007.

10496 PPL Pest. Microwave Extraction

The sample aliquot is extracted using microwave extraction with 1:1 hexane and acetone. The extract is concentrated prior to analysis.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 3546, Revision 0, February 2007.

10727 TCL 8270 (microwave)

The sample extract is analyzed by capillary column Gas Chromatography/Mass Spectrometry.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8270C, December 1996

05895 Total Cyanide (solid)

During the distillation step, complex cyanides are converted to hydrogen cyanide which readily reacts with chloramine T. Simple cyanides are converted to cyanogen chloride by reaction with chloramine T. This reacts with pyridine and barbituric acid to give a red colored complex determined colorimetrically.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 9012B, August 2002.

05896 Cyanide Solid Distillation

The sample is acidified and distilled. Cyanide is released as hydrogen cyanide and is absorbed in a sodium hydroxide solution.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 9012B, August 2002.

05898 Amenable Cyanide (solid)
05897 Amenable Cyanide Solid Distill

A portion of the sample is pretreated with chlorine to release the dissociable cyanide. Both treated and untreated portions of the sample are acidified and distilled. Cyanide is released as hydrogen cyanide and is absorbed in a sodium hydroxide solution. The amenable cyanide is calculated as the difference between the untreated and chlorine treated portions.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 9012B, August 2002.

00425 Hexavalent Chromium (SOLIDS)

The filtrate from method #7825 is analyzed colorimetrically using diphenylcarbazide to produce a red-violet color. The absorbance is read at 540 nm and compared to a standard curve.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 7196A, July 1992.

07825 Hexavalent Cr (Extraction)

The sample is digested using a 3% sodium carbonate - 2% sodium hydroxide solution and then filtered through a 0.45 micron filter.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 3060A, December 1996

00111 Moisture

A well-mixed sample is placed in a tared container and dried to a constant weight in an oven at 103-105C. The increase in weight is the total solids.

Reference: Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998, Method 2540 G

00374 GC/MS - Bulk Soil Prep

Samples are field collected in glass containers, and preserved within 48 hours. An aliquot of the soil sample is prepared in reagent water and is purged at 40oC with helium.

Reference: Test Methods for Evaluating Solid Waste, SW-846, Method 5035A Modified, July 2002.

06646 GC/MS HL Bulk Sample Prep

Samples are field collected in glass containers, and preserved within 48 hours. An aliquot of the methanolic extract of the sample is diluted in reagent water and purged at ambient temperature with helium.

Reference: Test Methods for Evaluating Solid Waste, SW-846, Method 5035A Modified, July 2002.

Analysis Reports / Field Chain of Custody

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

January 23, 2013

Project: Tappan Terminal

Submittal Date: 01/17/2013
Group Number: 1362782
SDG: TAP05
PO Number: 15249
State of Sample Origin: NY

Client Sample Description	Lancaster Labs (LLI) #
AGC-TSC-2 Composite Soil	6925518
AGC-TS3 Grab Soil	6925519
AGC-TS4 Grab Soil	6925520

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	Roux Associates	Attn: Tracy Bispham
ELECTRONIC COPY TO	Exxon Mobil: Woodard & Curran	Attn: Anne Proctor
ELECTRONIC COPY TO	Roux	Attn: Noelle Clarke
1 COPY TO	Data Package Group	

Respectfully Submitted,

Barbara Weyandt

Barbara A. Weyandt
Specialist

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Sample Description: AGC-TSC-2 Composite Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6925518
LLI Group # 1362782
Account # 01907

Project Name: Tappan Terminal

Collected: 01/14/2013 16:30 by KC

Submitted: 01/17/2013 13:00
Reported: 01/23/2013 12:36

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

TSC-2 SDG#: TAP05-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	
10727	Acenaphthene	83-32-9	6	J	4	1
10727	Acenaphthylene	208-96-8	16	J	4	1
10727	Anthracene	120-12-7	21		4	1
10727	Benzo(a)anthracene	56-55-3	65		4	1
10727	Benzo(a)pyrene	50-32-8	63		4	1
10727	Benzo(b)fluoranthene	205-99-2	89		4	1
10727	Benzo(g,h,i)perylene	191-24-2	53		4	1
10727	Benzo(k)fluoranthene	207-08-9	39		4	1
10727	Chrysene	218-01-9	76		4	1
10727	Dibenz(a,h)anthracene	53-70-3	10	J	4	1
10727	Dibenzofuran	132-64-9	N.D.		20	1
10727	Fluoranthene	206-44-0	120		4	1
10727	Fluorene	86-73-7	7	J	4	1
10727	Indeno(1,2,3-cd)pyrene	193-39-5	42		4	1
10727	2-Methylphenol	95-48-7	N.D.		20	1
10727	4-Methylphenol	106-44-5	N.D.		20	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10727	Naphthalene	91-20-3	7	J	4	1
10727	Pentachlorophenol	87-86-5	N.D.		39	1
10727	Phenanthrene	85-01-8	64		4	1
10727	Phenol	108-95-2	N.D.		20	1
10727	Pyrene	129-00-0	110		4	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	
10401	2,4,5-TP	93-72-1	N.D.		0.88	1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	
10738	Aldrin	309-00-2	N.D.		0.98	5
10738	Alpha BHC	319-84-6	N.D.		0.98	5
10738	Beta BHC	319-85-7	N.D.		5.5	5
10738	Gamma BHC - Lindane	58-89-9	N.D.		0.98	5
10738	Alpha Chlordane	5103-71-9	21		0.98	5
10738	p,p-DDD	72-54-8	7.8	J	1.9	5
10738	p,p-DDE	72-55-9	44		1.9	5
10738	p,p-DDT	50-29-3	49		2.0	5
10738	Delta BHC	319-86-8	N.D.		2.6	5
10738	Dieldrin	60-57-1	N.D.		1.9	5
10738	Endosulfan I	959-98-8	N.D.		1.3	5
10738	Endosulfan II	33213-65-9	N.D.		1.9	5
10738	Endosulfan Sulfate	1031-07-8	N.D.		1.9	5
10738	Endrin	72-20-8	N.D.		1.9	5
10738	HCB	118-74-1	N.D.		1.2	5
10738	Heptachlor	76-44-8	N.D.		2.3	5
	Reporting limits were raised due to interference from the sample matrix.					
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	
10736	PCB-1016	12674-11-2	N.D.		21	5

Sample Description: AGC-TSC-2 Composite Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6925518
LLI Group # 1362782
Account # 01907

Project Name: Tappan Terminal

Collected: 01/14/2013 16:30 by KC

Submitted: 01/17/2013 13:00
Reported: 01/23/2013 12:36

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

TSC-2 SDG#: TAP05-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	
10736	PCB-1221	11104-28-2	N.D.		27	5
10736	PCB-1232	11141-16-5	N.D.		47	5
10736	PCB-1242	53469-21-9	N.D.		19	5
10736	PCB-1248	12672-29-6	N.D.		19	5
10736	PCB-1254	11097-69-1	N.D.		19	5
10736	PCB-1260	11096-82-5	N.D.		29	5
	The % difference for the calibration verification standard is outside the +/- 15% criteria for the analyte(s) listed below. Since the average of the % difference values meets the criteria, the results are reported. This applies to the following analyte(s): decachlorobiphenyl surrogate Reporting limits were raised due to interference from the sample matrix.					
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	
06935	Arsenic	7440-38-2	2.99		0.383	1
06946	Barium	7440-39-3	107		0.0383	1
06947	Beryllium	7440-41-7	0.452	J	0.0779	1
06949	Cadmium	7440-43-9	N.D.		0.0383	1
06951	Chromium	7440-47-3	27.7		0.102	1
06953	Copper	7440-50-8	29.6		0.209	1
06955	Lead	7439-92-1	15.7		0.546	1
06958	Manganese	7439-96-5	473		0.0965	1
06961	Nickel	7440-02-0	16.0		0.128	1
06936	Selenium	7782-49-2	1.01	J	0.837	1
06966	Silver	7440-22-4	N.D.		0.163	1
06972	Zinc	7440-66-6	54.2		0.232	1
	SW-846 6010B modified		**mg/kg**		**mg/kg**	
02829	Trivalent Chromium soils	16065-83-1	27.7		0.59	1
	The Trivalent Chromium result is calculated by subtracting Hexavalent Chromium from Total Chromium.					
	SW-846 7471A		**mg/kg**		**mg/kg**	
00159	Mercury	7439-97-6	0.0298	J	0.0119	1
Wet Chemistry	**SW-846 9012B**		**mg/kg**		**mg/kg**	
05898	Amenable Cyanide (solid)	n.a.	N.D.		0.21	1
05895	Total Cyanide (solid)	57-12-5	N.D.		0.21	1
	SW-846 7196A		**mg/kg**		**mg/kg**	
00425	Hexavalent Chromium (SOLIDS)	18540-29-9	N.D.		0.59	1
Wet Chemistry	**SM 2540 G-1997**		**%**		**%**	
00111	Moisture	n.a.	14.8		0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

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S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6925518
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188 Long Island Avenue
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TSC-2 SDG#: TAP05-01

General Sample Comments

State of New York Certification No. 10670
This sample was originally submitted to the laboratory on 01/16/13 at 10:05. We received authorization for testing on 01/17/13.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10727	Table 375-6.8(a) SVOCs	SW-846 8270C	1	13017SLD026	01/18/2013 11:34	Brian K Graham	1
10809	BNA Soil Microwave	SW-846 3546	1	13017SLD026	01/17/2013 18:00	Sally L Appleyard	1
10401	Table 375-6.8(a) Herbicides	SW-846 8151A	1	130170017A	01/21/2013 16:19	Matthew S Listner	1
10738	Table 375-6.8(a) Pesticides	SW-846 8081A	1	130170016A	01/22/2013 04:19	Jamie L Brillhart	5
10736	PCBs 8082 Soil	SW-846 8082	1	130180006A	01/21/2013 15:50	Monica M Souders	5
10497	PCB Microwave Soil Extraction	SW-846 3546	1	130180006A	01/19/2013 02:10	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	130170016A	01/18/2013 10:00	Olivia Arosemena	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	130170017A	01/18/2013 07:50	Katheryne V Sponheimer	1
06935	Arsenic	SW-846 6010B	1	130175708001	01/18/2013 07:39	Joanne M Gates	1
06946	Barium	SW-846 6010B	1	130175708001	01/18/2013 07:39	Joanne M Gates	1
06947	Beryllium	SW-846 6010B	1	130175708001	01/18/2013 07:39	Joanne M Gates	1
06949	Cadmium	SW-846 6010B	1	130175708001	01/18/2013 07:39	Joanne M Gates	1
06951	Chromium	SW-846 6010B	1	130175708001	01/18/2013 07:39	Joanne M Gates	1
06953	Copper	SW-846 6010B	1	130175708001	01/18/2013 07:39	Joanne M Gates	1
06955	Lead	SW-846 6010B	1	130175708001	01/18/2013 17:44	John P Hook	1
06958	Manganese	SW-846 6010B	1	130175708001	01/18/2013 07:39	Joanne M Gates	1
06961	Nickel	SW-846 6010B	1	130175708001	01/18/2013 07:39	Joanne M Gates	1
06936	Selenium	SW-846 6010B	1	130175708001	01/18/2013 07:39	Joanne M Gates	1
06966	Silver	SW-846 6010B	1	130175708001	01/18/2013 07:39	Joanne M Gates	1
06972	Zinc	SW-846 6010B	1	130175708001	01/18/2013 07:39	Joanne M Gates	1
02829	Trivalent Chromium soils	SW-846 6010B modified	1	130232829001	01/23/2013 05:14	Deborah A Krady	1
00159	Mercury	SW-846 7471A	2	130175711001	01/18/2013 09:38	Damary Valentin	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	130175708001	01/17/2013 23:52	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	130175711001	01/18/2013 01:40	Annamaria Stipkovits	1
05898	Amenable Cyanide (solid)	SW-846 9012B	1	13018103201A	01/21/2013 08:08	K Robert Caulfeild-James	1
05895	Total Cyanide (solid)	SW-846 9012B	1	13018102201A	01/21/2013 07:56	K Robert Caulfeild-James	1
05897	Amenable Cyanide Solid Distill	SW-846 9012B	1	13018103201A	01/18/2013 13:20	Carolyn M Mastropietro	1

Sample Description: AGC-TSC-2 Composite Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6925518
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Account # 01907

Project Name: Tappan Terminal

Collected: 01/14/2013 16:30 by KC

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TSC-2 SDG#: TAP05-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05896	Cyanide Solid Distillation	SW-846 9012B	1	13018102201A	01/18/2013 13:20	Carolyn M Mastropietro	1
00425	Hexavalent Chromium (SOLIDS)	SW-846 7196A	1	13019042501A	01/21/2013 22:15	Daniel S Smith	1
07825	Hexavalent Cr (Extraction)	SW-846 3060A	1	13019042501A	01/19/2013 06:10	Daniel S Smith	1
00111	Moisture	SM 2540 G-1997	1	13017820003B	01/17/2013 19:18	Scott W Freisher	1

Sample Description: AGC-TS3 Grab Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6925519
LLI Group # 1362782
Account # 01907

Project Name: Tappan Terminal

Collected: 01/14/2013 16:20 by KC

Submitted: 01/17/2013 13:00
Reported: 01/23/2013 12:36

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

TS3-- SDG#: TAP05-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg	ug/kg	
10237	Acetone	67-64-1	N.D.	8	0.98
10237	Benzene	71-43-2	N.D.	0.6	0.98
10237	2-Butanone	78-93-3	N.D.	5	0.98
10237	n-Butylbenzene	104-51-8	N.D.	1	0.98
10237	sec-Butylbenzene	135-98-8	N.D.	1	0.98
10237	tert-Butylbenzene	98-06-6	N.D.	1	0.98
10237	Carbon Tetrachloride	56-23-5	N.D.	1	0.98
10237	Chlorobenzene	108-90-7	N.D.	1	0.98
10237	Chloroform	67-66-3	N.D.	1	0.98
10237	1,2-Dichlorobenzene	95-50-1	N.D.	1	0.98
10237	1,3-Dichlorobenzene	541-73-1	N.D.	1	0.98
10237	1,4-Dichlorobenzene	106-46-7	N.D.	1	0.98
10237	1,1-Dichloroethane	75-34-3	N.D.	1	0.98
10237	1,2-Dichloroethane	107-06-2	N.D.	1	0.98
10237	1,1-Dichloroethene	75-35-4	N.D.	1	0.98
10237	cis-1,2-Dichloroethene	156-59-2	N.D.	1	0.98
10237	trans-1,2-Dichloroethene	156-60-5	N.D.	1	0.98
10237	1,4-Dioxane	123-91-1	N.D.	80	0.98
10237	Ethylbenzene	100-41-4	N.D.	1	0.98
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.6	0.98
10237	Methylene Chloride	75-09-2	N.D.	2	0.98
10237	n-Propylbenzene	103-65-1	N.D.	1	0.98
10237	Tetrachloroethene	127-18-4	N.D.	1	0.98
10237	Toluene	108-88-3	N.D.	1	0.98
10237	1,1,1-Trichloroethane	71-55-6	N.D.	1	0.98
10237	Trichloroethene	79-01-6	N.D.	1	0.98
10237	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	0.98
10237	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	0.98
10237	Vinyl Chloride	75-01-4	N.D.	1	0.98
10237	Xylene (Total)	1330-20-7	N.D.	1	0.98
Wet Chemistry	**SM 2540 G-1997**		%	%	
00111	Moisture	n.a.	14.0	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

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Analysis Report

Sample Description: AGC-TS3 Grab Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6925519
LLI Group # 1362782
Account # 01907

Project Name: Tappan Terminal

Collected: 01/14/2013 16:20 by KC

Submitted: 01/17/2013 13:00
Reported: 01/23/2013 12:36

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

TS3-- SDG#: TAP05-02

General Sample Comments

State of New York Certification No. 10670
This sample was originally submitted to the laboratory on 01/16/13 at 10:05. We received authorization for testing on 01/17/13.

Lancaster Laboratories is responsible only for the certified testing of samples. We are not directly responsible for the integrity of the sample prior to laboratory receipt. Any reported concentrations less than 200 ug/kg may be biased low if they were not collected according to EPA 5035/5035A specifications.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	Table 375-6.8(a) VOCs	SW-846 8260B	1	B130171AA	01/17/2013 15:57	Chelsea B Stong	0.98
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201301729951	01/17/2013 14:28	Mitchell R Washel	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201301729951	01/17/2013 14:28	Mitchell R Washel	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201301729949	01/17/2013 14:26	Mitchell R Washel	n.a.
00111	Moisture	SM 2540 G-1997	1	13017820003B	01/17/2013 19:18	Scott W Freisher	1

Sample Description: AGC-TS4 Grab Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6925520
LLI Group # 1362782
Account # 01907

Project Name: Tappan Terminal

Collected: 01/14/2013 16:25 by KC

Submitted: 01/17/2013 13:00
Reported: 01/23/2013 12:36

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

TS4-- SDG#: TAP05-03*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg	ug/kg	
10237	Acetone	67-64-1	N.D.	8	1.01
10237	Benzene	71-43-2	N.D.	0.6	1.01
10237	2-Butanone	78-93-3	N.D.	5	1.01
10237	n-Butylbenzene	104-51-8	N.D.	1	1.01
10237	sec-Butylbenzene	135-98-8	N.D.	1	1.01
10237	tert-Butylbenzene	98-06-6	N.D.	1	1.01
10237	Carbon Tetrachloride	56-23-5	N.D.	1	1.01
10237	Chlorobenzene	108-90-7	N.D.	1	1.01
10237	Chloroform	67-66-3	N.D.	1	1.01
10237	1,2-Dichlorobenzene	95-50-1	N.D.	1	1.01
10237	1,3-Dichlorobenzene	541-73-1	N.D.	1	1.01
10237	1,4-Dichlorobenzene	106-46-7	N.D.	1	1.01
10237	1,1-Dichloroethane	75-34-3	N.D.	1	1.01
10237	1,2-Dichloroethane	107-06-2	N.D.	1	1.01
10237	1,1-Dichloroethene	75-35-4	N.D.	1	1.01
10237	cis-1,2-Dichloroethene	156-59-2	N.D.	1	1.01
10237	trans-1,2-Dichloroethene	156-60-5	N.D.	1	1.01
10237	1,4-Dioxane	123-91-1	N.D.	83	1.01
10237	Ethylbenzene	100-41-4	N.D.	1	1.01
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.6	1.01
10237	Methylene Chloride	75-09-2	N.D.	2	1.01
10237	n-Propylbenzene	103-65-1	N.D.	1	1.01
10237	Tetrachloroethene	127-18-4	N.D.	1	1.01
10237	Toluene	108-88-3	N.D.	1	1.01
10237	1,1,1-Trichloroethane	71-55-6	N.D.	1	1.01
10237	Trichloroethene	79-01-6	N.D.	1	1.01
10237	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1.01
10237	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1.01
10237	Vinyl Chloride	75-01-4	N.D.	1	1.01
10237	Xylene (Total)	1330-20-7	N.D.	1	1.01
Wet Chemistry	**SM 2540 G-1997**		%	%	
00111	Moisture	n.a.	14.7	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

Sample Description: AGC-TS4 Grab Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6925520
LLI Group # 1362782
Account # 01907

Project Name: Tappan Terminal

Collected: 01/14/2013 16:25 by KC

Submitted: 01/17/2013 13:00
Reported: 01/23/2013 12:36

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

TS4-- SDG#: TAP05-03*

General Sample Comments

State of New York Certification No. 10670
This sample was originally submitted to the laboratory on 01/16/13 at 10:05. We received authorization for testing on 01/17/13.

Lancaster Laboratories is responsible only for the certified testing of samples. We are not directly responsible for the integrity of the sample prior to laboratory receipt. Any reported concentrations less than 200 ug/kg may be biased low if they were not collected according to EPA 5035/5035A specifications.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	Table 375-6.8(a) VOCs	SW-846 8260B	1	B130171AA	01/17/2013 16:20	Chelsea B Stong	1.01
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201301729951	01/17/2013 14:28	Mitchell R Washel	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201301729951	01/17/2013 14:28	Mitchell R Washel	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201301729949	01/17/2013 14:23	Mitchell R Washel	n.a.
00111	Moisture	SM 2540 G-1997	1	13017820003B	01/17/2013 19:18	Scott W Freisher	1

Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1362782
Reported: 01/23/13 at 12:36 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B130171AA	Sample number(s): 6925519-6925520							
Acetone	N.D.	7.	ug/kg	95		32-209		
Benzene	N.D.	0.5	ug/kg	103		80-120		
2-Butanone	N.D.	4.	ug/kg	76		37-155		
n-Butylbenzene	N.D.	1.	ug/kg	95		72-120		
sec-Butylbenzene	N.D.	1.	ug/kg	98		75-120		
tert-Butylbenzene	N.D.	1.	ug/kg	92		75-120		
Carbon Tetrachloride	N.D.	1.	ug/kg	101		69-122		
Chlorobenzene	N.D.	1.	ug/kg	99		80-120		
Chloroform	N.D.	1.	ug/kg	99		80-120		
1,2-Dichlorobenzene	N.D.	1.	ug/kg	93		79-120		
1,3-Dichlorobenzene	N.D.	1.	ug/kg	97		78-120		
1,4-Dichlorobenzene	N.D.	1.	ug/kg	95		79-120		
1,1-Dichloroethane	N.D.	1.	ug/kg	102		80-120		
1,2-Dichloroethane	N.D.	1.	ug/kg	96		70-137		
1,1-Dichloroethene	N.D.	1.	ug/kg	108		73-129		
cis-1,2-Dichloroethene	N.D.	1.	ug/kg	107		80-120		
trans-1,2-Dichloroethene	N.D.	1.	ug/kg	104		79-120		
1,4-Dioxane	N.D.	70.	ug/kg	110		48-129		
Ethylbenzene	N.D.	1.	ug/kg	100		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/kg	94		74-121		
Methylene Chloride	N.D.	2.	ug/kg	102		76-124		
n-Propylbenzene	N.D.	1.	ug/kg	85		77-120		
Tetrachloroethene	N.D.	1.	ug/kg	106		78-126		
Toluene	N.D.	1.	ug/kg	97		80-120		
1,1,1-Trichloroethane	N.D.	1.	ug/kg	95		71-125		
Trichloroethene	N.D.	1.	ug/kg	102		80-120		
1,2,4-Trimethylbenzene	N.D.	1.	ug/kg	96		79-120		
1,3,5-Trimethylbenzene	N.D.	1.	ug/kg	95		78-120		
Vinyl Chloride	N.D.	1.	ug/kg	88		53-120		
Xylene (Total)	N.D.	1.	ug/kg	99		80-120		
Batch number: 13017SLD026	Sample number(s): 6925518							
Acenaphthene	N.D.	3.	ug/kg	90		83-111		
Acenaphthylene	N.D.	3.	ug/kg	95		83-127		
Anthracene	N.D.	3.	ug/kg	92		83-111		
Benzo(a)anthracene	N.D.	3.	ug/kg	89		73-123		
Benzo(a)pyrene	N.D.	3.	ug/kg	88		80-123		
Benzo(b)fluoranthene	N.D.	3.	ug/kg	84		76-124		
Benzo(g,h,i)perylene	N.D.	3.	ug/kg	86		77-122		
Benzo(k)fluoranthene	N.D.	3.	ug/kg	93		71-135		
Chrysene	N.D.	3.	ug/kg	92		73-119		
Dibenz(a,h)anthracene	N.D.	3.	ug/kg	89		67-129		
Dibenzofuran	N.D.	17.	ug/kg	91		78-116		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1362782
Reported: 01/23/13 at 12:36 PM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Fluoranthene	N.D.	3.	ug/kg	92		80-120		
Fluorene	N.D.	3.	ug/kg	95		81-117		
Indeno(1,2,3-cd)pyrene	N.D.	3.	ug/kg	88		64-128		
2-Methylphenol	N.D.	17.	ug/kg	92		75-126		
4-Methylphenol	N.D.	17.	ug/kg	89		74-116		
Naphthalene	N.D.	3.	ug/kg	88		77-115		
Pentachlorophenol	N.D.	33.	ug/kg	95		60-134		
Phenanthrene	N.D.	3.	ug/kg	91		77-119		
Phenol	N.D.	17.	ug/kg	87		69-126		
Pyrene	N.D.	3.	ug/kg	89		80-121		
Batch number: 130170017A	Sample number(s): 6925518							
2,4,5-TP	N.D.	0.75	ug/kg	108		60-111		
Batch number: 130170016A	Sample number(s): 6925518							
Aldrin	N.D.	0.17	ug/kg	88		62-134		
Alpha BHC	N.D.	0.17	ug/kg	87		67-131		
Beta BHC	N.D.	0.96	ug/kg	89		59-161		
Gamma BHC - Lindane	N.D.	0.17	ug/kg	90		66-132		
Alpha Chlordane	N.D.	0.17	ug/kg	99		64-140		
p,p-DDD	N.D.	0.33	ug/kg	96		73-131		
p,p-DDE	N.D.	0.33	ug/kg	96		72-132		
p,p-DDT	N.D.	0.35	ug/kg	93		65-131		
Delta BHC	N.D.	0.45	ug/kg	91		44-145		
Dieldrin	N.D.	0.33	ug/kg	101		71-134		
Endosulfan I	N.D.	0.22	ug/kg	91		57-127		
Endosulfan II	N.D.	0.33	ug/kg	98		63-127		
Endosulfan Sulfate	N.D.	0.33	ug/kg	101		80-137		
Endrin	N.D.	0.33	ug/kg	100		66-136		
HCB	N.D.	0.21	ug/kg					
Heptachlor	N.D.	0.17	ug/kg	91		68-132		
Batch number: 130180006A	Sample number(s): 6925518							
PCB-1016	N.D.	3.6	ug/kg	112		64-121		
PCB-1221	N.D.	4.6	ug/kg					
PCB-1232	N.D.	8.0	ug/kg					
PCB-1242	N.D.	3.3	ug/kg					
PCB-1248	N.D.	3.3	ug/kg					
PCB-1254	N.D.	3.3	ug/kg					
PCB-1260	N.D.	4.9	ug/kg	118		72-123		
Batch number: 130175708001	Sample number(s): 6925518							
Arsenic	N.D.	0.330	mg/kg	108		80-120		
Barium	N.D.	0.0330	mg/kg	99		80-120		
Beryllium	N.D.	0.0670	mg/kg	99		80-120		
Cadmium	N.D.	0.0330	mg/kg	101		80-120		
Chromium	N.D.	0.0880	mg/kg	104		80-120		
Copper	N.D.	0.180	mg/kg	105		80-120		
Lead	N.D.	0.470	mg/kg	104		80-120		
Manganese	N.D.	0.0830	mg/kg	100		80-120		
Nickel	N.D.	0.110	mg/kg	104		80-120		
Selenium	N.D.	0.720	mg/kg	101		80-120		
Silver	N.D.	0.140	mg/kg	110		80-120		
Zinc	0.305 J	0.200	mg/kg	103		80-120		
Batch number: 130175711001	Sample number(s): 6925518							

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1362782
Reported: 01/23/13 at 12:36 PM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Mercury	N.D.	0.0103	mg/kg	107		80-120		
Batch number: 13018102201A	Sample number(s): 6925518							
Total Cyanide (solid)	N.D.	0.18	mg/kg	90		90-110		
Batch number: 13018103201A	Sample number(s): 6925518							
Amenable Cyanide (solid)	N.D.	0.18	mg/kg	0		-20-20		
Batch number: 13019042501A	Sample number(s): 6925518							
Hexavalent Chromium (SOLIDS)	N.D.	0.50	mg/kg	99		80-120		
Batch number: 13017820003B	Sample number(s): 6925518-6925520							
Moisture				100		99-101		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: B130171AA	Sample number(s): 6925519-6925520 UNSPK: P924131								
Acetone	103	121	31-195	20	30				
Benzene	101	120	55-143	20	30				
2-Butanone	75	88	37-163	19	30				
n-Butylbenzene	74	97	30-146	30	30				
sec-Butylbenzene	84	109	33-157	29	30				
tert-Butylbenzene	82	102	41-152	24	30				
Carbon Tetrachloride	101	121	45-153	21	30				
Chlorobenzene	91	110	49-135	22	30				
Chloroform	97	110	61-142	15	30				
1,2-Dichlorobenzene	82	101	36-133	23	30				
1,3-Dichlorobenzene	84	102	34-134	22	30				
1,4-Dichlorobenzene	82	101	35-136	23	30				
1,1-Dichloroethane	102	119	63-142	19	30				
1,2-Dichloroethane	92	105	68-131	15	30				
1,1-Dichloroethene	111	134	61-149	22	30				
cis-1,2-Dichloroethene	107	123	60-136	16	30				
trans-1,2-Dichloroethene	104	124	59-142	20	30				
1,4-Dioxane	130	125	39-180	2	30				
Ethylbenzene	91	109	44-141	21	30				
Methyl Tertiary Butyl Ether	90	101	55-129	15	30				
Methylene Chloride	107	117	61-141	12	30				
n-Propylbenzene	76	94	39-157	24	30				
Tetrachloroethene	102	125	42-149	23	30				
Toluene	94	112	50-146	21	30				
1,1,1-Trichloroethane	94	112	64-142	20	30				
Trichloroethene	99	120	53-144	21	30				
1,2,4-Trimethylbenzene	84	104	37-149	23	30				
1,3,5-Trimethylbenzene	84	104	38-150	24	30				
Vinyl Chloride	87	108	50-154	24	30				
Xylene (Total)	90	109	44-136	22	30				

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1362782
Reported: 01/23/13 at 12:36 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13017SLD026	Sample number(s): 6925518 UNSPK: P924711								
Acenaphthene	85	84	33-140	1	30				
Acenaphthylene	87	89	47-137	2	30				
Anthracene	86	88	40-147	2	30				
Benzo(a)anthracene	82	84	32-150	2	30				
Benzo(a)pyrene	81	82	30-150	1	30				
Benzo(b)fluoranthene	80	77	29-150	4	30				
Benzo(g,h,i)perylene	82	82	31-152	1	30				
Benzo(k)fluoranthene	90	87	35-148	4	30				
Chrysene	83	85	33-142	2	30				
Dibenz(a,h)anthracene	87	88	37-151	1	30				
Dibenzofuran	85	86	38-148	2	30				
Fluoranthene	80	81	30-151	2	30				
Fluorene	86	86	36-140	0	30				
Indeno(1,2,3-cd)pyrene	85	86	31-154	1	30				
2-Methylphenol	83	89	32-146	6	30				
4-Methylphenol	79	83	36-149	5	30				
Naphthalene	85	86	35-141	2	30				
Pentachlorophenol	86	89	23-145	4	30				
Phenanthrene	85	86	34-147	1	30				
Phenol	84	86	39-151	2	30				
Pyrene	85	86	29-148	1	30				
Batch number: 130170017A	Sample number(s): 6925518 UNSPK: P921662								
2,4,5-TP	94	109	10-142	15	35				
Batch number: 130170016A	Sample number(s): 6925518 UNSPK: 6925518								
Aldrin	95	87	18-138	9	50				
Alpha BHC	91	83	9-143	9	50				
Beta BHC	0*	0*	14-168	0	50				
Gamma BHC - Lindane	92	82	14-143	12	50				
Alpha Chlordane	-69 (2)	-99 (2)	15-153	7	50				
p,p-DDD	50	42	17-163	5	50				
p,p-DDE	101 (2)	65 (2)	22-169	6	50				
p,p-DDT	111 (2)	85 (2)	4-159	4	50				
Delta BHC	95	88	30-144	9	50				
Dieldrin	130	119	17-163	9	50				
Endosulfan I	99	90	8-137	10	50				
Endosulfan II	104	95	17-146	8	50				
Endosulfan Sulfate	107	98	6-190	9	50				
Endrin	112	102	25-166	9	50				
Heptachlor	121	111	25-148	9	50				
Batch number: 130180006A	Sample number(s): 6925518 UNSPK: P924129								
PCB-1016	95	102	29-146	6	50				
PCB-1260	85	96	39-149	12	50				
Batch number: 130175708001	Sample number(s): 6925518 UNSPK: P924566 BKG: P924566								
Arsenic	112	120	75-125	6	20	4.35	5.42	22* (1)	20
Barium	62 (2)	164 (2)	75-125	17	20	966	829	15	20
Beryllium	101	103	83-111	2	20	0.297 J	0.196 J	41* (1)	20
Cadmium	97	104	75-125	6	20	0.638	0.745	15 (1)	20

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1362782
Reported: 01/23/13 at 12:36 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Chromium	171*	260*	75-125	20	20	46.0	42.3	8	20
Copper	17 (2)	44 (2)	75-125	5	20	115	153	28*	20
Lead	0 (2)	62 (2)	75-125	7	20	129	102	23*	20
Manganese	28*	46*	75-125	5	20	166	116	36*	20
Nickel	78	136*	75-125	27*	20	51.5	46.0	11	20
Selenium	103	102	75-125	1	20	2.00	1.50 J	29* (1)	20
Silver	108	111	75-125	3	20	0.399 J	0.228 J	54* (1)	20
Zinc	-87 (2)	54 (2)	75-125	20	20	350	378	8	20
Batch number: 130175711001	Sample number(s): 6925518 UNSPK: P924566 BKG: P924566								
Mercury	137 (2)	193 (2)	80-120	9	20	0.770	0.606	24* (1)	20
Batch number: 13018102201A	Sample number(s): 6925518 UNSPK: P926232 BKG: P926232								
Total Cyanide (solid)	91		68-134			N.D.	N.D.	0 (1)	20
Batch number: 13018103201A	Sample number(s): 6925518 UNSPK: 6925518 BKG: 6925518								
Amenable Cyanide (solid)	0		-20-20			N.D.	N.D.	0 (1)	20
Batch number: 13019042501A	Sample number(s): 6925518 UNSPK: P922862 BKG: P922862								
Hexavalent Chromium (SOLIDS)	138 (2)		75-125			471	478	1	20
Batch number: 13017820003B	Sample number(s): 6925518-6925520 BKG: P924702								
Moisture						21.9	21.7	1	13

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 8260 Benzene and Toluene
Batch number: B130171AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6925519	104	97	98	82
6925520	105	99	97	80
Blank	105	102	94	90
LCS	102	102	98	98
MS	100	98	98	96
MSD	98	99	98	97
Limits:	50-141	54-135	52-141	50-131

Analysis Name: TCL 8270 (microwave)
Batch number: 13017SLD026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6925518	90	95	90	87	92	98
Blank	89	93	99	84	88	98
LCS	91	95	97	89	91	100

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
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Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1362782
Reported: 01/23/13 at 12:36 PM

Surrogate Quality Control

MS	83	89	83	83	88	96
MSD	87	92	86	80	89	97
Limits:	42-130	48-136	28-139	45-123	47-126	46-143

Analysis Name: TCL Pesticides 8081A Soil
Batch number: 130170016A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6925518	89	98
Blank	83	98
LCS	83	100
MS	88	99
MSD	82	96
Limits:	33-140	45-150

Analysis Name: Herbicide soils 8151A Master
Batch number: 130170017A

	2,4-Dichlorophenylacetic acid
6925518	112
Blank	95
LCS	104
MS	71
MSD	71
Limits:	36-156

Analysis Name: PCBs in Soil (microwave)
Batch number: 130180006A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6925518	123	80
Blank	122	114
LCS	123	119
MS	110	94
MSD	116	107
Limits:	33-143	24-164

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

Exxon Mobil Analysis Request/Environmental Services Chain of Custody

For Lancaster Laboratories use only Acct. #: 1907
Group #: _____ Sample #: _____
1362782 / 6925518-20

Provide MRN for retail or AFE for major projects

Client: ExxonMobil Acct. #:
Project Name: Former Tappan Term MRN:
Project Manager: T Bispham AFE:
Sampler: K Conklin
Name of State where samples were collected:

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Water	Other	Potable	NPDES	Total # of Containers	VOCs	SVOCs	TAL Metals	Hex & Trivalent Chrom	Mercury	Pesticides	PCBs	Herbicides	Cyanide
AGC-TSC-2	1-14-13	1630		X	X					1		X	X	X	X	X	X	X	X
AGC-TS3	1-14-13	1620	X		X					1	X								
AGC-TS4	1-14-13	1625	X		X					1	X								

Analyses Requested / Preservation Codes

For Lab Use Only
FSC: _____
SCR#:

Preservation Codes
H=HCl T=Thiosulfate
N=HNO3 B=NaOH
S=H2SO4 O=Other

Remarks

Temperature of samples upon receipt (if requested)

Turnaround Time Requested (TAT) (please circle): Normal (Rush)
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed: _____
Rush results requested by (please circle): Phone Fax E-mail
Phone #: _____ Fax #: _____
E-mail address: tbispham@rouxinc.com

Data Package Options (please circle if required)
Type I (validation/NJ reg) TX-TRRP-13
Type II (Tier II) MA MCP CT RCP
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)

SDG Complete? Yes No

State-specific QC (MS/MSD/Dup)? Yes No
(If yes, indicated QC sample and submit triplecate volume)
Internal COC required? Yes No

Relinquished by:	Date	Time	Received by:	Date	Time
K Conkli	1-14-13	1700			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: Fed Ex	1/16/13	1005

Lancaster Laboratories, Inc. 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 717-656-2300

Please hold for instructions from Tracy B.

SAP 65 Page 201 of 92

Bill to
Dan Hirschberger

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Environmental Sample Administration Receipt Documentation Log

1362782

Client/Project: ExxonMobil

Date of Receipt: 1/16/13

Time of Receipt: 1005

Source Code: SO

Shipping Container Sealed: (YES) NO

Custody Seal Present * : YES (NO)

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	1396	4.8	ST	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Pat Eyh 3472 **Date/Time:** 1/16/13 1114

Issued by Dept. 6042 Management

2174.06

Volatiles by GC/MS Data

Case Narrative/Conformance Summary

Volatiles by GC/MS

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Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP05

GC/MS Volatiles

Fraction: Volatiles by GC/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
6925519	AGC-TS3		X	0.98	
6925520	AGC-TS4		X	1.01	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

eurofins | Lancaster Laboratories

Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP05

GC/MS Volatiles

Fraction: Volatiles by GC/MS

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

Sample Data

Volatiles by GC/MS

Fraction: Volatiles by GC/MS

B130171AA / VBLKB52 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Vinyl Chloride	01/17/13	N.D.	ug/kg	1	5
1,1-Dichloroethene	01/17/13	N.D.	ug/kg	1	5
Acetone	01/17/13	N.D.	ug/kg	7	20
Benzene	01/17/13	N.D.	ug/kg	0.5	5
2-Butanone	01/17/13	N.D.	ug/kg	4	10
Carbon Tetrachloride	01/17/13	N.D.	ug/kg	1	5
Chloroform	01/17/13	N.D.	ug/kg	1	5
1,1-Dichloroethane	01/17/13	N.D.	ug/kg	1	5
1,2-Dichloroethane	01/17/13	N.D.	ug/kg	1	5
cis-1,2-Dichloroethene	01/17/13	N.D.	ug/kg	1	5
trans-1,2-Dichloroethene	01/17/13	N.D.	ug/kg	1	5
1,4-Dioxane	01/17/13	N.D.	ug/kg	70	250
Methyl Tertiary Butyl Ether	01/17/13	N.D.	ug/kg	0.5	5
Methylene Chloride	01/17/13	N.D.	ug/kg	2	5
Toluene	01/17/13	N.D.	ug/kg	1	5
1,1,1-Trichloroethane	01/17/13	N.D.	ug/kg	1	5
Trichloroethene	01/17/13	N.D.	ug/kg	1	5
Chlorobenzene	01/17/13	N.D.	ug/kg	1	5
Ethylbenzene	01/17/13	N.D.	ug/kg	1	5
n-Propylbenzene	01/17/13	N.D.	ug/kg	1	5
Tetrachloroethene	01/17/13	N.D.	ug/kg	1	5
Xylene (Total)	01/17/13	N.D.	ug/kg	1	5
1,3,5-Trimethylbenzene	01/17/13	N.D.	ug/kg	1	5
sec-Butylbenzene	01/17/13	N.D.	ug/kg	1	5
tert-Butylbenzene	01/17/13	N.D.	ug/kg	1	5
1,2,4-Trimethylbenzene	01/17/13	N.D.	ug/kg	1	5
n-Butylbenzene	01/17/13	N.D.	ug/kg	1	5
1,2-Dichlorobenzene	01/17/13	N.D.	ug/kg	1	5
1,3-Dichlorobenzene	01/17/13	N.D.	ug/kg	1	5
1,4-Dichlorobenzene	01/17/13	N.D.	ug/kg	1	5

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TS3--

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: 6925519

Sample wt/vol: 5.09 (g/mL) g Lab File ID: HP09953.i/13jan17a.b/bj17s18.d

Level: (low/med) LOW Date Received: 01/17/13

Moisture: not dec. N/A Date Analyzed: 01/17/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
75-01-4	Vinyl Chloride	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	20	U
75-09-2	Methylene Chloride	5	U
1634-04-4	Methyl Tertiary Butyl Ether	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
71-43-2	Benzene	5	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
123-91-1	1,4-Dioxane	250	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (Total)	5	U
103-65-1	n-Propylbenzene	5	U
108-67-8	1,3,5-Trimethylbenzene	5	U
98-06-6	tert-Butylbenzene	5	U
95-63-6	1,2,4-Trimethylbenzene	5	U
135-98-8	sec-Butylbenzene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
104-51-8	n-Butylbenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TS4--

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: 6925520

Sample wt/vol: 4.96 (g/mL) g Lab File ID: HP09953.i/13jan17a.b/bj17s19.d

Level: (low/med) LOW Date Received: 01/17/13

Moisture: not dec. 15 Date Analyzed: 01/17/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
75-01-4	Vinyl Chloride	6	U
75-35-4	1,1-Dichloroethene	6	U
67-64-1	Acetone	24	U
75-09-2	Methylene Chloride	6	U
1634-04-4	Methyl Tertiary Butyl Ether	6	U
156-60-5	trans-1,2-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
78-93-3	2-Butanone	12	U
156-59-2	cis-1,2-Dichloroethene	6	U
67-66-3	Chloroform	6	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
71-43-2	Benzene	6	U
107-06-2	1,2-Dichloroethane	6	U
79-01-6	Trichloroethene	6	U
123-91-1	1,4-Dioxane	300	U
108-88-3	Toluene	6	U
127-18-4	Tetrachloroethene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
1330-20-7	Xylene (Total)	6	U
103-65-1	n-Propylbenzene	6	U
108-67-8	1,3,5-Trimethylbenzene	6	U
98-06-6	tert-Butylbenzene	6	U
95-63-6	1,2,4-Trimethylbenzene	6	U
135-98-8	sec-Butylbenzene	6	U
541-73-1	1,3-Dichlorobenzene	6	U
106-46-7	1,4-Dichlorobenzene	6	U
104-51-8	n-Butylbenzene	6	U
95-50-1	1,2-Dichlorobenzene	6	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSB52

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: LCSB52

Sample wt/vol: 5.00 (g/mL) g Lab File ID: HP09953.i/13jan17a.b/bj17l01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 01/17/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
75-71-8	Dichlorodifluoromethane	17	
74-87-3	Chloromethane	17	
75-01-4	Vinyl Chloride	18	
74-83-9	Bromomethane	20	
75-00-3	Chloroethane	20	
75-69-4	Trichlorofluoromethane	20	
64-17-5	Ethanol	920	
107-02-8	Acrolein	140	
75-35-4	1,1-Dichloroethene	22	
67-64-1	Acetone	140	
76-13-1	Freon 113	23	
67-63-0	2-Propanol	140	
74-88-4	Methyl Iodide	21	
75-15-0	Carbon Disulfide	20	
79-20-9	Methyl Acetate	22	
107-05-1	Allyl Chloride	19	
75-09-2	Methylene Chloride	20	
75-65-0	t-Butyl alcohol	180	
107-13-1	Acrylonitrile	72	
1634-04-4	Methyl Tertiary Butyl Ether	19	
156-60-5	trans-1,2-Dichloroethene	21	
110-54-3	n-Hexane	22	
75-34-3	1,1-Dichloroethane	20	
108-20-3	di-Isopropyl ether	20	
126-99-8	2-Chloro-1,3-butadiene	21	
637-92-3	Ethyl t-butyl ether	20	
78-93-3	2-Butanone	110	
156-59-2	cis-1,2-Dichloroethene	21	
540-59-0	1,2-Dichloroethene (Total)	42	
594-20-7	2,2-Dichloropropane	20	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSB52

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: LCSB52

Sample wt/vol: 5.00 (g/mL) g Lab File ID: HP09953.i/13jan17a.b/bj17l01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 01/17/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
107-12-0	Propionitrile	170	
126-98-7	Methacrylonitrile	130	
74-97-5	Bromochloromethane	22	
109-99-9	Tetrahydrofuran	110	
67-66-3	Chloroform	20	
71-55-6	1,1,1-Trichloroethane	19	
110-82-7	Cyclohexane	22	
563-58-6	1,1-Dichloropropene	20	
56-23-5	Carbon Tetrachloride	20	
78-83-1	Isobutyl Alcohol	460	
71-43-2	Benzene	21	
107-06-2	1,2-Dichloroethane	19	
994-05-8	t-Amyl methyl ether	19	
142-82-5	n-Heptane	21	
71-36-3	n-Butanol	900	
79-01-6	Trichloroethene	20	
108-87-2	Methylcyclohexane	23	
78-87-5	1,2-Dichloropropane	19	
80-62-6	Methyl Methacrylate	17	
123-91-1	1,4-Dioxane	550	
74-95-3	Dibromomethane	19	
75-27-4	Bromodichloromethane	19	
79-46-9	2-Nitropropane	16	
110-75-8	2-Chloroethyl Vinyl Ether	19	
10061-01-5	cis-1,3-Dichloropropene	20	
108-10-1	4-Methyl-2-pentanone	64	
108-88-3	Toluene	19	
10061-02-6	trans-1,3-Dichloropropene	17	
97-63-2	Ethyl Methacrylate	17	
79-00-5	1,1,2-Trichloroethane	18	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSB52

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: LCSB52

Sample wt/vol: 5.00 (g/mL) g Lab File ID: HP09953.i/13jan17a.b/bj17l01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 01/17/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	Tetrachloroethene	21	
142-28-9	1,3-Dichloropropane	18	
591-78-6	2-Hexanone	62	
124-48-1	Dibromochloromethane	19	
106-93-4	1,2-Dibromoethane	18	
108-90-7	Chlorobenzene	20	
630-20-6	1,1,1,2-Tetrachloroethane	18	
100-41-4	Ethylbenzene	20	
179601-23-1	m+p-Xylene	40	
95-47-6	o-Xylene	19	
1330-20-7	Xylene (Total)	59	
100-42-5	Styrene	20	
75-25-2	Bromoform	17	
98-82-8	Isopropylbenzene	20	
108-94-1	Cyclohexanone	410	
79-34-5	1,1,2,2-Tetrachloroethane	16	
108-86-1	Bromobenzene	19	
110-57-6	trans-1,4-Dichloro-2-butene	84	
96-18-4	1,2,3-Trichloropropane	16	
103-65-1	n-Propylbenzene	17	
95-49-8	2-Chlorotoluene	19	
108-67-8	1,3,5-Trimethylbenzene	19	
106-43-4	4-Chlorotoluene	19	
98-06-6	tert-Butylbenzene	18	
76-01-7	Pentachloroethane	17	
95-63-6	1,2,4-Trimethylbenzene	19	
135-98-8	sec-Butylbenzene	20	
541-73-1	1,3-Dichlorobenzene	19	
99-87-6	p-Isopropyltoluene	20	
106-46-7	1,4-Dichlorobenzene	19	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSB52

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: LCSB52

Sample wt/vol: 5.00 (g/mL) g Lab File ID: HP09953.i/13jan17a.b/bj17l01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 01/17/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
526-73-8	1,2,3-Trimethylbenzene	19	
100-44-7	Benzyl Chloride	15	
141-93-5	1,3-Diethylbenzene	20	
105-05-5	1,4-Diethylbenzene	20	
104-51-8	n-Butylbenzene	19	
95-50-1	1,2-Dichlorobenzene	19	
135-01-3	1,2-Diethylbenzene	19	
96-12-8	1,2-Dibromo-3-chloropropane	14	
108-70-3	1,3,5-Trichlorobenzene	20	
120-82-1	1,2,4-Trichlorobenzene	20	
87-68-3	Hexachlorobutadiene	21	
91-20-3	Naphthalene	18	
87-61-6	1,2,3-Trichlorobenzene	19	
91-57-6	2-Methylnaphthalene	16	
25340-17-4	Diethylbenzene (total)	58	

Semivolatiles by GC/MS Data

Case Narrative/Conformance Summary

Semivolatiles by GC/MS

Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP05

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
6925518	AGC-TSC-2		X	1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected

eurofins | Lancaster Laboratories

Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP05

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

Sample Data

Semivolatiles by GC/MS

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TSC-2

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: 6925518

Sample wt/vol: 30.0 (g/mL) G Lab File ID: oa0450.d

Level: (low/med) LOW Date Received: 01/17/13

% Moisture: not dec: 15 dec: Date Extracted: 01/17/13

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/18/13

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Mic

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	LOQ UG/KG	Q
108-95-2	Phenol		39	U
95-48-7	2-Methylphenol		39	U
106-44-5	4-Methylphenol		39	U
91-20-3	Naphthalene		7	J
208-96-8	Acenaphthylene		16	J
83-32-9	Acenaphthene		6	J
132-64-9	Dibenzofuran		39	U
86-73-7	Fluorene		7	J
87-86-5	Pentachlorophenol		200	U
85-01-8	Phenanthrene		65	
120-12-7	Anthracene		21	
206-44-0	Fluoranthene		120	
129-00-0	Pyrene		110	
56-55-3	Benzo(a)anthracene		65	
218-01-9	Chrysene		76	
205-99-2	Benzo(b)fluoranthene		89	
207-08-9	Benzo(k)fluoranthene		40	
50-32-8	Benzo(a)pyrene		63	
193-39-5	Indeno(1,2,3-cd)pyrene		42	
53-70-3	Dibenz(a,h)anthracene		10	J
191-24-2	Benzo(g,h,i)perylene		54	

FORM I SV-1

Fraction: Semivolatiles by GC/MS

13017SLD026 / SBLKLD017 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Phenol	01/18/13	N.D.	ug/kg	17	33
2-Methylphenol	01/18/13	N.D.	ug/kg	17	33
4-Methylphenol	01/18/13	N.D.	ug/kg	17	33
Naphthalene	01/18/13	N.D.	ug/kg	3	17
Acenaphthylene	01/18/13	N.D.	ug/kg	3	17
Acenaphthene	01/18/13	N.D.	ug/kg	3	17
Dibenzofuran	01/18/13	N.D.	ug/kg	17	33
Fluorene	01/18/13	N.D.	ug/kg	3	17
Pentachlorophenol	01/18/13	N.D.	ug/kg	33	170
Phenanthrene	01/18/13	N.D.	ug/kg	3	17
Anthracene	01/18/13	N.D.	ug/kg	3	17
Fluoranthene	01/18/13	N.D.	ug/kg	3	17
Pyrene	01/18/13	N.D.	ug/kg	3	17
Benzo(a)anthracene	01/18/13	N.D.	ug/kg	3	17
Chrysene	01/18/13	N.D.	ug/kg	3	17
Benzo(b)fluoranthene	01/18/13	N.D.	ug/kg	3	17
Benzo(k)fluoranthene	01/18/13	N.D.	ug/kg	3	17
Benzo(a)pyrene	01/18/13	N.D.	ug/kg	3	17
Indeno(1,2,3-cd)pyrene	01/18/13	N.D.	ug/kg	3	17
Dibenz(a,h)anthracene	01/18/13	N.D.	ug/kg	3	17
Benzo(g,h,i)perylene	01/18/13	N.D.	ug/kg	3	17

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

017LDLCS15

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: 017LDLCS

Sample wt/vol: 30.0 (g/mL) G Lab File ID: oa0433.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 01/17/13

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/18/13

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Mic

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) LOQ UG/KG	Q
100-52-7	Benzaldehyde	890	
108-95-2	Phenol	1500	
111-44-4	bis(2-Chloroethyl)ether	1500	
95-57-8	2-Chlorophenol	1600	
95-48-7	2-Methylphenol	1500	
108-60-1	2,2'-oxybis(1-Chloropropane)	1300	
98-86-2	Acetophenone	1400	
106-44-5	4-Methylphenol	1500	
621-64-7	N-Nitroso-di-n-propylamine	1300	
67-72-1	Hexachloroethane	1400	
98-95-3	Nitrobenzene	1500	
78-59-1	Isophorone	1500	
88-75-5	2-Nitrophenol	1600	
105-67-9	2,4-Dimethylphenol	1600	
111-91-1	bis(2-Chloroethoxy)methane	1500	
120-83-2	2,4-Dichlorophenol	1600	
91-20-3	Naphthalene	1500	
106-47-8	4-Chloroaniline	590	
87-68-3	Hexachlorobutadiene	1500	
105-60-2	Caprolactam	1500	
59-50-7	4-Chloro-3-methylphenol	1600	
91-57-6	2-Methylnaphthalene	1500	
77-47-4	Hexachlorocyclopentadiene	3000	
88-06-2	2,4,6-Trichlorophenol	1600	
95-95-4	2,4,5-Trichlorophenol	1600	
92-52-4	1,1'-Biphenyl	1500	
91-58-7	2-Chloronaphthalene	1700	
88-74-4	2-Nitroaniline	1600	
131-11-3	Dimethylphthalate	1500	
606-20-2	2,6-Dinitrotoluene	1600	

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

017LDLCS15

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: 017LDLCS

Sample wt/vol: 30.0 (g/mL) G Lab File ID: oa0433.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 01/17/13

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/18/13

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Mic

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) LOQ UG/KG	Q
208-96-8	Acenaphthylene	1600	
99-09-2	3-Nitroaniline	1500	
83-32-9	Acenaphthene	1500	
51-28-5	2,4-Dinitrophenol	1400	
100-02-7	4-Nitrophenol	1400	
121-14-2	2,4-Dinitrotoluene	1500	
132-64-9	Dibenzofuran	1500	
84-66-2	Diethylphthalate	1500	
86-73-7	Fluorene	1600	
7005-72-3	4-Chlorophenyl-phenylether	1600	
100-01-6	4-Nitroaniline	1100	
534-52-1	4,6-Dinitro-2-methylphenol	980	
86-30-6	N-Nitrosodiphenylamine	1600	
101-55-3	4-Bromophenyl-phenylether	1600	
118-74-1	Hexachlorobenzene	1600	
1912-24-9	Atrazine	1700	E
87-86-5	Pentachlorophenol	1600	
85-01-8	Phenanthrene	1500	
120-12-7	Anthracene	1500	
86-74-8	Carbazole	1500	
84-74-2	Di-n-butylphthalate	1500	
206-44-0	Fluoranthene	1500	
129-00-0	Pyrene	1500	
85-68-7	Butylbenzylphthalate	1500	
91-94-1	3,3'-Dichlorobenzidine	760	
56-55-3	Benzo(a)anthracene	1500	
218-01-9	Chrysene	1500	
117-81-7	bis(2-Ethylhexyl)phthalate	1500	
117-84-0	Di-n-octylphthalate	1600	
205-99-2	Benzo(b)fluoranthene	1400	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

017LDLCS15

Lab Name: Lancaster Laboratories Contract:

Lab Code: LANCAS Case No.: SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 017LDLCS

Sample wt/vol: 30.0 (g/mL) G Lab File ID: oa0433.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 01/17/13

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/18/13

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Mic

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	LOQ UG/KG	Q
207-08-9	Benzo(k)fluoranthene		1500	
50-32-8	Benzo(a)pyrene		1500	
193-39-5	Indeno(1,2,3-cd)pyrene		1500	
53-70-3	Dibenz(a,h)anthracene		1500	
191-24-2	Benzo(g,h,i)perylene		1400	

FORM I SV-3

Herbicides Data

Case Narrative/Conformance Summary

Herbicides

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Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP05

Pesticide Residue Analysis

Fraction: Herbicides

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
6925518	AGC-TSC-2		X	1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

(Sample number(s): 6925518: Analysis: 10401)
For dual column analyses in which the calibration (initial and/or continuing) response is outside the acceptance criteria on one column and within criteria on the second column affected analytes are reported from the compliant column. The sample raw data identifies the column used to report each analyte.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

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Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP05

Pesticide Residue Analysis

Fraction: Herbicides

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

Narrative Reviewed and Approved 1/22/2013 by
(Date)

M. Susan Kreider
M. Susan Kreider
Senior Specialist

Sample Data

Herbicides

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO.

TSC-2

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130170017A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:** TAP05

Matrix: (soil/water) SOIL **Lab Sample ID:** 6925518

Sample wt/vol: 30.1 (g/ml) g **Lab File ID:** 13H15360.012.RAW

% Moisture: 14.8 **Decanted: (Y/N)** **Date Received:** 1/17/2013

Extraction: (SepF/Cont/Sonc) SONC **Date Extracted:** 1/18/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/21/2013

Injection Volume: 2 (uL) **Dilution Factor:** 1

GPC Cleanup: (Y/N) N **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
93-72-1	2,4,5-TP	0.88	U

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO.

PBLK17017

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130170017A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:**

Matrix: (soil/water) SOIL **Lab Sample ID:** BLANKA

Sample wt/vol: 30 (g/ml) g **Lab File ID:** 13H15360.006.RAW

% Moisture: **Decanted: (Y/N)** **Date Received:**

Extraction: (SepF/Cont/Sonc) SONC **Date Extracted:** 1/18/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/21/2013

Injection Volume: 2 (uL) **Dilution Factor:** 1

GPC Cleanup: (Y/N) N **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
75-99-0	Dalapon	44	U
1918-00-9	Dicamba	4.0	U
93-65-2	Mcpp	750	U
94-74-6	Mcpa	760	U
120-36-5	2,4-DP	9.0	U
94-75-7	2,4-D	12	U
87-86-5	PCP	0.33	U
93-72-1	2,4,5-TP	0.75	U
93-76-5	2,4,5-T	0.82	U
94-82-6	2,4-DB	6.2	U
88-85-7	Dinoseb	8.0	U
1918-02-1	Picloram	50	U
70-30-4	Hexachlorophene	8.0	U

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO. LCS17017

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130170017A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:**

Matrix: (soil/water) SOIL **Lab Sample ID:** LCSA

Sample wt/vol: 30 (g/ml) g **Lab File ID:** 13H15360.007.RAW

% Moisture: **Decanted: (Y/N)** **Date Received:**

Extraction: (SepF/Cont/Sonc) SONC **Date Extracted:** 1/18/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/21/2013

Injection Volume: 2 (uL) **Dilution Factor:** 1

GPC Cleanup: (Y/N) N **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
75-99-0	Dalapon	120	
1918-00-9	Dicamba	9.1	J
93-65-2	Mcpp	7800	
94-74-6	Mcpa	7300	
120-36-5	2,4-DP	100	
94-75-7	2,4-D	87	
87-86-5	PCP	27	
93-72-1	2,4,5-TP	9.0	
93-76-5	2,4,5-T	7.7	
94-82-6	2,4-DB	93	
88-85-7	Dinoseb	27	
1918-02-1	Picloram	140	

Pesticides Data

Case Narrative/Conformance Summary

Pesticides

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Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP05

Pesticide Residue Analysis

Fraction: Pesticides

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
6925518	AGC-TSC-2		X	5	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

(Sample number(s): 6925518: Analysis: 10738)
For dual column analyses in which the calibration (initial and/or continuing) response is outside the acceptance criteria on one column and within criteria on the second column affected analytes are reported from the compliant column. The sample raw data identifies the column used to report each analyte.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Please note that US EPA Methods for organic compounds do not require action by the laboratory based on out-of-specification MS/MSD results.

SAMPLE ANALYSIS:

(Sample number(s): 6925518: Analysis: 10738)
Reporting limits were raised due to interference from the sample matrix.

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Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP05

Pesticide Residue Analysis

Fraction: Pesticides

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

Narrative Reviewed and Approved 1/22/2013 by (Date)

M. Susan Kreider

M. Susan Kreider
Senior Specialist

Sample Data

Pesticides

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Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP05

Pesticide Residue Analysis

Fraction: Pesticides

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
6925518	AGC-TSC-2		X	5	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

(Sample number(s): 6925518: Analysis: 10738)
For dual column analyses in which the calibration (initial and/or continuing) response is outside the acceptance criteria on one column and within criteria on the second column affected analytes are reported from the compliant column. The sample raw data identifies the column used to report each analyte.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Please note that US EPA Methods for organic compounds do not require action by the laboratory based on out-of-specification MS/MSD results.

SAMPLE ANALYSIS:

(Sample number(s): 6925518: Analysis: 10738)
Reporting limits were raised due to interference from the sample matrix.

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Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP05

Pesticide Residue Analysis

Fraction: Pesticides

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

Narrative Reviewed and Approved 1/22/2013 by
(Date)

M. Susan Kreider
M. Susan Kreider
Senior Specialist

TAP05 Page 65 of 92

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO.

TSC-2

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130170016A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:** TAP05

Matrix: (soil/water) SOIL **Lab Sample ID:** 6925518

Sample wt/vol: 30.5 **(g/ml)** g **Lab File ID:** 1P10021.0044.RAW

% Moisture: 14.8 **Decanted: (Y/N)** **Date Received:** 1/17/2013

Extraction: (SepF/Cont/Sonc) MICRO **Date Extracted:** 1/18/2013

Concentrated Extract Volume: 10000 **(uL)** **Date Analyzed:** 1/22/2013

Injection Volume: 1 **(uL)** **Dilution Factor:** 5

GPC Cleanup: (Y/N) Y **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
118-74-1	Hcb	1.2	U
319-84-6	alpha-BHC	0.98	U
58-89-9	gamma-BHC (Lindane)	0.98	U
319-85-7	beta-BHC	5.5	U
319-86-8	delta-BHC	2.6	U
76-44-8	Heptachlor	2.3	U
309-00-2	Aldrin	0.98	U
5103-71-9	alpha-Chlordane	21	
72-55-9	4,4'-DDE	44	
959-98-8	Endosulfan I	1.3	U
60-57-1	Dieldrin	1.9	U
72-20-8	Endrin	1.9	U
72-54-8	4,4'-DDD	7.8	J
33213-65-9	Endosulfan II	1.9	U
50-29-3	4,4'-DDT	49	
1031-07-8	Endosulfan sulfate	1.9	U

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO. PBLK16017

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130170016A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:**

Matrix: (soil/water) SOIL **Lab Sample ID:** BLANKA

Sample wt/vol: 30 **(g/ml)** g **Lab File ID:** 1P10021.0040.RAW

% Moisture: **Decanted: (Y/N)** **Date Received:**

Extraction: (SepF/Cont/Sonc) MICRO **Date Extracted:** 1/18/2013

Concentrated Extract Volume: 10000 **(uL)** **Date Analyzed:** 1/22/2013

Injection Volume: 1 **(uL)** **Dilution Factor:** 1

GPC Cleanup: (Y/N) Y **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
118-74-1	Hcb	0.21	U
319-84-6	alpha-BHC	0.17	U
58-89-9	gamma-BHC (Lindane)	0.17	U
319-85-7	beta-BHC	0.96	U
319-86-8	delta-BHC	0.45	U
76-44-8	Heptachlor	0.17	U
309-00-2	Aldrin	0.17	U
297-78-9	Telodrin	0.40	U
3424-82-6	o,p-DDE	0.33	U
1024-57-3	Heptachlor epoxide	0.17	U
5103-74-2	gamma-Chlordane	0.17	U
5103-71-9	alpha-Chlordane	0.17	U
72-55-9	4,4'-DDE	0.33	U
959-98-8	Endosulfan I	0.22	U
53-19-0	o,p-DDD	0.33	U
60-57-1	Dieldrin	0.33	U
789-02-6	o,p-DDT	0.33	U
72-20-8	Endrin	0.33	U
72-54-8	4,4'-DDD	0.33	U
143-50-0	Kepone	2.3	U
33213-65-9	Endosulfan II	0.33	U
50-29-3	4,4'-DDT	0.35	U
7421-93-4	Endrin aldehyde	0.33	U
72-43-5	Methoxychlor	1.7	U
2385-85-5	Mirex	0.35	U
1031-07-8	Endosulfan sulfate	0.33	U
53494-70-5	Endrin ketone	0.60	U
57-74-9	Chlordane	4.0	U
8001-35-2	Toxaphene	12	U

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO.: LCS16017

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130170016A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:**

Matrix: (soil/water) SOIL **Lab Sample ID:** LCSB

Sample wt/vol: 30 (g/ml) g **Lab File ID:** 1P10021.0041.RAW

% Moisture: **Decanted: (Y/N)** **Date Received:**

Extraction: (SepF/Cont/Sonc) MICRO **Date Extracted:** 1/18/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/22/2013

Injection Volume: 1 (uL) **Dilution Factor:** 1

GPC Cleanup: (Y/N) Y **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
319-84-6	alpha-BHC	3.0	
58-89-9	gamma-BHC (Lindane)	3.1	
319-85-7	beta-BHC	3.0	
319-86-8	delta-BHC	3.1	
76-44-8	Heptachlor	3.1	
309-00-2	Aldrin	2.9	
1024-57-3	Heptachlor epoxide	3.3	
5103-74-2	gamma-Chlordane	3.4	
5103-71-9	alpha-Chlordane	3.3	
72-55-9	4,4'-DDE	6.5	
959-98-8	Endosulfan I	3.1	
60-57-1	Dieldrin	6.8	
72-20-8	Endrin	6.7	
72-54-8	4,4'-DDD	6.5	
33213-65-9	Endosulfan II	6.6	
50-29-3	4,4'-DDT	6.6	
7421-93-4	Endrin aldehyde	6.9	
72-43-5	Methoxychlor	32	
1031-07-8	Endosulfan sulfate	6.7	
53494-70-5	Endrin ketone	6.5	

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO.

TSC-2MS

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130170016A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:** TAP05

Matrix: (soil/water) SOIL **Lab Sample ID:** 6925518

Sample wt/vol: 30.5 (g/ml) g **Lab File ID:** 1P10021.0045.RAW

% Moisture: 14.8 **Decanted: (Y/N)** **Date Received:** 1/17/2013

Extraction: (SepF/Cont/Sonc) MICRO **Date Extracted:** 1/18/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/22/2013

Injection Volume: 1 (uL) **Dilution Factor:** 5

GPC Cleanup: (Y/N) Y **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
319-84-6	alpha-BHC	3.5	J
58-89-9	gamma-BHC (Lindane)	3.6	J
319-85-7	beta-BHC	5.5	U
319-86-8	delta-BHC	3.7	J
76-44-8	Heptachlor	4.8	J
309-00-2	Aldrin	3.7	J
1024-57-3	Heptachlor epoxide	0.98	U
5103-74-2	gamma-Chlordane	16	
5103-71-9	alpha-Chlordane	18	
72-55-9	4,4'-DDE	52	
959-98-8	Endosulfan I	3.9	J
60-57-1	Dieldrin	10	
72-20-8	Endrin	8.7	J
72-54-8	4,4'-DDD	12	
33213-65-9	Endosulfan II	8.1	J
50-29-3	4,4'-DDT	58	
7421-93-4	Endrin aldehyde	8.6	J
72-43-5	Methoxychlor	47	J
1031-07-8	Endosulfan sulfate	8.2	J
53494-70-5	Endrin ketone	8.0	J

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO.

TSC-2MSD

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130170016A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:** TAP05

Matrix: (soil/water) SOIL **Lab Sample ID:** 6925518

Sample wt/vol: 30.5 **(g/ml)** g **Lab File ID:** 1P10021.0046.RAW

% Moisture: 14.8 **Decanted: (Y/N)** **Date Received:** 1/17/2013

Extraction: (SepF/Cont/Sonc) MICRO **Date Extracted:** 1/18/2013

Concentrated Extract Volume: 10000 **(uL)** **Date Analyzed:** 1/22/2013

Injection Volume: 1 **(uL)** **Dilution Factor:** 5

GPC Cleanup: (Y/N) Y **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
319-84-6	alpha-BHC	3.2	U
58-89-9	gamma-BHC (Lindane)	3.2	U
319-85-7	beta-BHC	5.5	U
319-86-8	delta-BHC	3.4	U
76-44-8	Heptachlor	4.4	U
309-00-2	Aldrin	3.7	U
1024-57-3	Heptachlor epoxide	0.98	U
5103-74-2	gamma-Chlordane	15	
5103-71-9	alpha-Chlordane	17	
72-55-9	4,4'-DDE	49	
959-98-8	Endosulfan I	3.5	U
60-57-1	Dieldrin	9.3	U
72-20-8	Endrin	8.0	U
72-54-8	4,4'-DDD	11	
33213-65-9	Endosulfan II	7.4	U
50-29-3	4,4'-DDT	56	
7421-93-4	Endrin aldehyde	8.0	U
72-43-5	Methoxychlor	43	U
1031-07-8	Endosulfan sulfate	7.6	U
53494-70-5	Endrin ketone	7.2	U

Polychlorinated Biphenyls (PCBs) Data

Case Narrative/Conformance Summary

Polychlorinated Biphenyls (PCBs)

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Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP05

Pesticide Residue Analysis

Fraction: Polychlorinated Biphenyls (PCBs)

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
6925518	AGC-TSC-2		X	5	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

(Sample number(s): 6925518: Analysis: 10736)
For dual column analyses in which the calibration (initial and/or continuing) response is outside the acceptance criteria on one column and within criteria on the second column affected analytes are reported from the compliant column. The sample raw data identifies the column used to report each analyte.

(Sample number(s): 6925518: Analysis: 10736)
The % difference for the calibration verification standard is outside the +/- 15% criteria for the analyte(s) listed below. Since the average of the % difference values meets the criteria, the results are reported.
This applies to the following analyte(s): decachlorobiphenyl surrogate
Reporting limits were raised due to interference from the sample matrix.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

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Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP05

Pesticide Residue Analysis

Fraction: Polychlorinated Biphenyls (PCBs)

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

Narrative Reviewed and Approved 1/22/2013 by (Date)

M. Susan Kreider

M. Susan Kreider
Senior Specialist

Sample Data

Polychlorinated Biphenyls (PCBs)

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO.

TSC-2

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130180006A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:** TAP05

Matrix: (soil/water) SOIL **Lab Sample ID:** 6925518

Sample wt/vol: 30.2 **(g/ml)** g **Lab File ID:** GP25361.0038.RAW

% Moisture: 14.8 **Decanted: (Y/N)** **Date Received:** 1/17/2013

Extraction: (SepF/Cont/Sonc) SONC **Date Extracted:** 1/19/2013

Concentrated Extract Volume: 10000 **(uL)** **Date Analyzed:** 1/21/2013

Injection Volume: 1 **(uL)** **Dilution Factor:** 5

GPC Cleanup: (Y/N) N **pH:** **Sulfur Cleanup: (Y/N)** Y

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
12674-11-2	Aroclor-1016	21	U
11104-28-2	Aroclor-1221	27	U
11141-16-5	Aroclor-1232	47	U
53469-21-9	Aroclor-1242	19	U
12672-29-6	Aroclor-1248	19	U
11097-69-1	Aroclor-1254	19	U
11096-82-5	Aroclor-1260	29	U

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO. PBLK06018

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130180006A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:**

Matrix: (soil/water) SOIL **Lab Sample ID:** BLANKA

Sample wt/vol: 30 **(g/ml)** g **Lab File ID:** GP25361.0016.RAW

% Moisture: **Decanted: (Y/N)** **Date Received:**

Extraction: (SepF/Cont/Sonc) SONC **Date Extracted:** 1/19/2013

Concentrated Extract Volume: 10000 **(uL)** **Date Analyzed:** 1/21/2013

Injection Volume: 1 **(uL)** **Dilution Factor:** 1

GPC Cleanup: (Y/N) N **pH:** **Sulfur Cleanup: (Y/N)** Y

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
12674-11-2	Aroclor-1016	3.6	U
11104-28-2	Aroclor-1221	4.6	U
11141-16-5	Aroclor-1232	8.0	U
53469-21-9	Aroclor-1242	3.3	U
12672-29-6	Aroclor-1248	3.3	U
11097-69-1	Aroclor-1254	3.3	U
11096-82-5	Aroclor-1260	4.9	U
37324-23-5	Aroclor-1262	3.3	U
11100-14-4	Aroclor-1268	3.3	U
1336-36-3	Total PCBs	3.3	U

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO. LCS06018

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130180006A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:**

Matrix: (soil/water) SOIL **Lab Sample ID:** LCSA

Sample wt/vol: 30 (g/ml) g **Lab File ID:** GP25361.0017.RAW

% Moisture: **Decanted: (Y/N)** **Date Received:**

Extraction: (SepF/Cont/Sonc) SONC **Date Extracted:** 1/19/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/21/2013

Injection Volume: 1 (uL) **Dilution Factor:** 1

GPC Cleanup: (Y/N) N **pH:** **Sulfur Cleanup: (Y/N)** Y

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
12674-11-2	Aroclor-1016	190	
11096-82-5	Aroclor-1260	200	
1336-36-3	Total PCBs	380	P

Metals in Solid Data

Case Narrative/Conformance Summary

Metals in Solid

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Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP05

ICP Metals

Fraction: Metals in Solid

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
6925518	AGC-TSC-2		X	1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

Method defined actions are taken for any failed matrix QC.

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

The instrument detection limits (IDLs) are used for determining the U flags on the initial and continuing calibration blanks. The highest IDL is selected when multiple instruments are used for an analysis. The method detection limits (MDLs) are used for determining all other U flags.

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Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP05

ICP Metals

Fraction: Metals in Solid

Abbreviation Key

BKG – Background	AF - Cold Vapor Atomic Fluorescence
DUP – Duplicate	U - Below MDL
MS - Matrix Spike	B - Below LOQ
MSD - Matrix Spike Dup	N - Matrix Spike out of specifications
B – Blank	* - Duplicate out of specifications
Q - Laboratory Control Sample	E - Matrix Effects exist as proven by Serial Dilution or Spiked Dilution
Y - Laboratory Control Sample Duplicate	A - Post Digestion Spike
P - ICP Atomic Emission Spectrometer	L - Serial Dilution
MS - ICP Mass Spectrometry	R - Internal Standard Relative Intensity OOS
CV - Cold Vapor	NR - Not Required

Sample Data

Metals in Solid

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: TAP05
Matrix: SOIL Level (low/med): LOW

Lab Sample ID: 6925518 % Solids: 85.2
Concentration Units: MG/KG Date Received: 01/17/2013

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	3.0			P
7440-39-3	Barium	107			P
7440-41-7	Beryllium	0.45	B		P
7440-43-9	Cadmium	0.038	U		P
7440-47-3	Chromium	27.7			P
7440-50-8	Copper	29.6			P
7439-92-1	Lead	15.7			P
7439-96-5	Manganese	473			P
7439-97-6	Mercury	0.030	B		CV
7440-02-0	Nickel	16.0			P
7782-49-2	Selenium	1.0	B		P
7440-22-4	Silver	0.16	U		P
7440-66-6	Zinc	54.2			P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

Instrumental Wet Chemistry Data

Case Narrative/Conformance Summary

Instrumental Wet Chemistry

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CLIENT: American Environmental Assess.
SDG: TAP05

Instrumental Water Quality

Sample #	Matrix Liquid	Solid	Comments
6925518		X	

ANALYSIS:
There were no dilutions performed for analyses associated with samples in this SDG.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:
Matrix QC may not be included for all analyses if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

Method defined actions are taken for any failed matrix QC.

DATA INTERPRETATION:
Due to the limitations of the data package software, form I's are not available for the Instrumental Analysis data. Please refer to the analysis reports for this information.

Abbreviation Key

U = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
R = Matrix Spike (MS)	MDL = Method Detection Limit
M = Matrix Spike Duplicate (MSD)	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	NA = Not Applicable
HS = High Spike	ME = Method
LS = Low Spike	CO = Colorimetric
SS = Soluble Spike	G = Gravimetric
IS = Insoluble Spike	IR = Infrared Spectrophotometry
ISD = Insoluble Spike Duplicate	MTR = Meter
PDS = Post Digestion Spike	OD = Oven Dried
* = Out of Specification	TI = Titration
V = Visual	TOC = Total Organic Carbon
AK = Alpkem	IC = Ion Chromatography
TC = Total Carbon	RA = Rapid Analyzer

Wet Chemistry Data

Case Narrative/Conformance Summary

Wet Chemistry

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CLIENT: American Environmental Assess.
SDG: TAP05

Miscellaneous Wet Chemistry

Sample #	Matrix Liquid	Matrix Solid	Comments
6925518		X	

ANALYSIS:

There were no dilutions performed for analyses associated with samples in this SDG.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

Method defined actions are taken for any failed matrix QC.

DATA INTERPRETATION:

Due to the limitations of the data package software, there are no form 1's available for the Wet Chemistry data. Please refer to the analysis reports for this information.

Abbreviation Key

U = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
R = Matrix Spike (MS)	MDL = Method Detection Limit
M = Matrix Spike Duplicate (MSD)	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	NA = Not Applicable
HS = High Spike	ME = Method
LS = Low Spike	CO = Colorimetric
SS = Soluble Spike	G = Gravimetric
IS = Insoluble Spike	IR = Infrared Spectrophotometry
ISD = Insoluble Spike Duplicate	MTR = Meter
PDS = Post Digestion Spike	OD = Oven Dried
* = Out of Specification	TI = Titration
V = Visual	TOC = Total Organic Carbon
AK = Alpkem	IC = Ion Chromatography
TC = Total Carbon	RA = Rapid Analyzer

Moisture Data

MOISTURE

SAMPLE NUMBERS:

Sample #	Sample Code
6925518	TSC-2
6925519	TS3--
6925520	TS4--

COMMENTS:

The moisture value calculation is:

$$\% \text{ moisture} = \frac{A - B}{C} \times 100$$

Where: A = weight of sample and container before drying
B = weight of sample and container after drying
C = weight of sample before drying

Method defined actions are taken for any failed matrix QC.

Laboratory Compliance Quality Control

Analysis Name		LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number:	13017820003B	Sample number(s):	6925518-6925520			
Moisture		100		99-101		

Sample Matrix Quality Control

Analysis Name		BKG Conc	DUP Conc	RPD	RPD Max
Batch number:	13017820003B	Sample number(s):	6925518-6925520		
Moisture		21.9	21.7	1	13

* - Outside of specification
(1) - The result for one or both determinations was less than five times the LOQ.

Moisture Data Report

Batch #: **13017820003**

Sample ID	Batch ID	Analysis#	Tare Wt	Sample Wt	Dry Wt	%Moisture	Analysis Date (Emp#)	Verified Date (Emp#)
LCS 89.5% Std.			1.1319	5.0112	1.6617	89.43	1/17/13 (1201/SWF)	1/18/13 (0236/CW)
6925518	B	00111	1.0862	7.6863	7.6319	14.84	1/17/13 (1201/SWF)	1/18/13 (0236/CW)
6925519	B	00111	1.0502	8.2096	8.1099	14.01	1/17/13 (1201/SWF)	1/18/13 (0236/CW)
6925520	B	00111	1.0782	6.8007	6.8798	14.69	1/17/13 (1201/SWF)	1/18/13 (0236/CW)
P924702BKG	B	00111	1.0781	7.1644	6.6739	21.89	1/17/13 (1201/SWF)	1/18/13 (0236/CW)
P924702DUP	B	00111	1.1030	7.3925	6.8888	21.73	1/17/13 (1201/SWF)	1/18/13 (0236/CW)

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Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

January 24, 2013

Project: Tappan Terminal

Submittal Date: 01/18/2013
Group Number: 1363014
SDG: TAP06
PO Number: 15249
State of Sample Origin: NY

Client Sample Description	Lancaster Labs (LLI) #
POC2-TSC1 Composite Soil	6926640
POC2-TS1 Grab Soil	6926641
POC2-TS2 Grab Soil	6926642

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	Roux Associates	Attn: Tracy Bispham
ELECTRONIC COPY TO	Exxon Mobil: Woodard & Curran	Attn: Anne Proctor
ELECTRONIC COPY TO	Roux	Attn: Noelle Clarke
1 COPY TO	Data Package Group	

Respectfully Submitted,

Barbara Weyandt

Barbara A. Weyandt
Specialist

(717) 556-7264

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681• www.lancasterlabs.com

Sample Description: **POC2-TSC1 Composite Soil**
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6926640
LLI Group # 1363014
Account # 01907

Project Name: Tappan Terminal

Collected: 01/17/2013 16:15 by KC

Submitted: 01/18/2013 09:15
Reported: 01/24/2013 14:41

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

TSC-1 SDG#: TAP06-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	
10727	Acenaphthene	83-32-9	4	J	4	1
10727	Acenaphthylene	208-96-8	N.D.		4	1
10727	Anthracene	120-12-7	15	J	4	1
10727	Benzo(a)anthracene	56-55-3	99		4	1
10727	Benzo(a)pyrene	50-32-8	110		4	1
10727	Benzo(b)fluoranthene	205-99-2	160		4	1
10727	Benzo(g,h,i)perylene	191-24-2	90		4	1
10727	Benzo(k)fluoranthene	207-08-9	68		4	1
10727	Chrysene	218-01-9	140		4	1
10727	Dibenz(a,h)anthracene	53-70-3	19	J	4	1
10727	Dibenzofuran	132-64-9	N.D.		20	1
10727	Fluoranthene	206-44-0	200		4	1
10727	Fluorene	86-73-7	5	J	4	1
10727	Indeno(1,2,3-cd)pyrene	193-39-5	83		4	1
10727	2-Methylphenol	95-48-7	N.D.		20	1
10727	4-Methylphenol	106-44-5	59		20	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10727	Naphthalene	91-20-3	5	J	4	1
10727	Pentachlorophenol	87-86-5	N.D.		40	1
10727	Phenanthrene	85-01-8	83		4	1
10727	Phenol	108-95-2	N.D.		20	1
10727	Pyrene	129-00-0	200		4	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	
10401	2,4,5-TP	93-72-1	N.D.		0.89	1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	
10738	Aldrin	309-00-2	0.33	J	0.20	1
10738	Alpha BHC	319-84-6	N.D.		0.20	1
10738	Beta BHC	319-85-7	N.D.		1.1	1
10738	Gamma BHC - Lindane	58-89-9	N.D.		0.20	1
10738	Alpha Chlordane	5103-71-9	N.D.		0.20	1
10738	p,p-DDD	72-54-8	N.D.		0.55	1
10738	p,p-DDE	72-55-9	0.74	J	0.39	1
10738	p,p-DDT	50-29-3	N.D.		0.42	1
10738	Delta BHC	319-86-8	N.D.		0.54	1
10738	Dieldrin	60-57-1	0.62	J	0.39	1
10738	Endosulfan I	959-98-8	0.31	J	0.26	1
10738	Endosulfan II	33213-65-9	N.D.		0.39	1
10738	Endosulfan Sulfate	1031-07-8	N.D.		0.39	1
10738	Endrin	72-20-8	N.D.		0.39	1
10738	HCB	118-74-1	2.7		0.25	1
10738	Heptachlor	76-44-8	1.1		0.20	1
	Reporting limits were raised due to interference from the sample matrix.					
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	
10736	PCB-1016	12674-11-2	N.D.		4.3	1

Sample Description: **POC2-TSC1 Composite Soil**
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6926640
LLI Group # 1363014
Account # 01907

Project Name: Tappan Terminal

Collected: 01/17/2013 16:15 by KC

Submitted: 01/18/2013 09:15
Reported: 01/24/2013 14:41

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

TSC-1 SDG#: TAP06-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	
10736	PCB-1221	11104-28-2	N.D.		5.4	1
10736	PCB-1232	11141-16-5	N.D.		9.5	1
10736	PCB-1242	53469-21-9	N.D.		3.9	1
10736	PCB-1248	12672-29-6	N.D.		3.9	1
10736	PCB-1254	11097-69-1	N.D.		3.9	1
10736	PCB-1260	11096-82-5	N.D.		5.8	1
	The % difference for the calibration verification standard is outside the +/- 15% criteria for the analyte(s) listed below. Since the average of the % difference values meets the criteria, the results are reported. This applies to the following analyte(s): decachlorobiphenyl surrogate					
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	
06935	Arsenic	7440-38-2	4.28		0.389	1
06946	Barium	7440-39-3	50.3		0.0389	1
06947	Beryllium	7440-41-7	0.705		0.0791	1
06949	Cadmium	7440-43-9	N.D.		0.0389	1
06951	Chromium	7440-47-3	11.9		0.104	1
06953	Copper	7440-50-8	17.7		0.212	1
06955	Lead	7439-92-1	13.9		0.555	1
06958	Manganese	7439-96-5	336		0.0979	1
06961	Nickel	7440-02-0	14.1		0.130	1
06936	Selenium	7782-49-2	1.51	J	0.850	1
06966	Silver	7440-22-4	N.D.		0.165	1
06972	Zinc	7440-66-6	48.3		0.236	1
	SW-846 6010B modified		**mg/kg**		**mg/kg**	
02829	Trivalent Chromium soils	16065-83-1	11.9		0.60	1
	The Trivalent Chromium result is calculated by subtracting Hexavalent Chromium from Total Chromium.					
	SW-846 7471A		**mg/kg**		**mg/kg**	
00159	Mercury	7439-97-6	0.0180	J	0.0121	1
Wet Chemistry	**SW-846 9012B**		**mg/kg**		**mg/kg**	
05898	Amenable Cyanide (solid)	n.a.	N.D.		0.21	1
05895	Total Cyanide (solid)	57-12-5	N.D.		0.21	1
	SW-846 7196A		**mg/kg**		**mg/kg**	
00425	Hexavalent Chromium (SOLIDS)	18540-29-9	N.D.		0.60	1
Wet Chemistry	**SM 2540 G-1997**		**%**		**%**	
00111	Moisture	n.a.	16.1		0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

Sample Description: **POC2-TSC1 Composite Soil**
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6926640
LLI Group # 1363014
Account # 01907

Project Name: Tappan Terminal

Collected: 01/17/2013 16:15 by KC

Submitted: 01/18/2013 09:15
Reported: 01/24/2013 14:41

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

TSC-1 SDG#: TAP06-01

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10727	Table 375-6.8(a) SVOCs	SW-846 8270C	1	13023SLB026	01/24/2013 12:50	Brian K Graham	1
10809	BNA Soil Microwave	SW-846 3546	2	13023SLB026	01/23/2013 14:00	David S Schrum	1
10401	Table 375-6.8(a) Herbicides	SW-846 8151A	1	130180007A	01/21/2013 23:12	Matthew S Listner	1
10738	Table 375-6.8(a) Pesticides	SW-846 8081A	1	130180009A	01/22/2013 13:18	Jamie L Brillhart	1
10736	PCBs 8082 Soil	SW-846 8082	1	130180006A	01/21/2013 15:27	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	130180006A	01/19/2013 02:10	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	130180009A	01/21/2013 03:00	David V Hershey Jr	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	130180007A	01/21/2013 01:30	Sherry L Morrow	1
06935	Arsenic	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
06946	Barium	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
06947	Beryllium	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
06949	Cadmium	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
06951	Chromium	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
06953	Copper	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
06955	Lead	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
06958	Manganese	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
06961	Nickel	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
06936	Selenium	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
06966	Silver	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
06972	Zinc	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
02829	Trivalent Chromium soils	SW-846 6010B modified	1	130232829010	01/23/2013 06:00	Jennifer L Moyer	1
00159	Mercury	SW-846 7471A	1	130205711001	01/22/2013 04:34	Damary Valentin	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	130205708001	01/21/2013 06:11	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	130205711001	01/21/2013 07:56	James L Mertz	1
05898	Amenable Cyanide (solid)	SW-846 9012B	1	13022103201A	01/23/2013 10:43	K Robert Caulfeild-James	1
05895	Total Cyanide (solid)	SW-846 9012B	1	13022102201A	01/23/2013 10:32	K Robert Caulfeild-James	1
05897	Amenable Cyanide Solid Distill	SW-846 9012B	1	13022103201A	01/22/2013 09:55	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	13022102201A	01/22/2013 09:55	Nancy J Shoop	1
00425	Hexavalent Chromium (SOLIDS)	SW-846 7196A	1	13019042501A	01/21/2013 22:15	Daniel S Smith	1

Sample Description: **POC2-TSC1 Composite Soil**
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6926640
LLI Group # 1363014
Account # 01907

Project Name: Tappan Terminal

Collected: 01/17/2013 16:15 by KC

Submitted: 01/18/2013 09:15
Reported: 01/24/2013 14:41

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

TSC-1 SDG#: TAP06-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07825	Hexavalent Cr (Extraction)	SW-846 3060A	1	13019042501A	01/19/2013 06:10	Daniel S Smith	1
00111	Moisture	SM 2540 G-1997	1	13019820001A	01/19/2013 08:46	Stephanie A Sanchez	1

Sample Description: **POC2-TS1 Grab Soil**
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6926641
LLI Group # 1363014
Account # 01907

Project Name: Tappan Terminal

Collected: 01/17/2013 16:05 by KC

Submitted: 01/18/2013 09:15
Reported: 01/24/2013 14:41

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

2-TS1 SDG#: TAP06-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**	**ug/kg**	
10237	Acetone	67-64-1	N.D.	8	0.96
10237	Benzene	71-43-2	N.D.	0.6	0.96
10237	2-Butanone	78-93-3	N.D.	5	0.96
10237	n-Butylbenzene	104-51-8	N.D.	1	0.96
10237	sec-Butylbenzene	135-98-8	N.D.	1	0.96
10237	tert-Butylbenzene	98-06-6	N.D.	1	0.96
10237	Carbon Tetrachloride	56-23-5	N.D.	1	0.96
10237	Chlorobenzene	108-90-7	N.D.	1	0.96
10237	Chloroform	67-66-3	N.D.	1	0.96
10237	1,2-Dichlorobenzene	95-50-1	N.D.	1	0.96
10237	1,3-Dichlorobenzene	541-73-1	N.D.	1	0.96
10237	1,4-Dichlorobenzene	106-46-7	N.D.	1	0.96
10237	1,1-Dichloroethane	75-34-3	N.D.	1	0.96
10237	1,2-Dichloroethane	107-06-2	N.D.	1	0.96
10237	1,1-Dichloroethene	75-35-4	N.D.	1	0.96
10237	cis-1,2-Dichloroethene	156-59-2	N.D.	1	0.96
10237	trans-1,2-Dichloroethene	156-60-5	N.D.	1	0.96
10237	1,4-Dioxane	123-91-1	N.D.	82	0.96
10237	Ethylbenzene	100-41-4	N.D.	1	0.96
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.6	0.96
10237	Methylene Chloride	75-09-2	N.D.	2	0.96
10237	n-Propylbenzene	103-65-1	N.D.	1	0.96
10237	Tetrachloroethene	127-18-4	N.D.	1	0.96
10237	Toluene	108-88-3	N.D.	1	0.96
10237	1,1,1-Trichloroethane	71-55-6	N.D.	1	0.96
10237	Trichloroethene	79-01-6	N.D.	1	0.96
10237	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	0.96
10237	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	0.96
10237	Vinyl Chloride	75-01-4	N.D.	1	0.96
10237	Xylene (Total)	1330-20-7	N.D.	1	0.96
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	17.6	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of New York Certification No. 10670

Lancaster Laboratories is responsible only for the certified testing of samples. We are not directly responsible for the integrity of the sample prior to laboratory receipt. Any reported concentrations less than 200 ug/kg may be biased low if they were not collected according to EPA 5035/5035A specifications.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Sample Description: POC2-TS1 Grab Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6926641
LLI Group # 1363014
Account # 01907

Project Name: Tappan Terminal

Collected: 01/17/2013 16:05 by KC

Submitted: 01/18/2013 09:15
Reported: 01/24/2013 14:41

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

2-TS1 SDG#: TAP06-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	Table 375-6.8(a) VOCs	SW-846 8260B	1	B130211AA	01/21/2013 12:25	Angela D Sneeringer	0.96
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201301829964	01/18/2013 12:22	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201301829964	01/18/2013 12:22	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201301829964	01/18/2013 12:19	Larry E Bevins	n.a.
00111	Moisture	SM 2540 G-1997	1	13019820001A	01/19/2013 08:46	Stephanie A Sanchez	1

Sample Description: **POC2-TS2 Grab Soil**
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6926642
LLI Group # 1363014
Account # 01907

Project Name: Tappan Terminal

Collected: 01/17/2013 16:10 by KC

Submitted: 01/18/2013 09:15
Reported: 01/24/2013 14:41

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

2-TS2 SDG#: TAP06-03*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	
10237	Acetone	67-64-1	N.D.		8	0.99
10237	Benzene	71-43-2	N.D.		0.6	0.99
10237	2-Butanone	78-93-3	N.D.		5	0.99
10237	n-Butylbenzene	104-51-8	N.D.		1	0.99
10237	sec-Butylbenzene	135-98-8	N.D.		1	0.99
10237	tert-Butylbenzene	98-06-6	N.D.		1	0.99
10237	Carbon Tetrachloride	56-23-5	N.D.		1	0.99
10237	Chlorobenzene	108-90-7	N.D.		1	0.99
10237	Chloroform	67-66-3	N.D.		1	0.99
10237	1,2-Dichlorobenzene	95-50-1	N.D.		1	0.99
10237	1,3-Dichlorobenzene	541-73-1	N.D.		1	0.99
10237	1,4-Dichlorobenzene	106-46-7	N.D.		1	0.99
10237	1,1-Dichloroethane	75-34-3	N.D.		1	0.99
10237	1,2-Dichloroethane	107-06-2	N.D.		1	0.99
10237	1,1-Dichloroethene	75-35-4	N.D.		1	0.99
10237	cis-1,2-Dichloroethene	156-59-2	N.D.		1	0.99
10237	trans-1,2-Dichloroethene	156-60-5	N.D.		1	0.99
10237	1,4-Dioxane	123-91-1	N.D.		83	0.99
10237	Ethylbenzene	100-41-4	N.D.		1	0.99
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.		0.6	0.99
10237	Methylene Chloride	75-09-2	N.D.		2	0.99
10237	n-Propylbenzene	103-65-1	N.D.		1	0.99
10237	Tetrachloroethene	127-18-4	N.D.		1	0.99
10237	Toluene	108-88-3	2	J	1	0.99
10237	1,1,1-Trichloroethane	71-55-6	N.D.		1	0.99
10237	Trichloroethene	79-01-6	N.D.		1	0.99
10237	1,2,4-Trimethylbenzene	95-63-6	N.D.		1	0.99
10237	1,3,5-Trimethylbenzene	108-67-8	N.D.		1	0.99
10237	Vinyl Chloride	75-01-4	N.D.		1	0.99
10237	Xylene (Total)	1330-20-7	2	J	1	0.99

The recovery for the sample internal standard is outside the QC acceptance limits. The following corrective action was taken: The sample was re-analyzed and the QC is again outside of the acceptance limits, indicating a matrix effect. The data is reported from the initial trial.

Wet Chemistry	**SM 2540 G-1997**		**%**		**%**	
00111	Moisture	n.a.	15.9		0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

Sample Description: **POC2-TS2 Grab Soil**
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6926642
LLI Group # 1363014
Account # 01907

Project Name: Tappan Terminal

Collected: 01/17/2013 16:10 by KC

Submitted: 01/18/2013 09:15
Reported: 01/24/2013 14:41

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

2-TS2 SDG#: TAP06-03*

General Sample Comments

State of New York Certification No. 10670

Lancaster Laboratories is responsible only for the certified testing of samples. We are not directly responsible for the integrity of the sample prior to laboratory receipt. Any reported concentrations less than 200 ug/kg may be biased low if they were not collected according to EPA 5035/5035A specifications.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	Table 375-6.8(a) VOCs	SW-846 8260B	1	B130211AA	01/21/2013 12:47	Angela D Sneeringer	0.99
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201301829964	01/18/2013 12:22	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201301829964	01/18/2013 12:22	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201301829964	01/18/2013 12:22	Larry E Bevins	n.a.
00111	Moisture	SM 2540 G-1997	1	13019820001A	01/19/2013 08:46	Stephanie A Sanchez	1

Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1363014
Reported: 01/24/13 at 02:41 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B130211AA	Sample number(s): 6926641-6926642							
Acetone	N.D.	7.	ug/kg	91	97	32-209	7	30
Benzene	N.D.	0.5	ug/kg	109	107	80-120	1	30
2-Butanone	N.D.	4.	ug/kg	83	89	37-155	6	30
n-Butylbenzene	N.D.	1.	ug/kg	94	89	72-120	5	30
sec-Butylbenzene	N.D.	1.	ug/kg	99	97	75-120	2	30
tert-Butylbenzene	N.D.	1.	ug/kg	94	92	75-120	2	30
Carbon Tetrachloride	N.D.	1.	ug/kg	109	109	69-122	1	30
Chlorobenzene	N.D.	1.	ug/kg	100	102	80-120	3	30
Chloroform	N.D.	1.	ug/kg	108	108	80-120	0	30
1,2-Dichlorobenzene	N.D.	1.	ug/kg	96	95	79-120	0	30
1,3-Dichlorobenzene	N.D.	1.	ug/kg	99	100	78-120	0	30
1,4-Dichlorobenzene	N.D.	1.	ug/kg	96	96	79-120	0	30
1,1-Dichloroethane	N.D.	1.	ug/kg	107	108	80-120	1	30
1,2-Dichloroethane	N.D.	1.	ug/kg	110	111	70-137	1	30
1,1-Dichloroethene	N.D.	1.	ug/kg	110	112	73-129	2	30
cis-1,2-Dichloroethene	N.D.	1.	ug/kg	115	115	80-120	0	30
trans-1,2-Dichloroethene	N.D.	1.	ug/kg	109	109	79-120	0	30
1,4-Dioxane	N.D.	70.	ug/kg	94	100	48-129	6	30
Ethylbenzene	N.D.	1.	ug/kg	102	103	80-120	1	30
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/kg	105	108	74-121	3	30
Methylene Chloride	N.D.	2.	ug/kg	110	111	76-124	1	30
n-Propylbenzene	N.D.	1.	ug/kg	88	87	77-120	2	30
Tetrachloroethene	N.D.	1.	ug/kg	108	107	78-126	1	30
Toluene	N.D.	1.	ug/kg	102	102	80-120	0	30
1,1,1-Trichloroethane	N.D.	1.	ug/kg	99	99	71-125	0	30
Trichloroethene	N.D.	1.	ug/kg	108	109	80-120	1	30
1,2,4-Trimethylbenzene	N.D.	1.	ug/kg	99	99	79-120	1	30
1,3,5-Trimethylbenzene	N.D.	1.	ug/kg	100	97	78-120	2	30
Vinyl Chloride	N.D.	1.	ug/kg	91	94	53-120	4	30
Xylene (Total)	N.D.	1.	ug/kg	101	102	80-120	1	30
Batch number: 13023SLB026	Sample number(s): 6926640							
Acenaphthene	N.D.	3.	ug/kg	98		83-111		
Acenaphthylene	N.D.	3.	ug/kg	105		83-127		
Anthracene	N.D.	3.	ug/kg	105		83-111		
Benzo(a)anthracene	N.D.	3.	ug/kg	100		73-123		
Benzo(a)pyrene	N.D.	3.	ug/kg	111		80-123		
Benzo(b)fluoranthene	N.D.	3.	ug/kg	116		76-124		
Benzo(g,h,i)perylene	N.D.	3.	ug/kg	104		77-122		
Benzo(k)fluoranthene	N.D.	3.	ug/kg	103		71-135		
Chrysene	N.D.	3.	ug/kg	99		73-119		
Dibenz(a,h)anthracene	N.D.	3.	ug/kg	103		67-129		
Dibenzofuran	N.D.	17.	ug/kg	99		78-116		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1363014
Reported: 01/24/13 at 02:41 PM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Fluoranthene	N.D.	3.	ug/kg	103		80-120		
Fluorene	N.D.	3.	ug/kg	105		81-117		
Indeno(1,2,3-cd)pyrene	N.D.	3.	ug/kg	102		64-128		
2-Methylphenol	N.D.	17.	ug/kg	109		75-126		
4-Methylphenol	N.D.	17.	ug/kg	108		74-116		
Naphthalene	N.D.	3.	ug/kg	97		77-115		
Pentachlorophenol	N.D.	33.	ug/kg	84		60-134		
Phenanthrene	N.D.	3.	ug/kg	102		77-119		
Phenol	N.D.	17.	ug/kg	98		69-126		
Pyrene	N.D.	3.	ug/kg	97		80-121		
Batch number: 130180007A	Sample number(s): 6926640							
2,4,5-TP	N.D.	0.75	ug/kg	120*		60-111		
Batch number: 130180006A	Sample number(s): 6926640							
PCB-1016	N.D.	3.6	ug/kg	112		64-121		
PCB-1221	N.D.	4.6	ug/kg					
PCB-1232	N.D.	8.0	ug/kg					
PCB-1242	N.D.	3.3	ug/kg					
PCB-1248	N.D.	3.3	ug/kg					
PCB-1254	N.D.	3.3	ug/kg					
PCB-1260	N.D.	4.9	ug/kg	118		72-123		
Batch number: 130180009A	Sample number(s): 6926640							
Aldrin	N.D.	0.17	ug/kg	85		62-134		
Alpha BHC	N.D.	0.17	ug/kg	86		67-131		
Beta BHC	N.D.	0.96	ug/kg	89		59-161		
Gamma BHC - Lindane	N.D.	0.17	ug/kg	89		66-132		
Alpha Chlordane	N.D.	0.17	ug/kg	88		64-140		
p,p-DDD	N.D.	0.33	ug/kg	100		73-131		
p,p-DDE	N.D.	0.33	ug/kg	90		72-132		
p,p-DDT	N.D.	0.35	ug/kg	99		65-131		
Delta BHC	N.D.	0.45	ug/kg	93		44-145		
Dieldrin	N.D.	0.33	ug/kg	94		71-134		
Endosulfan I	N.D.	0.22	ug/kg	84		57-127		
Endosulfan II	N.D.	0.33	ug/kg	89		63-127		
Endosulfan Sulfate	N.D.	0.33	ug/kg	86		80-137		
Endrin	N.D.	0.33	ug/kg	89		66-136		
HCB	N.D.	0.21	ug/kg					
Heptachlor	N.D.	0.17	ug/kg	90		68-132		
Batch number: 130205708001	Sample number(s): 6926640							
Arsenic	N.D.	0.330	mg/kg	98		80-120		
Barium	N.D.	0.0330	mg/kg	99		80-120		
Beryllium	0.132 J	0.0670	mg/kg	102		80-120		
Cadmium	N.D.	0.0330	mg/kg	100		80-120		
Chromium	N.D.	0.0880	mg/kg	99		80-120		
Copper	0.446 J	0.180	mg/kg	103		80-120		
Lead	N.D.	0.470	mg/kg	103		80-120		
Manganese	N.D.	0.0830	mg/kg	100		80-120		
Nickel	N.D.	0.110	mg/kg	103		80-120		
Selenium	N.D.	0.720	mg/kg	99		80-120		
Silver	N.D.	0.140	mg/kg	94		80-120		
Zinc	0.326 J	0.200	mg/kg	100		80-120		
Batch number: 130205711001	Sample number(s): 6926640							

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1363014
Reported: 01/24/13 at 02:41 PM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Mercury	N.D.	0.0103	mg/kg	97		80-120		
Batch number: 13022102201A	Sample number(s): 6926640							
Total Cyanide (solid)	N.D.	0.18	mg/kg	101		90-110		
Batch number: 13022103201A	Sample number(s): 6926640							
Amenable Cyanide (solid)	N.D.	0.18	mg/kg	0		-20-20		
Batch number: 13019042501A	Sample number(s): 6926640							
Hexavalent Chromium (SOLIDS)	N.D.	0.50	mg/kg	99		80-120		
Batch number: 13019820001A	Sample number(s): 6926640-6926642							
Moisture				100		99-101		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: B130211AA	Sample number(s): 6926641-6926642 UNSPK: P927354								
Acetone	107	98	31-195	10	30				
Benzene	111	110	55-143	2	30				
2-Butanone	77	72	37-163	8	30				
n-Butylbenzene	89	93	30-146	3	30				
sec-Butylbenzene	97	103	33-157	5	30				
tert-Butylbenzene	93	97	41-152	3	30				
Carbon Tetrachloride	117	116	45-153	1	30				
Chlorobenzene	100	103	49-135	2	30				
Chloroform	109	109	61-142	1	30				
1,2-Dichlorobenzene	93	94	36-133	1	30				
1,3-Dichlorobenzene	96	98	34-134	2	30				
1,4-Dichlorobenzene	93	96	35-136	3	30				
1,1-Dichloroethane	111	111	63-142	1	30				
1,2-Dichloroethane	108	106	68-131	3	30				
1,1-Dichloroethene	120	118	61-149	3	30				
cis-1,2-Dichloroethene	115	112	60-136	3	30				
trans-1,2-Dichloroethene	116	111	59-142	4	30				
1,4-Dioxane	98	106	39-180	8	30				
Ethylbenzene	100	103	44-141	3	30				
Methyl Tertiary Butyl Ether	100	97	55-129	3	30				
Methylene Chloride	114	112	61-141	2	30				
n-Propylbenzene	87	91	39-157	4	30				
Tetrachloroethene	120	117	42-149	3	30				
Toluene	104	106	50-146	1	30				
1,1,1-Trichloroethane	103	102	64-142	2	30				
Trichloroethene	112	110	53-144	3	30				
1,2,4-Trimethylbenzene	96	101	37-149	5	30				
1,3,5-Trimethylbenzene	98	102	38-150	4	30				
Vinyl Chloride	100	98	50-154	4	30				
Xylene (Total)	99	102	44-136	2	30				

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1363014
Reported: 01/24/13 at 02:41 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13023SLB026	Sample number(s): 6926640			UNSPK: P929330					
Acenaphthene	91	90	33-140	1	30				
Acenaphthylene	98	96	47-137	2	30				
Anthracene	97	97	40-147	0	30				
Benzo(a)anthracene	91	92	32-150	1	30				
Benzo(a)pyrene	99	101	30-150	2	30				
Benzo(b)fluoranthene	97	103	29-150	7	30				
Benzo(g,h,i)perylene	99	103	31-152	4	30				
Benzo(k)fluoranthene	97	92	35-148	5	30				
Chrysene	88	89	33-142	1	30				
Dibenz(a,h)anthracene	100	104	37-151	4	30				
Dibenzofuran	92	91	38-148	1	30				
Fluoranthene	86	87	30-151	1	30				
Fluorene	94	92	36-140	3	30				
Indeno(1,2,3-cd)pyrene	99	105	31-154	6	30				
2-Methylphenol	100	102	32-146	2	30				
4-Methylphenol	97	104	36-149	7	30				
Naphthalene	92	93	35-141	1	30				
Pentachlorophenol	8*	12*	23-145	34*	30				
Phenanthrene	94	96	34-147	1	30				
Phenol	90	95	39-151	5	30				
Pyrene	93	93	29-148	0	30				
Batch number: 130180007A	Sample number(s): 6926640			UNSPK: 6926640					
2,4,5-TP	105	120	10-142	14	35				
Batch number: 130180006A	Sample number(s): 6926640			UNSPK: P924129					
PCB-1016	95	102	29-146	6	50				
PCB-1260	85	96	39-149	12	50				
Batch number: 130180009A	Sample number(s): 6926640			UNSPK: P926232					
Aldrin	84	80	18-138	6	50				
Alpha BHC	50	11	9-143	127*	50				
Beta BHC	5*	105	14-168	34	50				
Gamma BHC - Lindane	51	47	14-143	6	50				
Alpha Chlordane	30	36	15-153	5	50				
p,p-DDD	177*	191*	17-163	8	50				
p,p-DDE	-66 (2)	16 (2)	22-169	15	50				
p,p-DDT	-20 (2)	86 (2)	4-159	18	50				
Delta BHC	28*	29*	30-144	2	50				
Dieldrin	47	82	17-163	27	50				
Endosulfan I	49	47	8-137	4	50				
Endosulfan II	59	54	17-146	10	50				
Endosulfan Sulfate	-29*	34	6-190	51*	50				
Endrin	-7*	7*	25-166	13	50				
Heptachlor	93	87	25-148	6	50				
Batch number: 130205708001	Sample number(s): 6926640			UNSPK: 6926640		BKG: 6926640			
Arsenic	100	94	75-125	2	20	3.59	3.48	3 (1)	20
Barium	107	103	75-125	1	20	42.2	42.4	0	20
Beryllium	102	99	83-111	0	20	0.591	0.602	2 (1)	20
Cadmium	96	95	75-125	2	20	N.D.	N.D.	0 (1)	20

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1363014
Reported: 01/24/13 at 02:41 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Chromium	118	112	75-125	1	20	9.99	10.2	2	20
Copper	105	98	75-125	3	20	14.9	13.0	13	20
Lead	100	96	75-125	1	20	11.7	12.0	3	20
Manganese	229 (2)	91 (2)	75-125	18	20	282	316	11	20
Nickel	99	98	75-125	1	20	11.8	11.8	0	20
Selenium	100	99	75-125	2	20	1.27 J	1.34 J	6 (1)	20
Silver	93	92	75-125	2	20	N.D.	N.D.	0 (1)	20
Zinc	104	103	75-125	1	20	40.5	40.7	0	20
Batch number: 130205711001	Sample number(s): 6926640 UNSPK: 6926640 BKG: 6926640								
Mercury	125*	126*	80-120	1	20	0.0151 J	0.0245 J	47* (1)	20
Batch number: 13022102201A	Sample number(s): 6926640 UNSPK: P927565 BKG: P927565								
Total Cyanide (solid)	89		68-134			0.24 J	0.38 J	47* (1)	20
Batch number: 13022103201A	Sample number(s): 6926640 UNSPK: P929241 BKG: P929241								
Amenable Cyanide (solid)	0		-20-20			N.D.	N.D.	0 (1)	20
Batch number: 13019042501A	Sample number(s): 6926640 UNSPK: P922862 BKG: P922862								
Hexavalent Chromium (SOLIDS)	138 (2)		75-125			471	478	1	20
Batch number: 13019820001A	Sample number(s): 6926640-6926642 BKG: P926301								
Moisture						20.0	19.5	2	13

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 8260 Benzene and Toluene
Batch number: B130211AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6926641	108	104	98	80
6926642	108	100	101	76
Blank	110	102	91	91
LCS	105	101	98	98
LCSD	108	105	96	98
MS	105	99	97	96
MSD	103	96	97	97
Limits:	50-141	54-135	52-141	50-131

Analysis Name: TCL 8270 (microwave)
Batch number: 13023SLB026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6926640	88	93	54	73	96	100
Blank	96	101	107	92	102	110

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1363014
Reported: 01/24/13 at 02:41 PM

Surrogate Quality Control

LCS	100	102	101	92	100	110
MS	91	94	30	81	97	102
MSD	94	97	39	82	93	102
Limits:	42-130	48-136	28-139	45-123	47-126	46-143

Analysis Name: PCBs in Soil (microwave)
Batch number: 130180006A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6926640	77	54
Blank	122	114
LCS	123	119
MS	110	94
MSD	116	107
Limits:	33-143	24-164

Analysis Name: Herbicide soils 8151A Master
Batch number: 130180007A

	2,4-Dichlorophenylacetic acid
6926640	126
Blank	98
LCS	115
MS	121
MSD	204*
Limits:	36-156

Analysis Name: TCL Pesticides 8081A Soil
Batch number: 130180009A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6926640	117	74
Blank	88	92
LCS	81	90
MS	80	52
MSD	90	34*
Limits:	33-140	45-150

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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NYSDEC ASP Category A Data Package

Prepared for:

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

Project: Tappan Terminal
Soil Samples
Collected on 01/17/13

SDG# TAP06

GROUP	SAMPLE NUMBERS
1363014	6926640-6926642

PA Cert. # 36-00037
NY Cert. # 10670
NJ Cert. # PA011
NC Cert. # 521
TX Cert. # T104704194-08A-TX

Through our technical processes and second person review of data, we have established that our data/deliverables are in compliance with the methods and project requirements unless otherwise noted or previously resolved with the client.

Authorized by: Dana M Kauffman **Date:** **02/28/2013**

Dana M. Kauffman
Manager

Any questions or concerns you might have regarding this data package should be directed to your client representative, Barbara Weyandt at Ext. 1576.

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Table of Contents for SDG# TAP06

1. Sample Reference List 4

2. Methodology Summary/Reference 5

3. Analysis Reports / Field Chain of Custody 9

4. Sample Receipt Documentation Log 28

5. Volatiles by GC/MS Data 29

    a. Case Narrative/Conformance Summary 30

    b. Sample Data 33

6. Semivolatiles by GC/MS Data 47

    a. Case Narrative/Conformance Summary 48

    b. Sample Data 51

7. Herbicides Data 57

    a. Case Narrative/Conformance Summary 58

    b. Sample Data 61

8. Pesticides Data 67

    a. Case Narrative/Conformance Summary 68

    b. Sample Data 71

9. Polychlorinated Biphenyls (PCBs) Data 75

    a. Case Narrative/Conformance Summary 76

    b. Sample Data 79

10. Metals in Solid Data 83

    a. Case Narrative/Conformance Summary 84

    b. Sample Data 87

11. Instrumental Wet Chemistry Data 89

a. Case Narrative/Conformance Summary 90

12. Wet Chemistry Data 93

a. Case Narrative/Conformance Summary 94

13. Moisture Data 96

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Sample Reference List for SDG Number TAP06
with a Data Package Type of NYSDEC A

01907 - American Environmental Assess.

Project: Tappan Terminal

Lab Sample Number	Lab Sample Code	Client Sample Description
6926640	TSC-1	POC2-TSC1 Composite Soil S2010L4632
6926641	2-TS1	POC2-TS1 Grab Soil S2010L4632
6926642	2-TS2	POC2-TS2 Grab Soil S2010L4632

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10237 8260 Ext. Soil Master w/GRO

The soil sample is purged and the volatile compounds are collected on a sorbent trap that is subsequently desorbed onto the GC/MS system for chromatographic and mass spectral analysis.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8260B, December 1996

00159 Mercury

The solution resulting from the mercury digestion is analyzed by Cold Vapor AA.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 7471A, September 1994

02829 Trivalent Chromium soils

Calculation performed by subtracting hexavalent chromium from total chromium.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 6010B Modified, December 1996.

05711 SW SW846 Hg Digest

The sample is heated at 95 c with nitric acid, sulfuric acid, potassium persulfate, and potassium permanganate. Excess potassium permanganate is reduced with sodium chloride/hydroxylamine hydrochloride. Mercuric ions are reduced to mercury metal using stannous chloride.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 7471A Modified, September 1994.

06935 Arsenic
06946 Barium
06947 Beryllium
06949 Cadmium
06951 Chromium
06953 Copper
06955 Lead
06958 Manganese
06961 Nickel
06936 Selenium
06966 Silver
06972 Zinc

The solution resulting from the metals digestion is analyzed by Trace ICP.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 6010B, December 1996.

05708 SW SW846 ICP/ICP MS Digest

The sample is digested with nitric acid, hydrochloric acid and hydrogen peroxide.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 3050B, December 1996

10738 Pesticides in Soil (microwave)

The sample is solvent extracted and exchanged to hexane. Florisil cleanup is performed to reduce potential matrix interferences. The extract is analyzed using gas chromatography on two capillary columns (primary and confirmation) with electron capture detectors.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8081A, December 1996.

10401 Herbicide soils 8151A Master

The sample is acidified and solvent extracted. The extract is then hydrolyzed, solvent washed, and acidified for final extraction. The chlorophenoxy acids, phenols and related target compounds are converted to the methyl esters using diazomethane. Florisil cleanup is performed to reduce potential matrix interferences.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8151A, December 1996.

04181 Herbicide Soil Extraction

The sample is acidified and solvent extracted. The extract is then hydrolyzed, solvent washed, and acidified for final extraction. The chlorophenoxy acids, phenols and related target compounds are converted to the methyl esters using diazomethane. Florisil cleanup is performed to reduce potential matrix interferences.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Methods 3550B & 8151A, December 1996.

10736 PCBs in Soil (microwave)

The sample is solvent-extracted and exchanged to hexane. Sulfuric acid and Florisil cleanups are performed to reduce potential matrix interferences. The extract is analyzed using gas chromatography on two capillary columns (primary and confirmation) with electron capture detectors.

Reference: Test Methods for Evaluating Solid Waste, SW-846 Method 8082, December 1996.

10497 PCB Microwave Soil Extraction
10809 BNA Soil Microwave

The sample aliquot is extracted using microwave extraction with 1:1 methylene chloride and acetone. The extract is concentrated prior to analysis.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 3546, Revision 0, February 2007.

10496 PPL Pest. Microwave Extraction

The sample aliquot is extracted using microwave extraction with 1:1 hexane and acetone. The extract is concentrated prior to analysis.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 3546, Revision 0, February 2007.

10727 TCL 8270 (microwave)

The sample extract is analyzed by capillary column Gas Chromatography/Mass Spectrometry.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8270C, December 1996

05895 Total Cyanide (solid)

During the distillation step, complex cyanides are converted to hydrogen cyanide which readily reacts with chloramine T. Simple cyanides are converted to cyanogen chloride by reaction with chloramine T. This reacts with pyridine and barbituric acid to give a red colored complex determined colorimetrically.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 9012B, August 2002.

05896 Cyanide Solid Distillation

The sample is acidified and distilled. Cyanide is released as hydrogen cyanide and is absorbed in a sodium hydroxide solution.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 9012B, August 2002.

05898 Amenable Cyanide (solid)
05897 Amenable Cyanide Solid Distill

A portion of the sample is pretreated with chlorine to release the dissociable cyanide. Both treated and untreated portions of the sample are acidified and distilled. Cyanide is released as hydrogen cyanide and is absorbed in a sodium hydroxide solution. The amenable cyanide is calculated as the difference between the untreated and chlorine treated portions.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 9012B, August 2002.

00425 Hexavalent Chromium (SOLIDS)

The filtrate from method #7825 is analyzed colorimetrically using diphenylcarbazide to produce a red-violet color. The absorbance is read at 540 nm and compared to a standard curve.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 7196A, July 1992.

07825 Hexavalent Cr (Extraction)

The sample is digested using a 3% sodium carbonate - 2% sodium hydroxide solution and then filtered through a 0.45 micron filter.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 3060A, December 1996

00111 Moisture

A well-mixed sample is placed in a tared container and dried to a constant weight in an oven at 103-105C. The increase in weight is the total solids.

Reference: Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998, Method 2540 G

00374 GC/MS - Bulk Soil Prep

Samples are field collected in glass containers, and preserved within 48 hours. An aliquot of the soil sample is prepared in reagent water and is purged at 40oC with helium.

Reference: Test Methods for Evaluating Solid Waste, SW-846, Method 5035A Modified, July 2002.

06646 GC/MS HL Bulk Sample Prep

Samples are field collected in glass containers, and preserved within 48 hours. An aliquot of the methanolic extract of the sample is diluted in reagent water and purged at ambient temperature with helium.

Reference: Test Methods for Evaluating Solid Waste, SW-846, Method 5035A Modified, July 2002.

Analysis Reports / Field Chain of Custody

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

January 24, 2013

Project: Tappan Terminal

Submittal Date: 01/18/2013
Group Number: 1363014
SDG: TAP06
PO Number: 15249
State of Sample Origin: NY

Client Sample Description	Lancaster Labs (LLI) #
POC2-TSC1 Composite Soil	6926640
POC2-TS1 Grab Soil	6926641
POC2-TS2 Grab Soil	6926642

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	Roux Associates	Attn: Tracy Bispham
ELECTRONIC COPY TO	Exxon Mobil: Woodard & Curran	Attn: Anne Proctor
ELECTRONIC COPY TO	Roux	Attn: Noelle Clarke
1 COPY TO	Data Package Group	

Respectfully Submitted,

Barbara Weyandt

Barbara A. Weyandt
Specialist

(717) 556-7264

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Sample Description: **POC2-TSC1 Composite Soil**
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6926640
LLI Group # 1363014
Account # 01907

Project Name: Tappan Terminal

Collected: 01/17/2013 16:15 by KC

Submitted: 01/18/2013 09:15
Reported: 01/24/2013 14:41

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

TSC-1 SDG#: TAP06-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	
10727	Acenaphthene	83-32-9	4	J	4	1
10727	Acenaphthylene	208-96-8	N.D.		4	1
10727	Anthracene	120-12-7	15	J	4	1
10727	Benzo(a)anthracene	56-55-3	99		4	1
10727	Benzo(a)pyrene	50-32-8	110		4	1
10727	Benzo(b)fluoranthene	205-99-2	160		4	1
10727	Benzo(g,h,i)perylene	191-24-2	90		4	1
10727	Benzo(k)fluoranthene	207-08-9	68		4	1
10727	Chrysene	218-01-9	140		4	1
10727	Dibenz(a,h)anthracene	53-70-3	19	J	4	1
10727	Dibenzofuran	132-64-9	N.D.		20	1
10727	Fluoranthene	206-44-0	200		4	1
10727	Fluorene	86-73-7	5	J	4	1
10727	Indeno(1,2,3-cd)pyrene	193-39-5	83		4	1
10727	2-Methylphenol	95-48-7	N.D.		20	1
10727	4-Methylphenol	106-44-5	59		20	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10727	Naphthalene	91-20-3	5	J	4	1
10727	Pentachlorophenol	87-86-5	N.D.		40	1
10727	Phenanthrene	85-01-8	83		4	1
10727	Phenol	108-95-2	N.D.		20	1
10727	Pyrene	129-00-0	200		4	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	
10401	2,4,5-TP	93-72-1	N.D.		0.89	1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	
10738	Aldrin	309-00-2	0.33	J	0.20	1
10738	Alpha BHC	319-84-6	N.D.		0.20	1
10738	Beta BHC	319-85-7	N.D.		1.1	1
10738	Gamma BHC - Lindane	58-89-9	N.D.		0.20	1
10738	Alpha Chlordane	5103-71-9	N.D.		0.20	1
10738	p,p-DDD	72-54-8	N.D.		0.55	1
10738	p,p-DDE	72-55-9	0.74	J	0.39	1
10738	p,p-DDT	50-29-3	N.D.		0.42	1
10738	Delta BHC	319-86-8	N.D.		0.54	1
10738	Dieldrin	60-57-1	0.62	J	0.39	1
10738	Endosulfan I	959-98-8	0.31	J	0.26	1
10738	Endosulfan II	33213-65-9	N.D.		0.39	1
10738	Endosulfan Sulfate	1031-07-8	N.D.		0.39	1
10738	Endrin	72-20-8	N.D.		0.39	1
10738	HCB	118-74-1	2.7		0.25	1
10738	Heptachlor	76-44-8	1.1		0.20	1
	Reporting limits were raised due to interference from the sample matrix.					
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	
10736	PCB-1016	12674-11-2	N.D.		4.3	1

Sample Description: **POC2-TSC1 Composite Soil**
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6926640
LLI Group # 1363014
Account # 01907

Project Name: Tappan Terminal

Collected: 01/17/2013 16:15 by KC

Submitted: 01/18/2013 09:15
Reported: 01/24/2013 14:41

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

TSC-1 SDG#: TAP06-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	
10736	PCB-1221	11104-28-2	N.D.		5.4	1
10736	PCB-1232	11141-16-5	N.D.		9.5	1
10736	PCB-1242	53469-21-9	N.D.		3.9	1
10736	PCB-1248	12672-29-6	N.D.		3.9	1
10736	PCB-1254	11097-69-1	N.D.		3.9	1
10736	PCB-1260	11096-82-5	N.D.		5.8	1
	The % difference for the calibration verification standard is outside the +/- 15% criteria for the analyte(s) listed below. Since the average of the % difference values meets the criteria, the results are reported. This applies to the following analyte(s): decachlorobiphenyl surrogate					
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	
06935	Arsenic	7440-38-2	4.28		0.389	1
06946	Barium	7440-39-3	50.3		0.0389	1
06947	Beryllium	7440-41-7	0.705		0.0791	1
06949	Cadmium	7440-43-9	N.D.		0.0389	1
06951	Chromium	7440-47-3	11.9		0.104	1
06953	Copper	7440-50-8	17.7		0.212	1
06955	Lead	7439-92-1	13.9		0.555	1
06958	Manganese	7439-96-5	336		0.0979	1
06961	Nickel	7440-02-0	14.1		0.130	1
06936	Selenium	7782-49-2	1.51	J	0.850	1
06966	Silver	7440-22-4	N.D.		0.165	1
06972	Zinc	7440-66-6	48.3		0.236	1
	SW-846 6010B modified		**mg/kg**		**mg/kg**	
02829	Trivalent Chromium soils	16065-83-1	11.9		0.60	1
	The Trivalent Chromium result is calculated by subtracting Hexavalent Chromium from Total Chromium.					
	SW-846 7471A		**mg/kg**		**mg/kg**	
00159	Mercury	7439-97-6	0.0180	J	0.0121	1
Wet Chemistry	**SW-846 9012B**		**mg/kg**		**mg/kg**	
05898	Amenable Cyanide (solid)	n.a.	N.D.		0.21	1
05895	Total Cyanide (solid)	57-12-5	N.D.		0.21	1
	SW-846 7196A		**mg/kg**		**mg/kg**	
00425	Hexavalent Chromium (SOLIDS)	18540-29-9	N.D.		0.60	1
Wet Chemistry	**SM 2540 G-1997**		**%**		**%**	
00111	Moisture	n.a.	16.1		0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

Sample Description: **POC2-TSC1 Composite Soil**
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6926640
LLI Group # 1363014
Account # 01907

Project Name: Tappan Terminal

Collected: 01/17/2013 16:15 by KC

Submitted: 01/18/2013 09:15
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American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

TSC-1 SDG#: TAP06-01

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10727	Table 375-6.8(a) SVOCs	SW-846 8270C	1	13023SLB026	01/24/2013 12:50	Brian K Graham	1
10809	BNA Soil Microwave	SW-846 3546	2	13023SLB026	01/23/2013 14:00	David S Schrum	1
10401	Table 375-6.8(a) Herbicides	SW-846 8151A	1	130180007A	01/21/2013 23:12	Matthew S Listner	1
10738	Table 375-6.8(a) Pesticides	SW-846 8081A	1	130180009A	01/22/2013 13:18	Jamie L Brillhart	1
10736	PCBs 8082 Soil	SW-846 8082	1	130180006A	01/21/2013 15:27	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	130180006A	01/19/2013 02:10	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	130180009A	01/21/2013 03:00	David V Hershey Jr	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	130180007A	01/21/2013 01:30	Sherry L Morrow	1
06935	Arsenic	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
06946	Barium	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
06947	Beryllium	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
06949	Cadmium	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
06951	Chromium	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
06953	Copper	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
06955	Lead	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
06958	Manganese	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
06961	Nickel	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
06936	Selenium	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
06966	Silver	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
06972	Zinc	SW-846 6010B	1	130205708001	01/21/2013 18:23	John P Hook	1
02829	Trivalent Chromium soils	SW-846 6010B modified	1	130232829010	01/23/2013 06:00	Jennifer L Moyer	1
00159	Mercury	SW-846 7471A	1	130205711001	01/22/2013 04:34	Damary Valentin	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	130205708001	01/21/2013 06:11	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	130205711001	01/21/2013 07:56	James L Mertz	1
05898	Amenable Cyanide (solid)	SW-846 9012B	1	13022103201A	01/23/2013 10:43	K Robert Caulfeild-James	1
05895	Total Cyanide (solid)	SW-846 9012B	1	13022102201A	01/23/2013 10:32	K Robert Caulfeild-James	1
05897	Amenable Cyanide Solid Distill	SW-846 9012B	1	13022103201A	01/22/2013 09:55	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	13022102201A	01/22/2013 09:55	Nancy J Shoop	1
00425	Hexavalent Chromium (SOLIDS)	SW-846 7196A	1	13019042501A	01/21/2013 22:15	Daniel S Smith	1

Sample Description: **POC2-TSC1 Composite Soil**
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6926640
LLI Group # 1363014
Account # 01907

Project Name: Tappan Terminal

Collected: 01/17/2013 16:15 by KC

Submitted: 01/18/2013 09:15
Reported: 01/24/2013 14:41

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

TSC-1 SDG#: TAP06-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07825	Hexavalent Cr (Extraction)	SW-846 3060A	1	13019042501A	01/19/2013 06:10	Daniel S Smith	1
00111	Moisture	SM 2540 G-1997	1	13019820001A	01/19/2013 08:46	Stephanie A Sanchez	1

Sample Description: **POC2-TS1 Grab Soil**
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6926641
LLI Group # 1363014
Account # 01907

Project Name: Tappan Terminal

Collected: 01/17/2013 16:05 by KC

Submitted: 01/18/2013 09:15
Reported: 01/24/2013 14:41

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

2-TS1 SDG#: TAP06-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**	**ug/kg**	
10237	Acetone	67-64-1	N.D.	8	0.96
10237	Benzene	71-43-2	N.D.	0.6	0.96
10237	2-Butanone	78-93-3	N.D.	5	0.96
10237	n-Butylbenzene	104-51-8	N.D.	1	0.96
10237	sec-Butylbenzene	135-98-8	N.D.	1	0.96
10237	tert-Butylbenzene	98-06-6	N.D.	1	0.96
10237	Carbon Tetrachloride	56-23-5	N.D.	1	0.96
10237	Chlorobenzene	108-90-7	N.D.	1	0.96
10237	Chloroform	67-66-3	N.D.	1	0.96
10237	1,2-Dichlorobenzene	95-50-1	N.D.	1	0.96
10237	1,3-Dichlorobenzene	541-73-1	N.D.	1	0.96
10237	1,4-Dichlorobenzene	106-46-7	N.D.	1	0.96
10237	1,1-Dichloroethane	75-34-3	N.D.	1	0.96
10237	1,2-Dichloroethane	107-06-2	N.D.	1	0.96
10237	1,1-Dichloroethene	75-35-4	N.D.	1	0.96
10237	cis-1,2-Dichloroethene	156-59-2	N.D.	1	0.96
10237	trans-1,2-Dichloroethene	156-60-5	N.D.	1	0.96
10237	1,4-Dioxane	123-91-1	N.D.	82	0.96
10237	Ethylbenzene	100-41-4	N.D.	1	0.96
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.6	0.96
10237	Methylene Chloride	75-09-2	N.D.	2	0.96
10237	n-Propylbenzene	103-65-1	N.D.	1	0.96
10237	Tetrachloroethene	127-18-4	N.D.	1	0.96
10237	Toluene	108-88-3	N.D.	1	0.96
10237	1,1,1-Trichloroethane	71-55-6	N.D.	1	0.96
10237	Trichloroethene	79-01-6	N.D.	1	0.96
10237	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	0.96
10237	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	0.96
10237	Vinyl Chloride	75-01-4	N.D.	1	0.96
10237	Xylene (Total)	1330-20-7	N.D.	1	0.96
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	17.6	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of New York Certification No. 10670

Lancaster Laboratories is responsible only for the certified testing of samples. We are not directly responsible for the integrity of the sample prior to laboratory receipt. Any reported concentrations less than 200 ug/kg may be biased low if they were not collected according to EPA 5035/5035A specifications.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Sample Description: POC2-TS1 Grab Soil
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6926641
LLI Group # 1363014
Account # 01907

Project Name: Tappan Terminal

Collected: 01/17/2013 16:05 by KC

Submitted: 01/18/2013 09:15
Reported: 01/24/2013 14:41

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

2-TS1 SDG#: TAP06-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	Table 375-6.8(a) VOCs	SW-846 8260B	1	B130211AA	01/21/2013 12:25	Angela D Sneeringer	0.96
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201301829964	01/18/2013 12:22	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201301829964	01/18/2013 12:22	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201301829964	01/18/2013 12:19	Larry E Bevins	n.a.
00111	Moisture	SM 2540 G-1997	1	13019820001A	01/19/2013 08:46	Stephanie A Sanchez	1

Sample Description: **POC2-TS2 Grab Soil**
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6926642
LLI Group # 1363014
Account # 01907

Project Name: Tappan Terminal

Collected: 01/17/2013 16:10 by KC

Submitted: 01/18/2013 09:15
Reported: 01/24/2013 14:41

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

2-TS2 SDG#: TAP06-03*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	
10237	Acetone	67-64-1	N.D.		8	0.99
10237	Benzene	71-43-2	N.D.		0.6	0.99
10237	2-Butanone	78-93-3	N.D.		5	0.99
10237	n-Butylbenzene	104-51-8	N.D.		1	0.99
10237	sec-Butylbenzene	135-98-8	N.D.		1	0.99
10237	tert-Butylbenzene	98-06-6	N.D.		1	0.99
10237	Carbon Tetrachloride	56-23-5	N.D.		1	0.99
10237	Chlorobenzene	108-90-7	N.D.		1	0.99
10237	Chloroform	67-66-3	N.D.		1	0.99
10237	1,2-Dichlorobenzene	95-50-1	N.D.		1	0.99
10237	1,3-Dichlorobenzene	541-73-1	N.D.		1	0.99
10237	1,4-Dichlorobenzene	106-46-7	N.D.		1	0.99
10237	1,1-Dichloroethane	75-34-3	N.D.		1	0.99
10237	1,2-Dichloroethane	107-06-2	N.D.		1	0.99
10237	1,1-Dichloroethene	75-35-4	N.D.		1	0.99
10237	cis-1,2-Dichloroethene	156-59-2	N.D.		1	0.99
10237	trans-1,2-Dichloroethene	156-60-5	N.D.		1	0.99
10237	1,4-Dioxane	123-91-1	N.D.		83	0.99
10237	Ethylbenzene	100-41-4	N.D.		1	0.99
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.		0.6	0.99
10237	Methylene Chloride	75-09-2	N.D.		2	0.99
10237	n-Propylbenzene	103-65-1	N.D.		1	0.99
10237	Tetrachloroethene	127-18-4	N.D.		1	0.99
10237	Toluene	108-88-3	2	J	1	0.99
10237	1,1,1-Trichloroethane	71-55-6	N.D.		1	0.99
10237	Trichloroethene	79-01-6	N.D.		1	0.99
10237	1,2,4-Trimethylbenzene	95-63-6	N.D.		1	0.99
10237	1,3,5-Trimethylbenzene	108-67-8	N.D.		1	0.99
10237	Vinyl Chloride	75-01-4	N.D.		1	0.99
10237	Xylene (Total)	1330-20-7	2	J	1	0.99

The recovery for the sample internal standard is outside the QC acceptance limits. The following corrective action was taken: The sample was re-analyzed and the QC is again outside of the acceptance limits, indicating a matrix effect. The data is reported from the initial trial.

Wet Chemistry	**SM 2540 G-1997**		**%**		**%**	
00111	Moisture	n.a.	15.9		0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

Sample Description: **POC2-TS2 Grab Soil**
S2010L4632
EXXONMOBIL: Tappan Terminal, NY

LLI Sample # SW 6926642
LLI Group # 1363014
Account # 01907

Project Name: Tappan Terminal

Collected: 01/17/2013 16:10 by KC

Submitted: 01/18/2013 09:15
Reported: 01/24/2013 14:41

American Environmental Assess.
188 Long Island Avenue
Wyandanch NY 11798

2-TS2 SDG#: TAP06-03*

General Sample Comments

State of New York Certification No. 10670

Lancaster Laboratories is responsible only for the certified testing of samples. We are not directly responsible for the integrity of the sample prior to laboratory receipt. Any reported concentrations less than 200 ug/kg may be biased low if they were not collected according to EPA 5035/5035A specifications.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	Table 375-6.8(a) VOCs	SW-846 8260B	1	B130211AA	01/21/2013 12:47	Angela D Sneeringer	0.99
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201301829964	01/18/2013 12:22	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201301829964	01/18/2013 12:22	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201301829964	01/18/2013 12:22	Larry E Bevins	n.a.
00111	Moisture	SM 2540 G-1997	1	13019820001A	01/19/2013 08:46	Stephanie A Sanchez	1

Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1363014
Reported: 01/24/13 at 02:41 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B130211AA	Sample number(s): 6926641-6926642							
Acetone	N.D.	7.	ug/kg	91	97	32-209	7	30
Benzene	N.D.	0.5	ug/kg	109	107	80-120	1	30
2-Butanone	N.D.	4.	ug/kg	83	89	37-155	6	30
n-Butylbenzene	N.D.	1.	ug/kg	94	89	72-120	5	30
sec-Butylbenzene	N.D.	1.	ug/kg	99	97	75-120	2	30
tert-Butylbenzene	N.D.	1.	ug/kg	94	92	75-120	2	30
Carbon Tetrachloride	N.D.	1.	ug/kg	109	109	69-122	1	30
Chlorobenzene	N.D.	1.	ug/kg	100	102	80-120	3	30
Chloroform	N.D.	1.	ug/kg	108	108	80-120	0	30
1,2-Dichlorobenzene	N.D.	1.	ug/kg	96	95	79-120	0	30
1,3-Dichlorobenzene	N.D.	1.	ug/kg	99	100	78-120	0	30
1,4-Dichlorobenzene	N.D.	1.	ug/kg	96	96	79-120	0	30
1,1-Dichloroethane	N.D.	1.	ug/kg	107	108	80-120	1	30
1,2-Dichloroethane	N.D.	1.	ug/kg	110	111	70-137	1	30
1,1-Dichloroethene	N.D.	1.	ug/kg	110	112	73-129	2	30
cis-1,2-Dichloroethene	N.D.	1.	ug/kg	115	115	80-120	0	30
trans-1,2-Dichloroethene	N.D.	1.	ug/kg	109	109	79-120	0	30
1,4-Dioxane	N.D.	70.	ug/kg	94	100	48-129	6	30
Ethylbenzene	N.D.	1.	ug/kg	102	103	80-120	1	30
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/kg	105	108	74-121	3	30
Methylene Chloride	N.D.	2.	ug/kg	110	111	76-124	1	30
n-Propylbenzene	N.D.	1.	ug/kg	88	87	77-120	2	30
Tetrachloroethene	N.D.	1.	ug/kg	108	107	78-126	1	30
Toluene	N.D.	1.	ug/kg	102	102	80-120	0	30
1,1,1-Trichloroethane	N.D.	1.	ug/kg	99	99	71-125	0	30
Trichloroethene	N.D.	1.	ug/kg	108	109	80-120	1	30
1,2,4-Trimethylbenzene	N.D.	1.	ug/kg	99	99	79-120	1	30
1,3,5-Trimethylbenzene	N.D.	1.	ug/kg	100	97	78-120	2	30
Vinyl Chloride	N.D.	1.	ug/kg	91	94	53-120	4	30
Xylene (Total)	N.D.	1.	ug/kg	101	102	80-120	1	30
Batch number: 13023SLB026	Sample number(s): 6926640							
Acenaphthene	N.D.	3.	ug/kg	98		83-111		
Acenaphthylene	N.D.	3.	ug/kg	105		83-127		
Anthracene	N.D.	3.	ug/kg	105		83-111		
Benzo(a)anthracene	N.D.	3.	ug/kg	100		73-123		
Benzo(a)pyrene	N.D.	3.	ug/kg	111		80-123		
Benzo(b)fluoranthene	N.D.	3.	ug/kg	116		76-124		
Benzo(g,h,i)perylene	N.D.	3.	ug/kg	104		77-122		
Benzo(k)fluoranthene	N.D.	3.	ug/kg	103		71-135		
Chrysene	N.D.	3.	ug/kg	99		73-119		
Dibenz(a,h)anthracene	N.D.	3.	ug/kg	103		67-129		
Dibenzofuran	N.D.	17.	ug/kg	99		78-116		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1363014
Reported: 01/24/13 at 02:41 PM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Fluoranthene	N.D.	3.	ug/kg	103		80-120		
Fluorene	N.D.	3.	ug/kg	105		81-117		
Indeno(1,2,3-cd)pyrene	N.D.	3.	ug/kg	102		64-128		
2-Methylphenol	N.D.	17.	ug/kg	109		75-126		
4-Methylphenol	N.D.	17.	ug/kg	108		74-116		
Naphthalene	N.D.	3.	ug/kg	97		77-115		
Pentachlorophenol	N.D.	33.	ug/kg	84		60-134		
Phenanthrene	N.D.	3.	ug/kg	102		77-119		
Phenol	N.D.	17.	ug/kg	98		69-126		
Pyrene	N.D.	3.	ug/kg	97		80-121		
Batch number: 130180007A	Sample number(s): 6926640							
2,4,5-TP	N.D.	0.75	ug/kg	120*		60-111		
Batch number: 130180006A	Sample number(s): 6926640							
PCB-1016	N.D.	3.6	ug/kg	112		64-121		
PCB-1221	N.D.	4.6	ug/kg					
PCB-1232	N.D.	8.0	ug/kg					
PCB-1242	N.D.	3.3	ug/kg					
PCB-1248	N.D.	3.3	ug/kg					
PCB-1254	N.D.	3.3	ug/kg					
PCB-1260	N.D.	4.9	ug/kg	118		72-123		
Batch number: 130180009A	Sample number(s): 6926640							
Aldrin	N.D.	0.17	ug/kg	85		62-134		
Alpha BHC	N.D.	0.17	ug/kg	86		67-131		
Beta BHC	N.D.	0.96	ug/kg	89		59-161		
Gamma BHC - Lindane	N.D.	0.17	ug/kg	89		66-132		
Alpha Chlordane	N.D.	0.17	ug/kg	88		64-140		
p,p-DDD	N.D.	0.33	ug/kg	100		73-131		
p,p-DDE	N.D.	0.33	ug/kg	90		72-132		
p,p-DDT	N.D.	0.35	ug/kg	99		65-131		
Delta BHC	N.D.	0.45	ug/kg	93		44-145		
Dieldrin	N.D.	0.33	ug/kg	94		71-134		
Endosulfan I	N.D.	0.22	ug/kg	84		57-127		
Endosulfan II	N.D.	0.33	ug/kg	89		63-127		
Endosulfan Sulfate	N.D.	0.33	ug/kg	86		80-137		
Endrin	N.D.	0.33	ug/kg	89		66-136		
HCB	N.D.	0.21	ug/kg					
Heptachlor	N.D.	0.17	ug/kg	90		68-132		
Batch number: 130205708001	Sample number(s): 6926640							
Arsenic	N.D.	0.330	mg/kg	98		80-120		
Barium	N.D.	0.0330	mg/kg	99		80-120		
Beryllium	0.132 J	0.0670	mg/kg	102		80-120		
Cadmium	N.D.	0.0330	mg/kg	100		80-120		
Chromium	N.D.	0.0880	mg/kg	99		80-120		
Copper	0.446 J	0.180	mg/kg	103		80-120		
Lead	N.D.	0.470	mg/kg	103		80-120		
Manganese	N.D.	0.0830	mg/kg	100		80-120		
Nickel	N.D.	0.110	mg/kg	103		80-120		
Selenium	N.D.	0.720	mg/kg	99		80-120		
Silver	N.D.	0.140	mg/kg	94		80-120		
Zinc	0.326 J	0.200	mg/kg	100		80-120		
Batch number: 130205711001	Sample number(s): 6926640							

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1363014
Reported: 01/24/13 at 02:41 PM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Mercury	N.D.	0.0103	mg/kg	97		80-120		
Batch number: 13022102201A	Sample number(s): 6926640							
Total Cyanide (solid)	N.D.	0.18	mg/kg	101		90-110		
Batch number: 13022103201A	Sample number(s): 6926640							
Amenable Cyanide (solid)	N.D.	0.18	mg/kg	0		-20-20		
Batch number: 13019042501A	Sample number(s): 6926640							
Hexavalent Chromium (SOLIDS)	N.D.	0.50	mg/kg	99		80-120		
Batch number: 13019820001A	Sample number(s): 6926640-6926642							
Moisture				100		99-101		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: B130211AA	Sample number(s): 6926641-6926642 UNSPK: P927354								
Acetone	107	98	31-195	10	30				
Benzene	111	110	55-143	2	30				
2-Butanone	77	72	37-163	8	30				
n-Butylbenzene	89	93	30-146	3	30				
sec-Butylbenzene	97	103	33-157	5	30				
tert-Butylbenzene	93	97	41-152	3	30				
Carbon Tetrachloride	117	116	45-153	1	30				
Chlorobenzene	100	103	49-135	2	30				
Chloroform	109	109	61-142	1	30				
1,2-Dichlorobenzene	93	94	36-133	1	30				
1,3-Dichlorobenzene	96	98	34-134	2	30				
1,4-Dichlorobenzene	93	96	35-136	3	30				
1,1-Dichloroethane	111	111	63-142	1	30				
1,2-Dichloroethane	108	106	68-131	3	30				
1,1-Dichloroethene	120	118	61-149	3	30				
cis-1,2-Dichloroethene	115	112	60-136	3	30				
trans-1,2-Dichloroethene	116	111	59-142	4	30				
1,4-Dioxane	98	106	39-180	8	30				
Ethylbenzene	100	103	44-141	3	30				
Methyl Tertiary Butyl Ether	100	97	55-129	3	30				
Methylene Chloride	114	112	61-141	2	30				
n-Propylbenzene	87	91	39-157	4	30				
Tetrachloroethene	120	117	42-149	3	30				
Toluene	104	106	50-146	1	30				
1,1,1-Trichloroethane	103	102	64-142	2	30				
Trichloroethene	112	110	53-144	3	30				
1,2,4-Trimethylbenzene	96	101	37-149	5	30				
1,3,5-Trimethylbenzene	98	102	38-150	4	30				
Vinyl Chloride	100	98	50-154	4	30				
Xylene (Total)	99	102	44-136	2	30				

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1363014
Reported: 01/24/13 at 02:41 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13023SLB026	Sample number(s): 6926640			UNSPK: P929330					
Acenaphthene	91	90	33-140	1	30				
Acenaphthylene	98	96	47-137	2	30				
Anthracene	97	97	40-147	0	30				
Benzo(a)anthracene	91	92	32-150	1	30				
Benzo(a)pyrene	99	101	30-150	2	30				
Benzo(b)fluoranthene	97	103	29-150	7	30				
Benzo(g,h,i)perylene	99	103	31-152	4	30				
Benzo(k)fluoranthene	97	92	35-148	5	30				
Chrysene	88	89	33-142	1	30				
Dibenz(a,h)anthracene	100	104	37-151	4	30				
Dibenzofuran	92	91	38-148	1	30				
Fluoranthene	86	87	30-151	1	30				
Fluorene	94	92	36-140	3	30				
Indeno(1,2,3-cd)pyrene	99	105	31-154	6	30				
2-Methylphenol	100	102	32-146	2	30				
4-Methylphenol	97	104	36-149	7	30				
Naphthalene	92	93	35-141	1	30				
Pentachlorophenol	8*	12*	23-145	34*	30				
Phenanthrene	94	96	34-147	1	30				
Phenol	90	95	39-151	5	30				
Pyrene	93	93	29-148	0	30				
Batch number: 130180007A	Sample number(s): 6926640			UNSPK: 6926640					
2,4,5-TP	105	120	10-142	14	35				
Batch number: 130180006A	Sample number(s): 6926640			UNSPK: P924129					
PCB-1016	95	102	29-146	6	50				
PCB-1260	85	96	39-149	12	50				
Batch number: 130180009A	Sample number(s): 6926640			UNSPK: P926232					
Aldrin	84	80	18-138	6	50				
Alpha BHC	50	11	9-143	127*	50				
Beta BHC	5*	105	14-168	34	50				
Gamma BHC - Lindane	51	47	14-143	6	50				
Alpha Chlordane	30	36	15-153	5	50				
p,p-DDD	177*	191*	17-163	8	50				
p,p-DDE	-66 (2)	16 (2)	22-169	15	50				
p,p-DDT	-20 (2)	86 (2)	4-159	18	50				
Delta BHC	28*	29*	30-144	2	50				
Dieldrin	47	82	17-163	27	50				
Endosulfan I	49	47	8-137	4	50				
Endosulfan II	59	54	17-146	10	50				
Endosulfan Sulfate	-29*	34	6-190	51*	50				
Endrin	-7*	7*	25-166	13	50				
Heptachlor	93	87	25-148	6	50				
Batch number: 130205708001	Sample number(s): 6926640			UNSPK: 6926640		BKG: 6926640			
Arsenic	100	94	75-125	2	20	3.59	3.48	3 (1)	20
Barium	107	103	75-125	1	20	42.2	42.4	0	20
Beryllium	102	99	83-111	0	20	0.591	0.602	2 (1)	20
Cadmium	96	95	75-125	2	20	N.D.	N.D.	0 (1)	20

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1363014
Reported: 01/24/13 at 02:41 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Chromium	118	112	75-125	1	20	9.99		10.2		2	20
Copper	105	98	75-125	3	20	14.9		13.0		13	20
Lead	100	96	75-125	1	20	11.7		12.0		3	20
Manganese	229 (2)	91 (2)	75-125	18	20	282		316		11	20
Nickel	99	98	75-125	1	20	11.8		11.8		0	20
Selenium	100	99	75-125	2	20	1.27	J	1.34	J	6 (1)	20
Silver	93	92	75-125	2	20	N.D.		N.D.		0 (1)	20
Zinc	104	103	75-125	1	20	40.5		40.7		0	20
Batch number: 130205711001	Sample number(s): 6926640 UNSPK: 6926640 BKG: 6926640										
Mercury	125*	126*	80-120	1	20	0.0151	J	0.0245	J	47* (1)	20
Batch number: 13022102201A	Sample number(s): 6926640 UNSPK: P927565 BKG: P927565										
Total Cyanide (solid)	89		68-134			0.24	J	0.38	J	47* (1)	20
Batch number: 13022103201A	Sample number(s): 6926640 UNSPK: P929241 BKG: P929241										
Amenable Cyanide (solid)	0		-20-20			N.D.		N.D.		0 (1)	20
Batch number: 13019042501A	Sample number(s): 6926640 UNSPK: P922862 BKG: P922862										
Hexavalent Chromium (SOLIDS)	138 (2)		75-125			471		478		1	20
Batch number: 13019820001A	Sample number(s): 6926640-6926642 BKG: P926301										
Moisture						20.0		19.5		2	13

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 8260 Benzene and Toluene
Batch number: B130211AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6926641	108	104	98	80
6926642	108	100	101	76
Blank	110	102	91	91
LCS	105	101	98	98
LCSD	108	105	96	98
MS	105	99	97	96
MSD	103	96	97	97
Limits:	50-141	54-135	52-141	50-131

Analysis Name: TCL 8270 (microwave)
Batch number: 13023SLB026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6926640	88	93	54	73	96	100
Blank	96	101	107	92	102	110

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: American Environmental Assess. Group Number: 1363014
Reported: 01/24/13 at 02:41 PM

Surrogate Quality Control

LCS	100	102	101	92	100	110
MS	91	94	30	81	97	102
MSD	94	97	39	82	93	102
Limits:	42-130	48-136	28-139	45-123	47-126	46-143

Analysis Name: PCBs in Soil (microwave)
Batch number: 130180006A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6926640	77	54
Blank	122	114
LCS	123	119
MS	110	94
MSD	116	107
Limits:	33-143	24-164

Analysis Name: Herbicide soils 8151A Master
Batch number: 130180007A

	2,4-Dichlorophenylacetic acid
6926640	126
Blank	98
LCS	115
MS	121
MSD	204*
Limits:	36-156

Analysis Name: TCL Pesticides 8081A Soil
Batch number: 130180009A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6926640	117	74
Blank	88	92
LCS	81	90
MS	80	52
MSD	90	34*
Limits:	33-140	45-150

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

Exxon Mobil Analysis Request/Environmental Services Chain of Custody

1907

For Lancaster Laboratories use only Acct. #: _____
Group #: _____ Sample #: _____

13630141 / 6926640-42

Provide MRN for retail or AFE for major projects

Client: Exxon Mobil Acct. #:
Project Name: Former Tappan Termin MRN:
Project Manager: T Bispham AFE:
Sampler: K Conklin
Name of State where samples were collected: NY

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Water	Other	Total # of Containers	VOCs	SVOCs	TAL Metals	Hex & Trivalent Chrom	Mercury	Pesticides	PCBs	Herbicides	Cyanide	
POC2-TSC-1	1-17-13	1615		X	X			1		X	X	X	X	X	X	X	X	
POC2-TS4	1-17-13	1605	X		X			1	X									
POC2-TS2	1-17-13	1610	X		X			1	X									

Matrix: Potable, NPDES

Analyses Requested / Preservation Codes

For Lab Use Only
FSC: _____
SCR#: _____

Preservation Codes
H=HCl T=Thiosulfate
N=HNO3 B=NaOH
S=H2SO4 O=Other

Remarks

Temperature of samples upon receipt (if requested)

Turnaround Time Requested (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed: _____
Rush results requested by (please circle): Phone Fax E-mail
Phone #: _____ Fax #: _____
E-mail address: tbispham@rouxinc.com

Data Package Options (please circle if required)
Type I (validation/NJ reg) TX-TRRP-13
Type II (Tier II) MA MCP CT RCP
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)

SDG Complete? Yes No

State-specific QC (MS/MSD/Dup)? Yes No
(If yes, indicated QC sample and submit triplecate volume)
Internal COC required? Yes No

Relinquished by:	Date	Time	Received by:	Date	Time
K Conklin	1-17-13	1700			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: Patch	1/18/13	0915

Lancaster Laboratories, Inc. 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 717-656-2300

Bill to Dan Hirschberger

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Environmental Sample Administration Receipt Documentation Log

1363014

Client/Project: Exxon Mobil

Date of Receipt: 1/18/13

Time of Receipt: 0915

Source Code: SO

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	429951	1.0	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Pat Gh 3472 **Date/Time:** 1/18/13 0958

Issued by Dept. 6042 Management

2174.06

Volatiles by GC/MS Data

Case Narrative/Conformance Summary

Volatiles by GC/MS

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Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP06

GC/MS Volatiles

Fraction: Volatiles by GC/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
6926641	POC2-TS1		X	0.96	
6926642	POC2-TS2		X	0.99	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

SAMPLE ANALYSIS:

(Sample number(s): 6926642: Analysis: 10237)
The recovery for the sample internal standard is outside the QC acceptance limits. The following corrective action was taken: The sample was re-analyzed and the QC is again outside of the acceptance limits, indicating a matrix effect. The data is reported from the initial trial.

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Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP06

GC/MS Volatiles

Fraction: Volatiles by GC/MS

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

Sample Data

Volatiles by GC/MS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

2-TS1

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: 6926641

Sample wt/vol: 5.20 (g/mL) g Lab File ID: HP09953.i/13jan21a.b/bj21s03.d

Level: (low/med) LOW Date Received: 01/18/13

Moisture: not dec. 18 Date Analyzed: 01/21/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg) mg/Kg	Q
75-01-4	Vinyl Chloride	0.006	U
75-35-4	1,1-Dichloroethene	0.006	U
67-64-1	Acetone	0.023	U
75-09-2	Methylene Chloride	0.006	U
1634-04-4	Methyl Tertiary Butyl Ether	0.006	U
156-60-5	trans-1,2-Dichloroethene	0.006	U
75-34-3	1,1-Dichloroethane	0.006	U
78-93-3	2-Butanone	0.012	U
156-59-2	cis-1,2-Dichloroethene	0.006	U
67-66-3	Chloroform	0.006	U
71-55-6	1,1,1-Trichloroethane	0.006	U
56-23-5	Carbon Tetrachloride	0.006	U
71-43-2	Benzene	0.006	U
107-06-2	1,2-Dichloroethane	0.006	U
79-01-6	Trichloroethene	0.006	U
123-91-1	1,4-Dioxane	0.290	U
108-88-3	Toluene	0.006	U
127-18-4	Tetrachloroethene	0.006	U
108-90-7	Chlorobenzene	0.006	U
100-41-4	Ethylbenzene	0.006	U
1330-20-7	Xylene (Total)	0.006	U
103-65-1	n-Propylbenzene	0.006	U
108-67-8	1,3,5-Trimethylbenzene	0.006	U
98-06-6	tert-Butylbenzene	0.006	U
95-63-6	1,2,4-Trimethylbenzene	0.006	U
135-98-8	sec-Butylbenzene	0.006	U
541-73-1	1,3-Dichlorobenzene	0.006	U
106-46-7	1,4-Dichlorobenzene	0.006	U
104-51-8	n-Butylbenzene	0.006	U
95-50-1	1,2-Dichlorobenzene	0.006	U

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

2-TS2

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: 6926642

Sample wt/vol: 5.04 (g/mL) g Lab File ID: HP09953.i/13jan21a.b/bj21s04.d

Level: (low/med) LOW Date Received: 01/18/13

Moisture: not dec. 16 Date Analyzed: 01/21/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
75-01-4	Vinyl Chloride	6	U
75-35-4	1,1-Dichloroethene	6	U
67-64-1	Acetone	24	U
75-09-2	Methylene Chloride	6	U
1634-04-4	Methyl Tertiary Butyl Ether	6	U
156-60-5	trans-1,2-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
78-93-3	2-Butanone	12	U
156-59-2	cis-1,2-Dichloroethene	6	U
67-66-3	Chloroform	6	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
71-43-2	Benzene	6	U
107-06-2	1,2-Dichloroethane	6	U
79-01-6	Trichloroethene	6	U
123-91-1	1,4-Dioxane	300	U
108-88-3	Toluene	2	J
127-18-4	Tetrachloroethene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
1330-20-7	Xylene (Total)	2	J
103-65-1	n-Propylbenzene	6	U
108-67-8	1,3,5-Trimethylbenzene	6	U
98-06-6	tert-Butylbenzene	6	U
95-63-6	1,2,4-Trimethylbenzene	6	U
135-98-8	sec-Butylbenzene	6	U
541-73-1	1,3-Dichlorobenzene	6	U
106-46-7	1,4-Dichlorobenzene	6	U
104-51-8	n-Butylbenzene	6	U
95-50-1	1,2-Dichlorobenzene	6	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

2-TS2RE

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: 6926642

Sample wt/vol: 5.32 (g/mL) g Lab File ID: HP09953.i/13jan21a.b/bj21s11.d

Level: (low/med) LOW Date Received: 01/18/13

Moisture: not dec. 16 Date Analyzed: 01/21/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
75-01-4	Vinyl Chloride	6	U
75-35-4	1,1-Dichloroethene	6	U
67-64-1	Acetone	22	U
75-09-2	Methylene Chloride	6	U
1634-04-4	Methyl Tertiary Butyl Ether	6	U
156-60-5	trans-1,2-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
78-93-3	2-Butanone	11	U
156-59-2	cis-1,2-Dichloroethene	6	U
67-66-3	Chloroform	6	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
71-43-2	Benzene	6	U
107-06-2	1,2-Dichloroethane	6	U
79-01-6	Trichloroethene	6	U
123-91-1	1,4-Dioxane	280	U
108-88-3	Toluene	1	J
127-18-4	Tetrachloroethene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
179601-23-1	m+p-Xylene	1	J
95-47-6	o-Xylene	6	U
1330-20-7	Xylene (Total)	1	J
103-65-1	n-Propylbenzene	6	U
108-67-8	1,3,5-Trimethylbenzene	6	U
98-06-6	tert-Butylbenzene	6	U
95-63-6	1,2,4-Trimethylbenzene	6	U
135-98-8	sec-Butylbenzene	6	U
541-73-1	1,3-Dichlorobenzene	6	U
106-46-7	1,4-Dichlorobenzene	6	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

2-TS2RE

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: 6926642

Sample wt/vol: 5.32 (g/mL) g Lab File ID: HP09953.i/13jan21a.b/bj21s11.d

Level: (low/med) LOW Date Received: 01/18/13

Moisture: not dec. 16 Date Analyzed: 01/21/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
104-51-8	n-Butylbenzene	6	U
95-50-1	1,2-Dichlorobenzene	6	U

Fraction: Volatiles by GC/MS

B130211AA / VBLKB55 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Vinyl Chloride	01/21/13	N.D.	ug/kg	1	5
1,1-Dichloroethene	01/21/13	N.D.	ug/kg	1	5
Acetone	01/21/13	N.D.	ug/kg	7	20
Benzene	01/21/13	N.D.	ug/kg	0.5	5
2-Butanone	01/21/13	N.D.	ug/kg	4	10
Carbon Tetrachloride	01/21/13	N.D.	ug/kg	1	5
Chloroform	01/21/13	N.D.	ug/kg	1	5
1,1-Dichloroethane	01/21/13	N.D.	ug/kg	1	5
1,2-Dichloroethane	01/21/13	N.D.	ug/kg	1	5
cis-1,2-Dichloroethene	01/21/13	N.D.	ug/kg	1	5
trans-1,2-Dichloroethene	01/21/13	N.D.	ug/kg	1	5
1,4-Dioxane	01/21/13	N.D.	ug/kg	70	250
Methyl Tertiary Butyl Ether	01/21/13	N.D.	ug/kg	0.5	5
Methylene Chloride	01/21/13	N.D.	ug/kg	2	5
Toluene	01/21/13	N.D.	ug/kg	1	5
1,1,1-Trichloroethane	01/21/13	N.D.	ug/kg	1	5
Trichloroethene	01/21/13	N.D.	ug/kg	1	5
Chlorobenzene	01/21/13	N.D.	ug/kg	1	5
Ethylbenzene	01/21/13	N.D.	ug/kg	1	5
n-Propylbenzene	01/21/13	N.D.	ug/kg	1	5
Tetrachloroethene	01/21/13	N.D.	ug/kg	1	5
Xylene (Total)	01/21/13	N.D.	ug/kg	1	5
1,3,5-Trimethylbenzene	01/21/13	N.D.	ug/kg	1	5
sec-Butylbenzene	01/21/13	N.D.	ug/kg	1	5
tert-Butylbenzene	01/21/13	N.D.	ug/kg	1	5
1,2,4-Trimethylbenzene	01/21/13	N.D.	ug/kg	1	5
n-Butylbenzene	01/21/13	N.D.	ug/kg	1	5
1,2-Dichlorobenzene	01/21/13	N.D.	ug/kg	1	5
1,3-Dichlorobenzene	01/21/13	N.D.	ug/kg	1	5
1,4-Dichlorobenzene	01/21/13	N.D.	ug/kg	1	5

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSB55

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: LCSB55

Sample wt/vol: 5.00 (g/mL) g Lab File ID: HP09953.i/13jan21a.b/bj21s01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 01/21/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg) mg/Kg	Q
75-71-8	Dichlorodifluoromethane	0.018	
74-87-3	Chloromethane	0.019	
75-01-4	Vinyl Chloride	0.018	
74-83-9	Bromomethane	0.022	
75-00-3	Chloroethane	0.022	
75-69-4	Trichlorofluoromethane	0.022	
64-17-5	Ethanol	0.860	
107-02-8	Acrolein	0.180	
75-35-4	1,1-Dichloroethene	0.022	
67-64-1	Acetone	0.140	
76-13-1	Freon 113	0.022	
67-63-0	2-Propanol	0.120	
74-88-4	Methyl Iodide	0.022	
75-15-0	Carbon Disulfide	0.020	
79-20-9	Methyl Acetate	0.026	
107-05-1	Allyl Chloride	0.021	
75-09-2	Methylene Chloride	0.022	
75-65-0	t-Butyl alcohol	0.190	
107-13-1	Acrylonitrile	0.080	
1634-04-4	Methyl Tertiary Butyl Ether	0.021	
156-60-5	trans-1,2-Dichloroethene	0.022	
110-54-3	n-Hexane	0.020	
75-34-3	1,1-Dichloroethane	0.021	
108-20-3	di-Isopropyl ether	0.021	
126-99-8	2-Chloro-1,3-butadiene	0.021	
637-92-3	Ethyl t-butyl ether	0.020	
78-93-3	2-Butanone	0.120	
156-59-2	cis-1,2-Dichloroethene	0.023	
540-59-0	1,2-Dichloroethene (Total)	0.045	
594-20-7	2,2-Dichloropropane	0.021	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSB55

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: LCSB55

Sample wt/vol: 5.00 (g/mL) g Lab File ID: HP09953.i/13jan21a.b/bj21s01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 01/21/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg) mg/Kg	Q
107-12-0	Propionitrile	0.170	
126-98-7	Methacrylonitrile	0.140	
74-97-5	Bromochloromethane	0.024	
109-99-9	Tetrahydrofuran	0.110	
67-66-3	Chloroform	0.022	
71-55-6	1,1,1-Trichloroethane	0.020	
110-82-7	Cyclohexane	0.021	
563-58-6	1,1-Dichloropropene	0.021	
56-23-5	Carbon Tetrachloride	0.022	
78-83-1	Isobutyl Alcohol	0.450	
71-43-2	Benzene	0.022	
107-06-2	1,2-Dichloroethane	0.022	
994-05-8	t-Amyl methyl ether	0.020	
142-82-5	n-Heptane	0.019	
71-36-3	n-Butanol	0.800	
79-01-6	Trichloroethene	0.022	
108-87-2	Methylcyclohexane	0.022	
78-87-5	1,2-Dichloropropane	0.020	
80-62-6	Methyl Methacrylate	0.018	
123-91-1	1,4-Dioxane	0.470	
74-95-3	Dibromomethane	0.021	
75-27-4	Bromodichloromethane	0.021	
79-46-9	2-Nitropropane	0.019	
110-75-8	2-Chloroethyl Vinyl Ether	0.017	
10061-01-5	cis-1,3-Dichloropropene	0.021	
108-10-1	4-Methyl-2-pentanone	0.071	
108-88-3	Toluene	0.020	
10061-02-6	trans-1,3-Dichloropropene	0.018	
97-63-2	Ethyl Methacrylate	0.018	
79-00-5	1,1,2-Trichloroethane	0.020	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSB55

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: LCSB55

Sample wt/vol: 5.00 (g/mL) g Lab File ID: HP09953.i/13jan21a.b/bj21s01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 01/21/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg) mg/Kg	Q
127-18-4	Tetrachloroethene	0.022	
142-28-9	1,3-Dichloropropane	0.019	
591-78-6	2-Hexanone	0.064	
124-48-1	Dibromochloromethane	0.020	
106-93-4	1,2-Dibromoethane	0.020	
108-90-7	Chlorobenzene	0.020	
630-20-6	1,1,1,2-Tetrachloroethane	0.020	
100-41-4	Ethylbenzene	0.020	
179601-23-1	m+p-Xylene	0.041	
95-47-6	o-Xylene	0.020	
1330-20-7	Xylene (Total)	0.061	
100-42-5	Styrene	0.020	
75-25-2	Bromoform	0.018	
98-82-8	Isopropylbenzene	0.020	
108-94-1	Cyclohexanone	0.390	
79-34-5	1,1,2,2-Tetrachloroethane	0.018	
108-86-1	Bromobenzene	0.020	
110-57-6	trans-1,4-Dichloro-2-butene	0.092	
96-18-4	1,2,3-Trichloropropane	0.018	
103-65-1	n-Propylbenzene	0.018	
95-49-8	2-Chlorotoluene	0.019	
108-67-8	1,3,5-Trimethylbenzene	0.020	
106-43-4	4-Chlorotoluene	0.019	
98-06-6	tert-Butylbenzene	0.019	
76-01-7	Pentachloroethane	0.018	
95-63-6	1,2,4-Trimethylbenzene	0.020	
135-98-8	sec-Butylbenzene	0.020	
541-73-1	1,3-Dichlorobenzene	0.020	
99-87-6	p-Isopropyltoluene	0.020	
106-46-7	1,4-Dichlorobenzene	0.019	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSB55

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: LCSB55

Sample wt/vol: 5.00 (g/mL) g Lab File ID: HP09953.i/13jan21a.b/bj21s01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 01/21/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg) mg/Kg	Q
526-73-8	1,2,3-Trimethylbenzene	0.020	
100-44-7	Benzyl Chloride	0.016	
141-93-5	1,3-Diethylbenzene	0.020	
105-05-5	1,4-Diethylbenzene	0.020	
104-51-8	n-Butylbenzene	0.019	
95-50-1	1,2-Dichlorobenzene	0.019	
135-01-3	1,2-Diethylbenzene	0.019	
96-12-8	1,2-Dibromo-3-chloropropane	0.015	
108-70-3	1,3,5-Trichlorobenzene	0.019	
120-82-1	1,2,4-Trichlorobenzene	0.019	
87-68-3	Hexachlorobutadiene	0.020	
91-20-3	Naphthalene	0.018	
87-61-6	1,2,3-Trichlorobenzene	0.018	
91-57-6	2-Methylnaphthalene	0.015	
25340-17-4	Diethylbenzene (total)	0.058	

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

LCDB55

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: LCDB55

Sample wt/vol: 5.00 (g/mL) g Lab File ID: HP09953.i/13jan21a.b/bj21s02.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 01/21/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg) mg/Kg	Q
75-71-8	Dichlorodifluoromethane	0.017	
74-87-3	Chloromethane	0.018	
75-01-4	Vinyl Chloride	0.019	
74-83-9	Bromomethane	0.023	
75-00-3	Chloroethane	0.022	
75-69-4	Trichlorofluoromethane	0.021	
64-17-5	Ethanol	0.860	
107-02-8	Acrolein	0.160	
75-35-4	1,1-Dichloroethene	0.022	
67-64-1	Acetone	0.150	
76-13-1	Freon 113	0.022	
67-63-0	2-Propanol	0.140	
74-88-4	Methyl Iodide	0.022	
75-15-0	Carbon Disulfide	0.020	
79-20-9	Methyl Acetate	0.021	
107-05-1	Allyl Chloride	0.020	
75-09-2	Methylene Chloride	0.022	
75-65-0	t-Butyl alcohol	0.220	
107-13-1	Acrylonitrile	0.084	
1634-04-4	Methyl Tertiary Butyl Ether	0.022	
156-60-5	trans-1,2-Dichloroethene	0.022	
110-54-3	n-Hexane	0.020	
75-34-3	1,1-Dichloroethane	0.022	
108-20-3	di-Isopropyl ether	0.021	
126-99-8	2-Chloro-1,3-butadiene	0.022	
637-92-3	Ethyl t-butyl ether	0.021	
78-93-3	2-Butanone	0.130	
156-59-2	cis-1,2-Dichloroethene	0.023	
540-59-0	1,2-Dichloroethene (Total)	0.045	
594-20-7	2,2-Dichloropropane	0.021	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCDB55

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: LCDB55

Sample wt/vol: 5.00 (g/mL) g Lab File ID: HP09953.i/13jan21a.b/bj21s02.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 01/21/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg) mg/Kg	Q
107-12-0	Propionitrile	0.160	
126-98-7	Methacrylonitrile	0.150	
74-97-5	Bromochloromethane	0.024	
109-99-9	Tetrahydrofuran	0.100	
67-66-3	Chloroform	0.022	
71-55-6	1,1,1-Trichloroethane	0.020	
110-82-7	Cyclohexane	0.021	
563-58-6	1,1-Dichloropropene	0.021	
56-23-5	Carbon Tetrachloride	0.022	
78-83-1	Isobutyl Alcohol	0.460	
71-43-2	Benzene	0.021	
107-06-2	1,2-Dichloroethane	0.022	
994-05-8	t-Amyl methyl ether	0.021	
142-82-5	n-Heptane	0.017	
71-36-3	n-Butanol	0.830	
79-01-6	Trichloroethene	0.022	
108-87-2	Methylcyclohexane	0.022	
78-87-5	1,2-Dichloropropane	0.020	
80-62-6	Methyl Methacrylate	0.019	
123-91-1	1,4-Dioxane	0.500	
74-95-3	Dibromomethane	0.022	
75-27-4	Bromodichloromethane	0.021	
79-46-9	2-Nitropropane	0.017	
110-75-8	2-Chloroethyl Vinyl Ether	0.018	
10061-01-5	cis-1,3-Dichloropropene	0.021	
108-10-1	4-Methyl-2-pentanone	0.076	
108-88-3	Toluene	0.020	
10061-02-6	trans-1,3-Dichloropropene	0.018	
97-63-2	Ethyl Methacrylate	0.018	
79-00-5	1,1,2-Trichloroethane	0.020	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCDB55

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: LCDB55

Sample wt/vol: 5.00 (g/mL) g Lab File ID: HP09953.i/13jan21a.b/bj21s02.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 01/21/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg) mg/Kg	Q
127-18-4	Tetrachloroethene	0.021	
142-28-9	1,3-Dichloropropane	0.019	
591-78-6	2-Hexanone	0.068	
124-48-1	Dibromochloromethane	0.020	
106-93-4	1,2-Dibromoethane	0.020	
108-90-7	Chlorobenzene	0.020	
630-20-6	1,1,1,2-Tetrachloroethane	0.019	
100-41-4	Ethylbenzene	0.021	
179601-23-1	m+p-Xylene	0.041	
95-47-6	o-Xylene	0.020	
1330-20-7	Xylene (Total)	0.061	
100-42-5	Styrene	0.020	
75-25-2	Bromoform	0.019	
98-82-8	Isopropylbenzene	0.020	
108-94-1	Cyclohexanone	0.410	
79-34-5	1,1,2,2-Tetrachloroethane	0.018	
108-86-1	Bromobenzene	0.020	
110-57-6	trans-1,4-Dichloro-2-butene	0.096	
96-18-4	1,2,3-Trichloropropane	0.019	
103-65-1	n-Propylbenzene	0.017	
95-49-8	2-Chlorotoluene	0.019	
108-67-8	1,3,5-Trimethylbenzene	0.019	
106-43-4	4-Chlorotoluene	0.019	
98-06-6	tert-Butylbenzene	0.018	
76-01-7	Pentachloroethane	0.018	
95-63-6	1,2,4-Trimethylbenzene	0.020	
135-98-8	sec-Butylbenzene	0.019	
541-73-1	1,3-Dichlorobenzene	0.020	
99-87-6	p-Isopropyltoluene	0.019	
106-46-7	1,4-Dichlorobenzene	0.019	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCDB55

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: LCDB55

Sample wt/vol: 5.00 (g/mL) g Lab File ID: HP09953.i/13jan21a.b/bj21s02.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 01/21/13

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg) mg/Kg	Q
526-73-8	1,2,3-Trimethylbenzene	0.020	
100-44-7	Benzyl Chloride	0.017	
141-93-5	1,3-Diethylbenzene	0.019	
105-05-5	1,4-Diethylbenzene	0.019	
104-51-8	n-Butylbenzene	0.018	
95-50-1	1,2-Dichlorobenzene	0.019	
135-01-3	1,2-Diethylbenzene	0.018	
96-12-8	1,2-Dibromo-3-chloropropane	0.016	
108-70-3	1,3,5-Trichlorobenzene	0.018	
120-82-1	1,2,4-Trichlorobenzene	0.019	
87-68-3	Hexachlorobutadiene	0.016	
91-20-3	Naphthalene	0.018	
87-61-6	1,2,3-Trichlorobenzene	0.018	
91-57-6	2-Methylnaphthalene	0.015	
25340-17-4	Diethylbenzene (total)	0.056	

Semivolatiles by GC/MS Data

Case Narrative/Conformance Summary

Semivolatiles by GC/MS

Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP06

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
6926640	POC2-TSC1		X	1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected

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Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP06

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

Sample Data

Semivolatiles by GC/MS

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TSC-1

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: 6926640

Sample wt/vol: 30.0 (g/mL) G Lab File ID: ea0636.d

Level: (low/med) LOW Date Received: 01/18/13

% Moisture: not dec: 16 dec: Date Extracted: 01/23/13

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/24/13

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Mic

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	LOQ	UG/KG	Q
108-95-2	Phenol			39	U
95-48-7	2-Methylphenol			39	U
106-44-5	4-Methylphenol			59	
91-20-3	Naphthalene			5	J
208-96-8	Acenaphthylene			20	U
83-32-9	Acenaphthene			4	J
132-64-9	Dibenzofuran			39	U
86-73-7	Fluorene			5	J
87-86-5	Pentachlorophenol			200	U
85-01-8	Phenanthrene			83	
120-12-7	Anthracene			15	J
206-44-0	Fluoranthene			200	
129-00-0	Pyrene			200	
56-55-3	Benzo(a)anthracene			99	
218-01-9	Chrysene			140	
205-99-2	Benzo(b)fluoranthene			160	
207-08-9	Benzo(k)fluoranthene			68	
50-32-8	Benzo(a)pyrene			110	
193-39-5	Indeno(1,2,3-cd)pyrene			83	
53-70-3	Dibenz(a,h)anthracene			19	J
191-24-2	Benzo(g,h,i)perylene			90	

FORM I SV-1

Fraction: Semivolatiles by GC/MS

13023SLB026 / SBLKLB023 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Phenol	01/24/13	N.D.	ug/kg	17	33
2-Methylphenol	01/24/13	N.D.	ug/kg	17	33
4-Methylphenol	01/24/13	N.D.	ug/kg	17	33
Naphthalene	01/24/13	N.D.	ug/kg	3	17
Acenaphthylene	01/24/13	N.D.	ug/kg	3	17
Acenaphthene	01/24/13	N.D.	ug/kg	3	17
Dibenzofuran	01/24/13	N.D.	ug/kg	17	33
Fluorene	01/24/13	N.D.	ug/kg	3	17
Pentachlorophenol	01/24/13	N.D.	ug/kg	33	170
Phenanthrene	01/24/13	N.D.	ug/kg	3	17
Anthracene	01/24/13	N.D.	ug/kg	3	17
Fluoranthene	01/24/13	N.D.	ug/kg	3	17
Pyrene	01/24/13	N.D.	ug/kg	3	17
Benzo(a)anthracene	01/24/13	N.D.	ug/kg	3	17
Chrysene	01/24/13	N.D.	ug/kg	3	17
Benzo(b)fluoranthene	01/24/13	N.D.	ug/kg	3	17
Benzo(k)fluoranthene	01/24/13	N.D.	ug/kg	3	17
Benzo(a)pyrene	01/24/13	N.D.	ug/kg	3	17
Indeno(1,2,3-cd)pyrene	01/24/13	N.D.	ug/kg	3	17
Dibenz(a,h)anthracene	01/24/13	N.D.	ug/kg	3	17
Benzo(g,h,i)perylene	01/24/13	N.D.	ug/kg	3	17

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

023LBLCS5

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: 023LBLCS

Sample wt/vol: 30.0 (g/mL) G Lab File ID: ea0613.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 01/23/13

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/24/13

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Mic

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) LOQ	UG/KG	Q
100-52-7	Benzaldehyde		850	
108-95-2	Phenol		1600	
111-44-4	bis(2-Chloroethyl)ether		1600	
95-57-8	2-Chlorophenol		1800	
95-48-7	2-Methylphenol		1800	
108-60-1	2,2'-oxybis(1-Chloropropane)		1400	
98-86-2	Acetophenone		1600	
621-64-7	N-Nitroso-di-n-propylamine		1500	
106-44-5	4-Methylphenol		1800	
67-72-1	Hexachloroethane		1500	
98-95-3	Nitrobenzene		1500	
78-59-1	Isophorone		1600	
88-75-5	2-Nitrophenol		1800	
105-67-9	2,4-Dimethylphenol		1700	
111-91-1	bis(2-Chloroethoxy)methane		1600	
120-83-2	2,4-Dichlorophenol		1800	
91-20-3	Naphthalene		1600	
106-47-8	4-Chloroaniline		280	
87-68-3	Hexachlorobutadiene		1600	
105-60-2	Caprolactam		1700	
59-50-7	4-Chloro-3-methylphenol		1700	
91-57-6	2-Methylnaphthalene		1700	
77-47-4	Hexachlorocyclopentadiene		3000	
88-06-2	2,4,6-Trichlorophenol		1700	
95-95-4	2,4,5-Trichlorophenol		1700	
92-52-4	1,1'-Biphenyl		1700	
91-58-7	2-Chloronaphthalene		2100	
88-74-4	2-Nitroaniline		1800	
131-11-3	Dimethylphthalate		1700	
606-20-2	2,6-Dinitrotoluene		1700	

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

023LBLCS5

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: 023LBLCS

Sample wt/vol: 30.0 (g/mL) G Lab File ID: ea0613.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 01/23/13

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/24/13

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Mic

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	LOQ UG/KG	Q
208-96-8	Acenaphthylene		1700	
99-09-2	3-Nitroaniline		1600	
83-32-9	Acenaphthene		1600	
51-28-5	2,4-Dinitrophenol		3100	
100-02-7	4-Nitrophenol		1400	
132-64-9	Dibenzofuran		1700	
121-14-2	2,4-Dinitrotoluene		1700	
84-66-2	Diethylphthalate		1600	
86-73-7	Fluorene		1800	
7005-72-3	4-Chlorophenyl-phenylether		1700	
100-01-6	4-Nitroaniline		1200	
534-52-1	4,6-Dinitro-2-methylphenol		1600	
86-30-6	N-Nitrosodiphenylamine		1700	
101-55-3	4-Bromophenyl-phenylether		1700	
118-74-1	Hexachlorobenzene		1600	
1912-24-9	Atrazine		1800	E
87-86-5	Pentachlorophenol		1400	
85-01-8	Phenanthrene		1700	
120-12-7	Anthracene		1800	
86-74-8	Carbazole		1700	
84-74-2	Di-n-butylphthalate		1700	
206-44-0	Fluoranthene		1700	
129-00-0	Pyrene		1600	
85-68-7	Butylbenzylphthalate		1700	
91-94-1	3,3'-Dichlorobenzidine		480	
56-55-3	Benzo(a)anthracene		1700	
218-01-9	Chrysene		1600	
117-81-7	bis(2-Ethylhexyl)phthalate		1600	
117-84-0	Di-n-octylphthalate		1900	
205-99-2	Benzo(b)fluoranthene		1900	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

023LBLCS5

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) SOIL Lab Sample ID: 023LBLCS

Sample wt/vol: 30.0 (g/mL) G Lab File ID: ea0613.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 01/23/13

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/24/13

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Mic

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	LOQ	UG/KG	Q
207-08-9	Benzo(k)fluoranthene			1700	
50-32-8	Benzo(a)pyrene			1900	
193-39-5	Indeno(1,2,3-cd)pyrene			1700	
53-70-3	Dibenz(a,h)anthracene			1700	
191-24-2	Benzo(g,h,i)perylene			1700	

FORM I SV-3

Herbicides Data

Case Narrative/Conformance Summary

Herbicides

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Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP06

Pesticide Residue Analysis

Fraction: Herbicides

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
6926640	POC2-TSC1		X	1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

(Sample number(s): 6926640: Analysis: 10401)
For dual column analyses in which the calibration (initial and/or continuing) response is outside the acceptance criteria on one column and within criteria on the second column affected analytes are reported from the compliant column. The sample raw data identifies the column used to report each analyte.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

LCS/LCSD

(Sample number(s): 6926640: Analysis: 10401)
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Surrogate

Surrogate recoveries that are noncompliant are confirmed unless attributed to a dilution or otherwise noted.

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Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP06

Pesticide Residue Analysis

Fraction: Herbicides

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

Narrative Reviewed and Approved 1/24/2013 by
(Date)

M. Susan Kreider
M. Susan Kreider
Senior Specialist

Sample Data

Herbicides

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO.

TSC-1

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130180007A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:** TAP06

Matrix: (soil/water) SOIL **Lab Sample ID:** 6926640

Sample wt/vol: 30 (g/ml) g **Lab File ID:** 13H15360.027.RAW

% Moisture: 16.1 **Decanted: (Y/N)** **Date Received:** 1/18/2013

Extraction: (SepF/Cont/Sonc) SONC **Date Extracted:** 1/21/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/21/2013

Injection Volume: 2 (uL) **Dilution Factor:** 1

GPC Cleanup: (Y/N) N **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
93-72-1	2,4,5-TP	0.89	U

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO. PBLK07018

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130180007A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:**

Matrix: (soil/water) SOIL **Lab Sample ID:** BLANKA

Sample wt/vol: 30 (g/ml) g **Lab File ID:** 13H15360.023.RAW

% Moisture: **Decanted: (Y/N)** **Date Received:**

Extraction: (SepF/Cont/Sonc) SONC **Date Extracted:** 1/21/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/21/2013

Injection Volume: 2 (uL) **Dilution Factor:** 1

GPC Cleanup: (Y/N) N **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
75-99-0	Dalapon	44	U
1918-00-9	Dicamba	4.0	U
93-65-2	Mcpp	750	U
94-74-6	Mcpa	760	U
120-36-5	2,4-DP	9.0	U
94-75-7	2,4-D	12	U
87-86-5	PCP	0.33	U
93-72-1	2,4,5-TP	0.75	U
93-76-5	2,4,5-T	0.82	U
94-82-6	2,4-DB	6.2	U
88-85-7	Dinoseb	8.0	U
1918-02-1	Picloram	50	U
70-30-4	Hexachlorophene	8.0	U

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO. TSC-1MS

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130180007A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:** TAP06

Matrix: (soil/water) SOIL **Lab Sample ID:** 6926640

Sample wt/vol: 30 (g/ml) g **Lab File ID:** 13H15360.028.RAW

% Moisture: 16.1 **Decanted: (Y/N)** **Date Received:** 1/18/2013

Extraction: (SepF/Cont/Sonc) SONC **Date Extracted:** 1/21/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/21/2013

Injection Volume: 2 (uL) **Dilution Factor:** 1

GPC Cleanup: (Y/N) N **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
75-99-0	Dalapon	130	
1918-00-9	Dicamba	11	U
93-65-2	Mcpp	890	U
94-74-6	Mcpa	11000	
120-36-5	2,4-DP	130	
94-75-7	2,4-D	120	
87-86-5	PCP	35	
93-72-1	2,4,5-TP	10	
93-76-5	2,4,5-T	7.9	P
94-82-6	2,4-DB	150	
88-85-7	Dinoseb	48	
1918-02-1	Picloram	250	

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO.

TSC-1MSD

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130180007A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:** TAP06

Matrix: (soil/water) SOIL **Lab Sample ID:** 6926640

Sample wt/vol: 30 (g/ml) g **Lab File ID:** 13H15360.029.RAW

% Moisture: 16.1 **Decanted: (Y/N)** **Date Received:** 1/18/2013

Extraction: (SepF/Cont/Sonc) SONC **Date Extracted:** 1/21/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/22/2013

Injection Volume: 2 (uL) **Dilution Factor:** 1

GPC Cleanup: (Y/N) N **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
75-99-0	Dalapon	150	
1918-00-9	Dicamba	13	J
93-65-2	Mcpp	5300	P
94-74-6	Mcpa	12000	
120-36-5	2,4-DP	130	
94-75-7	2,4-D	1800	E
87-86-5	PCP	36	P
93-72-1	2,4,5-TP	12	
93-76-5	2,4,5-T	370	E
94-82-6	2,4-DB	160	
88-85-7	Dinoseb	64	
1918-02-1	Picloram	250	

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO. LCS07018

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130180007A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:**

Matrix: (soil/water) SOIL **Lab Sample ID:** LCSA

Sample wt/vol: 30 (g/ml) g **Lab File ID:** 13H15360.024.RAW

% Moisture: **Decanted: (Y/N)** **Date Received:**

Extraction: (SepF/Cont/Sonc) SONC **Date Extracted:** 1/21/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/21/2013

Injection Volume: 2 (uL) **Dilution Factor:** 1

GPC Cleanup: (Y/N) N **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
75-99-0	Dalapon	96	
1918-00-9	Dicamba	9.4	J
93-65-2	Mcpp	8400	
94-74-6	Mcpa	8000	
120-36-5	2,4-DP	110	
94-75-7	2,4-D	93	
87-86-5	PCP	33	
93-72-1	2,4,5-TP	10	
93-76-5	2,4,5-T	8.5	
94-82-6	2,4-DB	100	
88-85-7	Dinoseb	48	
1918-02-1	Picloram	85	

Pesticides Data

Case Narrative/Conformance Summary

Pesticides

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Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP06

Pesticide Residue Analysis

Fraction: Pesticides

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
6926640	POC2-TSC1		X	1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

(Sample number(s): 6926640: Analysis: 10738)
For dual column analyses in which the calibration (initial and/or continuing) response is outside the acceptance criteria on one column and within criteria on the second column affected analytes are reported from the compliant column. The sample raw data identifies the column used to report each analyte.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

SAMPLE ANALYSIS:

(Sample number(s): 6926640: Analysis: 10738)
Reporting limits were raised due to interference from the sample matrix.

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Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP06

Pesticide Residue Analysis

Fraction: Pesticides

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

Narrative Reviewed and Approved 1/24/2013 by
(Date)

M. Susan Kreider

M. Susan Kreider
Senior Specialist

Sample Data

Pesticides

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO.

TSC-1

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130180009A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:** TAP06

Matrix: (soil/water) SOIL **Lab Sample ID:** 6926640

Sample wt/vol: 30 (g/ml) g **Lab File ID:** 1P10021.0083.RAW

% Moisture: 16.1 **Decanted: (Y/N)** **Date Received:** 1/18/2013

Extraction: (SepF/Cont/Sonc) MICRO **Date Extracted:** 1/21/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/22/2013

Injection Volume: 1 (uL) **Dilution Factor:** 1

GPC Cleanup: (Y/N) Y **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
118-74-1	Hcb	2.7	P
319-84-6	alpha-BHC	0.20	U
58-89-9	gamma-BHC (Lindane)	0.20	U
319-85-7	beta-BHC	1.1	U
319-86-8	delta-BHC	0.54	U
76-44-8	Heptachlor	1.1	P
309-00-2	Aldrin	0.33	JP
5103-71-9	alpha-Chlordane	0.20	U
72-55-9	4,4'-DDE	0.74	J
959-98-8	Endosulfan I	0.31	JP
60-57-1	Dieldrin	0.62	U
72-20-8	Endrin	0.39	U
72-54-8	4,4'-DDD	0.55	U
33213-65-9	Endosulfan II	0.39	U
50-29-3	4,4'-DDT	0.42	U
1031-07-8	Endosulfan sulfate	0.39	U

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO. PBLK09018

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130180009A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:**

Matrix: (soil/water) SOIL **Lab Sample ID:** BLANKA

Sample wt/vol: 30 **(g/ml)** g **Lab File ID:** 1P10021.0076.RAW

% Moisture: **Decanted: (Y/N)** **Date Received:**

Extraction: (SepF/Cont/Sonc) MICRO **Date Extracted:** 1/21/2013

Concentrated Extract Volume: 10000 **(uL)** **Date Analyzed:** 1/22/2013

Injection Volume: 1 **(uL)** **Dilution Factor:** 1

GPC Cleanup: (Y/N) Y **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
118-74-1	Hcb	0.21	U
319-84-6	alpha-BHC	0.17	U
58-89-9	gamma-BHC (Lindane)	0.17	U
319-85-7	beta-BHC	0.96	U
319-86-8	delta-BHC	0.45	U
76-44-8	Heptachlor	0.17	U
309-00-2	Aldrin	0.17	U
297-78-9	Telodrin	0.40	U
3424-82-6	o,p-DDE	0.33	U
1024-57-3	Heptachlor epoxide	0.17	U
5103-74-2	gamma-Chlordane	0.17	U
5103-71-9	alpha-Chlordane	0.17	U
72-55-9	4,4'-DDE	0.33	U
959-98-8	Endosulfan I	0.22	U
53-19-0	o,p-DDD	0.33	U
60-57-1	Dieldrin	0.33	U
789-02-6	o,p-DDT	0.33	U
72-20-8	Endrin	0.33	U
143-50-0	Kepone	2.3	U
72-54-8	4,4'-DDD	0.33	U
33213-65-9	Endosulfan II	0.33	U
50-29-3	4,4'-DDT	0.35	U
7421-93-4	Endrin aldehyde	0.33	U
72-43-5	Methoxychlor	1.7	U
2385-85-5	Mirex	0.35	U
1031-07-8	Endosulfan sulfate	0.33	U
53494-70-5	Endrin ketone	0.60	U
57-74-9	Chlordane	4.0	U
8001-35-2	Toxaphene	12	U

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO.

LCS09018

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130180009A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:**

Matrix: (soil/water) SOIL **Lab Sample ID:** LCSA

Sample wt/vol: 30 **(g/ml)** g **Lab File ID:** 1P10021.0077.RAW

% Moisture: **Decanted: (Y/N)** **Date Received:**

Extraction: (SepF/Cont/Sonc) MICRO **Date Extracted:** 1/21/2013

Concentrated Extract Volume: 10000 **(uL)** **Date Analyzed:** 1/22/2013

Injection Volume: 1 **(uL)** **Dilution Factor:** 1

GPC Cleanup: (Y/N) Y **pH:** **Sulfur Cleanup: (Y/N)** N

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
319-84-6	alpha-BHC	2.9	
58-89-9	gamma-BHC (Lindane)	3.0	
319-85-7	beta-BHC	3.0	
319-86-8	delta-BHC	3.2	
76-44-8	Heptachlor	3.1	
309-00-2	Aldrin	2.8	
1024-57-3	Heptachlor epoxide	3.0	
5103-74-2	gamma-Chlordane	3.0	P
5103-71-9	alpha-Chlordane	3.0	
72-55-9	4,4'-DDE	6.1	
959-98-8	Endosulfan I	2.8	
60-57-1	Dieldrin	6.4	
72-20-8	Endrin	6.0	
72-54-8	4,4'-DDD	6.7	
33213-65-9	Endosulfan II	6.0	
50-29-3	4,4'-DDT	7.1	
7421-93-4	Endrin aldehyde	5.8	
72-43-5	Methoxychlor	30	
1031-07-8	Endosulfan sulfate	5.7	
53494-70-5	Endrin ketone	5.8	

Polychlorinated Biphenyls (PCBs) Data

Case Narrative/Conformance Summary

Polychlorinated Biphenyls (PCBs)

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Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP06

Pesticide Residue Analysis

Fraction: Polychlorinated Biphenyls (PCBs)

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
6926640	POC2-TSC1		X	1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

(Sample number(s): 6926640: Analysis: 10736)
For dual column analyses in which the calibration (initial and/or continuing) response is outside the acceptance criteria on one column and within criteria on the second column affected analytes are reported from the compliant column. The sample raw data identifies the column used to report each analyte.

(Sample number(s): 6926640: Analysis: 10736)
The % difference for the calibration verification standard is outside the +/- 15% criteria for the analyte(s) listed below. Since the average of the % difference values meets the criteria, the results are reported.
This applies to the following analyte(s): decachlorobiphenyl surrogate

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

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Case Narrative/Conformance Summary

CLIENT: American Environmental Assess.
SDG: TAP06

Pesticide Residue Analysis

Fraction: Polychlorinated Biphenyls (PCBs)

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

Narrative Reviewed and Approved 1/24/2013 by
(Date)

M. Susan Kreider
M. Susan Kreider
Senior Specialist

Sample Data

Polychlorinated Biphenyls (PCBs)

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO.

TSC-1

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130180006A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:** TAP06

Matrix: (soil/water) SOIL **Lab Sample ID:** 6926640

Sample wt/vol: 30.2 (g/ml) g **Lab File ID:** GP25361.0036.RAW

% Moisture: 16.1 **Decanted: (Y/N)** **Date Received:** 1/18/2013

Extraction: (SepF/Cont/Sonc) SONC **Date Extracted:** 1/19/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/21/2013

Injection Volume: 1 (uL) **Dilution Factor:** 1

GPC Cleanup: (Y/N) N **pH:** **Sulfur Cleanup: (Y/N)** Y

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
12674-11-2	Aroclor-1016	4.3	U
11104-28-2	Aroclor-1221	5.4	U
11141-16-5	Aroclor-1232	9.5	U
53469-21-9	Aroclor-1242	3.9	U
12672-29-6	Aroclor-1248	3.9	U
11097-69-1	Aroclor-1254	3.9	U
11096-82-5	Aroclor-1260	5.8	U

1D

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO.

PBLK06018

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130180006A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:**

Matrix: (soil/water) SOIL **Lab Sample ID:** BLANKA

Sample wt/vol: 30 (g/ml) g **Lab File ID:** GP25361.0016.RAW

% Moisture: **Decanted: (Y/N)** **Date Received:**

Extraction: (SepF/Cont/Sonc) SONC **Date Extracted:** 1/19/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/21/2013

Injection Volume: 1 (uL) **Dilution Factor:** 1

GPC Cleanup: (Y/N) N **pH:** **Sulfur Cleanup: (Y/N)** Y

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
12674-11-2	Aroclor-1016	3.6	U
11104-28-2	Aroclor-1221	4.6	U
11141-16-5	Aroclor-1232	8.0	U
53469-21-9	Aroclor-1242	3.3	U
12672-29-6	Aroclor-1248	3.3	U
11097-69-1	Aroclor-1254	3.3	U
11096-82-5	Aroclor-1260	4.9	U
37324-23-5	Aroclor-1262	3.3	U
11100-14-4	Aroclor-1268	3.3	U
1336-36-3	Total PCBs	3.3	U

ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO. LCS06018

Lab Name: Lancaster Laboratories **Contract:** **Batchnumber:** 130180006A

Lab Code: **Case No.:** **SAS No.:** **SDG No.:**

Matrix: (soil/water) SOIL **Lab Sample ID:** LCSA

Sample wt/vol: 30 (g/ml) g **Lab File ID:** GP25361.0017.RAW

% Moisture: **Decanted: (Y/N)** **Date Received:**

Extraction: (SepF/Cont/Sonc) SONC **Date Extracted:** 1/19/2013

Concentrated Extract Volume: 10000 (uL) **Date Analyzed:** 1/21/2013

Injection Volume: 1 (uL) **Dilution Factor:** 1

GPC Cleanup: (Y/N) N **pH:** **Sulfur Cleanup: (Y/N)** Y

CAS NO.	COMPOUND	CONCENTRATION UNITS (UG/L or UG/KG) ug/kg	Q
12674-11-2	Aroclor-1016	190	
11096-82-5	Aroclor-1260	200	
1336-36-3	Total PCBs	380	P

Metals in Solid Data

Case Narrative/Conformance Summary

Metals in Solid

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Case Narrative/Conformance Summary

CLIENT: SUNOCO c/o EnviroTrac LTD
SDG: SNV11

ICP Metals

Fraction: Metals in Liquid

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
6940661	MW10	X		1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

Method defined actions are taken for any failed matrix QC.

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

The instrument detection limits (IDLs) are used for determining the U flags on the initial and continuing calibration blanks. The highest IDL is selected when multiple instruments are used for an analysis. The method detection limits (MDLs) are used for determining all other U flags.

Case Narrative/Conformance Summary

CLIENT: SUNOCO c/o EnviroTrac LTD
SDG: SNV11

ICP Metals

Fraction: Metals in Liquid

Abbreviation Key

BKG – Background	AF - Cold Vapor Atomic Fluorescence
DUP – Duplicate	U - Below MDL
MS - Matrix Spike	B - Below LOQ
MSD - Matrix Spike Dup	N - Matrix Spike out of specifications
B – Blank	* - Duplicate out of specifications
Q - Laboratory Control Sample	E - Matrix Effects exist as proven by Serial Dilution or Spiked Dilution
Y - Laboratory Control Sample Duplicate	A - Post Digestion Spike
P - ICP Atomic Emission Spectrometer	L - Serial Dilution
MS - ICP Mass Spectrometry	R - Internal Standard Relative Intensity OOS
CV - Cold Vapor	NR - Not Required

Sample Data

Metals in Solid

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: SNV11
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 6940661 % Solids: 0.0
Concentration Units: UG/L Date Received: 02/01/2013

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	854			P
7440-36-0	Antimony	4.2			MS
7440-38-2	Arsenic	1.5	B		MS
7440-39-3	Barium	50.4			MS
7440-41-7	Beryllium	0.052	B		MS
7440-43-9	Cadmium	0.33	B		MS
7440-70-2	Calcium	27500			P
7440-47-3	Chromium	23.8			MS
7440-48-4	Cobalt	1.8			MS
7440-50-8	Copper	17.0			MS
7439-89-6	Iron	9240			P
7439-92-1	Lead	10.3			MS
7439-95-4	Magnesium	11200			P
7439-96-5	Manganese	95.2			MS
7439-97-6	Mercury	0.070	U		CV
7440-02-0	Nickel	20.5			MS
7440-09-7	Potassium	11600			P
7782-49-2	Selenium	0.50	U		MS
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	60600			P
7440-28-0	Thallium	0.15	U		MS
7440-62-2	Vanadium	2.2			MS
7440-66-6	Zinc	189			MS

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

Instrumental Wet Chemistry Data

Case Narrative/Conformance Summary

Instrumental Wet Chemistry

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CLIENT: Chevron Env. Mgmt. Company
SDG: TAP06

Instrumental Water Quality

Sample #	Matrix Liquid	Solid	Comments
4622739	X		
4622741	X		
6926640		X	

ANALYSIS:

Dilutions are listed in the table below:

Samples	Nitrate Nitrogen	Nitrite Nitrogen
4622739	DF5	DF5
4622741	DF5	DF5

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

Site specific matrix QC samples were not submitted for this SDG. The batch matrix QC was performed on samples from another project. Therefore the matrix effects would not be relevant and matrix QC is not provided in the data package. Laboratory spike data (LCS) are provided.

Method defined actions are taken for any failed matrix QC.

DATA INTERPRETATION:

Due to the limitations of the data package software, form I's are not available for the Instrumental Analysis data. Please refer to the analysis reports for this information.

For soils, the software takes the weight and extraction volume and DF and calculates the final result in mg/kg based on:

Final Result in mg/kg = conc. of extract in mg/l X final volume in ml X DF/(sample weight in g X 1000)

IC (Nitrate Nitrogen, Nitrite Nitrogen) = raw result X dilution factor

Amenable Cyanide = total cyanide result – amenable cyanide result

Total Cyanide (soil) = result X dilution factor X 50 ml / weight of sample (g)

Mg/kg TOC = (raw result in mg C) x (1000/weight of sample in mg) x 1000

No further interpretation is necessary for the data submitted.

Abbreviation Key

U = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
R = Matrix Spike (MS)	MDL = Method Detection Limit
M = Matrix Spike Duplicate (MSD)	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	NA = Not Applicable
HS = High Spike	ME = Method
LS = Low Spike	CO = Colorimetric
SS = Soluble Spike	G = Gravimetric
IS = Insoluble Spike	IR = Infrared Spectrophotometry
ISD = Insoluble Spike Duplicate	MTR = Meter
PDS = Post Digestion Spike	OD = Oven Dried
* = Out of Specification	TI = Titration
V = Visual	TOC = Total Organic Carbon
AK = Alpkem	IC = Ion Chromatography
TC = Total Carbon	RA = Rapid Analyzer

Wet Chemistry Data

Case Narrative/Conformance Summary

Wet Chemistry

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CLIENT: American Environmental Assess.
SDG: TAP06

Miscellaneous Wet Chemistry

Sample #	Matrix Liquid	Matrix Solid	Comments
6926640		X	

ANALYSIS:

There were no dilutions performed for analyses associated with samples in this SDG.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

Method defined actions are taken for any failed matrix QC.

DATA INTERPRETATION:

Due to the limitations of the data package software, there are no form 1's available for the Wet Chemistry data. Please refer to the analysis reports for this information.

No further interpretation is necessary for the data submitted.

Abbreviation Key

U = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
R = Matrix Spike (MS)	MDL = Method Detection Limit
M = Matrix Spike Duplicate (MSD)	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	NA = Not Applicable
HS = High Spike	ME = Method
LS = Low Spike	CO = Colorimetric
SS = Soluble Spike	G = Gravimetric
IS = Insoluble Spike	IR = Infrared Spectrophotometry
ISD = Insoluble Spike Duplicate	MTR = Meter
PDS = Post Digestion Spike	OD = Oven Dried
* = Out of Specification	TI = Titration
V = Visual	TOC = Total Organic Carbon
AK = Alpkem	IC = Ion Chromatography
TC = Total Carbon	RA = Rapid Analyzer

Moisture Data

MOISTURE

SAMPLE NUMBERS:

Sample #	Sample Code
6926640	TSC-1
6926641	2-TS1
6926642	2-TS2

COMMENTS:

The moisture value calculation is:

$$\% \text{ moisture} = \frac{A - B}{C} \times 100$$

Where: A = weight of sample and container before drying
B = weight of sample and container after drying
C = weight of sample before drying

Method defined actions are taken for any failed matrix QC.

Laboratory Compliance Quality Control

Analysis Name		LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number:	13019820001A	Sample number(s):	6926640-6926642			
Moisture		100		99-101		

Sample Matrix Quality Control

Analysis Name		BKG Conc	DUP Conc	RPD	RPD Max
Batch number:	13019820001A	Sample number(s):	6926640-6926642		
Moisture		20.0	19.5	2	13

* - Outside of specification
(1) - The result for one or both determinations was less than five times the LOQ.

Moisture Data Report

Batch #: **13019820001**

Sample ID	Batch ID	Analysis#	Tare Wt	Sample Wt	Dry Wt	%Moisture	Analysis Date (Emp#)	Verified Date (Emp#)
LCS 89.5% Std.			1.0728	5.0004	1.5986	89.48	1/19/13 (1382/SAS)	1/21/13 (0236/CW)
6926640	A	00111	1.0946	5.8480	6.0014	16.09	1/19/13 (1382/SAS)	1/21/13 (0236/CW)
6926641	A	00111	1.1048	5.4173	5.5691	17.59	1/19/13 (1382/SAS)	1/21/13 (0236/CW)
6926642	A	00111	1.0899	5.4666	5.6899	15.85	1/19/13 (1382/SAS)	1/21/13 (0236/CW)
P926301BKG	A	00111	1.0855	5.0952	5.1614	20.01	1/19/13 (1382/SAS)	1/21/13 (0236/CW)
P926301DUP	A	00111	1.1041	5.1681	5.2626	19.54	1/19/13 (1382/SAS)	1/21/13 (0236/CW)

APPENDIX G: AIR MONITORING DATA

(Documents located on enclosed CD located under Appendix E)

Final Remedial Design/Remedial Action Work Plan
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)
Village of Hastings on Hudson, Westchester County, New York
Site No. 3-60-015
Air Monitoring
October 15-19, 2012

Date: - Activity Notes:	**October 15** - Mobilization	**October 16** - Mobilization	**October 17** - Mobilization	**October 18** - Begin site preparation and commence Air Monitoring	**October 19** - Site preparation activities suspended due to rain.
Particulates:				**Upwind Results:** Minimum: 5.4 ug/m3 Maximum: 37.6 ug/m3 **Downwind Results:** Minimum: 2.7 ug/m3 Maximum: 25.3 ug/m3 *No particulates measured above action levels.*(1)	
Volatile Organic Compounds (VOCs):				**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0 ppm *No VOCs measured above action levels.*(1)	

(1) Action Levels:
Particulate: 150 micrograms per cubic meter (ug/m3)
Volatile Organic Compounds (VOCs): 5 parts per million (ppm)

Final Remedial Design/Remedial Action Work Plan
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)
Village of Hastings on Hudson, Westchester County, New York
Site No. 3-60-015
Air Monitoring
October 22-26, 2012

Date: - Activity Notes:	**October 22** - Site preparation	**October 23** - Site preparation	**October 24** - Site preparation	**October 25** - Site preparation	**October 26** - Site preparation
Particulates:	**Upwind Results:** Minimum: 3.7 ug/m3 Maximum: 10.7 ug/m3 **Downwind Results:** Minimum: 3.9 ug/m3 Maximum: 29.6 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 6.3 ug/m3 Maximum: 11 ug/m3 **Downwind Results:** Minimum: 6.3 ug/m3 Maximum: 32.9 ug/m3 *No particulates measured above action levels.*(1)(2)	**Upwind Results:** Minimum: 20.2 ug/m3 Maximum: 35.9 ug/m3 **Downwind Results:** Minimum: 20.9 ug/m3 Maximum: 37.3 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 7.6 ug/m3 Maximum: 14.2 ug/m3 **Downwind Results:** Minimum: 6.6 ug/m3 Maximum: 16.3 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 7 ug/m3 Maximum: 12.4 ug/m3 **Downwind Results:** Minimum: 6.3 ug/m3 Maximum: 31 ug/m3 *No particulates measured above action levels.*(1)
Volatile Organic Compounds (VOCs):	**Upwind Results:** Minimum: 0 ppm Maximum: 0.1 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0 ppm *No VOCs measured above action levels.(1)*	**Upwind Results:** Minimum: 0 ppm Maximum: 0.3 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0.1 ppm *No VOCs measured above action levels.(1)*	**Upwind Results:** Minimum: 0 ppm Maximum: 0.4 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0 ppm *No VOCs measured above action levels.(1)*	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0 ppm *No VOCs measured above action levels.(1)*	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0.3 ppm Maximum: 1.8 ppm *No VOCs measured above action levels.(1)*

(1) Action Levels:
Particulate: 150 micrograms per cubic meter (ug/m3)
Volatile Organic Compounds (VOCs): 5 parts per million (ppm)

(2) On October 23rd at 9:00am, a brief alarm sounded (less than 10 seconds) at the downwind particulate meter during a routine check when the meter was accessed, thought possibly due to disturbance from vehicular traffic. No measurements exceeded the action level.

Final Remedial Design/Remedial Action Work Plan
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)
Village of Hastings on Hudson, Westchester County, New York
Site No. 3-60-015
Air Monitoring
October 29-November 2, 2012

Date: - Activity Notes:	**October 29** - No site activity (severe weather)	**October 30** - No site activity	**October 31** - No site activity	**November 1** - Cleanup only following severe weather	**November 2** - Tree removal
Particulates:					**Upwind Results:** Minimum: 0.7 ug/m3 Maximum: 2.7 ug/m3 **Downwind Results:** Minimum: 0.9 ug/m3 Maximum: 18.5 ug/m3 *No particulates measured above action levels.*(1)
Volatile Organic Compounds (VOCs):					**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0.3 ppm Maximum: 20.3 ppm *VOCs measured above action level*(1) *addressed when probe was cleared and meter recalibrated.*

(1) Action Levels:
Particulate: 150 micrograms per cubic meter (ug/m3)
Volatile Organic Compounds (VOCs): 5 parts per million (ppm)

Final Remedial Design/Remedial Action Work Plan
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)
Village of Hastings on Hudson, Westchester County, New York
Site No. 3-60-015
Air Monitoring
November 5-9, 2012

Date: - Activity Notes:	**November 5** - Site preparation	**November 6** - Site preparation	**November 7** - No site activity (severe weather)	**November 8** - No site activity	**November 9** - Site preparation
Particulates:	**Upwind Results:** Minimum: 3.1 ug/m3 Maximum: 7.2 ug/m3 **Downwind Results:** Minimum: 5.3 ug/m3 Maximum: 32 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 1.9 ug/m3 Maximum: 4.7 ug/m3 **Downwind Results:** Minimum: 2.5 ug/m3 Maximum: 42.9 ug/m3 *No particulates measured above action levels.*(1)			**Upwind Results:** Minimum: 4 ug/m3 Maximum: 6.3 ug/m3 **Downwind Results:** Minimum: 4.3 ug/m3 Maximum: 14.6 ug/m3 *No particulates measured above action levels.*(1)
Volatile Organic Compounds (VOCs):	**Upwind Results:** Minimum: 0 ppm Maximum: 0.1 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0 ppm *No VOCs measured above action levels.(1)*	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0.8 ppm *No VOCs measured above action levels.(1)*			**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0.1 ppm Maximum: 1.6 ppm *No VOCs measured above action levels.(1)*

(1) Action Levels:
Particulate: 150 micrograms per cubic meter (ug/m3)
Volatile Organic Compounds (VOCs): 5 parts per million (ppm)

Final Remedial Design/Remedial Action Work Plan
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)
Village of Hastings on Hudson, Westchester County, New York
Site No. 3-60-015
Air Monitoring
November 12-16, 2012

Date: - Activity Notes:	**November 12** - Site preparation	**November 13** - Site preparation	**November 14** - Site preparation	**November 15** - Site preparation	**November 16** - Site preparation
Particulates:	**Upwind Results:** Minimum: 41.7 ug/m3 Maximum: 112.5 ug/m3 **Downwind Results:** Minimum: 65.1 ug/m3 Maximum: 147 ug/m3 *Alarm engaged due to fog, meter operation interrupted due to weather.*	- Inclement weather, meters not operated.	**Upwind Results:** Minimum: 0.7 ug/m3 Maximum: 2.4 ug/m3 **Downwind Results:** Minimum: 3.8 ug/m3 Maximum: 36.4 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 6.8 ug/m3 Maximum: 24.9 ug/m3 **Downwind Results:** Minimum: 3 ug/m3 Maximum: 9.6 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 0 ug/m3 Maximum: 44.3 ug/m3 **Downwind Results:** Minimum: 6.4 ug/m3 Maximum: 27.1 ug/m3 *No particulates measured above action levels.*(1)
Volatile Organic Compounds (VOCs):	**Upwind Results:** Minimum: 0 ppm Maximum: 2.4 ppm **Downwind Results:** Minimum: 0.8 ppm Maximum: 1.3 ppm *No VOCs measured above action levels.(1)*	- Inclement weather, meters not operated.	**Upwind Results:** Minimum: 0 ppm Maximum: 0.4 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0 ppm *No VOCs measured above action levels.(1)*	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0.2 ppm *No VOCs measured above action levels.(1)*	**Upwind Results:** Minimum: 0 ppm Maximum: 0.2 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0.1 ppm *No VOCs measured above action levels.(1)*

(1) Action Levels:
Particulate: 150 micrograms per cubic meter (ug/m3)
Volatile Organic Compounds (VOCs): 5 parts per million (ppm)

Final Remedial Design/Remedial Action Work Plan
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)
Village of Hastings on Hudson, Westchester County, New York
Site No. 3-60-015
Air Monitoring
November 19-23, 2012

Date: - Activity Notes:	**November 19** - Site preparation, fill material off-loading and placement	**November 20** - Site preparation, fill material off-loading and placement	**November 21** - Site preparation, fill material off-loading and placement	**November 22** - Holiday, No site work	**November 23** - No site work
Particulates:	**Upwind Results:** Minimum: 0 ug/m3 Maximum: 49.9 ug/m3 **Downwind Results:** Minimum: 8.5 ug/m3 Maximum: 31.4 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 8.8 ug/m3 Maximum: 38.1 ug/m3 **Downwind Results:** Minimum: 9.4 ug/m3 Maximum: 25.6 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 10.2 ug/m3 Maximum: 23.1 ug/m3 **Downwind Results:** Minimum: 19.1 ug/m3 Maximum: 59.7 ug/m3 *No particulates measured above action levels.*(1)	- Meters not operated	- Meters not operated.
Volatile Organic Compounds (VOCs):	**Upwind Results:** Minimum: 0 ppm Maximum: 0.3 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0 ppm *No VOCs measured above action levels.(1)*	**Upwind Results:** Minimum: 0.6 ppm Maximum: 1.1 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0 ppm *No VOCs measured above action levels.(1)*	**Upwind Results:** Minimum: 0 ppm Maximum: 0.1 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0 ppm *No VOCs measured above action levels.(1)*	- Meters not operated.	- Meters not operated.

(1) Action Levels:
Particulate: 150 micrograms per cubic meter (ug/m3)
Volatile Organic Compounds (VOCs): 5 parts per million (ppm)

Final Remedial Design/Remedial Action Work Plan
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)
Village of Hastings on Hudson, Westchester County, New York
Site No. 3-60-015
Air Monitoring
November 26-30, 2012

Date: - Activity Notes:	**November 26** - Site preparation, fill material off-loading and placement	**November 27** - Site preparation, fill material off-loading and placement	**November 28** - Site preparation, fill material off-loading and placement	**November 29** - Site preparation, fill material off-loading and placement	**November 30** - Site preparation, fill material off-loading and placement
Particulates:	**Upwind Results:** Minimum: 0 ug/m3 Maximum: 67.4 ug/m3 **Downwind Results:** Minimum: 6.5 ug/m3 Maximum: 24.1 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 47.4 ug/m3 Maximum: 95.3 ug/m3 **Downwind Results:** Minimum: 12.8 ug/m3 Maximum: 90.9 ug/m3 *Upwind alarm engaged due to rain/snow, no particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 8.6 ug/m3 Maximum: 17.1 ug/m3 **Downwind Results:** Minimum: 35.9 ug/m3 Maximum: 99.1 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 15.8 ug/m3 Maximum: 31.7 ug/m3 **Downwind Results:** Minimum: 0 ug/m3 Maximum: 9.9 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 23.5 ug/m3 Maximum: 40.4 ug/m3 **Downwind Results:** Minimum: 23.5 ug/m3 Maximum: 39.3 ug/m3 *No particulates measured above action levels.*(1)
Volatile Organic Compounds (VOCs):	**Upwind Results:** Minimum: 0.7 ppm Maximum: 1.1 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0.2 ppm *No VOCs measured above action levels.*(1)	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0.3 ppm *No VOCs measured above action levels.*(1)	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0.7 ppm Maximum: 1.2 ppm *No VOCs measured above action levels.*(1)	**Upwind Results:** Minimum: 0 ppm Maximum: 0.2 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0.4 ppm *No VOCs measured above action levels.*(1)	**Upwind Results:** Minimum: 0 ppm Maximum: 0.3 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0 ppm *No VOCs measured above action levels.*(1)

(1) Action Levels:
Particulate: 150 micrograms per cubic meter (ug/m3)
Volatile Organic Compounds (VOCs): 5 parts per million (ppm)

Final Remedial Design/Remedial Action Work Plan
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)
Village of Hastings on Hudson, Westchester County, New York
Site No. 3-60-015
Air Monitoring
December 3-7, 2012

Date: - Activity Notes:	**December 3** - Site preparation, fill material off-loading and placement	**December 4** - Site preparation, fill material off-loading and placement	**December 5** - Site preparation, fill material off-loading and placement	**December 6** - Site preparation, fill material off-loading and placement	**December 7** - Site preparation, fill material off-loading and placement
Particulates:	**Upwind Results:** Minimum: 17.5 ug/m3 Maximum: 69.2 ug/m3 **Downwind Results:** Minimum: 18.7 ug/m3 Maximum: 62.4 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 423.1 ug/m3 Maximum: 428.4 ug/m3 **Downwind Results:** Minimum: 400.5 ug/m3 Maximum: 412.5 ug/m3 *Anomalous readings upwind and downwind due to weather.*(2)	**Upwind Results:** Minimum: 3.6 ug/m3 Maximum: 71.6 ug/m3 **Downwind Results:** Minimum: 14.1 ug/m3 Maximum: 37.4 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 2.0 ug/m3 Maximum: 7.0 ug/m3 **Downwind Results:** Minimum: 2.5 ug/m3 Maximum: 14.5 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 1.0 ug/m3 Maximum: 4.7 ug/m3 **Downwind Results:** Minimum: 3.2 ug/m3 Maximum: 10.1 ug/m3 *No particulates measured above action levels.*(1)
Volatile Organic Compounds (VOCs):	**Upwind Results:** Minimum: 0 ppm Maximum: 0.3 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0 ppm *No VOCs measured above action levels.*(1)	**Upwind Results:** Minimum: 0.8 ppm Maximum: 0.9 ppm **Downwind Results:** Minimum: 2.3 ppm Maximum: 2.3 ppm *No VOCs measured above action levels.*(1)(2)	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0.4 ppm *No VOCs measured above action levels.*(1)	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0 ppm *No VOCs measured above action levels.*(1)	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0.7 ppm Maximum: 1.1 ppm *No VOCs measured above action levels.*(1)

(1) Action Levels:
Particulate: 150 micrograms per cubic meter (ug/m3)
Volatile Organic Compounds (VOCs): 5 parts per million (ppm)

(2) Meter operation limited due to weather and limited site activity. Particulate readings elevated due to high humidity and fog.

Final Remedial Design/Remedial Action Work Plan
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)
Village of Hastings on Hudson, Westchester County, New York
Site No. 3-60-015
Air Monitoring
December 10-14, 2012

Date: - Activity Notes:	**December 10** - Site preparation, fill material off-loading and placement	**December 11** - Site preparation, fill material off-loading and placement	**December 12** - Site preparation, fill material off-loading and placement	**December 13** - Site preparation, fill material off-loading and placement	**December 14** - Site preparation, fill material off-loading and placement
Particulates:	*Meters not operated due to inclement weather and fog.*	**Upwind Results:** Minimum: 2.9 ug/m3 Maximum: 5.9 ug/m3 **Downwind Results:** Minimum: 2.3 ug/m3 Maximum: 9.8 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 5.6 ug/m3 Maximum: 9.0 ug/m3 **Downwind Results:** Minimum: 4.8 ug/m3 Maximum: 12.9 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 9.9 ug/m3 Maximum: 21.5 ug/m3 **Downwind Results:** Minimum: 11.1 ug/m3 Maximum: 27.0 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 21.3 ug/m3 Maximum: 34.4 ug/m3 **Downwind Results:** Minimum: 21.5 ug/m3 Maximum: 35.0 ug/m3 *No particulates measured above action levels.*(1)
Volatile Organic Compounds (VOCs):	*Meters not operated due to inclement weather and fog.*	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0.8 ppm Maximum: 1.3 ppm *No VOCs measured above action levels.(1)*	**Upwind Results:** Minimum: 0 ppm Maximum: 0.1 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0.3 ppm *No VOCs measured above action levels.(1)*	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0.3 ppm *No VOCs measured above action levels.(1)*	**Upwind Results:** Minimum: 0.1 ppm Maximum: 0.5 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0 ppm *No VOCs measured above action levels.(1)*

(1) Action Levels:
Particulate: 150 micrograms per cubic meter (ug/m3)
Volatile Organic Compounds (VOCs): 5 parts per million (ppm)

Final Remedial Design/Remedial Action Work Plan
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)
Village of Hastings on Hudson, Westchester County, New York
Site No. 3-60-015
Air Monitoring
December 17-21, 2012

Date: - Activity Notes:	**December 17** - Site preparation, fill material off-loading and placement	**December 18** - Site preparation, fill material off-loading and placement	**December 19** - Site preparation, fill material off-loading and placement	**December 20** - Site preparation, fill material off-loading and placement	**December 21** - Inclement weather, no site work
Particulates:	**Upwind Results:** Minimum: 3.6 ug/m3 Maximum: 15.4 ug/m3 **Downwind Results:** Minimum: 5.0 ug/m3 Maximum: 17.5 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 1.2 ug/m3 Maximum: 24.6 ug/m3 **Downwind Results:** Minimum: 0 ug/m3 Maximum: 2.0 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 8.8 ug/m3 Maximum: 10.8 ug/m3 **Downwind Results:** Minimum: 3.1 ug/m3 Maximum: 6.3 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 3.9 ug/m3 Maximum: 15.0 ug/m3 **Downwind Results:** Minimum: 3.2 ug/m3 Maximum: 19.6 ug/m3 *No particulates measured above action levels.*(1)	Meters not operated
Volatile Organic Compounds (VOCs):	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0.2 ppm *No VOCs measured above action levels.(1)*	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0.1 ppm Maximum: 0.5 ppm *No VOCs measured above action levels.(1)*	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0.4 ppm *No VOCs measured above action levels.(1)*	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0.3 ppm *No VOCs measured above action levels.(1)*	Meters not operated

(1) Action Levels:
Particulate: 150 micrograms per cubic meter (ug/m3)
Volatile Organic Compounds (VOCs): 5 parts per million (ppm)

Final Remedial Design/Remedial Action Work Plan
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)
Village of Hastings on Hudson, Westchester County, New York
Site No. 3-60-015
Air Monitoring
December 24-28, 2012

Date: - Activity Notes:	**December 24** - No site work	**December 25** - Holiday, No site work	**December 26** - Site preparation, fill material off-loading and placement	**December 27** - Inclement weather, no site work	**December 28** - Site preparation, fill material off-loading and placement
Particulates:	Meters not operated	Meters not operated.	**Upwind Results:** Minimum: 5.6 ug/m3 Maximum: 11.8 ug/m3 **Downwind Results:** Minimum: 0 ug/m3 Maximum: 0.6 ug/m3 *No particulates measured above action levels.*(1)	Meters not operated	**Upwind Results:** Minimum: 2.0 ug/m3 Maximum: 5.9 ug/m3 **Downwind Results:** Minimum: 2.0 ug/m3 Maximum: 6.5 ug/m3 *No particulates measured above action levels.*(1)
Volatile Organic Compounds (VOCs):	Meters not operated.	Meters not operated.	**Upwind Results:** Minimum: 0 ppm Maximum: 0.5 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0 ppm *No VOCs measured above action levels.(1)*	Meters not operated	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0.2 ppm Maximum: 0.7 ppm *No VOCs measured above action levels.(1)*

(1) Action Levels:
Particulate: 150 micrograms per cubic meter (ug/m3)
Volatile Organic Compounds (VOCs): 5 parts per million (ppm)

Final Remedial Design/Remedial Action Work Plan
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)
Village of Hastings on Hudson, Westchester County, New York
Site No. 3-60-015
Air Monitoring
December 31, 2012 – January 5, 2013

Date: - Activity Notes:	**December 31** - Site preparation, fill material placement	**January 1** - Holiday, No site work	**January 2** - Site preparation, fill material placement	**January 3** - Site preparation, fill material placement	**January 4** - Fill material placement	**January 5** - Fill material placement
Particulates:	**Upwind Results:** Minimum: 10.7 ug/m3 Maximum: 16.5 ug/m3 **Downwind Results:** Minimum: 0 ug/m3 Maximum: 4.6 ug/m3 *No particulates measured above action levels.*(1)	Meters not operated.	**Upwind Results:** Minimum: 16.7 ug/m3 Maximum: 25.6 ug/m3 **Downwind Results:** Minimum: 3.5 ug/m3 Maximum: 13.0 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 9.0 ug/m3 Maximum: 39.3 ug/m3 **Downwind Results:** Minimum: 7.1 ug/m3 Maximum: 35.6 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 13.3 ug/m3 Maximum: 18.5 ug/m3 **Downwind Results:** Minimum: 2.0 ug/m3 Maximum: 6.5 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 8.0 ug/m3 Maximum: 15.9 ug/m3 **Downwind Results:** Minimum: 12.6 ug/m3 Maximum: 20.5 ug/m3 *No particulates measured above action levels.*(1)
Volatile Organic Compounds (VOCs):	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0.3 ppm *No VOCs measured above action levels.(1)*	Meters not operated.	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0.4 ppm *No VOCs measured above action levels.(1)*	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0.1 ppm Maximum: 0.6 ppm *No VOCs measured above action levels.(1)*	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0.1 ppm Maximum: 0.5 ppm *No VOCs measured above action levels.(1)*	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0.5 ppm *No VOCs measured above action levels.(1)*

(1) Action Levels:
Particulate: 150 micrograms per cubic meter (ug/m3)
Volatile Organic Compounds (VOCs): 5 parts per million (ppm)

Final Remedial Design/Remedial Action Work Plan
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)
Village of Hastings on Hudson, Westchester County, New York
Site No. 3-60-015
Air Monitoring
January 7-12, 2013

Date: - Activity Notes:	**January 7** - Fill material placement	**January 8** - Fill material placement	**January 9** - Fill material placement	**January 10** - Fill material placement	**January 11** - Fill material placement	**January 12** - Fill material placement (stone)
Particulates:	**Upwind Results:** Minimum: 0 ug/m3 Maximum: 0.9 ug/m3 **Downwind Results:** Minimum: 4.6 ug/m3 Maximum: 13.3 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 22.7 ug/m3 Maximum: 43.5 ug/m3 **Downwind Results:** Minimum: 25.0 ug/m3 Maximum: 47.5 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 42.2 ug/m3 Maximum: 99.1 ug/m3 **Downwind Results:** Minimum: 42.9 ug/m3 Maximum: 99.8 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 2.2 ug/m3 Maximum: 3.8 ug/m3 **Downwind Results:** Minimum: 1.6 ug/m3 Maximum: 5.3 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 2.7 ug/m3 Maximum: 74.7 ug/m3 **Downwind Results:** Minimum: 5.8 ug/m3 Maximum: 71.3 ug/m3 *No particulates measured above action levels.*(1)	*Limited site work, meters not operated.*
Volatile Organic Compounds (VOCs):	**Upwind Results:** Minimum: 0 ug/m3 Maximum: 0 ug/m3 **Downwind Results:** Minimum: 0 ug/m3 Maximum: 0.4 ug/m3 *No VOCs measured above action levels.(1)*	**Upwind Results:** Minimum: 0 ug/m3 Maximum: 0 ug/m3 **Downwind Results:** Minimum: 0 ug/m3 Maximum: 0.5 ug/m3 *No VOCs measured above action levels.(1)*	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0.6 ppm *No VOCs measured above action levels.(1)*	**Upwind Results:** Minimum: 0 ug/m3 Maximum: 0 ug/m3 **Downwind Results:** Minimum: 0 ug/m3 Maximum: 0.5 ug/m3 *No VOCs measured above action levels.(1)*	**Upwind Results:** Minimum: 0 ppm Maximum: 0.2 ppm **Downwind Results:** Minimum: 0.2 ppm Maximum: 1.1 ppm *No VOCs measured above action levels.(1)*	*Limited site work, meters not operated.*

(1) Action Levels:
Particulate: 150 micrograms per cubic meter (ug/m3)
Volatile Organic Compounds (VOCs): 5 parts per million (ppm)

Final Remedial Design/Remedial Action Work Plan
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)
Village of Hastings on Hudson, Westchester County, New York
Site No. 3-60-015
Air Monitoring
January 14-19, 2013

Date: - Activity Notes:	**January 14** - No site work	**January 15** - Fill material placement	**January 16** - Fill material placement	**January 17** - Fill material placement	**January 18** - Fill material placement	**January 19** - Fill material placement
Particulates:	*Meters not operated.*	**Upwind Results:** Minimum: 10.4 ug/m3 Maximum: 14.0 ug/m3 **Downwind Results:** Minimum: 9.9 ug/m3 Maximum: 16.8 ug/m3 *No particulates measured above action levels.*(1)	*Meters not operated due to inclement weather*	**Upwind Results:** Minimum: 6.5 ug/m3 Maximum: 13.7 ug/m3 **Downwind Results:** Minimum: 9.7 ug/m3 Maximum: 17.6 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 4.6 ug/m3 Maximum: 10.2 ug/m3 **Downwind Results:** Minimum: 2.4 ug/m3 Maximum: 19.0 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 21.7 ug/m3 Maximum: 85.5 ug/m3 **Downwind Results:** Minimum: 2.4 ug/m3 Maximum: 19.0 ug/m3 *No particulates measured above action levels.*(1)
Volatile Organic Compounds (VOCs):	*Meters not operated.*	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0.5 ppm *No VOCs measured above action levels.*(1)	*Meters not operated due to inclement weather*	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0.5 ppm *No VOCs measured above action levels.*(1)	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0 ppm Maximum: 0.3 ppm *No VOCs measured above action levels.*(1)	**Upwind Results:** Minimum: 0 ppm Maximum: 0 ppm **Downwind Results:** Minimum: 0.1 ppm Maximum: 0.7 ppm *No VOCs measured above action levels.*(1)

(1) Action Levels:
Particulate: 150 micrograms per cubic meter (ug/m3)
Volatile Organic Compounds (VOCs): 5 parts per million (ppm)

Final Remedial Design/Remedial Action Work Plan
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)
Village of Hastings on Hudson, Westchester County, New York
Site No. 3-60-015
Air Monitoring
January 21-25, 2013

Date: - Activity Notes:	**January 21** - Fill material placement	**January 22** - Fill material placement	**January 23** - Grading	**January 24** - Fill material placement	**January 25** - Fill material placement
Particulates:	**Upwind Results:** Minimum: 5.1 ug/m3 Maximum: 10.5 ug/m3 **Downwind Results:** Minimum: 3.9 ug/m3 Maximum: 9.3 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 2.8 ug/m3 Maximum: 9.0 ug/m3 **Downwind Results:** Minimum: 5.2 ug/m3 Maximum: 10.9 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 4.8 ug/m3 Maximum: 16.2 ug/m3 **Downwind Results:** Minimum: 1.7 ug/m3 Maximum: 9.5 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 1.8 ug/m3 Maximum: 14.2 ug/m3 **Downwind Results:** Minimum: 5.8 ug/m3 Maximum: 25.7 ug/m3 *No particulates measured above action levels.*(1)	*Meters not operated due to inclement weather*

(1) With completion of base material placement on January 19th, 2013, air monitoring for volatile organic compounds was discontinued and transitioned to monitoring for particulates only; action level for particulates = 150 micrograms per cubic meter (ug/m3).

Final Remedial Design/Remedial Action Work Plan
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)
Village of Hastings on Hudson, Westchester County, New York
Site No. 3-60-015
Air Monitoring
January 28 - February 5, 2013

Date: - Activity Notes:	**January 28** - Fill material placement, inclement weather	**January 29** - Fill material placement	**January 30** - Fill material placement, inclement weather	**January 31** - No site work, inclement weather	**February 1** - Fill material placement
Particulates:	**Upwind Results:** Minimum: 44.7 ug/m3 Maximum: 101.8 ug/m3 **Downwind Results:** Minimum: 21.0 ug/m3 Maximum: 102.9 ug/m3 *No particulates measured above action levels.*(1)	**Upwind Results:** Minimum: 4.1 ug/m3 Maximum: 90.5 ug/m3 **Downwind Results:** Minimum: 6.4 ug/m3 Maximum: 73.8 ug/m3 *No particulates measured above action levels.*(1)	*Meters not operated due to inclement weather.*	*Meters not operated.*	**Upwind Results:** Minimum: 1.1 ug/m3 Maximum: 10.4 ug/m3 **Downwind Results:** Minimum: 0.9 ug/m3 Maximum: 18.5 ug/m3 *No particulates measured above action levels.*(1)
Date: - Activity Notes:	**February 4** - Fill material placement	**February 5** - Complete fill material placement, inclement weather			
Particulates:	**Upwind Results:** Minimum: 13.3 ug/m3 Maximum: 18.5 ug/m3 **Downwind Results:** Minimum: 7.1 ug/m3 Maximum: 47.5 ug/m3 *No particulates measured above action levels.*(1)	*Meters not operated due to inclement weather.*			

(1) With completion of base material placement on January 19th, 2013, air monitoring for volatile organic compounds was discontinued and transitioned to monitoring for particulates only; action level for particulates = 150 micrograms per cubic meter (ug/m3).

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 10/18/2012

Upwind Dataram Serial #: D581
Downwind Dataram Serial #: D389

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
--	--	8:46:44	17.4
--	--	9:01:44	18.7
9:07:15	37.6	9:16:44	19.7
9:22:15	19.6	9:31:44	22.2
9:37:15	27.3	9:46:44	23.4
9:52:15	19.6	10:01:44	24.1
10:07:15	20	10:16:44	24.5
10:22:15	20.5	10:31:44	24.8
10:37:15	22.3	10:46:44	24.8
10:52:15	20.6	11:01:44	25.3
11:07:15	19.7	11:16:44	24.4
11:22:15	18.6	11:31:44	21.5
11:37:15	17.1	11:46:44	16.6
11:52:15	14.3	12:01:44	12.6
12:07:15	18.3	12:16:44	12.4
12:22:15	15.8	12:31:44	10.3
12:37:15	14.8	12:46:44	7.6
12:52:15	7.9	13:01:44	4.7
13:07:15	5.4	13:16:44	3.7
13:22:15	14.8	13:31:44	4.2
13:37:15	6.1	13:46:44	8.7
13:52:15	6.7	14:01:44	3.5
14:07:15	5.5	14:16:44	2.7

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 10/18/2012

Upwind PID Serial #: 9578
Downwind PID Serial #: 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
9:02	0	9:10	0
9:17	0	9:25	0
9:32	0	9:40	0
9:47	0	9:55	0
10:02	0	10:10	0
10:17	0	10:25	0
10:32	0	10:40	0
10:47	0	10:55	0
11:02	0	11:10	0
11:17	0	11:25	0
11:32	0	11:40	0
11:47	0	11:55	0
12:02	0	12:10	0
12:17	0	12:25	0
12:32	0	12:40	0
12:47	0	12:55	0
13:02	0	13:10	0
13:17	0	13:25	0
13:32	0	13:40	0
13:47	0	13:55	0

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

8:30-14:20
Downwind Meters

8:30-14:20
Upwind Meters

10/18/2012
Former Tappan Terminal
CAMP

WIND DIRECTION

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

GRAPHIC SCALE
50 25 0 50 100 150

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1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Chelsfile1\projects\209925 ExxonMobil Tappan Terminal\wip\Final Remedial Design\Dwg Files\Civil\209925-GRA (2012.10.03).dwg, Oct 05, 2012 - 9:56am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 10/22/2012

Upwind Serial Number: D389
Downwind Serial Number: D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:21:47	10.7	8:15:01	29.6
8:36:47	5.5	8:30:01	6.1
8:51:47	5.8	8:45:01	5.5
9:06:47	5.7	9:00:01	6.3
9:21:47	6.1	9:15:01	11.3
9:36:47	6.2	9:30:01	6.3
9:51:47	6.1	9:45:01	5.8
10:06:47	6.0	10:00:01	6.1
10:21:47	6.1	10:15:01	5.1
10:36:47	6.1	10:30:01	4.7
10:51:47	6.0	10:45:01	4.8
11:06:47	5.6	11:00:01	13.9
11:21:47	5.4	11:15:01	4.6
11:36:47	5.2	11:30:01	7.7
11:51:47	4.9	11:45:01	7.7
12:06:47	4.5	12:00:01	4.7
12:21:47	3.9	12:15:01	4.3
12:36:47	4.2	12:30:01	3.9
12:51:47	4.9	12:45:01	8.6
13:06:47	4.8	13:00:01	8.2
13:21:47	4.6	13:15:01	7.1
13:36:47	4.5	13:30:01	6.0
13:51:47	4.4	13:45:01	5.6
14:06:47	4.0	14:00:01	4.5
14:21:47	3.9	14:15:01	5.6
14:36:47	3.7	14:30:01	6.2

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 10/22/2012

Upwind Serial Number: 12685
Downwind Serial Number: 9578

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
8:18	0.0	8:09	0.0
8:33	0.0	8:24	0.0
8:48	0.0	8:39	0.0
9:03	0.1	8:54	0.0
9:18	0.1	9:09	0.0
9:33	0.1	9:24	0.0
9:48	0.1	9:39	0.0
10:03	0.1	9:54	0.0
10:18	0.1	10:09	0.0
10:33	0.1	10:24	0.0
10:48	0.1	10:39	0.0
11:03	0.1	10:54	0.0
11:18	0.1	11:09	0.0
11:33	0.1	11:24	0.0
11:48	0.1	11:39	0.0
12:03	0.1	11:54	0.0
12:18	0.0	12:09	0.0
12:33	0.0	12:24	0.0
12:48	0.0	12:39	0.0
13:03	0.0	12:54	0.0
13:18	0.0	13:09	0.0
13:33	0.0	13:24	0.0
13:48	0.0	13:39	0.0
14:03	0.0	13:54	0.0
14:18	0.0	14:09	0.0

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

8:00-14:40
Downwind Meters

8:00-14:40
Upwind Meters

10/22/2012
Former Tappan Terminal
CAMP

WIND DIRECTION

GRAPHIC SCALE
50 25 0 50 100 150

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SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Chelsfile1\projects\209925 ExxonMobil Tappan Terminal\wip\Final Remedial Design\Dwg Files\Civil\209925-GDA (2012.10.03).dwg, Oct 05, 2012 - 8:56am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 10/23/2012

Upwind Serial Number: D581
Downwind Serial Number: D389

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:19:43	11	8:14:33	14.3
8:34:43	11	8:29:33	12.5
8:49:43	9.8	8:44:33	32.9
9:04:43	9.8	8:59:33	22.1
9:19:43	8.2	9:14:33	12.5
9:34:43	8.8	9:29:33	12
9:49:43	8.5	9:44:33	14.1
10:04:43	6.3	9:59:33	10.3
10:19:43	6.3	10:14:33	6.6
10:34:43	6.5	10:29:33	6.6
10:49:43	6.3	10:44:33	7.8
11:04:43	6.4	10:59:33	12
11:19:43	6.3	11:14:33	6.3
11:34:43	6.6	11:29:33	6.7

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 10/23/2012

Upwind Serial Number: 12685
Downwind Serial Number: 9578

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
8:17	0.0	8:09	0.0
8:32	0.1	8:24	0.0
8:47	0.2	8:39	0.0
9:02	0.2	8:54	0.0
9:17	0.2	9:09	0.0
9:32	0.2	9:24	0.0
9:47	0.2	9:39	0.0
10:02	0.2	9:54	0.0
10:17	0.2	10:09	0.0
10:32	0.2	10:24	0.0
10:47	0.2	10:39	0.1
11:02	0.2	10:54	0.0
11:17	0.3	11:09	0.0

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

8:00-11:40 Upwind Meters

8:00-11:40 Downwind Meters

10/23/2012
Former Tappan Terminal
CAMP

WIND DIRECTION

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

GRAPHIC SCALE
50 25 0 50 100 150

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SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 208925.05
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Cheshire\projects\208925 Exxonmobil Tappan Terminal\Wip\Final Remedial Design\Dwg Files\c04\208925-C04 (29.2.10.03).dwg, Sep 05, 2012 - 8:35am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 10/24/2012

Upwind Serial Number: D581
Downwind Serial Number: D389

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:25:51	22.3	8:20:06	20.9
8:40:51	20.2	8:35:06	23.2
8:55:51	22.4	8:50:06	24.2
9:10:51	24.2	9:05:06	27.1
9:25:51	23.8	9:20:06	26.8
9:40:51	23.8	9:35:06	27.8
9:55:51	24.9	9:50:06	27.3
10:10:51	26.7	10:05:06	28.2
10:25:51	28.2	10:20:06	30.1
10:40:51	26.9	10:35:06	31.1
10:55:51	25.8	10:50:06	28.0
11:10:51	25.8	11:05:06	27.4
11:25:51	24.5	11:20:06	26.7
11:40:51	23.4	11:35:06	25.8
11:55:51	21.4	11:50:06	22.9
12:10:51	21.4	12:05:06	23.3
12:25:51	21.9	12:20:06	24.1
12:40:51	22.2	12:35:06	24.0
12:55:51	25.4	12:50:06	24.9
13:10:51	28.1	13:05:06	28.1
13:25:51	27.5	13:20:06	28.9
13:40:51	34.6	13:35:06	31.7
13:55:51	35.9	13:50:06	37.3
14:10:51	31.0	14:05:06	34.4
14:25:51	28.6	14:20:06	30.4
14:40:51	26.2	14:35:06	28.2

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 10/24/2012

Upwind Serial Number: 12685
Downwind Serial Number: 9578

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
8:23	0.0	8:15	0.0
8:38	0.1	8:30	0.0
8:53	0.2	8:45	0.0
9:08	0.2	9:00	0.0
9:23	0.2	9:15	0.0
9:38	0.2	9:30	0.0
9:53	0.3	9:45	0.0
10:08	0.3	10:00	0.0
10:23	0.3	10:15	0.0
10:38	0.3	10:30	0.0
10:53	0.3	10:45	0.0
11:08	0.3	11:00	0.0
11:23	0.3	11:15	0.0
11:38	0.3	11:30	0.0
11:53	0.3	11:45	0.0
12:08	0.3	12:00	0.0
12:23	0.3	12:15	0.0
12:38	0.3	12:30	0.0
12:53	0.4	12:45	0.0
13:08	0.4	13:00	0.0
13:23	0.4	13:15	0.0
13:38	0.4	13:30	0.0
13:53	0.4	13:45	0.0
14:08	0.4	14:00	0.0
14:23	0.4	14:15	0.0

24x36 SHEET
1:1

HUDSON RIVER
FLOW

HUDSON RIVER
FLOW

CONC. MOORING DOLPHIN

CONC. MOORING DOLPHIN

8:05-14:45
Upwind Meters

8:05-14:45
Downwind Meters

WIND DIRECTION

10/24/2012
Former Tappan Terminal
CAMP

GRAPHIC SCALE
50 25 0 50 100 150

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SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 208925.05
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Cheshire\projects\208925 Exxonmobil Tappan Terminal\Wip\Final Remedial Design\Dwg Files\c04\208925-c03a (29.2.10.03).dwg, Sat, 05, 2012 - 8:35am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 10/25/2012

Upwind Serial Number: D389
Downwind Serial Number: D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:01:30	13.9	7:55:58	12.7
8:16:30	12.1	8:10:58	11.5
8:31:30	13.4	8:25:58	16.3
8:46:30	14.2	8:40:58	12.5
9:01:30	13.7	8:55:58	13
9:16:30	13.6	9:10:58	12.5
9:31:30	13.5	9:25:58	13.6
9:46:30	13.3	9:40:58	13.2
10:01:30	13.2	9:55:58	12.9
10:16:30	13.7	10:10:58	15.9
10:31:30	13.5	10:25:58	12.4
10:46:30	12.9	10:40:58	12.3
11:01:30	12.4	10:55:58	11.8
11:16:30	10.7	11:10:58	10
11:31:30	9.7	11:25:58	8.9
11:46:30	9.2	11:40:58	8.3
12:01:30	11	11:55:58	9
12:16:30	10.6	12:10:58	9.2
12:31:30	10.2	12:25:58	9.8
12:46:30	10	12:40:58	10.3
13:01:30	10.5	12:55:58	9.7
13:16:30	10.1	13:10:58	9.9
13:31:30	10.6	13:25:58	13.4
13:46:30	8.6	13:40:58	7.5
14:01:30	9.2	13:55:58	7.8
14:16:30	12.4	14:10:58	8.5
14:31:30	8.4	14:25:58	7.3
14:46:30	7.6	14:40:58	6.6

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 10/25/2012

Upwind Serial Number: 12685
Downwind Serial Number: 9578

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:58	0.0	7:50	0.0
8:13	0.0	8:05	0.0
8:28	0.0	8:20	0.0
8:43	0.0	8:35	0.0
8:58	0.0	8:50	0.0
9:13	0.0	9:05	0.0
9:28	0.0	9:20	0.0
9:43	0.0	9:35	0.0
9:58	0.0	9:50	0.0
10:13	0.0	10:05	0.0
10:28	0.0	10:20	0.0
10:43	0.0	10:35	0.0
10:58	0.0	10:50	0.0
11:13	0.0	11:05	0.0
11:28	0.0	11:20	0.0
11:43	0.0	11:35	0.0
11:58	0.0	11:50	0.0
12:13	0.0	12:05	0.0
12:28	0.0	12:20	0.0
12:43	0.0	12:35	0.0
12:58	0.0	12:50	0.0
13:13	0.0	13:05	0.0
13:28	0.0	13:20	0.0
13:43	0.0	13:35	0.0
13:58	0.0	13:50	0.0
14:13	0.0	14:05	0.0
14:28	0.0	14:20	0.0

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

CONC. MOORING DOLPHIN

CONC. MOORING DOLPHIN

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

7:40-15:00
Downwind Meters

7:40-15:00
Upwind Meters

WIND DIRECTION

10/25/2012
Former Tappan Terminal
CAMP

GRAPHIC SCALE
50 25 0 50 100 150

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REV	DESCRIPTION	DESIGNED BY: AJG	CHECKED BY: AJG
	NYSDEC COMMENTS	DRAWN BY: HP	DATE: 7.03.13

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Chelsfile1\projects\209925 ExxonMobil Tappan Terminal\wip\Final Remedial Design\Dwg Files\Civil\209925-GDA (2012.10.03).dwg, Oct 05, 2012 - 8:56am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 10/26/2012

Upwind Serial Number: D581
Downwind Serial Number: D389

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:07:47	10.3	8:02:27	31.0
8:22:47	8.5	8:17:27	13.2
8:37:47	7.6	8:32:27	8.1
8:52:47	10.4	8:47:27	10.7
9:07:47	9.2	9:02:27	7.5
9:22:47	7.2	9:17:27	7.6
9:37:47	7.7	9:32:27	21.2
9:52:47	7.6	9:47:27	8.9
10:07:47	7.1	10:02:27	7.2
10:22:47	7.2	10:17:27	6.3
10:37:47	7.5	10:32:27	11.1
10:52:47	7.7	10:47:27	8.2
11:07:47	7.1	11:02:27	7.8
11:22:47	7.0	11:17:27	8.2
11:37:47	7.4	11:32:27	7.4
11:52:47	7.9	11:47:27	7.5
12:07:47	7.5	12:02:27	13.3
12:22:47	7.5	12:17:27	12.7
12:37:47	7.6	12:32:27	20.3
12:52:47	7.6	12:47:27	9.3
13:07:47	7.7	13:02:27	24.5
13:22:47	8.3	13:17:27	12.0
13:37:47	8.7	13:32:27	9.7
13:52:47	8.8	13:47:27	9.8
14:01:30	9.2	14:02:27	9.0
14:16:30	12.4	14:10:58	8.5
14:31:30	8.4	14:25:58	7.3
14:46:30	7.6	14:40:58	6.6

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 10/26/2012

Upwind Serial Number: 12685
Downwind Serial Number: 9578

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
8:02	0.0	8:00	0.3
8:17	0.0	8:15	0.4
8:32	0.0	8:30	0.4
8:47	0.0	8:45	0.5
9:02	0.0	9:00	0.5
9:17	0.0	9:15	1.8
9:32	0.0	9:30	0.6
9:47	0.0	9:45	0.6
10:02	0.0	10:00	0.6
10:17	0.0	10:15	0.6
10:32	0.0	10:30	0.6
10:47	0.0	10:45	0.7
11:02	0.0	11:00	0.7
11:17	0.0	11:15	0.8
11:32	0.0	11:30	0.7
11:47	0.0	11:45	1.7
12:02	0.0	12:00	0.7
12:17	0.0	12:15	1.7
12:32	0.0	12:30	0.6
12:47	0.0	12:45	1.7
13:02	0.0	13:00	0.6
13:17	0.0	13:15	0.6
13:32	0.0	13:30	0.7
--	--	13:45	0.6

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

CONC. MOORING DOLPHIN

CONC. MOORING DOLPHIN

7:45-14:00
Upwind Meters

MATCH EXISTING GRADE AT PROPERTY LINE WITH SLOPE

SEE NOTE 3 ON SHEET C-04

7:45-14:00
Downwind Meters

WIND DIRECTION

10/26/2012
Former Tappan Terminal
CAMP

GRAPHIC SCALE
50 25 0 50 100 150

Woodard & Curran Engineering P.A.P.C.
709 Westchester Avenue | Suite L2
White Plains, New York 10604
800.837.4900 | www.woodardcurran.com
COMMITMENT & INTEGRITY DRIVE RESULTS

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REV	DESCRIPTION	DESIGNED BY: AHS	DRAWN BY: KP	CHECKED BY: AHS	DATE: 7.03.03
	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Charlie\projects\209925 ExxonMobil Tappan Terminal\wip\Final Removal Design\Dwg Files\Cvil\209925-C01A (29.2.10.03).dwg, Oct 05, 2012 - 8:58am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/2/2012

Upwind Serial Number D581
Downwind Serial Number D389

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:22:25	2.7	8:17:20	3.0
8:37:25	2.1	8:32:20	2.6
8:52:25	2.2	8:47:20	2.6
9:07:25	2.6	9:02:20	3.6
9:22:25	2.4	9:17:20	2.7
9:37:25	2.2	9:32:20	3.6
9:52:25	2.0	9:47:20	2.7
10:07:25	1.8	10:02:20	2.7
10:22:25	1.6	10:17:20	1.8
10:37:25	1.6	10:32:20	11.5
10:52:25	1.5	10:47:20	18.5
11:07:25	1.2	11:02:20	3.9
11:22:25	1.2	11:17:20	1.6
11:37:25	1.2	11:32:20	1.4
11:52:25	1.1	11:47:20	1.3
12:07:25	1.1	12:02:20	2.1
12:22:25	1.0	12:17:20	1.1
12:37:25	1.1	12:32:20	1.1
12:52:25	0.8	12:47:20	0.9
13:07:25	0.7	13:02:20	0.9
13:22:25	0.9	13:17:20	1.1
13:37:25	0.8	13:32:20	1.9
13:52:25	0.8	13:47:20	1.4
14:07:25	1.3	14:02:20	2.5
14:22:25	1.3	14:17:20	4.1
14:37:25	1.6	14:32:20	2.2

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/2/2012

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
8:24	0.0	8:17	2.5
8:39	0.0	8:32	7.1
8:54	0.0	8:47	12.1
9:09	0.0	9:02	15.3
9:24	0.0	9:17	19.2
9:39	0.0	9:32	20.3
9:54	0.0	*Recalibrate meter	
10:09	0.0	10:04	1.7
10:24	0.0	10:19	3.2
10:39	0.0	10:34	2.8
10:54	0.0	10:49	1.7
11:09	0.0	11:04	0.7
11:24	0.0	11:19	0.7
11:39	0.0	11:34	0
11:54	0.0	11:49	0
12:09	0.0	12:04	0.3
12:24	0.0	12:19	0
12:39	0.0	12:34	0
12:54	0.0	12:49	0
13:09	0.0	13:04	0
13:24	0.0	13:19	3.5
13:39	0.0	13:34	4.2

* Exceedances were noted on the downwind meter during the hourly check. Upon identification of the exceedance, logging was interrupted, the intake probe was cleared and the meter was recalibrated prior to resuming logging. No issues were noted after the recalibration. Note that the alarm system was not in place as the components had been damaged during Hurricane Sandy. Replacements for the alarms had been ordered from the rental company but had not been delivered when the stations were set up. Work being performed at the time of the time of the exceedances included tree removal and load-out activities. No soil disturbance activities were taking place at the time of the exceedances.

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

8:00-14:30
Upwind Meters

8:00-14:30
Downwind Meters

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

11/02/2012
Former Tappan Terminal
CAMP

WIND DIRECTION

GRAPHIC SCALE
50 25 0 50 100 150

Woodard & Curran Engineering P.A.P.C.
709 Westchester Avenue | Suite L2
White Plains, New York 10604
800.837.4900 | www.woodardcurran.com

COMMITMENT & INTEGRITY DRIVE RESULTS

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REV	NYSDEC COMMENTS	DESIGNED BY: AHS	CHECKED BY: AHS	DATE: 7.03.13
		DRAWN BY: KP		

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 208925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Charlie\projects\208925 Exxonmobil Tappan Terminal\wip\Final Removal Design\Dwg Files\Grid\208925-GDA (2012.10.03).dwg, Oct 05, 2012 - 8:35am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/5/2012

Upwind Serial Number D389
Downwind Serial Number D581

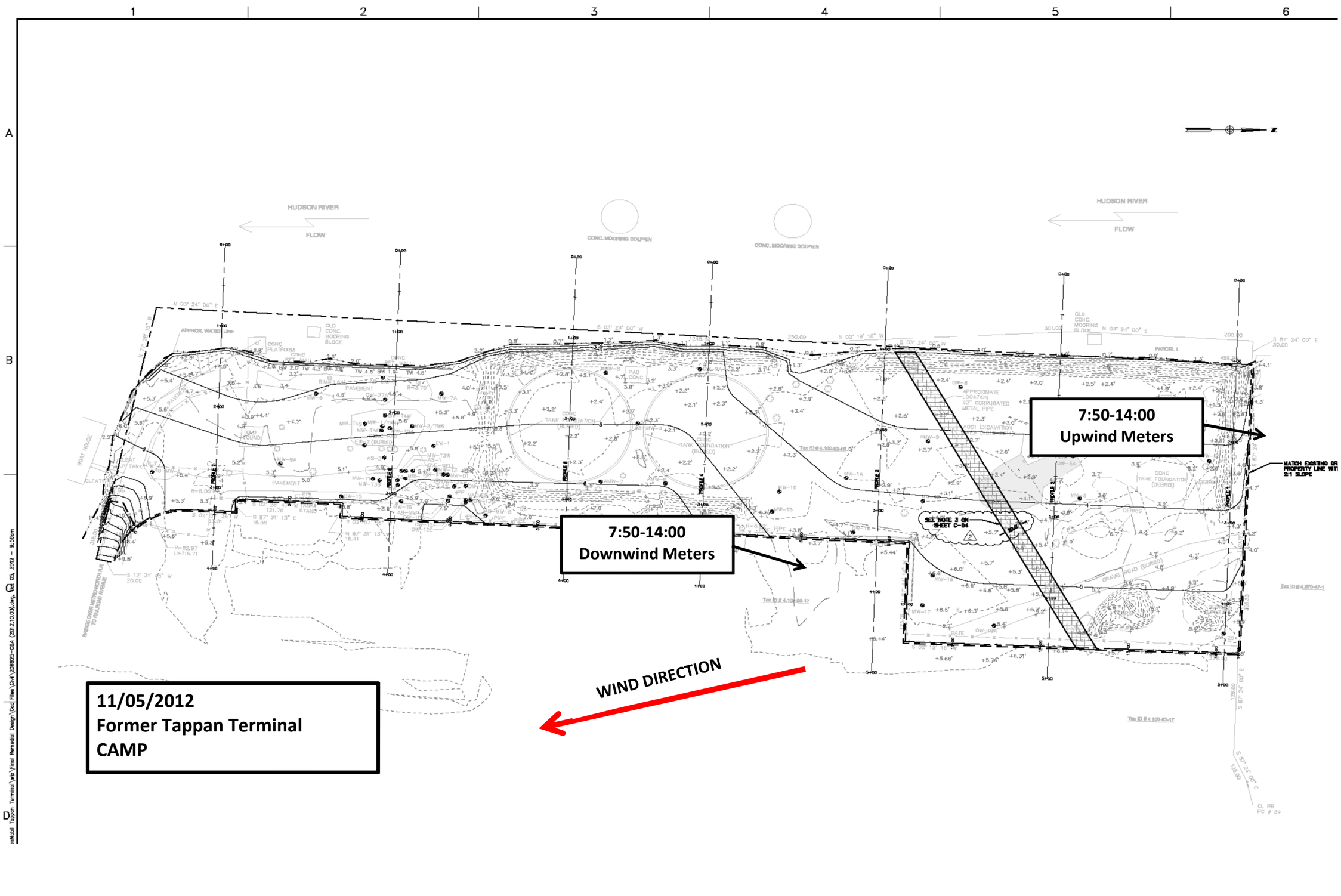
Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:11:12	3.1	8:14:51	12.9
8:26:12	4.4	8:29:51	32.0
8:41:12	4.4	8:44:51	8.3
8:56:12	4.8	8:59:51	5.3
9:11:12	5.1	9:14:51	8.9
9:26:12	5.3	9:29:51	7.9
9:41:12	5.6	9:44:51	12.3
9:56:12	5.6	9:59:51	7.2
10:11:12	5.6	10:14:51	9.5
10:26:12	5.3	10:29:51	5.3
10:41:12	5.2	10:44:51	9.7
10:56:12	5.1	10:59:51	7.4
11:11:12	5.3	11:14:51	19.2
11:26:12	5.1	11:29:51	21.9
11:41:12	5.2	11:44:51	17.7
11:56:12	6.0	11:59:51	26.2
12:11:12	7.2	12:14:51	16.4
12:26:12	5.0	12:29:51	10.0
12:41:12	5.1	12:44:51	12.0
12:56:12	5.1	12:59:51	9.4
13:11:12	6.0	13:14:51	16.8
13:26:12	5.0	13:29:51	19.9
13:41:12	5.3	13:44:51	13.8
13:56:12	5.1	13:59:51	10.8

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/5/2012

Upwind Serial Number 12685
Downwind Serial Number 9578

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
8:11	0	8:17	0
8:26	0	8:32	0
8:41	0.1	8:47	0
8:56	0.1	9:02	0
9:11	0.1	9:17	0
9:26	0.1	9:32	0
9:41	0.1	9:47	0
9:56	0.1	10:02	0
10:11	0.1	10:17	0
10:26	0.1	10:32	0
10:41	0.1	10:47	0
10:56	0.1	11:02	0
11:11	0.1	11:17	0
11:26	0.1	11:32	0
11:41	0.1	11:47	0
11:56	0.1	12:02	0
12:11	0.1	12:17	0
12:26	0.1	12:32	0
12:41	0.1	12:47	0
12:56	0.1	13:02	0
13:11	0.1	13:17	0
13:26	0.1	13:32	0
13:41	0.1	13:47	0


HUDSON RIVER
FLOW
HUDSON RIVER
FLOW
7:50-14:00
Upwind Meters
7:50-14:00
Downwind Meters
WIND DIRECTION
11/05/2012
Former Tappan Terminal
CAMP

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/6/2012

Upwind Serial Number D581
Downwind Serial Number D389

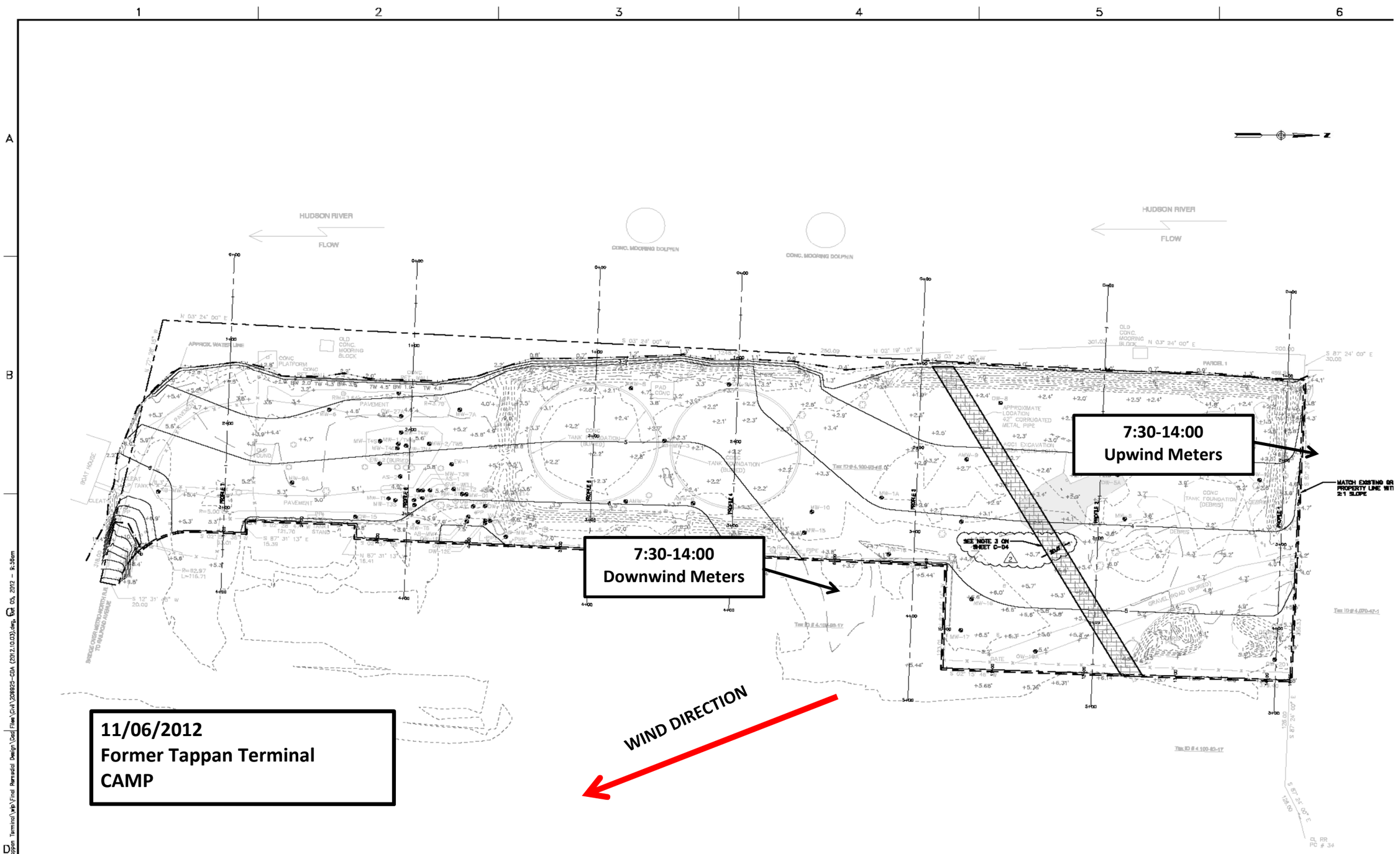
Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:41:31	4.7	7:46:40	8.4
7:56:31	4.7	8:01:40	6.5
8:11:31	2.8	8:16:40	4.2
8:26:31	3.2	8:31:40	7.1
8:41:31	3.2	8:46:40	10.3
8:56:31	3.3	9:01:40	8.5
9:11:31	2.5	9:16:40	10.7
9:26:31	2.3	9:31:40	39.7
9:41:31	2.3	9:46:40	17.1
9:56:31	2.3	10:01:40	20.8
10:11:31	2.3	10:16:40	11.5
10:26:31	2.0	10:31:40	18.5
10:41:31	1.9	10:46:40	42.9
10:56:31	2.9	11:01:40	17.7
11:11:31	2.3	11:16:40	27.1
11:26:31	2.4	11:31:40	16.2
11:41:31	2.5	11:46:40	13.4
11:56:31	2.4	12:01:40	5.4
12:11:31	2.3	12:16:40	2.7
12:26:31	2.4	12:31:40	2.5
12:41:31	2.4	12:46:40	2.8
12:56:31	2.5	13:01:40	16.6
13:11:31	2.6	13:16:40	8.9
13:26:31	2.7	13:31:40	2.9
13:41:31	2.9	13:46:40	3.1
13:56:31	3.0	14:01:40	9.8

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/6/2012

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:44	0.0	7:46	0.2
7:59	0.0	8:01	0.3
8:14	0.0	8:16	0.4
8:29	0.0	8:31	0.5
8:44	0.0	8:46	0.5
8:59	0.0	9:01	0.6
9:14	0.0	9:16	0.6
9:29	0.0	9:31	0.6
9:44	0.0	9:46	0.6
9:59	0.0	10:01	0.6
10:14	0.0	10:16	0.7
10:29	0.0	10:31	0.7
10:44	0.0	10:46	0.7
10:59	0.0	11:01	0.7
11:14	0.0	11:16	0.7
11:29	0.0	11:31	0.7
11:44	0.0	11:46	0.8
11:59	0.0	12:01	0.8
12:14	0.0	12:16	0.8
12:29	0.0	12:31	0.7
12:44	0.0	12:46	0.7
12:59	0.0	13:01	0.8
13:14	0.0	13:16	0.7
13:29	0.0	13:31	0.7
13:44	0.0	13:46	0.7


HUDSON RIVER
FLOW
HUDSON RIVER
FLOW
CONC. MOORING DOLPHIN
CONC. MOORING DOLPHIN
7:30-14:00
Upwind Meters
7:30-14:00
Downwind Meters
WIND DIRECTION
11/06/2012
Former Tappan Terminal
CAMP

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/9/2012

Upwind Serial Number D389
Downwind Serial Number D581

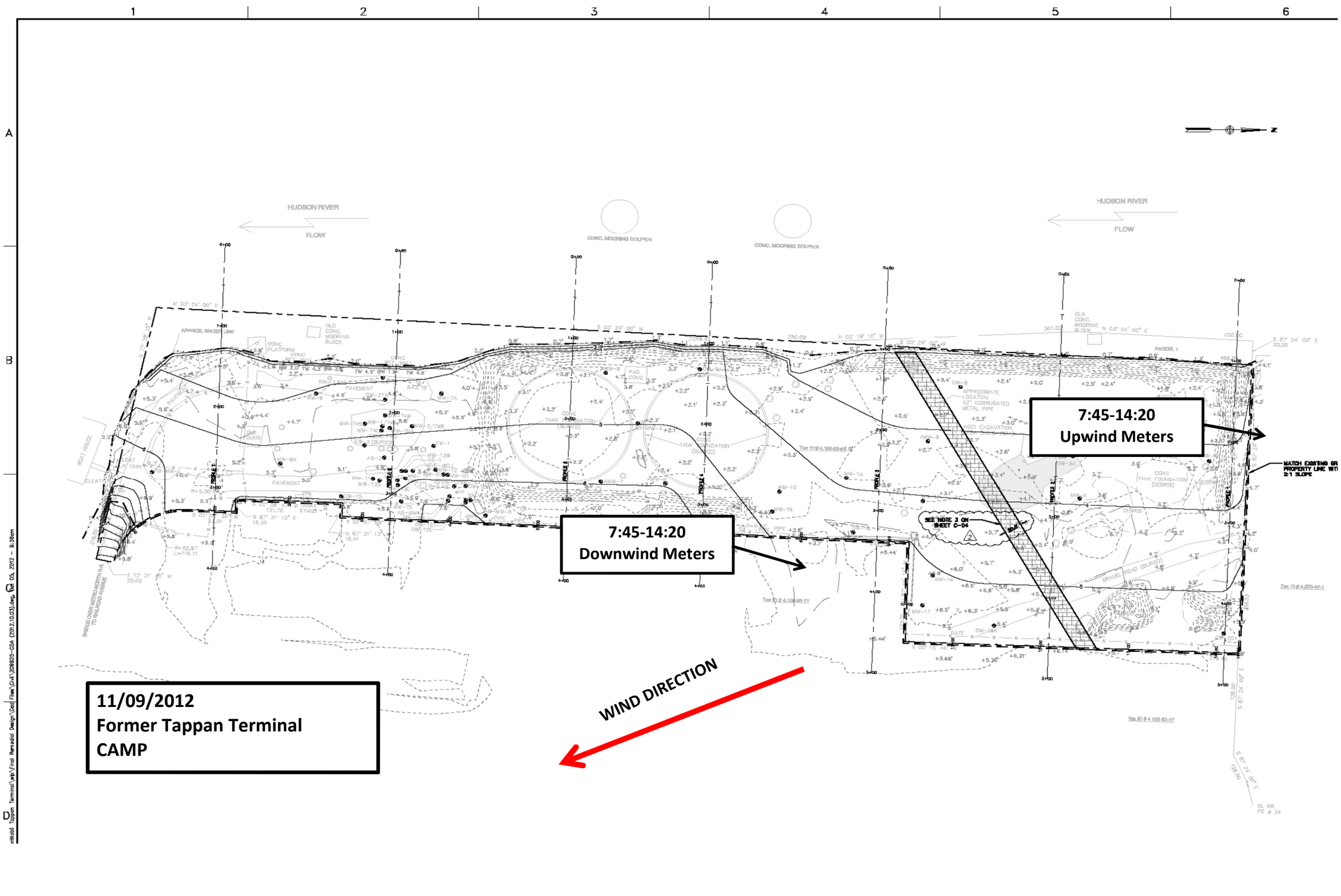
Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:08:59	4.0	8:15:10	5.0
8:23:59	4.4	8:30:10	4.6
8:38:59	4.7	8:45:10	4.4
8:53:59	5.2	9:00:10	5.3
9:08:59	6.0	9:15:10	6.3
9:23:59	6.3	9:30:10	5.2
9:38:59	5.5	9:45:10	4.5
9:53:59	5.2	10:00:10	4.3
10:08:59	5.2	10:15:10	6.3
10:23:59	5.3	10:30:10	6.3
10:38:59	5.4	10:45:10	5.4
10:53:59	5.5	11:00:10	5.7
11:08:59	5.5	11:15:10	14.6
11:23:59	5.3	11:30:10	6.3
11:38:59	5.4	11:45:10	5.9
11:53:59	5.5	12:00:10	5.1
12:08:59	5.5	12:15:10	5.0
12:23:59	5.4	12:30:10	4.9
12:38:59	5.6	12:45:10	5.0
12:53:59	5.5	13:00:10	5.4
13:08:59	5.7	13:15:10	5.6
13:23:59	5.4	13:30:10	5.7
13:38:59	5.1	13:45:10	5.9
13:53:59	5.2	14:00:10	4.9
14:08:59	5.3	14:15:10	5.0
14:23:59	5.1	14:30:10	6.2

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/9/2012

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
8:08	0.0	8:14	0.1
8:23	0.0	8:29	0.2
8:38	0.0	8:44	0.2
8:53	0.0	8:59	0.2
9:08	0.0	9:14	0.2
9:23	0.0	9:29	0.2
9:38	0.0	9:44	0.3
9:53	0.0	9:59	0.3
10:08	0.0	10:14	0.3
10:23	0.0	10:29	0.2
10:38	0.0	10:44	0.3
10:53	0.0	10:59	1.6
11:08	0.0	11:14	0.3
11:23	0.0	11:29	0.2
11:38	0.0	11:44	0.2
11:53	0.0	11:59	0.2
12:08	0.0	12:14	0.2
12:23	0.0	12:29	0.2
12:38	0.0	12:44	0.2
12:53	0.0	12:59	0.3
13:08	0.0	13:14	0.2
13:23	0.0	13:29	0.2
13:38	0.0	13:44	0.2
13:53	0.0	13:59	0.2
14:08	0.0	14:14	0.2


HUDSON RIVER
FLOW
HUDSON RIVER
FLOW
CONC. MOORING DOLPHIN
CONC. MOORING DOLPHIN
7:45-14:20
Upwind Meters
7:45-14:20
Downwind Meters
WIND DIRECTION
11/09/2012
Former Tappan Terminal
CAMP

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/12/2012

Upwind Serial Number D581
Downwind Serial Number D389

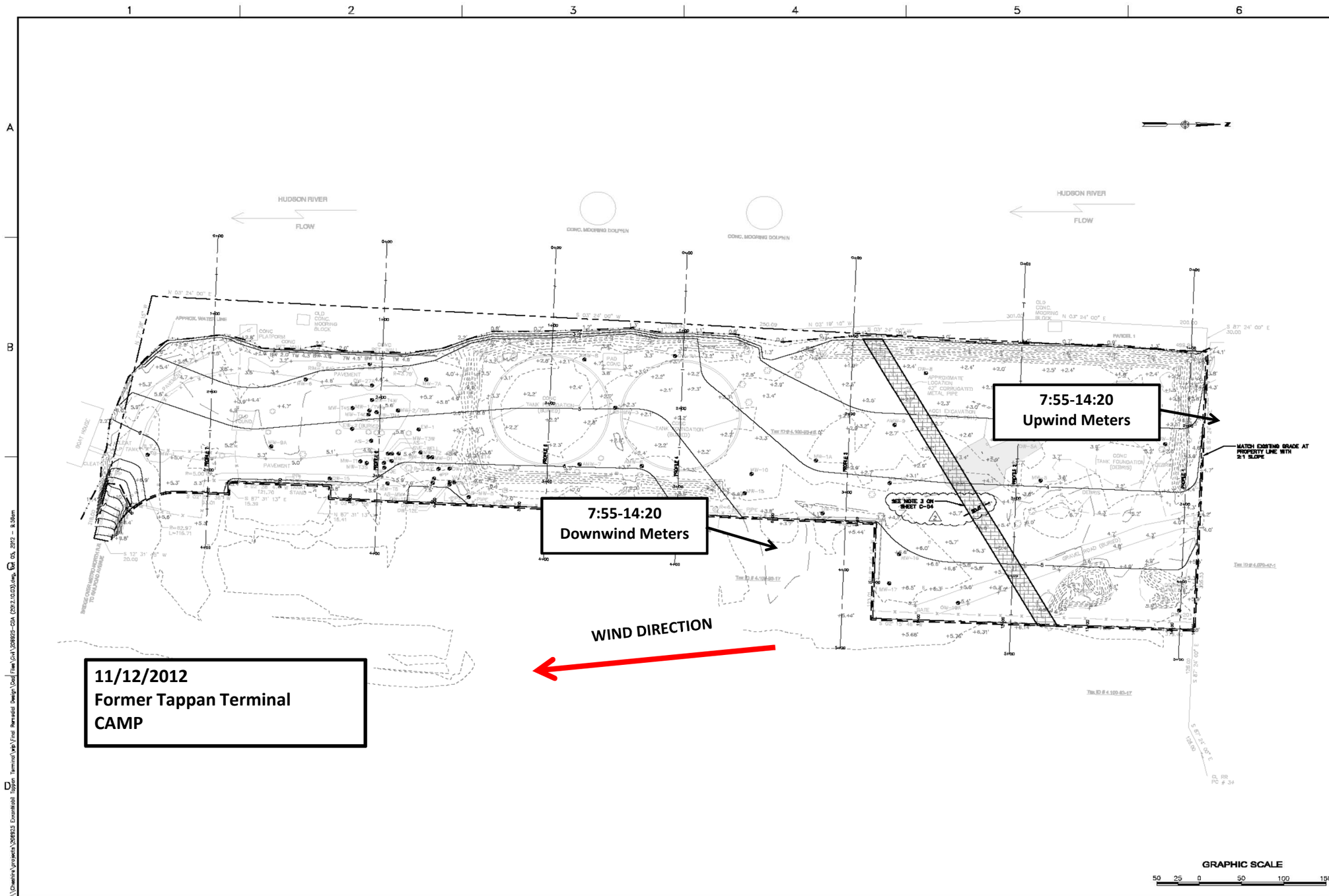
Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:09:02	41.7	8:11 AM	65.1
8:24:02	47.7	8:26 AM	67.9
8:39:02	54.2	8:41 AM	71.9
8:54:02	62.7	8:56 AM	94.8
9:09:02	71.9	9:11 AM	95.4
9:24:02	79.9	9:26 AM	105.6
9:39:02	91.6	9:41 AM	147
9:54:02	100.5	9:56 AM	128.4
10:09:02	112.5	10:11 AM	123.1
CAMP stopped for the remainder of day due to inclement weather affecting readings.			

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/12/2012

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
8:10	0.0	8:04	0.8
8:25	0.0	8:19	0.9
8:40	0.0	8:34	1.0
8:55	0.0	8:49	1.1
9:10	0.0	9:04	1.1
9:25	1.6	9:19	1.1
9:40	1.7	9:34	1.1
9:55	1.7	9:49	1.2
10:10	2.0	10:04	1.2
10:25	0.0	10:19	1.2
10:40	0.0	10:34	1.3
10:55	0.0	10:49	1.3
11:10	0.0	11:04	1.3
11:25	0.0	11:19	1.3
11:40	0.7	11:34	1.3
11:55	0.0	11:49	1.3
12:10	0.0	12:04	1.3
12:25	0.0	12:19	1.3
12:40	0.0	12:34	1.3
12:55	2.4	12:49	1.3
13:10	2.3	13:04	1.3
13:25	2.3	13:19	1.2
13:40	2.3	13:34	1.3
--	--	13:49	1.3
--	--	14:04	1.3
--	--	14:19	1.3
--	--	14:34	1.3



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REV	DESCRIPTION	DESIGNED BY: AJG	DRAWN BY: HP	CHECKED BY: AJG	DATE: 7/13/12
	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.:	208925.06
DATE:	DECEMBER 2011
SCALE:	AS SHOWN
SHEET:	3 OF 5

C-03

\\Cheshire\projects\208925 Exxonmobil Tappan Terminal\Wip\Final Remedial Design\Dwg Files\cad\208925-CDA (29.2.10.03).dwg, Sep 05, 2012 - 8:35am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/14/2012

Upwind Serial Number D389
Downwind Serial Number D581

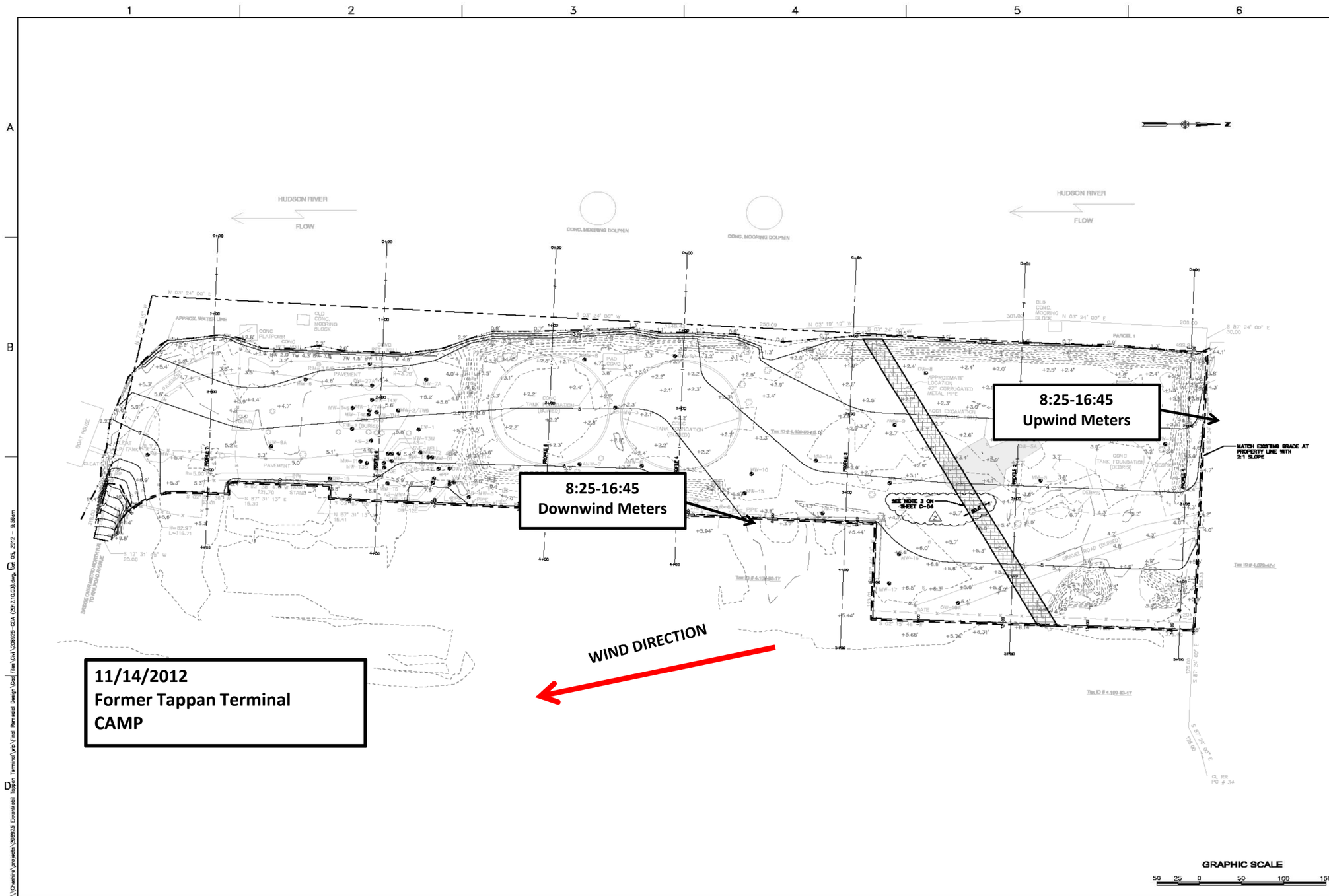
Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:40:58	2.4	8:45:38	7.9
8:55:58	1.4	9:00:38	26.7
9:10:58	1.6	9:15:38	26.5
9:25:58	1.0	9:30:38	24.7
9:40:58	1.0	9:45:38	22.9
9:55:58	1.1	10:00:38	20.7
10:10:58	1.3	10:15:38	22.5
10:25:58	1.0	10:30:38	25.2
10:40:58	0.8	10:45:38	19.9
10:55:58	0.9	11:00:38	18.1
11:10:58	1.0	11:15:38	36.4
11:25:58	1.0	11:30:38	25.2
11:40:58	1.1	11:45:38	21.6
11:55:58	1.0	12:00:38	4.8
12:10:58	0.9	12:15:38	3.8
12:25:58	0.8	12:30:38	4.1
12:40:58	0.8	12:45:38	5.3
12:55:58	0.8	13:00:38	7.5
13:10:58	0.8	13:15:38	10.0
13:25:58	0.7	13:30:38	10.6
13:40:58	0.7	13:45:38	10.6
13:55:58	0.8	14:00:38	11.4
14:10:58	0.8	14:15:38	9.2
14:25:58	0.7	14:30:38	26.9
14:40:58	0.8	14:45:38	8.7
14:55:58	0.7	15:00:38	3.8
15:10:58	0.7	15:15:38	7.2
15:25:58	0.7	15:30:38	6.2
15:40:58	0.7	15:45:38	4.9
15:55:58	0.7	16:00:38	6.1
16:10:58	0.7	16:15:38	4.8
16:25:58	0.7	16:30:38	4.8
16:40:58	0.7	16:45:38	4.0

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/14/2012

Upwind Serial Number 12685
Downwind Serial Number 9578

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
8:41	0.0	8:46	0.0
8:56	0.0	9:01	0.0
9:11	0.0	9:16	0.0
9:26	0.1	9:31	0.0
9:41	0.2	9:46	0.0
9:56	0.2	10:01	0.0
10:11	0.2	10:16	0.0
10:26	0.3	10:31	0.0
10:41	0.3	10:46	0.0
10:56	0.3	11:01	0.0
11:11	0.4	11:16	0.0
11:26	0.4	11:31	0.0
11:41	0.4	11:46	0.0
11:56	0.4	12:01	0.0
12:11	0.4	12:16	0.0
12:26	0.4	12:31	0.0
12:41	0.4	12:46	0.0
12:56	0.4	13:01	0.0
13:11	0.4	13:16	0.0
13:26	0.4	13:31	0.0
13:41	0.4	13:46	0.0
13:56	0.4	14:01	0.0
14:11	0.4	14:16	0.0
14:26	0.4	14:31	0.0
14:41	0.4	14:46	0.0
14:56	0.4	15:01	0.0
15:11	0.4	15:16	0.0
15:26	0.4	15:31	0.0
15:41	0.4	15:46	0.0
15:56	0.4	16:01	0.0
16:11	0.4	16:16	0.0
16:26	0.4	16:31	0.0



24x36 SHEET

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	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 208925.05
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Cheshire\projects\208925 Exxonmobil Tappan Terminal\Wip\Final Remedial Design\Dwg Files\c4\208925-c04 (29.2.10.03).dwg, Sat 05, 2012 - 8:35am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/15/2012

Upwind Serial Number D389
Downwind Serial Number D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:01:02	15.4	7:56:10	6.1
8:16:02	15.3	8:11:10	6.6
8:31:02	20.5	8:26:10	6.7
8:46:02	16.8	8:41:10	9.6
9:01:02	18.2	8:56:10	4.6
9:16:02	16.3	9:11:10	5.2
9:31:02	15.2	9:26:10	4.4
9:46:02	24.9	9:41:10	6.8
10:01:02	20.6	9:56:10	4.5
10:16:02	18.5	10:11:10	5.7
10:31:02	6.8	10:26:10	4.0
10:46:02	15.1	10:41:10	6.9
11:01:02	14.8	10:56:10	7.9
11:16:02	14.4	11:11:10	4.6
11:31:02	14.2	11:26:10	5.3
11:46:02	13.7	11:41:10	9.3
12:01:02	12.8	11:56:10	7.0
12:16:02	13.3	12:11:10	6.2
12:31:02	13.9	12:26:10	7.6
12:46:02	13.9	12:41:10	3.0
13:01:02	13.8	12:56:10	3.6
13:16:02	14.0	13:11:10	7.1
13:31:02	13.9	13:26:10	6.5
13:46:02	14.2	13:41:10	5.4
14:01:02	13.7	13:56:10	4.0
14:16:02	13.2	14:11:10	3.8
14:31:02	14.1	14:26:10	8.6
--	--	14:41:10	5.9

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/15/2012

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:56	0.0	8:00	0.0
8:11	0.0	8:15	0.0
8:26	0.0	8:30	0.0
8:41	0.0	8:45	0.0
8:56	0.0	9:00	0.1
9:11	0.0	9:15	0.1
9:26	0.0	9:30	0.1
9:41	0.0	9:45	0.1
9:56	0.0	10:00	0.1
10:11	0.0	10:15	0.1
10:26	0.0	10:30	0.1
10:41	0.0	10:45	0.2
10:56	0.0	11:00	0.2
11:11	0.0	11:15	0.2
11:26	0.0	11:30	0.2
11:41	0.0	11:45	0.2
11:56	0.0	12:00	0.2
12:11	0.0	12:15	0.2
12:26	0.0	12:30	0.2
12:41	0.0	12:45	0.2
12:56	0.0	13:00	0.2
13:11	0.0	13:15	0.2
13:26	0.0	13:30	0.2
13:41	0.0	13:45	0.2
13:56	0.0	14:00	0.2
14:11	0.0	14:15	0.2
14:26	0.0	--	--

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

CONC. MOORING DOLPHIN

CONC. MOORING DOLPHIN

7:40-14:45 Upwind Meters

7:40-14:45 Downwind Meters

WIND DIRECTION

11/15/2012
Former Tappan Terminal
CAMP

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

GRAPHIC SCALE
50 25 0 50 100 150

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1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 208925.05
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Cheshire\projects\208925 Exxonmobil Tappan Terminal\Wip\Final Remedial Design\Dwg Files\c4\208925-c03c (29.2.10.03).dwg, Sep 05, 2012 - 8:35am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/16/2012

Upwind Serial Number D389
Downwind Serial Number D581

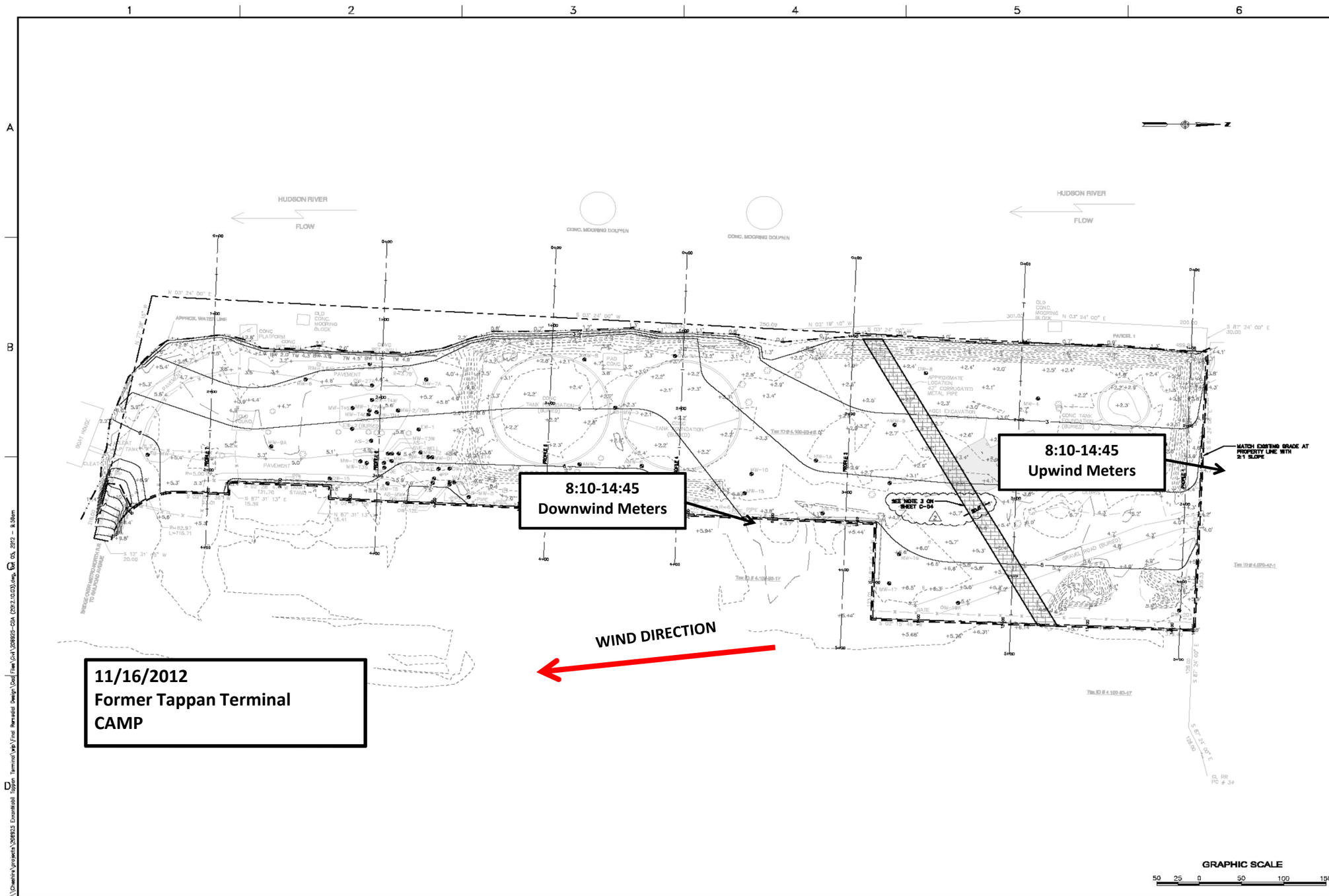
Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:28:59	44.3	8:34:14	12.4
8:43:59	41.2	8:49:14	14.5
8:58:59	43.6	9:04:14	12.9
9:13:59	44.0	9:19:14	12.3
9:28:59	33.1	9:34:14	12.2
9:43:59	33.8	9:49:14	14.9
9:58:59	42.0	10:04:14	17.7
10:13:59	33.0	10:19:14	14.5
10:28:59	10.7	10:34:14	12.7
10:43:59	8.1	10:49:14	16.9
10:58:59	21.7	11:04:14	11.2
11:13:59	21.1	11:19:14	18.1
11:28:59	19.8	11:34:14	13.8
11:43:59	17.9	11:49:14	21.3
11:58:59	25.5	12:04:14	10.4
12:13:59	19.8	12:19:14	24.7
12:28:59	22.8	12:34:14	11.6
12:43:59	24.3	12:49:14	27.1
12:58:59	20.6	13:04:14	10.8
13:13:59	21.9	13:19:14	6.4
13:28:59	22.1	13:34:14	6.9
13:43:59	1.8	13:49:14	12.0
13:58:59	0.1	14:04:14	10.3
14:13:59	0.1	14:19:14	12.1
14:28:59	0.0	14:34:14	12.9
14:43:59	0.0	--	--

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/16/2012

Upwind Serial Number 12685
Downwind Serial Number 9578

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
8:28	0.0	8:35	0.0
8:43	0.0	8:50	0.0
8:58	0.0	9:05	0.0
9:13	0.0	9:20	0.0
9:28	0.1	9:35	0.0
9:43	0.1	9:50	0.0
9:58	0.1	10:05	0.0
10:13	0.1	10:20	0.0
10:28	0.2	10:35	0.0
10:43	0.2	10:50	0.0
10:58	0.2	11:05	0.0
11:13	0.2	11:20	0.0
11:28	0.2	11:35	0.0
11:43	0.2	11:50	0.0
11:58	0.2	12:05	0.0
12:13	0.2	12:20	0.0
12:28	0.2	12:35	0.0
12:43	0.2	12:50	0.0
12:58	0.2	13:05	0.1
13:13	0.2	13:20	0.1
13:28	0.2	--	--
13:43	0.2	--	--
13:58	0.2	--	--
14:13	0.2	--	--
14:28	0.2	--	--



24x36 SHEET
1:1

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	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 208925.05
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Cheshire\projects\208925 Exxonmobil Tappan Terminal\Wp\Final Remedial Design\Dwg Files\cad\208925-c03a (29.2.10.03).dwg, Sat 05, 2012 - 8:35am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/19/2012

Upwind Serial Number D389
Downwind Serial Number D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:58:43	12.0	8:02:41	12.6
8:13:43	11.3	8:17:41	13.0
8:28:43	12.1	8:32:41	12.3
8:43:43	12.6	8:47:41	12.5
8:58:43	19.2	9:02:41	16.2
9:13:43	17.6	9:17:41	16.5
9:28:43	15.1	9:32:41	12.2
9:43:43	21.8	9:47:41	14.0
9:58:43	19.1	10:02:41	31.4
10:13:43	17.1	10:17:41	12.4
10:28:43	21.1	10:32:41	24.1
10:43:43	8.3	10:47:41	16.1
10:58:43	0.0	11:02:41	12.3
11:13:43	0.0	11:17:41	10.9
11:28:43	0.1	11:32:41	12.0
11:43:43	10.8	11:47:41	10.8
11:58:43	49.3	12:02:41	10.7
12:13:43	49.9	12:17:41	9.4
12:28:43	49.9	12:32:41	9.9
12:43:43	49.3	12:47:41	9.1
12:58:43	47.2	13:02:41	9.0
13:13:43	43.8	13:17:41	8.9
13:28:43	46.5	13:32:41	9.0
13:43:43	45.5	13:47:41	9.0
13:58:43	46.1	14:02:41	9.8
14:13:43	45.1	14:17:41	8.6
14:28:43	41.7	14:32:41	8.5
14:43:43	43.9	14:47:41	8.5
14:58:43	40.2	--	--

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/19/2012

Upwind Serial Number 12685
Downwind Serial Number 9578

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:59	0.0	8:04	0.0
8:14	0.0	8:19	0.0
8:29	0.1	8:34	0.0
8:44	0.1	8:49	0.0
8:59	0.2	9:04	0.0
9:14	0.2	9:19	0.0
9:29	0.2	9:34	0.0
9:44	0.2	9:49	0.0
9:59	0.2	10:04	0.0
10:14	0.3	10:19	0.0
10:29	0.3	10:34	0.0
10:44	0.3	10:49	0.0
10:59	0.3	11:04	0.0
11:14	0.3	11:19	0.0
11:29	0.3	11:34	0.0
11:44	0.3	11:49	0.0
11:59	0.3	12:04	0.0
12:14	0.3	12:19	0.0
12:29	0.3	12:34	0.0
12:44	0.3	12:49	0.0
12:59	0.2	13:04	0.0
13:14	0.2	13:19	0.0
13:29	0.2	13:34	0.0
13:44	0.2	13:49	0.0
13:59	0.2	14:04	0.0
14:14	0.2	14:19	0.0
14:29	0.2	14:34	0.0
14:44	0.2	--	--

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

CONC. MOORING DOLPHIN

CONC. MOORING DOLPHIN

7:45-15:00
Downwind Meters

7:45-15:00
Upwind Meters

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

WIND DIRECTION

11/19/2012
Former Tappan Terminal
CAMP

GRAPHIC SCALE
50 25 0 50 100 150

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REV	DESCRIPTION	DESIGNED BY: AJG	DRAWN BY: HP	CHECKED BY: AJG	DATE: 7/13/12
1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 208925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Cheshire\projects\208925 Exxonmobil Tappan Terminal\wip\Final Remedial Design\Civil\208925-C03A (2012.10.03).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/20/2012

Upwind Serial Number D389
Downwind Serial Number D581

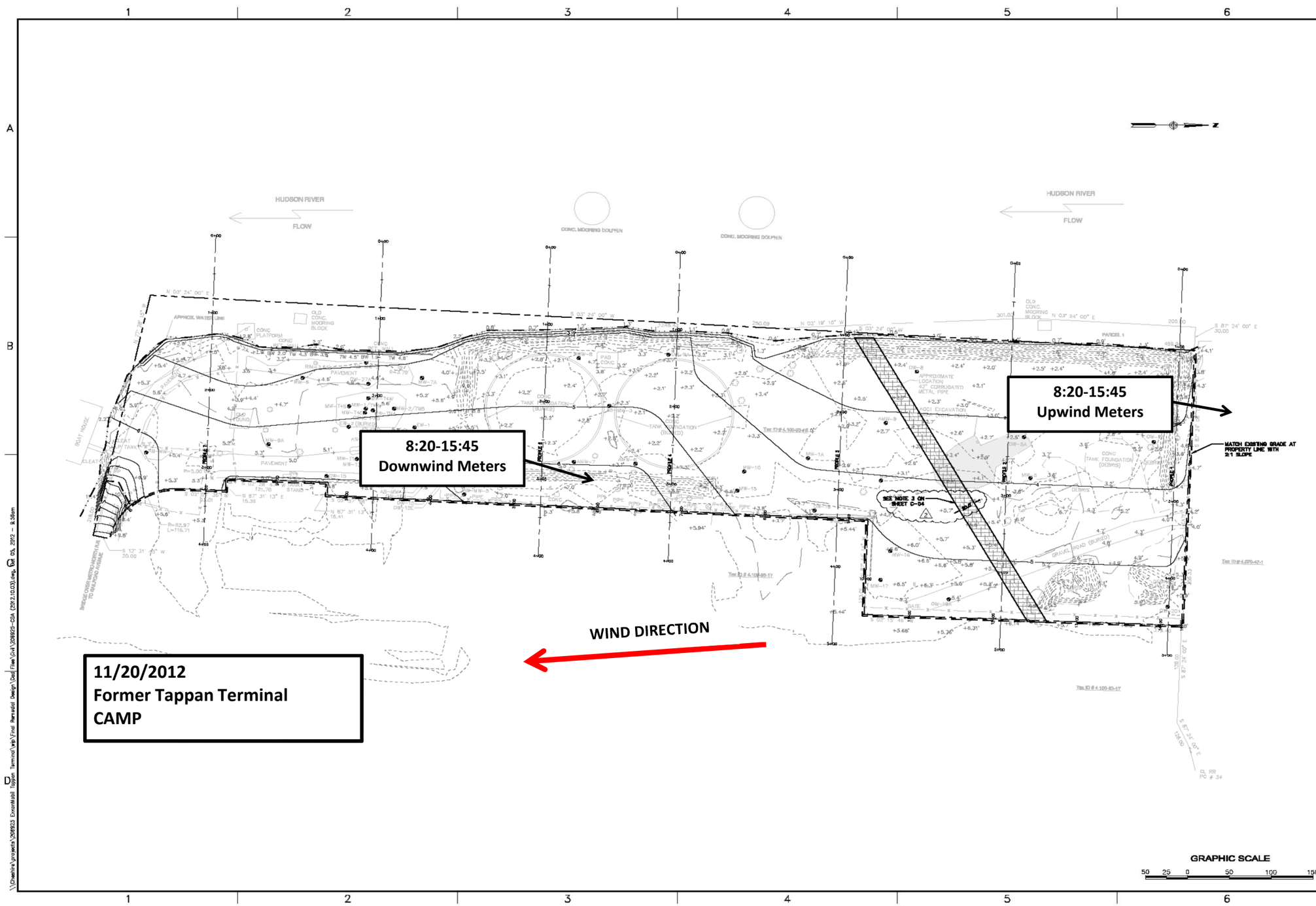
Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:38:56	8.8	8:44:10	25.6
8:53:56	22.2	8:59:10	14.7
9:08:56	24.9	9:14:10	14.7
9:23:56	33.9	9:29:10	15.5
9:38:56	32.0	9:44:10	16.7
9:53:56	37.5	9:59:10	18.1
10:08:56	35.4	10:14:10	16.7
10:23:56	37.1	10:29:10	17.1
10:38:56	35.2	10:44:10	17.2
10:53:56	35.6	10:59:10	16.9
11:08:56	36.5	11:14:10	16.1
11:23:56	32.7	11:29:10	14.3
11:38:56	35.1	11:44:10	14.4
11:53:56	35.9	11:59:10	14.4
12:08:56	35.6	12:14:10	13.9
12:23:56	34.8	12:29:10	13.3
12:38:56	35.2	12:44:10	13.8
12:53:56	35.1	12:59:10	13.3
13:08:56	33.1	13:14:10	13.2
13:23:56	33.5	13:29:10	14.2
13:38:56	38.1	13:44:10	15.6
13:53:56	30.2	13:59:10	25.5
14:08:56	30.8	14:14:10	13.6
14:23:56	28.8	14:29:10	12.2
14:38:56	30.3	14:44:10	11.7
14:53:56	28.5	14:59:10	12.0
15:08:56	26.5	15:14:10	10.8
15:23:56	26.0	15:29:10	9.4
15:38:56	26.3	--	--

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/20/2012

Upwind Serial Number 12685
Downwind Serial Number 9578

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
8:39	0.6	8:45	0.0
8:54	0.7	9:00	0.0
9:09	0.7	9:15	0.0
9:24	0.8	9:30	0.0
9:39	0.9	9:45	0.0
9:54	0.9	10:00	0.0
10:09	1.0	10:15	0.0
10:24	1.0	10:30	0.0
10:39	1.0	10:45	0.0
10:54	1.0	11:00	0.0
11:09	1.0	11:15	0.0
11:24	1.1	11:30	0.0
11:39	1.1	11:45	0.0
11:54	1.1	12:00	0.0
12:09	1.1	12:15	0.0
12:24	1.1	12:30	0.0
12:39	1.1	12:45	0.0
12:54	1.1	13:00	0.0
13:09	1.1	13:15	0.0
13:24	1.1	13:30	0.0
13:39	1.1	13:45	0.0
13:54	1.1	14:00	0.0
14:09	1.1	14:15	0.0
14:24	1.1	14:30	0.0
14:39	1.1	14:45	0.0
14:54	1.1	15:00	0.0
15:09	1.1	15:15	0.0
15:24	1.1	15:30	0.0



24x36 SHEET
1:1

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REV	DESCRIPTION	DESIGNED BY: AJG	DRAWN BY: KP	CHECKED BY: AJG	DATE: 7.03.03
1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Ghecmw1\projects\209925 ExxonMobil Tappan Terminal\wip\Final Remedial Design\Dwg\Final\209925-C03A (2012.03.03).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/21/2012

Upwind Serial Number D581
Downwind Serial Number D389

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:31:24	18.3	7:38:05	44.0
7:46:24	18.6	7:53:05	32.8
8:01:24	20.4	8:08:05	26.5
8:16:24	23.1	8:23:05	59.7
8:31:24	18.1	8:38:05	19.1
8:46:24	18.8	8:53:05	51.0
9:01:24	19.5	9:08:05	51.3
9:16:24	19.4	9:23:05	45.8
9:31:24	19.8	9:38:05	26.6
9:46:24	21.3	9:53:05	46.5
10:01:24	21.6	10:08:05	30.7
10:16:24	20.9	10:23:05	26.4
10:31:24	17.4	10:38:05	37.5
10:46:24	15.5	10:53:05	36.6
11:01:24	14.3	11:08:05	37.0
11:16:24	13.4	11:23:05	31.1
11:31:24	12.9	11:38:05	33.5
11:46:24	12.4	11:53:05	37.8
12:01:24	12.1	12:08:05	36.3
12:16:24	11.9	12:23:05	36.8
12:31:24	11.6	12:38:05	35.4
12:46:24	11.2	12:53:05	35.8
13:01:24	10.8	13:08:05	31.7
13:16:24	10.2	13:23:05	29.2

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/21/2012

Upwind Serial Number 12685
Downwind Serial Number 9578

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:32	0.0	7:38	0.0
7:47	0.0	7:53	0.0
8:02	0.0	8:08	0.0
8:17	0.0	8:23	0.0
8:32	0.0	8:38	0.0
8:47	0.0	8:53	0.0
9:02	0.0	9:08	0.0
9:17	0.0	9:23	0.0
9:32	0.1	9:38	0.0
9:47	0.1	9:53	0.0
10:02	0.1	10:08	0.0
10:17	0.1	10:23	0.0
10:32	0.1	10:38	0.0
10:47	0.1	10:53	0.0
11:02	0.1	11:08	0.0
11:17	0.1	11:23	0.0
11:32	0.1	11:38	0.0
11:47	0.1	11:53	0.0
12:02	0.0	12:08	0.0
12:17	0.0	12:23	0.0
12:32	0.0	12:38	0.0
12:47	0.0	12:53	0.0
13:02	0.0	13:08	0.0

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

CONC. MOORING DOLPHIN

CONC. MOORING DOLPHIN

7:15-13:30 Upwind Meters

7:15-13:30 Downwind Meters

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

WIND DIRECTION

11/21/2012
Former Tappan Terminal
CAMP

GRAPHIC SCALE
50 25 0 50 100 150

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REV	DESCRIPTION	DESIGNED BY: JMS	DRAWN BY: HP	CHECKED BY: JMS	DATE: 7/13/12
1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Charlie\projects\209925 ExxonMobil Tappan Terminal\dgn\Final Remedial Design\Dwg\Plan\209925-C03A (2012.0103).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/26/2012

Upwind Serial Number D389
Downwind Serial Number D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:46:51	67.4	7:51:16	18.3
8:01:51	61.3	8:06:16	20.3
8:16:51	38.0	8:21:16	20.0
8:31:51	22.9	8:36:16	20.8
8:46:51	22.3	8:51:16	22.0
9:01:51	17.7	9:06:16	22.8
9:16:51	23.9	9:21:16	24.0
9:31:51	17.5	9:36:16	24.1
9:46:51	14.5	9:51:16	17.9
10:01:51	4.9	10:06:16	12.8
10:16:51	3.5	10:21:16	12.2
10:31:51	4.4	10:36:16	23.1
10:46:51	2.6	10:51:16	17.2
11:01:51	2.0	11:06:16	11.8
11:16:51	2.6	11:21:16	10.2
11:31:51	1.8	11:36:16	10.5
11:46:51	0.9	11:51:16	8.9
12:01:51	0.4	12:06:16	9.7
12:16:51	0.4	12:21:16	6.5
12:31:51	0.5	12:36:16	7.0
12:46:51	0.4	12:51:16	11.9
13:01:51	0.2	13:06:16	11.2
13:16:51	0.2	13:21:16	9.8
13:31:51	0.0	13:36:16	9.2
13:46:51	0.0	13:51:16	12.8
14:01:51	0.0	14:06:16	8.7
14:16:51	0.0	14:21:16	6.6
14:31:51	0.0	--	--

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/26/2012

Upwind Serial Number 12685
Downwind Serial Number 9578

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:47	0.7	7:53	0.0
8:02	0.8	8:08	0.0
8:17	0.9	8:23	0.0
8:32	0.9	8:38	0.0
8:47	1.0	8:53	0.0
9:02	1.0	9:08	0.0
9:17	1.0	9:23	0.0
9:32	1.0	9:38	0.0
9:47	1.0	9:53	0.0
10:02	1.1	10:08	0.0
10:17	1.1	10:23	0.0
10:32	1.1	10:38	0.0
10:47	1.1	10:53	0.0
11:02	1.1	11:08	0.0
11:17	1.1	11:23	0.0
11:32	1.1	11:38	0.0
11:47	1.1	11:53	0.0
12:02	1.1	12:08	0.0
12:17	1.1	12:23	0.0
12:32	1.1	12:38	0.0
12:47	1.1	12:53	0.0
13:02	1.1	13:08	0.1
13:17	1.1	13:23	0.2
13:32	1.1	13:38	0.1
13:47	1.1	13:53	0.0
14:02	1.1	14:08	0.0
14:17	1.1	14:23	0.0

7:30-14:35
Downwind Meters

7:30-14:35
Upwind Meters

11/26/2012
Former Tappan Terminal
CAMP

WIND DIRECTION

HUDSON RIVER FLOW

HUDSON RIVER FLOW

GRAPHIC SCALE
50 25 0 50 100 150

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

REV	DESCRIPTION	DATE
	NYSDEC COMMENTS	7.03.013

DESIGNED BY: AJS
DRAWN BY: HP
CHECKED BY: AJS

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White Plains, New York 10604
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24x36 SHEET
1:1

\\Charlie\projects\209925 ExxonMobil Tappan Terminal\dgn\Final Remedial Design\Civil\209925-C03A (2012.0103).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/27/2012

Upwind Serial Number D389
Downwind Serial Number D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:47:09	47.7	7:52:47	12.8
8:02:09	53.9	8:07:47	15.7
8:17:09	58.0	8:22:47	15.6
8:32:09	65.1	8:37:47	16
8:47:09	68.5	8:52:47	17.1
9:02:09	68.9	9:07:47	17.9
9:17:09	73.4	9:22:47	19.7
9:32:09	74.4	9:37:47	21.2
9:47:09	80.2	9:52:47	22.6
10:02:09	85.1	10:07:47	24.4
10:17:09	92.3	10:22:47	30
10:32:09	95.3	10:37:47	29.9
10:47:09	94.7	10:52:47	31.9
11:02:09	92.9	11:07:47	33.7
11:17:09	48.2	11:22:47	33.8
11:32:09	48.6	11:37:47	34.5
11:47:09	49.1	11:52:47	35.2
12:02:09	49.6	12:07:47	51.9
12:17:09	50.2	12:22:47	64.6
12:32:09	50.8	12:37:47	64.5
12:47:09	51.3	12:52:47	73.5
13:02:09	51.8	13:07:47	76.8
13:17:09	52.4	13:22:47	77.5
13:32:09	53.0	13:37:47	80.1
13:47:09	53.6	13:52:47	87.8
14:02:09	54.0	14:07:47	90.8
14:17:09	54.5	14:22:47	90.9
14:32:09	47.4	14:37:47	84.3
14:47:09	47.5	14:52:47	79.3

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/27/2012

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:49	0.0	7:53	0.0
8:04	0.0	8:08	0.1
8:19	0.0	8:23	0.2
8:34	0.0	8:38	0.2
8:49	0.0	8:53	0.2
9:04	0.0	9:08	0.2
9:19	0.0	9:23	0.2
9:34	0.0	9:38	0.2
9:49	0.0	9:53	0.2
10:04	0.0	10:08	0.3
10:19	0.0	10:23	0.3
10:34	0.0	10:38	0.3
10:49	0.0	10:53	0.3
11:04	0.0	11:08	0.3
11:19	0.0	11:23	0.3
11:34	0.0	11:38	0.3
11:49	0.0	11:53	0.3
12:04	0.0	12:08	0.3
12:19	0.0	12:23	0.3
12:34	0.0	12:38	0.3
12:49	0.0	12:53	0.3
13:04	0.0	13:08	0.3
13:19	0.0	13:23	0.3
13:34	0.0	13:38	0.3
13:49	0.0	13:53	0.3
14:04	0.0	14:08	0.3
14:19	0.0	14:23	0.3
14:34	0.0	14:38	0.3
14:49	0.0	--	--

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

7:30-14:55
Downwind Meters

7:30-14:55
Upwind Meters

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

WIND DIRECTION

11/27/2012
Former Tappan Terminal
CAMPS

GRAPHIC SCALE
50 25 0 50 100 150

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REV	DESCRIPTION	DESIGNED BY: AJG	DRAWN BY: HP	CHECKED BY: AJG	DATE: 7/13/12
1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Charlie\projects\209925 ExxonMobil Tappan Terminal\wip\Final Remedial Design\Dwg\Civil\209925-C03A (2012.0103).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/28/2012

Upwind Serial Number D581
Downwind Serial Number D389

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:59:14	17.1	8:07:38	92.8
8:14:14	14.6	8:22:38	91
8:29:14	15.1	8:37:38	93
8:44:14	15	8:52:38	90
8:59:14	15.8	9:07:38	93.6
9:14:14	15.6	9:22:38	99.1
9:29:14	16	9:37:38	93.7
9:44:14	15.6	9:52:38	39
9:59:14	15	10:07:38	90.4
10:14:14	13.9	10:22:38	94.3
10:29:14	12.9	10:37:38	66.3
10:44:14	12	10:52:38	43.4
10:59:14	10.7	11:07:38	44.2
11:14:14	10.6	11:22:38	49.4
11:29:14	10.3	11:37:38	40.2
11:44:14	10	11:52:38	37
11:59:14	9.9	12:07:38	36.3
12:14:14	10.3	12:22:38	36.2
12:29:14	10.6	12:37:38	37.1
12:44:14	11.4	12:52:38	37.4
12:59:14	10.6	13:07:38	37.1
13:14:14	10.6	13:22:38	36.8
13:29:14	9.9	13:37:38	37.6
13:44:14	9.5	13:52:38	36.6
13:59:14	8.9	14:07:38	35.9
14:14:14	8.6	14:22:38	36
14:29:14	9.2	14:37:38	39.7
14:44:14	9.5	14:52:38	37.8
14:59:14	10.2	--	--

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/28/2012

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
8:00	0.0	8:07	0.7
8:15	0.0	8:22	0.9
8:30	0.0	8:37	0.9
8:45	0.0	8:52	1.0
9:00	0.0	9:07	1.0
9:15	0.0	9:22	1.0
9:30	0.0	9:37	1.1
9:45	0.0	9:52	1.1
10:00	0.0	10:07	1.2
10:15	0.0	10:22	1.1
10:30	0.0	10:37	1.2
10:45	0.0	10:52	1.2
11:00	0.0	11:07	1.2
11:15	0.0	11:22	1.2
11:30	0.0	11:37	1.2
11:45	0.0	11:52	1.2
12:00	0.0	12:07	1.2
12:15	0.0	12:22	1.2
12:30	0.0	12:37	1.2
12:45	0.0	12:52	1.2
13:00	0.0	13:07	1.2
13:15	0.0	13:22	1.2
13:30	0.0	13:37	1.2
13:45	0.0	13:52	1.2
14:00	0.0	14:07	1.2
14:15	0.0	14:22	1.2
14:30	0.0	14:37	1.2

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

7:4- Commence delivery of top soil

7:45-15:00
Upwind Meters

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

WIND DIRECTION

11/28/2012
Former Tappan Terminal
CAMP

GRAPHIC SCALE
50 25 0 50 100 150

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REV	DESCRIPTION	DESIGNED BY: AJG	DRAWN BY: HP	CHECKED BY: AJG	DATE: 7/13/12
1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Qnetdrv\projects\209925 ExxonMobil Tappan Terminal\wip\Final Remedial Design\Dsd Files\civil\209925-r03A (2012.10.03).dwg, Oct 05, 2012 - 8:56am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/29/2012

Upwind Serial Number D389
Downwind Serial Number D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:06:58	17.3	8:00:53	0.2
8:21:58	19.2	8:15:53	0
8:36:58	21.4	8:30:53	0
8:51:58	23.9	8:45:53	0.7
9:06:58	26.3	9:00:53	2.3
9:21:58	28.4	9:15:53	3.2
9:36:58	29.1	9:30:53	3.7
9:51:58	30.2	9:45:53	6
10:06:58	30	10:00:53	7.2
10:21:58	30.5	10:15:53	8.9
10:36:58	31.7	10:30:53	9.7
10:51:58	31.4	10:45:53	9.7
11:06:58	31	11:00:53	9.9
11:21:58	29.6	11:15:53	8.3
11:36:58	28.1	11:30:53	4.3
11:51:58	27.5	11:45:53	3.6
12:06:58	27	12:00:53	2.7
12:21:58	25.4	12:15:53	0.5
12:36:58	21.3	12:30:53	0
12:51:58	20	12:45:53	0.1
13:06:58	22.5	13:00:53	0.3
13:21:58	21.1	13:15:53	1.5
13:36:58	19	13:30:53	0.1
13:51:58	15.8	13:45:53	0.2
14:06:58	16.8	14:00:53	0
14:21:58	18.3	14:15:53	0.2
14:36:58	18.2	14:30:53	0
14:51:58	19.1	14:45:53	0
15:06:58	18.6	15:00:53	0
--	--	15:15:53	0

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/29/2012

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
8:06	0.0	8:02	0.0
8:21	0.0	8:17	0.1
8:36	0.0	8:32	0.2
8:51	0.0	8:47	0.2
9:06	0.0	9:02	0.3
9:21	0.0	9:17	0.3
9:36	0.0	9:32	0.3
9:51	0.0	9:47	0.4
10:06	0.0	10:02	0.4
10:21	0.0	10:17	0.4
10:36	0.0	10:32	0.4
10:51	0.0	10:47	0.4
11:06	0.0	11:02	0.4
11:21	0.0	11:17	0.4
11:36	0.0	11:32	0.4
11:51	0.0	11:47	0.4
12:06	0.0	12:02	0.4
12:21	0.0	12:17	0.4
12:36	0.0	12:32	0.4
12:51	0.2	12:47	0.4
13:06	0.0	13:02	0.4
13:21	0.0	13:17	0.4
13:36	0.0	13:32	0.4
13:51	0.1	13:47	0.4
14:06	0.0	14:02	0.4
14:21	0.0	14:17	0.4
14:36	0.0	14:32	0.4
14:51	0.0	14:47	0.4
--	--	15:02	0.4

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

7:45-15:20 Upwind Meters

7:45-15:20 Downwind Meters

WIND DIRECTION

11/29/2012
Former Tappan Terminal
CAMP

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

GRAPHIC SCALE
50 25 0 50 100 150

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REV	DESCRIPTION	DESIGNED BY: AJG	DRAWN BY: KP	CHECKED BY: AJG	DATE: 7.03.03
1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Charlie\projects\209925 ExxonMobil Tappan Terminal\wip\Final Remedial Design\Dwg\Final\209925-C03A (2012.03.03).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/30/2012

Upwind Serial Number D581
Downwind Serial Number D389

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:49:34	34.5	7:56:16	35.2
8:04:34	35.9	8:11:16	33.7
8:19:34	37.5	8:26:16	37.9
8:34:34	38.2	8:41:16	38.3
8:49:34	38.8	8:56:16	38.4
9:04:34	40.4	9:11:16	39.3
9:19:34	40.4	9:26:16	37.7
9:34:34	29.8	9:41:16	28.6
9:49:34	27.3	9:56:16	29.4
10:04:34	26.7	10:11:16	34.9
10:19:34	26.2	10:26:16	27.4
10:34:34	26.6	10:41:16	32.8
10:49:34	26.8	10:56:16	27.1
11:04:34	27.7	11:11:16	27.4
11:19:34	28.2	11:26:16	36
11:34:34	28.7	11:41:16	33.8
11:49:34	29	11:56:16	34.5
12:04:34	28.7	12:11:16	28.3
12:19:34	27.4	12:26:16	25.1
12:34:34	24.2	12:41:16	23.5
12:49:34	23.5	12:56:16	23.9
13:04:34	24.6	13:11:16	25.9
13:19:34	28.1	13:26:16	30.2
13:34:34	30.3	13:41:16	28.1
13:49:34	30.2	13:56:16	28.3
14:04:34	29.1	14:11:16	28.5
14:19:34	29.4	14:26:16	28.2

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 11/30/2012

Upwind Serial Number 12685
Downwind Serial Number 9578

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:51	0.0	7:56	0.0
8:06	0.0	8:11	0.0
8:21	0.0	8:26	0.0
8:36	0.0	8:41	0.0
8:51	0.0	8:56	0.0
9:06	0.0	9:11	0.0
9:21	0.0	9:26	0.0
9:36	0.1	9:41	0.0
9:51	0.1	9:56	0.0
10:06	0.1	10:11	0.0
10:21	0.2	10:26	0.0
10:36	0.2	10:41	0.0
10:51	0.2	10:56	0.0
11:06	0.2	11:11	0.0
11:21	0.2	11:26	0.0
11:36	0.2	11:41	0.0
11:51	0.3	11:56	0.0
12:06	0.3	12:11	0.0
12:21	0.2	12:26	0.0
12:36	0.2	12:41	0.0
12:51	0.3	12:56	0.0
13:06	0.3	13:11	0.0
13:21	0.3	13:26	0.0
13:36	0.3	13:41	0.0
13:51	0.3	13:56	0.0
14:06	0.3	14:11	0.0

7:35-14:30
Downwind Meters

7:35-14:30
Upwind Meters

11/30/2012
Former Tappan Terminal
CAMP

WIND DIRECTION

HUDSON RIVER
FLOW

HUDSON RIVER
FLOW

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

GRAPHIC SCALE
50 25 0 50 100 150

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1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

24x36 SHEET
1:1

\\Cheshire's projects\209925 ExxonMobil Tappan Terminal\wip\Final Remedial Design\Dsd Files\Civil\209925-02A (2012.10.03).dwg, Oct 05, 2012 - 8:56am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/3/2012

Upwind Serial Number D389
Downwind Serial Number D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:59:47	69.2	8:03:44	62.4
8:14:47	49.5	8:18:44	47.7
8:29:47	46.5	8:33:44	47.1
8:44:47	47.3	8:48:44	48.5
8:59:47	44.3	9:03:44	47.2
9:14:47	42.6	9:18:44	51.1
9:29:47	46.2	9:33:44	48.2
9:44:47	43.2	9:48:44	45.8
9:59:47	43.5	10:03:44	47.8
10:14:47	49.3	10:18:44	50.9
10:29:47	46.3	10:33:44	47.9
10:44:47	42	10:48:44	42.9
10:59:47	39.2	11:03:44	39.3
11:14:47	40.1	11:18:44	42
11:29:47	37.2	11:33:44	35.2
11:44:47	32.5	11:48:44	31
11:59:47	30.8	12:03:44	25.8
12:14:47	20.6	12:18:44	19.5
12:29:47	19.8	12:33:44	19.3
12:44:47	19.7	12:48:44	19
12:59:47	18	13:03:44	20.4
13:14:47	21.1	13:18:44	21
13:29:47	18.9	13:33:44	18.7
13:44:47	17.5	13:48:44	19.6
13:59:47	21	14:03:44	22.5
14:14:47	21.3	14:18:44	21.9
14:29:47	20.2	--	--

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/3/2012

Upwind Serial Number 12685
Downwind Serial Number 9578

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
8:00	0.0	8:04	0.0
8:15	0.0	8:19	0.0
8:30	0.1	8:34	0.0
8:45	0.2	8:49	0.0
9:00	0.2	9:04	0.0
9:15	0.3	9:19	0.0
9:30	0.3	9:34	0.0
9:45	0.3	9:49	0.0
10:00	0.3	10:04	0.0
10:15	0.3	10:19	0.0
10:30	0.3	10:34	0.0
10:45	0.3	10:49	0.0
11:00	0.3	11:04	0.0
11:15	0.3	11:19	0.0
11:30	0.3	11:34	0.0
11:45	0.3	11:49	0.0
12:00	0.3	12:04	0.0
12:15	0.3	12:19	0.0
12:30	0.3	12:34	0.0
12:45	0.3	12:49	0.0
13:00	0.3	13:04	0.0
13:15	0.3	13:19	0.0
13:30	0.3	13:34	0.0
13:45	0.3	13:49	0.0
14:00	0.3	14:04	0.0
14:15	0.3	--	--

7:45-14:30
Downwind Meters

7:45-14:30
Upwind Meters

WIND DIRECTION

12/03/2012
Former Tappan Terminal
CAMP

SUB-GRADE PLAN

GRAPHIC SCALE
50 25 0 50 100 150

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

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1	NYSDEC COMMENTS				

24x36 SHEET
1:1

\\Charlotte\projects\209925 ExxonMobil Tappan Terminal\wip\Final Remedial Design\Dwg\Civil\209925-C03A (2012.10.03).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/4/2012

Upwind Serial Number D581
Downwind Serial Number D389

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
CAMP not conducted prior to start time due to inclement weather.			
16:39:57	428.4	16:36:16	400.5
16:54:57	423.1	16:51:16	412.5

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/4/2012

Upwind Serial Number 12685
Downwind Serial Number 9578

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
CAMP not conducted prior to start time due to inclement weather.			
16:31	0.8	16:36	2.3
16:46	0.9	16:51	2.3

16:20-16:55
Upwind Meters

16:20-16:55
Downwind Meters

WIND DIRECTION

12/04/2012
Former Tappan Terminal
CAMP

HUDSON RIVER
FLOW

HUDSON RIVER
FLOW

CONC. MOORING DOLPHIN

CONC. MOORING DOLPHIN

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

GRAPHIC SCALE
50 25 0 50 100 150

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

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REV	DESCRIPTION	DESIGNED BY: AJG	DRAWN BY: HP	CHECKED BY: AJG	DATE: 7.03.03
1	NYSDEC COMMENTS				

24x36 SHEET
1:1

\\Charlene\projects\209925 ExxonMobil Tappan Terminal\cad\Final Remedial Design\Dwg\Civil\209925-C03A (2012.03.03).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/5/2012

Upwind Serial Number D581
Downwind Serial Number D389

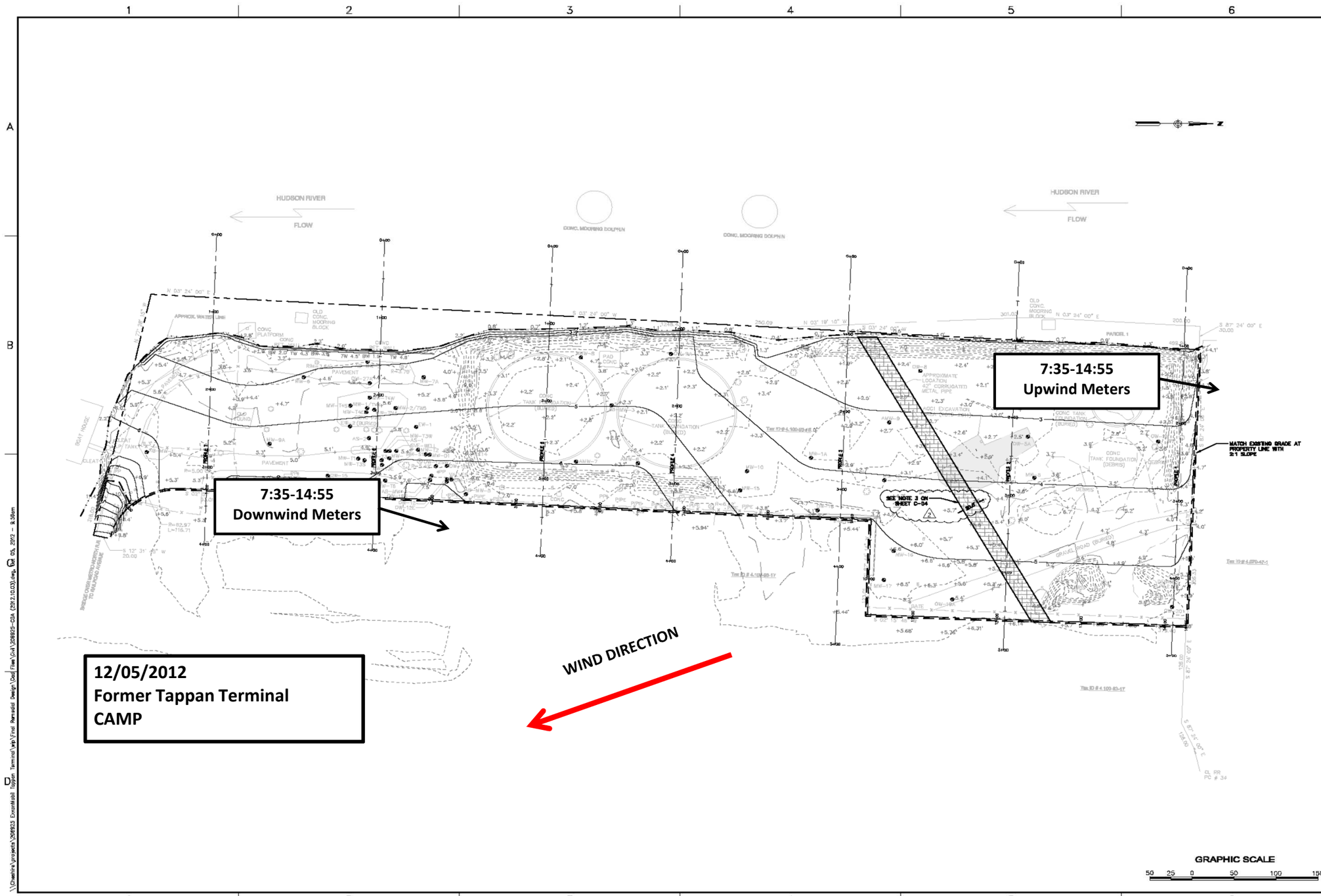
Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:53:26	1.0	7:49:57	7.1
8:08:26	1.0	8:04:57	4.7
8:23:26	1.1	8:19:57	3.8
8:38:26	1.0	8:34:57	4.9
8:53:26	1.4	8:49:57	3.4
9:08:26	1.4	9:04:57	4.1
9:23:26	1.6	9:19:57	4.1
9:38:26	2.1	9:34:57	3.9
9:53:26	2.3	9:49:57	3.2
10:08:26	2.4	10:04:57	4.5
10:23:26	2.6	10:19:57	4.5
10:38:26	3.6	10:34:57	5.5
10:53:26	4.7	10:49:57	5.5
11:08:26	4.2	11:04:57	7.4
11:23:26	4.0	11:19:57	6.0
11:38:26	4.1	11:34:57	5.9
11:53:26	4.1	11:49:57	6.5
12:08:26	3.9	12:04:57	5.5
12:23:26	4.1	12:19:57	5.8
12:38:26	3.9	12:34:57	7.5
12:53:26	3.7	12:49:57	4.8
13:08:26	3.6	13:04:57	5.6
13:23:26	3.7	13:19:57	4.7
13:38:26	3.6	13:34:57	3.9
13:53:26	3.5	13:49:57	4.2
14:08:26	3.5	14:04:57	10.1
14:23:26	3.3	14:19:57	7.7
14:38:26	3.3	14:34:57	3.6
14:53:26	3.7	14:49:57	4.6

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/5/2012

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:54	0	7:50	0.7
8:09	0	8:05	0.8
8:24	0	8:20	0.9
8:39	0	8:35	0.9
8:54	0	8:50	1
9:09	0	9:05	1
9:24	0	9:20	1
9:39	0	9:35	1.1
9:54	0	9:50	1.1
10:09	0	10:05	1.1
10:24	0	10:20	1.1
10:39	0	10:35	1.1
10:54	0	10:50	1.1
11:09	0	11:05	1.1
11:24	0	11:20	1.1
11:39	0	11:35	1.1
11:54	0	11:50	1.1
12:09	0	12:05	1.1
12:24	0	12:20	1.1
12:39	0	12:35	1.1
12:54	0	12:50	1.1
13:09	0	13:05	1.1
13:24	0	13:20	1.1
13:39	0	13:35	1.1
13:54	0	13:50	1.1
14:09	0	14:05	1.1
14:24	0	14:20	1.1
14:39	0	14:35	1.1



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	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.:	209925.06
DATE:	DECEMBER 2011
SCALE:	AS SHOWN
SHEET:	3 OF 5

C-03

24x36 SHEET

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/6/2012

Upwind Serial Number D389
Downwind Serial Number D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:01:06	2.1	8:05:04	3.1
8:16:06	2.0	8:20:04	2.5
8:31:06	3.1	8:35:04	3.9
8:46:06	4.1	8:50:04	9.3
9:01:06	7.0	9:05:04	7.0
9:16:06	4.0	9:20:04	4.5
9:31:06	4.2	9:35:04	6.3
9:46:06	4.3	9:50:04	4.8
10:01:06	4.2	10:05:04	5.4
10:16:06	4.3	10:20:04	5.2
10:31:06	4.9	10:35:04	14.5
10:46:06	4.5	10:50:04	9.9
11:01:06	4.5	11:05:04	4.4
11:16:06	3.9	11:20:04	5.4
11:31:06	4.0	11:35:04	8.5
11:46:06	5.0	11:50:04	5.8
12:01:06	3.7	12:05:04	2.9
12:16:06	3.6	12:20:04	4.4
12:31:06	3.5	12:35:04	5.8
12:46:06	3.8	12:50:04	2.8
13:01:06	3.9	13:05:04	3.1
13:16:06	4.0	13:20:04	3.4
13:31:06	4.1	13:35:04	3.0
13:46:06	4.3	13:50:04	3.6
14:01:06	4.0	14:05:04	3.0
14:16:06	3.7	14:20:04	2.8
14:31:06	3.8	14:35:04	5.8
14:46:06	4.3	14:50:04	6.0
15:01:06	3.6	15:05:04	4.4
15:16:06	3.6	15:20:04	3.6
15:31:06	3.8	15:35:04	5.1

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/6/2012

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
8:01	0.0	8:06	0.0
8:16	0.0	8:21	0.0
8:31	0.0	8:36	0.0
8:46	0.0	8:51	0.0
9:01	0.0	9:06	0.0
9:16	0.0	9:21	0.0
9:31	0.0	9:36	0.0
9:46	0.0	9:51	0.0
10:01	0.0	10:06	0.0
10:16	0.0	10:21	0.0
10:31	0.0	10:36	0.0
10:46	0.0	10:51	0.0
11:01	0.0	11:06	0.0
11:16	0.0	11:21	0.0
11:31	0.0	11:36	0.0
11:46	0.0	11:51	0.0
12:01	0.0	12:06	0.0
12:16	0.0	12:21	0.0
12:31	0.0	12:36	0.0
12:46	0.0	12:51	0.0
13:01	0.0	13:06	0.0
13:16	0.0	13:21	0.0
13:31	0.0	13:36	0.0
13:46	0.0	13:51	0.0
14:01	0.0	14:06	0.0
14:16	0.0	14:21	0.0
14:31	0.0	14:36	0.0
14:46	0.0	14:51	0.0
15:01	0.0	15:06	0.0
15:16	0.0	15:21	0.0

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

7:45-15:35
Downwind Meters

7:45-15:35
Upwind Meters

WIND DIRECTION

12/06/2012
Former Tappan Terminal
CAMP

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

GRAPHIC SCALE
50 25 0 50 100 150

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1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Ghwarine\projects\209925 Exxonmobil Tappan Terminal\dgn\Final Remedial Design\Dwg\Final\209925-C03A (2012.0103).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/7/2012

Upwind Serial Number D389
Downwind Serial Number D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:48:28	36.6	7:54:01	18.3
8:03:28	47.0	8:09:01	20.2
8:18:28	44.1	8:24:01	17.3
8:33:28	40.0	8:39:01	14.6
8:48:28	36.6	8:54:01	14.1
9:03:28	38.5	9:09:01	21.0
9:18:28	43.4	9:24:01	15.0
9:33:28	44.5	9:39:01	16.4
9:48:28	46.6	9:54:01	16.8
10:03:28	48.7	10:09:01	17.5
10:18:28	51.4	10:24:01	18.5
10:33:28	54.4	10:39:01	19.7
10:48:28	55.4	10:54:01	20.3
11:03:28	58.2	11:09:01	21.5
11:18:28	60.4	11:24:01	22.7
11:33:28	64.2	11:39:01	24.0
11:48:28	66.5	11:54:01	24.6
12:03:28	69.6	12:09:01	28.3
12:18:28	71.6	12:24:01	28.2
12:33:28	64.8	12:39:01	28.6
12:48:28	49.2	12:54:01	30.4
13:03:28	71.0	13:09:01	30.7
13:18:28	20.3	13:24:01	31.3
13:33:28	18.9	13:39:01	33.0
13:48:28	8.1	13:54:01	32.2
14:03:28	3.6	14:09:01	34.6
14:18:28	6.0	14:24:01	37.4
14:33:28	8.3	--	--

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/7/2012

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:48	0.0	7:54	0.0
8:03	0.0	8:09	0.0
8:18	0.0	8:24	0.1
8:33	0.0	8:39	0.1
8:48	0.0	8:54	0.2
9:03	0.0	9:09	0.2
9:18	0.0	9:24	0.3
9:33	0.0	9:39	0.3
9:48	0.0	9:54	0.3
10:03	0.0	10:09	0.3
10:18	0.0	10:24	0.4
10:33	0.0	10:39	0.4
10:48	0.0	10:54	0.4
11:03	0.0	11:09	0.4
11:18	0.0	11:24	0.4
11:33	0.0	11:39	0.4
11:48	0.0	11:54	0.4
12:03	0.0	12:09	0.4
12:18	0.0	12:24	0.4
12:33	0.0	12:39	0.4
12:48	0.0	12:54	0.4
13:03	0.0	13:09	0.4
13:18	0.0	13:24	0.4
13:33	0.0	13:39	0.4
13:48	0.0	13:54	0.4
14:03	0.0	14:09	0.4

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

7:45-15:35 Downwind Meters

7:45-15:35 Upwind Meters

12/07/2012
Former Tappan Terminal
CAMP

WIND DIRECTION

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

GRAPHIC SCALE
50 25 0 50 100 150

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REV	DESCRIPTION	DESIGNED BY: AJG	DRAWN BY: KP	CHECKED BY: AJG	DATE: 7/13/12
1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Charlie\projects\209925 ExxonMobil Tappan Terminal\wip\Final Removal Design\Dwg\Final\209925-C0A (2012.0103).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/11/2012

Upwind Serial Number D389
Downwind Serial Number D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:43:27	2.9	7:47:06	2.3
7:58:27	3.7	8:02:06	2.3
8:13:27	4.1	8:17:06	2.7
8:28:27	4.6	8:32:06	3.9
8:43:27	4.8	8:47:06	3.9
8:58:27	4.6	9:02:06	4.5
9:13:27	4.4	9:17:06	3.9
9:28:27	4.4	9:32:06	3.9
9:43:27	4.5	9:47:06	3.1
9:58:27	4.9	10:02:06	3.2
10:13:27	5.4	10:17:06	3.9
10:28:27	5.6	10:32:06	5.0
10:43:27	5.3	10:47:06	4.4
10:58:27	5.4	11:02:06	4.1
11:13:27	5.7	11:17:06	5.1
11:28:27	5.6	11:32:06	6.0
11:43:27	5.5	11:47:06	9.8
11:58:27	5.5	12:02:06	3.7
12:13:27	5.7	12:17:06	4.0
12:28:27	5.9	12:32:06	4.4
12:43:27	5.7	12:47:06	4.1
12:58:27	5.6	13:02:06	3.9
13:13:27	5.5	13:17:06	4.0
13:28:27	5.5	13:32:06	4.1
13:43:27	4.9	13:47:06	4.4
13:58:27	5.4	14:02:06	4.6
14:13:27	5.5	14:17:06	4.7
14:28:27	5.5	14:32:06	4.3
14:43:27	5.6	14:47:06	4.1

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/11/2012

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:43	0.0	7:49	0.8
7:58	0.0	8:04	0.8
8:13	0.0	8:19	0.9
8:28	0.0	8:34	1.0
8:43	0.0	8:49	1.1
8:58	0.0	9:04	1.1
9:13	0.0	9:19	1.1
9:28	0.0	9:34	1.2
9:43	0.0	9:49	1.2
9:58	0.0	10:04	1.2
10:13	0.0	10:19	1.2
10:28	0.0	10:34	1.2
10:43	0.0	10:49	1.3
10:58	0.0	11:04	1.3
11:13	0.0	11:19	1.3
11:28	0.0	11:34	1.4
11:43	0.0	11:49	1.3
11:58	0.0	12:04	1.3
12:13	0.0	12:19	1.3
12:28	0.0	12:34	1.3
12:43	0.0	12:49	1.3
12:58	0.0	13:04	1.3
13:13	0.0	13:19	1.3
13:28	0.0	13:34	1.3
13:43	0.0	13:49	1.3
13:58	0.0	14:04	1.3
14:13	0.0	14:19	1.3
14:28	0.0	14:34	1.3
14:43	0.0	14:49	1.3

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

CONC. MOORING DOLPHIN

CONC. MOORING DOLPHIN

7:30-14:50
Upwind Meters

7:30-14:50
Downwind Meters

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

12/11/2012
Former Tappan Terminal
CAMP

WIND DIRECTION

GRAPHIC SCALE
50 25 0 50 100 150

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1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Charlie\projects\209925 Exxonmobil Tappan Terminal\wip\Final Remedial Design\Dwg\Final\209925-C03A (2012.0103).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/12/2012

Upwind Serial Number D389
Downwind Serial Number D581

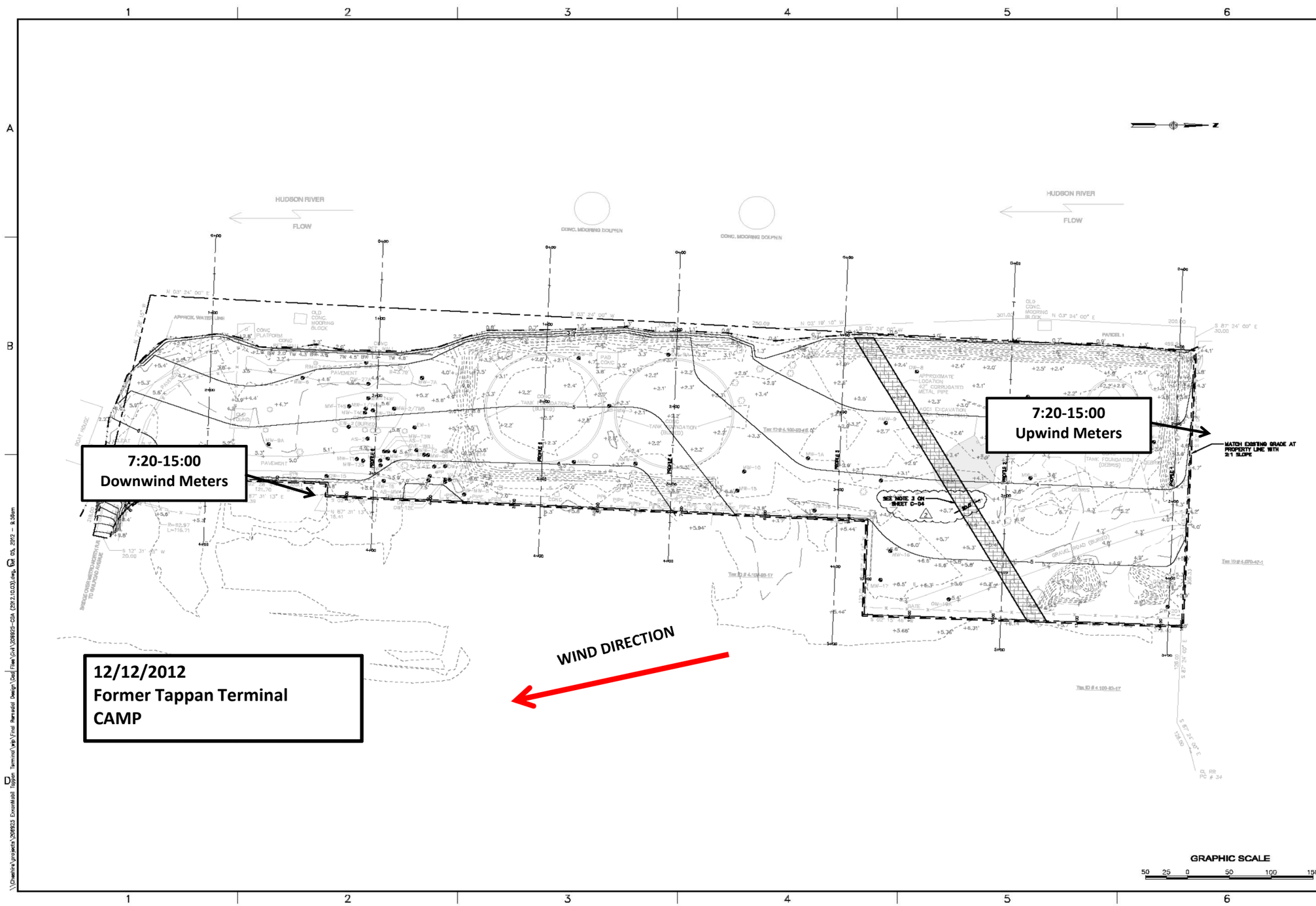
Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:37:45	7.0	7:40:57	7.7
7:52:45	7.7	7:55:57	7.8
8:07:45	6.6	8:10:57	8.0
8:22:45	6.1	8:25:57	9.2
8:37:45	7.1	8:40:57	6.6
8:52:45	6.6	8:55:57	6.4
9:07:45	6.2	9:10:57	5.9
9:22:45	5.9	9:25:57	6.3
9:37:45	5.7	9:40:57	5.7
9:52:45	5.6	9:55:57	4.8
10:07:45	5.8	10:10:57	5.1
10:22:45	6.5	10:25:57	6.2
10:37:45	6.4	10:40:57	6.5
10:52:45	7.0	10:55:57	6.5
11:07:45	6.6	11:10:57	6.2
11:22:45	6.3	11:25:57	7.0
11:37:45	6.4	11:40:57	7.9
11:52:45	5.9	11:55:57	7.2
12:07:45	6.0	12:10:57	10.5
12:22:45	6.6	12:25:57	10.2
12:37:45	6.8	12:40:57	9.9
12:52:45	7.1	12:55:57	8.1
13:07:45	8.3	13:10:57	9.4
13:22:45	8.8	13:25:57	8.7
13:37:45	8.0	13:40:57	8.7
13:52:45	7.9	13:55:57	12.9
14:07:45	8.2	14:10:57	11.8
14:22:45	8.2	14:25:57	11.3
14:37:45	8.7	14:40:57	8.9
14:52:45	9.0	14:55:57	8.7

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/12/2012

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:37	0.0	7:42	0.0
7:52	0.0	7:57	0.0
8:07	0.0	8:12	0.0
8:22	0.1	8:27	0.0
8:37	0.0	8:42	0.0
8:52	0.0	8:57	0.1
9:07	0.0	9:12	0.1
9:22	0.0	9:27	0.1
9:37	0.0	9:42	0.1
9:52	0.0	9:57	0.1
10:07	0.0	10:12	0.1
10:22	0.0	10:27	0.1
10:37	0.0	10:42	0.2
10:52	0.0	10:57	0.2
11:07	0.0	11:12	0.2
11:22	0.0	11:27	0.2
11:37	0.0	11:42	0.2
11:52	0.0	11:57	0.2
12:07	0.0	12:12	0.3
12:22	0.0	12:27	0.3
12:37	0.0	12:42	0.3
12:52	0.0	12:57	0.3
13:07	0.0	13:12	0.3
13:22	0.0	13:27	0.3
13:37	0.0	13:42	0.3
13:52	0.0	13:57	0.3
14:07	0.0	14:12	0.3
14:22	0.0	14:27	0.3
14:37	0.0	--	--



24x36 SHEET

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1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Charlie\projects\209925 ExxonMobil Tappan Terminal\wip\Final Remedial Design\Dwg\Civil\209925-C03A (2012.0103).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/13/2012

Upwind Serial Number D389
Downwind Serial Number D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:40:11	15.1	7:43:47	15.4
7:55:11	15.2	7:58:47	17.9
8:10:11	16.5	8:13:47	15.9
8:25:11	17.8	8:28:47	17.1
8:40:11	19.6	8:43:47	18.7
8:55:11	20.7	8:58:47	21.8
9:10:11	20.6	9:13:47	22.0
9:25:11	20.8	9:28:47	22.4
9:40:11	19.4	9:43:47	18.6
9:55:11	18.8	9:58:47	22.7
10:10:11	20.1	10:13:47	23.4
10:25:11	20.6	10:28:47	20.1
10:40:11	20.5	10:43:47	22.6
10:55:11	21.5	10:58:47	27.0
11:10:11	20.7	11:13:47	21.3
11:25:11	20.5	11:28:47	21.4
11:40:11	19.7	11:43:47	19.2
11:55:11	18.2	11:58:47	19.0
12:10:11	16.8	12:13:47	17.0
12:25:11	15.4	12:28:47	15.8
12:40:11	14.5	12:43:47	15.8
12:55:11	13.7	12:58:47	13.7
13:10:11	12.9	13:13:47	13.3
13:25:11	12.5	13:28:47	14.5
13:40:11	12.1	13:43:47	13.5
13:55:11	12.5	13:58:47	13.6
14:10:11	11.4	14:13:47	12.3
14:25:11	10.5	14:28:47	11.3
14:40:11	9.9	14:43:47	11.1

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/13/2012

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:40	0.0	7:45	0.0
7:55	0.0	8:00	0.0
8:10	0.0	8:15	0.0
8:25	0.0	8:30	0.1
8:40	0.0	8:45	0.1
8:55	0.0	9:00	0.2
9:10	0.0	9:15	0.2
9:25	0.0	9:30	0.2
9:40	0.0	9:45	0.2
9:55	0.0	10:00	0.3
10:10	0.0	10:15	0.3
10:25	0.0	10:30	0.3
10:40	0.0	10:45	0.3
10:55	0.0	11:00	0.3
11:10	0.0	11:15	0.3
11:25	0.0	11:30	0.3
11:40	0.0	11:45	0.3
11:55	0.0	12:00	0.3
12:10	0.0	12:15	0.3
12:25	0.0	12:30	0.3
12:40	0.0	12:45	0.3
12:55	0.0	13:00	0.3
13:10	0.0	13:15	0.3
13:25	0.0	13:30	0.3
13:40	0.0	13:45	0.3
13:55	0.0	14:00	0.4
14:10	0.0	14:15	0.3
14:25	0.0	14:30	0.3

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

CONC. MOORING DOLPHIN

CONC. MOORING DOLPHIN

7:25-14:45 Downwind Meters

7:25-14:45 Upwind Meters

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

WIND DIRECTION

12/13/2012
Former Tappan Terminal
CAMP

GRAPHIC SCALE
50 25 0 50 100 150

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REV	DESCRIPTION	DESIGNED BY: AJG	DRAWN BY: HP	CHECKED BY: AJG	DATE: 7.03.13
1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Charlie\projects\209925 ExxonMobil Tappan Terminal\wip\Final Remedial Design\Dwg\Final\209925-C03A (2012.03.03).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/14/2012

Upwind Serial Number D581
Downwind Serial Number D389

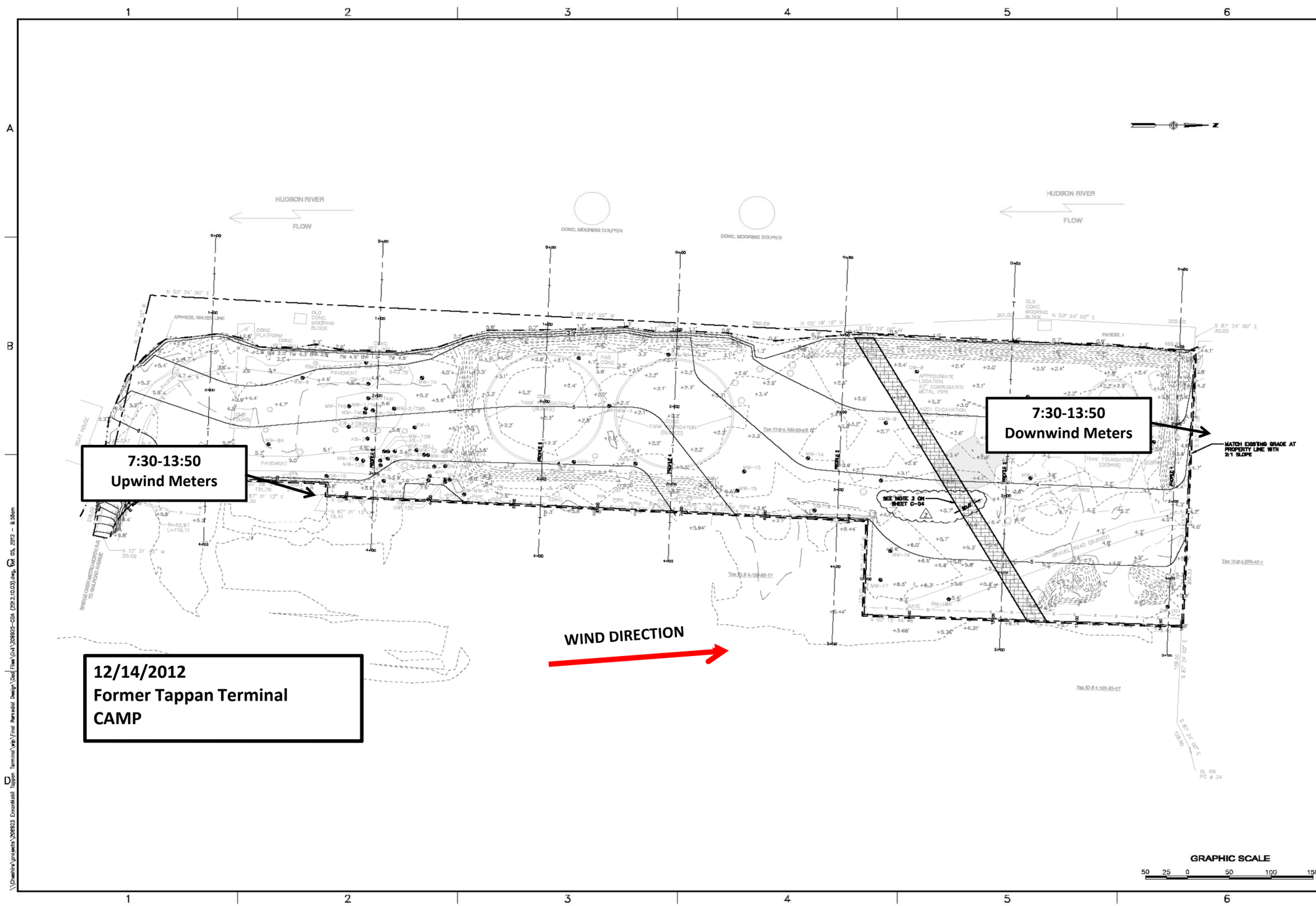
Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:48:18	21.3	7:45:13	23.2
8:03:18	24.1	8:00:13	24.0
8:18:18	24.7	8:15:13	25.3
8:33:18	26.1	8:30:13	25.9
8:48:18	26.4	8:45:13	27.6
9:03:18	28.4	9:00:13	29.9
9:18:18	30.0	9:15:13	30.9
9:33:18	32.7	9:30:13	32.8
9:48:18	34.4	9:45:13	34.9
10:03:18	33.4	10:00:13	34.8
10:18:18	33.0	10:15:13	34.2
10:33:18	33.5	10:30:13	35.0
10:48:18	33.8	10:45:13	33.8
11:03:18	30.9	11:00:13	31.6
11:18:18	26.5	11:15:13	27.8
11:33:18	24.5	11:30:13	25.3
11:48:18	24.3	11:45:13	24.1
12:03:18	24.0	12:00:13	24.4
12:18:18	23.2	12:15:13	24.9
12:33:18	22.8	12:30:13	23.1
12:48:18	24.3	12:45:13	21.5
13:03:18	22.8	13:00:13	23.6
13:18:18	23.3	13:15:13	22.1
13:33:18	23.8	13:30:13	24.0
--	--	13:45:13	32.0

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/14/2012

Upwind Serial Number 12685
Downwind Serial Number 9578

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:50	0.1	7:44	0.0
8:05	0.2	7:59	0.0
8:20	0.2	8:14	0.0
8:35	0.3	8:29	0.0
8:50	0.3	8:44	0.0
9:05	0.4	8:59	0.0
9:20	0.4	9:14	0.0
9:35	0.5	9:29	0.0
9:50	0.5	9:44	0.0
10:05	0.5	9:59	0.0
10:20	0.5	10:14	0.0
10:35	0.5	10:29	0.0
10:50	0.5	10:44	0.0
11:05	0.5	10:59	0.0
11:20	0.4	11:14	0.0
11:35	0.4	11:29	0.0
11:50	0.4	11:44	0.0
12:05	0.4	11:59	0.0
12:20	0.4	12:14	0.0
12:35	0.4	12:29	0.0
12:50	0.5	12:44	0.0
13:05	0.5	12:59	0.0
13:20	0.5	13:14	0.0



24x36 SHEET

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REV	DESCRIPTION	DESIGNED BY: JHS	DRAWN BY: HP	CHECKED BY: JHS	DATE: 7/3/13
1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Charlie\projects\209925 ExxonMobil Tappan Terminal\wip\Final Removal Design\Dwg\Final\209925-C03A (2012.0103).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/17/2012

Upwind Serial Number D581
Downwind Serial Number D389

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
9:49:46	3.6	9:47:03	5.0
10:04:46	4.6	10:02:03	6.2
10:19:46	4.2	10:17:03	5.5
10:34:46	5.2	10:32:03	6.5
10:49:46	6.1	10:47:03	7.5
11:04:46	7.5	11:02:03	8.9
11:19:46	8.4	11:17:03	10.1
11:34:46	8.8	11:32:03	10.9
11:49:46	9.4	11:47:03	11.7
12:04:46	9.7	12:02:03	13.4
12:19:46	9.5	12:17:03	11.3
12:34:46	10.3	12:32:03	12.2
12:49:46	11.1	12:47:03	12.8
13:04:46	12.9	13:02:03	13.9
13:19:46	14.0	13:17:03	15.6
13:34:46	13.9	13:32:03	16.9
13:49:46	13.8	13:47:03	16.7
14:04:46	14.4	14:02:03	17.3
14:19:46	14.8	14:17:03	16.7
14:34:46	15.4	14:32:03	17.0
--	--	14:47:03	17.5

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/17/2012

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
9:50	0.0	9:47	0.0
10:05	0.0	10:02	0.0
10:20	0.0	10:17	0.0
10:35	0.0	10:32	0.0
10:50	0.0	10:47	0.1
11:05	0.0	11:02	0.1
11:20	0.0	11:17	0.1
11:35	0.0	11:32	0.1
11:50	0.0	11:47	0.1
12:05	0.0	12:02	0.1
12:20	0.0	12:17	0.1
12:35	0.0	12:32	0.1
12:50	0.0	12:47	0.1
13:05	0.0	13:02	0.1
13:20	0.0	13:17	0.1
13:35	0.0	13:32	0.1
13:50	0.0	13:47	0.1
14:05	0.0	14:02	0.1
14:20	0.0	14:17	0.2
--	--	14:32	0.2

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

9:30-14:45 Downwind Meters

9:30-14:45 Upwind Meters

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

WIND DIRECTION

12/17/2012
Former Tappan Terminal
CAMPS

GRAPHIC SCALE
50 25 0 50 100 150

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	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 208925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Charlie\projects\208925 Exxonmobil Tappan Terminal\wip\Final Remedial Design\Dwg Files\Civil\208925-C03A (2012.10.03).dwg, Oct 05, 2012 - 8:35am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/18/2012

Upwind Serial Number D581
Downwind Serial Number D389

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:09:13	1.2	8:16:23	0.6
8:24:13	1.3	8:31:23	0.0
8:39:13	1.8	8:46:23	0.0
8:54:13	5.6	9:01:23	0.0
9:09:13	4.1	9:16:23	2.0
9:24:13	3.8	9:31:23	0.0
9:39:13	5.1	9:46:23	0.0
9:54:13	8.5	10:01:23	0.0
10:09:13	8.8	10:16:23	0.0
10:24:13	13.3	10:31:23	0.0
10:39:13	14.9	10:46:23	0.0
10:54:13	14.3	11:01:23	0.0
11:09:13	17.5	11:16:23	0.1
11:24:13	24.6	11:31:23	0.3
11:39:13	20.2	11:46:23	0.0
11:54:13	24.3	12:01:23	0.0
12:09:13	23.0	12:16:23	0.0
12:24:13	21.6	12:31:23	0.0
12:39:13	19.0	12:46:23	0.0
12:54:13	17.9	13:01:23	0.0
13:09:13	17.2	13:16:23	0.0
13:24:13	17.2	13:31:23	0.0
13:39:13	15.1	13:46:23	0.0
13:54:13	12.5	14:01:23	0.0
14:09:13	13.9	14:16:23	0.0
14:24:13	18.2	--	--

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/18/2012

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
8:10	0.0	8:16	0.1
8:25	0.0	8:31	0.2
8:40	0.0	8:46	0.2
8:55	0.0	9:01	0.3
9:10	0.0	9:16	0.3
9:25	0.0	9:31	0.3
9:40	0.0	9:46	0.3
9:55	0.0	10:01	0.4
10:10	0.0	10:16	0.4
10:25	0.0	10:31	0.4
10:40	0.0	10:46	0.5
10:55	0.0	11:01	0.5
11:10	0.0	11:16	0.5
11:25	0.0	11:31	0.5
11:40	0.0	11:46	0.5
11:55	0.0	12:01	0.5
12:10	0.0	12:16	0.5
12:25	0.0	12:31	0.5
12:40	0.0	12:46	0.5
12:55	0.0	13:01	0.5
13:10	0.0	13:16	0.5
13:25	0.0	13:31	0.5
13:40	0.0	13:46	0.5
13:55	0.0	14:01	0.5
14:10	0.0	--	--

24x36 SHEET
1:1

HUDSON RIVER
FLOW

HUDSON RIVER
FLOW

CONC. MOORING DOLPHIN

CONC. MOORING DOLPHIN

7:50-14:35
Downwind Meters

7:50-14:35
Upwind Meters

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

WIND DIRECTION

12/18/2012
Former Tappan Terminal
CAMP

GRAPHIC SCALE
50 25 0 50 100 150

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	NYSDEC COMMENTS	Drawn BY: KP		

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 208925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Charlie\projects\208925 Exxonmobil Tappan Terminal\wip\Final Remedial Design\Dwg Files\Civil\208925-C03A (2012.10.03).dwg, Oct 05, 2012 - 8:35am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/19/2012

Upwind Serial Number D389
Downwind Serial Number D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:38:28	8.8	7:32:25	4.7
7:53:28	8.8	7:47:25	3.7
8:08:28	9.2	8:02:25	3.4
8:23:28	9.5	8:17:25	3.5
8:38:28	9.8	8:32:25	4.0
8:53:28	9.9	8:47:25	3.6
9:08:28	10.0	9:02:25	4.4
9:23:28	10.2	9:17:25	3.7
9:38:28	10.3	9:32:25	4.4
9:53:28	10.5	9:47:25	6.3
10:08:28	10.6	10:02:25	4.4
10:23:28	10.8	10:17:25	4.8
10:38:28	10.8	10:32:25	4.8
10:53:28	10.7	10:47:25	4.0
11:08:28	10.6	11:02:25	5.0
11:23:28	10.3	11:17:25	3.8
11:38:28	10.2	11:32:25	5.1
11:53:28	10.0	11:47:25	4.9
12:08:28	10.0	12:02:25	4.6
12:23:28	9.9	12:17:25	3.4
12:38:28	9.9	12:32:25	3.4
12:53:28	9.7	12:47:25	3.1
13:08:28	9.9	13:02:25	3.6
13:23:28	10.0	13:17:25	4.9
13:38:28	9.8	13:32:25	5.9
13:53:28	9.4	13:47:25	4.7
14:08:28	9.4	14:02:25	4.5
14:23:28	9.3	14:17:25	3.7
14:38:28	9.3	14:32:25	4.7
--	--	14:47:25	3.2

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/19/2012

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:37	0.0	7:33	0.0
7:52	0.0	7:48	0.0
8:07	0.0	8:03	0.0
8:22	0.0	8:18	0.0
8:37	0.0	8:33	0.1
8:52	0.0	8:48	0.1
9:07	0.0	9:03	0.2
9:22	0.0	9:18	0.2
9:37	0.0	9:33	0.2
9:52	0.0	9:48	0.2
10:07	0.0	10:03	0.3
10:22	0.0	10:18	0.3
10:37	0.0	10:33	0.3
10:52	0.0	10:48	0.3
11:07	0.0	11:03	0.3
11:22	0.0	11:18	0.3
11:37	0.0	11:33	0.3
11:52	0.0	11:48	0.3
12:07	0.0	12:03	0.3
12:22	0.0	12:18	0.3
12:37	0.0	12:33	0.3
12:52	0.0	12:48	0.3
13:07	0.0	13:03	0.3
13:22	0.0	13:18	0.3
13:37	0.0	13:33	0.4
13:52	0.0	13:48	0.4
14:07	0.0	14:03	0.4
14:22	0.0	14:18	0.4
--	--	14:33	0.4

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

CONC. MOORING DOLPHIN

CONC. MOORING DOLPHIN

7:20-14:50
Upwind Meters

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

7:20-14:50
Downwind Meters

SEE NOTE 3 ON SHEET C-04

12/19/2012
Former Tappan Terminal
CAMP

WIND DIRECTION

GRAPHIC SCALE
50 25 0 50 100 150

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1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Ghwarins\projects\209925 ExxonMobil Tappan Terminal\wip\Final Removal Design\Dwg\Civil\209925-C03A (2012.0103).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/20/2012

Upwind Serial Number D389
Downwind Serial Number D581

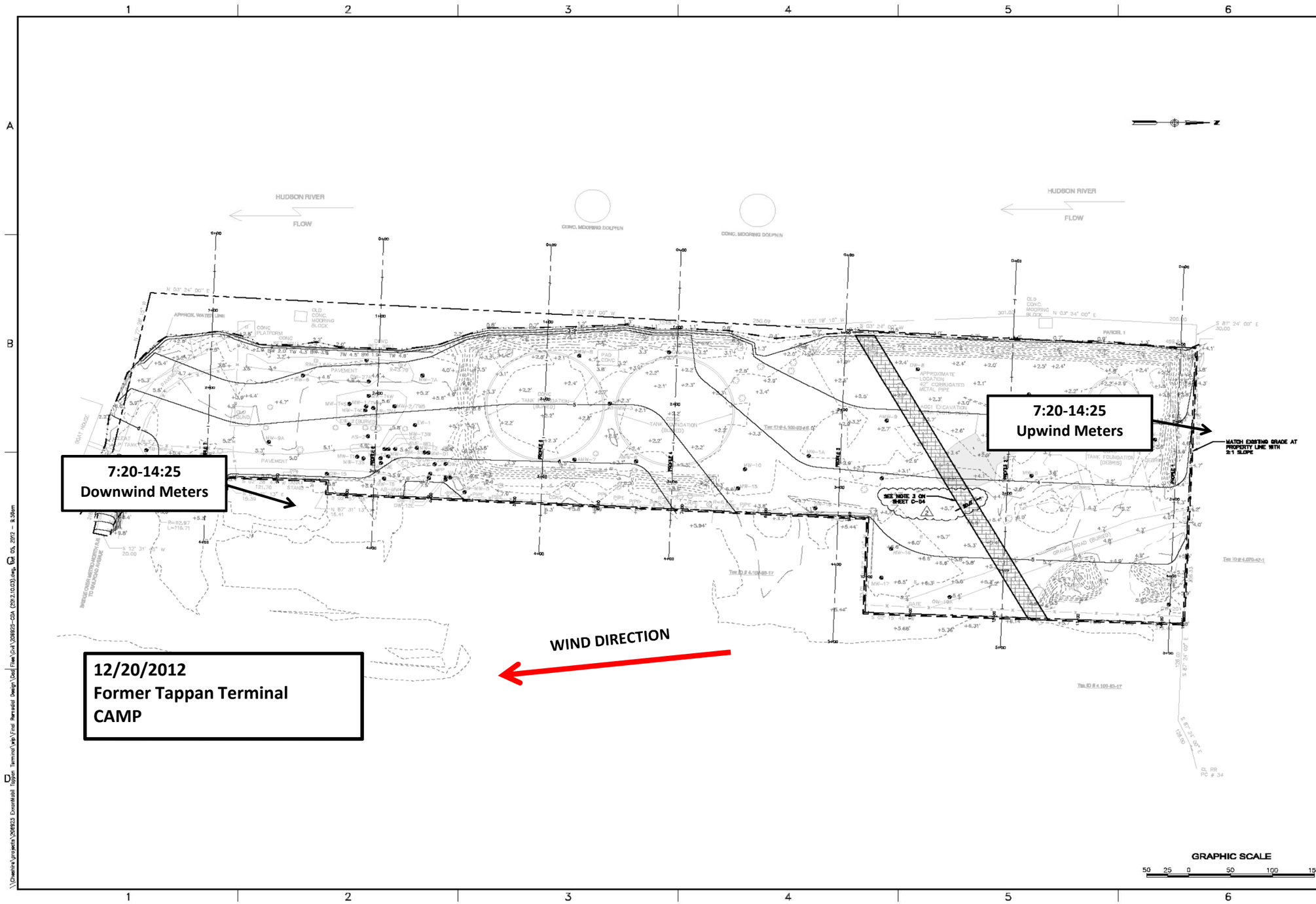
Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:34:01	7.2	7:37:45	8.7
7:49:01	9.2	7:52:45	7.2
8:04:01	15.0	8:07:45	6.7
8:19:01	8.7	8:22:45	8.0
8:34:01	11.6	8:37:45	6.8
8:49:01	7.6	8:52:45	7.8
9:04:01	8.0	9:07:45	9.0
9:19:01	7.8	9:22:45	10.9
9:34:01	7.8	9:37:45	7.3
9:49:01	6.0	9:52:45	7.6
10:04:01	5.1	10:07:45	4.8
10:19:01	4.6	10:22:45	4.8
10:34:01	4.8	10:37:45	5.7
10:49:01	4.9	10:52:45	4.9
11:04:01	4.8	11:07:45	5.4
11:19:01	4.9	11:22:45	19.6
11:34:01	5.0	11:37:45	10.7
11:49:01	5.0	11:52:45	11.5
12:04:01	4.9	12:07:45	4.7
12:19:01	5.3	12:22:45	4.7
12:34:01	5.5	12:37:45	4.9
12:49:01	5.1	12:52:45	3.8
13:04:01	3.9	13:07:45	3.2
13:19:01	4.4	13:22:45	3.2
13:34:01	3.9	13:37:45	4.0
13:49:01	5.9	13:52:45	4.0
14:04:01	5.4	14:07:45	4.3
14:19:01	4.9	14:22:45	4.6

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/20/2012

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:33	0.0	7:39	0.0
7:48	0.0	7:54	0.0
8:03	0.0	8:09	0.0
8:18	0.0	8:24	0.0
8:33	0.0	8:39	0.1
8:48	0.0	8:54	0.1
9:03	0.0	9:09	0.1
9:18	0.0	9:24	0.2
9:33	0.0	9:39	0.2
9:48	0.0	9:54	0.2
10:03	0.0	10:09	0.2
10:18	0.0	10:24	0.2
10:33	0.0	10:39	0.2
10:48	0.0	10:54	0.2
11:03	0.0	11:09	0.2
11:18	0.0	11:24	0.2
11:33	0.0	11:39	0.2
11:48	0.0	11:54	0.2
12:03	0.0	12:09	0.2
12:18	0.0	12:24	0.2
12:33	0.0	12:39	0.2
12:48	0.0	12:54	0.3
13:03	0.0	13:09	0.3
13:18	0.0	13:24	0.3
13:33	0.0	13:39	0.3
13:48	0.0	13:54	0.3
14:03	0.0	14:09	0.3



24x36 SHEET
1:1

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REV	DESCRIPTION	DESIGNED BY: AJG	DRAWN BY: KP	CHECKED BY: AJG	DATE: 7/13/12
1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Charlie\projects\209925 ExxonMobil Tappan Terminal\wip\Final Remedial Design\Dwg\Final\209925-C03A (2012.0103).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/26/2012

Upwind Serial Number D581
Downwind Serial Number D389

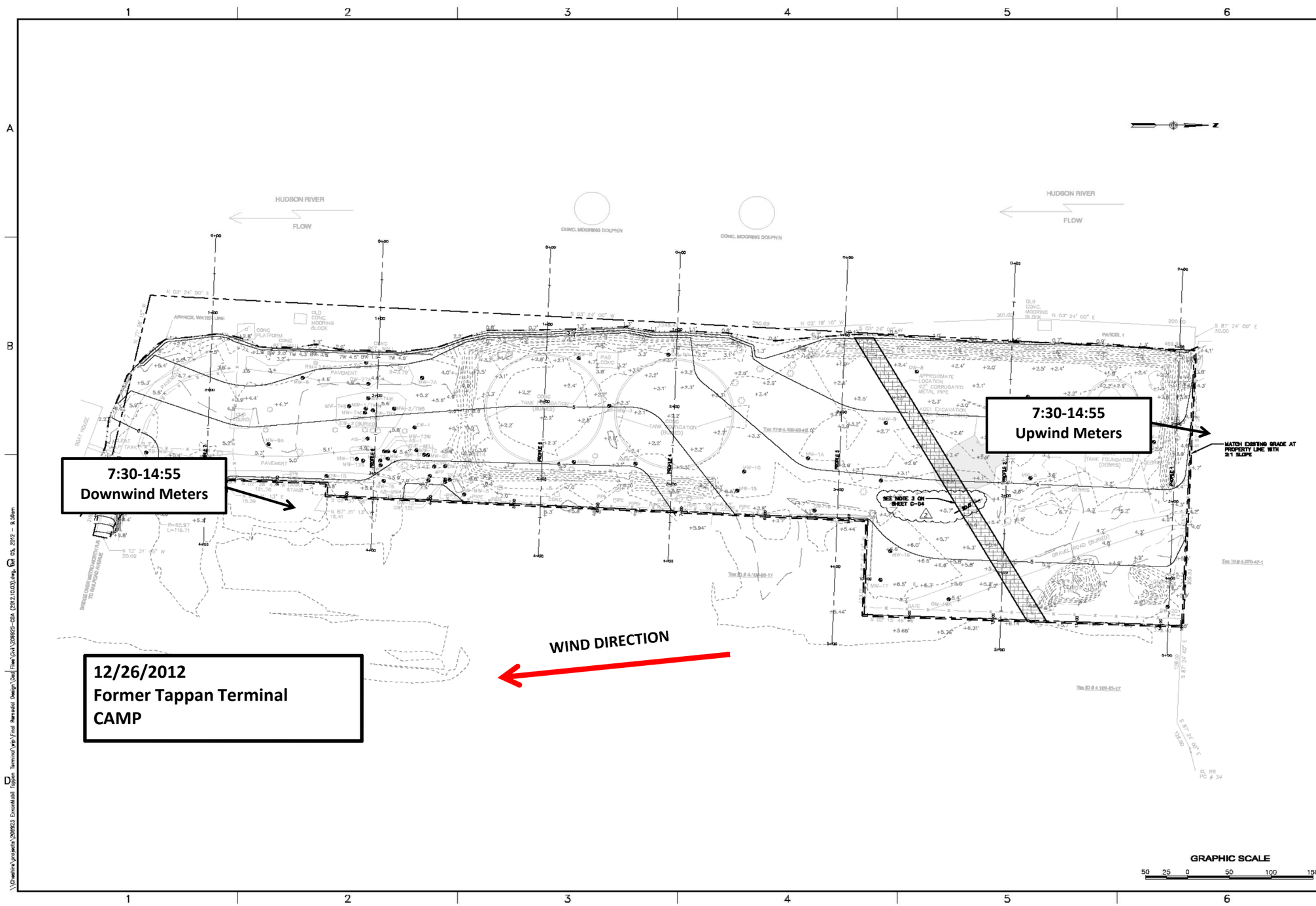
Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:54:10	7.1	8:00:04	0.1
8:09:10	7.7	8:15:04	0.0
8:24:10	8.3	8:30:04	0.1
8:39:10	8.8	8:45:04	0.0
8:54:10	9.2	9:00:04	0.0
9:09:10	9.2	9:15:04	0.0
9:24:10	11.8	9:30:04	0.6
9:39:10	11.7	9:45:04	0.4
9:54:10	9.9	10:00:04	0.1
10:09:10	8.8	10:15:04	0.0
10:24:10	7.9	10:30:04	0.0
10:39:10	6.5	10:45:04	0.0
10:54:10	5.6	11:00:04	0.0
11:09:10	5.6	11:15:04	0.0
11:24:10	6.1	11:30:04	0.0
11:39:10	6.7	11:45:04	0.0
11:54:10	7.2	12:00:04	0.0
12:09:10	7.8	12:15:04	0.0
12:24:10	8.5	12:30:04	0.0
12:39:10	9.0	12:45:04	0.0
12:54:10	9.8	13:00:04	0.0
13:09:10	10.1	13:15:04	0.0
13:24:10	9.9	13:30:04	0.0
13:39:10	10.1	13:45:04	0.0
13:54:10	9.7	14:00:04	0.0
14:09:10	10.2	14:15:04	0.0
14:24:10	10.4	14:30:04	0.0
14:39:10	11.0	14:45:04	0.0
14:54:10	11.0	--	--

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/26/2012

Upwind Serial Number 12685
Downwind Serial Number 9578

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:46	0.0	7:59	0.0
8:01	0.1	8:14	0.0
8:16	0.2	8:29	0.0
8:31	0.2	8:44	0.0
8:46	0.2	8:59	0.0
9:01	0.3	9:14	0.0
9:16	0.3	9:29	0.0
9:31	0.3	9:44	0.0
9:46	0.3	9:59	0.0
10:01	0.3	10:14	0.0
10:16	0.3	10:29	0.0
10:31	0.3	10:44	0.0
10:46	0.3	10:59	0.0
11:01	0.4	11:14	0.0
11:16	0.4	11:29	0.0
11:31	0.4	11:44	0.0
11:46	0.4	11:59	0.0
12:01	0.4	12:14	0.0
12:16	0.4	12:29	0.0
12:31	0.4	12:44	0.0
12:46	0.4	12:59	0.0
13:01	0.4	13:14	0.0
13:16	0.4	13:29	0.0
13:31	0.4	13:44	0.0
13:46	0.4	13:59	0.0
14:01	0.4	14:14	0.0
14:16	0.5	14:29	0.0
14:31	0.5	--	--



24x36 SHEET
1:1

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REV	DESCRIPTION	DESIGNED BY: AJG	DRAWN BY: HP	CHECKED BY: AJG	DATE: 7/13/12
1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.:	209925.09
DATE:	DECEMBER 2011
SCALE:	AS SHOWN
SHEET:	3 OF 5

C-03

\\Ghwerks\projects\209925 ExxonMobil Tappan Terminal\cad\Final Removal Design\Dwg\Civil\209925-C03A (2012.0103).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/28/2012

Upwind Serial Number D581
Downwind Serial Number D389

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:08:26	2.0	8:11:33	3.5
8:23:26	2.1	8:26:33	2.0
8:38:26	2.8	8:41:33	2.5
8:53:26	3.6	8:56:33	2.4
9:08:26	4.2	9:11:33	2.4
9:23:26	4.7	9:26:33	2.7
9:38:26	4.9	9:41:33	3.5
9:53:26	5.2	9:56:33	6.5
10:08:26	5.2	10:11:33	3.5
10:23:26	5.2	10:26:33	4.6
10:38:26	5.2	10:41:33	2.9
10:53:26	5.4	10:56:33	2.9
11:08:26	5.3	11:11:33	2.7
11:23:26	5.1	11:26:33	2.7
11:38:26	5.1	11:41:33	3.6
11:53:26	5.4	11:56:33	3.3
12:08:26	5.3	12:11:33	3.6
12:23:26	5.3	12:26:33	2.9
12:38:26	5.5	12:41:33	2.8
12:53:26	5.4	12:56:33	2.9
13:08:26	5.7	13:11:33	2.9
13:23:26	5.7	13:26:33	2.9
13:38:26	5.9	13:41:33	3.3
13:53:26	5.7	13:56:33	3.5
14:08:26	5.8	14:11:33	3.3

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/28/2012

Upwind Serial Number 12685
Downwind Serial Number 9578

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
8:07	0.0	8:13	0.2
8:22	0.0	8:28	0.3
8:37	0.0	8:43	0.3
8:52	0.0	8:58	0.4
9:07	0.0	9:13	0.5
9:22	0.0	9:28	0.5
9:37	0.0	9:43	0.5
9:52	0.0	9:58	0.6
10:07	0.0	10:13	0.5
10:22	0.0	10:28	0.6
10:37	0.0	10:43	0.6
10:52	0.0	10:58	0.6
11:07	0.0	11:13	0.6
11:22	0.0	11:28	0.6
11:37	0.0	11:43	0.6
11:52	0.0	11:58	0.6
12:07	0.0	12:13	0.6
12:22	0.0	12:28	0.7
12:37	0.0	12:43	0.7
12:52	0.0	12:58	0.7
13:07	0.0	13:13	0.7
13:22	0.0	13:28	0.7
13:37	0.0	13:43	0.7
13:52	0.0	13:58	0.7

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

CONC. MOORING DOLPHIN

CONC. MOORING DOLPHIN

7:55-14:15
Upwind Meters

7:55-14:15
Downwind Meters

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

WIND DIRECTION

12/28/2012
Former Tappan Terminal
CAMP

GRAPHIC SCALE
50 25 0 50 100 150

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REV	DESCRIPTION	DESIGNED BY: AJG	DRAWN BY: KP	CHECKED BY: AJG	DATE: 7.03.013
1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.:	209925.09
DATE:	DECEMBER 2011
SCALE:	AS SHOWN
SHEET:	3 OF 5

C-03

\\Ghwarins\projects\209925 ExxonMobil Tappan Terminal\dgn\Final Removal Design\Civil\209925-C03A (2012.0103).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/31/2012

Upwind Serial Number D581
Downwind Serial Number D389

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:01:22	10.7	7:55:57	2.8
8:16:22	11.5	8:10:57	1.6
8:31:22	12.6	8:25:57	1.4
8:46:22	12.8	8:40:57	1.1
9:01:22	13.2	8:55:57	0.5
9:16:22	14.1	9:10:57	0.0
9:31:22	14.7	9:25:57	2.3
9:46:22	14.7	9:40:57	4.6
10:01:22	16.5	9:55:57	2.2
10:16:22	15.3	10:10:57	0.6
10:31:22	14.3	10:25:57	0.0
10:46:22	14.2	10:40:57	0.0
11:01:22	14.0	10:55:57	0.0
11:16:22	14.0	11:10:57	0.0
11:31:22	14.0	11:25:57	0.0
11:46:22	13.6	11:40:57	0.0
12:01:22	13.9	11:55:57	0.0
12:16:22	14.0	12:10:57	0.0
12:31:22	13.5	12:25:57	0.0
12:46:22	13.3	12:40:57	0.0
13:01:22	14.6	12:55:57	0.0
13:16:22	14.1	13:10:57	0.0
13:31:22	14.1	13:25:57	0.0
13:46:22	14.0	13:40:57	0.0
14:01:22	13.8	13:55:57	0.0

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 12/31/2012

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:54	0.0	8:03	0.0
8:09	0.0	8:18	0.0
8:24	0.0	8:33	0.0
8:39	0.0	8:48	0.0
8:54	0.0	9:03	0.1
9:09	0.0	9:18	0.1
9:24	0.0	9:33	0.1
9:39	0.0	9:48	0.1
9:54	0.0	10:03	0.2
10:09	0.0	10:18	0.2
10:24	0.0	10:33	0.2
10:39	0.0	10:48	0.2
10:54	0.0	11:03	0.2
11:09	0.0	11:18	0.2
11:24	0.0	11:33	0.2
11:39	0.0	11:48	0.2
11:54	0.0	12:03	0.2
12:09	0.0	12:18	0.2
12:24	0.0	12:33	0.2
12:39	0.0	12:48	0.3
12:54	0.0	13:03	0.3
13:09	0.0	13:18	0.3
13:24	0.0	13:33	0.3
13:39	0.0	13:48	0.3

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

CONC. MOORING DOLPHIN

CONC. MOORING DOLPHIN

7:40-14:05
Upwind Meters

7:40-14:05
Downwind Meters

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

WIND DIRECTION

12/31/2012
Former Tappan Terminal
CAMP

GRAPHIC SCALE
50 25 0 50 100 150

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REV	DESCRIPTION	DESIGNED BY: AJG	DRAWN BY: KP	CHECKED BY: AJG	DATE: 7/13/12
1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Charlotte\projects\209925 ExxonMobil Tappan Terminal\cad\Final Removal Design\Dwg\Civil\209925-C03A (2012.10.03).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/2/2013

Upwind Serial Number D389
Downwind Serial Number D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:46:26	16.7	7:37:46	7.0
8:01:26	18.8	7:52:46	7.6
8:16:26	20.7	8:07:46	6.0
8:31:26	23.3	8:22:46	5.3
8:46:26	24.1	8:37:46	5.6
9:01:26	25.6	8:52:46	5.8
9:16:26	25.6	9:07:46	5.5
9:31:26	23.2	9:22:46	9.5
9:46:26	21.4	9:37:46	13.0
10:01:26	22.1	9:52:46	6.3
10:16:26	22.1	10:07:46	5.1
10:31:26	23.0	10:22:46	5.0
10:46:26	22.0	10:37:46	4.8
11:01:26	21.0	10:52:46	4.0
11:16:26	20.9	11:07:46	3.8
11:31:26	20.3	11:22:46	5.1
11:46:26	20.6	11:37:46	5.4
12:01:26	20.5	11:52:46	3.7
12:16:26	20.5	12:07:46	3.8
12:31:26	20.2	12:22:46	4.1
12:46:26	20.3	12:37:46	4.4
13:01:26	20.2	12:52:46	4.0
13:16:26	20.4	13:07:46	4.9
13:31:26	20.0	13:22:46	4.4
13:46:26	19.8	13:37:46	3.8
14:01:26	20.0	13:52:46	3.8
14:16:26	19.6	14:07:46	3.6
14:31:26	19.0	14:22:46	3.5
14:46:26	18.9	14:37:46	3.5
--	--	14:52:46	3.7

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/2/2013

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:44	0.0	7:39	0.0
7:59	0.0	7:54	0.0
8:14	0.0	8:09	0.1
8:29	0.0	8:24	0.2
8:44	0.0	8:39	0.2
8:59	0.0	8:54	0.2
9:14	0.0	9:09	0.3
9:29	0.0	9:24	0.3
9:44	0.0	9:39	0.3
9:59	0.0	9:54	0.3
10:14	0.0	10:09	0.3
10:29	0.0	10:24	0.3
10:44	0.0	10:39	0.3
10:59	0.0	10:54	0.3
11:14	0.0	11:09	0.3
11:29	0.0	11:24	0.3
11:44	0.0	11:39	0.4
11:59	0.0	11:54	0.4
12:14	0.0	12:09	0.4
12:29	0.0	12:24	0.4
12:44	0.0	12:39	0.4
12:59	0.0	12:54	0.4
13:14	0.0	13:09	0.4
13:29	0.0	13:24	0.4
13:44	0.0	13:39	0.4
13:59	0.0	13:54	0.4
14:14	0.0	14:09	0.4
14:29	0.0	14:24	0.4
14:44	0.0	14:39	0.4

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

CONC. MOORING DOLPHIN

CONC. MOORING DOLPHIN

7:30-14:55
Upwind Meters

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

7:30-14:55
Downwind Meters

WIND DIRECTION

01/02/2013
Former Tappan Terminal
CAMP

GRAPHIC SCALE
50 25 0 50 100 150

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REV	DESCRIPTION	DESIGNED BY: AJG	DRAWN BY: KP	CHECKED BY: AJG	DATE: 7/3/13
1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Charlie\projects\209925 ExxonMobil Tappan Terminal\wip\Final Remedial Design\Dwg\Civil\209925-C03A (2012.0103).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/3/2013

Upwind Serial Number D389
Downwind Serial Number D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:45:54	9.5	7:38:09	18.5
8:00:54	9.0	7:53:09	17.3
8:15:54	9.5	8:08:09	19.5
8:30:54	9.5	8:23:09	7.7
8:45:54	14.5	8:38:09	8.6
9:00:54	12.8	8:53:09	7.8
9:15:54	16.8	9:08:09	7.1
9:30:54	22.0	9:23:09	35.6
9:45:54	20.0	9:38:09	28.8
10:00:54	12.7	9:53:09	19.9
10:15:54	12.4	10:08:09	9.4
10:30:54	27.3	10:23:09	9.0
10:45:54	13.3	10:38:09	9.3
11:00:54	13.7	10:53:09	12.0
11:15:54	39.3	11:08:09	28.0
11:30:54	15.3	11:23:09	20.1
11:45:54	14.2	11:38:09	11.1
12:00:54	14.5	11:53:09	10.0
12:15:54	14.7	12:08:09	10.9
12:30:54	14.5	12:23:09	9.8
12:45:54	14.4	12:38:09	9.8
13:00:54	14.3	12:53:09	12.6
13:15:54	14.2	13:08:09	10.2
13:30:54	14.5	13:23:09	10.4
13:45:54	14.5	13:38:09	10.5
14:00:54	14.8	13:53:09	10.3
14:15:54	13.9	14:08:09	9.3
14:30:54	13.7	14:23:09	9.5
14:45:54	13.0	14:38:09	9.6
--	--	14:53:09	8.0

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/3/2013

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:44	0.0	7:39	0.1
7:59	0.0	7:54	0.1
8:14	0.0	8:09	0.2
8:29	0.0	8:24	0.3
8:44	0.0	8:39	0.3
8:59	0.0	8:54	0.4
9:14	0.0	9:09	0.4
9:29	0.0	9:24	0.4
9:44	0.0	9:39	0.4
9:59	0.0	9:54	0.5
10:14	0.0	10:09	0.5
10:29	0.0	10:24	0.5
10:44	0.0	10:39	0.5
10:59	0.0	10:54	0.5
11:14	0.0	11:09	0.5
11:29	0.0	11:24	0.5
11:44	0.0	11:39	0.5
11:59	0.0	11:54	0.5
12:14	0.0	12:09	0.5
12:29	0.0	12:24	0.6
12:44	0.0	12:39	0.6
12:59	0.0	12:54	0.6
13:14	0.0	13:09	0.6
13:29	0.0	13:24	0.6
13:44	0.0	13:39	0.6
13:59	0.0	13:54	0.6
14:14	0.0	14:09	0.6
14:29	0.0	14:24	0.6
--	--	14:39	0.6

24x36 SHEET
1:1

7:25-14:55
Downwind Meters

7:25-14:55
Upwind Meters

01/03/2013
Former Tappan Terminal
CAMP

WIND DIRECTION

HUDSON RIVER
FLOW

HUDSON RIVER
FLOW

CONC. MOORING DOLPHIN

CONC. MOORING DOLPHIN

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

GRAPHIC SCALE
50 25 0 50 100 150

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REV	DESCRIPTION	DATE
	NYSDEC COMMENTS	7/3/13

DESIGNED BY: AJG
DRAWN BY: HP
CHECKED BY: AJG

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Ghwarins\projects\209925 ExxonMobil Tappan Terminal\wip\Final Remedial Design\Dwg\Civil\209925-C03A (2012.0103).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/4/2013

Upwind Serial Number D389
Downwind Serial Number D581

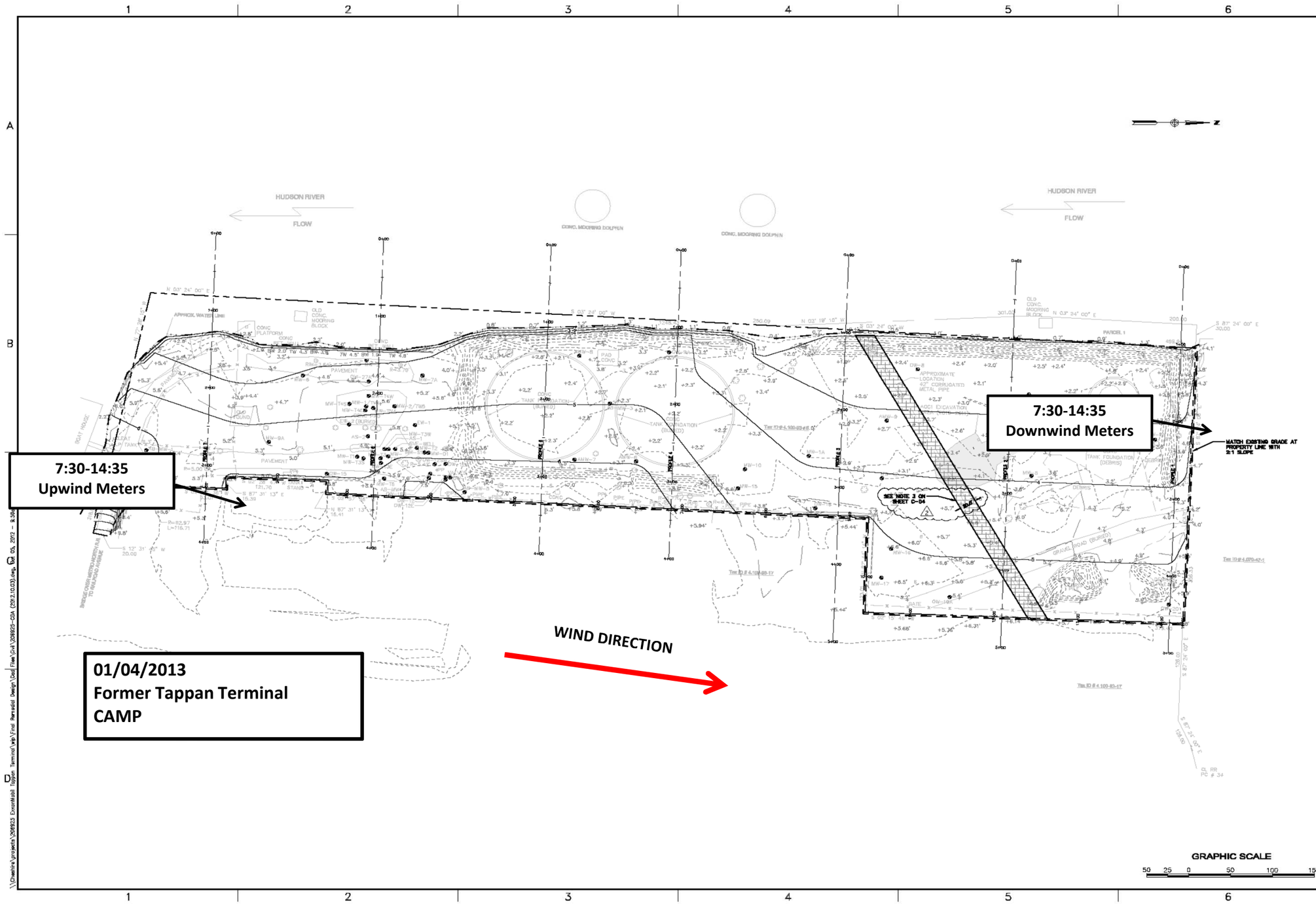
Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:50:41	17.6	8:00:13	20.5
8:05:41	18.0	8:15:13	18.3
8:20:41	18.0	8:30:13	17.4
8:35:41	17.2	8:45:13	16.2
8:50:41	16.8	9:00:13	16.5
9:05:41	17.1	9:15:13	16.3
9:20:41	17.4	9:30:13	18.2
9:35:41	18.4	9:45:13	16.9
9:50:41	18.4	10:00:13	17.7
10:05:41	18.5	10:15:13	17.2
10:20:41	18.3	10:30:13	16.9
10:35:41	17.9	10:45:13	16.8
10:50:41	17.9	11:00:13	17.6
11:05:41	17.5	11:15:13	14.7
11:20:41	15.9	11:30:13	14.3
11:35:41	15.5	11:45:13	15.2
11:50:41	15.8	12:00:13	14.4
12:05:41	16.1	12:15:13	14.9
12:20:41	16.2	12:30:13	15.0
12:35:41	16.4	12:45:13	14.7
12:50:41	15.7	13:00:13	14.6
13:05:41	15.3	13:15:13	13.7
13:20:41	14.5	13:30:13	13.3
13:35:41	14.2	13:45:13	12.9
13:50:41	13.8	14:00:13	13.0
14:05:41	13.5	14:15:13	12.6
14:20:41	13.3	14:30:13	13.0
14:35:41	13.8	--	--

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/4/2013

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:48	0.0	8:02	0.1
8:03	0.0	8:17	0.2
8:18	0.0	8:32	0.2
8:33	0.0	8:47	0.3
8:48	0.0	9:02	0.3
9:03	0.0	9:17	0.4
9:18	0.0	9:32	0.4
9:33	0.0	9:47	0.4
9:48	0.0	10:02	0.4
10:03	0.0	10:17	0.4
10:18	0.0	10:32	0.5
10:33	0.0	10:47	0.5
10:48	0.0	11:02	0.5
11:03	0.0	11:17	0.5
11:18	0.0	11:32	0.5
11:33	0.0	11:47	0.5
11:48	0.0	12:02	0.5
12:03	0.0	12:17	0.5
12:18	0.0	12:32	0.5
12:33	0.0	12:47	0.5
12:48	0.0	13:02	0.5
13:03	0.0	13:17	0.5
13:18	0.0	13:32	0.5
13:33	0.0	13:47	0.5
13:48	0.0	14:02	0.5
14:03	0.0	14:17	0.5
14:18	0.0	--	--



24x36 SHEET

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REV	DESCRIPTION	DESIGNED BY: AJG	DRAWN BY: KP	CHECKED BY: AJG	DATE: 7/3/13
1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Charlie\projects\209925 ExxonMobil Tappan Terminal\cad\Final Removal Design\Dwg\Final\209925-C03A (2012.0103).dwg, Oct 05, 2012 - 8:38

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/5/2013

Upwind Serial Number D389
Downwind Serial Number D581

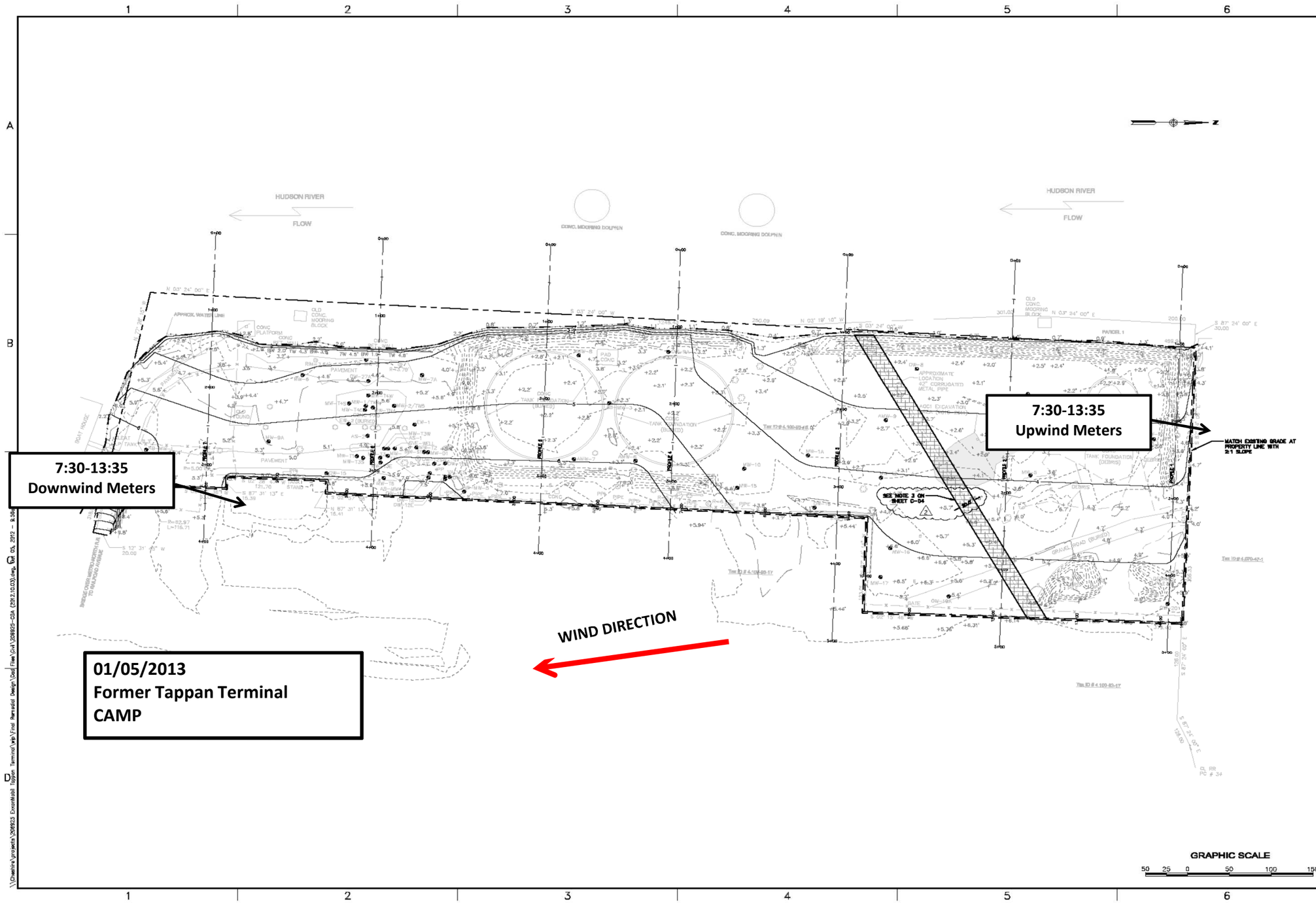
Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:49:42	11.2	7:43:04	10.5
8:04:42	10.5	7:58:04	10.3
8:19:42	11.5	8:13:04	10.8
8:34:42	11.8	8:28:04	11.4
8:49:42	12.5	8:43:04	11.8
9:04:42	12.9	8:58:04	12.1
9:19:42	12.7	9:13:04	11.8
9:34:42	12.5	9:28:04	11.4
9:49:42	12.2	9:43:04	11.2
10:04:42	12.3	9:58:04	10.7
10:19:42	11.6	10:13:04	10.4
10:34:42	10.8	10:28:04	10.2
10:49:42	13.7	10:43:04	10.0
11:04:42	11.8	10:58:04	9.8
11:19:42	10.6	11:13:04	9.7
11:34:42	12.3	11:28:04	9.5
11:49:42	15.9	11:43:04	9.5
12:04:42	11.3	11:58:04	8.7
12:19:42	12.0	12:13:04	7.8
12:34:42	9.4	12:28:04	7.3
12:49:42	8.1	12:43:04	7.2
13:04:42	8.1	12:58:04	6.9
13:19:42	8.2	13:13:04	7.0
13:34:42	8.0	13:28:04	7.0

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/5/2013

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:48	0.0	7:45	0.0
8:03	0.0	8:00	0.1
8:18	0.0	8:15	0.2
8:33	0.0	8:30	0.2
8:48	0.0	8:45	0.3
9:03	0.0	9:00	0.3
9:18	0.0	9:15	0.3
9:33	0.0	9:30	0.4
9:48	0.0	9:45	0.4
10:03	0.0	10:00	0.4
10:18	0.0	10:15	0.4
10:33	0.0	10:30	0.4
10:48	0.0	10:45	0.5
11:03	0.0	11:00	0.5
11:18	0.0	11:15	0.5
11:33	0.0	11:30	0.5
11:48	0.0	11:45	0.5
12:03	0.0	12:00	0.5
12:18	0.0	12:15	0.5
12:33	0.0	12:30	0.5
12:48	0.0	12:45	0.5
13:03	0.0	13:00	0.5
13:18	0.0	13:15	0.5



24x36 SHEET
1:1

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REV	DESCRIPTION	DESIGNED BY: JHS	DRAWN BY: HP	CHECKED BY: JHS	DATE: 7/3/13
1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Charlie\projects\209925 ExxonMobil Tappan Terminal\wip\Final Removal Design\Dwg Files\Civil\209925-C03A (2012.0103).dwg, Oct 05, 2012 - 8:38

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/7/2013

Upwind Serial Number D389
Downwind Serial Number D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:10:01	0.9	8:12:32	11.0
8:25:01	0.0	8:27:32	11.6
8:40:01	0.0	8:42:32	12.5
8:55:01	0.0	8:57:32	13.2
9:10:01	0.0	9:12:32	13.3
9:25:01	0.0	9:27:32	11.5
9:40:01	0.0	9:42:32	10.3
9:55:01	0.0	9:57:32	9.9
10:10:01	0.0	10:12:32	10.3
10:25:01	0.0	10:27:32	10.2
10:40:01	0.0	10:42:32	8.9
10:55:01	0.0	10:57:32	9.6
11:10:01	0.0	11:12:32	8.6
11:25:01	0.0	11:27:32	8.0
11:40:01	0.0	11:42:32	8.2
11:55:01	0.0	11:57:32	8.5
12:10:01	0.0	12:12:32	6.7
12:25:01	0.0	12:27:32	6.4
12:40:01	0.0	12:42:32	6.1
12:55:01	0.0	12:57:32	5.6
13:10:01	0.0	13:12:32	5.5
13:25:01	0.0	13:27:32	6.1
13:40:01	0.0	13:42:32	5.5
13:55:01	0.0	13:57:32	5.4
14:10:01	0.0	14:12:32	5.8
14:25:01	0.0	14:27:32	6.0
14:40:01	0.5	14:42:32	7.0
14:55:01	0.0	14:57:32	4.6

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/7/2013

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
8:08	0.0	8:14	0.0
8:23	0.0	8:29	0.0
8:38	0.0	8:44	0.1
8:53	0.0	8:59	0.2
9:08	0.0	9:14	0.2
9:23	0.0	9:29	0.2
9:38	0.0	9:44	0.3
9:53	0.0	9:59	0.3
10:08	0.0	10:14	0.3
10:23	0.0	10:29	0.3
10:38	0.0	10:44	0.3
10:53	0.0	10:59	0.3
11:08	0.0	11:14	0.3
11:23	0.0	11:29	0.3
11:38	0.0	11:44	0.3
11:53	0.0	11:59	0.3
12:08	0.0	12:14	0.3
12:23	0.0	12:29	0.3
12:38	0.0	12:44	0.4
12:53	0.0	12:59	0.4
13:08	0.0	13:14	0.4
13:23	0.0	13:29	0.4
13:38	0.0	13:44	0.4
13:53	0.0	13:59	0.4
14:08	0.0	14:14	0.4
14:23	0.0	14:29	0.4
14:38	0.0	14:44	0.4

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

CONC. MOORING DOLPHIN

CONC. MOORING DOLPHIN

7:55-14:55
Upwind Meters

7:55-14:55
Downwind Meters

WIND DIRECTION

01/07/2013
Former Tappan Terminal
CAMP

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

GRAPHIC SCALE
50 25 0 50 100 150

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REV	DESCRIPTION	DESIGNED BY: AJG	DRAWN BY: HP	CHECKED BY: AJG	DATE: 7/3/13
1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Ghwarins\projects\209925 Exxonmobil Tappan Terminal\wip\Final Removal Design\Dwg\Civil\209925-C03A (2012.0103).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/8/2013

Upwind Serial Number D389
Downwind Serial Number D581

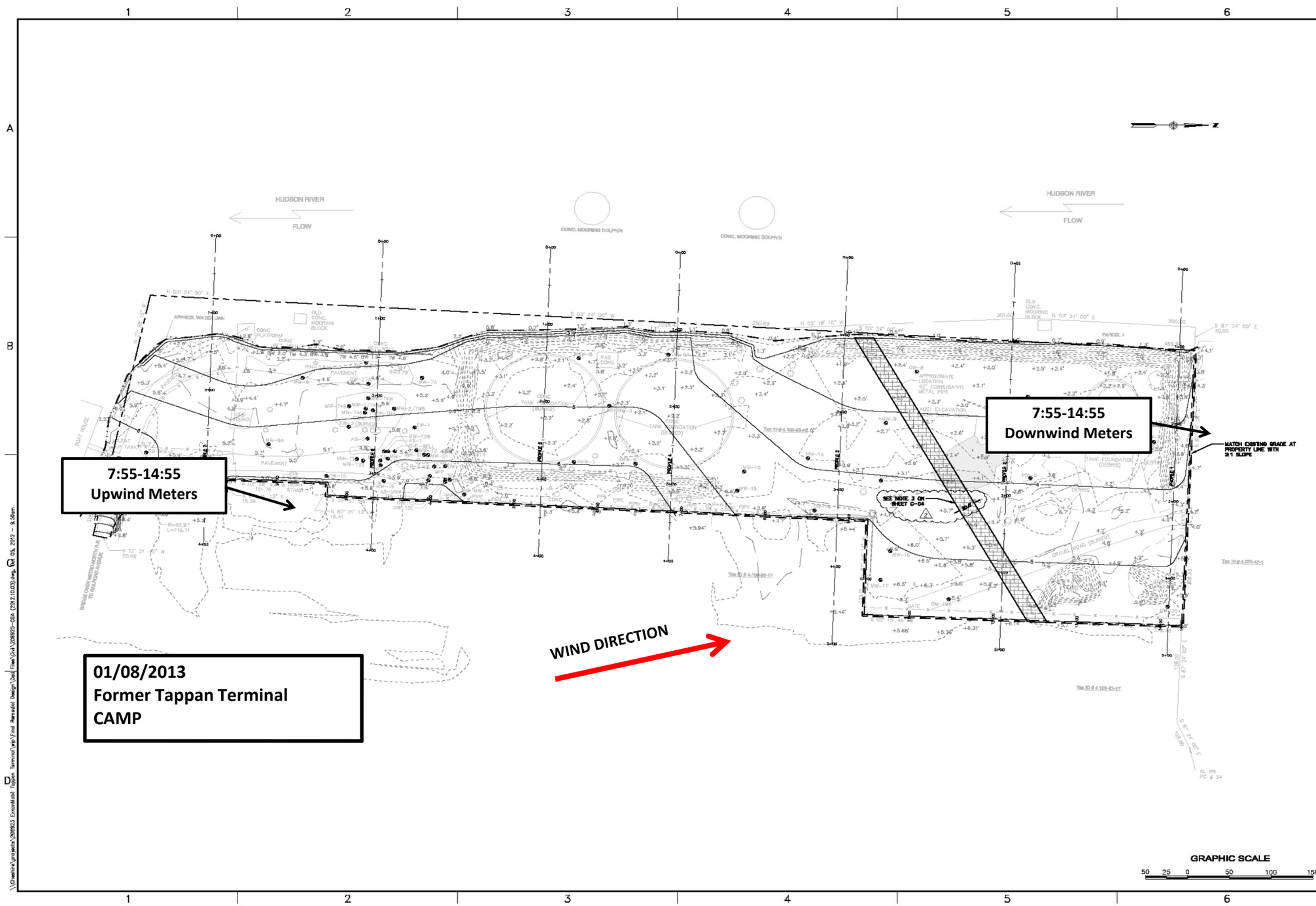
Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:10:59	38.9	8:13:08	42.0
8:25:59	41.7	8:28:08	43.8
8:40:59	42.9	8:43:08	45.6
8:55:59	43.5	8:58:08	46.5
9:10:59	42.1	9:13:08	44.1
9:25:59	42.7	9:28:08	43.8
9:40:59	42.1	9:43:08	43.8
9:55:59	41.2	9:58:08	43.6
10:10:59	40.0	10:13:08	42.6
10:25:59	39.4	10:28:08	43.0
10:40:59	39.6	10:43:08	44.5
10:55:59	39.6	10:58:08	45.3
11:10:59	39.6	11:13:08	46.0
11:25:59	41.0	11:28:08	47.5
11:40:59	39.4	11:43:08	46.0
11:55:59	37.5	11:58:08	43.8
12:10:59	35.8	12:13:08	42.9
12:25:59	34.5	12:28:08	41.4
12:40:59	33.7	12:43:08	40.1
12:55:59	33.4	12:58:08	40.2
13:10:59	32.5	13:13:08	40.8
13:25:59	30.2	13:28:08	35.9
13:40:59	26.8	13:43:08	31.3
13:55:59	23.7	13:58:08	27.4
14:10:59	22.7	14:13:08	25.0
14:25:59	24.0	14:28:08	26.1

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/8/2013

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
8:09	0	8:15	0
8:24	0	8:30	0.1
8:39	0	8:45	0.2
8:54	0	9:00	0.2
9:09	0	9:15	0.3
9:24	0	9:30	0.3
9:39	0	9:45	0.3
9:54	0	10:00	0.4
10:09	0	10:15	0.4
10:24	0	10:30	0.4
10:39	0	10:45	0.4
10:54	0	11:00	0.5
11:09	0	11:15	0.5
11:24	0	11:30	0.5
11:39	0	11:45	0.5
11:54	0	12:00	0.5
12:09	0	12:15	0.5
12:24	0	12:30	0.5
12:39	0	12:45	0.5
12:54	0	13:00	0.5
13:09	0	13:15	0.5
13:24	0	13:30	0.5
13:39	0	13:45	0.5
13:54	0	14:00	0.5
14:09	0	14:15	0.5



24x36 SHEET

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REV	DESCRIPTION	DESIGNED BY: AJG	DRAWN BY: KP	CHECKED BY: AJG	DATE: 7/3/13
1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.:	209925.09
DATE:	DECEMBER 2011
SCALE:	AS SHOWN
SHEET:	3 OF 5

C-03

\\Ghwarins\projects\209925 ExxonMobil Tappan Terminal\cad\Final Removal Design\Dwg\Plan\209925-C03A (2012.0103).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/9/2013

Upwind Serial Number D389
Downwind Serial Number D581

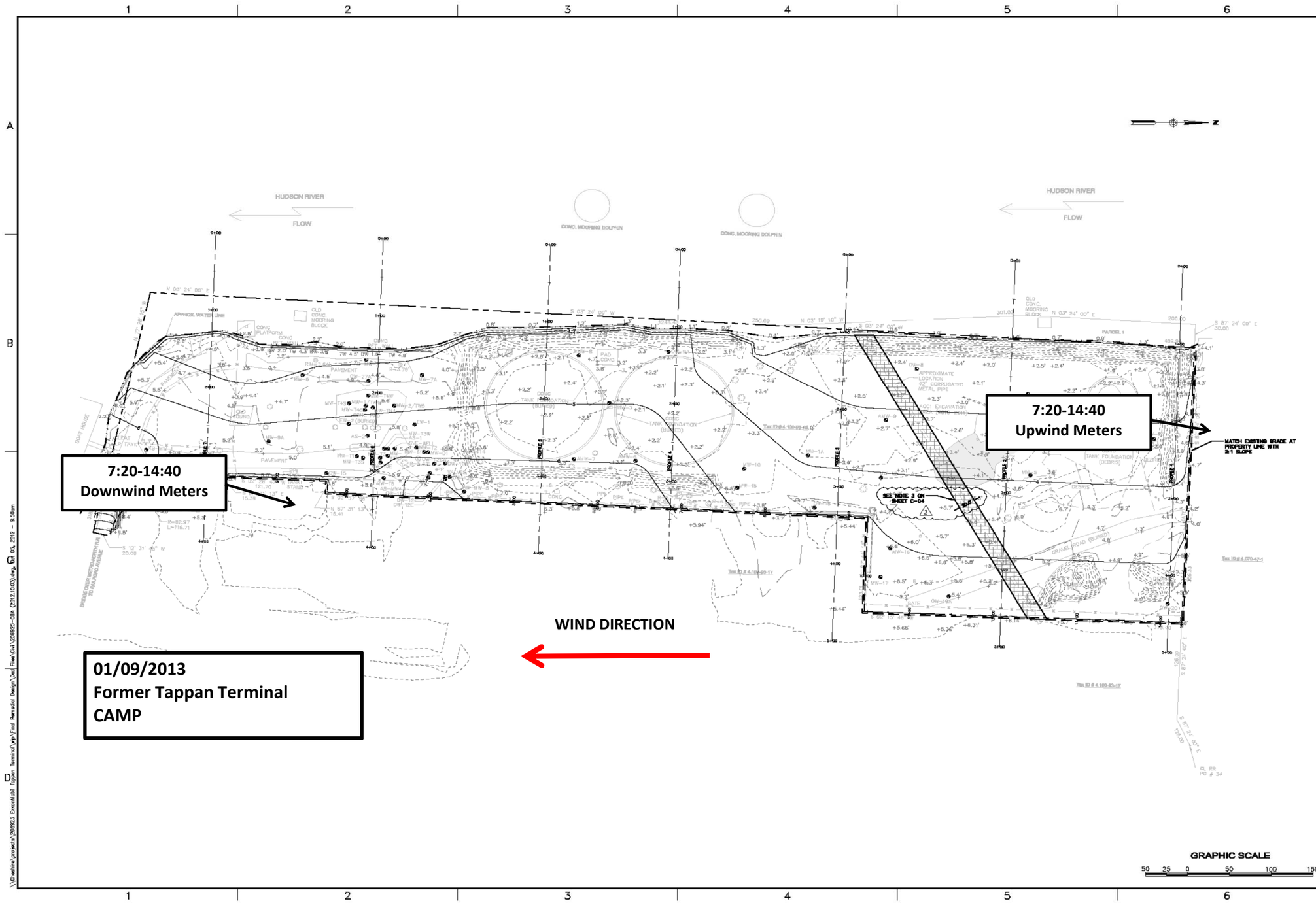
Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:47:05	42.2	7:40:32	42.9
8:02:05	44.9	7:55:32	45.2
8:17:05	47.5	8:10:32	47.4
8:32:05	51.5	8:25:32	50.6
8:47:05	53.7	8:40:32	51.9
9:02:05	56.8	8:55:32	55.3
9:17:05	59.6	9:10:32	58.0
9:32:05	59.6	9:25:32	60.7
9:47:05	61.6	9:40:32	61.2
10:02:05	65.1	9:55:32	66.4
10:17:05	64.8	10:10:32	66.9
10:32:05	65.8	10:25:32	68.6
10:47:05	68.2	10:40:32	71.5
11:02:05	67.6	10:55:32	73.0
11:17:05	66.5	11:10:32	73.2
11:32:05	67.9	11:25:32	74.2
11:47:05	67.9	11:40:32	76.6
12:02:05	71.3	11:55:32	77.1
12:17:05	80.5	12:10:32	89.0
12:32:05	82.7	12:25:32	88.7
12:47:05	83.7	12:40:32	91.9
13:02:05	83.7	12:55:32	89.9
13:17:05	89.7	13:10:32	93.6
13:32:05	96.0	13:25:32	90.5
13:47:05	98.1	13:40:32	93.4
14:02:05	98.5	13:55:32	94.7
14:17:05	98.2	14:10:32	98.7
14:32:05	99.1	14:25:32	99.8

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/9/2013

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:46	0.0	7:42	0.0
8:01	0.0	7:57	0.1
8:16	0.0	8:12	0.2
8:31	0.0	8:27	0.2
8:46	0.0	8:42	0.3
9:01	0.0	8:57	0.3
9:16	0.0	9:12	0.3
9:31	0.0	9:27	0.3
9:46	0.0	9:42	0.4
10:01	0.0	9:57	0.4
10:16	0.0	10:12	0.4
10:31	0.0	10:27	0.4
10:46	0.0	10:42	0.4
11:01	0.0	10:57	0.4
11:16	0.0	11:12	0.5
11:31	0.0	11:27	0.5
11:46	0.0	11:42	0.5
12:01	0.0	11:57	0.5
12:16	0.0	12:12	0.5
12:31	0.0	12:27	0.5
12:46	0.0	12:42	0.5
13:01	0.0	12:57	0.5
13:16	0.0	13:12	0.6
13:31	0.0	13:27	0.6
13:46	0.0	13:42	0.6
14:01	0.0	13:57	0.6
14:16	0.0	14:12	0.6



24x36 SHEET
1:1

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REV	DESCRIPTION	DESIGNED BY: AHS	DRAWN BY: HP	CHECKED BY: AHS	DATE: 7/3/13
1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Charlie\projects\209925 ExxonMobil Tappan Terminal\wip\Final Remedial Design\Dwg\Civil\209925-C03A (2012.0103).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/10/2013

Upwind Serial Number D389
Downwind Serial Number D581

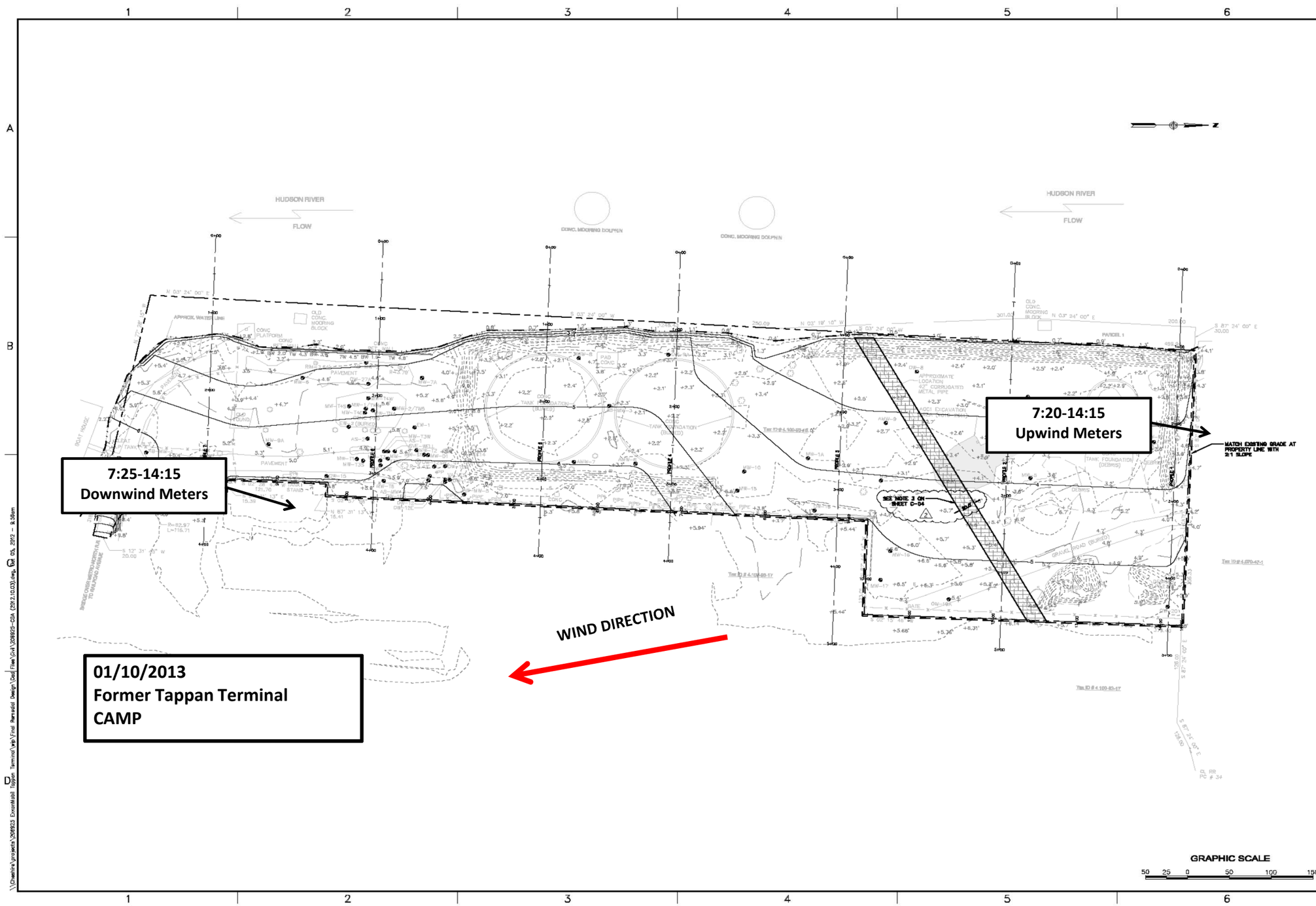
Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:45:21	3.0	7:47:27	2.1
8:00:21	2.9	8:02:27	3.1
8:15:21	3.1	8:17:27	5.3
8:30:21	3.2	8:32:27	2.8
8:45:21	3.4	8:47:27	2.4
9:00:21	3.3	9:02:27	2.4
9:15:21	3.5	9:17:27	2.6
9:30:21	3.8	9:32:27	3.0
9:45:21	3.7	9:47:27	2.6
10:00:21	3.6	10:02:27	2.6
10:15:21	3.6	10:17:27	2.5
10:30:21	3.3	10:32:27	2.7
10:45:21	3.2	10:47:27	3.7
11:00:21	3.4	11:02:27	3.9
11:15:21	3.2	11:17:27	2.5
11:30:21	3.1	11:32:27	2.8
11:45:21	3.2	11:47:27	3.6
12:00:21	3.1	12:02:27	3.1
12:15:21	2.9	12:17:27	3.4
12:30:21	2.8	12:32:27	2.9
12:45:21	2.7	12:47:27	2.7
13:00:21	2.6	13:02:27	1.8
13:15:21	2.4	13:17:27	1.9
13:30:21	2.2	13:32:27	2.2
13:45:21	2.5	13:47:27	3.5
14:00:21	2.5	14:02:27	1.6
14:15:21	2.3	--	--

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/10/2013

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:43	0.0	7:49	0.0
7:58	0.0	8:04	0.1
8:13	0.0	8:19	0.2
8:28	0.0	8:34	0.2
8:43	0.0	8:49	0.3
8:58	0.0	9:04	0.3
9:13	0.0	9:19	0.4
9:28	0.0	9:34	0.4
9:43	0.0	9:49	0.4
9:58	0.0	10:04	0.4
10:13	0.0	10:19	0.4
10:28	0.0	10:34	0.4
10:43	0.0	10:49	0.5
10:58	0.0	11:04	0.5
11:13	0.0	11:19	0.5
11:28	0.0	11:34	0.5
11:43	0.0	11:49	0.5
11:58	0.0	12:04	0.5
12:13	0.0	12:19	0.5
12:28	0.0	12:34	0.5
12:43	0.0	12:49	0.5
12:58	0.0	13:04	0.5
13:13	0.0	13:19	0.5
13:28	0.0	13:34	0.5
13:43	0.0	13:49	0.5
13:58	0.0	--	--



24x36 SHEET

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1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.:	209925.09
DATE:	DECEMBER 2011
SCALE:	AS SHOWN
SHEET:	3 OF 5

C-03

\\Ghwarins\projects\209925 ExxonMobil Tappan Terminal\cad\Final Removal Design\Dwg\Civil\209925-C03A (2012.0103).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/11/2013

Upwind Serial Number D389
Downwind Serial Number D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:44:10	14.3	7:42:12	15.2
7:59:10	12.6	7:57:12	18.5
8:14:10	12.4	8:12:12	17.0
8:29:10	19.1	8:27:12	15.2
8:44:10	7.1	8:42:12	6.0
8:59:10	2.7	8:57:12	5.8
9:14:10	3.2	9:12:12	6.2
9:29:10	3.3	9:27:12	6.3
9:44:10	3.4	9:42:12	6.3
9:59:10	3.7	9:57:12	6.5
10:14:10	3.8	10:12:12	6.6
10:29:10	4.0	10:27:12	6.7
10:44:10	13.3	10:42:12	17.0
10:59:10	33.5	10:57:12	44.8
11:14:10	74.7	11:12:12	71.3
11:29:10	46.0	11:27:12	57.7
11:44:10	10.8	11:42:12	15.0
11:59:10	4.3	11:57:12	7.4

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/11/2013

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
7:42	0.0	7:44	0.2
7:57	0.0	7:59	0.4
8:12	0.1	8:14	0.5
8:27	0.0	8:29	0.2
8:42	0.0	8:44	0.2
8:57	0.0	8:59	0.2
9:12	0.0	9:14	0.2
9:27	0.0	9:29	0.3
9:42	0.0	9:44	0.3
9:57	0.0	9:59	0.3
10:12	0.0	10:14	0.4
10:27	0.2	10:29	0.5
10:42	0.0	10:44	0.8
10:57	0.0	10:59	1.0
11:12	0.1	11:14	1.0
11:27	0.1	11:29	1.1
11:42	0.1	11:44	1.1

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

CONC. MOORING DOLPHIN

CONC. MOORING DOLPHIN

7:40-12:15
Upwind Meters

7:40-12:15
Downwind Meters

WIND DIRECTION

01/11/2013
Former Tappan Terminal
CAMP

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

GRAPHIC SCALE
50 25 0 50 100 150

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1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.:	209925.09
DATE:	DECEMBER 2011
SCALE:	AS SHOWN
SHEET:	3 OF 5

C-03

\\Chelmire\projects\209925 ExxonMobil Tappan Terminal\cad\Final Remedial Design\Dwg\Civil\209925-C03A (2012.10.03).dwg, Oct 05, 2012 - 8:38am

Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/15/2013

Upwind Serial Number D389
Downwind Serial Number D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
9:42:27	10.4	9:26:37	16.8
9:57:27	11.1	9:41:37	9.9
10:12:27	12.2	9:56:37	10.6
10:27:27	12.7	10:11:37	10.0
10:42:27	13.3	10:26:37	10.6
10:57:27	14.0	10:41:37	10.9
11:12:27	14.0	10:56:37	11.4
11:27:27	13.6	11:11:37	10.7
11:42:27	13.3	11:26:37	10.8
11:57:27	13.2	11:41:37	10.4
12:12:27	12.8	11:56:37	10.2
12:27:27	13.2	12:11:37	10.0
12:42:27	13.5	12:26:37	10.6
12:57:27	13.3	12:41:37	10.5
13:12:27	13.6	12:56:37	10.8
13:27:27	13.5	13:11:37	11.3
13:42:27	13.5	13:26:37	11.6
13:57:27	13.5	13:41:37	11.1
14:12:27	12.9	13:56:37	11.1
14:27:27	12.9	14:11:37	10.5

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/15/2013

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
9:30	0.0	9:40	0.0
9:45	0.0	9:55	0.0
10:00	0.0	10:10	0.1
10:15	0.0	10:25	0.2
10:30	0.0	10:40	0.2
10:45	0.0	10:55	0.3
11:00	0.0	11:10	0.3
11:15	0.0	11:25	0.3
11:30	0.0	11:40	0.4
11:45	0.0	11:55	0.4
12:00	0.0	12:10	0.4
12:15	0.0	12:25	0.4
12:30	0.0	12:40	0.4
12:45	0.0	12:55	0.4
13:00	0.0	13:10	0.4
13:15	0.0	13:25	0.4
13:30	0.0	13:40	0.4
13:45	0.0	13:55	0.4
14:00	0.0	14:10	0.5

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

9:15-14:30
Upwind Meters

9:15-14:30
Downwind Meters

01/15/2013
Former Tappan Terminal
CAMP

WIND DIRECTION

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

GRAPHIC SCALE
50 25 0 50 100 150

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1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Charlie\projects\209925 ExxonMobil Tappan Terminal\cad\Final Remedial Design\Dwg\Civil\209925-C03A (2012.0103).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/17/2013

Upwind Serial Number D389
Downwind Serial Number D581

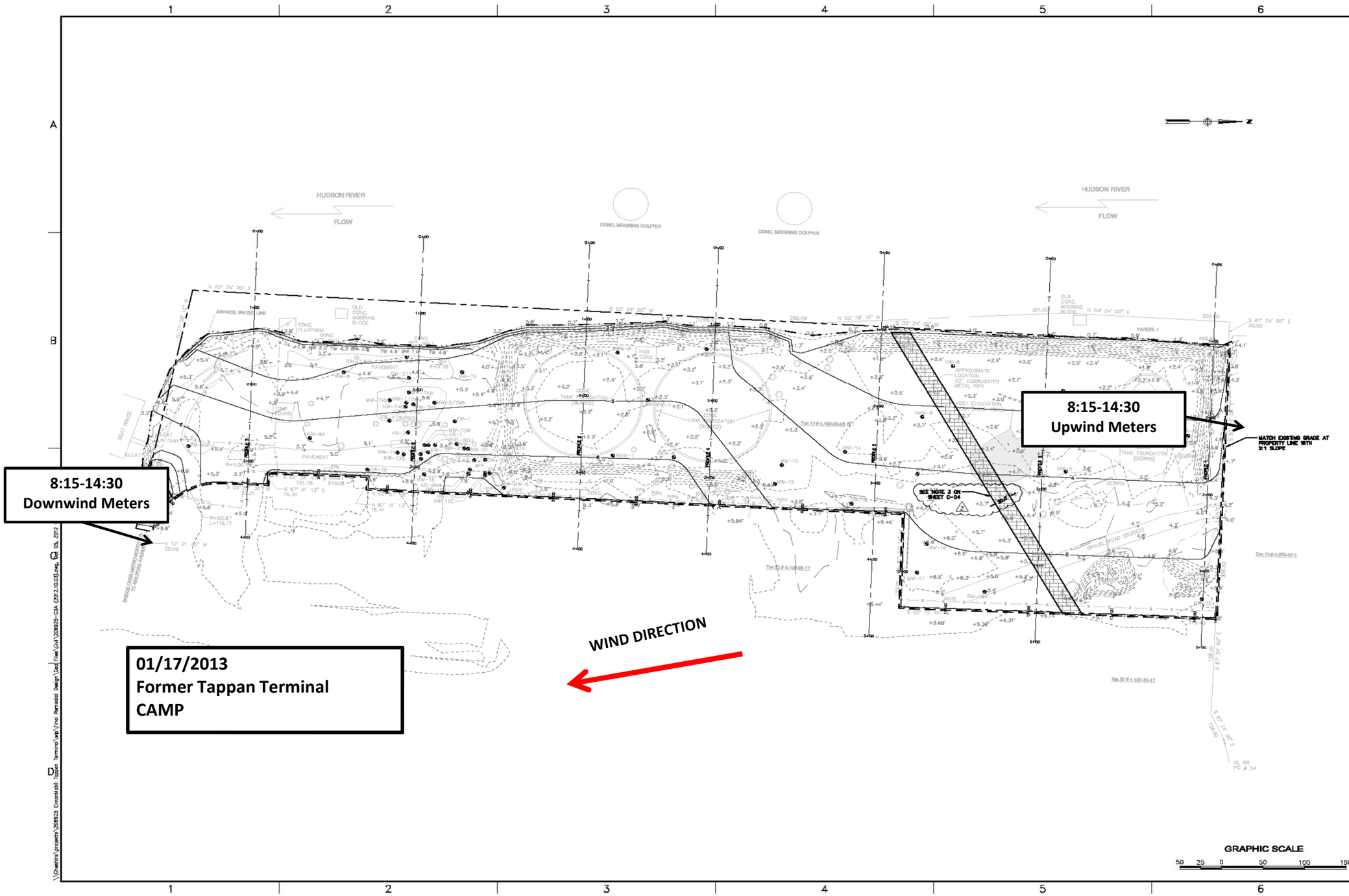
Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:41:55	11.6	8:27:12	15.5
8:56:55	11.6	8:42:12	16.1
9:11:55	12.2	8:57:12	16.0
9:26:55	12.5	9:12:12	16.7
9:41:55	13.1	9:27:12	16.8
9:56:55	13.3	9:42:12	16.9
10:11:55	13.1	9:57:12	17.6
10:26:55	13.1	10:12:12	17.1
10:41:55	13.3	10:27:12	16.5
10:56:55	13.7	10:42:12	16.0
11:11:55	12.0	10:57:12	15.0
11:26:55	9.7	11:12:12	14.3
11:41:55	8.8	11:27:12	12.9
11:56:55	8.6	11:42:12	11.8
12:11:55	8.8	11:57:12	11.7
12:26:55	8.8	12:12:12	12.0
12:41:55	8.2	12:27:12	11.8
12:56:55	8.1	12:42:12	11.0
13:11:55	6.5	12:57:12	10.4
13:26:55	6.9	13:12:12	9.8
13:41:55	7.9	13:27:12	9.7
13:56:55	7.2	13:42:12	10.1
14:11:55	10.6	13:57:12	9.8
14:26:55	8.6	14:12:12	10.1
--	--	14:27:12	9.9

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/17/2013

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
8:40	0.0	8:30	0.0
8:55	0.0	8:45	0.1
9:10	0.0	9:00	0.2
9:25	0.0	9:15	0.2
9:40	0.0	9:30	0.3
9:55	0.0	9:45	0.3
10:10	0.0	10:00	0.4
10:25	0.0	10:15	0.4
10:40	0.0	10:30	0.4
10:55	0.0	10:45	0.4
11:10	0.0	11:00	0.4
11:25	0.0	11:15	0.4
11:40	0.0	11:30	0.5
11:55	0.0	11:45	0.5
12:10	0.0	12:00	0.5
12:25	0.0	12:15	0.5
12:40	0.0	12:30	0.5
12:55	0.0	12:45	0.5
13:10	0.0	13:00	0.5
13:25	0.0	13:15	0.5
13:40	0.0	13:30	0.5
13:55	0.0	13:45	0.5
14:10	0.0	14:00	0.5
--	--	14:15	0.5



24x36 SHEET

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1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Ghwarins\projects\209925 ExxonMobil Tappan Terminal\wip\Final Remedial Design\Dwg Files\Civil\209925-C03A (2012.0103).dwg, Oct 05, 2012

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/18/2013

Upwind Serial Number D389
Downwind Serial Number D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:02:55	4.8	8:07:36	4.4
8:17:55	7.8	8:22:36	14.5
8:32:55	6.4	8:37:36	5.6
8:47:55	5.1	8:52:36	5.2
9:02:55	5.6	9:07:36	7.8
9:17:55	5.7	9:22:36	4.1
9:32:55	6.0	9:37:36	5.4
9:47:55	6.2	9:52:36	3.4
10:02:55	10.2	10:07:36	19.0
10:17:55	6.5	10:22:36	6.3
10:32:55	6.7	10:37:36	3.0
10:47:55	6.8	10:52:36	4.2
11:02:55	6.3	11:07:36	5.8
11:17:55	6.2	11:22:36	4.0
11:32:55	6.2	11:37:36	6.6
11:47:55	6.2	11:52:36	4.5
12:02:55	5.9	12:07:36	3.1
12:17:55	6.0	12:22:36	3.0
12:32:55	6.0	12:37:36	3.2
12:47:55	6.0	12:52:36	9.8
13:02:55	5.2	13:07:36	2.4
13:17:55	5.0	13:22:36	4.6
13:32:55	4.9	13:37:36	2.5
13:47:55	4.8	13:52:36	2.4
14:02:55	5.1	14:07:36	3.6
14:17:55	4.7	14:22:36	2.4
14:32:55	4.6	14:37:36	4.9

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/18/2013

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
8:02	0.0	8:09	0.0
8:17	0.0	8:24	0.1
8:32	0.0	8:39	0.2
8:47	0.0	8:54	0.2
9:02	0.0	9:09	0.3
9:17	0.0	9:24	0.3
9:32	0.0	9:39	0.3
9:47	0.0	9:54	0.3
10:02	0.0	10:09	0.3
10:17	0.0	10:24	0.3
10:32	0.0	10:39	0.3
10:47	0.0	10:54	0.3
11:02	0.0	11:09	0.3
11:17	0.0	11:24	0.3
11:32	0.0	11:39	0.3
11:47	0.0	11:54	0.3
12:02	0.0	12:09	0.3
12:17	0.0	12:24	0.4
12:32	0.0	12:39	0.3
12:47	0.0	12:54	0.3
13:02	0.0	13:09	0.3
13:17	0.0	13:24	0.3
13:32	0.0	13:39	0.3
13:47	0.0	13:54	0.3
14:02	0.0	14:09	0.3
14:17	0.0	14:24	0.3

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

CONC. MOORING DOLPHIN

CONC. MOORING DOLPHIN

7:45-14:40
Upwind Meters

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

7:45-14:40
Downwind Meters

WIND DIRECTION

01/18/2013
Former Tappan Terminal
CAMP

GRAPHIC SCALE
50 25 0 50 100 150

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REV	DESCRIPTION	DESIGNED BY: AJG	DRAWN BY: KP	CHECKED BY: AJG	DATE: 7/13/13
1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Ghecmw1\projects\209925 ExxonMobil Tappan Terminal\wip\Final Remedial Design\Dwg\Final\209925-C03A (2012.10.03).dwg, Oct 05, 2012

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/19/2013

Upwind Serial Number D389
Downwind Serial Number D581

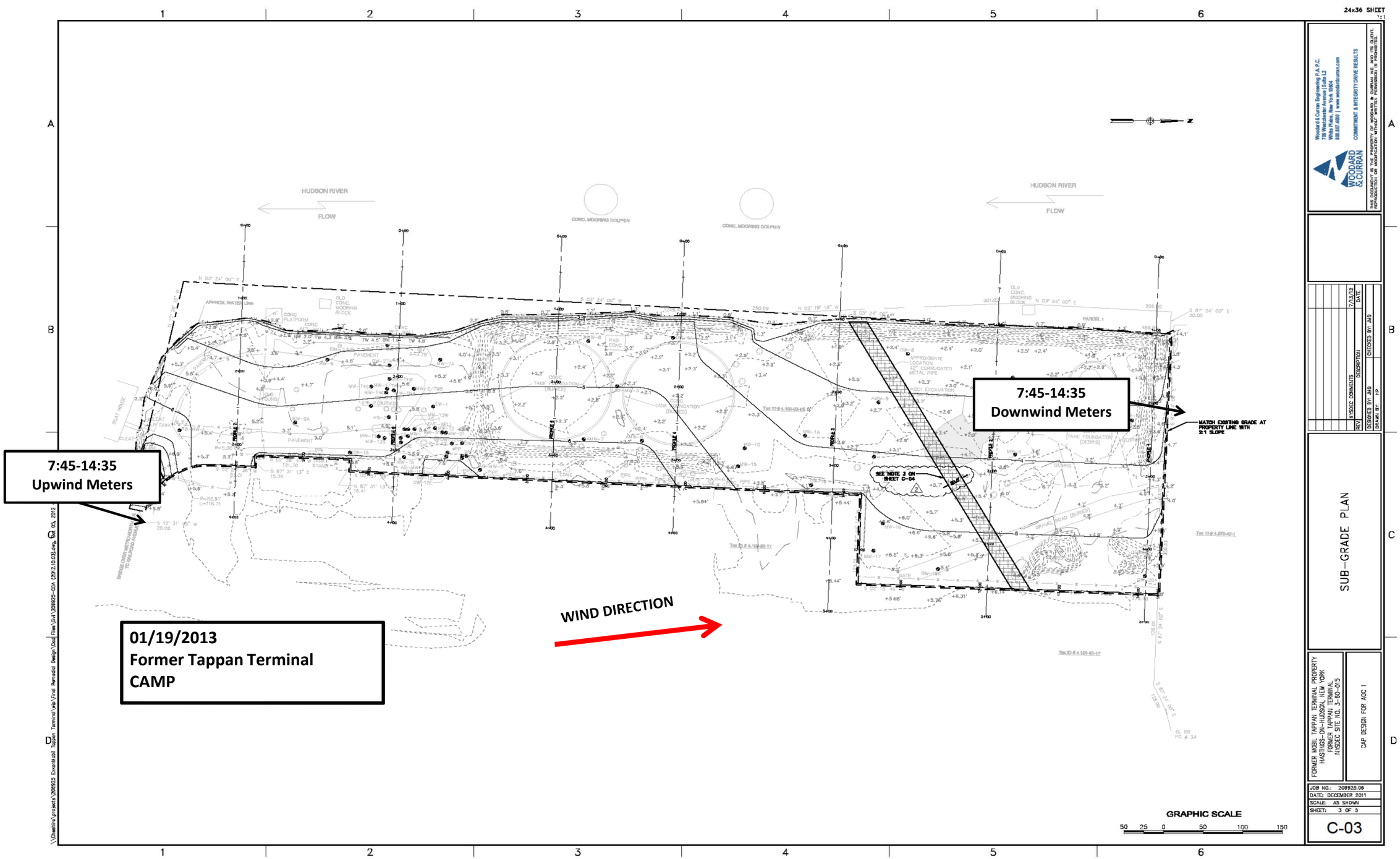
Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:12:19	39.7	8:01:12	4.4
8:27:19	44.7	8:16:12	14.5
8:42:19	34.3	8:31:12	5.6
8:57:19	33.8	8:46:12	5.2
9:12:19	22.4	9:01:12	7.8
9:27:19	22.6	9:16:12	4.1
9:42:19	24.2	9:31:12	5.4
9:57:19	27.4	9:46:12	3.4
10:12:19	40	10:01:12	19.0
10:27:19	78.4	10:16:12	6.3
10:42:19	79.7	10:31:12	3.0
10:57:19	77.8	10:46:12	4.2
11:12:19	80.5	11:01:12	5.8
11:27:19	80	11:16:12	4.0
11:42:19	78	11:31:12	6.6
11:57:19	70.1	11:46:12	4.5
12:12:19	71.2	12:01:12	3.1
12:27:19	85.5	12:16:12	3.0
12:42:19	60.1	12:31:12	3.2
12:57:19	23	12:46:12	9.8
13:12:19	22.7	13:01:12	2.4
13:27:19	22.2	13:16:12	4.6
13:42:19	22.3	13:31:12	2.5
13:57:19	22.1	13:46:12	2.4
14:12:19	21.8	14:01:12	3.6
14:27:19	21.7	14:16:12	2.4
		14:31:12	4.9

Roux Associates
Community Air Monitoring Program - VOC

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/19/2013

Upwind Serial Number 9578
Downwind Serial Number 12685

Upwind		Downwind	
Time	VOC Average (ppm)	Time	VOC Average (ppm)
8:10	0.0	8:04	0.1
8:25	0.0	8:19	0.2
8:40	0.0	8:34	0.3
8:55	0.0	8:49	0.3
9:10	0.0	9:04	0.4
9:25	0.0	9:19	0.4
9:40	0.0	9:34	0.5
9:55	0.0	9:49	0.5
10:10	0.0	10:04	0.5
10:25	0.0	10:19	0.5
10:40	0.0	10:34	0.6
10:55	0.0	10:49	0.6
11:10	0.0	11:04	0.6
11:25	0.0	11:19	0.6
11:40	0.0	11:34	0.6
11:55	0.0	11:49	0.6
12:10	0.0	12:04	0.7
12:25	0.0	12:19	0.7
12:40	0.0	12:34	0.7
12:55	0.0	12:49	0.7
13:10	0.0	13:04	0.7
13:25	0.0	13:19	0.7
13:40	0.0	13:34	0.7
13:55	0.0	13:49	0.7
14:10	0.0	14:04	0.7
--	--	14:19	0.7



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1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.:	209925.09
DATE:	DECEMBER 2011
SCALE:	AS SHOWN
SHEET:	3 OF 5

C-03

\\Chelmsfs\projects\209925 ExxonMobil Tappan Terminal\wip\Final Remedial Design\Dwg\Final\209925-C03A (2012.10.03).dwg, Oct 05, 2012

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/21/2013

Upwind Serial Number D389
Downwind Serial Number D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:05:30	5.2	7:56:36	4.6
8:20:30	5.1	8:11:36	5.0
8:35:30	5.2	8:26:36	5.1
8:50:30	5.4	8:41:36	5.0
9:05:30	6.1	8:56:36	5.0
9:20:30	6.2	9:11:36	5.1
9:35:30	5.3	9:26:36	4.7
9:50:30	5.7	9:41:36	4.2
10:05:30	9.5	9:56:36	4.0
10:20:30	5.8	10:11:36	3.9
10:35:30	6.0	10:26:36	4.2
10:50:30	6.6	10:41:36	5.0
11:05:30	7.9	10:56:36	5.7
11:20:30	9.2	11:11:36	6.9
11:35:30	9.1	11:26:36	7.3
11:50:30	9.1	11:41:36	8.1
12:05:30	9.8	11:56:36	8.3
12:20:30	10.1	12:11:36	8.9
12:35:30	10.5	12:26:36	9.3
12:50:30	10.2	12:41:36	9.2
13:05:30	10.5	12:56:36	8.9
13:20:30	9.8	13:11:36	8.1
13:35:30	9.6	13:26:36	7.9
13:50:30	8.5	13:41:36	8.8
--	--	13:56:36	8.8
--	--	14:11:36	6.7

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

CONC. MOORING DOLPHIN

CONC. MOORING DOLPHIN

7:40-14:15
Upwind Meters

7:40-14:15
Downwind Meters

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

WIND DIRECTION

01/21/2013
Former Tappan Terminal
CAMP

GRAPHIC SCALE
50 25 0 50 100 150

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SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

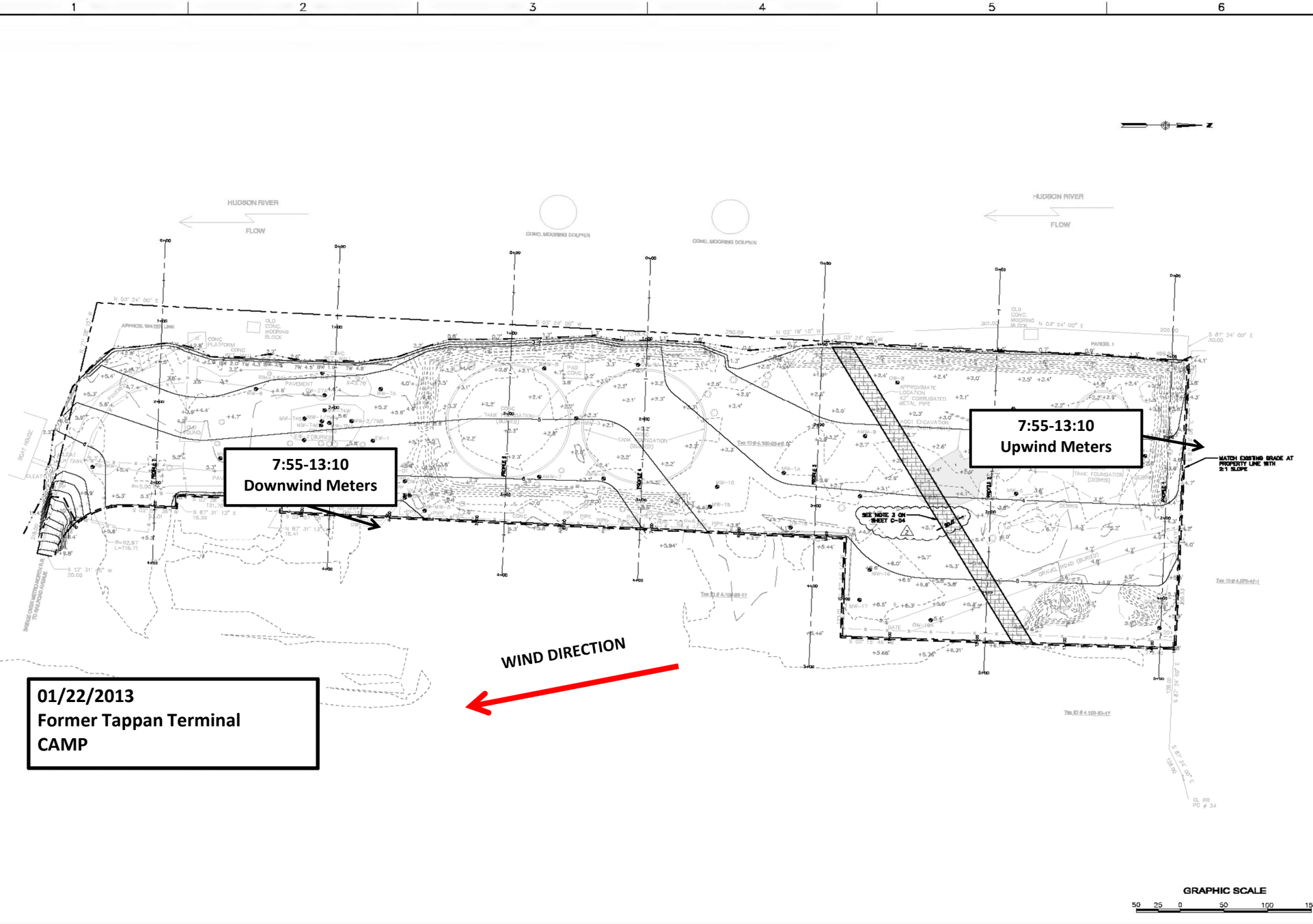
\\Charlotte\projects\209925 Exxonmobil Tappan Terminal\wip\Final Remedial Design\Dwg\Civil\209925-C03A (2012.0103).dwg, Oct 05, 2012

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/22/2013

Upwind Serial Number D581
Downwind Serial Number D389

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:09:31	9.0	8:15:46	5.2
8:24:31	4.6	8:30:46	5.9
8:39:31	5.0	8:45:46	7.9
8:54:31	5.0	9:00:46	8.9
9:09:31	5.3	9:15:46	9.5
9:24:31	5.6	9:30:46	10.6
9:39:31	5.7	9:45:46	10.2
9:54:31	5.4	10:00:46	9.6
10:09:31	5.5	10:15:46	9.6
10:24:31	5.7	10:30:46	9.7
10:39:31	5.7	10:45:46	9.6
10:54:31	5.7	11:00:46	9.8
11:09:31	5.9	11:15:46	10.9
11:24:31	5.9	11:30:46	10.6
11:39:31	5.2	11:45:46	8.6
11:54:31	5.1	12:00:46	10.8
12:09:31	5.0	12:15:46	8.8
12:24:31	4.8	12:30:46	8.6
12:39:31	3.8	12:45:46	7.9
12:54:31	3.3	13:00:46	7.2
13:09:31	2.8	--	--



24x36 SHEET

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1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 208925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Charlie\projects\208925 Exxonmobil Tappan Terminal\dgn\Final Revised Design\Dwg Files\Grd\208925-GIA (2012.10.03).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/23/2013

Upwind Serial Number D389
Downwind Serial Number D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:47:53	16.2	8:45:04	9.5
9:02:53	4.8	9:00:04	2.4
9:17:53	4.8	9:15:04	2.0
9:32:53	5.5	9:30:04	2.2
9:47:53	5.4	9:45:04	2.0
10:02:53	5.5	10:00:04	1.9
10:17:53	6.3	10:15:04	2.5
10:32:53	5.9	10:30:04	2.3
10:47:53	5.6	10:45:04	2.0
11:02:53	5.6	11:00:04	1.8
11:17:53	5.8	11:15:04	2.0
11:32:53	5.6	11:30:04	2.1
11:47:53	5.4	11:45:04	1.9
12:02:53	5.4	12:00:04	2.2
12:17:53	5.8	12:15:04	2.4
12:32:53	5.8	12:30:04	2.4
12:47:53	5.8	12:45:04	2.3
13:02:53	6.2	13:00:04	2.5
13:17:53	5.5	13:15:04	2.0
13:32:53	4.8	13:30:04	1.7
13:47:53	5.1	13:45:04	2.1
14:02:53	5.2	14:00:04	1.9

24x36 SHEET
1:1

HUDSON RIVER
FLOW

HUDSON RIVER
FLOW

CONC. MOORING DOLPHIN

CONC. MOORING DOLPHIN

8:30-14:05
Upwind Meters

8:30-14:05
Downwind Meters

WIND DIRECTION

01/23/2013
Former Tappan Terminal
CAMP

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

GRAPHIC SCALE
50 25 0 50 100 150

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REV	DESCRIPTION	DESIGNED BY: AJG	DRAWN BY: KP	CHECKED BY: AJG	DATE: 7.03.013
	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

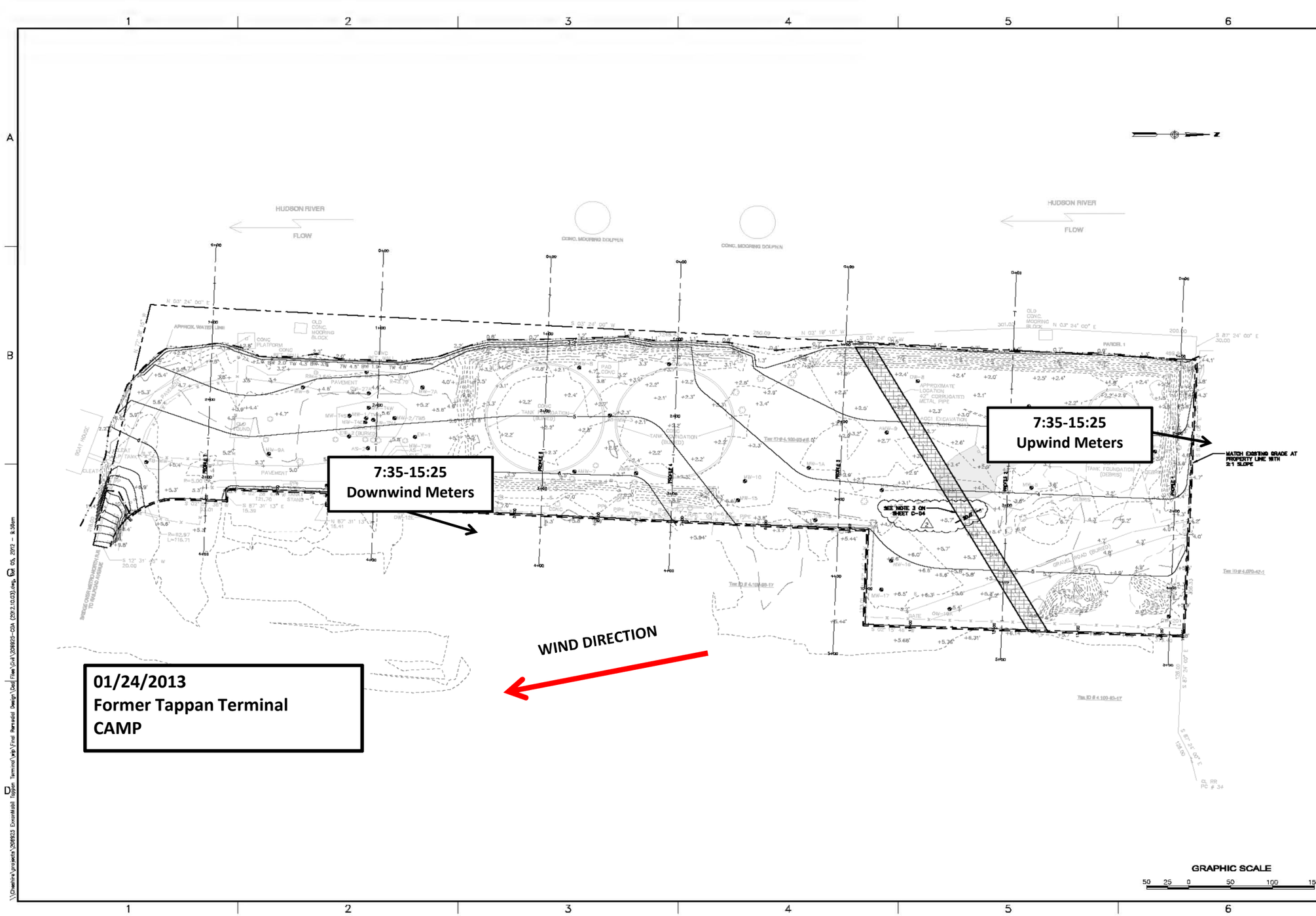
\\Cheshire\projects\209925 Exxonmobil Tappan Terminal\wip\Final Remedial Design\Dwg\Final\209925-C03A (2012.0103).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/24/2013

Upwind Serial Number D389
Downwind Serial Number D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:54:28	1.8	7:55:07	12.5
8:09:28	7.7	8:10:07	9.7
8:24:28	8.5	8:25:07	9.3
8:39:28	8.3	8:40:07	11.9
8:54:28	10.7	8:55:07	8.7
9:09:28	12.0	9:10:07	8.8
9:24:28	11.4	9:25:07	8.9
9:39:28	11.6	9:40:07	12.1
9:54:28	8.5	9:55:07	10.9
10:09:28	7.8	10:10:07	8.5
10:24:28	14.2	10:25:07	11.3
10:39:28	10.3	10:40:07	8.2
10:54:28	6.8	10:55:07	10.9
11:09:28	7.1	11:10:07	9.7
11:24:28	4.6	11:25:07	18.7
11:39:28	3.4	11:40:07	10.5
11:54:28	3.7	11:55:07	15.6
12:09:28	5.5	12:10:07	16.3
12:24:28	5.1	12:25:07	25.7
12:39:28	4.5	12:40:07	14.7
12:54:28	3.7	12:55:07	25.4
13:09:28	3.4	13:10:07	5.8
13:24:28	3.5	13:25:07	6.3
13:39:28	3.5	13:40:07	15.3
13:54:28	2.9	13:55:07	8.2
14:09:28	3.1	14:10:07	6.0
14:24:28	3.2	14:25:07	6.5
14:39:28	3.4	14:40:07	7.9
14:54:28	3.2	14:55:07	14.8
15:09:28	3.3	15:10:07	10.8
15:24:28	3.6	--	--



24x36 SHEET

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1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.:	209925.09
DATE:	DECEMBER 2011
SCALE:	AS SHOWN
SHEET:	3 OF 5

C-03

\\Charlie\projects\209925 ExxonMobil Tappan Terminal\cad\Final Remedial Design\Dwg\Civil\209925-C03A (2012.0103).dwg, Oct 05, 2012 - 8:38am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/28/2013

Upwind Serial Number D389
Downwind Serial Number D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:14:43	45.7	8:04:25	21.0
8:29:43	52.9	8:19:25	22.2
8:44:43	61.5	8:34:25	27.3
8:59:43	46.2	8:49:25	28.9
9:14:43	70.1	9:04:25	41.1
9:29:43	44.7	9:19:25	44.5
9:44:43	68.2	9:34:25	45.7
9:59:43	67.6	9:49:25	45.6
10:14:43	66.5	10:04:25	54.2
10:29:43	67.9	10:19:25	57.5
10:44:43	67.9	10:34:25	65.8
10:59:43	71.3	10:49:25	71.4
11:14:43	80.5	11:04:25	79.9
11:29:43	82.7	11:19:25	85.0
11:44:43	83.7	11:34:25	99.4
11:59:43	83.7	11:49:25	93.5
12:14:43	92.6	12:04:25	75.0
12:29:43	82.9	12:19:25	72.4
12:44:43	73.2	12:34:25	74.5
12:59:43	76.2	12:49:25	77.1
13:14:43	83.7	13:04:25	82.0
13:29:43	89.7	13:19:25	86.9
13:44:43	96.0	13:34:25	89.5
13:59:43	98.1	13:49:25	93.2
14:14:43	98.5	14:04:25	96.8
14:29:43	98.2	14:19:25	101.1
14:44:43	99.1	14:34:25	102.9
14:59:43	100.0	14:49:25	97.5
15:14:43	100.9	15:04:25	100.1
15:29:43	101.8	15:19:25	102.3

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

7:50-15:35 Upwind Meters

7:50-15:35 Downwind Meters

WIND DIRECTION

01/28/2013
Former Tappan Terminal
CAMP

GRAPHIC SCALE
50 25 0 50 100 150

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

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	NYSDEC COMMENTS	7/13/12			

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 208925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Charlie\projects\208925 Exxonmobil Tappan Terminal\cpt\Final Remedial Design\Dwg Files\Civil\208925-C03A (2012.10.03).dwg, Oct 05, 2012 - 8:35am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 1/29/2013

Upwind Serial Number D389
Downwind Serial Number D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:25:30	4.1	8:22:57	27.3
8:40:30	22.1	8:37:57	14.1
8:55:30	43.8	8:52:57	13.5
9:10:30	40.8	9:07:57	12.9
9:25:30	37.8	9:22:57	11.1
9:40:30	33.0	9:37:57	9.8
9:55:30	44.0	9:52:57	8.3
10:10:30	45.2	10:07:57	7.2
10:25:30	44.6	10:22:57	6.4
10:40:30	45.3	10:37:57	7.3
10:55:30	55.4	10:52:57	10.1
11:10:30	90.5	11:07:57	23.3
11:25:30	47.9	11:22:57	73.8
11:40:30	48.5	11:37:57	62.7
11:55:30	49.2	11:52:57	46.5
12:10:30	50.0	12:07:57	40.4
12:25:30	50.9	12:22:57	32.0
12:40:30	51.7	12:37:57	26.0
12:55:30	52.5	12:52:57	23.3
13:10:30	53.4	13:07:57	22.0
13:25:30	54.2	13:22:57	20.9
13:40:30	54.8	13:37:57	20.3
13:55:30	55.4	13:52:57	24.3

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

8:05-14:05 Downwind Meters

8:05-14:05 Upwind Meters

WIND DIRECTION

01/29/2013
Former Tappan Terminal
CAMP

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

GRAPHIC SCALE
50 25 0 50 100 150

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REV	DESCRIPTION	DESIGNED BY: AHS	CHECKED BY: AHS	DATE: 7/13/12
	NYSDEC COMMENTS	Drawn BY: KP		

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 208925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Charlie\projects\208925 Exxonmobil Tappan Terminal\cpt\Final Revised Design\Dwg Files\Grid\208925-GIA (2012.10.03).dwg, Oct 05, 2012 - 8:35am

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 2/1/2013

Upwind Serial Number D581
Downwind Serial Number D389

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
8:09:10	10.4	8:17:20	3.0
8:24:10	4.7	8:32:20	2.6
8:39:10	3.5	8:47:20	2.6
8:54:10	2.8	9:02:20	3.6
9:09:10	2.4	9:17:20	2.7
9:24:10	2.5	9:32:20	3.6
9:39:10	2.3	9:47:20	2.7
9:54:10	2.4	10:02:20	2.7
10:09:10	2.3	10:17:20	1.8
10:24:10	2.9	10:32:20	11.5
10:39:10	2.6	10:47:20	18.5
10:54:10	2.3	11:02:20	3.9
11:09:10	3.1	11:17:20	1.6
11:24:10	5.4	11:32:20	1.4
11:39:10	2.9	11:47:20	1.3
11:54:10	2.5	12:02:20	2.1
12:09:10	2.3	12:17:20	1.1
12:24:10	2.5	12:32:20	1.1
12:39:10	2.9	12:47:20	0.9
12:54:10	2.9	13:02:20	0.9
13:09:10	2.0	13:17:20	1.1
13:24:10	1.6	13:32:20	1.9
13:39:10	1.6	13:47:20	1.4
13:54:10	3.2	14:02:20	2.5
14:09:10	1.4	14:17:20	4.1
14:24:10	1.1	14:32:20	2.2

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

CONC. MOORING DOLPHIN

CONC. MOORING DOLPHIN

7:55-14:35
Downwind Meters

7:55-14:35
Upwind Meters

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

WIND DIRECTION

02/01/2013
Former Tappan Terminal
CAMP

GRAPHIC SCALE
50 25 0 50 100 150

\\Ghedata\projects\209925 ExxonMobil Tappan Terminal\dgn\Final Removal Design\Dwg\Final\209925-C03A (2012.10.03).dwg, Oct 05, 2012 - 8:38am

Woodard & Curran Engineering P.A.P.C.
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COMMITMENT & INTEGRITY DRIVE RESULTS

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REV	DESCRIPTION	DESIGNED BY: JHS	DRAWN BY: HP	CHECKED BY: JHS	DATE: 7.03.13
	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

Roux Associates
Community Air Monitoring Program - DUST

Project: Former Tappan Terminal
PM: Tracy Bispham
Location: 1 Railroad Avenue, Hastings-on-Hudson, New York
Date: 2/4/2013

Upwind Serial Number D389
Downwind Serial Number D581

Upwind		Downwind	
Time	Concentration [ug/m3]	Time	Concentration [ug/m3]
7:50:41	17.6	7:56:59	12.6
8:05:41	18.0	8:11:59	33.3
8:20:41	18.0	8:26:59	12.6
8:35:41	17.2	8:41:59	7.1
8:50:41	16.8	8:56:59	25.8
9:05:41	17.1	9:11:59	30.5
9:20:41	17.4	9:26:59	43.8
9:35:41	18.4	9:41:59	43.6
9:50:41	18.4	9:56:59	42.6
10:05:41	18.5	10:11:59	43.0
10:20:41	18.3	10:26:59	44.5
10:35:41	17.9	10:41:59	45.3
10:50:41	17.9	10:56:59	46.0
11:05:41	17.5	11:11:59	47.5
11:20:41	15.9	11:26:59	46.0
11:35:41	15.5	11:41:59	43.8
11:50:41	15.8	11:56:59	42.9
12:05:41	16.1	12:11:59	41.4
12:20:41	16.2	12:26:59	40.1
12:35:41	16.4	12:41:59	40.2
12:50:41	15.7	12:56:59	40.8
13:05:41	15.3	13:11:59	35.9
13:20:41	14.5	13:26:59	31.3
13:35:41	14.2	13:41:59	27.4
13:50:41	13.8	13:56:59	25.0
14:05:41	13.5	14:11:59	26.1
14:20:41	13.3	14:26:59	21.6
14:35:41	13.8	--	--

24x36 SHEET

HUDSON RIVER FLOW

HUDSON RIVER FLOW

CONC. MOORING DOLPHIN

CONC. MOORING DOLPHIN

7:35-14:40 Downwind Meters

7:35-14:40 Upwind Meters

MATCH EXISTING GRADE AT PROPERTY LINE WITH 2:1 SLOPE

SEE NOTE 3 ON SHEET C-04

WIND DIRECTION

02/04/2013
Former Tappan Terminal
CAMP

GRAPHIC SCALE
50 25 0 50 100 150

Woodard & Curran Engineering P.A.P.C.
709 Westchester Avenue | Suite L2
White Plains, New York 10604
800.837.4900 | www.woodardcurran.com

COMMITMENT & INTEGRITY DRIVE RESULTS

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REV	DESCRIPTION	DESIGNED BY: AHS	DRAWN BY: HP	CHECKED BY: AHS	DATE: 7/3/13
1	NYSDEC COMMENTS				

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Charlotte\projects\209925 ExxonMobil Tappan Terminal\dgn\Final Remedial Design\Civil\209925-C03A (2012.0103).dwg, Oct 05, 2012 - 8:38am

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 10/22/2012
Weather: clear, 50's

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	No Dice		Dud	
Data Ram:	10310		06307	
Last Calibration:	10/22		10/22	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0800	✓	✓	✓	✓	Set out meters	JK
0900	✓	✓	✓	✓	checked; all ok	JK
1030	✓	✓	✓	✓	checked; all ok	JK
1145	✓	✓	✓	✓	Checked; all ok	JK
1240	✓	✓	✓	✓	Checked; all ok	JK
1410	✓	✓	✓	✓	Checked; all ok	JK
1450	✓	✓	✓	✓	Took down meters	JK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 10/22		Downloading Data: ✓	Comments: No problems
File Name: 10222012		Location (i.e., laptop): laptop	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kenerak
Date: 10/23/2012
Weather : 50's, clear & sunny

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	Due		No Due	
Data Ram:	10510		06307	
Last Calibration:	10/23		10/23	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0800	✓	✓	✓	✓	Set out meters	JK
0900	✓	✓	✓	A	Short Alarm, ended <10sec after shelter was opened to check	JK
1030	✓	✓	✓	✓	Checked; all alarms	JK
1130	✓	✓	✓	✓	Rain start; wait to clear	JK
1200	✓	✓	✓	✓	Took down meters	JK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 10/24		Downloading Data: ✓	Comments: Alarm was caused by vehicular traffic; rain start so take down early
File Name: 10242012		Location (i.e., laptop): laptop	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J Kendrot
Date: 10/24/2012
Weather : 50's, Rain/overcast

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	12685	Due	7578	No Due
Data Ram:	D3581	10310	D3587	010307
Last Calibration:	10/24		10/24	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0805	✓	✓	✓	✓	Set out meters	JK
0930	✓	✓	✓	✓	Checked meters; all ok	JK
1045	✓	✓	✓	✓	Checked meters; all ok	JK
1245	✓	✓	✓	✓	Checked meters; all ok	JK
1330	✓	✓	✓	✓	Checked meters; all ok	JK
1430	✓	✓	✓	✓	Took down meters	JK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 10/24		Downloading Data: ✓	Comments: longer breaks (1045-1245) due to no grubbing / deliveries being brought onsite
File Name: 10242012		Location (i.e. laptop): laptop	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kneisel
Date: 10/25/2012
Weather : 50's, cloudy

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	12685	Due	9578	NoDue
Data Ram:	D389	04307	D581	10310
Last Calibration:	10/25		10/25	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0740	✓	✓	✓	✓	Set out meters	tk
0830	✓	✓	✓	✓	Checked meters; all ok	tk
1015	✓	✓	✓	✓	Checked meters; all ok	tk
1205	✓	✓	✓	✓	Checked meters; all ok	tk
1310	✓	✓	✓	✓	Checked meters; all ok	tk
1425	✓	✓	✓	✓	Checked meters; all ok	tk
1500	✓	✓	✓	✓	~~Last~~ Took down meters	tk

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 10/25		Downloading Data: ✓	Comments: No problems, delay between 1015 & 1205 due to meeting
File Name: 10252012		Location (i.e., Upto laptop	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 10/26/2012
Weather: 50's, overcast

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	9578	NoDue	12685	Due
Data Ram:	D581	10310	D389	06207
Last Calibration:	10/26		10/26	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0745	✓	✓	✓	✓	Set out meters	HK
0905	✓	✓	✓	✓	Checked on meters; all ok	HK
1015	✓	✓	✓	✓	Checked on meters; all ok	HK
1100	✓	✓	✓	✓	Checked on meters; all ok	HK
1215	✓	✓	✓	✓	Checked on meters; all ok	HK
1320	✓	✓	✓	✓	Checked on meters; all ok	HK
1400	✓	✓	✓	✓	Took down meters	HK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 10/26		Downloading Data: ✓	Comments: No problems
File Name: 1026 2012		Location (i.e. laptop): laptop	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 11/5/2012
Weather : 40s ; overcast

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	12685	Dne	9575	No Dne
Data Ram:	D359	06302	D5571	10310
Last Calibration:	11/5		11/5	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0750	✓	✓	✓	✓	Set out meters	JK
0845	✓	✓	✓	✓	Checked meters; all ok	JK
0935	✓	✓	✓	✓	Checked meters; all ok	JK
1015	✓	✓	✓	✓	Checked meters; all ok	JK
1120	✓	✓	✓	✓	Checked meters; all ok	JK
1235	✓	✓	✓	✓	Checked meters; all ok	JK
1320	✓	✓	✓	✓	Checked meters; all ok	JK
1430	✓	✓	✓	✓	Took down meters	JK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 11/5/12		Downloading Data: ✓	Comments: No problems
File Name: 11052012		Location (i.e., laptop Flash	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrat
Date: 11/6/2012
Weather: 50's, Sunny

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	9578	No Due	12685	Due
Data Ram:	D581	10310	D384	06307
Last Calibration:	11/6		11/6	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0730	✓	✓	✓	✓	Set out meters	HH
0830	✓	✓	✓	✓	Checked meters; all ok	HH
0945	✓	✓	✓	✓	Checked meters; all ok	HH
1025	✓	✓	✓	✓	Checked meters; all ok	HH
1145	✓	✓	✓	✓	Checked meters; all ok	HH
1300	✓	✓	✓	✓	Checked meters; all ok	HH
1400	✓	✓	✓	✓	Took down meters	HH

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 11/6/12		Downloading Data: ✓	Comments: No problems
File Name: 11062012		Location (i.e., laptop): Laptop/desktop	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrat
Date: 11/9/2012
Weather: 40s, Sunny

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	9578	No DMC	12685	DMC
Data Ram:	D339	06307	D551	10310
Last Calibration:	11/9		11/9	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0745	✓	✓	✓	✓	Set out meters	HK
0840	✓	✓	✓	✓	Checked meters; all ok	HK
0930	✓	✓	✓	✓	Checked meters; all ok	HK
1015	✓	✓	✓	✓	Checked meters; all ok	HK
1140	✓	✓	✓	✓	Checked meters; all ok	HK
1250	✓	✓	✓	✓	Checked meters; all ok	HK
1345	✓	✓	✓	✓	Checked meters; all ok	HK
1420	✓	✓	✓	✓	Took down meters	HK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 11/9/12		Downloading Data: ✓	Comments: No problems
File Name: 11092012		Location (i.e., laptop): laptop/C	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 11/12/2012
Weather: high 40s, v foggy

Meter Type:	UPWIND Serial Number	UPWIND Rental Number	DOWNWIND Serial Number	DOWNWIND Rental Number
MiniRae:	9578	NoDue	126857	Due
Data Ram:	D581	10310	D385	0436C7
Last Calibration:	11/12		11/12	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0740	✓	✓	✓	✓	Set out meters	HK
0845	✓	✓	✓	✓	Checked meters; all ok	HK
0900	✓	A	✓	A	Checked meters; PID ok	HK
0950	✓	X	✓	X	Checked meters; PID ok	HK
1035	✓	X	✓	X	Checked meters; PID ok	HK
1150	✓	X	✓	X	Checked meters; PID ok	HK
1235	✓	X	✓	X	Checked meters; PID ok	HK
1420	✓	X	✓	X	Took down meters	HK

- Alarms caused by high humidity from fog (>90%) turn off until fog thins/lifts
keep PID meters on

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 11/12		Downloading Data: ✓	Comments: Heavy fog entire day made DR4's alarm continuously
File Name: 11122012		Location (i.e., laptop/flash): flash	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 11/13/2012
Weather: rain 40s

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	9578	NoDwc	12685	Dwc
Data Ram:	D581	10310	D389	06307
Last Calibration:	11/12		11/12	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0700	X	X	X	X	meters not set out today due to incliment weather	HK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: N/A		Downloading Data: ✓	Comments: heavy rain entire day, moisture causes unnatural high readings
File Name: 11132012		Location (i.e., lapto	

did not set up meters as a percaution against false data

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 11/14/2012
Weather : 30s, Sunny

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	12685	DWC	9578	No DWC
Data Ram:	D389	06307	D581	10310
Last Calibration:	11/14		11/14	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0800	✓	✓	✓	✓	Set out meters	HK
0825	✓	✓	✓	✓	Checked meters; all ok	HK
0940	✓	✓	✓	✓	Checked meters; all ok	HK
1035	✓	✓	✓	✓	Checked meters; all ok	HK
1120	✓	✓	✓	✓	Checked meters; all ok	HK
1240	✓	✓	✓	✓	Checked meters; all ok	HK
1330	✓	✓	✓	✓	Checked meters; all ok	HK
1440	✓	✓	✓	✓	Checked meters; all ok	HK
1530	✓	✓	✓	✓	Checked meters; all ok	HK
1630	✓	✓	✓	✓	Took down meters	HK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 11/14		Downloading Data: ✓	Comments: no problems long day rebuilding berm
File Name: 1114 2012		Location (i.e., laptop/flash): Tap/Flash	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 11/15/2012
Weather: 30s Sunny

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	12685	Due	9578	No Due
Data Ram:	D389	06307	D681	10310
Last Calibration:	11/15		11/15	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0750	✓	✓	✓	✓	Set up meters	HK
0900	✓	✓	✓	✓	Checked meters; all ok	HK
1015	✓	✓	✓	✓	Checked meters; all ok	HK
1220	✓	✓	✓	✓	Checked meters; all ok	HK
1300	✓	✓	✓	✓	Checked meters; all ok	HK
1440	✓	✓	✓	✓	Took down meters	HK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 11/15		Downloading Data: ✓	Comments: Delay due to weekly proj. meeting w/ DEC / WSP
File Name: 11152012		Location (i.e., laptop/flash): laptop/flash	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 11/16/2012
Weather: high 30s, sunny

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	12685	Due	9578	No Due
Data Ram:	D339	06307	D581	10510
Last Calibration:	11/16		11/16	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0800	✓	✓	✓	✓	Set out meters	JK
0915	✓	✓	✓	✓	Checked meters; all ok	JK
1020	✓	✓	✓	✓	Checked meters; all ok	JK
1115	✓	✓	✓	✓	Checked meters; all ok	JK
1230	✓	✓	✓	✓	Checked meters; all ok	JK
1335	✓	✓	✓	✓	Checked meters; all ok	JK
1430	✓	✓	X	✓	Checked meters; remain ok	JK
1500	✓	✓	X	✓	Took down meters	JK

downwind PID — "Low Batt" on ~~downwind~~ will keep running due to close to end of day (only stopped recording last hour of day)

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 11/16		Downloading Data: ✓	Comments: Besides battery in PID dying everything else ok
File Name: 111620i2		Location (i.e., laptop/flash): laptop	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J Kendrot
Date: 11/19/2012
Weather : 30s overcast

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	12655	Due	9578	No Due
Data Ram:	D389	06307	D581	10310
Last Calibration:	11/19		11/19	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0745	✓	✓	✓	✓	Set out meters	HL
0830	✓	✓	✓	✓	Checked meters; all ok	HL
0925	✓	✓	✓	✓	Checked meters; all ok	HL
1040	✓	✓	✓	✓	Checked meters; all ok	HL
1145	✓	✓	✓	✓	Checked meters; all ok	HL
1230	✓	✓	✓	✓	Checked meters; all ok	HL
1340	✓	✓	✓	✓	Checked meters; all ok	HL
1430	✓	✓	✓	✓	Checked meters; all ok	HL
1510	✓	✓	✓	✓	Took down meters	HL

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 11/19		Downloading Data: ✓	Comments: No problems
File Name: 11192012		Location (i.e., laptop/flash): flash	No exceedances

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 11/20/2012
Weather: 30s overcast

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	12685	Due	9578	No Due
Data Ram:	D353	06307	D581	10310
Last Calibration:	11/20		11/20	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0820	✓	✓	✓	✓	Set out meters	HK
0910	✓	✓	✓	✓	Checked meters; all ok	HK
1005	✓	✓	✓	✓	Checked meters; all ok	HK
1145	✓	✓	✓	✓	Checked meters; all ok	HK
1230	✓	✓	✓	✓	Checked meters; all ok	HK
1320	✓	✓	✓	✓	Checked meters; all ok	HK
1520	✓	✓	✓	✓	Checked meters; all ok	HK
1545	✓	✓	✓	✓	Took down meters	HK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 11/20		Downloading Data: ✓	Comments: No exceedances
File Name: 11202012		Location (i.e., laptop/flash): lap/flash	delay in set up due to calibration problems in AM

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kenehan
Date: 11/21/2012
Weather: 30s Sunny

	UPWIND		DOWNWIND	
Meter Type:	Serial Number	Rental Number	Serial Number	Rental Number
MiniRae:	126655	Dne	9578	No Dne
Data Ram:	D5051	10310	D3859	06307
Last Calibration:	11/21		11/21	

TIME	UPWIND		DOWNWIND		Comments / Action Taken	Initials
	PID	DATA RAM	PID	DATA RAM		
0715	✓	✓	✓	✓	Set out meters	HK
0820	✓	✓	✓	✓	Checked on meters; all ok	HK
0905	✓	✓	✓	✓	Checked meters; all ok	HK
1020	✓	✓	✓	✓	Checked meters; all ok	HK
1110	✓	✓	✓	✓	Checked meters; all ok	HK
1200	✓	✓	✓	✓	Checked meters; all ok	HK
1305	✓	✓	✓	✓	Checked meters; a	HK
1330	✓	✓	✓	✓	Took down meters	HK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 11/21		Downloading Data: ✓	Comments: Days end early due to holiday
File Name: 11212012		Location (i.e., laptop/flash): laptop/flash	No exceedances

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 11/26/2012
Weather: 40s, Sunny windy (>5mph)

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	12685	Dnc	9578	No Dnc
Data Ram:	D359	06307	D581	10310
Last Calibration:	11/26		11/26	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0720	✓	✓	✓	✓	Set up meters	HK
0830	✓	✓	✓	✓	Checked meters; all ok	HK
0940	✓	✓	✓	✓	Checked meters; all ok	HK
1030	✓	✓	✓	✓	Checked meters; all ok	HK
1120	✓	✓	✓	✓	Checked meters; all ok	HK
1205	✓	✓	✓	✓	Checked meters; all ok	HK
1320	✓	✓	✓	✓	Checked meters; all ok	HK
1420	✓	✓	✓	✓	Took down meters	HK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 11/26		Downloading Data: ✓	Comments: No problems
File Name: 11 26 2012		Location (ie., lapto: lap/flash	No exceedances

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 11/27/2012
Weather: 30s Rain/snow

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	9578	No Dwg	12685	Dwg
Data Ram:	D389	06307	D581	10310
Last Calibration:	11/27		11/27	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0720	✓	✓	✓	✓	Set out meters	HK
0805	✓	✓	✓	✓	Checked meters; all ok	HK
0850	✓	✓	✓	✓	Checked on meters; all ok	HK
0935	✓	✓	✓	✓	Checked on meters; all ok	HK
1050	✓	✓	✓	✓	Checked on meters; all ok	HK
1140	✓	A	✓	✓	Beside upwind dust all meters ok from ck	HK
1235	✓	✓	✓	✓	Checked on meters; all ok	HK
1330	✓	✓	✓	✓	Checked on meters; all ok	HK
1430	✓	✓	✓	✓	Took down meters	HK

Upwind Dust Alarming on and off du... rain/snow increasing but ... for sustained periods a... did not cause an exc...

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 11/27		Downloading Data: ✓	Comments: Meter upwind alarming when it began to rain/snow heavier but was not exceeding; all others normal
File Name: 11 27 2012		Lap/Flash Location (i.e., lapto	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 11/28/2012
Weather : 30's sunny/l. clouds

	UPWIND		DOWNWIND	
Meter Type:	Serial Number	Rental Number	Serial Number	Rental Number
MiniRae:	9578	No Dnc	12685	Dnc
Data Ram:	D581	10310	D359	06307
Last Calibration:	11/28		11/28	

TIME	UPWIND		DOWNWIND		Comments / Action Taken	Initials
	PID	DATA RAM	PID	DATA RAM		
0730	✓	✓	✓	✓	Set up meters	JK
0825	✓	✓	✓	✓	Checked meters; all ok	JK
0930	✓	✓	✓	✓	Checked meters; all ok	JK
1040	✓	✓	✓	✓	Checked meters; all ok	JK
1135	✓	✓	✓	✓	Checked meters; all ok	JK
1240	✓	✓	✓	✓	Checked meters; all ok	JK
1320	✓	✓	✓	✓	Checked meters; all ok	JK
1430	✓	✓	✓	✓	Checked meters; all ok	JK
1500	✓	✓	✓	✓	Took down meters	JK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 11/28		Downloading Data: ✓	Comments: No problems
File Name: 112820:2		Location (i.e., laptop): Dup/Hank	No exceedances

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 11/29/2017
Weather: 30s cloudy

	~~UPWIND~~ Downwind		~~DOWNWIND~~ Upwind	
Meter Type:	Serial Number	Rental Number	Serial Number	Rental Number
MiniRae:	12685	Due	9578	No Due
Data Ram:	D581	10310	D589	063047
Last Calibration:	11/29		11/29	

TIME	UPWIND		DOWNWIND		Comments / Action Taken	Initials
	PID	DATA RAM	PID	DATA RAM		
0740	✓	✓	✓	✓	Set up meters	HK
0830	✓	✓	✓	✓	Checked on meters; all ok	HK
0910	✓	✓	✓	✓	Checked on meters; all ok	HK
1000	✓	✓	✓	✓	Checked on meters; all ok	HK
1045	✓	✓	✓	✓	Checked on meters; all ok	HK
1140	✓	✓	✓	✓	Checked on meters; all ok	HK
1230	✓	✓	✓	✓	Checked on meters; all ok	HK
1320	✓	✓	✓	✓	Checked on meters; all ok	HK
1400	✓	✓	✓	✓	Checked on meters; all ok	HK
1455	✓	✓	✓	✓	Checked on meters; all ok	HK
1520	✓	✓	✓	✓	Took down meters	HK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 11/29		Downloading Data: ✓	Comments: No problems
File Name: 11 29 2017		Location (i.e., laptop/flash): Lap/Flash	No exceedances

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 11/30/2012
Weather: 30s, overcast

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:		Dwc 10310		No Dwc 00307
Data Ram:				
Last Calibration:	11/30		11/30	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0730	✓	✓	✓	✓	Set out meters	JK
0815	✓	✓	✓	✓	Checked on meters; all ok	JK
0900	✓	✓	✓	✓	Checked on meters; all ok	JK
1005	✓	✓	✓	✓	Checked on meters; all ok	JK
1100	✓	✓	✓	✓	Checked on meters; all ok	JK
1215	✓	✓	✓	✓	Checked on meters; all ok	JK
1305	✓	✓	✓	✓	Checked on meters; all ok	JK
1400	✓	✓	✓	✓	Checked on meters; all ok	JK
1435	✓	✓	✓	✓	Took down meters	JK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 11/30		Downloading Data: ✓	Comments: No problems
File Name: 11302012		Location (i.e., laptop): Laptop/Flash	No exceedances

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 12/3/2012
Weather: 40s, foggy/overcast

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	12685	Dne	9578	No Doc
Data Ram:	D389	06307	D581	10310
Last Calibration:	12/3		12/3	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0735	✓	✓	✓	✓	Set out meters	JK
0830	✓	✓	✓	✓	Checked meters; all ok	JK
0920	✓	✓	✓	✓	Checked meters; all ok	JK
1015	✓	✓	✓	✓	Checked meters; all ok	JK
1100	✓	✓	✓	✓	Checked meters; all ok	JK
1215	✓	✓	✓	✓	Checked meters; all ok	JK
1305	✓	✓	✓	✓	Checked meters; all ok	JK
1400	✓	✓	✓	✓	Checked meters; all ok	JK
1435	✓	✓	✓	✓	Took down meters	JK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 12/3		Downloading Data: ✓	Comments: No problems
File Name: 12032012		Location (i.e., laptop/flash): Flash	No exceedances

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 12/4/2017
Weather : 40s rain/h. humidity

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	12635	Due	9578	No Due
Data Ram:	D359	06307	D551	10310
Last Calibration:	12/4		12/4	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0700	X	X	X	X	Meters not set up due to inclement weather	HK
—	—	—	—	—	—	
1620	✓	✓	✓	✓	Set out meters	HK
1640	✓	A	✓	A	Checked on meters	HK
1650	✓	A	✓	A	Took down meters	HK

- Rain stop @ 1200 but no work done on site by Weeks / American went for barge to come/more soil
- PIDs high (~3.0) and both Dust meters alarming (>400) Due to high humidity (>90%) and fog rolling into site (there were no construction vehicles on site moving except for crane & soil was saturated/wet from rain throughout the day; was unable to capture such readings with no wind/high humidity)

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 12/4		Downloading Data: ✓	Comments: Alarming dust problems noted above; rain/high humidity prevented readings earlier in the work day
File Name: 12042012		Location (i.e., laptop): Lap/Flash	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 12/5/2012
Weather: sunny 50s

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	9578	No Dnc	12685	Dnc
Data Ram:	D581	10310	D369	06307
Last Calibration:	12/5		12/5	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0735	✓	✓	✓	✓	Set up meters	JK
0845	✓	✓	✓	✓	Checked on meters, all ok	JK
1010	✓	✓	✓	✓	Checked on meters, all ok	JK
1100	✓	✓	✓	✓	Checked on meters, all ok	JK
1150	✓	✓	✓	✓	Checked on meters; all ok	JK
1230	✓	✓	✓	✓	Checked on meters, all ok	JK
1320	✓	✓	✓	✓	Checked on meters; all ok	JK
1405	✓	✓	✓	✓	Checked on meters; all ok	JK
1450	✓	✓	✓	✓	Took down meters	JK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 12/5		Downloading Data: ✓	Comments: No problems
File Name: 12052012		Location (i.e., laptop/flash): flash	No exceedances

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 12/6/2012
Weather: Sunny, 30's

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	9578	No Dnc	126856	Dnc
Data Ram:	D389	06307	D581	10310
Last Calibration:	12/6		12/6	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0740	✓	✓	✓	✓	Set up meters	HK
0830	✓	✓	✓	✓	Checked on meters, all ok	HK
0920	✓	✓	✓	✓	Checked on meters, all ok	HK
1005	✓	✓	✓	✓	Checked on meters, all ok	HK
1110	✓	✓	✓	✓	Checked on meters, all ok	HK
1125	✓	✓	✓	✓	Checked on meters, all ok	HK
1205	✓	✓	✓	✓	Checked on meters, all ok	HK
1320	✓	✓	✓	✓	Checked on meters, all ok	HK
1400	✓	✓	✓	✓	Checked on meters, all ok	HK
1305	✓	✓	✓	✓	Checked on meters, all ok	HK
1340	✓	✓	✓	✓	Took down meters	HK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 12/6		Downloading Data: ✓	Comments: No problems
File Name: 12062012		Location (i.e., lapto: lap/flash	No exceedances

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendzior
Date: 12/7/2012
Weather: overcast/rain 30s

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	12685	No One	12685	One
Data Ram:	D389	06307	D581	10310
Last Calibration:	12/3		12/7	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0730	✓	✓	✓	✓	Set up meters	JK
0820	✓	✓	✓	✓	Checked on meters, all ok	JK
0900	✓	✓	✓	✓	Checked on meters, all ok	JK
0950	✓	✓	✓	✓	Checked on meters, all ok	JK
1045	✓	✓	✓	✓	Checked on meters, all ok	JK
1140	✓	✓	✓	✓	Checked on meters, all ok	JK
1230	✓	✓	✓	✓	Checked on meters, all ok	JK
1320	✓	✓	✓	✓	Checked on meters, all ok	JK
1405	✓	✓	✓	✓	Checked on meters, all ok	JK
1435	✓	✓	✓	✓	Took down meters	JK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 12/7		Downloading Data: ✓	Comments: No problems
File Name: 12072012		Logs/flash Location (i.e., lapto	No exceedences

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 12/10/2012
Weather: v. foggy/high hum 40s - 50s

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:				
Data Ram:				
Last Calibration:	12/10		12/10	

hum = 99% all day

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0700	—	—	—	—	Meters not set out	JK

Meters not set up due to v. dense fog & high humidity (>95%) known to give false high readings

Fog did not clear until around 1430, which is when work began to slow

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: N/A		Downloading Data: ✓	Comments: Meters not set up due to high humidity/rain
File Name: 12102012		Location (i.e., lapto Lap/Flash	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 12/11/2012
Weather: 40s clear

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	9578	No Dnc	126853	Dnc
Data Ram:	D3853	06307	D5851	103.0
Last Calibration:	12/11		12/11	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0720	✓	✓	✓	✓	Set up meters	HK
0800	✓	✓	✓	✓	Checked meters; all ok	HK
0920	✓	✓	✓	✓	Checked meters; all ok	HK
1005	✓	✓	✓	✓	Checked meters; all ok	HK
1100	✓	✓	✓	✓	Checked meters; all ok	HK
1220	✓	✓	✓	✓	Checked meters; all ok	HK
1300	✓	✓	✓	✓	Checked meters; all ok	HK
1405	✓	✓	✓	✓	Checked meters; all ok	HK
1450	✓	✓	✓	✓	Took down meters	HK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 12/11		Downloading Data: ✓	Comments: No problems
File Name: 12112012		Location (i.e., lapto: Lap/Flash	No exceedances

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrick
Date: 12/12/12
Weather: 30s / 40s; fg cloudy

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	4578	No Dmc	12685	Dmc
Data Ram:	D359	Dmc07	D581	10310
Last Calibration:	12/12		12/12	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0720	✓	✓	✓	✓	Set up meters	HK
0805	✓	✓	✓	✓	Checked meters; all ok	HK
0915	✓	✓	✓	✓	Checked meters; all ok	HK
1000	✓	✓	✓	✓	Checked meters; all ok	HK
1110	✓	✓	✓	✓	Checked meters; all ok	HK
1230	✓	✓	✓	✓	Checked meters; all ok	HK
1315	✓	✓	✓	✓	Checked meters; all ok	HK
1400	✓	✓	✓	✓	Checked meters; all ok	HK
1500	✓	✓	✓	✓	Checked meters; all ok	HK
1505	✓	✓	✓	✓	Took down meters	HK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 12/12		Downloading Data: ✓	Comments: No problems
File Name: 122012		Location (i.e., lapto: lap/flash	No exceedances

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 12/13/2012
Weather: 30s Windy

	UPWIND		DOWNWIND	
Meter Type:	Serial Number	Rental Number	Serial Number	Rental Number
MiniRae:	9578	No Due	12685	Due
Data Ram:	D3597	06307	D5581	10310
Last Calibration:	12/13		12/13	

TIME	UPWIND		DOWNWIND		Comments / Action Taken	Initials
	PID	DATA RAM	PID	DATA RAM		
0720	✓	✓	✓	✓	Set up meters	HK
0815	✓	✓	✓	✓	Checked meters; all ok	HK
0910	✓	✓	✓	✓	Checked meters; all ok	HK
1005	✓	✓	✓	✓	Checked meters; all ok	HK
1120	✓	✓	✓	✓	Checked meters; all ok	HK
1210	✓	✓	✓	✓	Checked meters; all ok	HK
1255	✓	✓	✓	✓	Checked meters; all ok	HK
1305	✓	✓	✓	✓	Checked meters; all ok	HK
1415	✓	✓	✓	✓	Checked meters; all ok	HK
1450	✓	✓	✓	✓	Took down meters	HK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 12/13		Downloading Data: ✓	Comments: No problems
File Name: 12132012		Location (i.e., laptop): Rep/Health	No exceedances

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J Kendrot
Date: 12/14/2012
Weather: 30s - 40s sunny

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	12655	Due	9578	No Due
Data Ram:	D5581	10310	D389	06307
Last Calibration:	12/14		12/14	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0730	✓	✓	✓	✓	Set up meters	HK
0820	✓	✓	✓	✓	Checked meters; all ok	HK
0915	✓	✓	✓	✓	Checked meters; all ok	HK
1000	✓	✓	✓	✓	Checked meters; all ok	HK
1115	✓	✓	✓	✓	Checked meters; all ok	HK
1215	✓	✓	✓	✓	Checked meters; all ok	HK
1310	✓	✓	✓	✓	Checked meters; all ok	HK
1330	✓	✓	✓	✓	Took down meters	HK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 12/14		Downloading Data: ✓	Comments: No problems
File Name: 12142012		Location (i.e., laptop/flash): laptop/flash	No exceedances

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrat
Date: 12/17/2012
Weather: 40s, overcast/raining

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	7578	No One	12685	Duc
Data Ram:	D551	10310	D385	06307
Last Calibration:	12/17		12/17	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0930	✓	✓	✓	✓	Set out meters	JK
1020	✓	✓	✓	✓	Checked on meters; all ok	JK
1125	✓	✓	✓	✓	Checked on meters; all ok	JK
1215	✓	✓	✓	✓	Checked on meters; all ok	JK
1310	✓	✓	✓	✓	Checked on meters; all ok	JK
1400	✓	✓	✓	✓	Checked on meters; all ok	JK
1445	✓	✓	✓	✓	Took down meters	JK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 12/17/12		Downloading Data: ✓	Comments: Delay in setting out meters due to rain; no exceedances
File Name: 121720.2		Location (i.e., laptop/flash): flash	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrat
Date: 12/18/2012
Weather: 40s - 50s, overcast/foggy

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	05578	No Dmc	12685	Dmc
Data Ram:	D581	10310	D389	06307
Last Calibration:	12/18		12/18	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0750	✓	✓	✓	✓	Set up meters	HH
0830	✓	✓	✓	✓	Checked on meters; all ok	HH
1015	✓	✓	✓	✓	Checked on meters; all ok	HH
1055	✓	✓	✓	✓	Checked on meters; all ok	HH
1145	✓	✓	✓	✓	Checked on meters; all ok	HH
1245	✓	✓	✓	✓	Checked on meters; all ok	HH
1330	✓	✓	✓	✓	Checked on meters; all ok	HH
1430	✓	✓	✓	✓	Took down meters	HH

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 12/18		Downloading Data: ✓	Comments: No problems, No exceedances
File Name: 12182012		Location (i.e., lapto lap/Hasth	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 12/19/2012
Weather : 40s, Sunny

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	09578	No Dust	12685	Dust
Data Ram:	D389	~~10346~~ 16309	D581	10310
Last Calibration:	12/19		12/19	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0715	✓	✓	✓	✓	Set out meters	HK
0820	✓	✓	✓	✓	Checked on meters; all ok	HK
0940	✓	✓	✓	✓	Checked on meters; all ok	HK
1030	✓	✓	✓	✓	Checked on meters; all ok	HK
1115	✓	✓	✓	✓	Checked on meters; all ok	HK
1210	✓	✓	✓	✓	Checked on meters; all ok	HK
1315	✓	✓	✓	✓	Checked on meters; all ok	HK
1420	✓	✓	✓	✓	Checked on meters; all ok	HK
1510	✓	✓	✓	✓	Took down meters	HK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 12/19		Downloading Data: ✓	Comments: No problems
File Name: 12192012		Location (i.e., lapto: lap/Hawk	No exceedances

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 12/20/2012
Weather: 30s, p. cloudy

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	09578	No Dnc	12685	Dnc
Data Ram:	D389	06307	D581	10310
Last Calibration:	12/20		12/20	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0720	✓	✓	✓	✓	Set up meters	HK
0815	✓	✓	✓	✓	Checked on meters; all ok	HK
0930	✓	✓	✓	✓	Checked on meters; all ok	HK
1020	✓	✓	✓	✓	Checked on meters; all ok	HK
1105	✓	✓	✓	✓	Checked on meters; all ok	HK
1215	✓	✓	✓	✓	Checked on meters; all ok	HK
1320	✓	✓	✓	✓	Checked on meters; all ok	HK
1415	✓	✓	✓	✓	Checked on meters; all ok	HK
1430	✓	✓	✓	✓	Took down meters	HK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 12/20		Downloading Data: ✓	Comments: No problems
File Name: 12202012		Location (i.e., laptop): Lap/Hash	No exceedances

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kindrot
Date: 12/21/2012
Weather : 40s h. wind

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	09578	No Due	12685	Due
Data Ram:	D389	06307	D581	10310
Last Calibration:	12/20		12/20	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0700	X	X	X	X	Meters not set up	JK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 12/21		Downloading Data:	Comments: Meters not set up due to inclement weather (rain, high winds)
File Name: 12212012		Location (i.e., laptop/flash	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendzior
Date: 12/24/2012
Weather: Holiday

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	12685	Dmc	9578	No Dmc
Data Ram:	D581	10310	D389	06307
Last Calibration:	12/20		12/20	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0700	X	X	X	X	Meters not set out today	(JK)

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: N/A		Downloading Data: ✓	Comments: No CAMP / work onsite due to holiday (Christmas Eve)
File Name: 12242012		Location (i.e., laptop/flash): flash	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 12/25/2012
Weather : Holiday

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	12685	Due	9578	No Due
Data Ram:	D581	10310	D389	06307
Last Calibration:	12/20		12/20	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0700	X	X	X	X	Meters not set out today	HW

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: N/A		Downloading Data: ✓	Comments: ~~Meters~~ No CAMP / work onsite due to holiday (Christmas Day)
File Name: 12252012		Loc'n (i.e., laptop/flash): Lap/Flash	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendzt
Date: 12/26/2012
Weather: low 20s - 30s, foggy

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	12685	Due	9578	No Due
Data Ram:	D581	10310	D389	06307
Last Calibration:	12/26		12/26	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0735	✓	✓	✓	✓	Set out meters	JK
0820	✓	✓	✓	✓	Checked on meters; all ok	JK
0915	✓	✓	✓	✓	Checked on meters; all ok	JK
1020	✓	✓	✓	✓	Checked on meters; all ok	JK
1105	✓	✓	✓	✓	Checked on meters; all ok	JK
1230	✓	✓	✓	✓	Checked on meters; all ok	JK
1310	✓	✓	✓	✓	Checked on meters; all ok	JK
1425	✓	✓	✓	✓	Checked on meters; all ok	JK
1455	✓	✓	✓	✓	Took down meters	JK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 12/26		Downloading Data: ✓	Comments: No problems
File Name: 12262012		Location (i.e., laptop/flash): flash	No exceedances

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 12/27/2012
Weather : Rain, 30s

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	9578	No Dnc	12685	Dnc
Data Ram:	D389	C6307	D581	10310
Last Calibration:	12/26		12/26	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0700	X	X	X	X	Meters not set up today	HK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: N/A		Downloading Data: ✓	Comments: No CAMP/work on site due to inclement weather (rain/snow and v. hvy. winds throughout area)
File Name: 12272012		Location (i.e., laptop/flash): lap/flash	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 12/28/2012
Weather: 30s, Sunny

	UPWIND		DOWNWIND	
Meter Type:	Serial Number	Rental Number	Serial Number	Rental Number
MiniRae:	9598	No Dwg	12685	Dwg
Data Ram:	D389	06307	D581	10310
Last Calibration:	12/28		12/28	

TIME	UPWIND		DOWNWIND		Comments / Action Taken	Initials
	PID	DATA RAM	PID	DATA RAM		
0745	✓	✓	✓	✓	Set up meters	HK
0830	✓	✓	✓	✓	Checked on meters; all ok	HK
0915	✓	✓	✓	✓	Checked on meters; all ok	HK
1020	✓	✓	✓	✓	Checked on meters; all ok	HK
1100	✓	✓	✓	✓	Checked on meters; all ok	HK
1200	✓	✓	✓	✓	Checked on meters; all ok	HK
1310	✓	✓	✓	✓	Checked on meters; all ok	HK
1400	✓	✓	✓	✓	Checked on meters; all ok	HK
1435	✓	✓	✓	✓	Took down meters	HK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 12/28		Downloading Data: ✓	Comments: No problems No exceedances
File Name: 12282012		Location (i.e., laptop/flash): flash	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J Kendrot
Date: 01/21/2013
Weather: 20s overcast

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:	3578	No Data	02655	Data
Data Ram:	D359	06302	D581	10310
Last Calibration:	01/21		01/21	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0735		✓		✓	Set up meters	HW
0820		✓		✓	Checked on meters, all okay	HW
0915		✓		✓	Checked on meters, all okay	HW
1020		✓		✓	Checked on meters, all okay	HW
1135		✓		✓	Checked on meters, all okay	HW
1240		✓		✓	Checked on meters, all okay	HW
1325		✓		✓	Checked on meters, all okay	HW
1425		✓		✓	Took down meters	HW

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 01/21		Downloading Data: ✓	Comments: Due to quarter-mile danger finalized, PIDs are no longer required for VOCs
File Name: 01212013		Location (i.e., laptop): Lap/Flash	No problems / No exceedances

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J Kenehan
Date: 01/22/2013
Weather: 20s sunny w/ clouds

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:				
Data Ram:	D551	10310	D389	06307
Last Calibration:	01/22		01/22	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0755		✓		✓	Set up meters	HK
0855		✓		✓	Checked on meters, all okay	HK
1010		✓		✓	Checked on meters, all okay	HK
1100		✓		✓	Checked on meters, all okay	HK
1210		✓		✓	Checked on meters, all okay	HK
1300		✓		✓	Checked on meter, all okay	HK
1315		✓		✓	Took down meters	HK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Date Downloaded on: 01/22		Downloading Data: ✓	Comments: No problems No exceedances
File Name: 012220 13		Location (i.e., laptop): Hasting	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 01/23/2013
Weather: sunny, breezy

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Nomber	Rental Number
MiniRae:				
Data Ram:	D359	060307	D381	10310
Last Calibration:	01/23		01/23	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0820		✓		✓	Set up meters	JK
0915		✓		✓	Checked on meters, all okay	JK
1010		✓		✓	Checked on meters, all okay	JK
1115		✓		✓	Checked on meters, all okay	JK
1200		✓		✓	Checked on meters, all okay	JK
1320		✓		✓	Checked on meters, all okay	JK
1345		✓		✓	Took down meters	JK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 01/23		Downloading Data: ✓	Comments: No problems
File Name: 01232013		Location (i.e., laptop): Engr/Hash	No exceedances

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrick
Date: 01/24/2013
Weather: Teens / Overcast

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:				
Data Ram:	D3389	0630 1	D5581	103.0
Last Calibration:	01/24		01/24	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0730		✓		✓	Set up meters	JK
0845		✓		✓	Checked on meters; all okay	JK
0940		✓		✓	Checked on meters; all okay	JK
1045		✓		✓	Checked on meters; all okay	JK
1130		✓		✓	Checked on meters; all okay	JK
1230		✓		✓	Checked on meters; all okay	JK
1325		✓		✓	Checked on meters; all okay	JK
1440		✓		✓	Checked on meters; all okay	JK
1520		✓		✓	Took down meters	JK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 01/24		Downloading Data: ✓	Comments: No problems
File Name: 01242013		Location (i.e., laptop): Flash drive	No exceedances

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 01/25/2013
Weather: Teens / overcast

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:				
Data Ram:	D551	10310	D385	D6307
Last Calibration:	01/25		01/25	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0855		✓		✓	Set up meters	JK
0945		X		X	Meters off; turned back on	JK
1015		✓		✓	Checked on meters; all okay	JK
1045		X		X	Meters off; turned back on	JK
1230		✓		✓	Checked on meters; all okay	JK
1345		✓		✓	Took down meters	JK

- Meters off due to sustained temperature below freezing (past 3+ days) did not have temp > 15°F until past 1100 where meters remained on for period > 30 min @ a time

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 01/25		Downloading Data: ✓	Comments: interruptions in meters due to extreme/sustained cold. Otherwise all dust values were within given.
File Name: 01252013		Location (i.e., laptop): Desktop/Hard	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrat
Date: 01/28/2013
Weather: rain/snow/sleet low 30s

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:				
Data Ram:	D3857	06307	D3551	10310
Last Calibration:	01/28		01/28	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0750		✓		✓	Set up meters;	HW
0845		✓		✓	Checked on meters; all okay	HW
0940		✓		✓	Checked on meters; all okay	HW
1035		✓		✓	Checked on meters; all okay	HW
1140		✓		✓	Checked on meters; all okay	HW
1245		✓		✓	Checked on meters; all okay	HW
1355		✓		✓	Checked on meters; all okay	HW
1440		A		A	Meters alarming due to weather	HW
1525		A		A	Meters alarming; took down meters	HW

→ Meters alarming due to increase in humidity & snow onsite changing to rain sleet
Recorded values over 100, but did not exceed action limit of 150 mg/m³

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 01/28		Downloading Data: ✓	Comments: Meters alarming after 1400 due to change in weather (snow → sleet/rain). Values recorded did not exceed action limit value (>150 µg/m3).
File Name: 01282013		Location (i.e., laptop): Flash	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendall
Date: 01/29/2013
Weather: overcast 30-40s

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:				
Data Ram:	D389	10307	D581	10310
Last Calibration:	01/29		01/29	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0740		✓		✓	Set up meters	JK
0830		✓		✓	Checked on meters; all okay	JK
0945		✓		✓	Checked on meters; all okay	JK
1040		✓		✓	Checked on meters; all okay	JK
1130		✓		✓	Checked on meters; all okay	JK
1245		✓		✓	Checked on meters; all okay	JK
1330		✓		✓	Checked on meters; all okay	JK
1350		✓		✓	Took down meters	JK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 01/29		Downloading Data: ✓	Comments: No problems
File Name: 0129 2013		Laptop/Flash Location (i.e., lapto	No exceedances

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendzor
Date: 01/30/2013
Weather: heavy fog forecast 40s

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:				
Data Ram:	D359	06307	D581	10310
Last Calibration:	01/29		01/29	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0700		X		X	Meters not set out	JK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: N/A		Downloading Data: ✓	Comments: Meters not set out to heavy fog / high humidity that would cause false high values recorded.
File Name: 01302013		Location (i.e., laptop): laptop/flash	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J Kendrot
Date: 01/31/2013
Weather: Heavy rain 40s

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:				
Data Ram:	D359	106307	D581	10310
Last Calibration:	01/29		01/29	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0700		X		X	Meters not set out	JK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: N/A		Downloading Data:	Comments: Meters not set out due to inclement weather on 01/31 resulting in no personnel / no work onsite 01/31.
File Name: 01312013		Location (i.e., laptop): Laptflash	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J Kendzi
Date: 02/01/2013
Weather: sunny, windy 30s

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:				
Data Ram:	D581	10310	D389	06307
Last Calibration:	02/01		02/01	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0725		✓		✓	Set up meters	JK
0830		✓		✓	Checked on meters; all okay	JK
0935		✓		✓	Checked on meters; all okay	JK
1040		✓		✓	Checked on meters; all okay	JK
1120		✓		✓	Checked on meters; all okay	JK
1235		✓		✓	Checked on meters; all okay	JK
1330		✓		✓	Checked on meters; all okay	JK
1405		✓		✓	Took down meters	JK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 02/01		Downloading Data: ✓	Comments: No problems
File Name: 02012013		Location (i.e., laptop): laptop/flash	No exceedances

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 02/04/2013
Weather: hazy 20s

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:				
Data Ram:	D589	06307	D581	10310
Last Calibration:	02/04		02/04	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0735		✓		✓	Set up meters	JK
0850		✓		✓	Checked on meters; all okay	JK
0940		✓		✓	Checked on meters; all okay	JK
1045		✓		✓	Checked on meters; all ok	JK
1135		✓		✓	Checked on meters; all okay	JK
1220		✓		✓	Checked on meters; all okay	JK
1315		✓		✓	Checked on meters; all okay	JK
1430		✓		✓	Checked on meters; all okay	JK
1435		✓		✓	Took down meters	JK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 02/04		Downloading Data: ✓	Comments: No problems No exceedances
File Name: 020413		Location (i.e., laptop/flash): laptop	

Daily Air Monitoring Data Form
Former Tappan Terminal
1 Railroad Avenue
Hastings-on-Hudson, New York

Name(s): J. Kendrot
Date: 03/05/2013
Weather : Snow 20s

Meter Type:	UPWIND Serial Number	Rental Number	DOWNWIND Serial Number	Rental Number
MiniRae:				
Data Ram:	D581	10310	D359	06307
Last Calibration:	03/05		03/05	

TIME	UPWIND PID	UPWIND DATA RAM	DOWNWIND PID	DOWNWIND DATA RAM	Comments / Action Taken	Initials
0725		X		X	Meters not set out	JK

Notes:
1. Meters should be checked hourly (at a minimum) to make sure that they are logging properly.
2. Record the time that the meters were checked
3. Use a √ to indicate that the meter is on and logging. Use an "X" to indicate that meter was off. Use an "A" to indicate meter Alarm.
4. Note any significant changes between the current and previous checks.
5. Download data from equipment within 24 hours.

Data Downloaded on: 03/05		Downloading Data: ✓	Comments: Meters not set out due to inclement weather (snow rain); Soil movement stopped before weather improved
File Name: 0305 2013		Location (i.e., laptop): Kay/Heath	

APPENDIX H: DATA USABILITY SUMMARY REPORT

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June 17, 2013

Ms. Anne Proctor
Sr. Project Manager
Woodard & Curran
1520 Highland Ave.
Cheshire, CT 06410

Re: Project No. 0206925.09.008.0002
Tappen Terminal
Data Validation Report
Soil samples

Dear Ms. Proctor:

The data usability summary report (DUSR) and data validation summaries are attached to this letter for the project no. 0206925.09.008.0002, Tappen Terminal, soil sampling event. The DUSR and QA/QC reviews represent 10% of the total data. The checked data for Lancaster Laboratories SDG No: TAP03 were acceptable with some minor issues that are identified and discussed in the DUSR and validation summary. There were no checked data that were qualified as unusable (R) in the data pack.

A list of common data validation acronyms and data validation qualifers is attached to this letter to assist you interpreting the validation summaries. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist Woodard & Curran.

Sincerely,
Alpha Geoscience
Donald Anné

Donald Anné
Senior Chemist

DCA:dca
Attachments

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Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

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Data Usability Summary Report for
Lancaster Laboratories, SDG No: TAP03

8 Soil Samples
Collected November 6, 2012

Prepared by: Donald Anné
June 17, 2013

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of volatile analyses for soil samples TCN-ST9, TCN-ST10, TCN-ST11, POC-TS3, and POC-TS4 and results for semi-volatile, herbicide, pesticide, PCB, metals, total cyanide, amneable cyanide, and hexavalent chromium analyses for soil samples TCN-STC5, TCN-STC12, and POC-TSC2.

The overall performances of the analyses are acceptable. Lancaster Laboratories did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some minor issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The PCB result for aroclor-1260 was flagged as "estimated" (J) in sample POC-TSC2 because the %D for aroclor-1260 was above the allowable maximum for one column in the associated continuing calibration.

- The pesticide results for alpha-BHC and HCB were flagged as "estimated" (J) in sample POC-TSC2 because the %Ds for dual column quantitation of alpha-BHC and HCB were above the allowable maximum, but were not above 70% in the sample.

- The pesticide result for 4,4'-DDT was flagged as "estimated" (J) in sample POC-TSC2 because the %D for 4,4'-DDT was above the allowable maximum one column in the associated continuing calibration.

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of 8260B Volatiles Data for Lancaster Laboratories, SDG No: TAP03

Soil Samples TCN-ST9, TCN-ST10, TCN-ST11, POC-TS3, and POC-TS4 Collected November 6, 2012

Prepared by: Donald Anné
June 17, 2013

Holding Times: The samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8260B criteria.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8260B criteria.

The RRFs for target compounds were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (25%), as required.

Blanks: The analysis of the method blank reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits for soil samples TCN-ST9, TCN-ST10, TCN-ST11, POC-TS3, and POC-TS4.

Surrogate Recovery: The surrogate recoveries were within control limits for soil samples TCN-ST9, TCN-ST10, TCN-ST11, POC-TS3, and POC-TS4.

Matrix Spike: One of thirty percent recoveries for target compounds was above QC limits for soil MS TCN-ST9. No action is taken on MS data alone to qualify or reject an entire set of samples.

Laboratory Control Sample/Laboratory Control Sample Duplicate: The relative percent differences for target compounds were below the allowable maximums and the percent recoveries were within QC limits for soil samples LCSB84 and LCDB84.

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Compound ID: Checked surrogates were within GC/MS quantitation limits. The analyses of soil samples TCN-ST9, TCN-ST10, TCN-ST11, POC-TS3, and POC-TS4 reported target compounds as not detected.

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Quality Control Summary
Matrix Spike/Matrix Spike Duplicate

SDG: TAP03
Matrix: SOLID

GC/MS Volatiles

Fraction: Volatiles by GC/MS

UNSPK: 6850733 MS: 6850733	Batch: **B123122AA** (Sample number(s): 6850733-6850736, 6850740, 6850742-6850743, 6850746, 6850748-6850749, 6850751-6850752, 6850754-6850755, 6850757-6850758)								
Analyte	**Spike Added ug/kg**	**Unspiked Conc ug/kg**	**MS Conc ug/kg**	**MSD Conc ug/kg**	**MS %Rec**	**MSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Acetone	147.34	N.D.	192.7	NA	131	NA	31-195	NA	NA
1,1,1-Trichloroethane	19.65	N.D.	20.91	NA	106	NA	64-142	NA	NA
1,1-Dichloroethane	19.65	N.D.	18.92	NA	96	NA	63-142	NA	NA
1,2-Dichloroethane	19.65	N.D.	20.41	NA	104	NA	68-131	NA	NA
1,4-Dioxane	491.15	N.D.	375.24	NA	76	NA	39-180	NA	NA
2-Butanone	147.34	N.D.	166.16	NA	113	NA	37-163	NA	NA
Benzene	19.65	N.D.	18.15	NA	92	NA	55-143	NA	NA
Carbon Tetrachloride	19.65	N.D.	19.48	NA	99	NA	45-153	NA	NA
Chloroform	19.65	N.D.	18.5	NA	94	NA	61-142	NA	NA
cis-1,2-Dichloroethene	19.65	N.D.	18.23	NA	93	NA	60-136	NA	NA
Methyl Tertiary Butyl Ether	19.65	N.D.	19.12	NA	97	NA	55-129	NA	NA
Methylene Chloride	19.65	N.D.	19.81	NA	101	NA	61-141	NA	NA
Toluene	19.65	N.D.	18.11	NA	92	NA	50-146	NA	NA
trans-1,2-Dichloroethene	19.65	N.D.	19.01	NA	97	NA	59-142	NA	NA
Trichloroethene	19.65	N.D.	21.22	NA	108	NA	53-144	NA	NA
Tetrachloroethene	19.65	N.D.	30.38	NA	155 *	NA	42-149	NA	NA
Chlorobenzene	19.65	N.D.	17.79	NA	91	NA	49-135	NA	NA
Ethylbenzene	19.65	N.D.	17.94	NA	91	NA	44-141	NA	NA
n-Propylbenzene	19.65	N.D.	15.93	NA	81	NA	39-157	NA	NA
Xylene (Total)	58.94	N.D.	52.85	NA	90	NA	44-136	NA	NA
1,3,5-Trimethylbenzene	19.65	N.D.	18.57	NA	95	NA	38-150	NA	NA
1,2,4-Trimethylbenzene	19.65	N.D.	18.13	NA	92	NA	37-149	NA	NA
sec-Butylbenzene	19.65	N.D.	18.17	NA	92	NA	33-157	NA	NA
tert-Butylbenzene	19.65	N.D.	16.26	NA	83	NA	41-152	NA	NA
1,2-Dichlorobenzene	19.65	N.D.	17.37	NA	88	NA	36-133	NA	NA
1,3-Dichlorobenzene	19.65	N.D.	17.81	NA	91	NA	34-134	NA	NA
1,4-Dichlorobenzene	19.65	N.D.	17.57	NA	89	NA	35-136	NA	NA
n-Butylbenzene	19.65	N.D.	17.69	NA	90	NA	30-146	NA	NA

Comments:
(2) The unspiked sample result is greater than four times the spike added.
* = Out of Specification

Results are being reported on an as received basis.

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QA/QC Review of 8270C Semi-Volatile Data
for Lancaster Laboratories, SDG No: TAP03

Soil Samples TCN-STC5, TCN-STC12, and POC-TSC2
Collected November 6, 2012

Prepared by: Donald Anné
June 17, 2013

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8260B criteria.

The average RRFs for target compounds were above the allowable minimum (0.050) and %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8260B criteria.

The RRFs for target compounds were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (25%), as required.

Blanks: The analysis of the method blank reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits for soil samples TCN-STC5, TCN-STC12, and POC-TSC2.

Surrogate Recovery: The surrogate recoveries were within control limits for soil samples TCN-STC5, TCN-STC12, and POC-TSC2.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for target compounds were below the allowable maximums and the percent recoveries were within QC limits for soil MS/MSD sample TCN-STC5.

Laboratory Control Sample: The percent recoveries for target compounds were within QC limits for soil sample 312LFLCS.

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Compound ID: Checked compounds and surrogates were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

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QA/QC Review of 8081A Pesticide Data
for Lancaster Laboratories, SDG No: TAP03

Soil Samples TCN-STC5, TCN-STC12, and POC-TSC2
Collected November 6, 2012

Prepared by: Donald Anné
June 17, 2013

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

Blanks: The analysis of the method blank reported target pesticides as not detected.

Surrogate Recovery: The surrogate recoveries were within control limits for soil samples TCN-STC5, TCN-STC12, and POC-TSC2.

Matrix Spike/Matrix Spike Duplicate: The relative percent difference for target pesticides were below the allowable maximums and the percent recoveries were within QC limits for soil MS/MSD sample TCN-STC5.

Laboratory Control Sample: The percent recoveries for target pesticides were within QC limits for soil sample LCS20313.

Initial Calibration: The %RSD for HCB was above the allowable maximum (20%) for H5262A on 11-06-12 for the RTX-CLP column. Positive results for HCB should be considered estimated (J) in associated samples.

Continuing Calibration: The %Ds for alpha-chlordane, endrin, and 4,4'-DDT were above the allowable maximum (15%) for the RTX-CLP column on 11-13-12 @19:47. The %Ds for alpha-chlordane, endosulgan I, endrin, and endosulfan II were above the allowable maximum (15%) for the RTXCLPII column on 11-13-12 @19:47. Positive results for these pesticides should be considered estimated (J) in associated samples.

Analytical Sequence: The retention times for TCX and DCB were within control limits for soil samples TCN-STC5, TCN-STC12, and POC-TSC2 on both columns.

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DDT/Endrin Breakdown Check: The percent breakdowns were below the allowable maximums (15% for 4,4'-DDT and endrin; 20% for combined) on both column, as required.

Pesticide Identification Summary for Single Component Analytes: Checked surrogates and detected pesticides were within GC quantitation limits. The %Ds for the dual column quatitation of HCB and alpha-BHC were above the allowable maximum (25%), but were not above 70% in sample POC-TCS2. The results for HCB and alpha-BHC should be considered estimated (J) in sample POC-TCS2.

6E

INITIAL CALIBRATION - CALIBRATION FACTOR SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H5262A Calibration File: 1P16311

GC Column (1): RTX-CLP ID: 0.32 (mm) Date(s) Analyzed: 11/6/2012 11/6/2012

COMPOUND	CALIBRATION FACTORS						%RSD
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	MEAN	
Tetrachloro-m-xylene	2.16E+04	1.79E+04	1.62E+04	1.53E+04	1.45E+04	1.71E+04	16.5
Hcb	4.79E+04	4.41E+04	3.37E+04	3.19E+04	2.83E+04	3.72E+04	22.6
alpha-BHC	2.94E+04	2.70E+04	2.57E+04	2.49E+04	2.41E+04	2.62E+04	7.9
gamma-BHC (Lindane)	2.96E+04	2.53E+04	2.39E+04	2.32E+04	2.31E+04	2.50E+04	10.7
beta-BHC	1.42E+04	1.19E+04	1.12E+04	1.09E+04	1.09E+04	1.18E+04	11.6
delta-BHC	2.41E+04	2.31E+04	2.21E+04	2.17E+04	2.17E+04	2.25E+04	4.6
Heptachlor	2.77E+04	2.41E+04	2.25E+04	2.19E+04	2.17E+04	2.36E+04	10.5
Aldrin	2.28E+04	1.97E+04	1.87E+04	1.83E+04	1.84E+04	1.96E+04	9.7
Telodrin	1.56E+04	1.52E+04	1.36E+04	1.37E+04	1.28E+04	1.42E+04	8.1
o,p-DDE	1.12E+04	1.09E+04	1.03E+04	9.91E+03	9.36E+03	1.03E+04	7.4
Heptachlor epoxide	1.63E+04	1.57E+04	1.50E+04	1.48E+04	1.48E+04	1.53E+04	4.4
gamma-Chlordane	1.47E+04	1.51E+04	1.43E+04	1.43E+04	1.43E+04	1.45E+04	2.6
alpha-Chlordane	1.47E+04	1.49E+04	1.37E+04	1.35E+04	1.34E+04	1.40E+04	5.0
4,4'-DDE	1.32E+04	1.43E+04	1.35E+04	1.34E+04	1.32E+04	1.35E+04	3.5
Endosulfan I	1.23E+04	1.51E+04	1.44E+04	1.44E+04	1.39E+04	1.40E+04	7.7
o,p-DDD	8.18E+03	8.00E+03	7.65E+03	7.59E+03	7.30E+03	7.75E+03	4.5
Dieldrin	1.40E+04	1.29E+04	1.26E+04	1.25E+04	1.18E+04	1.28E+04	6.3
o,p-DDT	9.70E+03	9.42E+03	9.16E+03	9.01E+03	8.65E+03	9.19E+03	4.4
Endrin	1.26E+04	1.18E+04	1.14E+04	1.14E+04	1.04E+04	1.15E+04	7.1
4,4'-DDD	1.26E+04	1.20E+04	1.19E+04	1.20E+04	1.10E+04	1.19E+04	5.0
Kepone	5.40E+03	5.27E+03	6.11E+03	4.97E+03	4.88E+03	5.32E+03	9.1
Endosulfan II	1.10E+04	1.05E+04	1.03E+04	1.01E+04	8.96E+03	1.02E+04	7.5
4,4'-DDT	1.04E+04	1.00E+04	9.82E+03	9.98E+03	8.82E+03	9.80E+03	6.0
Endrin aldehyde	8.72E+03	8.06E+03	8.07E+03	8.07E+03	7.53E+03	8.09E+03	5.2
Methoxychlor	5.11E+03	4.54E+03	4.40E+03	4.35E+03	4.02E+03	4.48E+03	8.9
Mirex	8.43E+03	7.87E+03	7.33E+03	6.92E+03	6.38E+03	7.39E+03	10.9
Endosulfan sulfate	7.76E+03	7.41E+03	7.45E+03	7.46E+03	6.65E+03	7.35E+03	5.6
Endrin ketone	9.90E+03	9.54E+03	9.39E+03	9.39E+03	8.75E+03	9.39E+03	4.4
Decachlorobiphenyl	1.08E+04	8.98E+03	8.37E+03	8.02E+03	7.86E+03	8.80E+03	13.4

Linear ✓

Average % RSD: 8

Jamie L. Brillhart

Jamie L. Brillhart
Senior Chemist

NOV 08 2012

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H5262A Init. Calib Date(s): 11/06/12 11/06/12

GC Column (1) : RTX-CLP ID: .32 (mm) Date Analyzed: 11/13/12

Lab File ID: 4P16311.0027.RAW Time Analyzed: 19:47

Lab Standard ID: MIXA3GR Initial Calibration: 1P16311

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	%D
Tetrachloro-m-xylene	2.78	2.76	2.82	41.46	40.28	3
alpha-BHC	3.25	3.23	3.29	9.65	10.00	-3
gamma-BHC (Lindane)	3.51	3.49	3.55	8.96	10.00	-10
beta-BHC	3.57	3.55	3.61	8.60	10.00	-14
delta-BHC	3.72	3.70	3.76	9.18	10.00	-8
Heptachlor	3.89	3.87	3.93	8.79	10.00	-12
Aldrin	4.13	4.11	4.17	8.46	10.00	-15
Heptachlor epoxide	4.58	4.56	4.62	8.49	10.00	-15
gamma-Chlordane	4.67	4.66	4.72	8.57	10.00	-14
alpha-Chlordane	4.77	4.75	4.81	8.42	10.00	-16
4,4'-DDE	4.82	4.80	4.86	17.95	20.00	-10
Endosulfan I	4.88	4.86	4.92	9.14	10.00	-9
Dieldrin	5.05	5.03	5.09	17.07	20.00	-15
Endrin	5.23	5.21	5.27	16.63	20.00	-17
4,4'-DDD	5.26	5.24	5.30	17.62	20.00	-12
Endosulfan II	5.39	5.37	5.43	17.15	20.00	-14
4,4'-DDT	5.47	5.45	5.51	16.57	20.00	-17
Endrin aldehyde	5.70	5.68	5.74	17.72	20.00	-11
Methoxychlor	5.82	5.80	5.86	88.20	100.00	-12
Endosulfan sulfate	6.03	6.01	6.07	18.20	20.00	-9
Endrin ketone	6.25	6.23	6.29	18.74	20.00	-6
Decachlorobiphenyl	7.01	6.97	7.07	34.77	40.60	-14

Compounds 22 Average of %D: 12

7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H5262B Init. Calib Date(s): 11/06/12 11/06/12

GC Column (2) : RTXCLPII ID: .32 (mm) Date Analyzed: 11/13/12

Lab File ID: 4P16311B.0027.RAW Time Analyzed: 19:47

Lab Standard ID: MIXA3GR Initial Calibration: 1P16311B

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT	NOM AMOUNT	%D
Tetrachloro-m-xylene	2.74	2.72	2.78	39.17	40.28	-3
alpha-BHC	3.24	3.22	3.28	9.48	10.00	-5
gamma-BHC (Lindane)	3.53	3.51	3.57	9.21	10.00	-8
beta-BHC	3.60	3.57	3.63	8.67	10.00	-13
~~Heptachlor~~ deltabhc	3.82	3.80	3.86	9.01	10.00	-10
~~delta-BHC~~ heptachlor	3.88	3.86	3.92	8.63	10.00	-14
Aldrin	4.12	4.10	4.16	8.72	10.00	-13
~~Heptachlor~~ epoxide	4.55	4.53	4.59	8.16	10.00	NA -18
gamma-Chlordane	4.69	4.67	4.73	8.38	10.00	NA -16
alpha-Chlordane	4.79	4.77	4.83	8.28	10.00	(-17)
Endosulfan I	4.84	4.82	4.88	8.40	10.00	(-16)
4,4'-DDE	4.91	4.89	4.95	17.70	20.00	-11
Dieldrin	5.04	5.02	5.08	17.16	20.00	-14
Endrin	5.26	5.25	5.31	15.82	20.00	(-21)
4,4'-DDD	5.33	5.31	5.37	17.22	20.00	-14
Endosulfan II	5.42	5.40	5.46	16.61	20.00	(-17)
4,4'-DDT	5.57	5.55	5.61	17.91	20.00	-10
Endrin aldehyde	5.67	5.65	5.71	17.16	20.00	-14
Endosulfan sulfate	5.87	5.85	5.91	19.35	20.00	-3
Methoxychlor	6.08	6.06	6.12	85.31	100.00	-15
Endrin ketone	6.28	6.26	6.32	19.41	20.00	-3
Decachlorobiphenyl	7.25	7.22	7.32	36.62	40.60	-10

Compounds 22 Average of %D: 12

Jamie L. Brillhart
Senior Chemist

NOV 19 2012

10A

IDENTIFICATION SUMMARY

SAMPLE CODE NO.

CTCS2

Lab Name: Lancaster Laboratories Contract: Batchnumber: 123130020A

Lab Code: Case No.: SAS No.: SDG No.: TAP03

Lab Sample ID: 6850759 Date(s) Analyzed: 11/13/2012 11/13/2012

Instrument ID (1): H5262A Instrument ID (2): H5262B

GC Column (1): RTX-CLP ID: 0.32 (mm) GC Column (2): RTXCLPII ID: 0.32 (mm)

ANALYTE	COL	RT	FROM	TO	CONCENTRATION	%RSD	%D
Hcb	1	3.14	3.09	3.15	1.5		49.3
	2	3.15	3.11	3.17	2.9	63.6	
alpha-BHC	1	3.28	3.23	3.29	0.81		32.5
	2	3.28	3.22	3.28	1.2	38.8	
Aldrin	1	4.11	4.11	4.17	0.42		9.5
	2	4.11	4.10	4.16	0.38	10.0	
4,4'-DDE	1	4.82	4.80	4.86	2.5		4.0
	2	4.91	4.89	4.95	2.4	4.1	
Dieldrin	1	5.07	5.03	5.09	1.9		21.0
	2	5.04	5.02	5.08	1.5	23.5	
4,4'-DDT	1	5.47	5.45	5.51	2.8		14.3
	2	5.57	5.55	5.61	2.4	15.4	

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QA/QC Review of 8082 PCB Data
for Lancaster Laboratories, SDG No: TAP03

Soil Samples TCN-STC5, TCN-STC12, and POC-TSC2
Collected November 6, 2012

Prepared by: Donald Anné
June 17, 2013

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

Blanks: The analysis of the method blank reported target PCBs as not detected.

Surrogate Recovery: The surrogate recoveries were within control limits for soil samples TCN-STC5, TCN-STC12, and POC-TSC2.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for PCB-1016 and PCB-1260 were below the allowable maximums and the percent recoveries were within QC limits for soil MS/MSD sample TCN-STC5.

Laboratory Control Sample: The percent recoveries for PCB-1016 and PCB-1260 were within QC limits for soil sample LCS22312.

Initial Calibration: The average %RSDs for applicable PCBs were below the allowable maximum (20%) for H5088A on 11-01-12 for both columns.

Continuing Calibration: The %D for PCB-1260 was above the allowable maximum (15%) for the RTXCLPI column on 11-08-12 @15:27. Positive results for PCB-1260 should be considered estimated (J) in associated samples.

Analytical Sequence: The retention times for TCX and DCB were within control limits for soil samples TCN-STC5, TCN-STC12, and POC-TSC2 on both columns.

PCB Identification Summary: Checked surrogate were within GC quantitation limits. The %Ds for dual column quantitation of detected PCBs were below the allowable maximum (25%), as required.

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7E

CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument: H5088A Init. Calib Date(s): 10/31/12 11/01/12

GC Column (1) : RTXCLPI ID: .32 (mm) Date Analyzed: 11/08/12

Lab File ID: 5P7305.005.RAW Time Analyzed: 15:27

Lab Standard ID: AR163RF Initial Calibration: 1P7305

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/kg)	NOM AMOUNT (ug/kg)	%D
Tetrachloro-m-xylene	4.03	4.00	4.06	42.89	41.26	4
Decachlorobiphenyl	9.70	9.68	9.74	41.35	40.00	3
Aroclor-1016	4.38	4.35	4.41	228.80	200.00	14
	4.84	4.82	4.88			
	5.10	5.08	5.14			
	5.24	5.22	5.28			
	5.33	5.31	5.37			
	5.63	5.60	5.66			
Aroclor-1260	6.51	6.48	6.54	235.02	200.00	18
	6.75	6.72	6.78			
	6.99	6.97	7.03			
	7.07	7.05	7.11			
	7.28	7.26	7.32			
	7.62	7.60	7.66			

Compounds 14 Average of %D: 10

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QA/QC Review of 8151A Herbicide Data
for Lancaster Laboratories, SDG No: TAP03

Soil Samples TCN-STC5, TCN-STC12, and POC-TSC2
Collected November 6, 2012

Prepared by: Donald Anné
June 17, 2013

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

Blanks: The analysis of the method blank reported 2,4,5-TP as not detected.

Surrogate Recovery: The surrogate recoveries for DCAA were within control limits for soil samples TCN-STC5, TCN-STC12, and POC-TSC2.

Matrix Spike/Matrix Spike Duplicate: The relative percent difference for 2,4,5-TP was below the allowable maximums and the percent recoveries were within QC limits for soil MS/MSD sample TCN-STC5.

Laboratory Control Sample: The percent recovery for 2,4,5-TP was above QC limits for soil sample LCS22312. Positive results for 2,4,5-TP should be considered estimated (J) in associated soil samples.

Initial Calibration: The %RSDs for 2,4,5-TP were below the allowable maximum (20%) for H8456A on 11-01-12 on both columns, as required.

Continuing Calibration: The %Ds for 2,4,5-TP were below the allowable maximum (15%) on both columns, as required.

Analytical Sequence: The retention times for DCAA were within control limits for soil samples TCN-STC5, TCN-STC12, and POC-TSC2 on both columns.

Compound ID: Checked surrogates were within GC quantitation limits. The analyses of soil samples TCN-STC5, TCN-STC12, and POC-TSC2 reported 2,4,5-TP as not detected.

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Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: TAP03
Matrix: SOLID

Pesticide Residue Analysis
Fraction: Herbicides

LCS: LCS22312	Batch: **123120022A** (Sample number(s): 6850737-6850738, 6850741, 6850744, 6850747, 6850750, 6850753, 6850756, 6850759, 6850764-6850765, 6850770-6850771)							
Analyte	Spike Added ug/kg	LCS Conc ug/kg	LCSD Conc ug/kg	LCS %Rec	LCSD %Rec	%Rec Limits	%RPD	%RPD Limits
2,4,5-TP	8.33	10.67		128 *		60-111		

LCS: LCS18314	Batch: **123140018A** (Sample number(s): 6850765, 6850771)							
Analyte	Spike Added ug/kg	LCS Conc ug/kg	LCSD Conc ug/kg	LCS %Rec	LCSD %Rec	%Rec Limits	%RPD	%RPD Limits
2,4,5-TP	8.33	8.98		108		60-111		

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QA/QC Review of Metals Data for
Lancaster Laboratories, SDG No: TAP03

Soil Samples TCN-STC5, TCN-STC12, and POC-TSC2
Collected November 6, 2012

Prepared by: Donald Anné
June 17, 2013

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for TAL metals were within control limits (90-110% for all metals except Hg, 80-120% for Hg).

CRDL Standard for AA and ICP: The percent recoveries for target metals were within laboratory QC limits (50-150%).

Blanks: The analyses of initial and continuing calibration, and preparation blanks reported target metals as below the CRQLs, as required.

ICP Interference Check Sample: The percent recoveries for applicable metals were within control limits (80-120%).

Spike Sample Recovery: The percent recoveries (%Rs) for applicable metals were within control limits (75-125%) for soil MS/MSD sample TCN-STC5.

Laboratory Duplicates: The relative percent differences for target metals were below the allowable maximum (35%) for soil MS/MSD sample TCN-STC5 and soil duplicate sample TCN-STC5 DUP, as required.

Laboratory Control Sample: The percent recoveries for target metals were within control limits (80-120%) for the soil laboratory control sample.

ICP Serial Dilution: The %Ds for applicable metals were below the allowable maximum (10%) for soil serial dilution sample TCN-STC5, as required.

Instrument Detection Limits: The IDLs were at or below the MRLs, as required.

Percent Solids: The percent solids for samples were greater than 50%, as required.

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QA/QC Review of Hexavalent Chromium Data
for Lancaster Laboratories, SDG No: TAP03

Soil Samples TCN-STC5, TCN-STC12, and POC-TSC2
Collected November 6, 2012

Prepared by: Donald Anné
June 17, 2013

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

Blanks: The analysis of the method blank reported hexavalent chromium as not detected.

Spike Sample Recovery: The percent recovery for hexavalent chromium was within QC limits (75-125%) for soil spike sample TCN-STC5 MS.

Laboratory Duplicates: The analysis of soil duplicate TCN-STC5 DUP was acceptable for hexavalent chromium.

Laboratory Control Sample: The percent recoveries for hexavalent chromium were within QC limits (90-110%) for soil samples P313042 and LCS-1S.

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ALPHA GEOSCIENCE

Geology
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Water Supply

QA/QC Review of Total and Amenable Cyanide Data for Lancaster Laboratories, SDG No: TAP03

Soil Samples TCN-STC5, TCN-STC12, and POC-TSC2 Collected November 6, 2012

Prepared by: Donald Anné
June 17, 2013

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for total and amenable cyanide were within control limits (90-110%).

Blanks: The analyses of initial and continuing calibration, and method blanks reported total and amenable cyanide as not detected.

Spike Sample Recovery: The percent recovery for total cyanide was within QC limits (68-134%) for soil spike sample TCN-STC5 MS.

Laboratory Duplicates: The analysis of soil duplicate TCN-STC5 DUP was acceptable for total and amenable cyanide.

Laboratory Control Sample: The percent recovery for total cyanide was within control limits (90-110%) for soil sample P31302AQ.

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APPENDIX I: AOC 2 CAP SOIL UNLOADNG AREA ANALYTICAL LABORATORY REPORTS

(Documents located on enclosed CD located under Appendix E)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-43956-1
Client Project/Site: CHEVRON - CVX Hastings, NY

For:
ARCADIS U.S. Inc
Arcadis
295 Woodcliff Drive #2, 3rd Floor
Suite 301
Fairport, New York 14450

Attn: Geoff Greapenprog

Authorized for release by:
8/23/2013 3:47:42 PM
Rebecca Jones, Project Mgmt. Assistant
rebecca.jones@testamericainc.com

Designee for

John Schove, Project Manager I
john.schove@testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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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Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 6
Client Sample Results 14
Surrogate Summary 84
QC Sample Results 89
QC Association Summary 113
Lab Chronicle 128
Certification Summary 144
Method Summary 146
Sample Summary 147
Chain of Custody 148
Receipt Checklists 154

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F	MS or MSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F	MS or MSD exceeds the control limits
X	Surrogate is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F	MS or MSD exceeds the control limits

General Chemistry

Qualifier	Qualifier Description
F	MS or MSD exceeds the control limits

Glossary

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

Job ID: 480-43956-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-43956-1

Comments
No additional comments.

Receipt
The samples were received on 8/15/2013 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 9 coolers at receipt time were 1.7º C, 2.0º C, 2.1º C, 2.5º C, 2.6º C, 3.0º C, 3.0º C, 3.2º C and 3.4º C.

GC/MS VOA
Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 134263 were outside control limits for 2-Butanone and Trichloroethene. The associated laboratory control sample (LCS) recovery met acceptance criteria.HOHAOC2-A-1 MS (480-43956-1 MS), HOHAOC2-A-1 MSD (480-43956-1 MSD)

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 134548 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 8270C: The following sample contained one acid and/or one base surrogate outside acceptance limits: HOHAOC2-A-6 (480-43956-6). The laboratory's SOP allows one acid surrogate and/or one base surrogate to be outside acceptance limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

No other analytical or quality issues were noted.

GC Semi VOA
Method(s) 8082: The surrogate percent difference in the associated continuing calibration verifications (CCV) for Decachlorobiphenyl was decreased and slightly exceeded 15% on the ZB-35 column, indicating a low bias. (CCV 480-134799/2)

No other analytical or quality issues were noted.

Metals
Method(s) 6010B: The Method Blank for batch 480-134367 contained Total Zinc above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples HOHAOC2-B-10 (480-43956-23), HOHAOC2-B-11 (480-43956-24), HOHAOC2-B-12 (480-43956-25), HOHAOC2-B-8 (480-43956-21), HOHAOC2-B-9 (480-43956-22) was not performed.

Method(s) 6010B: The Method Blank for batch 480-134366 contained Total Zinc above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples HOHAOC2-A-1 (480-43956-1), HOHAOC2-A-10 (480-43956-10), HOHAOC2-A-11 (480-43956-11), HOHAOC2-A-12 (480-43956-12), HOHAOC2-A-13 (480-43956-13), HOHAOC2-A-2 (480-43956-2), HOHAOC2-A-3 (480-43956-3), HOHAOC2-A-4 (480-43956-4), HOHAOC2-A-5 (480-43956-5), HOHAOC2-A-6 (480-43956-6), HOHAOC2-A-7 (480-43956-7), HOHAOC2-A-8 (480-43956-8), HOHAOC2-A-9 (480-43956-9), HOHAOC2-B-1 (480-43956-14), HOHAOC2-B-2 (480-43956-15), HOHAOC2-B-3 (480-43956-16), HOHAOC2-B-4 (480-43956-17), HOHAOC2-B-5 (480-43956-18), HOHAOC2-B-6 (480-43956-19), HOHAOC2-B-7 (480-43956-20) was not performed.

Method(s) 6010B: The Serial Dilution (480-43956-1 SD) in batch 480-134366, exhibited a result outside the quality control limits for Total Zinc. However, the Post Digestion Spike was compliant so no corrective action was necessary

Method(s) 6010B: The Matrix Spike/ Matrix Spike Duplicate (HOHAOC2-A-1 MS (480-43956-1 MS), HOHAOC2-A-1 MSD (480-43956-1 MSD)) recoveries for Total Manganese in batch 480-134366 were outside control limits. The Matrix Spike was also outside the quality control limits for Total Zinc. Sample matrix is suspected. The associated Laboratory Control Sample (LCS) met acceptance criteria, therefore no corrective action was necessary.

Job ID: 480-43956-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

No other analytical or quality issues were noted.

General Chemistry

Method(s) 335.4, 9012A: The matrix spike (MS) recoveries for batch 134753 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria. (480-43956-24 MS)

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-A-1 — Lab Sample ID: 480-43956-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	11	J	170	2.8	ug/Kg	1	☼	8270C	Total/NA
delta-BHC	0.28	J B	1.7	0.22	ug/Kg	1	☼	8081A	Total/NA
Lindane	0.26	J	1.7	0.21	ug/Kg	1	☼	8081A	Total/NA
Barium	10.5		0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.12	J	0.22	0.031	mg/Kg	1	☼	6010B	Total/NA
Chromium	7.4		0.56	0.22	mg/Kg	1	☼	6010B	Total/NA
Copper	111		1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Lead	2.4		1.1	0.27	mg/Kg	1	☼	6010B	Total/NA
Manganese	113		0.22	0.036	mg/Kg	1	☼	6010B	Total/NA
Nickel	17.5		5.6	0.26	mg/Kg	1	☼	6010B	Total/NA
Zinc	30.6	B	2.2	0.17	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	7.4		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-A-2 — Lab Sample ID: 480-43956-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.59	J	1.9	0.38	mg/Kg	1	☼	6010B	Total/NA
Barium	9.8		0.48	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.12	J	0.19	0.027	mg/Kg	1	☼	6010B	Total/NA
Chromium	4.5		0.48	0.19	mg/Kg	1	☼	6010B	Total/NA
Copper	125		0.95	0.20	mg/Kg	1	☼	6010B	Total/NA
Lead	2.4		0.95	0.23	mg/Kg	1	☼	6010B	Total/NA
Manganese	117		0.19	0.030	mg/Kg	1	☼	6010B	Total/NA
Nickel	18.0		4.8	0.22	mg/Kg	1	☼	6010B	Total/NA
Zinc	34.3	B	1.9	0.15	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	4.5		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-A-3 — Lab Sample ID: 480-43956-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.58	J	2.2	0.43	mg/Kg	1	☼	6010B	Total/NA
Barium	10.5		0.54	0.12	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.11	J	0.22	0.030	mg/Kg	1	☼	6010B	Total/NA
Chromium	4.4		0.54	0.22	mg/Kg	1	☼	6010B	Total/NA
Copper	117		1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Lead	2.1		1.1	0.26	mg/Kg	1	☼	6010B	Total/NA
Manganese	122		0.22	0.035	mg/Kg	1	☼	6010B	Total/NA
Nickel	17.5		5.4	0.25	mg/Kg	1	☼	6010B	Total/NA
Zinc	33.5	B	2.2	0.17	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	4.4		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-A-4 — Lab Sample ID: 480-43956-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
delta-BHC	0.28	J B	1.7	0.23	ug/Kg	1	☼	8081A	Total/NA
Arsenic	0.52	J	2.2	0.44	mg/Kg	1	☼	6010B	Total/NA
Barium	11.7		0.55	0.12	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.13	J	0.22	0.031	mg/Kg	1	☼	6010B	Total/NA
Chromium	5.5		0.55	0.22	mg/Kg	1	☼	6010B	Total/NA
Copper	113		1.1	0.23	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOHAOC2-A-4 (Continued) — Lab Sample ID: 480-43956-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	2.2		1.1	0.26	mg/Kg	1	☼	6010B	Total/NA
Manganese	128		0.22	0.035	mg/Kg	1	☼	6010B	Total/NA
Nickel	18.4		5.5	0.25	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.60	J	4.4	0.44	mg/Kg	1	☼	6010B	Total/NA
Zinc	36.6	B	2.2	0.17	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	5.5		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-A-5 — Lab Sample ID: 480-43956-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.64	J	2.1	0.43	mg/Kg	1	☼	6010B	Total/NA
Barium	9.4		0.54	0.12	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.10	J	0.21	0.030	mg/Kg	1	☼	6010B	Total/NA
Chromium	3.4		0.54	0.21	mg/Kg	1	☼	6010B	Total/NA
Copper	112		1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Lead	1.9		1.1	0.26	mg/Kg	1	☼	6010B	Total/NA
Manganese	118		0.21	0.034	mg/Kg	1	☼	6010B	Total/NA
Nickel	15.9		5.4	0.25	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.95	J	4.3	0.43	mg/Kg	1	☼	6010B	Total/NA
Zinc	33.2	B	2.1	0.16	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	3.4		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-A-6 — Lab Sample ID: 480-43956-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.55	J	2.1	0.43	mg/Kg	1	☼	6010B	Total/NA
Barium	10		0.53	0.12	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.12	J	0.21	0.030	mg/Kg	1	☼	6010B	Total/NA
Chromium	3.5		0.53	0.21	mg/Kg	1	☼	6010B	Total/NA
Copper	113		1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Lead	3.1		1.1	0.26	mg/Kg	1	☼	6010B	Total/NA
Manganese	125		0.21	0.034	mg/Kg	1	☼	6010B	Total/NA
Nickel	16.5		5.3	0.25	mg/Kg	1	☼	6010B	Total/NA
Zinc	37.2	B	2.1	0.16	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	3.5		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-A-7 — Lab Sample ID: 480-43956-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo(a)pyrene	4.9	J	170	4.1	ug/Kg	1	☼	8270C	Total/NA
Benzo(b)fluoranthene	9.4	J	170	3.3	ug/Kg	1	☼	8270C	Total/NA
Benzo(k)fluoranthene	9.1	J	170	1.9	ug/Kg	1	☼	8270C	Total/NA
delta-BHC	0.30	J B	1.7	0.22	ug/Kg	1	☼	8081A	Total/NA
Arsenic	0.42	J	1.8	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	9.9		0.46	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.12	J	0.18	0.026	mg/Kg	1	☼	6010B	Total/NA
Chromium	4.9		0.46	0.18	mg/Kg	1	☼	6010B	Total/NA
Copper	101		0.92	0.19	mg/Kg	1	☼	6010B	Total/NA
Lead	5.7		0.92	0.22	mg/Kg	1	☼	6010B	Total/NA
Manganese	128		0.18	0.029	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOHAOC2-A-7 (Continued) — Lab Sample ID: 480-43956-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	16.6		4.6	0.21	mg/Kg	1	☼	6010B	Total/NA
Zinc	31.5	B	1.8	0.14	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	4.9		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-A-8 — Lab Sample ID: 480-43956-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDE	0.25	J	1.7	0.25	ug/Kg	1	☼	8081A	Total/NA
delta-BHC	0.31	J B	1.7	0.22	ug/Kg	1	☼	8081A	Total/NA
Arsenic	0.55	J	2.2	0.44	mg/Kg	1	☼	6010B	Total/NA
Barium	11.9		0.55	0.12	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.12	J	0.22	0.031	mg/Kg	1	☼	6010B	Total/NA
Chromium	6.7		0.55	0.22	mg/Kg	1	☼	6010B	Total/NA
Copper	125		1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Lead	5.3		1.1	0.26	mg/Kg	1	☼	6010B	Total/NA
Manganese	145		0.22	0.035	mg/Kg	1	☼	6010B	Total/NA
Nickel	17.6		5.5	0.25	mg/Kg	1	☼	6010B	Total/NA
Zinc	34.2	B	2.2	0.17	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	6.7		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-A-9 — Lab Sample ID: 480-43956-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
delta-BHC	0.31	J B	1.7	0.23	ug/Kg	1	☼	8081A	Total/NA
Barium	12.0		0.54	0.12	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.12	J	0.22	0.030	mg/Kg	1	☼	6010B	Total/NA
Chromium	6.7		0.54	0.22	mg/Kg	1	☼	6010B	Total/NA
Copper	107		1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Lead	1.9		1.1	0.26	mg/Kg	1	☼	6010B	Total/NA
Manganese	133		0.22	0.035	mg/Kg	1	☼	6010B	Total/NA
Nickel	17.4		5.4	0.25	mg/Kg	1	☼	6010B	Total/NA
Zinc	32.4	B	2.2	0.17	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	6.7		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-A-10 — Lab Sample ID: 480-43956-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	11.6		0.45	0.099	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.11	J	0.18	0.025	mg/Kg	1	☼	6010B	Total/NA
Chromium	6.7		0.45	0.18	mg/Kg	1	☼	6010B	Total/NA
Copper	92.5		0.90	0.19	mg/Kg	1	☼	6010B	Total/NA
Lead	2.6		0.90	0.22	mg/Kg	1	☼	6010B	Total/NA
Manganese	132		0.18	0.029	mg/Kg	1	☼	6010B	Total/NA
Nickel	16.8		4.5	0.21	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.47	J	3.6	0.36	mg/Kg	1	☼	6010B	Total/NA
Zinc	31.0	B	1.8	0.14	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	6.7		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-A-11 — Lab Sample ID: 480-43956-11

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOHAOC2-A-11 (Continued) — Lab Sample ID: 480-43956-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
delta-BHC	0.27	J B	1.7	0.22	ug/Kg	1	☼	8081A	Total/NA
Arsenic	0.73	J	2.0	0.40	mg/Kg	1	☼	6010B	Total/NA
Barium	9.4		0.50	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.10	J	0.20	0.028	mg/Kg	1	☼	6010B	Total/NA
Chromium	5.0		0.50	0.20	mg/Kg	1	☼	6010B	Total/NA
Copper	121		1.0	0.21	mg/Kg	1	☼	6010B	Total/NA
Lead	3.4		1.0	0.24	mg/Kg	1	☼	6010B	Total/NA
Manganese	132		0.20	0.032	mg/Kg	1	☼	6010B	Total/NA
Nickel	17.4		5.0	0.23	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.60	J	4.0	0.40	mg/Kg	1	☼	6010B	Total/NA
Zinc	34.9	B	2.0	0.15	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	5.0		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-A-12 — Lab Sample ID: 480-43956-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	12.6		0.55	0.12	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.10	J	0.22	0.031	mg/Kg	1	☼	6010B	Total/NA
Chromium	4.9		0.55	0.22	mg/Kg	1	☼	6010B	Total/NA
Copper	127		1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Lead	2.2		1.1	0.26	mg/Kg	1	☼	6010B	Total/NA
Manganese	141		0.22	0.035	mg/Kg	1	☼	6010B	Total/NA
Nickel	17.3		5.5	0.25	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.84	J	4.4	0.44	mg/Kg	1	☼	6010B	Total/NA
Zinc	36.8	B	2.2	0.17	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	4.9		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-A-13 — Lab Sample ID: 480-43956-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	12.6		0.47	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.10	J	0.19	0.027	mg/Kg	1	☼	6010B	Total/NA
Chromium	6.1		0.47	0.19	mg/Kg	1	☼	6010B	Total/NA
Copper	200		0.95	0.20	mg/Kg	1	☼	6010B	Total/NA
Lead	3.8		0.95	0.23	mg/Kg	1	☼	6010B	Total/NA
Manganese	145		0.19	0.030	mg/Kg	1	☼	6010B	Total/NA
Nickel	18.9		4.7	0.22	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.47	J	3.8	0.38	mg/Kg	1	☼	6010B	Total/NA
Zinc	37.9	B	1.9	0.14	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	6.1		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-B-1 — Lab Sample ID: 480-43956-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	17.1		0.54	0.12	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.13	J	0.22	0.030	mg/Kg	1	☼	6010B	Total/NA
Chromium	8.8		0.54	0.22	mg/Kg	1	☼	6010B	Total/NA
Copper	119		1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Lead	2.7		1.1	0.26	mg/Kg	1	☼	6010B	Total/NA
Manganese	126		0.22	0.034	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOHAOC2-B-1 (Continued) — Lab Sample ID: 480-43956-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	21.2		5.4	0.25	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.59	J	4.3	0.43	mg/Kg	1	☼	6010B	Total/NA
Zinc	34.8	B	2.2	0.16	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	8.8		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-B-2 — Lab Sample ID: 480-43956-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	14.8		0.47	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.11	J	0.19	0.026	mg/Kg	1	☼	6010B	Total/NA
Chromium	7.2		0.47	0.19	mg/Kg	1	☼	6010B	Total/NA
Copper	107		0.94	0.20	mg/Kg	1	☼	6010B	Total/NA
Lead	2.4		0.94	0.22	mg/Kg	1	☼	6010B	Total/NA
Manganese	112		0.19	0.030	mg/Kg	1	☼	6010B	Total/NA
Nickel	18.9		4.7	0.22	mg/Kg	1	☼	6010B	Total/NA
Zinc	38.6	B	1.9	0.14	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	7.2		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-B-3 — Lab Sample ID: 480-43956-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.4	J	2.1	0.43	mg/Kg	1	☼	6010B	Total/NA
Barium	14.2		0.54	0.12	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.12	J	0.21	0.030	mg/Kg	1	☼	6010B	Total/NA
Chromium	3.5		0.54	0.21	mg/Kg	1	☼	6010B	Total/NA
Copper	137		1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Lead	2.2		1.1	0.26	mg/Kg	1	☼	6010B	Total/NA
Manganese	119		0.21	0.034	mg/Kg	1	☼	6010B	Total/NA
Nickel	17.6		5.4	0.25	mg/Kg	1	☼	6010B	Total/NA
Zinc	37.1	B	2.1	0.16	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	3.5		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-B-4 — Lab Sample ID: 480-43956-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	1.2	J	180	1.1	ug/Kg	1	☼	8270C	Total/NA
Arsenic	0.47	J	2.0	0.39	mg/Kg	1	☼	6010B	Total/NA
Barium	11.6		0.49	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.12	J	0.20	0.027	mg/Kg	1	☼	6010B	Total/NA
Chromium	5.6		0.49	0.20	mg/Kg	1	☼	6010B	Total/NA
Copper	140		0.98	0.21	mg/Kg	1	☼	6010B	Total/NA
Lead	2.5		0.98	0.24	mg/Kg	1	☼	6010B	Total/NA
Manganese	128		0.20	0.031	mg/Kg	1	☼	6010B	Total/NA
Nickel	18.9		4.9	0.23	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.53	J	3.9	0.39	mg/Kg	1	☼	6010B	Total/NA
Zinc	34.9	B	2.0	0.15	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	5.6		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-B-5 — Lab Sample ID: 480-43956-18

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOHAOC2-B-5 (Continued) — Lab Sample ID: 480-43956-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	2.2	J	170	1.1	ug/Kg	1	☼	8270C	Total/NA
Arsenic	0.51	J	2.0	0.40	mg/Kg	1	☼	6010B	Total/NA
Barium	11.5		0.50	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.11	J	0.20	0.028	mg/Kg	1	☼	6010B	Total/NA
Chromium	5.1		0.50	0.20	mg/Kg	1	☼	6010B	Total/NA
Copper	116		0.99	0.21	mg/Kg	1	☼	6010B	Total/NA
Lead	2.7		0.99	0.24	mg/Kg	1	☼	6010B	Total/NA
Manganese	136		0.20	0.032	mg/Kg	1	☼	6010B	Total/NA
Nickel	16.2		5.0	0.23	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.48	J	4.0	0.40	mg/Kg	1	☼	6010B	Total/NA
Zinc	34.2	B	2.0	0.15	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	5.1		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-B-6 — Lab Sample ID: 480-43956-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.49	J	2.0	0.40	mg/Kg	1	☼	6010B	Total/NA
Barium	13.9		0.50	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.10	J	0.20	0.028	mg/Kg	1	☼	6010B	Total/NA
Chromium	7.8		0.50	0.20	mg/Kg	1	☼	6010B	Total/NA
Copper	113		1.0	0.21	mg/Kg	1	☼	6010B	Total/NA
Lead	2.2		1.0	0.24	mg/Kg	1	☼	6010B	Total/NA
Manganese	110		0.20	0.032	mg/Kg	1	☼	6010B	Total/NA
Nickel	20.2		5.0	0.23	mg/Kg	1	☼	6010B	Total/NA
Zinc	31.3	B	2.0	0.15	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	7.8		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-B-7 — Lab Sample ID: 480-43956-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.59	J	2.0	0.40	mg/Kg	1	☼	6010B	Total/NA
Barium	14.9		0.50	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.12	J	0.20	0.028	mg/Kg	1	☼	6010B	Total/NA
Chromium	7.7		0.50	0.20	mg/Kg	1	☼	6010B	Total/NA
Copper	119		1.0	0.21	mg/Kg	1	☼	6010B	Total/NA
Lead	2.6		1.0	0.24	mg/Kg	1	☼	6010B	Total/NA
Manganese	118		0.20	0.032	mg/Kg	1	☼	6010B	Total/NA
Nickel	19.6		5.0	0.23	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.47	J	4.0	0.40	mg/Kg	1	☼	6010B	Total/NA
Zinc	34.0	B	2.0	0.15	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	7.7		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-B-8 — Lab Sample ID: 480-43956-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.2	J	2.0	0.40	mg/Kg	1	☼	6010B	Total/NA
Barium	8.9		0.50	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.23		0.20	0.028	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.052	J	0.20	0.030	mg/Kg	1	☼	6010B	Total/NA
Chromium	3.6		0.50	0.20	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOHAOC2-B-8 (Continued) — Lab Sample ID: 480-43956-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	146		1.0	0.21	mg/Kg	1	☼	6010B	Total/NA
Lead	2.0		1.0	0.24	mg/Kg	1	☼	6010B	Total/NA
Manganese	117		0.20	0.032	mg/Kg	1	☼	6010B	Total/NA
Nickel	16.4		5.0	0.23	mg/Kg	1	☼	6010B	Total/NA
Zinc	31.5	B	2.0	0.15	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	3.6		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-B-9 — Lab Sample ID: 480-43956-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.0	J	2.0	0.40	mg/Kg	1	☼	6010B	Total/NA
Barium	16.4		0.51	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.22		0.20	0.028	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.072	J	0.20	0.030	mg/Kg	1	☼	6010B	Total/NA
Chromium	10.5		0.51	0.20	mg/Kg	1	☼	6010B	Total/NA
Copper	119		1.0	0.21	mg/Kg	1	☼	6010B	Total/NA
Lead	58.7		1.0	0.24	mg/Kg	1	☼	6010B	Total/NA
Manganese	117		0.20	0.032	mg/Kg	1	☼	6010B	Total/NA
Nickel	21.5		5.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Zinc	33.4	B	2.0	0.15	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	10.5		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-B-10 — Lab Sample ID: 480-43956-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.4	J	2.1	0.42	mg/Kg	1	☼	6010B	Total/NA
Barium	8.7		0.53	0.12	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.22		0.21	0.030	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.074	J	0.21	0.032	mg/Kg	1	☼	6010B	Total/NA
Chromium	3.5		0.53	0.21	mg/Kg	1	☼	6010B	Total/NA
Copper	136		1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Lead	3.4		1.1	0.25	mg/Kg	1	☼	6010B	Total/NA
Manganese	131		0.21	0.034	mg/Kg	1	☼	6010B	Total/NA
Nickel	15.7		5.3	0.24	mg/Kg	1	☼	6010B	Total/NA
Zinc	31.0	B	2.1	0.16	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	3.5		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-B-11 — Lab Sample ID: 480-43956-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDT	1.3	J	1.7	0.17	ug/Kg	1	☼	8081A	Total/NA
Arsenic	1.0	J	1.8	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	11.2		0.46	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.24		0.18	0.026	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.062	J	0.18	0.028	mg/Kg	1	☼	6010B	Total/NA
Chromium	6.9		0.46	0.18	mg/Kg	1	☼	6010B	Total/NA
Copper	109		0.92	0.19	mg/Kg	1	☼	6010B	Total/NA
Lead	2.5		0.92	0.22	mg/Kg	1	☼	6010B	Total/NA
Manganese	131		0.18	0.029	mg/Kg	1	☼	6010B	Total/NA
Nickel	17.5		4.6	0.21	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOHAOC2-B-11 (Continued)

Lab Sample ID: 480-43956-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	0.41	J	3.7	0.37	mg/Kg	1	☼	6010B	Total/NA
Zinc	31.9	B	1.8	0.14	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	6.9		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-B-12

Lab Sample ID: 480-43956-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.3	J	2.2	0.43	mg/Kg	1	☼	6010B	Total/NA
Barium	11.8		0.54	0.12	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.25		0.22	0.030	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.068	J	0.22	0.033	mg/Kg	1	☼	6010B	Total/NA
Chromium	7.8		0.54	0.22	mg/Kg	1	☼	6010B	Total/NA
Copper	122		1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Lead	2.0		1.1	0.26	mg/Kg	1	☼	6010B	Total/NA
Manganese	121		0.22	0.035	mg/Kg	1	☼	6010B	Total/NA
Nickel	17.5		5.4	0.25	mg/Kg	1	☼	6010B	Total/NA
Zinc	32.1	B	2.2	0.17	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	7.8		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOHAOC2-A-1
Date Collected: 08/13/13 13:30
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-1
Matrix: Solid
Percent Solids: 98.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.3	0.39	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
1,1-Dichloroethane	ND		5.3	0.65	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
1,1-Dichloroethene	ND		5.3	0.65	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
1,2-Dichlorobenzene	ND		5.3	0.42	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
1,2-Dichloroethane	ND		5.3	0.27	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
1,2-Dichloroethene, cis-	ND		5.3	0.68	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
1,2-Dichloroethene, trans-	ND		5.3	0.55	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
1,3-Dichlorobenzene	ND		5.3	0.27	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
1,4-Dichlorobenzene	ND		5.3	0.74	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
1,4-Dioxane	ND		210	26	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
Acetone	ND		27	4.5	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
Benzene	ND		5.3	0.26	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
Butylbenzene	ND		5.3	0.46	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
Carbon tetrachloride	ND		5.3	0.51	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
Chlorobenzene	ND		5.3	0.70	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
Chloroform	ND		5.3	0.33	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
Ethylbenzene	ND		5.3	0.37	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
Methyl Ethyl Ketone (2-Butanone)	ND		27	1.9	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
Methyl tert-butyl ether	ND		5.3	0.52	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
Methylene Chloride	ND		5.3	2.4	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
Propylbenzene, n-	ND		5.3	0.43	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
sec-Butylbenzene	ND		5.3	0.46	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
tert-Butylbenzene	ND		5.3	0.55	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
Tetrachloroethene	ND		5.3	0.71	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
Toluene	ND		5.3	0.40	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
Trichloroethene	ND		5.3	1.2	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
Trimethylbenzene, 1,2,4-	ND		5.3	1.0	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
Trimethylbenzene, 1,3,5-	ND		5.3	0.34	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
Vinyl chloride	ND		5.3	0.65	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1
Xylene (mixed)	ND		11	0.89	ug/Kg	☼	08/16/13 01:11	08/16/13 02:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*64 - 126*	*08/16/13 01:11*	*08/16/13 02:58*	*1*
4-Bromofluorobenzene (Surr)	*107*		*72 - 126*	*08/16/13 01:11*	*08/16/13 02:58*	*1*
Toluene-d8 (Surr)	*108*		*71 - 125*	*08/16/13 01:11*	*08/16/13 02:58*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/19/13 19:18	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	08/17/13 07:48	08/19/13 19:18	1
Anthracene	ND		170	4.4	ug/Kg	☼	08/17/13 07:48	08/19/13 19:18	1
Benzo(a)anthracene	ND		170	3.0	ug/Kg	☼	08/17/13 07:48	08/19/13 19:18	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	08/17/13 07:48	08/19/13 19:18	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	08/17/13 07:48	08/19/13 19:18	1
Benzo(g,h,i)perylene	ND		170	2.1	ug/Kg	☼	08/17/13 07:48	08/19/13 19:18	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	08/17/13 07:48	08/19/13 19:18	1
Chrysene	ND		170	1.7	ug/Kg	☼	08/17/13 07:48	08/19/13 19:18	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/19/13 19:18	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	08/17/13 07:48	08/19/13 19:18	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	08/17/13 07:48	08/19/13 19:18	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-A-1
Date Collected: 08/13/13 13:30
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-1
Matrix: Solid
Percent Solids: 98.0

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	ND		170	3.9	ug/Kg	☼	08/17/13 07:48	08/19/13 19:18	1
Hexachlorobenzene	ND		170	8.5	ug/Kg	☼	08/17/13 07:48	08/19/13 19:18	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg	☼	08/17/13 07:48	08/19/13 19:18	1
m & p - Cresol	ND		330	9.5	ug/Kg	☼	08/17/13 07:48	08/19/13 19:18	1
Naphthalene	**11**	**J**	170	2.8	ug/Kg	☼	08/17/13 07:48	08/19/13 19:18	1
o-Cresol	ND		170	5.3	ug/Kg	☼	08/17/13 07:48	08/19/13 19:18	1
Pentachlorophenol	ND		330	59	ug/Kg	☼	08/17/13 07:48	08/19/13 19:18	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	08/17/13 07:48	08/19/13 19:18	1
Phenol	ND		170	18	ug/Kg	☼	08/17/13 07:48	08/19/13 19:18	1
Pyrene	ND		170	1.1	ug/Kg	☼	08/17/13 07:48	08/19/13 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*91*		*39 - 146*	*08/17/13 07:48*	*08/19/13 19:18*	*1*
2-Fluorobiphenyl	*90*		*37 - 120*	*08/17/13 07:48*	*08/19/13 19:18*	*1*
2-Fluorophenol	*83*		*18 - 120*	*08/17/13 07:48*	*08/19/13 19:18*	*1*
Nitrobenzene-d5	*89*		*34 - 132*	*08/17/13 07:48*	*08/19/13 19:18*	*1*
Phenol-d5	*87*		*11 - 120*	*08/17/13 07:48*	*08/19/13 19:18*	*1*
p-Terphenyl-d14	*66*		*65 - 153*	*08/17/13 07:48*	*08/19/13 19:18*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	08/17/13 07:39	08/19/13 10:43	1
4,4'-DDE	ND		1.7	0.25	ug/Kg	☼	08/17/13 07:39	08/19/13 10:43	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	08/17/13 07:39	08/19/13 10:43	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	08/17/13 07:39	08/19/13 10:43	1
alpha-BHC	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:39	08/19/13 10:43	1
alpha-Chlordane	ND		1.7	0.84	ug/Kg	☼	08/17/13 07:39	08/19/13 10:43	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:39	08/19/13 10:43	1
delta-BHC	**0.28**	**J B**	1.7	0.22	ug/Kg	☼	08/17/13 07:39	08/19/13 10:43	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:39	08/19/13 10:43	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:39	08/19/13 10:43	1
Endosulfan II	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:39	08/19/13 10:43	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	08/17/13 07:39	08/19/13 10:43	1
Endrin	ND		1.7	0.23	ug/Kg	☼	08/17/13 07:39	08/19/13 10:43	1
Heptachlor	ND		1.7	0.27	ug/Kg	☼	08/17/13 07:39	08/19/13 10:43	1
Lindane	**0.26**	**J**	1.7	0.21	ug/Kg	☼	08/17/13 07:39	08/19/13 10:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*87*		*32 - 136*	*08/17/13 07:39*	*08/19/13 10:43*	*1*
Tetrachloro-m-xylene	*81*		*30 - 124*	*08/17/13 07:39*	*08/19/13 10:43*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.22	0.043	mg/Kg	☼	08/19/13 14:38	08/20/13 05:21	1
PCB-1221	ND		0.22	0.043	mg/Kg	☼	08/19/13 14:38	08/20/13 05:21	1
PCB-1232	ND		0.22	0.043	mg/Kg	☼	08/19/13 14:38	08/20/13 05:21	1
PCB-1242	ND		0.22	0.043	mg/Kg	☼	08/19/13 14:38	08/20/13 05:21	1
PCB-1248	ND		0.22	0.043	mg/Kg	☼	08/19/13 14:38	08/20/13 05:21	1
PCB-1254	ND		0.22	0.10	mg/Kg	☼	08/19/13 14:38	08/20/13 05:21	1
PCB-1260	ND		0.22	0.10	mg/Kg	☼	08/19/13 14:38	08/20/13 05:21	1

Client Sample ID: HOHAOC2-A-1

Lab Sample ID: 480-43956-1

Date Collected: 08/13/13 13:30
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 98.0

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*93*		*47 - 176*	*08/19/13 14:38*	*08/20/13 05:21*	*1*
Tetrachloro-m-xylene	*102*		*46 - 175*	*08/19/13 14:38*	*08/20/13 05:21*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.0	ug/Kg	☼	08/20/13 07:41	08/22/13 04:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*102*		*39 - 120*	*08/20/13 07:41*	*08/22/13 04:39*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.2	0.45	mg/Kg	☼	08/16/13 13:30	08/20/13 21:32	1
Barium	**10.5**		0.56	0.12	mg/Kg	☼	08/16/13 13:30	08/20/13 21:32	1
Beryllium	**0.12**	**J**	0.22	0.031	mg/Kg	☼	08/16/13 13:30	08/20/13 21:32	1
Cadmium	ND		0.22	0.033	mg/Kg	☼	08/16/13 13:30	08/20/13 21:32	1
Chromium	**7.4**		0.56	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 21:32	1
Copper	**111**		1.1	0.23	mg/Kg	☼	08/16/13 13:30	08/20/13 21:32	1
Lead	**2.4**		1.1	0.27	mg/Kg	☼	08/16/13 13:30	08/20/13 21:32	1
Manganese	**113**		0.22	0.036	mg/Kg	☼	08/16/13 13:30	08/20/13 21:32	1
Nickel	**17.5**		5.6	0.26	mg/Kg	☼	08/16/13 13:30	08/20/13 21:32	1
Selenium	ND		4.5	0.45	mg/Kg	☼	08/16/13 13:30	08/20/13 21:32	1
Silver	ND		0.56	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 21:32	1
Zinc	**30.6**	**B**	2.2	0.17	mg/Kg	☼	08/16/13 13:30	08/20/13 21:32	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0079	mg/Kg	☼	08/16/13 10:05	08/16/13 12:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.82	0.28	mg/Kg	☼	08/19/13 07:10	08/20/13 14:51	1
Cyanide, Total	ND		0.96	0.47	mg/Kg	☼	08/16/13 06:40	08/16/13 12:32	1
Cr (III)	**7.4**		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-A-2

Lab Sample ID: 480-43956-2

Date Collected: 08/13/13 15:00
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.3	0.31	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
1,1-Dichloroethane	ND		4.3	0.52	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
1,1-Dichloroethene	ND		4.3	0.52	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
1,2-Dichlorobenzene	ND		4.3	0.33	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
1,2-Dichloroethane	ND		4.3	0.21	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
1,2-Dichloroethene, cis-	ND		4.3	0.55	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
1,2-Dichloroethene, trans-	ND		4.3	0.44	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
1,3-Dichlorobenzene	ND		4.3	0.22	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
1,4-Dichlorobenzene	ND		4.3	0.60	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
1,4-Dioxane	ND		170	21	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-A-2
Date Collected: 08/13/13 15:00
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-2
Matrix: Solid
Percent Solids: 97.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		21	3.6	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
Benzene	ND		4.3	0.21	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
Butylbenzene	ND		4.3	0.37	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
Carbon tetrachloride	ND		4.3	0.41	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
Chlorobenzene	ND		4.3	0.56	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
Chloroform	ND		4.3	0.26	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
Ethylbenzene	ND		4.3	0.29	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.6	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
Methyl tert-butyl ether	ND		4.3	0.42	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
Methylene Chloride	ND		4.3	2.0	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
Propylbenzene, n-	ND		4.3	0.34	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
sec-Butylbenzene	ND		4.3	0.37	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
tert-Butylbenzene	ND		4.3	0.44	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
Tetrachloroethene	ND		4.3	0.57	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
Toluene	ND		4.3	0.32	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
Trichloroethene	ND		4.3	0.94	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
Trimethylbenzene, 1,2,4-	ND		4.3	0.82	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
Trimethylbenzene, 1,3,5-	ND		4.3	0.27	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
Vinyl chloride	ND		4.3	0.52	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1
Xylene (mixed)	ND		8.5	0.72	ug/Kg	☼	08/16/13 01:11	08/16/13 03:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*64 - 126*	*08/16/13 01:11*	*08/16/13 03:24*	*1*
4-Bromofluorobenzene (Surr)	*92*		*72 - 126*	*08/16/13 01:11*	*08/16/13 03:24*	*1*
Toluene-d8 (Surr)	*93*		*71 - 125*	*08/16/13 01:11*	*08/16/13 03:24*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/19/13 19:42	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	08/17/13 07:48	08/19/13 19:42	1
Anthracene	ND		170	4.4	ug/Kg	☼	08/17/13 07:48	08/19/13 19:42	1
Benzo(a)anthracene	ND		170	3.0	ug/Kg	☼	08/17/13 07:48	08/19/13 19:42	1
Benzo(a)pyrene	ND		170	4.2	ug/Kg	☼	08/17/13 07:48	08/19/13 19:42	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	08/17/13 07:48	08/19/13 19:42	1
Benzo(g,h,i)perylene	ND		170	2.1	ug/Kg	☼	08/17/13 07:48	08/19/13 19:42	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	08/17/13 07:48	08/19/13 19:42	1
Chrysene	ND		170	1.7	ug/Kg	☼	08/17/13 07:48	08/19/13 19:42	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/19/13 19:42	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	08/17/13 07:48	08/19/13 19:42	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	08/17/13 07:48	08/19/13 19:42	1
Fluorene	ND		170	4.0	ug/Kg	☼	08/17/13 07:48	08/19/13 19:42	1
Hexachlorobenzene	ND		170	8.6	ug/Kg	☼	08/17/13 07:48	08/19/13 19:42	1
Indeno(1,2,3-cd)pyrene	ND		170	4.8	ug/Kg	☼	08/17/13 07:48	08/19/13 19:42	1
m & p - Cresol	ND		340	9.6	ug/Kg	☼	08/17/13 07:48	08/19/13 19:42	1
Naphthalene	ND		170	2.9	ug/Kg	☼	08/17/13 07:48	08/19/13 19:42	1
o-Cresol	ND		170	5.3	ug/Kg	☼	08/17/13 07:48	08/19/13 19:42	1
Pentachlorophenol	ND		340	59	ug/Kg	☼	08/17/13 07:48	08/19/13 19:42	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	08/17/13 07:48	08/19/13 19:42	1
Phenol	ND		170	18	ug/Kg	☼	08/17/13 07:48	08/19/13 19:42	1
Pyrene	ND		170	1.1	ug/Kg	☼	08/17/13 07:48	08/19/13 19:42	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-A-2
Date Collected: 08/13/13 15:00
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-2
Matrix: Solid
Percent Solids: 97.2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	90		39 - 146	08/17/13 07:48	08/19/13 19:42	1
2-Fluorobiphenyl	89		37 - 120	08/17/13 07:48	08/19/13 19:42	1
2-Fluorophenol	82		18 - 120	08/17/13 07:48	08/19/13 19:42	1
Nitrobenzene-d5	89		34 - 132	08/17/13 07:48	08/19/13 19:42	1
Phenol-d5	87		11 - 120	08/17/13 07:48	08/19/13 19:42	1
p-Terphenyl-d14	67		65 - 153	08/17/13 07:48	08/19/13 19:42	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	08/17/13 07:39	08/19/13 11:01	1
4,4'-DDE	ND		1.7	0.26	ug/Kg	☼	08/17/13 07:39	08/19/13 11:01	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	08/17/13 07:39	08/19/13 11:01	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	08/17/13 07:39	08/19/13 11:01	1
alpha-BHC	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:39	08/19/13 11:01	1
alpha-Chlordane	ND		1.7	0.85	ug/Kg	☼	08/17/13 07:39	08/19/13 11:01	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:39	08/19/13 11:01	1
delta-BHC	ND		1.7	0.23	ug/Kg	☼	08/17/13 07:39	08/19/13 11:01	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:39	08/19/13 11:01	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:39	08/19/13 11:01	1
Endosulfan II	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:39	08/19/13 11:01	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	08/17/13 07:39	08/19/13 11:01	1
Endrin	ND		1.7	0.24	ug/Kg	☼	08/17/13 07:39	08/19/13 11:01	1
Heptachlor	ND		1.7	0.27	ug/Kg	☼	08/17/13 07:39	08/19/13 11:01	1
Lindane	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:39	08/19/13 11:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	86		32 - 136	08/17/13 07:39	08/19/13 11:01	1
Tetrachloro-m-xylene	82		30 - 124	08/17/13 07:39	08/19/13 11:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.21	0.040	mg/Kg	☼	08/19/13 14:38	08/20/13 05:35	1
PCB-1221	ND		0.21	0.040	mg/Kg	☼	08/19/13 14:38	08/20/13 05:35	1
PCB-1232	ND		0.21	0.040	mg/Kg	☼	08/19/13 14:38	08/20/13 05:35	1
PCB-1242	ND		0.21	0.040	mg/Kg	☼	08/19/13 14:38	08/20/13 05:35	1
PCB-1248	ND		0.21	0.040	mg/Kg	☼	08/19/13 14:38	08/20/13 05:35	1
PCB-1254	ND		0.21	0.096	mg/Kg	☼	08/19/13 14:38	08/20/13 05:35	1
PCB-1260	ND		0.21	0.096	mg/Kg	☼	08/19/13 14:38	08/20/13 05:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	94		47 - 176	08/19/13 14:38	08/20/13 05:35	1
Tetrachloro-m-xylene	100		46 - 175	08/19/13 14:38	08/20/13 05:35	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.1	ug/Kg	☼	08/20/13 07:41	08/22/13 05:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	98		39 - 120	08/20/13 07:41	08/22/13 05:09	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-A-2

Lab Sample ID: 480-43956-2
Date Collected: 08/13/13 15:00
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.59	J	1.9	0.38	mg/Kg	☼	08/16/13 13:30	08/20/13 21:48	1
Barium	9.8		0.48	0.10	mg/Kg	☼	08/16/13 13:30	08/20/13 21:48	1
Beryllium	0.12	J	0.19	0.027	mg/Kg	☼	08/16/13 13:30	08/20/13 21:48	1
Cadmium	ND		0.19	0.029	mg/Kg	☼	08/16/13 13:30	08/20/13 21:48	1
Chromium	4.5		0.48	0.19	mg/Kg	☼	08/16/13 13:30	08/20/13 21:48	1
Copper	125		0.95	0.20	mg/Kg	☼	08/16/13 13:30	08/20/13 21:48	1
Lead	2.4		0.95	0.23	mg/Kg	☼	08/16/13 13:30	08/20/13 21:48	1
Manganese	117		0.19	0.030	mg/Kg	☼	08/16/13 13:30	08/20/13 21:48	1
Nickel	18.0		4.8	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 21:48	1
Selenium	ND		3.8	0.38	mg/Kg	☼	08/16/13 13:30	08/20/13 21:48	1
Silver	ND		0.48	0.19	mg/Kg	☼	08/16/13 13:30	08/20/13 21:48	1
Zinc	34.3	B	1.9	0.15	mg/Kg	☼	08/16/13 13:30	08/20/13 21:48	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0077	mg/Kg	☼	08/16/13 10:05	08/16/13 12:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.82	0.28	mg/Kg	☼	08/19/13 07:10	08/20/13 13:12	1
Cyanide, Total	ND		0.98	0.47	mg/Kg	☼	08/16/13 06:40	08/16/13 12:34	1
Cr (III)	4.5		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-A-3

Lab Sample ID: 480-43956-3
Date Collected: 08/13/13 15:20
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.9	0.28	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
1,1-Dichloroethane	ND		3.9	0.47	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
1,1-Dichloroethene	ND		3.9	0.48	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
1,2-Dichlorobenzene	ND		3.9	0.30	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
1,2-Dichloroethane	ND		3.9	0.20	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
1,2-Dichloroethene, cis-	ND		3.9	0.50	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
1,2-Dichloroethene, trans-	ND		3.9	0.40	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
1,3-Dichlorobenzene	ND		3.9	0.20	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
1,4-Dichlorobenzene	ND		3.9	0.55	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
1,4-Dioxane	ND		160	19	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
Acetone	ND		19	3.3	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
Benzene	ND		3.9	0.19	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
Butylbenzene	ND		3.9	0.34	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
Carbon tetrachloride	ND		3.9	0.38	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
Chlorobenzene	ND		3.9	0.51	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
Chloroform	ND		3.9	0.24	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
Ethylbenzene	ND		3.9	0.27	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
Methyl Ethyl Ketone (2-Butanone)	ND		19	1.4	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
Methyl tert-butyl ether	ND		3.9	0.38	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
Methylene Chloride	ND		3.9	1.8	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
Propylbenzene, n-	ND		3.9	0.31	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-A-3
Date Collected: 08/13/13 15:20
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-3
Matrix: Solid
Percent Solids: 97.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		3.9	0.34	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
tert-Butylbenzene	ND		3.9	0.40	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
Tetrachloroethene	ND		3.9	0.52	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
Toluene	ND		3.9	0.29	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
Trichloroethene	ND		3.9	0.86	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
Trimethylbenzene, 1,2,4-	ND		3.9	0.75	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
Trimethylbenzene, 1,3,5-	ND		3.9	0.25	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
Vinyl chloride	ND		3.9	0.47	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1
Xylene (mixed)	ND		7.8	0.65	ug/Kg	☼	08/16/13 01:11	08/16/13 03:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*64 - 126*	*08/16/13 01:11*	*08/16/13 03:49*	*1*
4-Bromofluorobenzene (Surr)	*109*		*72 - 126*	*08/16/13 01:11*	*08/16/13 03:49*	*1*
Toluene-d8 (Surr)	*110*		*71 - 125*	*08/16/13 01:11*	*08/16/13 03:49*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/19/13 20:06	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	08/17/13 07:48	08/19/13 20:06	1
Anthracene	ND		170	4.4	ug/Kg	☼	08/17/13 07:48	08/19/13 20:06	1
Benzo(a)anthracene	ND		170	3.0	ug/Kg	☼	08/17/13 07:48	08/19/13 20:06	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	08/17/13 07:48	08/19/13 20:06	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	08/17/13 07:48	08/19/13 20:06	1
Benzo(g,h,i)perylene	ND		170	2.1	ug/Kg	☼	08/17/13 07:48	08/19/13 20:06	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	08/17/13 07:48	08/19/13 20:06	1
Chrysene	ND		170	1.7	ug/Kg	☼	08/17/13 07:48	08/19/13 20:06	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/19/13 20:06	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	08/17/13 07:48	08/19/13 20:06	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	08/17/13 07:48	08/19/13 20:06	1
Fluorene	ND		170	4.0	ug/Kg	☼	08/17/13 07:48	08/19/13 20:06	1
Hexachlorobenzene	ND		170	8.5	ug/Kg	☼	08/17/13 07:48	08/19/13 20:06	1
Indeno(1,2,3-cd)pyrene	ND		170	4.8	ug/Kg	☼	08/17/13 07:48	08/19/13 20:06	1
m & p - Cresol	ND		340	9.6	ug/Kg	☼	08/17/13 07:48	08/19/13 20:06	1
Naphthalene	ND		170	2.9	ug/Kg	☼	08/17/13 07:48	08/19/13 20:06	1
o-Cresol	ND		170	5.3	ug/Kg	☼	08/17/13 07:48	08/19/13 20:06	1
Pentachlorophenol	ND		340	59	ug/Kg	☼	08/17/13 07:48	08/19/13 20:06	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	08/17/13 07:48	08/19/13 20:06	1
Phenol	ND		170	18	ug/Kg	☼	08/17/13 07:48	08/19/13 20:06	1
Pyrene	ND		170	1.1	ug/Kg	☼	08/17/13 07:48	08/19/13 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*94*		*39 - 146*	*08/17/13 07:48*	*08/19/13 20:06*	*1*
2-Fluorobiphenyl	*91*		*37 - 120*	*08/17/13 07:48*	*08/19/13 20:06*	*1*
2-Fluorophenol	*88*		*18 - 120*	*08/17/13 07:48*	*08/19/13 20:06*	*1*
Nitrobenzene-d5	*87*		*34 - 132*	*08/17/13 07:48*	*08/19/13 20:06*	*1*
Phenol-d5	*89*		*11 - 120*	*08/17/13 07:48*	*08/19/13 20:06*	*1*
p-Terphenyl-d14	*71*		*65 - 153*	*08/17/13 07:48*	*08/19/13 20:06*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-A-3
Date Collected: 08/13/13 15:20
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-3
Matrix: Solid
Percent Solids: 97.7

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	08/17/13 07:39	08/19/13 11:18	1
4,4'-DDE	ND		1.7	0.25	ug/Kg	☼	08/17/13 07:39	08/19/13 11:18	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	08/17/13 07:39	08/19/13 11:18	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	08/17/13 07:39	08/19/13 11:18	1
alpha-BHC	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:39	08/19/13 11:18	1
alpha-Chlordane	ND		1.7	0.84	ug/Kg	☼	08/17/13 07:39	08/19/13 11:18	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:39	08/19/13 11:18	1
delta-BHC	ND		1.7	0.22	ug/Kg	☼	08/17/13 07:39	08/19/13 11:18	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:39	08/19/13 11:18	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:39	08/19/13 11:18	1
Endosulfan II	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:39	08/19/13 11:18	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	08/17/13 07:39	08/19/13 11:18	1
Endrin	ND		1.7	0.23	ug/Kg	☼	08/17/13 07:39	08/19/13 11:18	1
Heptachlor	ND		1.7	0.27	ug/Kg	☼	08/17/13 07:39	08/19/13 11:18	1
Lindane	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:39	08/19/13 11:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*87*		*32 - 136*	*08/17/13 07:39*	*08/19/13 11:18*	*1*
Tetrachloro-m-xylene	*82*		*30 - 124*	*08/17/13 07:39*	*08/19/13 11:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.24	0.048	mg/Kg	☼	08/19/13 14:38	08/20/13 05:50	1
PCB-1221	ND		0.24	0.048	mg/Kg	☼	08/19/13 14:38	08/20/13 05:50	1
PCB-1232	ND		0.24	0.048	mg/Kg	☼	08/19/13 14:38	08/20/13 05:50	1
PCB-1242	ND		0.24	0.048	mg/Kg	☼	08/19/13 14:38	08/20/13 05:50	1
PCB-1248	ND		0.24	0.048	mg/Kg	☼	08/19/13 14:38	08/20/13 05:50	1
PCB-1254	ND		0.24	0.11	mg/Kg	☼	08/19/13 14:38	08/20/13 05:50	1
PCB-1260	ND		0.24	0.11	mg/Kg	☼	08/19/13 14:38	08/20/13 05:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*94*		*47 - 176*	*08/19/13 14:38*	*08/20/13 05:50*	*1*
Tetrachloro-m-xylene	*102*		*46 - 175*	*08/19/13 14:38*	*08/20/13 05:50*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.1	ug/Kg	☼	08/20/13 07:41	08/22/13 05:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*93*		*39 - 120*	*08/20/13 07:41*	*08/22/13 05:39*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.58**	**J**	2.2	0.43	mg/Kg	☼	08/16/13 13:30	08/20/13 21:50	1
Barium	**10.5**		0.54	0.12	mg/Kg	☼	08/16/13 13:30	08/20/13 21:50	1
Beryllium	**0.11**	**J**	0.22	0.030	mg/Kg	☼	08/16/13 13:30	08/20/13 21:50	1
Cadmium	ND		0.22	0.033	mg/Kg	☼	08/16/13 13:30	08/20/13 21:50	1
Chromium	**4.4**		0.54	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 21:50	1
Copper	**117**		1.1	0.23	mg/Kg	☼	08/16/13 13:30	08/20/13 21:50	1
Lead	**2.1**		1.1	0.26	mg/Kg	☼	08/16/13 13:30	08/20/13 21:50	1
Manganese	**122**		0.22	0.035	mg/Kg	☼	08/16/13 13:30	08/20/13 21:50	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-A-3

Lab Sample ID: 480-43956-3

Date Collected: 08/13/13 15:20
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.7

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**17.5**		5.4	0.25	mg/Kg	☼	08/16/13 13:30	08/20/13 21:50	1
Selenium	ND		4.3	0.43	mg/Kg	☼	08/16/13 13:30	08/20/13 21:50	1
Silver	ND		0.54	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 21:50	1
Zinc	**33.5**	**B**	2.2	0.17	mg/Kg	☼	08/16/13 13:30	08/20/13 21:50	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0075	mg/Kg	☼	08/16/13 10:05	08/16/13 12:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.82	0.28	mg/Kg	☼	08/19/13 07:10	08/20/13 13:14	1
Cyanide, Total	ND		0.96	0.46	mg/Kg	☼	08/16/13 06:40	08/16/13 12:35	1
Cr (III)	**4.4**		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-A-4

Lab Sample ID: 480-43956-4

Date Collected: 08/13/13 15:40
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 95.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	0.29	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
1,1-Dichloroethane	ND		4.0	0.48	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
1,1-Dichloroethene	ND		4.0	0.48	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
1,2-Dichlorobenzene	ND		4.0	0.31	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
1,2-Dichloroethane	ND		4.0	0.20	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
1,2-Dichloroethene, cis-	ND		4.0	0.51	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
1,2-Dichloroethene, trans-	ND		4.0	0.41	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
1,3-Dichlorobenzene	ND		4.0	0.20	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
1,4-Dichlorobenzene	ND		4.0	0.55	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
1,4-Dioxane	ND		160	19	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
Acetone	ND		20	3.3	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
Benzene	ND		4.0	0.19	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
Butylbenzene	ND		4.0	0.34	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
Carbon tetrachloride	ND		4.0	0.38	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
Chlorobenzene	ND		4.0	0.52	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
Chloroform	ND		4.0	0.24	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
Ethylbenzene	ND		4.0	0.27	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
Methyl Ethyl Ketone (2-Butanone)	ND		20	1.5	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
Methyl tert-butyl ether	ND		4.0	0.39	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
Methylene Chloride	ND		4.0	1.8	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
Propylbenzene, n-	ND		4.0	0.32	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
sec-Butylbenzene	ND		4.0	0.34	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
tert-Butylbenzene	ND		4.0	0.41	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
Tetrachloroethene	ND		4.0	0.53	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
Toluene	ND		4.0	0.30	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
Trichloroethene	ND		4.0	0.87	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
Trimethylbenzene, 1,2,4-	ND		4.0	0.76	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
Trimethylbenzene, 1,3,5-	ND		4.0	0.26	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1
Vinyl chloride	ND		4.0	0.48	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1

Client Sample ID: HOHAOC2-A-4
Date Collected: 08/13/13 15:40
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-4
Matrix: Solid
Percent Solids: 95.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylene (mixed)	ND		7.9	0.67	ug/Kg	☼	08/16/13 01:11	08/16/13 04:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*123*		*64 - 126*	*08/16/13 01:11*	*08/16/13 04:14*	*1*
4-Bromofluorobenzene (Surr)	*119*		*72 - 126*	*08/16/13 01:11*	*08/16/13 04:14*	*1*
Toluene-d8 (Surr)	*122*		*71 - 125*	*08/16/13 01:11*	*08/16/13 04:14*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		180	2.1	ug/Kg	☼	08/17/13 07:48	08/19/13 20:30	1
Acenaphthylene	ND		180	1.4	ug/Kg	☼	08/17/13 07:48	08/19/13 20:30	1
Anthracene	ND		180	4.5	ug/Kg	☼	08/17/13 07:48	08/19/13 20:30	1
Benzo(a)anthracene	ND		180	3.0	ug/Kg	☼	08/17/13 07:48	08/19/13 20:30	1
Benzo(a)pyrene	ND		180	4.2	ug/Kg	☼	08/17/13 07:48	08/19/13 20:30	1
Benzo(b)fluoranthene	ND		180	3.4	ug/Kg	☼	08/17/13 07:48	08/19/13 20:30	1
Benzo(g,h,i)perylene	ND		180	2.1	ug/Kg	☼	08/17/13 07:48	08/19/13 20:30	1
Benzo(k)fluoranthene	ND		180	1.9	ug/Kg	☼	08/17/13 07:48	08/19/13 20:30	1
Chrysene	ND		180	1.8	ug/Kg	☼	08/17/13 07:48	08/19/13 20:30	1
Dibenz(a,h)anthracene	ND		180	2.1	ug/Kg	☼	08/17/13 07:48	08/19/13 20:30	1
Dibenzofuran	ND		180	1.8	ug/Kg	☼	08/17/13 07:48	08/19/13 20:30	1
Fluoranthene	ND		180	2.5	ug/Kg	☼	08/17/13 07:48	08/19/13 20:30	1
Fluorene	ND		180	4.0	ug/Kg	☼	08/17/13 07:48	08/19/13 20:30	1
Hexachlorobenzene	ND		180	8.7	ug/Kg	☼	08/17/13 07:48	08/19/13 20:30	1
Indeno(1,2,3-cd)pyrene	ND		180	4.8	ug/Kg	☼	08/17/13 07:48	08/19/13 20:30	1
m & p - Cresol	ND		340	9.8	ug/Kg	☼	08/17/13 07:48	08/19/13 20:30	1
Naphthalene	ND		180	2.9	ug/Kg	☼	08/17/13 07:48	08/19/13 20:30	1
o-Cresol	ND		180	5.4	ug/Kg	☼	08/17/13 07:48	08/19/13 20:30	1
Pentachlorophenol	ND		340	60	ug/Kg	☼	08/17/13 07:48	08/19/13 20:30	1
Phenanthrene	ND		180	3.7	ug/Kg	☼	08/17/13 07:48	08/19/13 20:30	1
Phenol	ND		180	18	ug/Kg	☼	08/17/13 07:48	08/19/13 20:30	1
Pyrene	ND		180	1.1	ug/Kg	☼	08/17/13 07:48	08/19/13 20:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*89*		*39 - 146*	*08/17/13 07:48*	*08/19/13 20:30*	*1*
2-Fluorobiphenyl	*89*		*37 - 120*	*08/17/13 07:48*	*08/19/13 20:30*	*1*
2-Fluorophenol	*84*		*18 - 120*	*08/17/13 07:48*	*08/19/13 20:30*	*1*
Nitrobenzene-d5	*87*		*34 - 132*	*08/17/13 07:48*	*08/19/13 20:30*	*1*
Phenol-d5	*86*		*11 - 120*	*08/17/13 07:48*	*08/19/13 20:30*	*1*
p-Terphenyl-d14	*70*		*65 - 153*	*08/17/13 07:48*	*08/19/13 20:30*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.34	ug/Kg	☼	08/17/13 07:39	08/19/13 11:36	1
4,4'-DDE	ND		1.7	0.26	ug/Kg	☼	08/17/13 07:39	08/19/13 11:36	1
4,4'-DDT	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:39	08/19/13 11:36	1
Aldrin	ND		1.7	0.43	ug/Kg	☼	08/17/13 07:39	08/19/13 11:36	1
alpha-BHC	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:39	08/19/13 11:36	1
alpha-Chlordane	ND		1.7	0.87	ug/Kg	☼	08/17/13 07:39	08/19/13 11:36	1
beta-BHC	ND		1.7	0.19	ug/Kg	☼	08/17/13 07:39	08/19/13 11:36	1
delta-BHC	**0.28**	**J B**	1.7	0.23	ug/Kg	☼	08/17/13 07:39	08/19/13 11:36	1

Client Sample ID: HOHAOC2-A-4
Date Collected: 08/13/13 15:40
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-4
Matrix: Solid
Percent Solids: 95.4

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	ND		1.7	0.42	ug/Kg	☼	08/17/13 07:39	08/19/13 11:36	1
Endosulfan I	ND		1.7	0.22	ug/Kg	☼	08/17/13 07:39	08/19/13 11:36	1
Endosulfan II	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:39	08/19/13 11:36	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	08/17/13 07:39	08/19/13 11:36	1
Endrin	ND		1.7	0.24	ug/Kg	☼	08/17/13 07:39	08/19/13 11:36	1
Heptachlor	ND		1.7	0.27	ug/Kg	☼	08/17/13 07:39	08/19/13 11:36	1
Lindane	ND		1.7	0.22	ug/Kg	☼	08/17/13 07:39	08/19/13 11:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*89*		*32 - 136*	*08/17/13 07:39*	*08/19/13 11:36*	*1*
Tetrachloro-m-xylene	*83*		*30 - 124*	*08/17/13 07:39*	*08/19/13 11:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.23	0.045	mg/Kg	☼	08/19/13 14:38	08/20/13 06:05	1
PCB-1221	ND		0.23	0.045	mg/Kg	☼	08/19/13 14:38	08/20/13 06:05	1
PCB-1232	ND		0.23	0.045	mg/Kg	☼	08/19/13 14:38	08/20/13 06:05	1
PCB-1242	ND		0.23	0.045	mg/Kg	☼	08/19/13 14:38	08/20/13 06:05	1
PCB-1248	ND		0.23	0.045	mg/Kg	☼	08/19/13 14:38	08/20/13 06:05	1
PCB-1254	ND		0.23	0.11	mg/Kg	☼	08/19/13 14:38	08/20/13 06:05	1
PCB-1260	ND		0.23	0.11	mg/Kg	☼	08/19/13 14:38	08/20/13 06:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*95*		*47 - 176*	*08/19/13 14:38*	*08/20/13 06:05*	*1*
Tetrachloro-m-xylene	*102*		*46 - 175*	*08/19/13 14:38*	*08/20/13 06:05*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.3	ug/Kg	☼	08/20/13 07:41	08/22/13 06:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*94*		*39 - 120*	*08/20/13 07:41*	*08/22/13 06:08*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.52**	**J**	2.2	0.44	mg/Kg	☼	08/16/13 13:30	08/20/13 21:52	1
Barium	**11.7**		0.55	0.12	mg/Kg	☼	08/16/13 13:30	08/20/13 21:52	1
Beryllium	**0.13**	**J**	0.22	0.031	mg/Kg	☼	08/16/13 13:30	08/20/13 21:52	1
Cadmium	ND		0.22	0.033	mg/Kg	☼	08/16/13 13:30	08/20/13 21:52	1
Chromium	**5.5**		0.55	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 21:52	1
Copper	**113**		1.1	0.23	mg/Kg	☼	08/16/13 13:30	08/20/13 21:52	1
Lead	**2.2**		1.1	0.26	mg/Kg	☼	08/16/13 13:30	08/20/13 21:52	1
Manganese	**128**		0.22	0.035	mg/Kg	☼	08/16/13 13:30	08/20/13 21:52	1
Nickel	**18.4**		5.5	0.25	mg/Kg	☼	08/16/13 13:30	08/20/13 21:52	1
Selenium	**0.60**	**J**	4.4	0.44	mg/Kg	☼	08/16/13 13:30	08/20/13 21:52	1
Silver	ND		0.55	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 21:52	1
Zinc	**36.6**	**B**	2.2	0.17	mg/Kg	☼	08/16/13 13:30	08/20/13 21:52	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.0085	mg/Kg	☼	08/16/13 10:05	08/16/13 13:00	1

Client Sample ID: HOHAOC2-A-4

Lab Sample ID: 480-43956-4

Date Collected: 08/13/13 15:40
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 95.4

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.84	0.28	mg/Kg	☼	08/19/13 07:10	08/20/13 14:52	1
Cyanide, Total	ND		1.0	0.48	mg/Kg	☼	08/16/13 06:40	08/16/13 12:36	1
Cr (III)	**5.5**		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-A-5

Lab Sample ID: 480-43956-5

Date Collected: 08/13/13 16:00
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.2	0.30	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
1,1-Dichloroethane	ND		4.2	0.51	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
1,1-Dichloroethene	ND		4.2	0.51	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
1,2-Dichlorobenzene	ND		4.2	0.33	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
1,2-Dichloroethene, cis-	ND		4.2	0.53	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
1,2-Dichloroethene, trans-	ND		4.2	0.43	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
1,3-Dichlorobenzene	ND		4.2	0.21	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
1,4-Dichlorobenzene	ND		4.2	0.58	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
1,4-Dioxane	ND		170	20	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
Acetone	ND		21	3.5	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
Benzene	ND		4.2	0.20	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
Butylbenzene	ND		4.2	0.36	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
Carbon tetrachloride	ND		4.2	0.40	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
Chlorobenzene	ND		4.2	0.55	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
Chloroform	ND		4.2	0.26	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.5	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
Methyl tert-butyl ether	ND		4.2	0.41	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
Methylene Chloride	ND		4.2	1.9	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
Propylbenzene, n-	ND		4.2	0.33	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
sec-Butylbenzene	ND		4.2	0.36	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
tert-Butylbenzene	ND		4.2	0.43	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
Tetrachloroethene	ND		4.2	0.56	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
Toluene	ND		4.2	0.31	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
Trichloroethene	ND		4.2	0.91	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
Trimethylbenzene, 1,2,4-	ND		4.2	0.80	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
Trimethylbenzene, 1,3,5-	ND		4.2	0.27	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
Vinyl chloride	ND		4.2	0.51	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1
Xylene (mixed)	ND		8.3	0.70	ug/Kg	☼	08/16/13 01:11	08/16/13 04:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*64 - 126*	*08/16/13 01:11*	*08/16/13 04:40*	*1*
4-Bromofluorobenzene (Surr)	*86*		*72 - 126*	*08/16/13 01:11*	*08/16/13 04:40*	*1*
Toluene-d8 (Surr)	*85*		*71 - 125*	*08/16/13 01:11*	*08/16/13 04:40*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/19/13 20:55	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	08/17/13 07:48	08/19/13 20:55	1

Client Sample ID: HOHAOC2-A-5
Date Collected: 08/13/13 16:00
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-5
Matrix: Solid
Percent Solids: 97.4

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		170	4.4	ug/Kg	☼	08/17/13 07:48	08/19/13 20:55	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg	☼	08/17/13 07:48	08/19/13 20:55	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	08/17/13 07:48	08/19/13 20:55	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	08/17/13 07:48	08/19/13 20:55	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/19/13 20:55	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	08/17/13 07:48	08/19/13 20:55	1
Chrysene	ND		170	1.7	ug/Kg	☼	08/17/13 07:48	08/19/13 20:55	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/19/13 20:55	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	08/17/13 07:48	08/19/13 20:55	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	08/17/13 07:48	08/19/13 20:55	1
Fluorene	ND		170	3.9	ug/Kg	☼	08/17/13 07:48	08/19/13 20:55	1
Hexachlorobenzene	ND		170	8.5	ug/Kg	☼	08/17/13 07:48	08/19/13 20:55	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg	☼	08/17/13 07:48	08/19/13 20:55	1
m & p - Cresol	ND		330	9.5	ug/Kg	☼	08/17/13 07:48	08/19/13 20:55	1
Naphthalene	ND		170	2.8	ug/Kg	☼	08/17/13 07:48	08/19/13 20:55	1
o-Cresol	ND		170	5.2	ug/Kg	☼	08/17/13 07:48	08/19/13 20:55	1
Pentachlorophenol	ND		330	59	ug/Kg	☼	08/17/13 07:48	08/19/13 20:55	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	08/17/13 07:48	08/19/13 20:55	1
Phenol	ND		170	18	ug/Kg	☼	08/17/13 07:48	08/19/13 20:55	1
Pyrene	ND		170	1.1	ug/Kg	☼	08/17/13 07:48	08/19/13 20:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*84*		*39 - 146*	*08/17/13 07:48*	*08/19/13 20:55*	*1*
2-Fluorobiphenyl	*84*		*37 - 120*	*08/17/13 07:48*	*08/19/13 20:55*	*1*
2-Fluorophenol	*80*		*18 - 120*	*08/17/13 07:48*	*08/19/13 20:55*	*1*
Nitrobenzene-d5	*83*		*34 - 132*	*08/17/13 07:48*	*08/19/13 20:55*	*1*
Phenol-d5	*83*		*11 - 120*	*08/17/13 07:48*	*08/19/13 20:55*	*1*
p-Terphenyl-d14	*67*		*65 - 153*	*08/17/13 07:48*	*08/19/13 20:55*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	08/17/13 07:39	08/19/13 11:53	1
4,4'-DDE	ND		1.7	0.25	ug/Kg	☼	08/17/13 07:39	08/19/13 11:53	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	08/17/13 07:39	08/19/13 11:53	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	08/17/13 07:39	08/19/13 11:53	1
alpha-BHC	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:39	08/19/13 11:53	1
alpha-Chlordane	ND		1.7	0.84	ug/Kg	☼	08/17/13 07:39	08/19/13 11:53	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:39	08/19/13 11:53	1
delta-BHC	ND		1.7	0.22	ug/Kg	☼	08/17/13 07:39	08/19/13 11:53	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:39	08/19/13 11:53	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:39	08/19/13 11:53	1
Endosulfan II	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:39	08/19/13 11:53	1
Endosulfan sulfate	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:39	08/19/13 11:53	1
Endrin	ND		1.7	0.23	ug/Kg	☼	08/17/13 07:39	08/19/13 11:53	1
Heptachlor	ND		1.7	0.26	ug/Kg	☼	08/17/13 07:39	08/19/13 11:53	1
Lindane	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:39	08/19/13 11:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*88*		*32 - 136*	*08/17/13 07:39*	*08/19/13 11:53*	*1*
Tetrachloro-m-xylene	*81*		*30 - 124*	*08/17/13 07:39*	*08/19/13 11:53*	*1*

Client Sample ID: HOHAOC2-A-5

Lab Sample ID: 480-43956-5
Date Collected: 08/13/13 16:00
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.17	0.034	mg/Kg	☼	08/19/13 14:38	08/20/13 06:20	1
PCB-1221	ND		0.17	0.034	mg/Kg	☼	08/19/13 14:38	08/20/13 06:20	1
PCB-1232	ND		0.17	0.034	mg/Kg	☼	08/19/13 14:38	08/20/13 06:20	1
PCB-1242	ND		0.17	0.034	mg/Kg	☼	08/19/13 14:38	08/20/13 06:20	1
PCB-1248	ND		0.17	0.034	mg/Kg	☼	08/19/13 14:38	08/20/13 06:20	1
PCB-1254	ND		0.17	0.081	mg/Kg	☼	08/19/13 14:38	08/20/13 06:20	1
PCB-1260	ND		0.17	0.081	mg/Kg	☼	08/19/13 14:38	08/20/13 06:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*95*		*47 - 176*	*08/19/13 14:38*	*08/20/13 06:20*	*1*
Tetrachloro-m-xylene	*102*		*46 - 175*	*08/19/13 14:38*	*08/20/13 06:20*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.1	ug/Kg	☼	08/20/13 07:41	08/22/13 06:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*97*		*39 - 120*	*08/20/13 07:41*	*08/22/13 06:38*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.64**	**J**	2.1	0.43	mg/Kg	☼	08/16/13 13:30	08/20/13 21:54	1
Barium	**9.4**		0.54	0.12	mg/Kg	☼	08/16/13 13:30	08/20/13 21:54	1
Beryllium	**0.10**	**J**	0.21	0.030	mg/Kg	☼	08/16/13 13:30	08/20/13 21:54	1
Cadmium	ND		0.21	0.032	mg/Kg	☼	08/16/13 13:30	08/20/13 21:54	1
Chromium	**3.4**		0.54	0.21	mg/Kg	☼	08/16/13 13:30	08/20/13 21:54	1
Copper	**112**		1.1	0.23	mg/Kg	☼	08/16/13 13:30	08/20/13 21:54	1
Lead	**1.9**		1.1	0.26	mg/Kg	☼	08/16/13 13:30	08/20/13 21:54	1
Manganese	**118**		0.21	0.034	mg/Kg	☼	08/16/13 13:30	08/20/13 21:54	1
Nickel	**15.9**		5.4	0.25	mg/Kg	☼	08/16/13 13:30	08/20/13 21:54	1
Selenium	**0.95**	**J**	4.3	0.43	mg/Kg	☼	08/16/13 13:30	08/20/13 21:54	1
Silver	ND		0.54	0.21	mg/Kg	☼	08/16/13 13:30	08/20/13 21:54	1
Zinc	**33.2**	**B**	2.1	0.16	mg/Kg	☼	08/16/13 13:30	08/20/13 21:54	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.0085	mg/Kg	☼	08/16/13 10:05	08/16/13 13:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.82	0.28	mg/Kg	☼	08/19/13 07:10	08/20/13 13:28	1
Cyanide, Total	ND		0.98	0.47	mg/Kg	☼	08/16/13 06:40	08/16/13 12:37	1
Cr (III)	**3.4**		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-A-6

Lab Sample ID: 480-43956-6
Date Collected: 08/13/13 16:20
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.9	0.29	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-A-6
Date Collected: 08/13/13 16:20
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-6
Matrix: Solid
Percent Solids: 97.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		3.9	0.48	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
1,1-Dichloroethene	ND		3.9	0.48	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
1,2-Dichlorobenzene	ND		3.9	0.31	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
1,2-Dichloroethane	ND		3.9	0.20	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
1,2-Dichloroethene, cis-	ND		3.9	0.50	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
1,2-Dichloroethene, trans-	ND		3.9	0.41	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
1,3-Dichlorobenzene	ND		3.9	0.20	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
1,4-Dichlorobenzene	ND		3.9	0.55	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
1,4-Dioxane	ND		160	19	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
Acetone	ND		20	3.3	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
Benzene	ND		3.9	0.19	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
Butylbenzene	ND		3.9	0.34	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
Carbon tetrachloride	ND		3.9	0.38	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
Chlorobenzene	ND		3.9	0.52	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
Chloroform	ND		3.9	0.24	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
Ethylbenzene	ND		3.9	0.27	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
Methyl Ethyl Ketone (2-Butanone)	ND		20	1.4	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
Methyl tert-butyl ether	ND		3.9	0.39	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
Methylene Chloride	ND		3.9	1.8	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
Propylbenzene, n-	ND		3.9	0.31	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
sec-Butylbenzene	ND		3.9	0.34	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
tert-Butylbenzene	ND		3.9	0.41	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
Tetrachloroethene	ND		3.9	0.53	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
Toluene	ND		3.9	0.30	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
Trichloroethene	ND		3.9	0.87	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
Trimethylbenzene, 1,2,4-	ND		3.9	0.76	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
Trimethylbenzene, 1,3,5-	ND		3.9	0.25	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
Vinyl chloride	ND		3.9	0.48	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1
Xylene (mixed)	ND		7.9	0.66	ug/Kg	☼	08/16/13 01:11	08/16/13 05:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*64 - 126*	*08/16/13 01:11*	*08/16/13 05:05*	*1*
4-Bromofluorobenzene (Surr)	*89*		*72 - 126*	*08/16/13 01:11*	*08/16/13 05:05*	*1*
Toluene-d8 (Surr)	*89*		*71 - 125*	*08/16/13 01:11*	*08/16/13 05:05*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/19/13 21:19	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	08/17/13 07:48	08/19/13 21:19	1
Anthracene	ND		170	4.3	ug/Kg	☼	08/17/13 07:48	08/19/13 21:19	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg	☼	08/17/13 07:48	08/19/13 21:19	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	08/17/13 07:48	08/19/13 21:19	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	08/17/13 07:48	08/19/13 21:19	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/19/13 21:19	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	08/17/13 07:48	08/19/13 21:19	1
Chrysene	ND		170	1.7	ug/Kg	☼	08/17/13 07:48	08/19/13 21:19	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/19/13 21:19	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	08/17/13 07:48	08/19/13 21:19	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	08/17/13 07:48	08/19/13 21:19	1
Fluorene	ND		170	3.9	ug/Kg	☼	08/17/13 07:48	08/19/13 21:19	1

Client Sample ID: HOHAOC2-A-6
Date Collected: 08/13/13 16:20
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-6
Matrix: Solid
Percent Solids: 97.2

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		170	8.4	ug/Kg	☼	08/17/13 07:48	08/19/13 21:19	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg	☼	08/17/13 07:48	08/19/13 21:19	1
m & p - Cresol	ND		330	9.5	ug/Kg	☼	08/17/13 07:48	08/19/13 21:19	1
Naphthalene	ND		170	2.8	ug/Kg	☼	08/17/13 07:48	08/19/13 21:19	1
o-Cresol	ND		170	5.2	ug/Kg	☼	08/17/13 07:48	08/19/13 21:19	1
Pentachlorophenol	ND		330	58	ug/Kg	☼	08/17/13 07:48	08/19/13 21:19	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	08/17/13 07:48	08/19/13 21:19	1
Phenol	ND		170	18	ug/Kg	☼	08/17/13 07:48	08/19/13 21:19	1
Pyrene	ND		170	1.1	ug/Kg	☼	08/17/13 07:48	08/19/13 21:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*84*		*39 - 146*	*08/17/13 07:48*	*08/19/13 21:19*	*1*
2-Fluorobiphenyl	*85*		*37 - 120*	*08/17/13 07:48*	*08/19/13 21:19*	*1*
2-Fluorophenol	*79*		*18 - 120*	*08/17/13 07:48*	*08/19/13 21:19*	*1*
Nitrobenzene-d5	*81*		*34 - 132*	*08/17/13 07:48*	*08/19/13 21:19*	*1*
Phenol-d5	*81*		*11 - 120*	*08/17/13 07:48*	*08/19/13 21:19*	*1*
p-Terphenyl-d14	*64*	*X*	*65 - 153*	*08/17/13 07:48*	*08/19/13 21:19*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	08/17/13 07:39	08/19/13 12:11	1
4,4'-DDE	ND		1.7	0.25	ug/Kg	☼	08/17/13 07:39	08/19/13 12:11	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	08/17/13 07:39	08/19/13 12:11	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	08/17/13 07:39	08/19/13 12:11	1
alpha-BHC	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:39	08/19/13 12:11	1
alpha-Chlordane	ND		1.7	0.84	ug/Kg	☼	08/17/13 07:39	08/19/13 12:11	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:39	08/19/13 12:11	1
delta-BHC	ND		1.7	0.22	ug/Kg	☼	08/17/13 07:39	08/19/13 12:11	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:39	08/19/13 12:11	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:39	08/19/13 12:11	1
Endosulfan II	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:39	08/19/13 12:11	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	08/17/13 07:39	08/19/13 12:11	1
Endrin	ND		1.7	0.23	ug/Kg	☼	08/17/13 07:39	08/19/13 12:11	1
Heptachlor	ND		1.7	0.27	ug/Kg	☼	08/17/13 07:39	08/19/13 12:11	1
Lindane	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:39	08/19/13 12:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*93*		*32 - 136*	*08/17/13 07:39*	*08/19/13 12:11*	*1*
Tetrachloro-m-xylene	*85*		*30 - 124*	*08/17/13 07:39*	*08/19/13 12:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.18	0.036	mg/Kg	☼	08/19/13 14:38	08/20/13 07:04	1
PCB-1221	ND		0.18	0.036	mg/Kg	☼	08/19/13 14:38	08/20/13 07:04	1
PCB-1232	ND		0.18	0.036	mg/Kg	☼	08/19/13 14:38	08/20/13 07:04	1
PCB-1242	ND		0.18	0.036	mg/Kg	☼	08/19/13 14:38	08/20/13 07:04	1
PCB-1248	ND		0.18	0.036	mg/Kg	☼	08/19/13 14:38	08/20/13 07:04	1
PCB-1254	ND		0.18	0.086	mg/Kg	☼	08/19/13 14:38	08/20/13 07:04	1
PCB-1260	ND		0.18	0.086	mg/Kg	☼	08/19/13 14:38	08/20/13 07:04	1

Client Sample ID: HOHAOC2-A-6

Lab Sample ID: 480-43956-6

Date Collected: 08/13/13 16:20
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*94*		*47 - 176*	*08/19/13 14:38*	*08/20/13 07:04*	*1*
Tetrachloro-m-xylene	*100*		*46 - 175*	*08/19/13 14:38*	*08/20/13 07:04*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.1	ug/Kg	☼	08/20/13 07:41	08/22/13 07:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*99*		*39 - 120*	*08/20/13 07:41*	*08/22/13 07:07*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.55**	**J**	2.1	0.43	mg/Kg	☼	08/16/13 13:30	08/20/13 21:57	1
Barium	**10**		0.53	0.12	mg/Kg	☼	08/16/13 13:30	08/20/13 21:57	1
Beryllium	**0.12**	**J**	0.21	0.030	mg/Kg	☼	08/16/13 13:30	08/20/13 21:57	1
Cadmium	ND		0.21	0.032	mg/Kg	☼	08/16/13 13:30	08/20/13 21:57	1
Chromium	**3.5**		0.53	0.21	mg/Kg	☼	08/16/13 13:30	08/20/13 21:57	1
Copper	**113**		1.1	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 21:57	1
Lead	**3.1**		1.1	0.26	mg/Kg	☼	08/16/13 13:30	08/20/13 21:57	1
Manganese	**125**		0.21	0.034	mg/Kg	☼	08/16/13 13:30	08/20/13 21:57	1
Nickel	**16.5**		5.3	0.25	mg/Kg	☼	08/16/13 13:30	08/20/13 21:57	1
Selenium	ND		4.3	0.43	mg/Kg	☼	08/16/13 13:30	08/20/13 21:57	1
Silver	ND		0.53	0.21	mg/Kg	☼	08/16/13 13:30	08/20/13 21:57	1
Zinc	**37.2**	**B**	2.1	0.16	mg/Kg	☼	08/16/13 13:30	08/20/13 21:57	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0077	mg/Kg	☼	08/16/13 10:05	08/16/13 13:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.82	0.28	mg/Kg	☼	08/19/13 07:10	08/20/13 14:52	1
Cyanide, Total	ND		0.97	0.47	mg/Kg	☼	08/16/13 06:40	08/16/13 12:38	1
Cr (III)	**3.5**		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-A-7

Lab Sample ID: 480-43956-7

Date Collected: 08/13/13 16:40
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
1,1-Dichloroethane	ND		4.4	0.54	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
1,1-Dichloroethene	ND		4.4	0.54	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
1,2-Dichlorobenzene	ND		4.4	0.34	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
1,2-Dichloroethene, cis-	ND		4.4	0.56	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
1,2-Dichloroethene, trans-	ND		4.4	0.45	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
1,3-Dichlorobenzene	ND		4.4	0.23	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
1,4-Dichlorobenzene	ND		4.4	0.62	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
1,4-Dioxane	ND		180	21	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-A-7
Date Collected: 08/13/13 16:40
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-7
Matrix: Solid
Percent Solids: 97.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		22	3.7	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
Benzene	ND		4.4	0.22	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
Butylbenzene	ND		4.4	0.38	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
Carbon tetrachloride	ND		4.4	0.43	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
Chloroform	ND		4.4	0.27	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
Ethylbenzene	ND		4.4	0.30	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
Methyl Ethyl Ketone (2-Butanone)	ND		22	1.6	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
Methylene Chloride	ND		4.4	2.0	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
Propylbenzene, n-	ND		4.4	0.35	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
sec-Butylbenzene	ND		4.4	0.38	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
tert-Butylbenzene	ND		4.4	0.46	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
Tetrachloroethene	ND		4.4	0.59	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
Toluene	ND		4.4	0.33	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
Trichloroethene	ND		4.4	0.97	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
Trimethylbenzene, 1,2,4-	ND		4.4	0.85	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
Trimethylbenzene, 1,3,5-	ND		4.4	0.28	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
Vinyl chloride	ND		4.4	0.54	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1
Xylene (mixed)	ND		8.8	0.74	ug/Kg	☼	08/16/13 01:11	08/16/13 05:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*64 - 126*	*08/16/13 01:11*	*08/16/13 05:31*	*1*
4-Bromofluorobenzene (Surr)	*90*		*72 - 126*	*08/16/13 01:11*	*08/16/13 05:31*	*1*
Toluene-d8 (Surr)	*92*		*71 - 125*	*08/16/13 01:11*	*08/16/13 05:31*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/20/13 09:03	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	08/17/13 07:48	08/20/13 09:03	1
Anthracene	ND		170	4.4	ug/Kg	☼	08/17/13 07:48	08/20/13 09:03	1
Benzo(a)anthracene	ND		170	3.0	ug/Kg	☼	08/17/13 07:48	08/20/13 09:03	1
Benzo(a)pyrene	**4.9**	**J**	170	4.1	ug/Kg	☼	08/17/13 07:48	08/20/13 09:03	1
Benzo(b)fluoranthene	**9.4**	**J**	170	3.3	ug/Kg	☼	08/17/13 07:48	08/20/13 09:03	1
Benzo(g,h,i)perylene	ND		170	2.1	ug/Kg	☼	08/17/13 07:48	08/20/13 09:03	1
Benzo(k)fluoranthene	**9.1**	**J**	170	1.9	ug/Kg	☼	08/17/13 07:48	08/20/13 09:03	1
Chrysene	ND		170	1.7	ug/Kg	☼	08/17/13 07:48	08/20/13 09:03	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/20/13 09:03	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	08/17/13 07:48	08/20/13 09:03	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	08/17/13 07:48	08/20/13 09:03	1
Fluorene	ND		170	3.9	ug/Kg	☼	08/17/13 07:48	08/20/13 09:03	1
Hexachlorobenzene	ND		170	8.5	ug/Kg	☼	08/17/13 07:48	08/20/13 09:03	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg	☼	08/17/13 07:48	08/20/13 09:03	1
m & p - Cresol	ND		330	9.5	ug/Kg	☼	08/17/13 07:48	08/20/13 09:03	1
Naphthalene	ND		170	2.8	ug/Kg	☼	08/17/13 07:48	08/20/13 09:03	1
o-Cresol	ND		170	5.3	ug/Kg	☼	08/17/13 07:48	08/20/13 09:03	1
Pentachlorophenol	ND		330	59	ug/Kg	☼	08/17/13 07:48	08/20/13 09:03	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	08/17/13 07:48	08/20/13 09:03	1
Phenol	ND		170	18	ug/Kg	☼	08/17/13 07:48	08/20/13 09:03	1
Pyrene	ND		170	1.1	ug/Kg	☼	08/17/13 07:48	08/20/13 09:03	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-A-7
Date Collected: 08/13/13 16:40
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-7
Matrix: Solid
Percent Solids: 97.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	100		39 - 146	08/17/13 07:48	08/20/13 09:03	1
2-Fluorobiphenyl	101		37 - 120	08/17/13 07:48	08/20/13 09:03	1
2-Fluorophenol	97		18 - 120	08/17/13 07:48	08/20/13 09:03	1
Nitrobenzene-d5	100		34 - 132	08/17/13 07:48	08/20/13 09:03	1
Phenol-d5	99		11 - 120	08/17/13 07:48	08/20/13 09:03	1
p-Terphenyl-d14	100		65 - 153	08/17/13 07:48	08/20/13 09:03	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	08/17/13 07:39	08/19/13 13:42	1
4,4'-DDE	ND		1.7	0.25	ug/Kg	☼	08/17/13 07:39	08/19/13 13:42	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	08/17/13 07:39	08/19/13 13:42	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	08/17/13 07:39	08/19/13 13:42	1
alpha-BHC	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:39	08/19/13 13:42	1
alpha-Chlordane	ND		1.7	0.84	ug/Kg	☼	08/17/13 07:39	08/19/13 13:42	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:39	08/19/13 13:42	1
delta-BHC	**0.30**	**J B**	1.7	0.22	ug/Kg	☼	08/17/13 07:39	08/19/13 13:42	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:39	08/19/13 13:42	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:39	08/19/13 13:42	1
Endosulfan II	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:39	08/19/13 13:42	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	08/17/13 07:39	08/19/13 13:42	1
Endrin	ND		1.7	0.23	ug/Kg	☼	08/17/13 07:39	08/19/13 13:42	1
Heptachlor	ND		1.7	0.26	ug/Kg	☼	08/17/13 07:39	08/19/13 13:42	1
Lindane	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:39	08/19/13 13:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	89		32 - 136	08/17/13 07:39	08/19/13 13:42	1
Tetrachloro-m-xylene	86		30 - 124	08/17/13 07:39	08/19/13 13:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.20	0.040	mg/Kg	☼	08/19/13 14:38	08/20/13 07:19	1
PCB-1221	ND		0.20	0.040	mg/Kg	☼	08/19/13 14:38	08/20/13 07:19	1
PCB-1232	ND		0.20	0.040	mg/Kg	☼	08/19/13 14:38	08/20/13 07:19	1
PCB-1242	ND		0.20	0.040	mg/Kg	☼	08/19/13 14:38	08/20/13 07:19	1
PCB-1248	ND		0.20	0.040	mg/Kg	☼	08/19/13 14:38	08/20/13 07:19	1
PCB-1254	ND		0.20	0.095	mg/Kg	☼	08/19/13 14:38	08/20/13 07:19	1
PCB-1260	ND		0.20	0.095	mg/Kg	☼	08/19/13 14:38	08/20/13 07:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	97		47 - 176	08/19/13 14:38	08/20/13 07:19	1
Tetrachloro-m-xylene	103		46 - 175	08/19/13 14:38	08/20/13 07:19	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.0	ug/Kg	☼	08/20/13 07:41	08/22/13 08:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	102		39 - 120	08/20/13 07:41	08/22/13 08:07	1

Client Sample ID: HOHAOC2-A-7

Lab Sample ID: 480-43956-7

Date Collected: 08/13/13 16:40
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.42**	**J**	1.8	0.37	mg/Kg	☼	08/16/13 13:30	08/20/13 21:59	1
Barium	**9.9**		0.46	0.10	mg/Kg	☼	08/16/13 13:30	08/20/13 21:59	1
Beryllium	**0.12**	**J**	0.18	0.026	mg/Kg	☼	08/16/13 13:30	08/20/13 21:59	1
Cadmium	ND		0.18	0.028	mg/Kg	☼	08/16/13 13:30	08/20/13 21:59	1
Chromium	**4.9**		0.46	0.18	mg/Kg	☼	08/16/13 13:30	08/20/13 21:59	1
Copper	**101**		0.92	0.19	mg/Kg	☼	08/16/13 13:30	08/20/13 21:59	1
Lead	**5.7**		0.92	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 21:59	1
Manganese	**128**		0.18	0.029	mg/Kg	☼	08/16/13 13:30	08/20/13 21:59	1
Nickel	**16.6**		4.6	0.21	mg/Kg	☼	08/16/13 13:30	08/20/13 21:59	1
Selenium	ND		3.7	0.37	mg/Kg	☼	08/16/13 13:30	08/20/13 21:59	1
Silver	ND		0.46	0.18	mg/Kg	☼	08/16/13 13:30	08/20/13 21:59	1
Zinc	**31.5**	**B**	1.8	0.14	mg/Kg	☼	08/16/13 13:30	08/20/13 21:59	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0078	mg/Kg	☼	08/16/13 10:05	08/16/13 13:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.82	0.28	mg/Kg	☼	08/19/13 07:10	08/20/13 13:35	1
Cyanide, Total	ND		0.96	0.46	mg/Kg	☼	08/16/13 06:40	08/16/13 12:40	1
Cr (III)	**4.9**		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-A-8

Lab Sample ID: 480-43956-8

Date Collected: 08/13/13 17:00
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.2	0.38	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
1,1-Dichloroethane	ND		5.2	0.63	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
1,1-Dichloroethene	ND		5.2	0.64	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
1,2-Dichlorobenzene	ND		5.2	0.41	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
1,2-Dichloroethane	ND		5.2	0.26	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
1,2-Dichloroethene, cis-	ND		5.2	0.67	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
1,2-Dichloroethene, trans-	ND		5.2	0.54	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
1,3-Dichlorobenzene	ND		5.2	0.27	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
1,4-Dichlorobenzene	ND		5.2	0.73	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
1,4-Dioxane	ND		210	25	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
Acetone	ND		26	4.4	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
Benzene	ND		5.2	0.25	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
Butylbenzene	ND		5.2	0.45	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
Carbon tetrachloride	ND		5.2	0.50	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
Chlorobenzene	ND		5.2	0.69	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
Chloroform	ND		5.2	0.32	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
Ethylbenzene	ND		5.2	0.36	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
Methyl Ethyl Ketone (2-Butanone)	ND		26	1.9	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
Methyl tert-butyl ether	ND		5.2	0.51	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
Methylene Chloride	ND		5.2	2.4	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
Propylbenzene, n-	ND		5.2	0.42	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-A-8
Date Collected: 08/13/13 17:00
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-8
Matrix: Solid
Percent Solids: 97.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.2	0.45	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
tert-Butylbenzene	ND		5.2	0.54	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
Tetrachloroethene	ND		5.2	0.70	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
Toluene	ND		5.2	0.39	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
Trichloroethene	ND		5.2	1.1	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
Trimethylbenzene, 1,2,4-	ND		5.2	1.0	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
Trimethylbenzene, 1,3,5-	ND		5.2	0.33	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
Vinyl chloride	ND		5.2	0.63	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1
Xylene (mixed)	ND		10	0.87	ug/Kg	☼	08/16/13 01:11	08/16/13 05:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*64 - 126*	*08/16/13 01:11*	*08/16/13 05:56*	*1*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*	*08/16/13 01:11*	*08/16/13 05:56*	*1*
Toluene-d8 (Surr)	*96*		*71 - 125*	*08/16/13 01:11*	*08/16/13 05:56*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/20/13 01:06	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	08/17/13 07:48	08/20/13 01:06	1
Anthracene	ND		170	4.4	ug/Kg	☼	08/17/13 07:48	08/20/13 01:06	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg	☼	08/17/13 07:48	08/20/13 01:06	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	08/17/13 07:48	08/20/13 01:06	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	08/17/13 07:48	08/20/13 01:06	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/20/13 01:06	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	08/17/13 07:48	08/20/13 01:06	1
Chrysene	ND		170	1.7	ug/Kg	☼	08/17/13 07:48	08/20/13 01:06	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/20/13 01:06	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	08/17/13 07:48	08/20/13 01:06	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	08/17/13 07:48	08/20/13 01:06	1
Fluorene	ND		170	3.9	ug/Kg	☼	08/17/13 07:48	08/20/13 01:06	1
Hexachlorobenzene	ND		170	8.5	ug/Kg	☼	08/17/13 07:48	08/20/13 01:06	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg	☼	08/17/13 07:48	08/20/13 01:06	1
m & p - Cresol	ND		330	9.5	ug/Kg	☼	08/17/13 07:48	08/20/13 01:06	1
Naphthalene	ND		170	2.8	ug/Kg	☼	08/17/13 07:48	08/20/13 01:06	1
o-Cresol	ND		170	5.3	ug/Kg	☼	08/17/13 07:48	08/20/13 01:06	1
Pentachlorophenol	ND		330	59	ug/Kg	☼	08/17/13 07:48	08/20/13 01:06	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	08/17/13 07:48	08/20/13 01:06	1
Phenol	ND		170	18	ug/Kg	☼	08/17/13 07:48	08/20/13 01:06	1
Pyrene	ND		170	1.1	ug/Kg	☼	08/17/13 07:48	08/20/13 01:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*88*		*39 - 146*	*08/17/13 07:48*	*08/20/13 01:06*	*1*
2-Fluorobiphenyl	*90*		*37 - 120*	*08/17/13 07:48*	*08/20/13 01:06*	*1*
2-Fluorophenol	*87*		*18 - 120*	*08/17/13 07:48*	*08/20/13 01:06*	*1*
Nitrobenzene-d5	*91*		*34 - 132*	*08/17/13 07:48*	*08/20/13 01:06*	*1*
Phenol-d5	*91*		*11 - 120*	*08/17/13 07:48*	*08/20/13 01:06*	*1*
p-Terphenyl-d14	*90*		*65 - 153*	*08/17/13 07:48*	*08/20/13 01:06*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-A-8
Date Collected: 08/13/13 17:00
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-8
Matrix: Solid
Percent Solids: 97.7

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	08/17/13 07:39	08/19/13 13:59	1
4,4'-DDE	**0.25**	**J**	1.7	0.25	ug/Kg	☼	08/17/13 07:39	08/19/13 13:59	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	08/17/13 07:39	08/19/13 13:59	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	08/17/13 07:39	08/19/13 13:59	1
alpha-BHC	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:39	08/19/13 13:59	1
alpha-Chlordane	ND		1.7	0.84	ug/Kg	☼	08/17/13 07:39	08/19/13 13:59	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:39	08/19/13 13:59	1
delta-BHC	**0.31**	**J B**	1.7	0.22	ug/Kg	☼	08/17/13 07:39	08/19/13 13:59	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:39	08/19/13 13:59	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:39	08/19/13 13:59	1
Endosulfan II	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:39	08/19/13 13:59	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	08/17/13 07:39	08/19/13 13:59	1
Endrin	ND		1.7	0.23	ug/Kg	☼	08/17/13 07:39	08/19/13 13:59	1
Heptachlor	ND		1.7	0.27	ug/Kg	☼	08/17/13 07:39	08/19/13 13:59	1
Lindane	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:39	08/19/13 13:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*90*		*32 - 136*	*08/17/13 07:39*	*08/19/13 13:59*	*1*
Tetrachloro-m-xylene	*79*		*30 - 124*	*08/17/13 07:39*	*08/19/13 13:59*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.18	0.034	mg/Kg	☼	08/19/13 14:38	08/20/13 07:34	1
PCB-1221	ND		0.18	0.034	mg/Kg	☼	08/19/13 14:38	08/20/13 07:34	1
PCB-1232	ND		0.18	0.034	mg/Kg	☼	08/19/13 14:38	08/20/13 07:34	1
PCB-1242	ND		0.18	0.034	mg/Kg	☼	08/19/13 14:38	08/20/13 07:34	1
PCB-1248	ND		0.18	0.034	mg/Kg	☼	08/19/13 14:38	08/20/13 07:34	1
PCB-1254	ND		0.18	0.082	mg/Kg	☼	08/19/13 14:38	08/20/13 07:34	1
PCB-1260	ND		0.18	0.082	mg/Kg	☼	08/19/13 14:38	08/20/13 07:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*93*		*47 - 176*	*08/19/13 14:38*	*08/20/13 07:34*	*1*
Tetrachloro-m-xylene	*101*		*46 - 175*	*08/19/13 14:38*	*08/20/13 07:34*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.0	ug/Kg	☼	08/20/13 07:41	08/22/13 08:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*98*		*39 - 120*	*08/20/13 07:41*	*08/22/13 08:36*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.55**	**J**	2.2	0.44	mg/Kg	☼	08/16/13 13:30	08/20/13 22:01	1
Barium	**11.9**		0.55	0.12	mg/Kg	☼	08/16/13 13:30	08/20/13 22:01	1
Beryllium	**0.12**	**J**	0.22	0.031	mg/Kg	☼	08/16/13 13:30	08/20/13 22:01	1
Cadmium	ND		0.22	0.033	mg/Kg	☼	08/16/13 13:30	08/20/13 22:01	1
Chromium	**6.7**		0.55	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 22:01	1
Copper	**125**		1.1	0.23	mg/Kg	☼	08/16/13 13:30	08/20/13 22:01	1
Lead	**5.3**		1.1	0.26	mg/Kg	☼	08/16/13 13:30	08/20/13 22:01	1
Manganese	**145**		0.22	0.035	mg/Kg	☼	08/16/13 13:30	08/20/13 22:01	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-A-8

Lab Sample ID: 480-43956-8
Date Collected: 08/13/13 17:00
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.7

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	17.6		5.5	0.25	mg/Kg	☼	08/16/13 13:30	08/20/13 22:01	1
Selenium	ND		4.4	0.44	mg/Kg	☼	08/16/13 13:30	08/20/13 22:01	1
Silver	ND		0.55	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 22:01	1
Zinc	34.2	B	2.2	0.17	mg/Kg	☼	08/16/13 13:30	08/20/13 22:01	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0079	mg/Kg	☼	08/16/13 10:05	08/16/13 13:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.82	0.28	mg/Kg	☼	08/19/13 07:10	08/20/13 14:52	1
Cyanide, Total	ND		1.0	0.48	mg/Kg	☼	08/16/13 06:40	08/16/13 12:41	1
Cr (III)	6.7		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-A-9

Lab Sample ID: 480-43956-9
Date Collected: 08/13/13 17:20
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.2	0.38	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
1,1-Dichloroethane	ND		5.2	0.63	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
1,1-Dichloroethene	ND		5.2	0.63	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
1,2-Dichlorobenzene	ND		5.2	0.40	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
1,2-Dichloroethane	ND		5.2	0.26	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
1,2-Dichloroethene, cis-	ND		5.2	0.66	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
1,2-Dichloroethene, trans-	ND		5.2	0.53	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
1,3-Dichlorobenzene	ND		5.2	0.27	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
1,4-Dichlorobenzene	ND		5.2	0.72	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
1,4-Dioxane	ND		210	25	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
Acetone	ND		26	4.4	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
Benzene	ND		5.2	0.25	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
Butylbenzene	ND		5.2	0.45	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
Carbon tetrachloride	ND		5.2	0.50	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
Chlorobenzene	ND		5.2	0.68	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
Chloroform	ND		5.2	0.32	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
Ethylbenzene	ND		5.2	0.36	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
Methyl Ethyl Ketone (2-Butanone)	ND		26	1.9	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
Methyl tert-butyl ether	ND		5.2	0.51	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
Methylene Chloride	ND		5.2	2.4	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
Propylbenzene, n-	ND		5.2	0.41	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
sec-Butylbenzene	ND		5.2	0.45	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
tert-Butylbenzene	ND		5.2	0.54	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
Tetrachloroethene	ND		5.2	0.69	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
Toluene	ND		5.2	0.39	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
Trichloroethene	ND		5.2	1.1	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
Trimethylbenzene, 1,2,4-	ND		5.2	0.99	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
Trimethylbenzene, 1,3,5-	ND		5.2	0.33	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1
Vinyl chloride	ND		5.2	0.63	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1

Client Sample ID: HOHAOC2-A-9
Date Collected: 08/13/13 17:20
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-9
Matrix: Solid
Percent Solids: 97.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylene (mixed)	ND		10	0.87	ug/Kg	☼	08/16/13 01:11	08/16/13 06:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 126*	*08/16/13 01:11*	*08/16/13 06:22*	*1*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*	*08/16/13 01:11*	*08/16/13 06:22*	*1*
Toluene-d8 (Surr)	*96*		*71 - 125*	*08/16/13 01:11*	*08/16/13 06:22*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/20/13 01:31	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	08/17/13 07:48	08/20/13 01:31	1
Anthracene	ND		170	4.4	ug/Kg	☼	08/17/13 07:48	08/20/13 01:31	1
Benzo(a)anthracene	ND		170	3.0	ug/Kg	☼	08/17/13 07:48	08/20/13 01:31	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	08/17/13 07:48	08/20/13 01:31	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	08/17/13 07:48	08/20/13 01:31	1
Benzo(g,h,i)perylene	ND		170	2.1	ug/Kg	☼	08/17/13 07:48	08/20/13 01:31	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	08/17/13 07:48	08/20/13 01:31	1
Chrysene	ND		170	1.7	ug/Kg	☼	08/17/13 07:48	08/20/13 01:31	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/20/13 01:31	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	08/17/13 07:48	08/20/13 01:31	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	08/17/13 07:48	08/20/13 01:31	1
Fluorene	ND		170	4.0	ug/Kg	☼	08/17/13 07:48	08/20/13 01:31	1
Hexachlorobenzene	ND		170	8.5	ug/Kg	☼	08/17/13 07:48	08/20/13 01:31	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg	☼	08/17/13 07:48	08/20/13 01:31	1
m & p - Cresol	ND		340	9.6	ug/Kg	☼	08/17/13 07:48	08/20/13 01:31	1
Naphthalene	ND		170	2.9	ug/Kg	☼	08/17/13 07:48	08/20/13 01:31	1
o-Cresol	ND		170	5.3	ug/Kg	☼	08/17/13 07:48	08/20/13 01:31	1
Pentachlorophenol	ND		340	59	ug/Kg	☼	08/17/13 07:48	08/20/13 01:31	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	08/17/13 07:48	08/20/13 01:31	1
Phenol	ND		170	18	ug/Kg	☼	08/17/13 07:48	08/20/13 01:31	1
Pyrene	ND		170	1.1	ug/Kg	☼	08/17/13 07:48	08/20/13 01:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*88*		*39 - 146*	*08/17/13 07:48*	*08/20/13 01:31*	*1*
2-Fluorobiphenyl	*90*		*37 - 120*	*08/17/13 07:48*	*08/20/13 01:31*	*1*
2-Fluorophenol	*85*		*18 - 120*	*08/17/13 07:48*	*08/20/13 01:31*	*1*
Nitrobenzene-d5	*87*		*34 - 132*	*08/17/13 07:48*	*08/20/13 01:31*	*1*
Phenol-d5	*90*		*11 - 120*	*08/17/13 07:48*	*08/20/13 01:31*	*1*
p-Terphenyl-d14	*90*		*65 - 153*	*08/17/13 07:48*	*08/20/13 01:31*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	08/17/13 07:39	08/19/13 14:17	1
4,4'-DDE	ND		1.7	0.26	ug/Kg	☼	08/17/13 07:39	08/19/13 14:17	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	08/17/13 07:39	08/19/13 14:17	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	08/17/13 07:39	08/19/13 14:17	1
alpha-BHC	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:39	08/19/13 14:17	1
alpha-Chlordane	ND		1.7	0.85	ug/Kg	☼	08/17/13 07:39	08/19/13 14:17	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:39	08/19/13 14:17	1
delta-BHC	**0.31**	**J B**	1.7	0.23	ug/Kg	☼	08/17/13 07:39	08/19/13 14:17	1

Client Sample ID: HOHAOC2-A-9
Date Collected: 08/13/13 17:20
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-9
Matrix: Solid
Percent Solids: 97.1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:39	08/19/13 14:17	1
Endosulfan I	ND		1.7	0.22	ug/Kg	☼	08/17/13 07:39	08/19/13 14:17	1
Endosulfan II	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:39	08/19/13 14:17	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	08/17/13 07:39	08/19/13 14:17	1
Endrin	ND		1.7	0.24	ug/Kg	☼	08/17/13 07:39	08/19/13 14:17	1
Heptachlor	ND		1.7	0.27	ug/Kg	☼	08/17/13 07:39	08/19/13 14:17	1
Lindane	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:39	08/19/13 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*86*		*32 - 136*	*08/17/13 07:39*	*08/19/13 14:17*	*1*
Tetrachloro-m-xylene	*82*		*30 - 124*	*08/17/13 07:39*	*08/19/13 14:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.24	0.048	mg/Kg	☼	08/19/13 14:38	08/20/13 07:48	1
PCB-1221	ND		0.24	0.048	mg/Kg	☼	08/19/13 14:38	08/20/13 07:48	1
PCB-1232	ND		0.24	0.048	mg/Kg	☼	08/19/13 14:38	08/20/13 07:48	1
PCB-1242	ND		0.24	0.048	mg/Kg	☼	08/19/13 14:38	08/20/13 07:48	1
PCB-1248	ND		0.24	0.048	mg/Kg	☼	08/19/13 14:38	08/20/13 07:48	1
PCB-1254	ND		0.24	0.11	mg/Kg	☼	08/19/13 14:38	08/20/13 07:48	1
PCB-1260	ND		0.24	0.11	mg/Kg	☼	08/19/13 14:38	08/20/13 07:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*97*		*47 - 176*	*08/19/13 14:38*	*08/20/13 07:48*	*1*
Tetrachloro-m-xylene	*104*		*46 - 175*	*08/19/13 14:38*	*08/20/13 07:48*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.1	ug/Kg	☼	08/20/13 07:41	08/22/13 09:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*100*		*39 - 120*	*08/20/13 07:41*	*08/22/13 09:06*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.2	0.43	mg/Kg	☼	08/16/13 13:30	08/20/13 22:03	1
Barium	**12.0**		0.54	0.12	mg/Kg	☼	08/16/13 13:30	08/20/13 22:03	1
Beryllium	**0.12**	**J**	0.22	0.030	mg/Kg	☼	08/16/13 13:30	08/20/13 22:03	1
Cadmium	ND		0.22	0.033	mg/Kg	☼	08/16/13 13:30	08/20/13 22:03	1
Chromium	**6.7**		0.54	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 22:03	1
Copper	**107**		1.1	0.23	mg/Kg	☼	08/16/13 13:30	08/20/13 22:03	1
Lead	**1.9**		1.1	0.26	mg/Kg	☼	08/16/13 13:30	08/20/13 22:03	1
Manganese	**133**		0.22	0.035	mg/Kg	☼	08/16/13 13:30	08/20/13 22:03	1
Nickel	**17.4**		5.4	0.25	mg/Kg	☼	08/16/13 13:30	08/20/13 22:03	1
Selenium	ND		4.3	0.43	mg/Kg	☼	08/16/13 13:30	08/20/13 22:03	1
Silver	ND		0.54	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 22:03	1
Zinc	**32.4**	**B**	2.2	0.17	mg/Kg	☼	08/16/13 13:30	08/20/13 22:03	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0081	mg/Kg	☼	08/16/13 10:05	08/16/13 13:08	1

Client Sample ID: HOHAOC2-A-9

Lab Sample ID: 480-43956-9

Date Collected: 08/13/13 17:20
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.82	0.28	mg/Kg	☼	08/19/13 07:10	08/20/13 13:49	1
Cyanide, Total	ND		0.99	0.48	mg/Kg	☼	08/16/13 06:40	08/16/13 12:42	1
Cr (III)	**6.7**		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-A-10

Lab Sample ID: 480-43956-10

Date Collected: 08/13/13 17:40
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.2	0.31	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
1,1-Dichloroethane	ND		4.2	0.51	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
1,1-Dichloroethene	ND		4.2	0.52	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
1,2-Dichlorobenzene	ND		4.2	0.33	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
1,2-Dichloroethene, cis-	ND		4.2	0.54	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
1,2-Dichloroethene, trans-	ND		4.2	0.44	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
1,3-Dichlorobenzene	ND		4.2	0.22	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
1,4-Dichlorobenzene	ND		4.2	0.59	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
1,4-Dioxane	ND		170	20	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
Acetone	ND		21	3.6	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
Benzene	ND		4.2	0.21	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
Butylbenzene	ND		4.2	0.37	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
Carbon tetrachloride	ND		4.2	0.41	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
Chlorobenzene	ND		4.2	0.56	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
Chloroform	ND		4.2	0.26	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.5	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
Methyl tert-butyl ether	ND		4.2	0.41	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
Methylene Chloride	ND		4.2	1.9	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
Propylbenzene, n-	ND		4.2	0.34	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
sec-Butylbenzene	ND		4.2	0.37	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
tert-Butylbenzene	ND		4.2	0.44	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
Tetrachloroethene	ND		4.2	0.57	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
Toluene	ND		4.2	0.32	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
Trichloroethene	ND		4.2	0.93	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
Trimethylbenzene, 1,2,4-	ND		4.2	0.81	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
Trimethylbenzene, 1,3,5-	ND		4.2	0.27	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
Vinyl chloride	ND		4.2	0.51	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1
Xylene (mixed)	ND		8.4	0.71	ug/Kg	☼	08/16/13 01:11	08/16/13 06:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*64 - 126*	*08/16/13 01:11*	*08/16/13 06:47*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 126*	*08/16/13 01:11*	*08/16/13 06:47*	*1*
Toluene-d8 (Surr)	*102*		*71 - 125*	*08/16/13 01:11*	*08/16/13 06:47*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/20/13 01:56	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	08/17/13 07:48	08/20/13 01:56	1

Client Sample ID: HOHAOC2-A-10
Date Collected: 08/13/13 17:40
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-10
Matrix: Solid
Percent Solids: 97.3

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		170	4.4	ug/Kg	☼	08/17/13 07:48	08/20/13 01:56	1
Benzo(a)anthracene	ND		170	3.0	ug/Kg	☼	08/17/13 07:48	08/20/13 01:56	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	08/17/13 07:48	08/20/13 01:56	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	08/17/13 07:48	08/20/13 01:56	1
Benzo(g,h,i)perylene	ND		170	2.1	ug/Kg	☼	08/17/13 07:48	08/20/13 01:56	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	08/17/13 07:48	08/20/13 01:56	1
Chrysene	ND		170	1.7	ug/Kg	☼	08/17/13 07:48	08/20/13 01:56	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/20/13 01:56	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	08/17/13 07:48	08/20/13 01:56	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	08/17/13 07:48	08/20/13 01:56	1
Fluorene	ND		170	4.0	ug/Kg	☼	08/17/13 07:48	08/20/13 01:56	1
Hexachlorobenzene	ND		170	8.5	ug/Kg	☼	08/17/13 07:48	08/20/13 01:56	1
Indeno(1,2,3-cd)pyrene	ND		170	4.8	ug/Kg	☼	08/17/13 07:48	08/20/13 01:56	1
m & p - Cresol	ND		340	9.6	ug/Kg	☼	08/17/13 07:48	08/20/13 01:56	1
Naphthalene	ND		170	2.9	ug/Kg	☼	08/17/13 07:48	08/20/13 01:56	1
o-Cresol	ND		170	5.3	ug/Kg	☼	08/17/13 07:48	08/20/13 01:56	1
Pentachlorophenol	ND		340	59	ug/Kg	☼	08/17/13 07:48	08/20/13 01:56	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	08/17/13 07:48	08/20/13 01:56	1
Phenol	ND		170	18	ug/Kg	☼	08/17/13 07:48	08/20/13 01:56	1
Pyrene	ND		170	1.1	ug/Kg	☼	08/17/13 07:48	08/20/13 01:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*89*		*39 - 146*	*08/17/13 07:48*	*08/20/13 01:56*	*1*
2-Fluorobiphenyl	*89*		*37 - 120*	*08/17/13 07:48*	*08/20/13 01:56*	*1*
2-Fluorophenol	*85*		*18 - 120*	*08/17/13 07:48*	*08/20/13 01:56*	*1*
Nitrobenzene-d5	*88*		*34 - 132*	*08/17/13 07:48*	*08/20/13 01:56*	*1*
Phenol-d5	*88*		*11 - 120*	*08/17/13 07:48*	*08/20/13 01:56*	*1*
p-Terphenyl-d14	*91*		*65 - 153*	*08/17/13 07:48*	*08/20/13 01:56*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	08/17/13 07:39	08/19/13 14:34	1
4,4'-DDE	ND		1.7	0.25	ug/Kg	☼	08/17/13 07:39	08/19/13 14:34	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	08/17/13 07:39	08/19/13 14:34	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	08/17/13 07:39	08/19/13 14:34	1
alpha-BHC	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:39	08/19/13 14:34	1
alpha-Chlordane	ND		1.7	0.84	ug/Kg	☼	08/17/13 07:39	08/19/13 14:34	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:39	08/19/13 14:34	1
delta-BHC	ND		1.7	0.22	ug/Kg	☼	08/17/13 07:39	08/19/13 14:34	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:39	08/19/13 14:34	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:39	08/19/13 14:34	1
Endosulfan II	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:39	08/19/13 14:34	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	08/17/13 07:39	08/19/13 14:34	1
Endrin	ND		1.7	0.23	ug/Kg	☼	08/17/13 07:39	08/19/13 14:34	1
Heptachlor	ND		1.7	0.27	ug/Kg	☼	08/17/13 07:39	08/19/13 14:34	1
Lindane	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:39	08/19/13 14:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*88*		*32 - 136*	*08/17/13 07:39*	*08/19/13 14:34*	*1*
Tetrachloro-m-xylene	*83*		*30 - 124*	*08/17/13 07:39*	*08/19/13 14:34*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-A-10

Lab Sample ID: 480-43956-10

Date Collected: 08/13/13 17:40
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.23	0.045	mg/Kg	☼	08/19/13 14:38	08/20/13 08:03	1
PCB-1221	ND		0.23	0.045	mg/Kg	☼	08/19/13 14:38	08/20/13 08:03	1
PCB-1232	ND		0.23	0.045	mg/Kg	☼	08/19/13 14:38	08/20/13 08:03	1
PCB-1242	ND		0.23	0.045	mg/Kg	☼	08/19/13 14:38	08/20/13 08:03	1
PCB-1248	ND		0.23	0.045	mg/Kg	☼	08/19/13 14:38	08/20/13 08:03	1
PCB-1254	ND		0.23	0.11	mg/Kg	☼	08/19/13 14:38	08/20/13 08:03	1
PCB-1260	ND		0.23	0.11	mg/Kg	☼	08/19/13 14:38	08/20/13 08:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*94*		*47 - 176*	*08/19/13 14:38*	*08/20/13 08:03*	*1*
Tetrachloro-m-xylene	*102*		*46 - 175*	*08/19/13 14:38*	*08/20/13 08:03*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.1	ug/Kg	☼	08/20/13 07:41	08/22/13 09:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*104*		*39 - 120*	*08/20/13 07:41*	*08/22/13 09:35*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.8	0.36	mg/Kg	☼	08/16/13 13:30	08/20/13 22:10	1
Barium	**11.6**		0.45	0.099	mg/Kg	☼	08/16/13 13:30	08/20/13 22:10	1
Beryllium	**0.11**	**J**	0.18	0.025	mg/Kg	☼	08/16/13 13:30	08/20/13 22:10	1
Cadmium	ND		0.18	0.027	mg/Kg	☼	08/16/13 13:30	08/20/13 22:10	1
Chromium	**6.7**		0.45	0.18	mg/Kg	☼	08/16/13 13:30	08/20/13 22:10	1
Copper	**92.5**		0.90	0.19	mg/Kg	☼	08/16/13 13:30	08/20/13 22:10	1
Lead	**2.6**		0.90	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 22:10	1
Manganese	**132**		0.18	0.029	mg/Kg	☼	08/16/13 13:30	08/20/13 22:10	1
Nickel	**16.8**		4.5	0.21	mg/Kg	☼	08/16/13 13:30	08/20/13 22:10	1
Selenium	**0.47**	**J**	3.6	0.36	mg/Kg	☼	08/16/13 13:30	08/20/13 22:10	1
Silver	ND		0.45	0.18	mg/Kg	☼	08/16/13 13:30	08/20/13 22:10	1
Zinc	**31.0**	**B**	1.8	0.14	mg/Kg	☼	08/16/13 13:30	08/20/13 22:10	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0080	mg/Kg	☼	08/16/13 10:05	08/16/13 13:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.82	0.28	mg/Kg	☼	08/19/13 07:10	08/20/13 14:53	1
Cyanide, Total	ND		0.97	0.47	mg/Kg	☼	08/16/13 06:40	08/16/13 12:43	1
Cr (III)	**6.7**		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-A-11

Lab Sample ID: 480-43956-11

Date Collected: 08/13/13 18:00
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.8	0.28	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-A-11
Date Collected: 08/13/13 18:00
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-11
Matrix: Solid
Percent Solids: 97.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		3.8	0.47	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
1,1-Dichloroethene	ND		3.8	0.47	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
1,2-Dichlorobenzene	ND		3.8	0.30	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
1,2-Dichloroethane	ND		3.8	0.19	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
1,2-Dichloroethene, cis-	ND		3.8	0.49	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
1,2-Dichloroethene, trans-	ND		3.8	0.39	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
1,3-Dichlorobenzene	ND		3.8	0.20	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
1,4-Dichlorobenzene	ND		3.8	0.53	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
1,4-Dioxane	ND		150	18	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
Acetone	ND		19	3.2	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
Benzene	ND		3.8	0.19	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
Butylbenzene	ND		3.8	0.33	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
Carbon tetrachloride	ND		3.8	0.37	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
Chlorobenzene	ND		3.8	0.50	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
Chloroform	ND		3.8	0.24	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
Ethylbenzene	ND		3.8	0.26	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
Methyl Ethyl Ketone (2-Butanone)	ND		19	1.4	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
Methyl tert-butyl ether	ND		3.8	0.37	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
Methylene Chloride	ND		3.8	1.8	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
Propylbenzene, n-	ND		3.8	0.31	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
sec-Butylbenzene	ND		3.8	0.33	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
tert-Butylbenzene	ND		3.8	0.40	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
Tetrachloroethene	ND		3.8	0.51	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
Toluene	ND		3.8	0.29	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
Trichloroethene	ND		3.8	0.84	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
Trimethylbenzene, 1,2,4-	ND		3.8	0.73	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
Trimethylbenzene, 1,3,5-	ND		3.8	0.25	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
Vinyl chloride	ND		3.8	0.47	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1
Xylene (mixed)	ND		7.6	0.64	ug/Kg	☼	08/16/13 01:11	08/16/13 07:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 126*	*08/16/13 01:11*	*08/16/13 07:13*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*	*08/16/13 01:11*	*08/16/13 07:13*	*1*
Toluene-d8 (Surr)	*97*		*71 - 125*	*08/16/13 01:11*	*08/16/13 07:13*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/20/13 02:20	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	08/17/13 07:48	08/20/13 02:20	1
Anthracene	ND		170	4.4	ug/Kg	☼	08/17/13 07:48	08/20/13 02:20	1
Benzo(a)anthracene	ND		170	3.0	ug/Kg	☼	08/17/13 07:48	08/20/13 02:20	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	08/17/13 07:48	08/20/13 02:20	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	08/17/13 07:48	08/20/13 02:20	1
Benzo(g,h,i)perylene	ND		170	2.1	ug/Kg	☼	08/17/13 07:48	08/20/13 02:20	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	08/17/13 07:48	08/20/13 02:20	1
Chrysene	ND		170	1.7	ug/Kg	☼	08/17/13 07:48	08/20/13 02:20	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/20/13 02:20	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	08/17/13 07:48	08/20/13 02:20	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	08/17/13 07:48	08/20/13 02:20	1
Fluorene	ND		170	4.0	ug/Kg	☼	08/17/13 07:48	08/20/13 02:20	1

Client Sample ID: HOHAOC2-A-11
Date Collected: 08/13/13 18:00
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-11
Matrix: Solid
Percent Solids: 97.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		170	8.5	ug/Kg	☼	08/17/13 07:48	08/20/13 02:20	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg	☼	08/17/13 07:48	08/20/13 02:20	1
m & p - Cresol	ND		340	9.5	ug/Kg	☼	08/17/13 07:48	08/20/13 02:20	1
Naphthalene	ND		170	2.9	ug/Kg	☼	08/17/13 07:48	08/20/13 02:20	1
o-Cresol	ND		170	5.3	ug/Kg	☼	08/17/13 07:48	08/20/13 02:20	1
Pentachlorophenol	ND		340	59	ug/Kg	☼	08/17/13 07:48	08/20/13 02:20	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	08/17/13 07:48	08/20/13 02:20	1
Phenol	ND		170	18	ug/Kg	☼	08/17/13 07:48	08/20/13 02:20	1
Pyrene	ND		170	1.1	ug/Kg	☼	08/17/13 07:48	08/20/13 02:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*89*		*39 - 146*	*08/17/13 07:48*	*08/20/13 02:20*	*1*
2-Fluorobiphenyl	*85*		*37 - 120*	*08/17/13 07:48*	*08/20/13 02:20*	*1*
2-Fluorophenol	*72*		*18 - 120*	*08/17/13 07:48*	*08/20/13 02:20*	*1*
Nitrobenzene-d5	*81*		*34 - 132*	*08/17/13 07:48*	*08/20/13 02:20*	*1*
Phenol-d5	*81*		*11 - 120*	*08/17/13 07:48*	*08/20/13 02:20*	*1*
p-Terphenyl-d14	*92*		*65 - 153*	*08/17/13 07:48*	*08/20/13 02:20*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	08/17/13 07:39	08/19/13 14:52	1
4,4'-DDE	ND		1.7	0.25	ug/Kg	☼	08/17/13 07:39	08/19/13 14:52	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	08/17/13 07:39	08/19/13 14:52	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	08/17/13 07:39	08/19/13 14:52	1
alpha-BHC	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:39	08/19/13 14:52	1
alpha-Chlordane	ND		1.7	0.84	ug/Kg	☼	08/17/13 07:39	08/19/13 14:52	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:39	08/19/13 14:52	1
delta-BHC	**0.27**	**J B**	1.7	0.22	ug/Kg	☼	08/17/13 07:39	08/19/13 14:52	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:39	08/19/13 14:52	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:39	08/19/13 14:52	1
Endosulfan II	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:39	08/19/13 14:52	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	08/17/13 07:39	08/19/13 14:52	1
Endrin	ND		1.7	0.23	ug/Kg	☼	08/17/13 07:39	08/19/13 14:52	1
Heptachlor	ND		1.7	0.26	ug/Kg	☼	08/17/13 07:39	08/19/13 14:52	1
Lindane	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:39	08/19/13 14:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*86*		*32 - 136*	*08/17/13 07:39*	*08/19/13 14:52*	*1*
Tetrachloro-m-xylene	*82*		*30 - 124*	*08/17/13 07:39*	*08/19/13 14:52*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.18	0.035	mg/Kg	☼	08/19/13 14:38	08/20/13 08:18	1
PCB-1221	ND		0.18	0.035	mg/Kg	☼	08/19/13 14:38	08/20/13 08:18	1
PCB-1232	ND		0.18	0.035	mg/Kg	☼	08/19/13 14:38	08/20/13 08:18	1
PCB-1242	ND		0.18	0.035	mg/Kg	☼	08/19/13 14:38	08/20/13 08:18	1
PCB-1248	ND		0.18	0.035	mg/Kg	☼	08/19/13 14:38	08/20/13 08:18	1
PCB-1254	ND		0.18	0.084	mg/Kg	☼	08/19/13 14:38	08/20/13 08:18	1
PCB-1260	ND		0.18	0.084	mg/Kg	☼	08/19/13 14:38	08/20/13 08:18	1

Client Sample ID: HOHAOC2-A-11

Lab Sample ID: 480-43956-11

Date Collected: 08/13/13 18:00
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*98*		*47 - 176*	*08/19/13 14:38*	*08/20/13 08:18*	*1*
Tetrachloro-m-xylene	*104*		*46 - 175*	*08/19/13 14:38*	*08/20/13 08:18*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.0	ug/Kg	☼	08/20/13 07:41	08/22/13 10:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*100*		*39 - 120*	*08/20/13 07:41*	*08/22/13 10:05*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.73**	**J**	2.0	0.40	mg/Kg	☼	08/16/13 13:30	08/20/13 22:12	1
Barium	**9.4**		0.50	0.11	mg/Kg	☼	08/16/13 13:30	08/20/13 22:12	1
Beryllium	**0.10**	**J**	0.20	0.028	mg/Kg	☼	08/16/13 13:30	08/20/13 22:12	1
Cadmium	ND		0.20	0.030	mg/Kg	☼	08/16/13 13:30	08/20/13 22:12	1
Chromium	**5.0**		0.50	0.20	mg/Kg	☼	08/16/13 13:30	08/20/13 22:12	1
Copper	**121**		1.0	0.21	mg/Kg	☼	08/16/13 13:30	08/20/13 22:12	1
Lead	**3.4**		1.0	0.24	mg/Kg	☼	08/16/13 13:30	08/20/13 22:12	1
Manganese	**132**		0.20	0.032	mg/Kg	☼	08/16/13 13:30	08/20/13 22:12	1
Nickel	**17.4**		5.0	0.23	mg/Kg	☼	08/16/13 13:30	08/20/13 22:12	1
Selenium	**0.60**	**J**	4.0	0.40	mg/Kg	☼	08/16/13 13:30	08/20/13 22:12	1
Silver	ND		0.50	0.20	mg/Kg	☼	08/16/13 13:30	08/20/13 22:12	1
Zinc	**34.9**	**B**	2.0	0.15	mg/Kg	☼	08/16/13 13:30	08/20/13 22:12	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0078	mg/Kg	☼	08/16/13 10:05	08/16/13 13:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.82	0.28	mg/Kg	☼	08/19/13 07:10	08/20/13 13:56	1
Cyanide, Total	ND		0.96	0.47	mg/Kg	☼	08/16/13 06:40	08/16/13 12:45	1
Cr (III)	**5.0**		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-A-12

Lab Sample ID: 480-43956-12

Date Collected: 08/13/13 18:20
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.7	0.27	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
1,1-Dichloroethane	ND		3.7	0.45	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
1,1-Dichloroethene	ND		3.7	0.46	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
1,2-Dichlorobenzene	ND		3.7	0.29	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
1,2-Dichloroethane	ND		3.7	0.19	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
1,2-Dichloroethene, cis-	ND		3.7	0.48	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
1,2-Dichloroethene, trans-	ND		3.7	0.38	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
1,3-Dichlorobenzene	ND		3.7	0.19	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
1,4-Dichlorobenzene	ND		3.7	0.52	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
1,4-Dioxane	ND		150	18	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-A-12
Date Collected: 08/13/13 18:20
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-12
Matrix: Solid
Percent Solids: 97.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		19	3.1	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
Benzene	ND		3.7	0.18	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
Butylbenzene	ND		3.7	0.32	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
Carbon tetrachloride	ND		3.7	0.36	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
Chlorobenzene	ND		3.7	0.49	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
Chloroform	ND		3.7	0.23	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
Ethylbenzene	ND		3.7	0.26	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
Methyl Ethyl Ketone (2-Butanone)	ND		19	1.4	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
Methyl tert-butyl ether	ND		3.7	0.37	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
Methylene Chloride	ND		3.7	1.7	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
Propylbenzene, n-	ND		3.7	0.30	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
sec-Butylbenzene	ND		3.7	0.32	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
tert-Butylbenzene	ND		3.7	0.39	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
Tetrachloroethene	ND		3.7	0.50	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
Toluene	ND		3.7	0.28	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
Trichloroethene	ND		3.7	0.82	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
Trimethylbenzene, 1,2,4-	ND		3.7	0.71	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
Trimethylbenzene, 1,3,5-	ND		3.7	0.24	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
Vinyl chloride	ND		3.7	0.45	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1
Xylene (mixed)	ND		7.4	0.63	ug/Kg	☼	08/16/13 11:49	08/16/13 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*64 - 126*	*08/16/13 11:49*	*08/16/13 15:00*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 126*	*08/16/13 11:49*	*08/16/13 15:00*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*08/16/13 11:49*	*08/16/13 15:00*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/20/13 02:45	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	08/17/13 07:48	08/20/13 02:45	1
Anthracene	ND		170	4.4	ug/Kg	☼	08/17/13 07:48	08/20/13 02:45	1
Benzo(a)anthracene	ND		170	3.0	ug/Kg	☼	08/17/13 07:48	08/20/13 02:45	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	08/17/13 07:48	08/20/13 02:45	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	08/17/13 07:48	08/20/13 02:45	1
Benzo(g,h,i)perylene	ND		170	2.1	ug/Kg	☼	08/17/13 07:48	08/20/13 02:45	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	08/17/13 07:48	08/20/13 02:45	1
Chrysene	ND		170	1.7	ug/Kg	☼	08/17/13 07:48	08/20/13 02:45	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/20/13 02:45	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	08/17/13 07:48	08/20/13 02:45	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	08/17/13 07:48	08/20/13 02:45	1
Fluorene	ND		170	4.0	ug/Kg	☼	08/17/13 07:48	08/20/13 02:45	1
Hexachlorobenzene	ND		170	8.5	ug/Kg	☼	08/17/13 07:48	08/20/13 02:45	1
Indeno(1,2,3-cd)pyrene	ND		170	4.8	ug/Kg	☼	08/17/13 07:48	08/20/13 02:45	1
m & p - Cresol	ND		340	9.6	ug/Kg	☼	08/17/13 07:48	08/20/13 02:45	1
Naphthalene	ND		170	2.9	ug/Kg	☼	08/17/13 07:48	08/20/13 02:45	1
o-Cresol	ND		170	5.3	ug/Kg	☼	08/17/13 07:48	08/20/13 02:45	1
Pentachlorophenol	ND		340	59	ug/Kg	☼	08/17/13 07:48	08/20/13 02:45	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	08/17/13 07:48	08/20/13 02:45	1
Phenol	ND		170	18	ug/Kg	☼	08/17/13 07:48	08/20/13 02:45	1
Pyrene	ND		170	1.1	ug/Kg	☼	08/17/13 07:48	08/20/13 02:45	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-A-12
Date Collected: 08/13/13 18:20
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-12
Matrix: Solid
Percent Solids: 97.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	90		39 - 146	08/17/13 07:48	08/20/13 02:45	1
2-Fluorobiphenyl	91		37 - 120	08/17/13 07:48	08/20/13 02:45	1
2-Fluorophenol	77		18 - 120	08/17/13 07:48	08/20/13 02:45	1
Nitrobenzene-d5	85		34 - 132	08/17/13 07:48	08/20/13 02:45	1
Phenol-d5	85		11 - 120	08/17/13 07:48	08/20/13 02:45	1
p-Terphenyl-d14	92		65 - 153	08/17/13 07:48	08/20/13 02:45	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	08/17/13 07:39	08/19/13 15:09	1
4,4'-DDE	ND		1.7	0.25	ug/Kg	☼	08/17/13 07:39	08/19/13 15:09	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	08/17/13 07:39	08/19/13 15:09	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	08/17/13 07:39	08/19/13 15:09	1
alpha-BHC	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:39	08/19/13 15:09	1
alpha-Chlordane	ND		1.7	0.85	ug/Kg	☼	08/17/13 07:39	08/19/13 15:09	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:39	08/19/13 15:09	1
delta-BHC	ND		1.7	0.22	ug/Kg	☼	08/17/13 07:39	08/19/13 15:09	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:39	08/19/13 15:09	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:39	08/19/13 15:09	1
Endosulfan II	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:39	08/19/13 15:09	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	08/17/13 07:39	08/19/13 15:09	1
Endrin	ND		1.7	0.23	ug/Kg	☼	08/17/13 07:39	08/19/13 15:09	1
Heptachlor	ND		1.7	0.27	ug/Kg	☼	08/17/13 07:39	08/19/13 15:09	1
Lindane	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:39	08/19/13 15:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	86		32 - 136	08/17/13 07:39	08/19/13 15:09	1
Tetrachloro-m-xylene	81		30 - 124	08/17/13 07:39	08/19/13 15:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.19	0.038	mg/Kg	☼	08/19/13 14:38	08/20/13 08:33	1
PCB-1221	ND		0.19	0.038	mg/Kg	☼	08/19/13 14:38	08/20/13 08:33	1
PCB-1232	ND		0.19	0.038	mg/Kg	☼	08/19/13 14:38	08/20/13 08:33	1
PCB-1242	ND		0.19	0.038	mg/Kg	☼	08/19/13 14:38	08/20/13 08:33	1
PCB-1248	ND		0.19	0.038	mg/Kg	☼	08/19/13 14:38	08/20/13 08:33	1
PCB-1254	ND		0.19	0.090	mg/Kg	☼	08/19/13 14:38	08/20/13 08:33	1
PCB-1260	ND		0.19	0.090	mg/Kg	☼	08/19/13 14:38	08/20/13 08:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	94		47 - 176	08/19/13 14:38	08/20/13 08:33	1
Tetrachloro-m-xylene	102		46 - 175	08/19/13 14:38	08/20/13 08:33	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.0	ug/Kg	☼	08/20/13 07:41	08/22/13 10:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	104		39 - 120	08/20/13 07:41	08/22/13 10:35	1

Client Sample ID: HOHAOC2-A-12

Lab Sample ID: 480-43956-12

Date Collected: 08/13/13 18:20
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.2	0.44	mg/Kg	☼	08/16/13 13:30	08/20/13 22:14	1
Barium	**12.6**		0.55	0.12	mg/Kg	☼	08/16/13 13:30	08/20/13 22:14	1
Beryllium	**0.10**	**J**	0.22	0.031	mg/Kg	☼	08/16/13 13:30	08/20/13 22:14	1
Cadmium	ND		0.22	0.033	mg/Kg	☼	08/16/13 13:30	08/20/13 22:14	1
Chromium	**4.9**		0.55	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 22:14	1
Copper	**127**		1.1	0.23	mg/Kg	☼	08/16/13 13:30	08/20/13 22:14	1
Lead	**2.2**		1.1	0.26	mg/Kg	☼	08/16/13 13:30	08/20/13 22:14	1
Manganese	**141**		0.22	0.035	mg/Kg	☼	08/16/13 13:30	08/20/13 22:14	1
Nickel	**17.3**		5.5	0.25	mg/Kg	☼	08/16/13 13:30	08/20/13 22:14	1
Selenium	**0.84**	**J**	4.4	0.44	mg/Kg	☼	08/16/13 13:30	08/20/13 22:14	1
Silver	ND		0.55	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 22:14	1
Zinc	**36.8**	**B**	2.2	0.17	mg/Kg	☼	08/16/13 13:30	08/20/13 22:14	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0082	mg/Kg	☼	08/16/13 10:05	08/16/13 13:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.82	0.28	mg/Kg	☼	08/19/13 07:10	08/20/13 14:36	1
Cyanide, Total	ND		0.96	0.46	mg/Kg	☼	08/16/13 06:40	08/16/13 12:46	1
Cr (III)	**4.9**		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-A-13

Lab Sample ID: 480-43956-13

Date Collected: 08/13/13 18:40
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.9	0.28	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
1,1-Dichloroethane	ND		3.9	0.48	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
1,1-Dichloroethene	ND		3.9	0.48	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
1,2-Dichlorobenzene	ND		3.9	0.31	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
1,2-Dichloroethane	ND		3.9	0.20	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
1,2-Dichloroethene, cis-	ND		3.9	0.50	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
1,2-Dichloroethene, trans-	ND		3.9	0.40	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
1,3-Dichlorobenzene	ND		3.9	0.20	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
1,4-Dichlorobenzene	ND		3.9	0.55	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
1,4-Dioxane	ND		160	19	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
Acetone	ND		20	3.3	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
Benzene	ND		3.9	0.19	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
Butylbenzene	ND		3.9	0.34	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
Carbon tetrachloride	ND		3.9	0.38	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
Chlorobenzene	ND		3.9	0.52	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
Chloroform	ND		3.9	0.24	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
Ethylbenzene	ND		3.9	0.27	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
Methyl Ethyl Ketone (2-Butanone)	ND		20	1.4	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
Methyl tert-butyl ether	ND		3.9	0.38	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
Methylene Chloride	ND		3.9	1.8	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
Propylbenzene, n-	ND		3.9	0.31	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-A-13
Date Collected: 08/13/13 18:40
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-13
Matrix: Solid
Percent Solids: 97.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		3.9	0.34	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
tert-Butylbenzene	ND		3.9	0.41	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
Tetrachloroethene	ND		3.9	0.53	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
Toluene	ND		3.9	0.30	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
Trichloroethene	ND		3.9	0.86	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
Trimethylbenzene, 1,2,4-	ND		3.9	0.75	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
Trimethylbenzene, 1,3,5-	ND		3.9	0.25	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
Vinyl chloride	ND		3.9	0.48	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1
Xylene (mixed)	ND		7.8	0.66	ug/Kg	☼	08/16/13 01:11	08/16/13 08:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 126*	*08/16/13 01:11*	*08/16/13 08:04*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*	*08/16/13 01:11*	*08/16/13 08:04*	*1*
Toluene-d8 (Surr)	*98*		*71 - 125*	*08/16/13 01:11*	*08/16/13 08:04*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/20/13 03:09	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	08/17/13 07:48	08/20/13 03:09	1
Anthracene	ND		170	4.4	ug/Kg	☼	08/17/13 07:48	08/20/13 03:09	1
Benzo(a)anthracene	ND		170	3.0	ug/Kg	☼	08/17/13 07:48	08/20/13 03:09	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	08/17/13 07:48	08/20/13 03:09	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	08/17/13 07:48	08/20/13 03:09	1
Benzo(g,h,i)perylene	ND		170	2.1	ug/Kg	☼	08/17/13 07:48	08/20/13 03:09	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	08/17/13 07:48	08/20/13 03:09	1
Chrysene	ND		170	1.7	ug/Kg	☼	08/17/13 07:48	08/20/13 03:09	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	08/17/13 07:48	08/20/13 03:09	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	08/17/13 07:48	08/20/13 03:09	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	08/17/13 07:48	08/20/13 03:09	1
Fluorene	ND		170	4.0	ug/Kg	☼	08/17/13 07:48	08/20/13 03:09	1
Hexachlorobenzene	ND		170	8.5	ug/Kg	☼	08/17/13 07:48	08/20/13 03:09	1
Indeno(1,2,3-cd)pyrene	ND		170	4.8	ug/Kg	☼	08/17/13 07:48	08/20/13 03:09	1
m & p - Cresol	ND		340	9.6	ug/Kg	☼	08/17/13 07:48	08/20/13 03:09	1
Naphthalene	ND		170	2.9	ug/Kg	☼	08/17/13 07:48	08/20/13 03:09	1
o-Cresol	ND		170	5.3	ug/Kg	☼	08/17/13 07:48	08/20/13 03:09	1
Pentachlorophenol	ND		340	59	ug/Kg	☼	08/17/13 07:48	08/20/13 03:09	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	08/17/13 07:48	08/20/13 03:09	1
Phenol	ND		170	18	ug/Kg	☼	08/17/13 07:48	08/20/13 03:09	1
Pyrene	ND		170	1.1	ug/Kg	☼	08/17/13 07:48	08/20/13 03:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*94*		*39 - 146*	*08/17/13 07:48*	*08/20/13 03:09*	*1*
2-Fluorobiphenyl	*90*		*37 - 120*	*08/17/13 07:48*	*08/20/13 03:09*	*1*
2-Fluorophenol	*80*		*18 - 120*	*08/17/13 07:48*	*08/20/13 03:09*	*1*
Nitrobenzene-d5	*86*		*34 - 132*	*08/17/13 07:48*	*08/20/13 03:09*	*1*
Phenol-d5	*89*		*11 - 120*	*08/17/13 07:48*	*08/20/13 03:09*	*1*
p-Terphenyl-d14	*92*		*65 - 153*	*08/17/13 07:48*	*08/20/13 03:09*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-A-13
Date Collected: 08/13/13 18:40
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-13
Matrix: Solid
Percent Solids: 97.2

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	08/17/13 07:39	08/19/13 15:27	1
4,4'-DDE	ND		1.7	0.26	ug/Kg	☼	08/17/13 07:39	08/19/13 15:27	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	08/17/13 07:39	08/19/13 15:27	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	08/17/13 07:39	08/19/13 15:27	1
alpha-BHC	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:39	08/19/13 15:27	1
alpha-Chlordane	ND		1.7	0.85	ug/Kg	☼	08/17/13 07:39	08/19/13 15:27	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:39	08/19/13 15:27	1
delta-BHC	ND		1.7	0.22	ug/Kg	☼	08/17/13 07:39	08/19/13 15:27	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:39	08/19/13 15:27	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:39	08/19/13 15:27	1
Endosulfan II	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:39	08/19/13 15:27	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	08/17/13 07:39	08/19/13 15:27	1
Endrin	ND		1.7	0.23	ug/Kg	☼	08/17/13 07:39	08/19/13 15:27	1
Heptachlor	ND		1.7	0.27	ug/Kg	☼	08/17/13 07:39	08/19/13 15:27	1
Lindane	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:39	08/19/13 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*88*		*32 - 136*	*08/17/13 07:39*	*08/19/13 15:27*	*1*
Tetrachloro-m-xylene	*82*		*30 - 124*	*08/17/13 07:39*	*08/19/13 15:27*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.17	0.034	mg/Kg	☼	08/19/13 14:38	08/20/13 08:47	1
PCB-1221	ND		0.17	0.034	mg/Kg	☼	08/19/13 14:38	08/20/13 08:47	1
PCB-1232	ND		0.17	0.034	mg/Kg	☼	08/19/13 14:38	08/20/13 08:47	1
PCB-1242	ND		0.17	0.034	mg/Kg	☼	08/19/13 14:38	08/20/13 08:47	1
PCB-1248	ND		0.17	0.034	mg/Kg	☼	08/19/13 14:38	08/20/13 08:47	1
PCB-1254	ND		0.17	0.082	mg/Kg	☼	08/19/13 14:38	08/20/13 08:47	1
PCB-1260	ND		0.17	0.082	mg/Kg	☼	08/19/13 14:38	08/20/13 08:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*96*		*47 - 176*	*08/19/13 14:38*	*08/20/13 08:47*	*1*
Tetrachloro-m-xylene	*103*		*46 - 175*	*08/19/13 14:38*	*08/20/13 08:47*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.1	ug/Kg	☼	08/20/13 08:01	08/22/13 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*91*		*39 - 120*	*08/20/13 08:01*	*08/22/13 13:33*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.9	0.38	mg/Kg	☼	08/16/13 13:30	08/20/13 22:17	1
Barium	**12.6**		0.47	0.10	mg/Kg	☼	08/16/13 13:30	08/20/13 22:17	1
Beryllium	**0.10**	**J**	0.19	0.027	mg/Kg	☼	08/16/13 13:30	08/20/13 22:17	1
Cadmium	ND		0.19	0.028	mg/Kg	☼	08/16/13 13:30	08/20/13 22:17	1
Chromium	**6.1**		0.47	0.19	mg/Kg	☼	08/16/13 13:30	08/20/13 22:17	1
Copper	**200**		0.95	0.20	mg/Kg	☼	08/16/13 13:30	08/20/13 22:17	1
Lead	**3.8**		0.95	0.23	mg/Kg	☼	08/16/13 13:30	08/20/13 22:17	1
Manganese	**145**		0.19	0.030	mg/Kg	☼	08/16/13 13:30	08/20/13 22:17	1

Client Sample ID: HOHAOC2-A-13

Lab Sample ID: 480-43956-13
Date Collected: 08/13/13 18:40
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.2

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	18.9		4.7	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 22:17	1
Selenium	0.47	J	3.8	0.38	mg/Kg	☼	08/16/13 13:30	08/20/13 22:17	1
Silver	ND		0.47	0.19	mg/Kg	☼	08/16/13 13:30	08/20/13 22:17	1
Zinc	37.9	B	1.9	0.14	mg/Kg	☼	08/16/13 13:30	08/20/13 22:17	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0082	mg/Kg	☼	08/16/13 10:05	08/16/13 13:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.82	0.28	mg/Kg	☼	08/19/13 07:10	08/20/13 14:38	1
Cyanide, Total	ND		1.0	0.48	mg/Kg	☼	08/16/13 06:40	08/16/13 12:47	1
Cr (III)	6.1		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-B-1

Lab Sample ID: 480-43956-14
Date Collected: 08/14/13 11:30
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 98.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.7	0.34	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
1,1-Dichloroethane	ND		4.7	0.57	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
1,1-Dichloroethene	ND		4.7	0.57	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
1,2-Dichlorobenzene	ND		4.7	0.37	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
1,2-Dichloroethane	ND		4.7	0.24	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
1,2-Dichloroethene, cis-	ND		4.7	0.60	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
1,2-Dichloroethene, trans-	ND		4.7	0.48	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
1,3-Dichlorobenzene	ND		4.7	0.24	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
1,4-Dichlorobenzene	ND		4.7	0.66	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
1,4-Dioxane	ND		190	23	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
Acetone	ND		23	4.0	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
Benzene	ND		4.7	0.23	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
Butylbenzene	ND		4.7	0.41	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
Carbon tetrachloride	ND		4.7	0.45	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
Chlorobenzene	ND		4.7	0.62	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
Chloroform	ND		4.7	0.29	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
Ethylbenzene	ND		4.7	0.32	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
Methyl Ethyl Ketone (2-Butanone)	ND		23	1.7	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
Methyl tert-butyl ether	ND		4.7	0.46	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
Methylene Chloride	ND		4.7	2.2	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
Propylbenzene, n-	ND		4.7	0.38	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
sec-Butylbenzene	ND		4.7	0.41	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
tert-Butylbenzene	ND		4.7	0.49	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
Tetrachloroethene	ND		4.7	0.63	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
Toluene	ND		4.7	0.35	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
Trichloroethene	ND		4.7	1.0	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
Trimethylbenzene, 1,2,4-	ND		4.7	0.90	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
Trimethylbenzene, 1,3,5-	ND		4.7	0.30	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1
Vinyl chloride	ND		4.7	0.57	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1

Client Sample ID: HOHAOC2-B-1
Date Collected: 08/14/13 11:30
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-14
Matrix: Solid
Percent Solids: 98.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylene (mixed)	ND		9.4	0.79	ug/Kg	☼	08/16/13 01:11	08/16/13 08:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*64 - 126*	*08/16/13 01:11*	*08/16/13 08:30*	*1*
4-Bromofluorobenzene (Surr)	*101*		*72 - 126*	*08/16/13 01:11*	*08/16/13 08:30*	*1*
Toluene-d8 (Surr)	*102*		*71 - 125*	*08/16/13 01:11*	*08/16/13 08:30*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	08/17/13 07:49	08/20/13 03:34	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	08/17/13 07:49	08/20/13 03:34	1
Anthracene	ND		170	4.4	ug/Kg	☼	08/17/13 07:49	08/20/13 03:34	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg	☼	08/17/13 07:49	08/20/13 03:34	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	08/17/13 07:49	08/20/13 03:34	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	08/17/13 07:49	08/20/13 03:34	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg	☼	08/17/13 07:49	08/20/13 03:34	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	08/17/13 07:49	08/20/13 03:34	1
Chrysene	ND		170	1.7	ug/Kg	☼	08/17/13 07:49	08/20/13 03:34	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	08/17/13 07:49	08/20/13 03:34	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	08/17/13 07:49	08/20/13 03:34	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	08/17/13 07:49	08/20/13 03:34	1
Fluorene	ND		170	3.9	ug/Kg	☼	08/17/13 07:49	08/20/13 03:34	1
Hexachlorobenzene	ND		170	8.5	ug/Kg	☼	08/17/13 07:49	08/20/13 03:34	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg	☼	08/17/13 07:49	08/20/13 03:34	1
m & p - Cresol	ND		330	9.5	ug/Kg	☼	08/17/13 07:49	08/20/13 03:34	1
Naphthalene	ND		170	2.8	ug/Kg	☼	08/17/13 07:49	08/20/13 03:34	1
o-Cresol	ND		170	5.2	ug/Kg	☼	08/17/13 07:49	08/20/13 03:34	1
Pentachlorophenol	ND		330	58	ug/Kg	☼	08/17/13 07:49	08/20/13 03:34	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	08/17/13 07:49	08/20/13 03:34	1
Phenol	ND		170	18	ug/Kg	☼	08/17/13 07:49	08/20/13 03:34	1
Pyrene	ND		170	1.1	ug/Kg	☼	08/17/13 07:49	08/20/13 03:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*88*		*39 - 146*	*08/17/13 07:49*	*08/20/13 03:34*	*1*
2-Fluorobiphenyl	*83*		*37 - 120*	*08/17/13 07:49*	*08/20/13 03:34*	*1*
2-Fluorophenol	*73*		*18 - 120*	*08/17/13 07:49*	*08/20/13 03:34*	*1*
Nitrobenzene-d5	*79*		*34 - 132*	*08/17/13 07:49*	*08/20/13 03:34*	*1*
Phenol-d5	*79*		*11 - 120*	*08/17/13 07:49*	*08/20/13 03:34*	*1*
p-Terphenyl-d14	*87*		*65 - 153*	*08/17/13 07:49*	*08/20/13 03:34*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	08/17/13 07:43	08/19/13 10:12	1
4,4'-DDE	ND		1.7	0.25	ug/Kg	☼	08/17/13 07:43	08/19/13 10:12	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	08/17/13 07:43	08/19/13 10:12	1
Aldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:43	08/19/13 10:12	1
alpha-BHC	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:43	08/19/13 10:12	1
alpha-Chlordane	ND		1.7	0.84	ug/Kg	☼	08/17/13 07:43	08/19/13 10:12	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:43	08/19/13 10:12	1
delta-BHC	ND		1.7	0.22	ug/Kg	☼	08/17/13 07:43	08/19/13 10:12	1

Client Sample ID: HOHAOC2-B-1
Date Collected: 08/14/13 11:30
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-14
Matrix: Solid
Percent Solids: 98.4

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	ND		1.7	0.40	ug/Kg	☼	08/17/13 07:43	08/19/13 10:12	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 10:12	1
Endosulfan II	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:43	08/19/13 10:12	1
Endosulfan sulfate	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:43	08/19/13 10:12	1
Endrin	ND		1.7	0.23	ug/Kg	☼	08/17/13 07:43	08/19/13 10:12	1
Heptachlor	ND		1.7	0.26	ug/Kg	☼	08/17/13 07:43	08/19/13 10:12	1
Lindane	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 10:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*85*		*32 - 136*	*08/17/13 07:43*	*08/19/13 10:12*	*1*
Tetrachloro-m-xylene	*78*		*30 - 124*	*08/17/13 07:43*	*08/19/13 10:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.22	0.043	mg/Kg	☼	08/19/13 14:47	08/20/13 10:31	1
PCB-1221	ND		0.22	0.043	mg/Kg	☼	08/19/13 14:47	08/20/13 10:31	1
PCB-1232	ND		0.22	0.043	mg/Kg	☼	08/19/13 14:47	08/20/13 10:31	1
PCB-1242	ND		0.22	0.043	mg/Kg	☼	08/19/13 14:47	08/20/13 10:31	1
PCB-1248	ND		0.22	0.043	mg/Kg	☼	08/19/13 14:47	08/20/13 10:31	1
PCB-1254	ND		0.22	0.10	mg/Kg	☼	08/19/13 14:47	08/20/13 10:31	1
PCB-1260	ND		0.22	0.10	mg/Kg	☼	08/19/13 14:47	08/20/13 10:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*96*		*47 - 176*	*08/19/13 14:47*	*08/20/13 10:31*	*1*
Tetrachloro-m-xylene	*103*		*46 - 175*	*08/19/13 14:47*	*08/20/13 10:31*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.0	ug/Kg	☼	08/20/13 08:01	08/22/13 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*91*		*39 - 120*	*08/20/13 08:01*	*08/22/13 14:02*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.2	0.43	mg/Kg	☼	08/16/13 13:30	08/20/13 22:19	1
Barium	**17.1**		0.54	0.12	mg/Kg	☼	08/16/13 13:30	08/20/13 22:19	1
Beryllium	**0.13**	**J**	0.22	0.030	mg/Kg	☼	08/16/13 13:30	08/20/13 22:19	1
Cadmium	ND		0.22	0.032	mg/Kg	☼	08/16/13 13:30	08/20/13 22:19	1
Chromium	**8.8**		0.54	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 22:19	1
Copper	**119**		1.1	0.23	mg/Kg	☼	08/16/13 13:30	08/20/13 22:19	1
Lead	**2.7**		1.1	0.26	mg/Kg	☼	08/16/13 13:30	08/20/13 22:19	1
Manganese	**126**		0.22	0.034	mg/Kg	☼	08/16/13 13:30	08/20/13 22:19	1
Nickel	**21.2**		5.4	0.25	mg/Kg	☼	08/16/13 13:30	08/20/13 22:19	1
Selenium	**0.59**	**J**	4.3	0.43	mg/Kg	☼	08/16/13 13:30	08/20/13 22:19	1
Silver	ND		0.54	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 22:19	1
Zinc	**34.8**	**B**	2.2	0.16	mg/Kg	☼	08/16/13 13:30	08/20/13 22:19	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0078	mg/Kg	☼	08/16/13 10:05	08/16/13 13:22	1

Client Sample ID: HOHAOC2-B-1

Lab Sample ID: 480-43956-14
Date Collected: 08/14/13 11:30
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 98.4

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.81	0.27	mg/Kg	☼	08/19/13 07:10	08/20/13 14:54	1
Cyanide, Total	ND		0.94	0.45	mg/Kg	☼	08/16/13 06:40	08/16/13 12:47	1
Cr (III)	**8.8**		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-B-2

Lab Sample ID: 480-43956-15
Date Collected: 08/14/13 11:40
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 98.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.1	0.37	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
1,1-Dichloroethane	ND		5.1	0.62	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
1,1-Dichloroethene	ND		5.1	0.62	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
1,2-Dichlorobenzene	ND		5.1	0.40	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
1,2-Dichloroethane	ND		5.1	0.26	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
1,2-Dichloroethene, cis-	ND		5.1	0.65	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
1,2-Dichloroethene, trans-	ND		5.1	0.53	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
1,3-Dichlorobenzene	ND		5.1	0.26	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
1,4-Dichlorobenzene	ND		5.1	0.71	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
1,4-Dioxane	ND		200	25	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
Acetone	ND		25	4.3	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
Benzene	ND		5.1	0.25	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
Butylbenzene	ND		5.1	0.44	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
Carbon tetrachloride	ND		5.1	0.49	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
Chlorobenzene	ND		5.1	0.67	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
Chloroform	ND		5.1	0.31	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
Ethylbenzene	ND		5.1	0.35	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
Methyl Ethyl Ketone (2-Butanone)	ND		25	1.9	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
Methyl tert-butyl ether	ND		5.1	0.50	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
Methylene Chloride	ND		5.1	2.3	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
Propylbenzene, n-	ND		5.1	0.41	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
sec-Butylbenzene	ND		5.1	0.44	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
tert-Butylbenzene	ND		5.1	0.53	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
Tetrachloroethene	ND		5.1	0.68	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
Toluene	ND		5.1	0.39	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
Trichloroethene	ND		5.1	1.1	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
Trimethylbenzene, 1,2,4-	ND		5.1	0.98	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
Trimethylbenzene, 1,3,5-	ND		5.1	0.33	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
Vinyl chloride	ND		5.1	0.62	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1
Xylene (mixed)	ND		10	0.86	ug/Kg	☼	08/16/13 01:11	08/16/13 08:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*64 - 126*	*08/16/13 01:11*	*08/16/13 08:55*	*1*
4-Bromofluorobenzene (Surr)	*92*		*72 - 126*	*08/16/13 01:11*	*08/16/13 08:55*	*1*
Toluene-d8 (Surr)	*94*		*71 - 125*	*08/16/13 01:11*	*08/16/13 08:55*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	08/17/13 07:49	08/20/13 03:59	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	08/17/13 07:49	08/20/13 03:59	1

Client Sample ID: HOHAOC2-B-2
Date Collected: 08/14/13 11:40
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-15
Matrix: Solid
Percent Solids: 98.5

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		170	4.4	ug/Kg	☼	08/17/13 07:49	08/20/13 03:59	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg	☼	08/17/13 07:49	08/20/13 03:59	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	08/17/13 07:49	08/20/13 03:59	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	08/17/13 07:49	08/20/13 03:59	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg	☼	08/17/13 07:49	08/20/13 03:59	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	08/17/13 07:49	08/20/13 03:59	1
Chrysene	ND		170	1.7	ug/Kg	☼	08/17/13 07:49	08/20/13 03:59	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	08/17/13 07:49	08/20/13 03:59	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	08/17/13 07:49	08/20/13 03:59	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	08/17/13 07:49	08/20/13 03:59	1
Fluorene	ND		170	3.9	ug/Kg	☼	08/17/13 07:49	08/20/13 03:59	1
Hexachlorobenzene	ND		170	8.4	ug/Kg	☼	08/17/13 07:49	08/20/13 03:59	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg	☼	08/17/13 07:49	08/20/13 03:59	1
m & p - Cresol	ND		330	9.5	ug/Kg	☼	08/17/13 07:49	08/20/13 03:59	1
Naphthalene	ND		170	2.8	ug/Kg	☼	08/17/13 07:49	08/20/13 03:59	1
o-Cresol	ND		170	5.2	ug/Kg	☼	08/17/13 07:49	08/20/13 03:59	1
Pentachlorophenol	ND		330	58	ug/Kg	☼	08/17/13 07:49	08/20/13 03:59	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	08/17/13 07:49	08/20/13 03:59	1
Phenol	ND		170	18	ug/Kg	☼	08/17/13 07:49	08/20/13 03:59	1
Pyrene	ND		170	1.1	ug/Kg	☼	08/17/13 07:49	08/20/13 03:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*79*		*39 - 146*	*08/17/13 07:49*	*08/20/13 03:59*	*1*
2-Fluorobiphenyl	*85*		*37 - 120*	*08/17/13 07:49*	*08/20/13 03:59*	*1*
2-Fluorophenol	*77*		*18 - 120*	*08/17/13 07:49*	*08/20/13 03:59*	*1*
Nitrobenzene-d5	*83*		*34 - 132*	*08/17/13 07:49*	*08/20/13 03:59*	*1*
Phenol-d5	*81*		*11 - 120*	*08/17/13 07:49*	*08/20/13 03:59*	*1*
p-Terphenyl-d14	*88*		*65 - 153*	*08/17/13 07:49*	*08/20/13 03:59*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	08/17/13 07:43	08/19/13 10:31	1
4,4'-DDE	ND		1.7	0.25	ug/Kg	☼	08/17/13 07:43	08/19/13 10:31	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	08/17/13 07:43	08/19/13 10:31	1
Aldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:43	08/19/13 10:31	1
alpha-BHC	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:43	08/19/13 10:31	1
alpha-Chlordane	ND		1.7	0.83	ug/Kg	☼	08/17/13 07:43	08/19/13 10:31	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:43	08/19/13 10:31	1
delta-BHC	ND		1.7	0.22	ug/Kg	☼	08/17/13 07:43	08/19/13 10:31	1
Dieldrin	ND		1.7	0.40	ug/Kg	☼	08/17/13 07:43	08/19/13 10:31	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 10:31	1
Endosulfan II	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:43	08/19/13 10:31	1
Endosulfan sulfate	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:43	08/19/13 10:31	1
Endrin	ND		1.7	0.23	ug/Kg	☼	08/17/13 07:43	08/19/13 10:31	1
Heptachlor	ND		1.7	0.26	ug/Kg	☼	08/17/13 07:43	08/19/13 10:31	1
Lindane	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 10:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*86*		*32 - 136*	*08/17/13 07:43*	*08/19/13 10:31*	*1*
Tetrachloro-m-xylene	*79*		*30 - 124*	*08/17/13 07:43*	*08/19/13 10:31*	*1*

Client Sample ID: HOHAOC2-B-2

Lab Sample ID: 480-43956-15
Date Collected: 08/14/13 11:40
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 98.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.20	0.040	mg/Kg	☼	08/19/13 14:47	08/20/13 10:46	1
PCB-1221	ND		0.20	0.040	mg/Kg	☼	08/19/13 14:47	08/20/13 10:46	1
PCB-1232	ND		0.20	0.040	mg/Kg	☼	08/19/13 14:47	08/20/13 10:46	1
PCB-1242	ND		0.20	0.040	mg/Kg	☼	08/19/13 14:47	08/20/13 10:46	1
PCB-1248	ND		0.20	0.040	mg/Kg	☼	08/19/13 14:47	08/20/13 10:46	1
PCB-1254	ND		0.20	0.095	mg/Kg	☼	08/19/13 14:47	08/20/13 10:46	1
PCB-1260	ND		0.20	0.095	mg/Kg	☼	08/19/13 14:47	08/20/13 10:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*96*		*47 - 176*	*08/19/13 14:47*	*08/20/13 10:46*	*1*
Tetrachloro-m-xylene	*104*		*46 - 175*	*08/19/13 14:47*	*08/20/13 10:46*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.0	ug/Kg	☼	08/20/13 08:01	08/22/13 14:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*86*		*39 - 120*	*08/20/13 08:01*	*08/22/13 14:32*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.9	0.37	mg/Kg	☼	08/16/13 13:30	08/20/13 22:21	1
Barium	**14.8**		0.47	0.10	mg/Kg	☼	08/16/13 13:30	08/20/13 22:21	1
Beryllium	**0.11**	**J**	0.19	0.026	mg/Kg	☼	08/16/13 13:30	08/20/13 22:21	1
Cadmium	ND		0.19	0.028	mg/Kg	☼	08/16/13 13:30	08/20/13 22:21	1
Chromium	**7.2**		0.47	0.19	mg/Kg	☼	08/16/13 13:30	08/20/13 22:21	1
Copper	**107**		0.94	0.20	mg/Kg	☼	08/16/13 13:30	08/20/13 22:21	1
Lead	**2.4**		0.94	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 22:21	1
Manganese	**112**		0.19	0.030	mg/Kg	☼	08/16/13 13:30	08/20/13 22:21	1
Nickel	**18.9**		4.7	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 22:21	1
Selenium	ND		3.7	0.37	mg/Kg	☼	08/16/13 13:30	08/20/13 22:21	1
Silver	ND		0.47	0.19	mg/Kg	☼	08/16/13 13:30	08/20/13 22:21	1
Zinc	**38.6**	**B**	1.9	0.14	mg/Kg	☼	08/16/13 13:30	08/20/13 22:21	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0081	mg/Kg	☼	08/16/13 10:05	08/16/13 13:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.81	0.27	mg/Kg	☼	08/19/13 07:10	08/20/13 14:54	1
Cyanide, Total	ND		1.0	0.48	mg/Kg	☼	08/16/13 06:40	08/16/13 12:48	1
Cr (III)	**7.2**		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-B-3

Lab Sample ID: 480-43956-16
Date Collected: 08/14/13 11:50
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 98.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-B-3
Date Collected: 08/14/13 11:50
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-16
Matrix: Solid
Percent Solids: 98.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		4.4	0.54	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
1,1-Dichloroethene	ND		4.4	0.54	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
1,2-Dichlorobenzene	ND		4.4	0.35	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
1,2-Dichloroethene, cis-	ND		4.4	0.57	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
1,2-Dichloroethene, trans-	ND		4.4	0.46	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
1,3-Dichlorobenzene	ND		4.4	0.23	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
1,4-Dichlorobenzene	ND		4.4	0.62	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
1,4-Dioxane	ND		180	21	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
Acetone	ND		22	3.7	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
Benzene	ND		4.4	0.22	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
Butylbenzene	ND		4.4	0.39	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
Carbon tetrachloride	ND		4.4	0.43	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
Chloroform	ND		4.4	0.27	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
Ethylbenzene	ND		4.4	0.31	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
Methyl Ethyl Ketone (2-Butanone)	ND		22	1.6	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
Methylene Chloride	ND		4.4	2.0	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
Propylbenzene, n-	ND		4.4	0.35	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
sec-Butylbenzene	ND		4.4	0.39	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
tert-Butylbenzene	ND		4.4	0.46	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
Tetrachloroethene	ND		4.4	0.59	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
Toluene	ND		4.4	0.33	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
Trichloroethene	ND		4.4	0.97	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
Trimethylbenzene, 1,2,4-	ND		4.4	0.85	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
Trimethylbenzene, 1,3,5-	ND		4.4	0.29	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
Vinyl chloride	ND		4.4	0.54	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1
Xylene (mixed)	ND		8.9	0.74	ug/Kg	☼	08/16/13 01:11	08/16/13 09:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*64 - 126*	*08/16/13 01:11*	*08/16/13 09:21*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*	*08/16/13 01:11*	*08/16/13 09:21*	*1*
Toluene-d8 (Surr)	*96*		*71 - 125*	*08/16/13 01:11*	*08/16/13 09:21*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	08/17/13 07:49	08/20/13 04:23	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	08/17/13 07:49	08/20/13 04:23	1
Anthracene	ND		170	4.4	ug/Kg	☼	08/17/13 07:49	08/20/13 04:23	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg	☼	08/17/13 07:49	08/20/13 04:23	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	08/17/13 07:49	08/20/13 04:23	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	08/17/13 07:49	08/20/13 04:23	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg	☼	08/17/13 07:49	08/20/13 04:23	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	08/17/13 07:49	08/20/13 04:23	1
Chrysene	ND		170	1.7	ug/Kg	☼	08/17/13 07:49	08/20/13 04:23	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	08/17/13 07:49	08/20/13 04:23	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	08/17/13 07:49	08/20/13 04:23	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	08/17/13 07:49	08/20/13 04:23	1
Fluorene	ND		170	3.9	ug/Kg	☼	08/17/13 07:49	08/20/13 04:23	1

Client Sample ID: HOHAOC2-B-3
Date Collected: 08/14/13 11:50
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-16
Matrix: Solid
Percent Solids: 98.5

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		170	8.4	ug/Kg	☼	08/17/13 07:49	08/20/13 04:23	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg	☼	08/17/13 07:49	08/20/13 04:23	1
m & p - Cresol	ND		330	9.5	ug/Kg	☼	08/17/13 07:49	08/20/13 04:23	1
Naphthalene	ND		170	2.8	ug/Kg	☼	08/17/13 07:49	08/20/13 04:23	1
o-Cresol	ND		170	5.2	ug/Kg	☼	08/17/13 07:49	08/20/13 04:23	1
Pentachlorophenol	ND		330	58	ug/Kg	☼	08/17/13 07:49	08/20/13 04:23	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	08/17/13 07:49	08/20/13 04:23	1
Phenol	ND		170	18	ug/Kg	☼	08/17/13 07:49	08/20/13 04:23	1
Pyrene	ND		170	1.1	ug/Kg	☼	08/17/13 07:49	08/20/13 04:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*85*		*39 - 146*	*08/17/13 07:49*	*08/20/13 04:23*	*1*
2-Fluorobiphenyl	*88*		*37 - 120*	*08/17/13 07:49*	*08/20/13 04:23*	*1*
2-Fluorophenol	*81*		*18 - 120*	*08/17/13 07:49*	*08/20/13 04:23*	*1*
Nitrobenzene-d5	*87*		*34 - 132*	*08/17/13 07:49*	*08/20/13 04:23*	*1*
Phenol-d5	*86*		*11 - 120*	*08/17/13 07:49*	*08/20/13 04:23*	*1*
p-Terphenyl-d14	*90*		*65 - 153*	*08/17/13 07:49*	*08/20/13 04:23*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.32	ug/Kg	☼	08/17/13 07:43	08/19/13 10:49	1
4,4'-DDE	ND		1.7	0.25	ug/Kg	☼	08/17/13 07:43	08/19/13 10:49	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	08/17/13 07:43	08/19/13 10:49	1
Aldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:43	08/19/13 10:49	1
alpha-BHC	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:43	08/19/13 10:49	1
alpha-Chlordane	ND		1.7	0.83	ug/Kg	☼	08/17/13 07:43	08/19/13 10:49	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:43	08/19/13 10:49	1
delta-BHC	ND		1.7	0.22	ug/Kg	☼	08/17/13 07:43	08/19/13 10:49	1
Dieldrin	ND		1.7	0.40	ug/Kg	☼	08/17/13 07:43	08/19/13 10:49	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 10:49	1
Endosulfan II	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:43	08/19/13 10:49	1
Endosulfan sulfate	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:43	08/19/13 10:49	1
Endrin	ND		1.7	0.23	ug/Kg	☼	08/17/13 07:43	08/19/13 10:49	1
Heptachlor	ND		1.7	0.26	ug/Kg	☼	08/17/13 07:43	08/19/13 10:49	1
Lindane	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 10:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*86*		*32 - 136*	*08/17/13 07:43*	*08/19/13 10:49*	*1*
Tetrachloro-m-xylene	*81*		*30 - 124*	*08/17/13 07:43*	*08/19/13 10:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.25	0.048	mg/Kg	☼	08/19/13 14:47	08/20/13 11:01	1
PCB-1221	ND		0.25	0.048	mg/Kg	☼	08/19/13 14:47	08/20/13 11:01	1
PCB-1232	ND		0.25	0.048	mg/Kg	☼	08/19/13 14:47	08/20/13 11:01	1
PCB-1242	ND		0.25	0.048	mg/Kg	☼	08/19/13 14:47	08/20/13 11:01	1
PCB-1248	ND		0.25	0.048	mg/Kg	☼	08/19/13 14:47	08/20/13 11:01	1
PCB-1254	ND		0.25	0.11	mg/Kg	☼	08/19/13 14:47	08/20/13 11:01	1
PCB-1260	ND		0.25	0.11	mg/Kg	☼	08/19/13 14:47	08/20/13 11:01	1

Client Sample ID: HOHAOC2-B-3

Lab Sample ID: 480-43956-16

Date Collected: 08/14/13 11:50

Matrix: Solid

Date Received: 08/15/13 09:00

Percent Solids: 98.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	98		47 - 176	08/19/13 14:47	08/20/13 11:01	1
Tetrachloro-m-xylene	105		46 - 175	08/19/13 14:47	08/20/13 11:01	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.0	ug/Kg	☼	08/20/13 08:01	08/22/13 15:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	83		39 - 120	08/20/13 08:01	08/22/13 15:01	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.4**	**J**	2.1	0.43	mg/Kg	☼	08/16/13 13:30	08/20/13 22:23	1
Barium	**14.2**		0.54	0.12	mg/Kg	☼	08/16/13 13:30	08/20/13 22:23	1
Beryllium	**0.12**	**J**	0.21	0.030	mg/Kg	☼	08/16/13 13:30	08/20/13 22:23	1
Cadmium	ND		0.21	0.032	mg/Kg	☼	08/16/13 13:30	08/20/13 22:23	1
Chromium	**3.5**		0.54	0.21	mg/Kg	☼	08/16/13 13:30	08/20/13 22:23	1
Copper	**137**		1.1	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 22:23	1
Lead	**2.2**		1.1	0.26	mg/Kg	☼	08/16/13 13:30	08/20/13 22:23	1
Manganese	**119**		0.21	0.034	mg/Kg	☼	08/16/13 13:30	08/20/13 22:23	1
Nickel	**17.6**		5.4	0.25	mg/Kg	☼	08/16/13 13:30	08/20/13 22:23	1
Selenium	ND		4.3	0.43	mg/Kg	☼	08/16/13 13:30	08/20/13 22:23	1
Silver	ND		0.54	0.21	mg/Kg	☼	08/16/13 13:30	08/20/13 22:23	1
Zinc	**37.1**	**B**	2.1	0.16	mg/Kg	☼	08/16/13 13:30	08/20/13 22:23	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0082	mg/Kg	☼	08/16/13 10:05	08/16/13 13:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.81	0.27	mg/Kg	☼	08/21/13 13:55	08/22/13 12:01	1
Cyanide, Total	ND		0.98	0.47	mg/Kg	☼	08/19/13 06:45	08/19/13 15:19	1
Cr (III)	**3.5**		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-B-4

Lab Sample ID: 480-43956-17

Date Collected: 08/14/13 12:00

Matrix: Solid

Date Received: 08/15/13 09:00

Percent Solids: 96.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.7	0.34	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
1,1-Dichloroethane	ND		4.7	0.58	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
1,1-Dichloroethene	ND		4.7	0.58	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
1,2-Dichlorobenzene	ND		4.7	0.37	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
1,2-Dichloroethane	ND		4.7	0.24	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
1,2-Dichloroethene, cis-	ND		4.7	0.61	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
1,2-Dichloroethene, trans-	ND		4.7	0.49	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
1,3-Dichlorobenzene	ND		4.7	0.24	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
1,4-Dichlorobenzene	ND		4.7	0.66	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
1,4-Dioxane	ND		190	23	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-B-4
Date Collected: 08/14/13 12:00
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-17
Matrix: Solid
Percent Solids: 96.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		24	4.0	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
Benzene	ND		4.7	0.23	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
Butylbenzene	ND		4.7	0.41	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
Carbon tetrachloride	ND		4.7	0.46	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
Chlorobenzene	ND		4.7	0.63	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
Chloroform	ND		4.7	0.29	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
Ethylbenzene	ND		4.7	0.33	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
Methyl Ethyl Ketone (2-Butanone)	ND		24	1.7	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
Methyl tert-butyl ether	ND		4.7	0.47	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
Methylene Chloride	ND		4.7	2.2	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
Propylbenzene, n-	ND		4.7	0.38	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
sec-Butylbenzene	ND		4.7	0.41	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
tert-Butylbenzene	ND		4.7	0.49	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
Tetrachloroethene	ND		4.7	0.64	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
Toluene	ND		4.7	0.36	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
Trichloroethene	ND		4.7	1.0	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
Trimethylbenzene, 1,2,4-	ND		4.7	0.91	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
Trimethylbenzene, 1,3,5-	ND		4.7	0.31	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
Vinyl chloride	ND		4.7	0.58	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1
Xylene (mixed)	ND		9.5	0.80	ug/Kg	☼	08/19/13 10:15	08/19/13 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*64 - 126*	*08/19/13 10:15*	*08/19/13 18:56*	*1*
4-Bromofluorobenzene (Surr)	*104*		*72 - 126*	*08/19/13 10:15*	*08/19/13 18:56*	*1*
Toluene-d8 (Surr)	*102*		*71 - 125*	*08/19/13 10:15*	*08/19/13 18:56*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		180	2.1	ug/Kg	☼	08/17/13 08:42	08/19/13 13:37	1
Acenaphthylene	ND		180	1.4	ug/Kg	☼	08/17/13 08:42	08/19/13 13:37	1
Anthracene	ND		180	4.5	ug/Kg	☼	08/17/13 08:42	08/19/13 13:37	1
Benzo(a)anthracene	ND		180	3.0	ug/Kg	☼	08/17/13 08:42	08/19/13 13:37	1
Benzo(a)pyrene	ND		180	4.2	ug/Kg	☼	08/17/13 08:42	08/19/13 13:37	1
Benzo(b)fluoranthene	ND		180	3.4	ug/Kg	☼	08/17/13 08:42	08/19/13 13:37	1
Benzo(g,h,i)perylene	ND		180	2.1	ug/Kg	☼	08/17/13 08:42	08/19/13 13:37	1
Benzo(k)fluoranthene	ND		180	1.9	ug/Kg	☼	08/17/13 08:42	08/19/13 13:37	1
Chrysene	ND		180	1.7	ug/Kg	☼	08/17/13 08:42	08/19/13 13:37	1
Dibenz(a,h)anthracene	ND		180	2.1	ug/Kg	☼	08/17/13 08:42	08/19/13 13:37	1
Dibenzofuran	ND		180	1.8	ug/Kg	☼	08/17/13 08:42	08/19/13 13:37	1
Fluoranthene	ND		180	2.5	ug/Kg	☼	08/17/13 08:42	08/19/13 13:37	1
Fluorene	ND		180	4.0	ug/Kg	☼	08/17/13 08:42	08/19/13 13:37	1
Hexachlorobenzene	ND		180	8.7	ug/Kg	☼	08/17/13 08:42	08/19/13 13:37	1
Indeno(1,2,3-cd)pyrene	ND		180	4.8	ug/Kg	☼	08/17/13 08:42	08/19/13 13:37	1
m & p - Cresol	ND		340	9.7	ug/Kg	☼	08/17/13 08:42	08/19/13 13:37	1
Naphthalene	ND		180	2.9	ug/Kg	☼	08/17/13 08:42	08/19/13 13:37	1
o-Cresol	ND		180	5.4	ug/Kg	☼	08/17/13 08:42	08/19/13 13:37	1
Pentachlorophenol	ND		340	60	ug/Kg	☼	08/17/13 08:42	08/19/13 13:37	1
Phenanthrene	ND		180	3.7	ug/Kg	☼	08/17/13 08:42	08/19/13 13:37	1
Phenol	ND		180	18	ug/Kg	☼	08/17/13 08:42	08/19/13 13:37	1
Pyrene	**1.2**	**J**	180	1.1	ug/Kg	☼	08/17/13 08:42	08/19/13 13:37	1

Client Sample ID: HOHAOC2-B-4
Date Collected: 08/14/13 12:00
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-17
Matrix: Solid
Percent Solids: 96.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	79		39 - 146	08/17/13 08:42	08/19/13 13:37	1
2-Fluorobiphenyl	92		37 - 120	08/17/13 08:42	08/19/13 13:37	1
2-Fluorophenol	78		18 - 120	08/17/13 08:42	08/19/13 13:37	1
Nitrobenzene-d5	90		34 - 132	08/17/13 08:42	08/19/13 13:37	1
Phenol-d5	85		11 - 120	08/17/13 08:42	08/19/13 13:37	1
p-Terphenyl-d14	74		65 - 153	08/17/13 08:42	08/19/13 13:37	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	08/17/13 07:43	08/19/13 11:07	1
4,4'-DDE	ND		1.7	0.25	ug/Kg	☼	08/17/13 07:43	08/19/13 11:07	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	08/17/13 07:43	08/19/13 11:07	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	08/17/13 07:43	08/19/13 11:07	1
alpha-BHC	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:43	08/19/13 11:07	1
alpha-Chlordane	ND		1.7	0.84	ug/Kg	☼	08/17/13 07:43	08/19/13 11:07	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:43	08/19/13 11:07	1
delta-BHC	ND		1.7	0.22	ug/Kg	☼	08/17/13 07:43	08/19/13 11:07	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:43	08/19/13 11:07	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 11:07	1
Endosulfan II	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:43	08/19/13 11:07	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	08/17/13 07:43	08/19/13 11:07	1
Endrin	ND		1.7	0.23	ug/Kg	☼	08/17/13 07:43	08/19/13 11:07	1
Heptachlor	ND		1.7	0.27	ug/Kg	☼	08/17/13 07:43	08/19/13 11:07	1
Lindane	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 11:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	86		32 - 136	08/17/13 07:43	08/19/13 11:07	1
Tetrachloro-m-xylene	82		30 - 124	08/17/13 07:43	08/19/13 11:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.23	0.044	mg/Kg	☼	08/19/13 14:47	08/20/13 11:15	1
PCB-1221	ND		0.23	0.044	mg/Kg	☼	08/19/13 14:47	08/20/13 11:15	1
PCB-1232	ND		0.23	0.044	mg/Kg	☼	08/19/13 14:47	08/20/13 11:15	1
PCB-1242	ND		0.23	0.044	mg/Kg	☼	08/19/13 14:47	08/20/13 11:15	1
PCB-1248	ND		0.23	0.044	mg/Kg	☼	08/19/13 14:47	08/20/13 11:15	1
PCB-1254	ND		0.23	0.11	mg/Kg	☼	08/19/13 14:47	08/20/13 11:15	1
PCB-1260	ND		0.23	0.11	mg/Kg	☼	08/19/13 14:47	08/20/13 11:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	95		47 - 176	08/19/13 14:47	08/20/13 11:15	1
Tetrachloro-m-xylene	104		46 - 175	08/19/13 14:47	08/20/13 11:15	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.2	ug/Kg	☼	08/20/13 08:01	08/22/13 15:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	89		39 - 120	08/20/13 08:01	08/22/13 15:31	1

Client Sample ID: HOHAOC2-B-4

Lab Sample ID: 480-43956-17

Date Collected: 08/14/13 12:00
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 96.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.47	J	2.0	0.39	mg/Kg	☼	08/16/13 13:30	08/20/13 22:26	1
Barium	11.6		0.49	0.11	mg/Kg	☼	08/16/13 13:30	08/20/13 22:26	1
Beryllium	0.12	J	0.20	0.027	mg/Kg	☼	08/16/13 13:30	08/20/13 22:26	1
Cadmium	ND		0.20	0.029	mg/Kg	☼	08/16/13 13:30	08/20/13 22:26	1
Chromium	5.6		0.49	0.20	mg/Kg	☼	08/16/13 13:30	08/20/13 22:26	1
Copper	140		0.98	0.21	mg/Kg	☼	08/16/13 13:30	08/20/13 22:26	1
Lead	2.5		0.98	0.24	mg/Kg	☼	08/16/13 13:30	08/20/13 22:26	1
Manganese	128		0.20	0.031	mg/Kg	☼	08/16/13 13:30	08/20/13 22:26	1
Nickel	18.9		4.9	0.23	mg/Kg	☼	08/16/13 13:30	08/20/13 22:26	1
Selenium	0.53	J	3.9	0.39	mg/Kg	☼	08/16/13 13:30	08/20/13 22:26	1
Silver	ND		0.49	0.20	mg/Kg	☼	08/16/13 13:30	08/20/13 22:26	1
Zinc	34.9	B	2.0	0.15	mg/Kg	☼	08/16/13 13:30	08/20/13 22:26	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.0085	mg/Kg	☼	08/16/13 10:05	08/16/13 13:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.83	0.28	mg/Kg	☼	08/21/13 13:55	08/22/13 11:20	1
Cyanide, Total	ND		1.0	0.48	mg/Kg	☼	08/19/13 06:45	08/19/13 15:21	1
Cr (III)	5.6		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-B-5

Lab Sample ID: 480-43956-18

Date Collected: 08/14/13 12:10
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.6	0.33	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
1,1-Dichloroethane	ND		4.6	0.56	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
1,1-Dichloroethene	ND		4.6	0.56	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
1,2-Dichlorobenzene	ND		4.6	0.36	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
1,2-Dichloroethane	ND		4.6	0.23	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
1,2-Dichloroethene, cis-	ND		4.6	0.58	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
1,2-Dichloroethene, trans-	ND		4.6	0.47	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
1,3-Dichlorobenzene	ND		4.6	0.23	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
1,4-Dichlorobenzene	ND		4.6	0.64	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
1,4-Dioxane	ND		180	22	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
Acetone	ND		23	3.8	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
Benzene	ND		4.6	0.22	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
Butylbenzene	ND		4.6	0.40	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
Carbon tetrachloride	ND		4.6	0.44	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
Chlorobenzene	ND		4.6	0.60	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
Chloroform	ND		4.6	0.28	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
Ethylbenzene	ND		4.6	0.31	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
Methyl Ethyl Ketone (2-Butanone)	ND		23	1.7	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
Methyl tert-butyl ether	ND		4.6	0.45	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
Methylene Chloride	ND		4.6	2.1	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
Propylbenzene, n-	ND		4.6	0.36	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-B-5
Date Collected: 08/14/13 12:10
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-18
Matrix: Solid
Percent Solids: 97.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		4.6	0.40	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
tert-Butylbenzene	ND		4.6	0.47	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
Tetrachloroethene	ND		4.6	0.61	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
Toluene	ND		4.6	0.34	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
Trichloroethene	ND		4.6	1.0	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
Trimethylbenzene, 1,2,4-	ND		4.6	0.87	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
Trimethylbenzene, 1,3,5-	ND		4.6	0.29	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
Vinyl chloride	ND		4.6	0.56	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1
Xylene (mixed)	ND		9.1	0.76	ug/Kg	☼	08/16/13 11:49	08/16/13 15:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*64 - 126*	*08/16/13 11:49*	*08/16/13 15:51*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*	*08/16/13 11:49*	*08/16/13 15:51*	*1*
Toluene-d8 (Surr)	*96*		*71 - 125*	*08/16/13 11:49*	*08/16/13 15:51*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	08/17/13 08:42	08/19/13 14:26	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	08/17/13 08:42	08/19/13 14:26	1
Anthracene	ND		170	4.4	ug/Kg	☼	08/17/13 08:42	08/19/13 14:26	1
Benzo(a)anthracene	ND		170	3.0	ug/Kg	☼	08/17/13 08:42	08/19/13 14:26	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	08/17/13 08:42	08/19/13 14:26	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	08/17/13 08:42	08/19/13 14:26	1
Benzo(g,h,i)perylene	ND		170	2.1	ug/Kg	☼	08/17/13 08:42	08/19/13 14:26	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	08/17/13 08:42	08/19/13 14:26	1
Chrysene	ND		170	1.7	ug/Kg	☼	08/17/13 08:42	08/19/13 14:26	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	08/17/13 08:42	08/19/13 14:26	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	08/17/13 08:42	08/19/13 14:26	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	08/17/13 08:42	08/19/13 14:26	1
Fluorene	ND		170	4.0	ug/Kg	☼	08/17/13 08:42	08/19/13 14:26	1
Hexachlorobenzene	ND		170	8.6	ug/Kg	☼	08/17/13 08:42	08/19/13 14:26	1
Indeno(1,2,3-cd)pyrene	ND		170	4.8	ug/Kg	☼	08/17/13 08:42	08/19/13 14:26	1
m & p - Cresol	ND		340	9.6	ug/Kg	☼	08/17/13 08:42	08/19/13 14:26	1
Naphthalene	ND		170	2.9	ug/Kg	☼	08/17/13 08:42	08/19/13 14:26	1
o-Cresol	ND		170	5.3	ug/Kg	☼	08/17/13 08:42	08/19/13 14:26	1
Pentachlorophenol	ND		340	59	ug/Kg	☼	08/17/13 08:42	08/19/13 14:26	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	08/17/13 08:42	08/19/13 14:26	1
Phenol	ND		170	18	ug/Kg	☼	08/17/13 08:42	08/19/13 14:26	1
Pyrene	**2.2**	**J**	170	1.1	ug/Kg	☼	08/17/13 08:42	08/19/13 14:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*94*		*39 - 146*	*08/17/13 08:42*	*08/19/13 14:26*	*1*
2-Fluorobiphenyl	*91*		*37 - 120*	*08/17/13 08:42*	*08/19/13 14:26*	*1*
2-Fluorophenol	*87*		*18 - 120*	*08/17/13 08:42*	*08/19/13 14:26*	*1*
Nitrobenzene-d5	*91*		*34 - 132*	*08/17/13 08:42*	*08/19/13 14:26*	*1*
Phenol-d5	*88*		*11 - 120*	*08/17/13 08:42*	*08/19/13 14:26*	*1*
p-Terphenyl-d14	*76*		*65 - 153*	*08/17/13 08:42*	*08/19/13 14:26*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-B-5
Date Collected: 08/14/13 12:10
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-18
Matrix: Solid
Percent Solids: 97.2

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	08/17/13 07:43	08/19/13 11:24	1
4,4'-DDE	ND		1.7	0.26	ug/Kg	☼	08/17/13 07:43	08/19/13 11:24	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	08/17/13 07:43	08/19/13 11:24	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	08/17/13 07:43	08/19/13 11:24	1
alpha-BHC	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:43	08/19/13 11:24	1
alpha-Chlordane	ND		1.7	0.85	ug/Kg	☼	08/17/13 07:43	08/19/13 11:24	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:43	08/19/13 11:24	1
delta-BHC	ND		1.7	0.22	ug/Kg	☼	08/17/13 07:43	08/19/13 11:24	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:43	08/19/13 11:24	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 11:24	1
Endosulfan II	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:43	08/19/13 11:24	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	08/17/13 07:43	08/19/13 11:24	1
Endrin	ND		1.7	0.23	ug/Kg	☼	08/17/13 07:43	08/19/13 11:24	1
Heptachlor	ND		1.7	0.27	ug/Kg	☼	08/17/13 07:43	08/19/13 11:24	1
Lindane	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 11:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*86*		*32 - 136*	*08/17/13 07:43*	*08/19/13 11:24*	*1*
Tetrachloro-m-xylene	*83*		*30 - 124*	*08/17/13 07:43*	*08/19/13 11:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.18	0.035	mg/Kg	☼	08/19/13 14:47	08/20/13 11:30	1
PCB-1221	ND		0.18	0.035	mg/Kg	☼	08/19/13 14:47	08/20/13 11:30	1
PCB-1232	ND		0.18	0.035	mg/Kg	☼	08/19/13 14:47	08/20/13 11:30	1
PCB-1242	ND		0.18	0.035	mg/Kg	☼	08/19/13 14:47	08/20/13 11:30	1
PCB-1248	ND		0.18	0.035	mg/Kg	☼	08/19/13 14:47	08/20/13 11:30	1
PCB-1254	ND		0.18	0.085	mg/Kg	☼	08/19/13 14:47	08/20/13 11:30	1
PCB-1260	ND		0.18	0.085	mg/Kg	☼	08/19/13 14:47	08/20/13 11:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*98*		*47 - 176*	*08/19/13 14:47*	*08/20/13 11:30*	*1*
Tetrachloro-m-xylene	*104*		*46 - 175*	*08/19/13 14:47*	*08/20/13 11:30*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.1	ug/Kg	☼	08/20/13 08:01	08/22/13 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*88*		*39 - 120*	*08/20/13 08:01*	*08/22/13 16:01*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.51**	**J**	2.0	0.40	mg/Kg	☼	08/16/13 13:30	08/20/13 22:28	1
Barium	**11.5**		0.50	0.11	mg/Kg	☼	08/16/13 13:30	08/20/13 22:28	1
Beryllium	**0.11**	**J**	0.20	0.028	mg/Kg	☼	08/16/13 13:30	08/20/13 22:28	1
Cadmium	ND		0.20	0.030	mg/Kg	☼	08/16/13 13:30	08/20/13 22:28	1
Chromium	**5.1**		0.50	0.20	mg/Kg	☼	08/16/13 13:30	08/20/13 22:28	1
Copper	**116**		0.99	0.21	mg/Kg	☼	08/16/13 13:30	08/20/13 22:28	1
Lead	**2.7**		0.99	0.24	mg/Kg	☼	08/16/13 13:30	08/20/13 22:28	1
Manganese	**136**		0.20	0.032	mg/Kg	☼	08/16/13 13:30	08/20/13 22:28	1

Client Sample ID: HOHAOC2-B-5

Lab Sample ID: 480-43956-18
Date Collected: 08/14/13 12:10
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.2

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	16.2		5.0	0.23	mg/Kg	☼	08/16/13 13:30	08/20/13 22:28	1
Selenium	0.48	J	4.0	0.40	mg/Kg	☼	08/16/13 13:30	08/20/13 22:28	1
Silver	ND		0.50	0.20	mg/Kg	☼	08/16/13 13:30	08/20/13 22:28	1
Zinc	34.2	B	2.0	0.15	mg/Kg	☼	08/16/13 13:30	08/20/13 22:28	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0079	mg/Kg	☼	08/16/13 10:05	08/16/13 13:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.82	0.28	mg/Kg	☼	08/21/13 13:55	08/22/13 11:23	1
Cyanide, Total	ND		1.0	0.49	mg/Kg	☼	08/19/13 06:45	08/19/13 15:23	1
Cr (III)	5.1		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-B-6

Lab Sample ID: 480-43956-19
Date Collected: 08/14/13 12:20
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 96.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
1,1-Dichloroethane	ND		4.4	0.53	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
1,1-Dichloroethene	ND		4.4	0.54	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
1,2-Dichlorobenzene	ND		4.4	0.34	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
1,2-Dichloroethene, cis-	ND		4.4	0.56	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
1,2-Dichloroethene, trans-	ND		4.4	0.45	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
1,3-Dichlorobenzene	ND		4.4	0.22	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
1,4-Dichlorobenzene	ND		4.4	0.61	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
1,4-Dioxane	ND		170	21	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
Acetone	ND		22	3.7	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
Benzene	ND		4.4	0.21	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
Butylbenzene	ND		4.4	0.38	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
Carbon tetrachloride	ND		4.4	0.42	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
Chloroform	ND		4.4	0.27	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
Ethylbenzene	ND		4.4	0.30	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
Methyl Ethyl Ketone (2-Butanone)	ND		22	1.6	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
Methylene Chloride	ND		4.4	2.0	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
Propylbenzene, n-	ND		4.4	0.35	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
sec-Butylbenzene	ND		4.4	0.38	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
tert-Butylbenzene	ND		4.4	0.45	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
Tetrachloroethene	ND		4.4	0.59	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
Toluene	ND		4.4	0.33	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
Trichloroethene	ND		4.4	0.96	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
Trimethylbenzene, 1,2,4-	ND		4.4	0.84	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
Trimethylbenzene, 1,3,5-	ND		4.4	0.28	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1
Vinyl chloride	ND		4.4	0.53	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-B-6
Date Collected: 08/14/13 12:20
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-19
Matrix: Solid
Percent Solids: 96.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylene (mixed)	ND		8.7	0.73	ug/Kg	☼	08/16/13 11:49	08/16/13 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*64 - 126*	*08/16/13 11:49*	*08/16/13 16:17*	*1*
4-Bromofluorobenzene (Surr)	*89*		*72 - 126*	*08/16/13 11:49*	*08/16/13 16:17*	*1*
Toluene-d8 (Surr)	*89*		*71 - 125*	*08/16/13 11:49*	*08/16/13 16:17*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	08/17/13 08:42	08/19/13 14:51	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	08/17/13 08:42	08/19/13 14:51	1
Anthracene	ND		170	4.4	ug/Kg	☼	08/17/13 08:42	08/19/13 14:51	1
Benzo(a)anthracene	ND		170	3.0	ug/Kg	☼	08/17/13 08:42	08/19/13 14:51	1
Benzo(a)pyrene	ND		170	4.2	ug/Kg	☼	08/17/13 08:42	08/19/13 14:51	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	08/17/13 08:42	08/19/13 14:51	1
Benzo(g,h,i)perylene	ND		170	2.1	ug/Kg	☼	08/17/13 08:42	08/19/13 14:51	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	08/17/13 08:42	08/19/13 14:51	1
Chrysene	ND		170	1.7	ug/Kg	☼	08/17/13 08:42	08/19/13 14:51	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	08/17/13 08:42	08/19/13 14:51	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	08/17/13 08:42	08/19/13 14:51	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	08/17/13 08:42	08/19/13 14:51	1
Fluorene	ND		170	4.0	ug/Kg	☼	08/17/13 08:42	08/19/13 14:51	1
Hexachlorobenzene	ND		170	8.6	ug/Kg	☼	08/17/13 08:42	08/19/13 14:51	1
Indeno(1,2,3-cd)pyrene	ND		170	4.8	ug/Kg	☼	08/17/13 08:42	08/19/13 14:51	1
m & p - Cresol	ND		340	9.6	ug/Kg	☼	08/17/13 08:42	08/19/13 14:51	1
Naphthalene	ND		170	2.9	ug/Kg	☼	08/17/13 08:42	08/19/13 14:51	1
o-Cresol	ND		170	5.3	ug/Kg	☼	08/17/13 08:42	08/19/13 14:51	1
Pentachlorophenol	ND		340	59	ug/Kg	☼	08/17/13 08:42	08/19/13 14:51	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	08/17/13 08:42	08/19/13 14:51	1
Phenol	ND		170	18	ug/Kg	☼	08/17/13 08:42	08/19/13 14:51	1
Pyrene	ND		170	1.1	ug/Kg	☼	08/17/13 08:42	08/19/13 14:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*98*		*39 - 146*	*08/17/13 08:42*	*08/19/13 14:51*	*1*
2-Fluorobiphenyl	*91*		*37 - 120*	*08/17/13 08:42*	*08/19/13 14:51*	*1*
2-Fluorophenol	*86*		*18 - 120*	*08/17/13 08:42*	*08/19/13 14:51*	*1*
Nitrobenzene-d5	*90*		*34 - 132*	*08/17/13 08:42*	*08/19/13 14:51*	*1*
Phenol-d5	*89*		*11 - 120*	*08/17/13 08:42*	*08/19/13 14:51*	*1*
p-Terphenyl-d14	*76*		*65 - 153*	*08/17/13 08:42*	*08/19/13 14:51*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	08/17/13 07:43	08/19/13 11:42	1
4,4'-DDE	ND		1.7	0.25	ug/Kg	☼	08/17/13 07:43	08/19/13 11:42	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	08/17/13 07:43	08/19/13 11:42	1
Aldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:43	08/19/13 11:42	1
alpha-BHC	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:43	08/19/13 11:42	1
alpha-Chlordane	ND		1.7	0.84	ug/Kg	☼	08/17/13 07:43	08/19/13 11:42	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:43	08/19/13 11:42	1
delta-BHC	ND		1.7	0.22	ug/Kg	☼	08/17/13 07:43	08/19/13 11:42	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-B-6
Date Collected: 08/14/13 12:20
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-19
Matrix: Solid
Percent Solids: 96.7

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	ND		1.7	0.40	ug/Kg	☼	08/17/13 07:43	08/19/13 11:42	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 11:42	1
Endosulfan II	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:43	08/19/13 11:42	1
Endosulfan sulfate	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:43	08/19/13 11:42	1
Endrin	ND		1.7	0.23	ug/Kg	☼	08/17/13 07:43	08/19/13 11:42	1
Heptachlor	ND		1.7	0.26	ug/Kg	☼	08/17/13 07:43	08/19/13 11:42	1
Lindane	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 11:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*85*		*32 - 136*	*08/17/13 07:43*	*08/19/13 11:42*	*1*
Tetrachloro-m-xylene	*81*		*30 - 124*	*08/17/13 07:43*	*08/19/13 11:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.18	0.035	mg/Kg	☼	08/19/13 14:47	08/20/13 11:45	1
PCB-1221	ND		0.18	0.035	mg/Kg	☼	08/19/13 14:47	08/20/13 11:45	1
PCB-1232	ND		0.18	0.035	mg/Kg	☼	08/19/13 14:47	08/20/13 11:45	1
PCB-1242	ND		0.18	0.035	mg/Kg	☼	08/19/13 14:47	08/20/13 11:45	1
PCB-1248	ND		0.18	0.035	mg/Kg	☼	08/19/13 14:47	08/20/13 11:45	1
PCB-1254	ND		0.18	0.083	mg/Kg	☼	08/19/13 14:47	08/20/13 11:45	1
PCB-1260	ND		0.18	0.083	mg/Kg	☼	08/19/13 14:47	08/20/13 11:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*99*		*47 - 176*	*08/19/13 14:47*	*08/20/13 11:45*	*1*
Tetrachloro-m-xylene	*107*		*46 - 175*	*08/19/13 14:47*	*08/20/13 11:45*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.0	ug/Kg	☼	08/20/13 08:01	08/22/13 17:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*90*		*39 - 120*	*08/20/13 08:01*	*08/22/13 17:00*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.49**	**J**	2.0	0.40	mg/Kg	☼	08/16/13 13:30	08/20/13 22:30	1
Barium	**13.9**		0.50	0.11	mg/Kg	☼	08/16/13 13:30	08/20/13 22:30	1
Beryllium	**0.10**	**J**	0.20	0.028	mg/Kg	☼	08/16/13 13:30	08/20/13 22:30	1
Cadmium	ND		0.20	0.030	mg/Kg	☼	08/16/13 13:30	08/20/13 22:30	1
Chromium	**7.8**		0.50	0.20	mg/Kg	☼	08/16/13 13:30	08/20/13 22:30	1
Copper	**113**		1.0	0.21	mg/Kg	☼	08/16/13 13:30	08/20/13 22:30	1
Lead	**2.2**		1.0	0.24	mg/Kg	☼	08/16/13 13:30	08/20/13 22:30	1
Manganese	**110**		0.20	0.032	mg/Kg	☼	08/16/13 13:30	08/20/13 22:30	1
Nickel	**20.2**		5.0	0.23	mg/Kg	☼	08/16/13 13:30	08/20/13 22:30	1
Selenium	ND		4.0	0.40	mg/Kg	☼	08/16/13 13:30	08/20/13 22:30	1
Silver	ND		0.50	0.20	mg/Kg	☼	08/16/13 13:30	08/20/13 22:30	1
Zinc	**31.3**	**B**	2.0	0.15	mg/Kg	☼	08/16/13 13:30	08/20/13 22:30	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.0085	mg/Kg	☼	08/16/13 10:05	08/16/13 13:30	1

Client Sample ID: HOHAOC2-B-6

Lab Sample ID: 480-43956-19
Date Collected: 08/14/13 12:20
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 96.7

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.83	0.28	mg/Kg	☼	08/21/13 13:55	08/22/13 11:24	1
Cyanide, Total	ND		1.0	0.49	mg/Kg	☼	08/19/13 06:45	08/19/13 15:23	1
Cr (III)	**7.8**		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-B-7

Lab Sample ID: 480-43956-20
Date Collected: 08/14/13 12:30
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.1	0.37	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
1,1-Dichloroethane	ND		5.1	0.62	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
1,1-Dichloroethene	ND		5.1	0.63	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
1,2-Dichlorobenzene	ND		5.1	0.40	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
1,2-Dichloroethane	ND		5.1	0.26	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
1,2-Dichloroethene, cis-	ND		5.1	0.65	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
1,2-Dichloroethene, trans-	ND		5.1	0.53	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
1,3-Dichlorobenzene	ND		5.1	0.26	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
1,4-Dichlorobenzene	ND		5.1	0.72	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
1,4-Dioxane	ND		200	25	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
Acetone	ND		26	4.3	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
Benzene	ND		5.1	0.25	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
Butylbenzene	ND		5.1	0.44	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
Carbon tetrachloride	ND		5.1	0.49	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
Chlorobenzene	ND		5.1	0.67	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
Chloroform	ND		5.1	0.32	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
Ethylbenzene	ND		5.1	0.35	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
Methyl Ethyl Ketone (2-Butanone)	ND		26	1.9	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
Methyl tert-butyl ether	ND		5.1	0.50	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
Methylene Chloride	ND		5.1	2.3	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
Propylbenzene, n-	ND		5.1	0.41	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
sec-Butylbenzene	ND		5.1	0.44	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
tert-Butylbenzene	ND		5.1	0.53	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
Tetrachloroethene	ND		5.1	0.69	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
Toluene	ND		5.1	0.39	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
Trichloroethene	ND		5.1	1.1	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
Trimethylbenzene, 1,2,4-	ND		5.1	0.98	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
Trimethylbenzene, 1,3,5-	ND		5.1	0.33	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
Vinyl chloride	ND		5.1	0.62	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1
Xylene (mixed)	ND		10	0.86	ug/Kg	☼	08/16/13 11:49	08/16/13 16:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*64 - 126*	*08/16/13 11:49*	*08/16/13 16:43*	*1*
4-Bromofluorobenzene (Surr)	*97*		*72 - 126*	*08/16/13 11:49*	*08/16/13 16:43*	*1*
Toluene-d8 (Surr)	*98*		*71 - 125*	*08/16/13 11:49*	*08/16/13 16:43*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	08/17/13 08:42	08/19/13 15:15	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	08/17/13 08:42	08/19/13 15:15	1

Client Sample ID: HOHAOC2-B-7
Date Collected: 08/14/13 12:30
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-20
Matrix: Solid
Percent Solids: 97.5

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		170	4.4	ug/Kg	☼	08/17/13 08:42	08/19/13 15:15	1
Benzo(a)anthracene	ND		170	3.0	ug/Kg	☼	08/17/13 08:42	08/19/13 15:15	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	08/17/13 08:42	08/19/13 15:15	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	08/17/13 08:42	08/19/13 15:15	1
Benzo(g,h,i)perylene	ND		170	2.1	ug/Kg	☼	08/17/13 08:42	08/19/13 15:15	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	08/17/13 08:42	08/19/13 15:15	1
Chrysene	ND		170	1.7	ug/Kg	☼	08/17/13 08:42	08/19/13 15:15	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	08/17/13 08:42	08/19/13 15:15	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	08/17/13 08:42	08/19/13 15:15	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	08/17/13 08:42	08/19/13 15:15	1
Fluorene	ND		170	3.9	ug/Kg	☼	08/17/13 08:42	08/19/13 15:15	1
Hexachlorobenzene	ND		170	8.5	ug/Kg	☼	08/17/13 08:42	08/19/13 15:15	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg	☼	08/17/13 08:42	08/19/13 15:15	1
m & p - Cresol	ND		330	9.5	ug/Kg	☼	08/17/13 08:42	08/19/13 15:15	1
Naphthalene	ND		170	2.8	ug/Kg	☼	08/17/13 08:42	08/19/13 15:15	1
o-Cresol	ND		170	5.3	ug/Kg	☼	08/17/13 08:42	08/19/13 15:15	1
Pentachlorophenol	ND		330	59	ug/Kg	☼	08/17/13 08:42	08/19/13 15:15	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	08/17/13 08:42	08/19/13 15:15	1
Phenol	ND		170	18	ug/Kg	☼	08/17/13 08:42	08/19/13 15:15	1
Pyrene	ND		170	1.1	ug/Kg	☼	08/17/13 08:42	08/19/13 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*87*		*39 - 146*	*08/17/13 08:42*	*08/19/13 15:15*	*1*
2-Fluorobiphenyl	*93*		*37 - 120*	*08/17/13 08:42*	*08/19/13 15:15*	*1*
2-Fluorophenol	*83*		*18 - 120*	*08/17/13 08:42*	*08/19/13 15:15*	*1*
Nitrobenzene-d5	*89*		*34 - 132*	*08/17/13 08:42*	*08/19/13 15:15*	*1*
Phenol-d5	*87*		*11 - 120*	*08/17/13 08:42*	*08/19/13 15:15*	*1*
p-Terphenyl-d14	*75*		*65 - 153*	*08/17/13 08:42*	*08/19/13 15:15*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.32	ug/Kg	☼	08/17/13 07:43	08/19/13 12:00	1
4,4'-DDE	ND		1.7	0.25	ug/Kg	☼	08/17/13 07:43	08/19/13 12:00	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	08/17/13 07:43	08/19/13 12:00	1
Aldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:43	08/19/13 12:00	1
alpha-BHC	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:43	08/19/13 12:00	1
alpha-Chlordane	ND		1.7	0.83	ug/Kg	☼	08/17/13 07:43	08/19/13 12:00	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:43	08/19/13 12:00	1
delta-BHC	ND		1.7	0.22	ug/Kg	☼	08/17/13 07:43	08/19/13 12:00	1
Dieldrin	ND		1.7	0.40	ug/Kg	☼	08/17/13 07:43	08/19/13 12:00	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 12:00	1
Endosulfan II	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:43	08/19/13 12:00	1
Endosulfan sulfate	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:43	08/19/13 12:00	1
Endrin	ND		1.7	0.23	ug/Kg	☼	08/17/13 07:43	08/19/13 12:00	1
Heptachlor	ND		1.7	0.26	ug/Kg	☼	08/17/13 07:43	08/19/13 12:00	1
Lindane	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 12:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*86*		*32 - 136*	*08/17/13 07:43*	*08/19/13 12:00*	*1*
Tetrachloro-m-xylene	*82*		*30 - 124*	*08/17/13 07:43*	*08/19/13 12:00*	*1*

Client Sample ID: HOHAOC2-B-7

Lab Sample ID: 480-43956-20

Date Collected: 08/14/13 12:30
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.18	0.035	mg/Kg	☼	08/19/13 14:47	08/20/13 12:29	1
PCB-1221	ND		0.18	0.035	mg/Kg	☼	08/19/13 14:47	08/20/13 12:29	1
PCB-1232	ND		0.18	0.035	mg/Kg	☼	08/19/13 14:47	08/20/13 12:29	1
PCB-1242	ND		0.18	0.035	mg/Kg	☼	08/19/13 14:47	08/20/13 12:29	1
PCB-1248	ND		0.18	0.035	mg/Kg	☼	08/19/13 14:47	08/20/13 12:29	1
PCB-1254	ND		0.18	0.084	mg/Kg	☼	08/19/13 14:47	08/20/13 12:29	1
PCB-1260	ND		0.18	0.084	mg/Kg	☼	08/19/13 14:47	08/20/13 12:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*96*		*47 - 176*	*08/19/13 14:47*	*08/20/13 12:29*	*1*
Tetrachloro-m-xylene	*104*		*46 - 175*	*08/19/13 14:47*	*08/20/13 12:29*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.1	ug/Kg	☼	08/20/13 08:01	08/22/13 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*80*		*39 - 120*	*08/20/13 08:01*	*08/22/13 17:29*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.59**	**J**	2.0	0.40	mg/Kg	☼	08/16/13 13:30	08/20/13 22:37	1
Barium	**14.9**		0.50	0.11	mg/Kg	☼	08/16/13 13:30	08/20/13 22:37	1
Beryllium	**0.12**	**J**	0.20	0.028	mg/Kg	☼	08/16/13 13:30	08/20/13 22:37	1
Cadmium	ND		0.20	0.030	mg/Kg	☼	08/16/13 13:30	08/20/13 22:37	1
Chromium	**7.7**		0.50	0.20	mg/Kg	☼	08/16/13 13:30	08/20/13 22:37	1
Copper	**119**		1.0	0.21	mg/Kg	☼	08/16/13 13:30	08/20/13 22:37	1
Lead	**2.6**		1.0	0.24	mg/Kg	☼	08/16/13 13:30	08/20/13 22:37	1
Manganese	**118**		0.20	0.032	mg/Kg	☼	08/16/13 13:30	08/20/13 22:37	1
Nickel	**19.6**		5.0	0.23	mg/Kg	☼	08/16/13 13:30	08/20/13 22:37	1
Selenium	**0.47**	**J**	4.0	0.40	mg/Kg	☼	08/16/13 13:30	08/20/13 22:37	1
Silver	ND		0.50	0.20	mg/Kg	☼	08/16/13 13:30	08/20/13 22:37	1
Zinc	**34.0**	**B**	2.0	0.15	mg/Kg	☼	08/16/13 13:30	08/20/13 22:37	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.0085	mg/Kg	☼	08/16/13 10:05	08/16/13 13:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.82	0.28	mg/Kg	☼	08/21/13 13:55	08/22/13 12:02	1
Cyanide, Total	ND		1.0	0.49	mg/Kg	☼	08/19/13 06:45	08/19/13 15:24	1
Cr (III)	**7.7**		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-B-8

Lab Sample ID: 480-43956-21

Date Collected: 08/14/13 12:40
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 98.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.2	0.31	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1

Client Sample ID: HOHAOC2-B-8
Date Collected: 08/14/13 12:40
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-21
Matrix: Solid
Percent Solids: 98.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		4.2	0.52	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
1,1-Dichloroethene	ND		4.2	0.52	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
1,2-Dichlorobenzene	ND		4.2	0.33	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
1,2-Dichloroethene, cis-	ND		4.2	0.54	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
1,2-Dichloroethene, trans-	ND		4.2	0.44	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
1,3-Dichlorobenzene	ND		4.2	0.22	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
1,4-Dichlorobenzene	ND		4.2	0.59	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
1,4-Dioxane	ND		170	20	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
Acetone	ND		21	3.6	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
Benzene	ND		4.2	0.21	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
Butylbenzene	ND		4.2	0.37	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
Carbon tetrachloride	ND		4.2	0.41	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
Chlorobenzene	ND		4.2	0.56	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
Chloroform	ND		4.2	0.26	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.6	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
Methyl tert-butyl ether	ND		4.2	0.42	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
Methylene Chloride	ND		4.2	2.0	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
Propylbenzene, n-	ND		4.2	0.34	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
sec-Butylbenzene	ND		4.2	0.37	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
tert-Butylbenzene	ND		4.2	0.44	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
Tetrachloroethene	ND		4.2	0.57	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
Toluene	ND		4.2	0.32	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
Trichloroethene	ND		4.2	0.93	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
Trimethylbenzene, 1,2,4-	ND		4.2	0.81	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
Trimethylbenzene, 1,3,5-	ND		4.2	0.27	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
Vinyl chloride	ND		4.2	0.52	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1
Xylene (mixed)	ND		8.5	0.71	ug/Kg	☼	08/16/13 11:49	08/16/13 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*64 - 126*	*08/16/13 11:49*	*08/16/13 17:08*	*1*
4-Bromofluorobenzene (Surr)	*103*		*72 - 126*	*08/16/13 11:49*	*08/16/13 17:08*	*1*
Toluene-d8 (Surr)	*104*		*71 - 125*	*08/16/13 11:49*	*08/16/13 17:08*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	08/17/13 08:42	08/19/13 15:39	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	08/17/13 08:42	08/19/13 15:39	1
Anthracene	ND		170	4.4	ug/Kg	☼	08/17/13 08:42	08/19/13 15:39	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg	☼	08/17/13 08:42	08/19/13 15:39	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	08/17/13 08:42	08/19/13 15:39	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	08/17/13 08:42	08/19/13 15:39	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg	☼	08/17/13 08:42	08/19/13 15:39	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	08/17/13 08:42	08/19/13 15:39	1
Chrysene	ND		170	1.7	ug/Kg	☼	08/17/13 08:42	08/19/13 15:39	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	08/17/13 08:42	08/19/13 15:39	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	08/17/13 08:42	08/19/13 15:39	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	08/17/13 08:42	08/19/13 15:39	1
Fluorene	ND		170	3.9	ug/Kg	☼	08/17/13 08:42	08/19/13 15:39	1

Client Sample ID: HOHAOC2-B-8
Date Collected: 08/14/13 12:40
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-21
Matrix: Solid
Percent Solids: 98.4

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		170	8.5	ug/Kg	☼	08/17/13 08:42	08/19/13 15:39	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg	☼	08/17/13 08:42	08/19/13 15:39	1
m & p - Cresol	ND		330	9.5	ug/Kg	☼	08/17/13 08:42	08/19/13 15:39	1
Naphthalene	ND		170	2.8	ug/Kg	☼	08/17/13 08:42	08/19/13 15:39	1
o-Cresol	ND		170	5.2	ug/Kg	☼	08/17/13 08:42	08/19/13 15:39	1
Pentachlorophenol	ND		330	58	ug/Kg	☼	08/17/13 08:42	08/19/13 15:39	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	08/17/13 08:42	08/19/13 15:39	1
Phenol	ND		170	18	ug/Kg	☼	08/17/13 08:42	08/19/13 15:39	1
Pyrene	ND		170	1.1	ug/Kg	☼	08/17/13 08:42	08/19/13 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*79*		*39 - 146*	*08/17/13 08:42*	*08/19/13 15:39*	*1*
2-Fluorobiphenyl	*90*		*37 - 120*	*08/17/13 08:42*	*08/19/13 15:39*	*1*
2-Fluorophenol	*86*		*18 - 120*	*08/17/13 08:42*	*08/19/13 15:39*	*1*
Nitrobenzene-d5	*91*		*34 - 132*	*08/17/13 08:42*	*08/19/13 15:39*	*1*
Phenol-d5	*89*		*11 - 120*	*08/17/13 08:42*	*08/19/13 15:39*	*1*
p-Terphenyl-d14	*72*		*65 - 153*	*08/17/13 08:42*	*08/19/13 15:39*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.32	ug/Kg	☼	08/17/13 07:43	08/19/13 13:46	1
4,4'-DDE	ND		1.7	0.25	ug/Kg	☼	08/17/13 07:43	08/19/13 13:46	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	08/17/13 07:43	08/19/13 13:46	1
Aldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:43	08/19/13 13:46	1
alpha-BHC	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:43	08/19/13 13:46	1
alpha-Chlordane	ND		1.7	0.83	ug/Kg	☼	08/17/13 07:43	08/19/13 13:46	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:43	08/19/13 13:46	1
delta-BHC	ND		1.7	0.22	ug/Kg	☼	08/17/13 07:43	08/19/13 13:46	1
Dieldrin	ND		1.7	0.40	ug/Kg	☼	08/17/13 07:43	08/19/13 13:46	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 13:46	1
Endosulfan II	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:43	08/19/13 13:46	1
Endosulfan sulfate	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:43	08/19/13 13:46	1
Endrin	ND		1.7	0.23	ug/Kg	☼	08/17/13 07:43	08/19/13 13:46	1
Heptachlor	ND		1.7	0.26	ug/Kg	☼	08/17/13 07:43	08/19/13 13:46	1
Lindane	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 13:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*88*		*32 - 136*	*08/17/13 07:43*	*08/19/13 13:46*	*1*
Tetrachloro-m-xylene	*80*		*30 - 124*	*08/17/13 07:43*	*08/19/13 13:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.19	0.037	mg/Kg	☼	08/19/13 14:47	08/20/13 12:44	1
PCB-1221	ND		0.19	0.037	mg/Kg	☼	08/19/13 14:47	08/20/13 12:44	1
PCB-1232	ND		0.19	0.037	mg/Kg	☼	08/19/13 14:47	08/20/13 12:44	1
PCB-1242	ND		0.19	0.037	mg/Kg	☼	08/19/13 14:47	08/20/13 12:44	1
PCB-1248	ND		0.19	0.037	mg/Kg	☼	08/19/13 14:47	08/20/13 12:44	1
PCB-1254	ND		0.19	0.089	mg/Kg	☼	08/19/13 14:47	08/20/13 12:44	1
PCB-1260	ND		0.19	0.089	mg/Kg	☼	08/19/13 14:47	08/20/13 12:44	1

Client Sample ID: HOHAOC2-B-8

Lab Sample ID: 480-43956-21

Date Collected: 08/14/13 12:40
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 98.4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*97*		*47 - 176*	*08/19/13 14:47*	*08/20/13 12:44*	*1*
Tetrachloro-m-xylene	*104*		*46 - 175*	*08/19/13 14:47*	*08/20/13 12:44*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.1	ug/Kg	☼	08/20/13 08:01	08/22/13 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*83*		*39 - 120*	*08/20/13 08:01*	*08/22/13 17:59*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.2**	**J**	2.0	0.40	mg/Kg	☼	08/16/13 13:30	08/20/13 02:19	1
Barium	**8.9**		0.50	0.11	mg/Kg	☼	08/16/13 13:30	08/20/13 02:19	1
Beryllium	**0.23**		0.20	0.028	mg/Kg	☼	08/16/13 13:30	08/20/13 02:19	1
Cadmium	**0.052**	**J**	0.20	0.030	mg/Kg	☼	08/16/13 13:30	08/20/13 02:19	1
Chromium	**3.6**		0.50	0.20	mg/Kg	☼	08/16/13 13:30	08/20/13 02:19	1
Copper	**146**		1.0	0.21	mg/Kg	☼	08/16/13 13:30	08/20/13 02:19	1
Lead	**2.0**		1.0	0.24	mg/Kg	☼	08/16/13 13:30	08/20/13 02:19	1
Manganese	**117**		0.20	0.032	mg/Kg	☼	08/16/13 13:30	08/20/13 02:19	1
Nickel	**16.4**		5.0	0.23	mg/Kg	☼	08/16/13 13:30	08/20/13 02:19	1
Selenium	ND		4.0	0.40	mg/Kg	☼	08/16/13 13:30	08/20/13 02:19	1
Silver	ND		0.50	0.20	mg/Kg	☼	08/16/13 13:30	08/20/13 02:19	1
Zinc	**31.5**	**B**	2.0	0.15	mg/Kg	☼	08/16/13 13:30	08/21/13 14:23	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0078	mg/Kg	☼	08/16/13 10:05	08/16/13 12:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.81	0.27	mg/Kg	☼	08/21/13 13:55	08/22/13 11:40	1
Cyanide, Total	ND		1.0	0.48	mg/Kg	☼	08/19/13 06:45	08/19/13 15:25	1
Cr (III)	**3.6**		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-B-9

Lab Sample ID: 480-43956-22

Date Collected: 08/14/13 12:50
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 98.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.1	0.37	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
1,1-Dichloroethane	ND		5.1	0.62	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
1,1-Dichloroethene	ND		5.1	0.62	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
1,2-Dichlorobenzene	ND		5.1	0.40	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
1,2-Dichloroethane	ND		5.1	0.25	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
1,2-Dichloroethene, cis-	ND		5.1	0.65	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
1,2-Dichloroethene, trans-	ND		5.1	0.52	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
1,3-Dichlorobenzene	ND		5.1	0.26	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
1,4-Dichlorobenzene	ND		5.1	0.71	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
1,4-Dioxane	ND		200	24	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-B-9
Date Collected: 08/14/13 12:50
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-22
Matrix: Solid
Percent Solids: 98.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	4.3	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
Benzene	ND		5.1	0.25	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
Butylbenzene	ND		5.1	0.44	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
Carbon tetrachloride	ND		5.1	0.49	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
Chlorobenzene	ND		5.1	0.67	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
Chloroform	ND		5.1	0.31	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
Ethylbenzene	ND		5.1	0.35	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
Methyl Ethyl Ketone (2-Butanone)	ND		25	1.9	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
Methyl tert-butyl ether	ND		5.1	0.50	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
Methylene Chloride	ND		5.1	2.3	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
Propylbenzene, n-	ND		5.1	0.41	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
sec-Butylbenzene	ND		5.1	0.44	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
tert-Butylbenzene	ND		5.1	0.53	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
Tetrachloroethene	ND		5.1	0.68	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
Toluene	ND		5.1	0.38	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
Trichloroethene	ND		5.1	1.1	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
Trimethylbenzene, 1,2,4-	ND		5.1	0.97	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
Trimethylbenzene, 1,3,5-	ND		5.1	0.33	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
Vinyl chloride	ND		5.1	0.62	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1
Xylene (mixed)	ND		10	0.85	ug/Kg	☼	08/19/13 10:15	08/19/13 19:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*64 - 126*	*08/19/13 10:15*	*08/19/13 19:22*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*	*08/19/13 10:15*	*08/19/13 19:22*	*1*
Toluene-d8 (Surr)	*95*		*71 - 125*	*08/19/13 10:15*	*08/19/13 19:22*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	08/17/13 08:42	08/19/13 16:04	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	08/17/13 08:42	08/19/13 16:04	1
Anthracene	ND		170	4.4	ug/Kg	☼	08/17/13 08:42	08/19/13 16:04	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg	☼	08/17/13 08:42	08/19/13 16:04	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	08/17/13 08:42	08/19/13 16:04	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	08/17/13 08:42	08/19/13 16:04	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg	☼	08/17/13 08:42	08/19/13 16:04	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	08/17/13 08:42	08/19/13 16:04	1
Chrysene	ND		170	1.7	ug/Kg	☼	08/17/13 08:42	08/19/13 16:04	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	08/17/13 08:42	08/19/13 16:04	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	08/17/13 08:42	08/19/13 16:04	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	08/17/13 08:42	08/19/13 16:04	1
Fluorene	ND		170	3.9	ug/Kg	☼	08/17/13 08:42	08/19/13 16:04	1
Hexachlorobenzene	ND		170	8.5	ug/Kg	☼	08/17/13 08:42	08/19/13 16:04	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg	☼	08/17/13 08:42	08/19/13 16:04	1
m & p - Cresol	ND		330	9.5	ug/Kg	☼	08/17/13 08:42	08/19/13 16:04	1
Naphthalene	ND		170	2.8	ug/Kg	☼	08/17/13 08:42	08/19/13 16:04	1
o-Cresol	ND		170	5.2	ug/Kg	☼	08/17/13 08:42	08/19/13 16:04	1
Pentachlorophenol	ND		330	58	ug/Kg	☼	08/17/13 08:42	08/19/13 16:04	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	08/17/13 08:42	08/19/13 16:04	1
Phenol	ND		170	18	ug/Kg	☼	08/17/13 08:42	08/19/13 16:04	1
Pyrene	ND		170	1.1	ug/Kg	☼	08/17/13 08:42	08/19/13 16:04	1

Client Sample ID: HOHAOC2-B-9
Date Collected: 08/14/13 12:50
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-22
Matrix: Solid
Percent Solids: 98.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	84		39 - 146	08/17/13 08:42	08/19/13 16:04	1
2-Fluorobiphenyl	84		37 - 120	08/17/13 08:42	08/19/13 16:04	1
2-Fluorophenol	80		18 - 120	08/17/13 08:42	08/19/13 16:04	1
Nitrobenzene-d5	82		34 - 132	08/17/13 08:42	08/19/13 16:04	1
Phenol-d5	81		11 - 120	08/17/13 08:42	08/19/13 16:04	1
p-Terphenyl-d14	72		65 - 153	08/17/13 08:42	08/19/13 16:04	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.32	ug/Kg	☼	08/17/13 07:43	08/19/13 14:04	1
4,4'-DDE	ND		1.7	0.25	ug/Kg	☼	08/17/13 07:43	08/19/13 14:04	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	08/17/13 07:43	08/19/13 14:04	1
Aldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:43	08/19/13 14:04	1
alpha-BHC	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:43	08/19/13 14:04	1
alpha-Chlordane	ND		1.7	0.83	ug/Kg	☼	08/17/13 07:43	08/19/13 14:04	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:43	08/19/13 14:04	1
delta-BHC	ND		1.7	0.22	ug/Kg	☼	08/17/13 07:43	08/19/13 14:04	1
Dieldrin	ND		1.7	0.40	ug/Kg	☼	08/17/13 07:43	08/19/13 14:04	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 14:04	1
Endosulfan II	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:43	08/19/13 14:04	1
Endosulfan sulfate	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:43	08/19/13 14:04	1
Endrin	ND		1.7	0.23	ug/Kg	☼	08/17/13 07:43	08/19/13 14:04	1
Heptachlor	ND		1.7	0.26	ug/Kg	☼	08/17/13 07:43	08/19/13 14:04	1
Lindane	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 14:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	88		32 - 136	08/17/13 07:43	08/19/13 14:04	1
Tetrachloro-m-xylene	83		30 - 124	08/17/13 07:43	08/19/13 14:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.24	0.048	mg/Kg	☼	08/19/13 14:47	08/20/13 13:00	1
PCB-1221	ND		0.24	0.048	mg/Kg	☼	08/19/13 14:47	08/20/13 13:00	1
PCB-1232	ND		0.24	0.048	mg/Kg	☼	08/19/13 14:47	08/20/13 13:00	1
PCB-1242	ND		0.24	0.048	mg/Kg	☼	08/19/13 14:47	08/20/13 13:00	1
PCB-1248	ND		0.24	0.048	mg/Kg	☼	08/19/13 14:47	08/20/13 13:00	1
PCB-1254	ND		0.24	0.11	mg/Kg	☼	08/19/13 14:47	08/20/13 13:00	1
PCB-1260	ND		0.24	0.11	mg/Kg	☼	08/19/13 14:47	08/20/13 13:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	96		47 - 176	08/19/13 14:47	08/20/13 13:00	1
Tetrachloro-m-xylene	103		46 - 175	08/19/13 14:47	08/20/13 13:00	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.0	ug/Kg	☼	08/20/13 08:01	08/22/13 18:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	94		39 - 120	08/20/13 08:01	08/22/13 18:29	1

Client Sample ID: HOHAOC2-B-9

Lab Sample ID: 480-43956-22

Date Collected: 08/14/13 12:50

Matrix: Solid

Date Received: 08/15/13 09:00

Percent Solids: 98.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	J	2.0	0.40	mg/Kg	☼	08/16/13 13:30	08/20/13 02:22	1
Barium	16.4		0.51	0.11	mg/Kg	☼	08/16/13 13:30	08/20/13 02:22	1
Beryllium	0.22		0.20	0.028	mg/Kg	☼	08/16/13 13:30	08/20/13 02:22	1
Cadmium	0.072	J	0.20	0.030	mg/Kg	☼	08/16/13 13:30	08/20/13 02:22	1
Chromium	10.5		0.51	0.20	mg/Kg	☼	08/16/13 13:30	08/20/13 02:22	1
Copper	119		1.0	0.21	mg/Kg	☼	08/16/13 13:30	08/20/13 02:22	1
Lead	58.7		1.0	0.24	mg/Kg	☼	08/16/13 13:30	08/20/13 02:22	1
Manganese	117		0.20	0.032	mg/Kg	☼	08/16/13 13:30	08/20/13 02:22	1
Nickel	21.5		5.1	0.23	mg/Kg	☼	08/16/13 13:30	08/20/13 02:22	1
Selenium	ND		4.0	0.40	mg/Kg	☼	08/16/13 13:30	08/20/13 02:22	1
Silver	ND		0.51	0.20	mg/Kg	☼	08/16/13 13:30	08/20/13 02:22	1
Zinc	33.4	B	2.0	0.15	mg/Kg	☼	08/16/13 13:30	08/21/13 14:26	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.0083	mg/Kg	☼	08/16/13 10:05	08/16/13 12:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.81	0.27	mg/Kg	☼	08/21/13 13:55	08/22/13 11:43	1
Cyanide, Total	ND		0.97	0.47	mg/Kg	☼	08/19/13 06:45	08/19/13 15:28	1
Cr (III)	10.5		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-B-10

Lab Sample ID: 480-43956-23

Date Collected: 08/14/13 13:00

Matrix: Solid

Date Received: 08/15/13 09:00

Percent Solids: 99.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		6.7	0.49	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
1,1-Dichloroethane	ND		6.7	0.82	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
1,1-Dichloroethene	ND		6.7	0.82	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
1,2-Dichlorobenzene	ND		6.7	0.53	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
1,2-Dichloroethane	ND		6.7	0.34	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
1,2-Dichloroethene, cis-	ND		6.7	0.86	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
1,2-Dichloroethene, trans-	ND		6.7	0.69	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
1,3-Dichlorobenzene	ND		6.7	0.35	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
1,4-Dichlorobenzene	ND		6.7	0.94	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
1,4-Dioxane	ND		270	32	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
Acetone	ND		34	5.7	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
Benzene	ND		6.7	0.33	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
Butylbenzene	ND		6.7	0.59	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
Carbon tetrachloride	ND		6.7	0.65	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
Chlorobenzene	ND		6.7	0.89	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
Chloroform	ND		6.7	0.42	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
Ethylbenzene	ND		6.7	0.46	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
Methyl Ethyl Ketone (2-Butanone)	ND		34	2.5	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
Methyl tert-butyl ether	ND		6.7	0.66	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
Methylene Chloride	ND		6.7	3.1	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
Propylbenzene, n-	ND		6.7	0.54	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1

Client Sample ID: HOHAOC2-B-10
Date Collected: 08/14/13 13:00
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-23
Matrix: Solid
Percent Solids: 99.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		6.7	0.59	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
tert-Butylbenzene	ND		6.7	0.70	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
Tetrachloroethene	ND		6.7	0.90	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
Toluene	ND		6.7	0.51	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
Trichloroethene	ND		6.7	1.5	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
Trimethylbenzene, 1,2,4-	ND		6.7	1.3	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
Trimethylbenzene, 1,3,5-	ND		6.7	0.43	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
Vinyl chloride	ND		6.7	0.82	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1
Xylene (mixed)	ND		13	1.1	ug/Kg	☼	08/16/13 11:49	08/16/13 18:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*64 - 126*	*08/16/13 11:49*	*08/16/13 18:00*	*1*
4-Bromofluorobenzene (Surr)	*82*		*72 - 126*	*08/16/13 11:49*	*08/16/13 18:00*	*1*
Toluene-d8 (Surr)	*83*		*71 - 125*	*08/16/13 11:49*	*08/16/13 18:00*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	08/17/13 08:42	08/19/13 16:28	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	08/17/13 08:42	08/19/13 16:28	1
Anthracene	ND		170	4.3	ug/Kg	☼	08/17/13 08:42	08/19/13 16:28	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg	☼	08/17/13 08:42	08/19/13 16:28	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	08/17/13 08:42	08/19/13 16:28	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	08/17/13 08:42	08/19/13 16:28	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg	☼	08/17/13 08:42	08/19/13 16:28	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	08/17/13 08:42	08/19/13 16:28	1
Chrysene	ND		170	1.7	ug/Kg	☼	08/17/13 08:42	08/19/13 16:28	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	08/17/13 08:42	08/19/13 16:28	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	08/17/13 08:42	08/19/13 16:28	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	08/17/13 08:42	08/19/13 16:28	1
Fluorene	ND		170	3.9	ug/Kg	☼	08/17/13 08:42	08/19/13 16:28	1
Hexachlorobenzene	ND		170	8.4	ug/Kg	☼	08/17/13 08:42	08/19/13 16:28	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg	☼	08/17/13 08:42	08/19/13 16:28	1
m & p - Cresol	ND		330	9.4	ug/Kg	☼	08/17/13 08:42	08/19/13 16:28	1
Naphthalene	ND		170	2.8	ug/Kg	☼	08/17/13 08:42	08/19/13 16:28	1
o-Cresol	ND		170	5.2	ug/Kg	☼	08/17/13 08:42	08/19/13 16:28	1
Pentachlorophenol	ND		330	58	ug/Kg	☼	08/17/13 08:42	08/19/13 16:28	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	08/17/13 08:42	08/19/13 16:28	1
Phenol	ND		170	18	ug/Kg	☼	08/17/13 08:42	08/19/13 16:28	1
Pyrene	ND		170	1.1	ug/Kg	☼	08/17/13 08:42	08/19/13 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*95*		*39 - 146*	*08/17/13 08:42*	*08/19/13 16:28*	*1*
2-Fluorobiphenyl	*89*		*37 - 120*	*08/17/13 08:42*	*08/19/13 16:28*	*1*
2-Fluorophenol	*82*		*18 - 120*	*08/17/13 08:42*	*08/19/13 16:28*	*1*
Nitrobenzene-d5	*89*		*34 - 132*	*08/17/13 08:42*	*08/19/13 16:28*	*1*
Phenol-d5	*87*		*11 - 120*	*08/17/13 08:42*	*08/19/13 16:28*	*1*
p-Terphenyl-d14	*72*		*65 - 153*	*08/17/13 08:42*	*08/19/13 16:28*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-B-10
Date Collected: 08/14/13 13:00
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-23
Matrix: Solid
Percent Solids: 99.0

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.32	ug/Kg	☼	08/17/13 07:43	08/19/13 14:21	1
4,4'-DDE	ND		1.7	0.25	ug/Kg	☼	08/17/13 07:43	08/19/13 14:21	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	08/17/13 07:43	08/19/13 14:21	1
Aldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:43	08/19/13 14:21	1
alpha-BHC	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:43	08/19/13 14:21	1
alpha-Chlordane	ND		1.7	0.83	ug/Kg	☼	08/17/13 07:43	08/19/13 14:21	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:43	08/19/13 14:21	1
delta-BHC	ND		1.7	0.22	ug/Kg	☼	08/17/13 07:43	08/19/13 14:21	1
Dieldrin	ND		1.7	0.40	ug/Kg	☼	08/17/13 07:43	08/19/13 14:21	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 14:21	1
Endosulfan II	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:43	08/19/13 14:21	1
Endosulfan sulfate	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:43	08/19/13 14:21	1
Endrin	ND		1.7	0.23	ug/Kg	☼	08/17/13 07:43	08/19/13 14:21	1
Heptachlor	ND		1.7	0.26	ug/Kg	☼	08/17/13 07:43	08/19/13 14:21	1
Lindane	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*89*		*32 - 136*	*08/17/13 07:43*	*08/19/13 14:21*	*1*
Tetrachloro-m-xylene	*84*		*30 - 124*	*08/17/13 07:43*	*08/19/13 14:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.18	0.036	mg/Kg	☼	08/19/13 14:47	08/20/13 13:15	1
PCB-1221	ND		0.18	0.036	mg/Kg	☼	08/19/13 14:47	08/20/13 13:15	1
PCB-1232	ND		0.18	0.036	mg/Kg	☼	08/19/13 14:47	08/20/13 13:15	1
PCB-1242	ND		0.18	0.036	mg/Kg	☼	08/19/13 14:47	08/20/13 13:15	1
PCB-1248	ND		0.18	0.036	mg/Kg	☼	08/19/13 14:47	08/20/13 13:15	1
PCB-1254	ND		0.18	0.085	mg/Kg	☼	08/19/13 14:47	08/20/13 13:15	1
PCB-1260	ND		0.18	0.085	mg/Kg	☼	08/19/13 14:47	08/20/13 13:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*98*		*47 - 176*	*08/19/13 14:47*	*08/20/13 13:15*	*1*
Tetrachloro-m-xylene	*106*		*46 - 175*	*08/19/13 14:47*	*08/20/13 13:15*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.0	ug/Kg	☼	08/20/13 08:01	08/22/13 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*92*		*39 - 120*	*08/20/13 08:01*	*08/22/13 18:58*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.4**	**J**	2.1	0.42	mg/Kg	☼	08/16/13 13:30	08/20/13 02:24	1
Barium	**8.7**		0.53	0.12	mg/Kg	☼	08/16/13 13:30	08/20/13 02:24	1
Beryllium	**0.22**		0.21	0.030	mg/Kg	☼	08/16/13 13:30	08/20/13 02:24	1
Cadmium	**0.074**	**J**	0.21	0.032	mg/Kg	☼	08/16/13 13:30	08/20/13 02:24	1
Chromium	**3.5**		0.53	0.21	mg/Kg	☼	08/16/13 13:30	08/20/13 02:24	1
Copper	**136**		1.1	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 02:24	1
Lead	**3.4**		1.1	0.25	mg/Kg	☼	08/16/13 13:30	08/20/13 02:24	1
Manganese	**131**		0.21	0.034	mg/Kg	☼	08/16/13 13:30	08/20/13 02:24	1

Client Sample ID: HOHAOC2-B-10

Lab Sample ID: 480-43956-23

Date Collected: 08/14/13 13:00
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 99.0

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**15.7**		5.3	0.24	mg/Kg	☼	08/16/13 13:30	08/20/13 02:24	1
Selenium	ND		4.2	0.42	mg/Kg	☼	08/16/13 13:30	08/20/13 02:24	1
Silver	ND		0.53	0.21	mg/Kg	☼	08/16/13 13:30	08/20/13 02:24	1
Zinc	**31.0**	**B**	2.1	0.16	mg/Kg	☼	08/16/13 13:30	08/21/13 14:28	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.0084	mg/Kg	☼	08/16/13 10:05	08/16/13 12:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.81	0.27	mg/Kg	☼	08/21/13 13:55	08/22/13 11:44	1
Cyanide, Total	ND		0.95	0.46	mg/Kg	☼	08/19/13 06:45	08/19/13 15:29	1
Cr (III)	**3.5**		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-B-11

Lab Sample ID: 480-43956-24

Date Collected: 08/14/13 13:10
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 98.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.7	0.34	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
1,1-Dichloroethane	ND		4.7	0.57	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
1,1-Dichloroethene	ND		4.7	0.58	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
1,2-Dichlorobenzene	ND		4.7	0.37	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
1,2-Dichloroethane	ND		4.7	0.24	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
1,2-Dichloroethene, cis-	ND		4.7	0.60	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
1,2-Dichloroethene, trans-	ND		4.7	0.49	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
1,3-Dichlorobenzene	ND		4.7	0.24	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
1,4-Dichlorobenzene	ND		4.7	0.66	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
1,4-Dioxane	ND		190	23	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
Acetone	ND		24	4.0	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
Benzene	ND		4.7	0.23	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
Butylbenzene	ND		4.7	0.41	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
Carbon tetrachloride	ND		4.7	0.46	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
Chlorobenzene	ND		4.7	0.62	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
Chloroform	ND		4.7	0.29	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
Ethylbenzene	ND		4.7	0.32	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
Methyl Ethyl Ketone (2-Butanone)	ND		24	1.7	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
Methyl tert-butyl ether	ND		4.7	0.46	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
Methylene Chloride	ND		4.7	2.2	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
Propylbenzene, n-	ND		4.7	0.38	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
sec-Butylbenzene	ND		4.7	0.41	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
tert-Butylbenzene	ND		4.7	0.49	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
Tetrachloroethene	ND		4.7	0.63	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
Toluene	ND		4.7	0.36	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
Trichloroethene	ND		4.7	1.0	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
Trimethylbenzene, 1,2,4-	ND		4.7	0.90	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
Trimethylbenzene, 1,3,5-	ND		4.7	0.30	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1
Vinyl chloride	ND		4.7	0.57	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1

Client Sample ID: HOHAOC2-B-11
Date Collected: 08/14/13 13:10
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-24
Matrix: Solid
Percent Solids: 98.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylene (mixed)	ND		9.4	0.79	ug/Kg	☼	08/16/13 11:49	08/16/13 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*64 - 126*	*08/16/13 11:49*	*08/16/13 18:25*	*1*
4-Bromofluorobenzene (Surr)	*106*		*72 - 126*	*08/16/13 11:49*	*08/16/13 18:25*	*1*
Toluene-d8 (Surr)	*107*		*71 - 125*	*08/16/13 11:49*	*08/16/13 18:25*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	08/17/13 08:42	08/19/13 16:52	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	08/17/13 08:42	08/19/13 16:52	1
Anthracene	ND		170	4.4	ug/Kg	☼	08/17/13 08:42	08/19/13 16:52	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg	☼	08/17/13 08:42	08/19/13 16:52	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	08/17/13 08:42	08/19/13 16:52	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	08/17/13 08:42	08/19/13 16:52	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg	☼	08/17/13 08:42	08/19/13 16:52	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	08/17/13 08:42	08/19/13 16:52	1
Chrysene	ND		170	1.7	ug/Kg	☼	08/17/13 08:42	08/19/13 16:52	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	08/17/13 08:42	08/19/13 16:52	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	08/17/13 08:42	08/19/13 16:52	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	08/17/13 08:42	08/19/13 16:52	1
Fluorene	ND		170	3.9	ug/Kg	☼	08/17/13 08:42	08/19/13 16:52	1
Hexachlorobenzene	ND		170	8.5	ug/Kg	☼	08/17/13 08:42	08/19/13 16:52	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg	☼	08/17/13 08:42	08/19/13 16:52	1
m & p - Cresol	ND		330	9.5	ug/Kg	☼	08/17/13 08:42	08/19/13 16:52	1
Naphthalene	ND		170	2.8	ug/Kg	☼	08/17/13 08:42	08/19/13 16:52	1
o-Cresol	ND		170	5.2	ug/Kg	☼	08/17/13 08:42	08/19/13 16:52	1
Pentachlorophenol	ND		330	58	ug/Kg	☼	08/17/13 08:42	08/19/13 16:52	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	08/17/13 08:42	08/19/13 16:52	1
Phenol	ND		170	18	ug/Kg	☼	08/17/13 08:42	08/19/13 16:52	1
Pyrene	ND		170	1.1	ug/Kg	☼	08/17/13 08:42	08/19/13 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*98*		*39 - 146*	*08/17/13 08:42*	*08/19/13 16:52*	*1*
2-Fluorobiphenyl	*91*		*37 - 120*	*08/17/13 08:42*	*08/19/13 16:52*	*1*
2-Fluorophenol	*84*		*18 - 120*	*08/17/13 08:42*	*08/19/13 16:52*	*1*
Nitrobenzene-d5	*89*		*34 - 132*	*08/17/13 08:42*	*08/19/13 16:52*	*1*
Phenol-d5	*86*		*11 - 120*	*08/17/13 08:42*	*08/19/13 16:52*	*1*
p-Terphenyl-d14	*73*		*65 - 153*	*08/17/13 08:42*	*08/19/13 16:52*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.32	ug/Kg	☼	08/17/13 07:43	08/19/13 14:39	1
4,4'-DDE	ND		1.7	0.25	ug/Kg	☼	08/17/13 07:43	08/19/13 14:39	1
4,4'-DDT	**1.3**	**J**	1.7	0.17	ug/Kg	☼	08/17/13 07:43	08/19/13 14:39	1
Aldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:43	08/19/13 14:39	1
alpha-BHC	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:43	08/19/13 14:39	1
alpha-Chlordane	ND		1.7	0.83	ug/Kg	☼	08/17/13 07:43	08/19/13 14:39	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:43	08/19/13 14:39	1
delta-BHC	ND		1.7	0.22	ug/Kg	☼	08/17/13 07:43	08/19/13 14:39	1

Client Sample ID: HOHAOC2-B-11
Date Collected: 08/14/13 13:10
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-24
Matrix: Solid
Percent Solids: 98.5

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	ND		1.7	0.40	ug/Kg	☼	08/17/13 07:43	08/19/13 14:39	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 14:39	1
Endosulfan II	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:43	08/19/13 14:39	1
Endosulfan sulfate	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:43	08/19/13 14:39	1
Endrin	ND		1.7	0.23	ug/Kg	☼	08/17/13 07:43	08/19/13 14:39	1
Heptachlor	ND		1.7	0.26	ug/Kg	☼	08/17/13 07:43	08/19/13 14:39	1
Lindane	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 14:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*85*		*32 - 136*	*08/17/13 07:43*	*08/19/13 14:39*	*1*
Tetrachloro-m-xylene	*82*		*30 - 124*	*08/17/13 07:43*	*08/19/13 14:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.18	0.036	mg/Kg	☼	08/19/13 14:47	08/20/13 13:29	1
PCB-1221	ND		0.18	0.036	mg/Kg	☼	08/19/13 14:47	08/20/13 13:29	1
PCB-1232	ND		0.18	0.036	mg/Kg	☼	08/19/13 14:47	08/20/13 13:29	1
PCB-1242	ND		0.18	0.036	mg/Kg	☼	08/19/13 14:47	08/20/13 13:29	1
PCB-1248	ND		0.18	0.036	mg/Kg	☼	08/19/13 14:47	08/20/13 13:29	1
PCB-1254	ND		0.18	0.085	mg/Kg	☼	08/19/13 14:47	08/20/13 13:29	1
PCB-1260	ND		0.18	0.085	mg/Kg	☼	08/19/13 14:47	08/20/13 13:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*94*		*47 - 176*	*08/19/13 14:47*	*08/20/13 13:29*	*1*
Tetrachloro-m-xylene	*101*		*46 - 175*	*08/19/13 14:47*	*08/20/13 13:29*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.0	ug/Kg	☼	08/20/13 08:01	08/22/13 19:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*93*		*39 - 120*	*08/20/13 08:01*	*08/22/13 19:28*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.0**	**J**	1.8	0.37	mg/Kg	☼	08/16/13 13:30	08/20/13 02:27	1
Barium	**11.2**		0.46	0.10	mg/Kg	☼	08/16/13 13:30	08/20/13 02:27	1
Beryllium	**0.24**		0.18	0.026	mg/Kg	☼	08/16/13 13:30	08/20/13 02:27	1
Cadmium	**0.062**	**J**	0.18	0.028	mg/Kg	☼	08/16/13 13:30	08/20/13 02:27	1
Chromium	**6.9**		0.46	0.18	mg/Kg	☼	08/16/13 13:30	08/20/13 02:27	1
Copper	**109**		0.92	0.19	mg/Kg	☼	08/16/13 13:30	08/20/13 02:27	1
Lead	**2.5**		0.92	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 02:27	1
Manganese	**131**		0.18	0.029	mg/Kg	☼	08/16/13 13:30	08/20/13 02:27	1
Nickel	**17.5**		4.6	0.21	mg/Kg	☼	08/16/13 13:30	08/20/13 02:27	1
Selenium	**0.41**	**J**	3.7	0.37	mg/Kg	☼	08/16/13 13:30	08/20/13 02:27	1
Silver	ND		0.46	0.18	mg/Kg	☼	08/16/13 13:30	08/20/13 02:27	1
Zinc	**31.9**	**B**	1.8	0.14	mg/Kg	☼	08/16/13 13:30	08/21/13 14:31	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.0084	mg/Kg	☼	08/16/13 10:05	08/16/13 12:32	1

Client Sample ID: HOHAOC2-B-11

Lab Sample ID: 480-43956-24
Date Collected: 08/14/13 13:10
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 98.5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.81	0.27	mg/Kg	☼	08/21/13 13:55	08/22/13 11:54	1
Cyanide, Total	ND		0.99	0.48	mg/Kg	☼	08/19/13 06:45	08/19/13 15:30	1
Cr (III)	**6.9**		1.5	0.63	mg/Kg			08/22/13 14:04	1

Client Sample ID: HOHAOC2-B-12

Lab Sample ID: 480-43956-25
Date Collected: 08/14/13 13:20
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 98.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.2	0.31	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
1,1-Dichloroethane	ND		4.2	0.51	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
1,1-Dichloroethene	ND		4.2	0.52	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
1,2-Dichlorobenzene	ND		4.2	0.33	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
1,2-Dichloroethene, cis-	ND		4.2	0.54	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
1,2-Dichloroethene, trans-	ND		4.2	0.44	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
1,3-Dichlorobenzene	ND		4.2	0.22	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
1,4-Dichlorobenzene	ND		4.2	0.59	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
1,4-Dioxane	ND		170	20	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
Acetone	ND		21	3.6	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
Benzene	ND		4.2	0.21	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
Butylbenzene	ND		4.2	0.37	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
Carbon tetrachloride	ND		4.2	0.41	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
Chlorobenzene	ND		4.2	0.56	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
Chloroform	ND		4.2	0.26	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.5	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
Methyl tert-butyl ether	ND		4.2	0.41	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
Methylene Chloride	ND		4.2	1.9	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
Propylbenzene, n-	ND		4.2	0.34	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
sec-Butylbenzene	ND		4.2	0.37	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
tert-Butylbenzene	ND		4.2	0.44	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
Tetrachloroethene	ND		4.2	0.57	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
Toluene	ND		4.2	0.32	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
Trichloroethene	ND		4.2	0.93	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
Trimethylbenzene, 1,2,4-	ND		4.2	0.81	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
Trimethylbenzene, 1,3,5-	ND		4.2	0.27	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
Vinyl chloride	ND		4.2	0.51	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1
Xylene (mixed)	ND		8.4	0.71	ug/Kg	☼	08/16/13 11:49	08/16/13 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*64 - 126*	*08/16/13 11:49*	*08/16/13 18:51*	*1*
4-Bromofluorobenzene (Surr)	*91*		*72 - 126*	*08/16/13 11:49*	*08/16/13 18:51*	*1*
Toluene-d8 (Surr)	*91*		*71 - 125*	*08/16/13 11:49*	*08/16/13 18:51*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	08/17/13 08:42	08/19/13 17:16	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	08/17/13 08:42	08/19/13 17:16	1

Client Sample ID: HOHAOC2-B-12
Date Collected: 08/14/13 13:20
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-25
Matrix: Solid
Percent Solids: 98.2

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		170	4.4	ug/Kg	☼	08/17/13 08:42	08/19/13 17:16	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg	☼	08/17/13 08:42	08/19/13 17:16	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	08/17/13 08:42	08/19/13 17:16	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	08/17/13 08:42	08/19/13 17:16	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg	☼	08/17/13 08:42	08/19/13 17:16	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	08/17/13 08:42	08/19/13 17:16	1
Chrysene	ND		170	1.7	ug/Kg	☼	08/17/13 08:42	08/19/13 17:16	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	08/17/13 08:42	08/19/13 17:16	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	08/17/13 08:42	08/19/13 17:16	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	08/17/13 08:42	08/19/13 17:16	1
Fluorene	ND		170	3.9	ug/Kg	☼	08/17/13 08:42	08/19/13 17:16	1
Hexachlorobenzene	ND		170	8.5	ug/Kg	☼	08/17/13 08:42	08/19/13 17:16	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg	☼	08/17/13 08:42	08/19/13 17:16	1
m & p - Cresol	ND		330	9.5	ug/Kg	☼	08/17/13 08:42	08/19/13 17:16	1
Naphthalene	ND		170	2.8	ug/Kg	☼	08/17/13 08:42	08/19/13 17:16	1
o-Cresol	ND		170	5.2	ug/Kg	☼	08/17/13 08:42	08/19/13 17:16	1
Pentachlorophenol	ND		330	58	ug/Kg	☼	08/17/13 08:42	08/19/13 17:16	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	08/17/13 08:42	08/19/13 17:16	1
Phenol	ND		170	18	ug/Kg	☼	08/17/13 08:42	08/19/13 17:16	1
Pyrene	ND		170	1.1	ug/Kg	☼	08/17/13 08:42	08/19/13 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*88*		*39 - 146*	*08/17/13 08:42*	*08/19/13 17:16*	*1*
2-Fluorobiphenyl	*89*		*37 - 120*	*08/17/13 08:42*	*08/19/13 17:16*	*1*
2-Fluorophenol	*83*		*18 - 120*	*08/17/13 08:42*	*08/19/13 17:16*	*1*
Nitrobenzene-d5	*87*		*34 - 132*	*08/17/13 08:42*	*08/19/13 17:16*	*1*
Phenol-d5	*87*		*11 - 120*	*08/17/13 08:42*	*08/19/13 17:16*	*1*
p-Terphenyl-d14	*71*		*65 - 153*	*08/17/13 08:42*	*08/19/13 17:16*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	08/17/13 07:43	08/19/13 14:57	1
4,4'-DDE	ND		1.7	0.25	ug/Kg	☼	08/17/13 07:43	08/19/13 14:57	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	08/17/13 07:43	08/19/13 14:57	1
Aldrin	ND		1.7	0.41	ug/Kg	☼	08/17/13 07:43	08/19/13 14:57	1
alpha-BHC	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:43	08/19/13 14:57	1
alpha-Chlordane	ND		1.7	0.84	ug/Kg	☼	08/17/13 07:43	08/19/13 14:57	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	08/17/13 07:43	08/19/13 14:57	1
delta-BHC	ND		1.7	0.22	ug/Kg	☼	08/17/13 07:43	08/19/13 14:57	1
Dieldrin	ND		1.7	0.40	ug/Kg	☼	08/17/13 07:43	08/19/13 14:57	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 14:57	1
Endosulfan II	ND		1.7	0.30	ug/Kg	☼	08/17/13 07:43	08/19/13 14:57	1
Endosulfan sulfate	ND		1.7	0.31	ug/Kg	☼	08/17/13 07:43	08/19/13 14:57	1
Endrin	ND		1.7	0.23	ug/Kg	☼	08/17/13 07:43	08/19/13 14:57	1
Heptachlor	ND		1.7	0.26	ug/Kg	☼	08/17/13 07:43	08/19/13 14:57	1
Lindane	ND		1.7	0.21	ug/Kg	☼	08/17/13 07:43	08/19/13 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*84*		*32 - 136*	*08/17/13 07:43*	*08/19/13 14:57*	*1*
Tetrachloro-m-xylene	*84*		*30 - 124*	*08/17/13 07:43*	*08/19/13 14:57*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-B-12
Date Collected: 08/14/13 13:20
Date Received: 08/15/13 09:00

Lab Sample ID: 480-43956-25
Matrix: Solid
Percent Solids: 98.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.24	0.047	mg/Kg	☼	08/19/13 14:47	08/20/13 13:44	1
PCB-1221	ND		0.24	0.047	mg/Kg	☼	08/19/13 14:47	08/20/13 13:44	1
PCB-1232	ND		0.24	0.047	mg/Kg	☼	08/19/13 14:47	08/20/13 13:44	1
PCB-1242	ND		0.24	0.047	mg/Kg	☼	08/19/13 14:47	08/20/13 13:44	1
PCB-1248	ND		0.24	0.047	mg/Kg	☼	08/19/13 14:47	08/20/13 13:44	1
PCB-1254	ND		0.24	0.11	mg/Kg	☼	08/19/13 14:47	08/20/13 13:44	1
PCB-1260	ND		0.24	0.11	mg/Kg	☼	08/19/13 14:47	08/20/13 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*99*		*47 - 176*	*08/19/13 14:47*	*08/20/13 13:44*	*1*
Tetrachloro-m-xylene	*106*		*46 - 175*	*08/19/13 14:47*	*08/20/13 13:44*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.1	ug/Kg	☼	08/20/13 08:01	08/22/13 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*81*		*39 - 120*	*08/20/13 08:01*	*08/22/13 19:58*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.3**	**J**	2.2	0.43	mg/Kg	☼	08/16/13 13:30	08/20/13 02:30	1
Barium	**11.8**		0.54	0.12	mg/Kg	☼	08/16/13 13:30	08/20/13 02:30	1
Beryllium	**0.25**		0.22	0.030	mg/Kg	☼	08/16/13 13:30	08/20/13 02:30	1
Cadmium	**0.068**	**J**	0.22	0.033	mg/Kg	☼	08/16/13 13:30	08/20/13 02:30	1
Chromium	**7.8**		0.54	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 02:30	1
Copper	**122**		1.1	0.23	mg/Kg	☼	08/16/13 13:30	08/20/13 02:30	1
Lead	**2.0**		1.1	0.26	mg/Kg	☼	08/16/13 13:30	08/20/13 02:30	1
Manganese	**121**		0.22	0.035	mg/Kg	☼	08/16/13 13:30	08/20/13 02:30	1
Nickel	**17.5**		5.4	0.25	mg/Kg	☼	08/16/13 13:30	08/20/13 02:30	1
Selenium	ND		4.3	0.43	mg/Kg	☼	08/16/13 13:30	08/20/13 02:30	1
Silver	ND		0.54	0.22	mg/Kg	☼	08/16/13 13:30	08/20/13 02:30	1
Zinc	**32.1**	**B**	2.2	0.17	mg/Kg	☼	08/16/13 13:30	08/21/13 14:34	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.0083	mg/Kg	☼	08/16/13 10:05	08/16/13 12:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.81	0.27	mg/Kg	☼	08/21/13 13:55	08/22/13 12:03	1
Cyanide, Total	ND		0.98	0.48	mg/Kg	☼	08/19/13 06:45	08/19/13 15:31	1
Cr (III)	**7.8**		1.5	0.63	mg/Kg			08/22/13 14:04	1

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(71-125)
480-43956-1	HOHAOC2-A-1	112	107	108
480-43956-1 MS	HOHAOC2-A-1 MS	94	96	96
480-43956-1 MSD	HOHAOC2-A-1 MSD	96	101	100
480-43956-2	HOHAOC2-A-2	106	92	93
480-43956-3	HOHAOC2-A-3	116	109	110
480-43956-4	HOHAOC2-A-4	123	119	122
480-43956-5	HOHAOC2-A-5	99	86	85
480-43956-6	HOHAOC2-A-6	100	89	89
480-43956-7	HOHAOC2-A-7	103	90	92
480-43956-8	HOHAOC2-A-8	106	95	96
480-43956-9	HOHAOC2-A-9	107	95	96
480-43956-10	HOHAOC2-A-10	110	99	102
480-43956-11	HOHAOC2-A-11	107	98	97
480-43956-12	HOHAOC2-A-12	109	99	99
480-43956-13	HOHAOC2-A-13	107	96	98
480-43956-14	HOHAOC2-B-1	110	101	102
480-43956-15	HOHAOC2-B-2	105	92	94
480-43956-16	HOHAOC2-B-3	109	96	96
480-43956-17	HOHAOC2-B-4	106	104	102
480-43956-18	HOHAOC2-B-5	106	96	96
480-43956-19	HOHAOC2-B-6	101	89	89
480-43956-20	HOHAOC2-B-7	106	97	98
480-43956-21	HOHAOC2-B-8	110	103	104
480-43956-22	HOHAOC2-B-9	101	96	95
480-43956-23	HOHAOC2-B-10	96	82	83
480-43956-24	HOHAOC2-B-11	110	106	107
480-43956-25	HOHAOC2-B-12	109	91	91
LCS 480-134263/4	Lab Control Sample	94	86	85
LCS 480-134369/4	Lab Control Sample	102	100	99
LCS 480-134731/6	Lab Control Sample	103	104	101
LCSD 480-134369/5	Lab Control Sample Dup	99	92	91
MB 480-134263/5	Method Blank	107	101	104
MB 480-134369/7	Method Blank	99	102	104
MB 480-134731/7	Method Blank	98	96	96

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(39-146)	(37-120)	(18-120)	(34-132)	(11-120)	(65-153)
480-43956-1	HOHAOC2-A-1	91	90	83	89	87	66
480-43956-1 MS	HOHAOC2-A-1 MS	93	90	77	87	84	68
480-43956-1 MSD	HOHAOC2-A-1 MSD	97	90	82	89	91	72

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(39-146)	(37-120)	(18-120)	(34-132)	(11-120)	(65-153)
480-43956-2	HOHAOC2-A-2	90	89	82	89	87	67
480-43956-3	HOHAOC2-A-3	94	91	88	87	89	71
480-43956-4	HOHAOC2-A-4	89	89	84	87	86	70
480-43956-5	HOHAOC2-A-5	84	84	80	83	83	67
480-43956-6	HOHAOC2-A-6	84	85	79	81	81	64 X
480-43956-7	HOHAOC2-A-7	100	101	97	100	99	100
480-43956-8	HOHAOC2-A-8	88	90	87	91	91	90
480-43956-9	HOHAOC2-A-9	88	90	85	87	90	90
480-43956-10	HOHAOC2-A-10	89	89	85	88	88	91
480-43956-11	HOHAOC2-A-11	89	85	72	81	81	92
480-43956-12	HOHAOC2-A-12	90	91	77	85	85	92
480-43956-13	HOHAOC2-A-13	94	90	80	86	89	92
480-43956-14	HOHAOC2-B-1	88	83	73	79	79	87
480-43956-15	HOHAOC2-B-2	79	85	77	83	81	88
480-43956-16	HOHAOC2-B-3	85	88	81	87	86	90
480-43956-17	HOHAOC2-B-4	79	92	78	90	85	74
480-43956-18	HOHAOC2-B-5	94	91	87	91	88	76
480-43956-19	HOHAOC2-B-6	98	91	86	90	89	76
480-43956-20	HOHAOC2-B-7	87	93	83	89	87	75
480-43956-21	HOHAOC2-B-8	79	90	86	91	89	72
480-43956-22	HOHAOC2-B-9	84	84	80	82	81	72
480-43956-23	HOHAOC2-B-10	95	89	82	89	87	72
480-43956-24	HOHAOC2-B-11	98	91	84	89	86	73
480-43956-25	HOHAOC2-B-12	88	89	83	87	87	71
LCS 480-134548/2-A	Lab Control Sample	100	95	84	93	90	76
LCS 480-134554/2-A	Lab Control Sample	91	87	78	88	85	91
LCSD 480-134554/3-A	Lab Control Sample Dup	92	91	80	92	86	92
MB 480-134548/1-A	Method Blank	75	70	62	63	67	80
MB 480-134554/1-A	Method Blank	82	91	82	89	87	96

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPH = p-Terphenyl-d14

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB2	TCX2
Lab Sample ID	Client Sample ID	(32-136)	(30-124)
480-43956-1	HOHAOC2-A-1	87	81
480-43956-1 MS	HOHAOC2-A-1 MS	88	83
480-43956-1 MSD	HOHAOC2-A-1 MSD	88	82
480-43956-2	HOHAOC2-A-2	86	82
480-43956-3	HOHAOC2-A-3	87	82

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
		DCB2	TCX2										
Lab Sample ID	Client Sample ID	(32-136)	(30-124)										
480-43956-4	HOHAOC2-A-4	89	83										
480-43956-5	HOHAOC2-A-5	88	81										
480-43956-6	HOHAOC2-A-6	93	85										
480-43956-7	HOHAOC2-A-7	89	86										
480-43956-8	HOHAOC2-A-8	90	79										
480-43956-9	HOHAOC2-A-9	86	82										
480-43956-10	HOHAOC2-A-10	88	83										
480-43956-11	HOHAOC2-A-11	86	82										
480-43956-12	HOHAOC2-A-12	86	81										
480-43956-13	HOHAOC2-A-13	88	82										
480-43956-14	HOHAOC2-B-1	85	78										
480-43956-15	HOHAOC2-B-2	86	79										
480-43956-16	HOHAOC2-B-3	86	81										
480-43956-17	HOHAOC2-B-4	86	82										
480-43956-18	HOHAOC2-B-5	86	83										
480-43956-19	HOHAOC2-B-6	85	81										
480-43956-20	HOHAOC2-B-7	86	82										
480-43956-21	HOHAOC2-B-8	88	80										
480-43956-22	HOHAOC2-B-9	88	83										
480-43956-23	HOHAOC2-B-10	89	84										
480-43956-24	HOHAOC2-B-11	85	82										
480-43956-25	HOHAOC2-B-12	84	84										
LCS 480-134546/2-A	Lab Control Sample	90	79										
LCS 480-134547/2-A	Lab Control Sample	85	82										
LCSD 480-134547/3-A	Lab Control Sample Dup	84	76										
MB 480-134546/1-A	Method Blank	89	83										
MB 480-134547/1-A	Method Blank	84	78										

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
		DCB2	TCX2										
Lab Sample ID	Client Sample ID	(47-176)	(46-175)										
480-43956-1	HOHAOC2-A-1	93	102										
480-43956-1 MS	HOHAOC2-A-1 MS	103	110										
480-43956-1 MSD	HOHAOC2-A-1 MSD	104	110										
480-43956-2	HOHAOC2-A-2	94	100										
480-43956-3	HOHAOC2-A-3	94	102										
480-43956-4	HOHAOC2-A-4	95	102										
480-43956-5	HOHAOC2-A-5	95	102										
480-43956-6	HOHAOC2-A-6	94	100										
480-43956-7	HOHAOC2-A-7	97	103										
480-43956-8	HOHAOC2-A-8	93	101										
480-43956-9	HOHAOC2-A-9	97	104										

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	DCB2 (47-176)	TCX2 (46-175)								
480-43956-10	HOHAOC2-A-10	94	102								
480-43956-11	HOHAOC2-A-11	98	104								
480-43956-12	HOHAOC2-A-12	94	102								
480-43956-13	HOHAOC2-A-13	96	103								
480-43956-14	HOHAOC2-B-1	96	103								
480-43956-14 MS	HOHAOC2-B-1	112	109								
480-43956-14 MSD	HOHAOC2-B-1	117	111								
480-43956-15	HOHAOC2-B-2	96	104								
480-43956-16	HOHAOC2-B-3	98	105								
480-43956-17	HOHAOC2-B-4	95	104								
480-43956-18	HOHAOC2-B-5	98	104								
480-43956-19	HOHAOC2-B-6	99	107								
480-43956-20	HOHAOC2-B-7	96	104								
480-43956-21	HOHAOC2-B-8	97	104								
480-43956-22	HOHAOC2-B-9	96	103								
480-43956-23	HOHAOC2-B-10	98	106								
480-43956-24	HOHAOC2-B-11	94	101								
480-43956-25	HOHAOC2-B-12	99	106								
LCS 480-134465/2-A	Lab Control Sample	103	112								
LCS 480-134469/2-A	Lab Control Sample	112	112								
MB 480-134465/1-A	Method Blank	96	129								
MB 480-134469/1-A	Method Blank	93	99								

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8151A - Herbicides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	DCPA1 (39-120)									
480-43956-1	HOHAOC2-A-1	102									
480-43956-1 MS	HOHAOC2-A-1 MS	99									
480-43956-1 MSD	HOHAOC2-A-1 MSD	109									
480-43956-2	HOHAOC2-A-2	98									
480-43956-3	HOHAOC2-A-3	93									
480-43956-4	HOHAOC2-A-4	94									
480-43956-5	HOHAOC2-A-5	97									
480-43956-6	HOHAOC2-A-6	99									
480-43956-7	HOHAOC2-A-7	102									
480-43956-8	HOHAOC2-A-8	98									
480-43956-9	HOHAOC2-A-9	100									
480-43956-10	HOHAOC2-A-10	104									
480-43956-11	HOHAOC2-A-11	100									
480-43956-12	HOHAOC2-A-12	104									
480-43956-13	HOHAOC2-A-13	91									
480-43956-13 MS	HOHAOC2-A-13	66									

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Method: 8151A - Herbicides (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	DCPA1 (39-120)							
480-43956-13 MSD	HOHAOC2-A-13	92							
480-43956-14	HOHAOC2-B-1	91							
480-43956-15	HOHAOC2-B-2	86							
480-43956-16	HOHAOC2-B-3	83							
480-43956-17	HOHAOC2-B-4	89							
480-43956-18	HOHAOC2-B-5	88							
480-43956-19	HOHAOC2-B-6	90							
480-43956-20	HOHAOC2-B-7	80							
480-43956-21	HOHAOC2-B-8	83							
480-43956-22	HOHAOC2-B-9	94							
480-43956-23	HOHAOC2-B-10	92							
480-43956-24	HOHAOC2-B-11	93							
480-43956-25	HOHAOC2-B-12	81							
LCS 480-134831/2-A	Lab Control Sample	96							
LCS 480-134837/2-A	Lab Control Sample	102							
MB 480-134831/1-A	Method Blank	89							
MB 480-134837/1-A	Method Blank	97							

Surrogate Legend

DCPA = 2,4-Dichlorophenylacetic acid

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

Lab Sample ID: MB 480-134263/5
Matrix: Solid
Analysis Batch: 134263

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			08/16/13 00:55	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			08/16/13 00:55	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			08/16/13 00:55	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			08/16/13 00:55	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			08/16/13 00:55	1
1,2-Dichloroethene, cis-	ND		5.0	0.64	ug/Kg			08/16/13 00:55	1
1,2-Dichloroethene, trans-	ND		5.0	0.52	ug/Kg			08/16/13 00:55	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			08/16/13 00:55	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			08/16/13 00:55	1
1,4-Dioxane	ND		200	24	ug/Kg			08/16/13 00:55	1
Acetone	ND		25	4.2	ug/Kg			08/16/13 00:55	1
Benzene	ND		5.0	0.25	ug/Kg			08/16/13 00:55	1
Butylbenzene	ND		5.0	0.44	ug/Kg			08/16/13 00:55	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			08/16/13 00:55	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			08/16/13 00:55	1
Chloroform	ND		5.0	0.31	ug/Kg			08/16/13 00:55	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			08/16/13 00:55	1
Methyl Ethyl Ketone (2-Butanone)	ND		25	1.8	ug/Kg			08/16/13 00:55	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			08/16/13 00:55	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			08/16/13 00:55	1
Propylbenzene, n-	ND		5.0	0.40	ug/Kg			08/16/13 00:55	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg			08/16/13 00:55	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg			08/16/13 00:55	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/16/13 00:55	1
Toluene	ND		5.0	0.38	ug/Kg			08/16/13 00:55	1
Trichloroethene	ND		5.0	1.1	ug/Kg			08/16/13 00:55	1
Trimethylbenzene, 1,2,4-	ND		5.0	0.96	ug/Kg			08/16/13 00:55	1
Trimethylbenzene, 1,3,5-	ND		5.0	0.32	ug/Kg			08/16/13 00:55	1
Vinyl chloride	ND		5.0	0.61	ug/Kg			08/16/13 00:55	1
Xylene (mixed)	ND		10	0.84	ug/Kg			08/16/13 00:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 126*		*08/16/13 00:55*	*1*
4-Bromofluorobenzene (Surr)	*101*		*72 - 126*		*08/16/13 00:55*	*1*
Toluene-d8 (Surr)	*104*		*71 - 125*		*08/16/13 00:55*	*1*

Lab Sample ID: LCS 480-134263/4
Matrix: Solid
Analysis Batch: 134263

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	47.2		ug/Kg		94	73 - 126
1,1-Dichloroethene	50.0	45.5		ug/Kg		91	59 - 125
1,2-Dichlorobenzene	50.0	41.1		ug/Kg		82	75 - 120
1,2-Dichloroethane	50.0	47.6		ug/Kg		95	77 - 122
1,2-Dichloroethene, cis-	50.0	47.0		ug/Kg		94	81 - 117
1,2-Dichloroethene, trans-	50.0	45.6		ug/Kg		91	78 - 126
Benzene	50.0	46.4		ug/Kg		93	79 - 127

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

Lab Sample ID: LCS 480-134263/4
Matrix: Solid
Analysis Batch: 134263

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobenzene	50.0	42.2		ug/Kg		84	76 - 124
Ethylbenzene	50.0	42.0		ug/Kg		84	80 - 120
Methyl tert-butyl ether	50.0	44.4		ug/Kg		89	63 - 125
Tetrachloroethene	50.0	42.2		ug/Kg		84	74 - 122
Toluene	50.0	41.3		ug/Kg		83	74 - 128
Trichloroethene	50.0	46.2		ug/Kg		92	77 - 129
Trimethylbenzene, 1,2,4-	50.0	39.5		ug/Kg		79	74 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*64 - 126*
4-Bromofluorobenzene (Surr)	*86*		*72 - 126*
Toluene-d8 (Surr)	*85*		*71 - 125*

Lab Sample ID: 480-43956-1 MS
Matrix: Solid
Analysis Batch: 134263

Client Sample ID: HOHAOC2-A-1 MS
Prep Type: Total/NA
Prep Batch: 134276

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	ND		44.3	41.9		ug/Kg	☼	95	73 - 126
1,1-Dichloroethene	ND		44.3	41.6		ug/Kg	☼	94	59 - 125
1,2-Dichlorobenzene	ND		44.3	38.0		ug/Kg	☼	86	75 - 120
1,2-Dichloroethane	ND		44.3	39.5		ug/Kg	☼	89	77 - 122
1,2-Dichloroethene, cis-	ND		44.3	41.4		ug/Kg	☼	93	81 - 117
1,2-Dichloroethene, trans-	ND		44.3	40.8		ug/Kg	☼	92	78 - 126
Benzene	ND		44.3	40.9		ug/Kg	☼	92	79 - 127
Chlorobenzene	ND		44.3	38.4		ug/Kg	☼	87	76 - 124
Ethylbenzene	ND		44.3	38.6		ug/Kg	☼	87	80 - 120
Methyl tert-butyl ether	ND		44.3	36.6		ug/Kg	☼	83	63 - 125
Tetrachloroethene	ND		44.3	38.9		ug/Kg	☼	88	74 - 122
Toluene	ND		44.3	37.8		ug/Kg	☼	85	74 - 128
Trichloroethene	ND		44.3	59.1	F	ug/Kg	☼	133	77 - 129
Trimethylbenzene, 1,2,4-	ND		44.3	37.7		ug/Kg	☼	85	74 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*64 - 126*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*
Toluene-d8 (Surr)	*96*		*71 - 125*

Lab Sample ID: 480-43956-1 MSD
Matrix: Solid
Analysis Batch: 134263

Client Sample ID: HOHAOC2-A-1 MSD
Prep Type: Total/NA
Prep Batch: 134276

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	ND		44.8	44.1		ug/Kg	☼	99	73 - 126	5	30
1,1-Dichloroethene	ND		44.8	43.8		ug/Kg	☼	98	59 - 125	5	30
1,2-Dichlorobenzene	ND		44.8	41.3		ug/Kg	☼	92	75 - 120	8	30
1,2-Dichloroethane	ND		44.8	42.1		ug/Kg	☼	94	77 - 122	7	30
1,2-Dichloroethene, cis-	ND		44.8	44.0		ug/Kg	☼	98	81 - 117	6	30

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

Lab Sample ID: 480-43956-1 MSD
Matrix: Solid
Analysis Batch: 134263

Client Sample ID: HOHAOC2-A-1 MSD
Prep Type: Total/NA
Prep Batch: 134276

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloroethene, trans-	ND		44.8	43.7		ug/Kg	☼	98	78 - 126	7	30
Benzene	ND		44.8	43.5		ug/Kg	☼	97	79 - 127	6	30
Chlorobenzene	ND		44.8	41.4		ug/Kg	☼	93	76 - 124	8	30
Ethylbenzene	ND		44.8	41.0		ug/Kg	☼	92	80 - 120	6	30
Methyl tert-butyl ether	ND		44.8	39.1		ug/Kg	☼	87	63 - 125	7	30
Tetrachloroethene	ND		44.8	41.0		ug/Kg	☼	92	74 - 122	5	30
Toluene	ND		44.8	39.9		ug/Kg	☼	89	74 - 128	6	30
Trichloroethene	ND		44.8	63.4	F	ug/Kg	☼	142	77 - 129	7	30
Trimethylbenzene, 1,2,4-	ND		44.8	40.8		ug/Kg	☼	91	74 - 120	8	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*64 - 126*
4-Bromofluorobenzene (Surr)	*101*		*72 - 126*
Toluene-d8 (Surr)	*100*		*71 - 125*

Lab Sample ID: MB 480-134369/7
Matrix: Solid
Analysis Batch: 134369

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			08/16/13 14:24	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			08/16/13 14:24	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			08/16/13 14:24	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			08/16/13 14:24	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			08/16/13 14:24	1
1,2-Dichloroethene, cis-	ND		5.0	0.64	ug/Kg			08/16/13 14:24	1
1,2-Dichloroethene, trans-	ND		5.0	0.52	ug/Kg			08/16/13 14:24	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			08/16/13 14:24	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			08/16/13 14:24	1
1,4-Dioxane	ND		200	24	ug/Kg			08/16/13 14:24	1
Acetone	ND		25	4.2	ug/Kg			08/16/13 14:24	1
Benzene	ND		5.0	0.25	ug/Kg			08/16/13 14:24	1
Butylbenzene	ND		5.0	0.44	ug/Kg			08/16/13 14:24	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			08/16/13 14:24	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			08/16/13 14:24	1
Chloroform	ND		5.0	0.31	ug/Kg			08/16/13 14:24	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			08/16/13 14:24	1
Methyl Ethyl Ketone (2-Butanone)	ND		25	1.8	ug/Kg			08/16/13 14:24	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			08/16/13 14:24	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			08/16/13 14:24	1
Propylbenzene, n-	ND		5.0	0.40	ug/Kg			08/16/13 14:24	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg			08/16/13 14:24	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg			08/16/13 14:24	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/16/13 14:24	1
Toluene	ND		5.0	0.38	ug/Kg			08/16/13 14:24	1
Trichloroethene	ND		5.0	1.1	ug/Kg			08/16/13 14:24	1
Trimethylbenzene, 1,2,4-	ND		5.0	0.96	ug/Kg			08/16/13 14:24	1
Trimethylbenzene, 1,3,5-	ND		5.0	0.32	ug/Kg			08/16/13 14:24	1

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

Lab Sample ID: MB 480-134369/7
Matrix: Solid
Analysis Batch: 134369

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		5.0	0.61	ug/Kg			08/16/13 14:24	1
Xylene (mixed)	ND		10	0.84	ug/Kg			08/16/13 14:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*64 - 126*		*08/16/13 14:24*	*1*
4-Bromofluorobenzene (Surr)	*102*		*72 - 126*		*08/16/13 14:24*	*1*
Toluene-d8 (Surr)	*104*		*71 - 125*		*08/16/13 14:24*	*1*

Lab Sample ID: LCS 480-134369/4
Matrix: Solid
Analysis Batch: 134369

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	46.9		ug/Kg		94	73 - 126
1,1-Dichloroethene	50.0	44.9		ug/Kg		90	59 - 125
1,2-Dichlorobenzene	50.0	45.7		ug/Kg		91	75 - 120
1,2-Dichloroethane	50.0	48.9		ug/Kg		98	77 - 122
1,2-Dichloroethene, cis-	50.0	47.4		ug/Kg		95	81 - 117
1,2-Dichloroethene, trans-	50.0	45.6		ug/Kg		91	78 - 126
Benzene	50.0	46.4		ug/Kg		93	79 - 127
Chlorobenzene	50.0	46.4		ug/Kg		93	76 - 124
Ethylbenzene	50.0	45.4		ug/Kg		91	80 - 120
Methyl tert-butyl ether	50.0	50.7		ug/Kg		101	63 - 125
Tetrachloroethene	50.0	44.6		ug/Kg		89	74 - 122
Toluene	50.0	43.8		ug/Kg		88	74 - 128
Trichloroethene	50.0	46.0		ug/Kg		92	77 - 129
Trimethylbenzene, 1,2,4-	50.0	43.2		ug/Kg		86	74 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*
4-Bromofluorobenzene (Surr)	*100*		*72 - 126*
Toluene-d8 (Surr)	*99*		*71 - 125*

Lab Sample ID: LCSD 480-134369/5
Matrix: Solid
Analysis Batch: 134369

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-Dichloroethane	50.0	44.3		ug/Kg		89	73 - 126	6	20
1,1-Dichloroethene	50.0	41.8		ug/Kg		84	59 - 125	7	20
1,2-Dichlorobenzene	50.0	43.7		ug/Kg		87	75 - 120	4	20
1,2-Dichloroethane	50.0	47.2		ug/Kg		94	77 - 122	3	20
1,2-Dichloroethene, cis-	50.0	45.1		ug/Kg		90	81 - 117	5	20
1,2-Dichloroethene, trans-	50.0	42.5		ug/Kg		85	78 - 126	7	20
Benzene	50.0	43.7		ug/Kg		87	79 - 127	6	20
Chlorobenzene	50.0	42.7		ug/Kg		85	76 - 124	8	20
Ethylbenzene	50.0	41.4		ug/Kg		83	80 - 120	9	20
Methyl tert-butyl ether	50.0	50.3		ug/Kg		101	63 - 125	1	20

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

Lab Sample ID: LCSD 480-134369/5
Matrix: Solid
Analysis Batch: 134369

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
Tetrachloroethene			50.0	40.5		ug/Kg		81	74 - 122	10	20
Toluene			50.0	40.1		ug/Kg		80	74 - 128	9	20
Trichloroethene			50.0	43.2		ug/Kg		86	77 - 129	6	20
Trimethylbenzene, 1,2,4-			50.0	41.4		ug/Kg		83	74 - 120	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*64 - 126*
4-Bromofluorobenzene (Surr)	*92*		*72 - 126*
Toluene-d8 (Surr)	*91*		*71 - 125*

Lab Sample ID: MB 480-134731/7
Matrix: Solid
Analysis Batch: 134731

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			08/19/13 18:05	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			08/19/13 18:05	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			08/19/13 18:05	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			08/19/13 18:05	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			08/19/13 18:05	1
1,2-Dichloroethene, cis-	ND		5.0	0.64	ug/Kg			08/19/13 18:05	1
1,2-Dichloroethene, trans-	ND		5.0	0.52	ug/Kg			08/19/13 18:05	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			08/19/13 18:05	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			08/19/13 18:05	1
1,4-Dioxane	ND		200	24	ug/Kg			08/19/13 18:05	1
Acetone	ND		25	4.2	ug/Kg			08/19/13 18:05	1
Benzene	ND		5.0	0.25	ug/Kg			08/19/13 18:05	1
Butylbenzene	ND		5.0	0.44	ug/Kg			08/19/13 18:05	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			08/19/13 18:05	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			08/19/13 18:05	1
Chloroform	ND		5.0	0.31	ug/Kg			08/19/13 18:05	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			08/19/13 18:05	1
Methyl Ethyl Ketone (2-Butanone)	ND		25	1.8	ug/Kg			08/19/13 18:05	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			08/19/13 18:05	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			08/19/13 18:05	1
Propylbenzene, n-	ND		5.0	0.40	ug/Kg			08/19/13 18:05	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg			08/19/13 18:05	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg			08/19/13 18:05	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/19/13 18:05	1
Toluene	ND		5.0	0.38	ug/Kg			08/19/13 18:05	1
Trichloroethene	ND		5.0	1.1	ug/Kg			08/19/13 18:05	1
Trimethylbenzene, 1,2,4-	ND		5.0	0.96	ug/Kg			08/19/13 18:05	1
Trimethylbenzene, 1,3,5-	ND		5.0	0.32	ug/Kg			08/19/13 18:05	1
Vinyl chloride	ND		5.0	0.61	ug/Kg			08/19/13 18:05	1
Xylene (mixed)	ND		10	0.84	ug/Kg			08/19/13 18:05	1

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

Lab Sample ID: MB 480-134731/7
Matrix: Solid
Analysis Batch: 134731

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*98*		*64 - 126*		*08/19/13 18:05*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*		*08/19/13 18:05*	*1*
Toluene-d8 (Surr)	*96*		*71 - 125*		*08/19/13 18:05*	*1*

Lab Sample ID: LCS 480-134731/6
Matrix: Solid
Analysis Batch: 134731

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	50.5		ug/Kg		101	73 - 126
1,1-Dichloroethene	50.0	51.4		ug/Kg		103	59 - 125
1,2-Dichlorobenzene	50.0	51.9		ug/Kg		104	75 - 120
1,2-Dichloroethane	50.0	52.5		ug/Kg		105	77 - 122
1,2-Dichloroethene, cis-	50.0	51.1		ug/Kg		102	81 - 117
1,2-Dichloroethene, trans-	50.0	50.8		ug/Kg		102	78 - 126
Benzene	50.0	50.5		ug/Kg		101	79 - 127
Chlorobenzene	50.0	49.7		ug/Kg		99	76 - 124
Ethylbenzene	50.0	49.6		ug/Kg		99	80 - 120
Methyl tert-butyl ether	50.0	51.3		ug/Kg		103	63 - 125
Tetrachloroethene	50.0	49.4		ug/Kg		99	74 - 122
Toluene	50.0	48.4		ug/Kg		97	74 - 128
Trichloroethene	50.0	50.3		ug/Kg		101	77 - 129
Trimethylbenzene, 1,2,4-	50.0	49.7		ug/Kg		99	74 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*103*		*64 - 126*
4-Bromofluorobenzene (Surr)	*104*		*72 - 126*
Toluene-d8 (Surr)	*101*		*71 - 125*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-134548/1-A
Matrix: Solid
Analysis Batch: 134724

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 134548

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg		08/17/13 07:48	08/20/13 11:04	1
Acenaphthylene	ND		170	1.4	ug/Kg		08/17/13 07:48	08/20/13 11:04	1
Anthracene	ND		170	4.3	ug/Kg		08/17/13 07:48	08/20/13 11:04	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg		08/17/13 07:48	08/20/13 11:04	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg		08/17/13 07:48	08/20/13 11:04	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg		08/17/13 07:48	08/20/13 11:04	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg		08/17/13 07:48	08/20/13 11:04	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg		08/17/13 07:48	08/20/13 11:04	1
Chrysene	ND		170	1.7	ug/Kg		08/17/13 07:48	08/20/13 11:04	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg		08/17/13 07:48	08/20/13 11:04	1
Dibenzofuran	ND		170	1.7	ug/Kg		08/17/13 07:48	08/20/13 11:04	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-134548/1-A
Matrix: Solid
Analysis Batch: 134724

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 134548

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		170	2.4	ug/Kg		08/17/13 07:48	08/20/13 11:04	1
Fluorene	ND		170	3.9	ug/Kg		08/17/13 07:48	08/20/13 11:04	1
Hexachlorobenzene	ND		170	8.4	ug/Kg		08/17/13 07:48	08/20/13 11:04	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg		08/17/13 07:48	08/20/13 11:04	1
m & p - Cresol	ND		330	9.4	ug/Kg		08/17/13 07:48	08/20/13 11:04	1
Naphthalene	ND		170	2.8	ug/Kg		08/17/13 07:48	08/20/13 11:04	1
o-Cresol	ND		170	5.2	ug/Kg		08/17/13 07:48	08/20/13 11:04	1
Pentachlorophenol	ND		330	58	ug/Kg		08/17/13 07:48	08/20/13 11:04	1
Phenanthrene	ND		170	3.5	ug/Kg		08/17/13 07:48	08/20/13 11:04	1
Phenol	ND		170	18	ug/Kg		08/17/13 07:48	08/20/13 11:04	1
Pyrene	ND		170	1.1	ug/Kg		08/17/13 07:48	08/20/13 11:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*75*		*39 - 146*	*08/17/13 07:48*	*08/20/13 11:04*	*1*
2-Fluorobiphenyl	*70*		*37 - 120*	*08/17/13 07:48*	*08/20/13 11:04*	*1*
2-Fluorophenol	*62*		*18 - 120*	*08/17/13 07:48*	*08/20/13 11:04*	*1*
Nitrobenzene-d5	*63*		*34 - 132*	*08/17/13 07:48*	*08/20/13 11:04*	*1*
Phenol-d5	*67*		*11 - 120*	*08/17/13 07:48*	*08/20/13 11:04*	*1*
p-Terphenyl-d14	*80*		*65 - 153*	*08/17/13 07:48*	*08/20/13 11:04*	*1*

Lab Sample ID: LCS 480-134548/2-A
Matrix: Solid
Analysis Batch: 134659

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 134548

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	1650	1560		ug/Kg		95	53 - 120
Acenaphthylene	1650	1560		ug/Kg		94	58 - 121
Anthracene	1650	1680		ug/Kg		101	62 - 129
Benzo(a)anthracene	1650	1570		ug/Kg		95	65 - 133
Benzo(a)pyrene	1650	1750		ug/Kg		106	64 - 127
Benzo(b)fluoranthene	1650	2040		ug/Kg		123	64 - 135
Benzo(g,h,i)perylene	1650	929		ug/Kg		56	50 - 152
Benzo(k)fluoranthene	1650	2070		ug/Kg		126	58 - 138
Chrysene	1650	1570		ug/Kg		95	64 - 131
Dibenz(a,h)anthracene	1650	1020		ug/Kg		62	54 - 148
Fluoranthene	1650	1720		ug/Kg		104	62 - 131
Fluorene	1650	1610		ug/Kg		97	63 - 126
Indeno(1,2,3-cd)pyrene	1650	989		ug/Kg		60	56 - 149
Naphthalene	1650	1450		ug/Kg		88	46 - 120
Pentachlorophenol	3300	2750		ug/Kg		83	33 - 136
Phenanthrene	1650	1670		ug/Kg		101	60 - 130
Phenol	1650	1420		ug/Kg		86	36 - 120
Pyrene	1650	1250		ug/Kg		76	51 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*100*		*39 - 146*
2-Fluorobiphenyl	*95*		*37 - 120*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-134548/2-A
Matrix: Solid
Analysis Batch: 134659

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 134548

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	84		18 - 120
Nitrobenzene-d5	93		34 - 132
Phenol-d5	90		11 - 120
p-Terphenyl-d14	76		65 - 153

Lab Sample ID: 480-43956-1 MS
Matrix: Solid
Analysis Batch: 134659

Client Sample ID: HOHAOC2-A-1 MS
Prep Type: Total/NA
Prep Batch: 134548

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		1670	1530		ug/Kg	☼	92	53 - 120
Acenaphthylene	ND		1670	1490		ug/Kg	☼	89	58 - 121
Anthracene	ND		1670	1610		ug/Kg	☼	96	62 - 129
Benzo(a)anthracene	ND		1670	1460		ug/Kg	☼	87	65 - 133
Benzo(a)pyrene	ND		1670	1690		ug/Kg	☼	101	64 - 127
Benzo(b)fluoranthene	ND		1670	2020		ug/Kg	☼	121	64 - 135
Benzo(g,h,i)perylene	ND		1670	912		ug/Kg	☼	55	50 - 152
Benzo(k)fluoranthene	ND		1670	2120		ug/Kg	☼	127	58 - 138
Chrysene	ND		1670	1490		ug/Kg	☼	89	64 - 131
Dibenz(a,h)anthracene	ND		1670	957		ug/Kg	☼	57	54 - 148
Fluoranthene	ND		1670	1640		ug/Kg	☼	98	62 - 131
Fluorene	ND		1670	1570		ug/Kg	☼	94	63 - 126
Indeno(1,2,3-cd)pyrene	ND		1670	946		ug/Kg	☼	57	56 - 149
Naphthalene	11	J	1670	1350		ug/Kg	☼	80	46 - 120
Pentachlorophenol	ND		3340	2630		ug/Kg	☼	79	33 - 136
Phenanthrene	ND		1670	1580		ug/Kg	☼	94	60 - 130
Phenol	ND		1670	1300		ug/Kg	☼	78	36 - 120
Pyrene	ND		1670	1130		ug/Kg	☼	68	51 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
2,4,6-Tribromophenol	93		39 - 146
2-Fluorobiphenyl	90		37 - 120
2-Fluorophenol	77		18 - 120
Nitrobenzene-d5	87		34 - 132
Phenol-d5	84		11 - 120
p-Terphenyl-d14	68		65 - 153

Lab Sample ID: 480-43956-1 MSD
Matrix: Solid
Analysis Batch: 134659

Client Sample ID: HOHAOC2-A-1 MSD
Prep Type: Total/NA
Prep Batch: 134548

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		1670	1520		ug/Kg	☼	91	53 - 120	0	35
Acenaphthylene	ND		1670	1510		ug/Kg	☼	91	58 - 121	1	18
Anthracene	ND		1670	1630		ug/Kg	☼	98	62 - 129	1	15
Benzo(a)anthracene	ND		1670	1520		ug/Kg	☼	91	65 - 133	4	15
Benzo(a)pyrene	ND		1670	1710		ug/Kg	☼	103	64 - 127	1	15
Benzo(b)fluoranthene	ND		1670	2270	F	ug/Kg	☼	136	64 - 135	12	15

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-43956-1 MSD
Matrix: Solid
Analysis Batch: 134659

Client Sample ID: HOHAOC2-A-1 MSD
Prep Type: Total/NA
Prep Batch: 134548

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo(g,h,i)perylene	ND		1670	897		ug/Kg	☼	54	50 - 152	2	15
Benzo(k)fluoranthene	ND		1670	1850		ug/Kg	☼	111	58 - 138	13	22
Chrysene	ND		1670	1540		ug/Kg	☼	92	64 - 131	3	15
Dibenz(a,h)anthracene	ND		1670	974		ug/Kg	☼	58	54 - 148	2	15
Fluoranthene	ND		1670	1670		ug/Kg	☼	100	62 - 131	2	15
Fluorene	ND		1670	1570		ug/Kg	☼	94	63 - 126	0	15
Indeno(1,2,3-cd)pyrene	ND		1670	956		ug/Kg	☼	57	56 - 149	1	15
Naphthalene	11	J	1670	1400		ug/Kg	☼	83	46 - 120	4	29
Pentachlorophenol	ND		3330	2680		ug/Kg	☼	80	33 - 136	2	35
Phenanthrene	ND		1670	1610		ug/Kg	☼	97	60 - 130	2	15
Phenol	ND		1670	1400		ug/Kg	☼	84	36 - 120	7	35
Pyrene	ND		1670	1180		ug/Kg	☼	71	51 - 133	4	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*97*		*39 - 146*
2-Fluorobiphenyl	*90*		*37 - 120*
2-Fluorophenol	*82*		*18 - 120*
Nitrobenzene-d5	*89*		*34 - 132*
Phenol-d5	*91*		*11 - 120*
p-Terphenyl-d14	*72*		*65 - 153*

Lab Sample ID: MB 480-134554/1-A
Matrix: Solid
Analysis Batch: 134659

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 134554

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	1.9	ug/Kg		08/17/13 08:42	08/19/13 10:44	1
Acenaphthylene	ND		170	1.4	ug/Kg		08/17/13 08:42	08/19/13 10:44	1
Anthracene	ND		170	4.2	ug/Kg		08/17/13 08:42	08/19/13 10:44	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg		08/17/13 08:42	08/19/13 10:44	1
Benzo(a)pyrene	ND		170	4.0	ug/Kg		08/17/13 08:42	08/19/13 10:44	1
Benzo(b)fluoranthene	ND		170	3.2	ug/Kg		08/17/13 08:42	08/19/13 10:44	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg		08/17/13 08:42	08/19/13 10:44	1
Benzo(k)fluoranthene	ND		170	1.8	ug/Kg		08/17/13 08:42	08/19/13 10:44	1
Chrysene	ND		170	1.7	ug/Kg		08/17/13 08:42	08/19/13 10:44	1
Dibenz(a,h)anthracene	ND		170	1.9	ug/Kg		08/17/13 08:42	08/19/13 10:44	1
Dibenzofuran	ND		170	1.7	ug/Kg		08/17/13 08:42	08/19/13 10:44	1
Fluoranthene	ND		170	2.4	ug/Kg		08/17/13 08:42	08/19/13 10:44	1
Fluorene	ND		170	3.8	ug/Kg		08/17/13 08:42	08/19/13 10:44	1
Hexachlorobenzene	ND		170	8.2	ug/Kg		08/17/13 08:42	08/19/13 10:44	1
Indeno(1,2,3-cd)pyrene	ND		170	4.6	ug/Kg		08/17/13 08:42	08/19/13 10:44	1
m & p - Cresol	ND		320	9.2	ug/Kg		08/17/13 08:42	08/19/13 10:44	1
Naphthalene	ND		170	2.8	ug/Kg		08/17/13 08:42	08/19/13 10:44	1
o-Cresol	ND		170	5.1	ug/Kg		08/17/13 08:42	08/19/13 10:44	1
Pentachlorophenol	ND		320	57	ug/Kg		08/17/13 08:42	08/19/13 10:44	1
Phenanthrene	ND		170	3.5	ug/Kg		08/17/13 08:42	08/19/13 10:44	1
Phenol	ND		170	17	ug/Kg		08/17/13 08:42	08/19/13 10:44	1
Pyrene	ND		170	1.1	ug/Kg		08/17/13 08:42	08/19/13 10:44	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-134554/1-A
Matrix: Solid
Analysis Batch: 134659

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 134554

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	82		39 - 146	08/17/13 08:42	08/19/13 10:44	1
2-Fluorobiphenyl	91		37 - 120	08/17/13 08:42	08/19/13 10:44	1
2-Fluorophenol	82		18 - 120	08/17/13 08:42	08/19/13 10:44	1
Nitrobenzene-d5	89		34 - 132	08/17/13 08:42	08/19/13 10:44	1
Phenol-d5	87		11 - 120	08/17/13 08:42	08/19/13 10:44	1
p-Terphenyl-d14	96		65 - 153	08/17/13 08:42	08/19/13 10:44	1

Lab Sample ID: LCS 480-134554/2-A
Matrix: Solid
Analysis Batch: 134659

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 134554

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	1640	1470		ug/Kg		89	53 - 120
Acenaphthylene	1640	1460		ug/Kg		89	58 - 121
Anthracene	1640	1570		ug/Kg		95	62 - 129
Benzo(a)anthracene	1640	1440		ug/Kg		88	65 - 133
Benzo(a)pyrene	1640	1630		ug/Kg		99	64 - 127
Benzo(b)fluoranthene	1640	1740		ug/Kg		106	64 - 135
Benzo(g,h,i)perylene	1640	1600		ug/Kg		97	50 - 152
Benzo(k)fluoranthene	1640	1560		ug/Kg		95	58 - 138
Chrysene	1640	1500		ug/Kg		91	64 - 131
Dibenz(a,h)anthracene	1640	1590		ug/Kg		97	54 - 148
Fluoranthene	1640	1540		ug/Kg		94	62 - 131
Fluorene	1640	1500		ug/Kg		92	63 - 126
Indeno(1,2,3-cd)pyrene	1640	1550		ug/Kg		95	56 - 149
Naphthalene	1640	1350		ug/Kg		82	46 - 120
Pentachlorophenol	3290	2390		ug/Kg		73	33 - 136
Phenanthrene	1640	1540		ug/Kg		94	60 - 130
Phenol	1640	1340		ug/Kg		81	36 - 120
Pyrene	1640	1450		ug/Kg		88	51 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	91		39 - 146
2-Fluorobiphenyl	87		37 - 120
2-Fluorophenol	78		18 - 120
Nitrobenzene-d5	88		34 - 132
Phenol-d5	85		11 - 120
p-Terphenyl-d14	91		65 - 153

Lab Sample ID: LCSD 480-134554/3-A
Matrix: Solid
Analysis Batch: 134659

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 134554

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	1650	1520		ug/Kg		92	53 - 120	4	35
Acenaphthylene	1650	1500		ug/Kg		91	58 - 121	3	18
Anthracene	1650	1610		ug/Kg		97	62 - 129	3	15
Benzo(a)anthracene	1650	1490		ug/Kg		90	65 - 133	3	15

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-134554/3-A
Matrix: Solid
Analysis Batch: 134659

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 134554

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo(a)pyrene			1650	1670		ug/Kg		101	64 - 127	2	15
Benzo(b)fluoranthene			1650	1600		ug/Kg		97	64 - 135	8	15
Benzo(g,h,i)perylene			1650	1670		ug/Kg		101	50 - 152	4	15
Benzo(k)fluoranthene			1650	1740		ug/Kg		105	58 - 138	11	22
Chrysene			1650	1540		ug/Kg		93	64 - 131	3	15
Dibenz(a,h)anthracene			1650	1640		ug/Kg		99	54 - 148	3	15
Fluoranthene			1650	1580		ug/Kg		95	62 - 131	3	15
Fluorene			1650	1580		ug/Kg		96	63 - 126	5	15
Indeno(1,2,3-cd)pyrene			1650	1650		ug/Kg		100	56 - 149	6	15
Naphthalene			1650	1420		ug/Kg		86	46 - 120	5	29
Pentachlorophenol			3310	2370		ug/Kg		72	33 - 136	1	35
Phenanthrene			1650	1590		ug/Kg		96	60 - 130	3	15
Phenol			1650	1390		ug/Kg		84	36 - 120	4	35
Pyrene			1650	1470		ug/Kg		89	51 - 133	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*92*		*39 - 146*
2-Fluorobiphenyl	*91*		*37 - 120*
2-Fluorophenol	*80*		*18 - 120*
Nitrobenzene-d5	*92*		*34 - 132*
Phenol-d5	*86*		*11 - 120*
p-Terphenyl-d14	*92*		*65 - 153*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-134546/1-A
Matrix: Solid
Analysis Batch: 134647

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 134546

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.32	ug/Kg		08/17/13 07:39	08/19/13 08:46	1
4,4'-DDE	ND		1.7	0.25	ug/Kg		08/17/13 07:39	08/19/13 08:46	1
4,4'-DDT	ND		1.7	0.17	ug/Kg		08/17/13 07:39	08/19/13 08:46	1
Aldrin	ND		1.7	0.41	ug/Kg		08/17/13 07:39	08/19/13 08:46	1
alpha-BHC	ND		1.7	0.30	ug/Kg		08/17/13 07:39	08/19/13 08:46	1
alpha-Chlordane	ND		1.7	0.82	ug/Kg		08/17/13 07:39	08/19/13 08:46	1
beta-BHC	ND		1.7	0.18	ug/Kg		08/17/13 07:39	08/19/13 08:46	1
delta-BHC	0.248	J	1.7	0.22	ug/Kg		08/17/13 07:39	08/19/13 08:46	1
Dieldrin	ND		1.7	0.40	ug/Kg		08/17/13 07:39	08/19/13 08:46	1
Endosulfan I	ND		1.7	0.21	ug/Kg		08/17/13 07:39	08/19/13 08:46	1
Endosulfan II	ND		1.7	0.30	ug/Kg		08/17/13 07:39	08/19/13 08:46	1
Endosulfan sulfate	ND		1.7	0.31	ug/Kg		08/17/13 07:39	08/19/13 08:46	1
Endrin	ND		1.7	0.23	ug/Kg		08/17/13 07:39	08/19/13 08:46	1
Heptachlor	ND		1.7	0.26	ug/Kg		08/17/13 07:39	08/19/13 08:46	1
Lindane	ND		1.7	0.20	ug/Kg		08/17/13 07:39	08/19/13 08:46	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 480-134546/1-A
Matrix: Solid
Analysis Batch: 134647

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 134546

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	89		32 - 136	08/17/13 07:39	08/19/13 08:46	1
Tetrachloro-m-xylene	83		30 - 124	08/17/13 07:39	08/19/13 08:46	1

Lab Sample ID: LCS 480-134546/2-A
Matrix: Solid
Analysis Batch: 134647

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 134546

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.5	15.2		ug/Kg		92	52 - 138
4,4'-DDE	16.5	14.9		ug/Kg		90	52 - 131
4,4'-DDT	16.5	15.0		ug/Kg		91	52 - 131
Aldrin	16.5	14.0		ug/Kg		85	35 - 120
alpha-BHC	16.5	13.8		ug/Kg		84	49 - 120
alpha-Chlordane	16.5	14.8		ug/Kg		89	40 - 133
beta-BHC	16.5	14.4		ug/Kg		87	52 - 127
delta-BHC	16.5	12.8		ug/Kg		77	45 - 123
Dieldrin	16.5	15.4		ug/Kg		94	53 - 131
Endosulfan I	16.5	14.1		ug/Kg		86	53 - 121
Endosulfan II	16.5	14.7		ug/Kg		89	48 - 134
Endosulfan sulfate	16.5	16.0		ug/Kg		97	46 - 144
Endrin	16.5	15.3		ug/Kg		92	56 - 134
Heptachlor	16.5	14.5		ug/Kg		88	54 - 121
Lindane	16.5	14.1		ug/Kg		86	50 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	90		32 - 136
Tetrachloro-m-xylene	79		30 - 124

Lab Sample ID: 480-43956-1 MS
Matrix: Solid
Analysis Batch: 134647

Client Sample ID: HOHAOC2-A-1 MS
Prep Type: Total/NA
Prep Batch: 134546

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		17.0	15.1		ug/Kg	☼	89	26 - 162
4,4'-DDE	ND		17.0	14.9		ug/Kg	☼	88	34 - 138
4,4'-DDT	ND		17.0	14.7		ug/Kg	☼	87	43 - 131
Aldrin	ND		17.0	14.7		ug/Kg	☼	87	37 - 125
alpha-BHC	ND		17.0	14.3		ug/Kg	☼	85	39 - 117
alpha-Chlordane	ND		17.0	15.0		ug/Kg	☼	88	29 - 141
beta-BHC	ND		17.0	14.3		ug/Kg	☼	85	36 - 139
delta-BHC	0.28	J B	17.0	14.4		ug/Kg	☼	83	23 - 132
Dieldrin	ND		17.0	15.4		ug/Kg	☼	91	38 - 135
Endosulfan I	ND		17.0	14.3		ug/Kg	☼	85	39 - 128
Endosulfan II	ND		17.0	14.4		ug/Kg	☼	85	24 - 134
Endosulfan sulfate	ND		17.0	14.9		ug/Kg	☼	88	19 - 137
Endrin	ND		17.0	15.4		ug/Kg	☼	91	41 - 147
Heptachlor	ND		17.0	15.5		ug/Kg	☼	91	42 - 128
Lindane	0.26	J	17.0	14.3		ug/Kg	☼	83	50 - 120

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 480-43956-1 MS
Matrix: Solid
Analysis Batch: 134647

Client Sample ID: HOHAOC2-A-1 MS
Prep Type: Total/NA
Prep Batch: 134546

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	88		32 - 136
Tetrachloro-m-xylene	83		30 - 124

Lab Sample ID: 480-43956-1 MSD
Matrix: Solid
Analysis Batch: 134647

Client Sample ID: HOHAOC2-A-1 MSD
Prep Type: Total/NA
Prep Batch: 134546

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		16.9	14.9		ug/Kg	☼	88	26 - 162	2	21
4,4'-DDE	ND		16.9	14.7		ug/Kg	☼	87	34 - 138	1	18
4,4'-DDT	ND		16.9	14.3		ug/Kg	☼	85	43 - 131	3	25
Aldrin	ND		16.9	14.9		ug/Kg	☼	88	37 - 125	1	12
alpha-BHC	ND		16.9	14.7		ug/Kg	☼	87	39 - 117	2	15
alpha-Chlordane	ND		16.9	14.9		ug/Kg	☼	88	29 - 141	1	23
beta-BHC	ND		16.9	14.4		ug/Kg	☼	86	36 - 139	1	19
delta-BHC	0.28	J B	16.9	14.5		ug/Kg	☼	84	23 - 132	0	14
Dieldrin	ND		16.9	15.2		ug/Kg	☼	90	38 - 135	1	12
Endosulfan I	ND		16.9	14.3		ug/Kg	☼	85	39 - 128	0	18
Endosulfan II	ND		16.9	14.3		ug/Kg	☼	85	24 - 134	1	26
Endosulfan sulfate	ND		16.9	14.9		ug/Kg	☼	88	19 - 137	0	35
Endrin	ND		16.9	15.1		ug/Kg	☼	89	41 - 147	2	20
Heptachlor	ND		16.9	15.6		ug/Kg	☼	92	42 - 128	1	22
Lindane	0.26	J	16.9	14.5		ug/Kg	☼	84	50 - 120	1	12

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	88		32 - 136
Tetrachloro-m-xylene	82		30 - 124

Lab Sample ID: MB 480-134547/1-A
Matrix: Solid
Analysis Batch: 134645

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 134547

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.32	ug/Kg		08/17/13 07:43	08/19/13 08:50	1
4,4'-DDE	ND		1.7	0.25	ug/Kg		08/17/13 07:43	08/19/13 08:50	1
4,4'-DDT	ND		1.7	0.17	ug/Kg		08/17/13 07:43	08/19/13 08:50	1
Aldrin	ND		1.7	0.41	ug/Kg		08/17/13 07:43	08/19/13 08:50	1
alpha-BHC	ND		1.7	0.30	ug/Kg		08/17/13 07:43	08/19/13 08:50	1
alpha-Chlordane	ND		1.7	0.82	ug/Kg		08/17/13 07:43	08/19/13 08:50	1
beta-BHC	ND		1.7	0.18	ug/Kg		08/17/13 07:43	08/19/13 08:50	1
delta-BHC	ND		1.7	0.22	ug/Kg		08/17/13 07:43	08/19/13 08:50	1
Dieldrin	ND		1.7	0.40	ug/Kg		08/17/13 07:43	08/19/13 08:50	1
Endosulfan I	ND		1.7	0.21	ug/Kg		08/17/13 07:43	08/19/13 08:50	1
Endosulfan II	ND		1.7	0.30	ug/Kg		08/17/13 07:43	08/19/13 08:50	1
Endosulfan sulfate	ND		1.7	0.31	ug/Kg		08/17/13 07:43	08/19/13 08:50	1
Endrin	ND		1.7	0.23	ug/Kg		08/17/13 07:43	08/19/13 08:50	1
Heptachlor	ND		1.7	0.26	ug/Kg		08/17/13 07:43	08/19/13 08:50	1
Lindane	ND		1.7	0.20	ug/Kg		08/17/13 07:43	08/19/13 08:50	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 480-134547/1-A
Matrix: Solid
Analysis Batch: 134645

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 134547

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	84		32 - 136	08/17/13 07:43	08/19/13 08:50	1
Tetrachloro-m-xylene	78		30 - 124	08/17/13 07:43	08/19/13 08:50	1

Lab Sample ID: LCS 480-134547/2-A
Matrix: Solid
Analysis Batch: 134645

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 134547

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.4	15.0		ug/Kg		91	52 - 138
4,4'-DDE	16.4	14.9		ug/Kg		91	52 - 131
4,4'-DDT	16.4	15.8		ug/Kg		96	52 - 131
Aldrin	16.4	14.2		ug/Kg		87	35 - 120
alpha-BHC	16.4	14.3		ug/Kg		87	49 - 120
alpha-Chlordane	16.4	14.8		ug/Kg		90	40 - 133
beta-BHC	16.4	14.7		ug/Kg		90	52 - 127
delta-BHC	16.4	14.3		ug/Kg		87	45 - 123
Dieldrin	16.4	14.9		ug/Kg		91	53 - 131
Endosulfan I	16.4	14.0		ug/Kg		85	53 - 121
Endosulfan II	16.4	14.5		ug/Kg		89	48 - 134
Endosulfan sulfate	16.4	15.4		ug/Kg		94	46 - 144
Endrin	16.4	15.0		ug/Kg		91	56 - 134
Heptachlor	16.4	14.9		ug/Kg		91	54 - 121
Lindane	16.4	14.5		ug/Kg		88	50 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	85		32 - 136
Tetrachloro-m-xylene	82		30 - 124

Lab Sample ID: LCSD 480-134547/3-A
Matrix: Solid
Analysis Batch: 134645

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 134547

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	16.6	14.7		ug/Kg		89	52 - 138	2	18
4,4'-DDE	16.6	14.5		ug/Kg		88	52 - 131	2	16
4,4'-DDT	16.6	15.5		ug/Kg		94	52 - 131	2	17
Aldrin	16.6	13.4		ug/Kg		81	35 - 120	6	24
alpha-BHC	16.6	13.5		ug/Kg		82	49 - 120	5	19
alpha-Chlordane	16.6	14.4		ug/Kg		87	40 - 133	3	13
beta-BHC	16.6	14.2		ug/Kg		86	52 - 127	4	17
delta-BHC	16.6	14.0		ug/Kg		85	45 - 123	2	14
Dieldrin	16.6	14.6		ug/Kg		88	53 - 131	2	13
Endosulfan I	16.6	13.5		ug/Kg		82	53 - 121	3	16
Endosulfan II	16.6	14.3		ug/Kg		86	48 - 134	2	17
Endosulfan sulfate	16.6	15.2		ug/Kg		92	46 - 144	2	14
Endrin	16.6	14.7		ug/Kg		89	56 - 134	2	19
Heptachlor	16.6	14.2		ug/Kg		86	54 - 121	5	16
Lindane	16.6	13.9		ug/Kg		84	50 - 120	5	20

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 480-134547/3-A
Matrix: Solid
Analysis Batch: 134645

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 134547

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	84		32 - 136
Tetrachloro-m-xylene	76		30 - 124

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

Lab Sample ID: MB 480-134465/1-A
Matrix: Solid
Analysis Batch: 134799

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 134465

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.17	0.034	mg/Kg		08/19/13 14:38	08/20/13 04:07	1
PCB-1221	ND		0.17	0.034	mg/Kg		08/19/13 14:38	08/20/13 04:07	1
PCB-1232	ND		0.17	0.034	mg/Kg		08/19/13 14:38	08/20/13 04:07	1
PCB-1242	ND		0.17	0.034	mg/Kg		08/19/13 14:38	08/20/13 04:07	1
PCB-1248	ND		0.17	0.034	mg/Kg		08/19/13 14:38	08/20/13 04:07	1
PCB-1254	ND		0.17	0.082	mg/Kg		08/19/13 14:38	08/20/13 04:07	1
PCB-1260	ND		0.17	0.082	mg/Kg		08/19/13 14:38	08/20/13 04:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	96		47 - 176	08/19/13 14:38	08/20/13 04:07	1
Tetrachloro-m-xylene	129		46 - 175	08/19/13 14:38	08/20/13 04:07	1

Lab Sample ID: LCS 480-134465/2-A
Matrix: Solid
Analysis Batch: 134799

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 134465

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	1.70	1.94		mg/Kg		114	51 - 185
PCB-1260	1.70	1.78		mg/Kg		105	61 - 184

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	103		47 - 176
Tetrachloro-m-xylene	112		46 - 175

Lab Sample ID: 480-43956-1 MS
Matrix: Solid
Analysis Batch: 134799

Client Sample ID: HOHAOC2-A-1 MS
Prep Type: Total/NA
Prep Batch: 134465

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND		2.15	2.36		mg/Kg	☼	110	42 - 159
PCB-1260	ND		2.15	2.23		mg/Kg	☼	104	47 - 153

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	103		47 - 176
Tetrachloro-m-xylene	110		46 - 175

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

Lab Sample ID: 480-43956-1 MSD
Matrix: Solid
Analysis Batch: 134799

Client Sample ID: HOHAOC2-A-1 MSD
Prep Type: Total/NA
Prep Batch: 134465

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		1.89	2.06		mg/Kg	☼	109	42 - 159	14	50
PCB-1260	ND		1.89	1.97		mg/Kg	☼	104	47 - 153	13	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*104*		*47 - 176*
Tetrachloro-m-xylene	*110*		*46 - 175*

Lab Sample ID: MB 480-134469/1-A
Matrix: Solid
Analysis Batch: 134799

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 134469

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.21	0.041	mg/Kg		08/19/13 14:47	08/20/13 09:32	1
PCB-1221	ND		0.21	0.041	mg/Kg		08/19/13 14:47	08/20/13 09:32	1
PCB-1232	ND		0.21	0.041	mg/Kg		08/19/13 14:47	08/20/13 09:32	1
PCB-1242	ND		0.21	0.041	mg/Kg		08/19/13 14:47	08/20/13 09:32	1
PCB-1248	ND		0.21	0.041	mg/Kg		08/19/13 14:47	08/20/13 09:32	1
PCB-1254	ND		0.21	0.099	mg/Kg		08/19/13 14:47	08/20/13 09:32	1
PCB-1260	ND		0.21	0.099	mg/Kg		08/19/13 14:47	08/20/13 09:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*93*		*47 - 176*	*08/19/13 14:47*	*08/20/13 09:32*	*1*
Tetrachloro-m-xylene	*99*		*46 - 175*	*08/19/13 14:47*	*08/20/13 09:32*	*1*

Lab Sample ID: LCS 480-134469/2-A
Matrix: Solid
Analysis Batch: 134799

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 134469

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016			1.78	2.02		mg/Kg		113	51 - 185
PCB-1260			1.78	1.88		mg/Kg		106	61 - 184

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*112*		*47 - 176*
Tetrachloro-m-xylene	*112*		*46 - 175*

Lab Sample ID: 480-43956-14 MS
Matrix: Solid
Analysis Batch: 134799

Client Sample ID: HOHAOC2-B-1
Prep Type: Total/NA
Prep Batch: 134469

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND		1.83	2.04		mg/Kg	☼	111	42 - 159
PCB-1260	ND		1.83	1.87		mg/Kg	☼	102	47 - 153

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*112*		*47 - 176*
Tetrachloro-m-xylene	*109*		*46 - 175*

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

Lab Sample ID: 480-43956-14 MSD — **Client Sample ID: HOHAOC2-B-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 134799 — **Prep Batch: 134469**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		2.41	2.65		mg/Kg	☼	110	42 - 159	26	50
PCB-1260	ND		2.41	2.62		mg/Kg	☼	109	47 - 153	33	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*117*		*47 - 176*
Tetrachloro-m-xylene	*111*		*46 - 175*

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 480-134831/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 135266 — **Prep Batch: 134831**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.0	ug/Kg		08/20/13 07:41	08/22/13 02:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*89*		*39 - 120*	*08/20/13 07:41*	*08/22/13 02:41*	*1*

Lab Sample ID: LCS 480-134831/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 135266 — **Prep Batch: 134831**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silvex (2,4,5-TP)	65.4	62.8		ug/Kg		96	49 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*96*		*39 - 120*

Lab Sample ID: 480-43956-1 MS — **Client Sample ID: HOHAOC2-A-1 MS**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 135266 — **Prep Batch: 134831**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silvex (2,4,5-TP)	ND		66.4	63.5		ug/Kg	☼	96	32 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*99*		*39 - 120*

Lab Sample ID: 480-43956-1 MSD — **Client Sample ID: HOHAOC2-A-1 MSD**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 135266 — **Prep Batch: 134831**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silvex (2,4,5-TP)	ND		66.4	67.5		ug/Kg	☼	102	32 - 125	6	50

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: 480-43956-1 MSD
Matrix: Solid
Analysis Batch: 135266

Client Sample ID: HOHAOC2-A-1 MSD
Prep Type: Total/NA
Prep Batch: 134831

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*109*		*39 - 120*

Lab Sample ID: MB 480-134837/1-A
Matrix: Solid
Analysis Batch: 135266

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 134837

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.0	ug/Kg		08/20/13 08:01	08/22/13 11:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*97*		*39 - 120*	*08/20/13 08:01*	*08/22/13 11:34*	*1*

Lab Sample ID: LCS 480-134837/2-A
Matrix: Solid
Analysis Batch: 135266

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 134837

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Silvex (2,4,5-TP)			65.4	59.5		ug/Kg		91	49 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*102*		*39 - 120*

Lab Sample ID: 480-43956-13 MS
Matrix: Solid
Analysis Batch: 135266

Client Sample ID: HOHAOC2-A-13
Prep Type: Total/NA
Prep Batch: 134837

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Silvex (2,4,5-TP)	ND		67.8	39.2		ug/Kg	☼	58	32 - 125		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*66*		*39 - 120*

Lab Sample ID: 480-43956-13 MSD
Matrix: Solid
Analysis Batch: 135266

Client Sample ID: HOHAOC2-A-13
Prep Type: Total/NA
Prep Batch: 134837

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silvex (2,4,5-TP)	ND		67.5	57.0		ug/Kg	☼	84	32 - 125	37	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*92*		*39 - 120*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 480-134366/1-A
Matrix: Solid
Analysis Batch: 135080

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 134366

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.8	0.37	mg/Kg		08/16/13 13:30	08/20/13 21:27	1
Barium	ND		0.46	0.10	mg/Kg		08/16/13 13:30	08/20/13 21:27	1
Beryllium	ND		0.18	0.026	mg/Kg		08/16/13 13:30	08/20/13 21:27	1
Cadmium	ND		0.18	0.028	mg/Kg		08/16/13 13:30	08/20/13 21:27	1
Chromium	ND		0.46	0.18	mg/Kg		08/16/13 13:30	08/20/13 21:27	1
Copper	ND		0.92	0.19	mg/Kg		08/16/13 13:30	08/20/13 21:27	1
Lead	ND		0.92	0.22	mg/Kg		08/16/13 13:30	08/20/13 21:27	1
Manganese	ND		0.18	0.029	mg/Kg		08/16/13 13:30	08/20/13 21:27	1
Nickel	ND		4.6	0.21	mg/Kg		08/16/13 13:30	08/20/13 21:27	1
Selenium	ND		3.7	0.37	mg/Kg		08/16/13 13:30	08/20/13 21:27	1
Silver	ND		0.46	0.18	mg/Kg		08/16/13 13:30	08/20/13 21:27	1
Zinc	0.860	J	1.8	0.14	mg/Kg		08/16/13 13:30	08/20/13 21:27	1

Lab Sample ID: LCSSRM 480-134366/2-A
Matrix: Solid
Analysis Batch: 135080

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 134366

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	161	168.7		mg/Kg		104.7	70.8 - 129.8
Barium	385	423.7		mg/Kg		109.9	74.3 - 125.7
Beryllium	146	159.4		mg/Kg		109.1	75.3 - 124.7
Cadmium	149	170.9		mg/Kg		114.6	73.8 - 128.2
Chromium	180	184.2		mg/Kg		102.2	70.6 - 129.4
Copper	162	169.5		mg/Kg		104.5	75.3 - 127.8
Lead	103	112.4		mg/Kg		109.0	70.9 - 128.2
Manganese	386	394.7		mg/Kg		102.2	75.9 - 124.4
Nickel	133	157.9		mg/Kg		118.6	73.2 - 129.3
Selenium	153	166.7		mg/Kg		108.9	67.3 - 132.0
Silver	71.2	74.52		mg/Kg		104.7	67.2 - 132.9
Zinc	352	355.5		mg/Kg		100.9	72.2 - 127.8

Lab Sample ID: 480-43956-1 MS
Matrix: Solid
Analysis Batch: 135080

Client Sample ID: HOHAOC2-A-1 MS
Prep Type: Total/NA
Prep Batch: 134366

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		44.4	44.56		mg/Kg	☼	100	75 - 125
Barium	10.5		44.4	63.96		mg/Kg	☼	121	75 - 125
Beryllium	0.12	J	44.4	43.99		mg/Kg	☼	99	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 480-43956-1 MS — **Client Sample ID: HOHAOC2-A-1 MS**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 135080 — **Prep Batch: 134366**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	ND		44.4	44.40		mg/Kg	☼	100	75 - 125
Chromium	7.4		44.4	50.08		mg/Kg	☼	96	75 - 125
Copper	111		44.4	156.8		mg/Kg	☼	104	75 - 125
Lead	2.4		44.4	48.91		mg/Kg	☼	105	75 - 125
Manganese	113		44.4	284.0	F	mg/Kg	☼	386	75 - 125
Nickel	17.5		44.4	67.22		mg/Kg	☼	112	75 - 125
Selenium	ND		44.4	43.48		mg/Kg	☼	98	75 - 125
Silver	ND		11.1	11.04		mg/Kg	☼	100	75 - 125
Zinc	30.6	B	44.4	88.43	F	mg/Kg	☼	130	75 - 125

Lab Sample ID: 480-43956-1 MSD — **Client Sample ID: HOHAOC2-A-1 MSD**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 135080 — **Prep Batch: 134366**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		42.5	42.40		mg/Kg	☼	100	75 - 125	5	20
Barium	10.5		42.5	52.43		mg/Kg	☼	99	75 - 125	20	20
Beryllium	0.12	J	42.5	41.53		mg/Kg	☼	97	75 - 125	6	20
Cadmium	ND		42.5	41.85		mg/Kg	☼	98	75 - 125	6	20
Chromium	7.4		42.5	47.78		mg/Kg	☼	95	75 - 125	5	20
Copper	111		42.5	153.6		mg/Kg	☼	101	75 - 125	2	20
Lead	2.4		42.5	45.67		mg/Kg	☼	102	75 - 125	7	20
Manganese	113		42.5	234.6	F	mg/Kg	☼	287	75 - 125	19	20
Nickel	17.5		42.5	63.95		mg/Kg	☼	109	75 - 125	5	20
Selenium	ND		42.5	41.78		mg/Kg	☼	98	75 - 125	4	20
Silver	ND		10.6	10.45		mg/Kg	☼	98	75 - 125	5	20
Zinc	30.6	B	42.5	73.49		mg/Kg	☼	101	75 - 125	18	20

Lab Sample ID: MB 480-134367/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 134822 — **Prep Batch: 134367**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.1	0.42	mg/Kg		08/16/13 13:30	08/20/13 01:18	1
Barium	ND		0.53	0.12	mg/Kg		08/16/13 13:30	08/20/13 01:18	1
Beryllium	ND		0.21	0.029	mg/Kg		08/16/13 13:30	08/20/13 01:18	1
Cadmium	ND		0.21	0.032	mg/Kg		08/16/13 13:30	08/20/13 01:18	1
Chromium	ND		0.53	0.21	mg/Kg		08/16/13 13:30	08/20/13 01:18	1
Copper	ND		1.1	0.22	mg/Kg		08/16/13 13:30	08/20/13 01:18	1
Lead	ND		1.1	0.25	mg/Kg		08/16/13 13:30	08/20/13 01:18	1
Manganese	ND		0.21	0.034	mg/Kg		08/16/13 13:30	08/20/13 01:18	1
Nickel	ND		5.3	0.24	mg/Kg		08/16/13 13:30	08/20/13 01:18	1
Selenium	ND		4.2	0.42	mg/Kg		08/16/13 13:30	08/20/13 01:18	1
Silver	ND		0.53	0.21	mg/Kg		08/16/13 13:30	08/20/13 01:18	1
Zinc	0.439	J	2.1	0.16	mg/Kg		08/16/13 13:30	08/20/13 01:18	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-134367/2-A
Matrix: Solid
Analysis Batch: 134822

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 134367

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	161	166.1		mg/Kg		103.3	70.8 - 129.8
Barium	384	369.8		mg/Kg		96.2	74.3 - 125.7
Beryllium	146	155.9		mg/Kg		107.0	75.3 - 124.7
Cadmium	149	153.9		mg/Kg		103.5	73.8 - 128.2
Chromium	180	186.5		mg/Kg		103.8	70.6 - 129.4
Copper	162	168.9		mg/Kg		104.4	75.3 - 127.8
Lead	103	110.0		mg/Kg		106.9	70.9 - 128.2
Manganese	385	416.7		mg/Kg		108.2	75.9 - 124.4
Nickel	133	145.5		mg/Kg		109.6	73.2 - 129.3
Selenium	153	155.8		mg/Kg		102.0	67.3 - 132.0
Silver	71.0	70.15		mg/Kg		98.8	67.2 - 132.9
Zinc	351	377.0		mg/Kg		107.3	72.2 - 127.8

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 480-134350/1-A
Matrix: Solid
Analysis Batch: 134449

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 134350

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0079	mg/Kg		08/16/13 10:05	08/16/13 11:45	1

Lab Sample ID: LCSSRM 480-134350/2-A
Matrix: Solid
Analysis Batch: 134449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 134350

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	3.77	3.90		mg/Kg		103.5	50.9 - 149.1

Lab Sample ID: 480-43956-25 MS
Matrix: Solid
Analysis Batch: 134449

Client Sample ID: HOHAOC2-B-12
Prep Type: Total/NA
Prep Batch: 134350

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.329	0.333		mg/Kg	☼	101	75 - 125

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: 480-43956-25 MSD — **Client Sample ID: HOHAOC2-B-12**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 134449 — **Prep Batch: 134350**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.324	0.330		mg/Kg	☼	102	75 - 125	1	20

Lab Sample ID: MB 480-134361/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 134449 — **Prep Batch: 134361**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.018	0.0075	mg/Kg		08/16/13 10:05	08/16/13 12:41	1

Lab Sample ID: LCSSRM 480-134361/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 134449 — **Prep Batch: 134361**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	3.77	3.53		mg/Kg		93.5	50.9 - 149.1

Lab Sample ID: 480-43956-1 MS — **Client Sample ID: HOHAOC2-A-1 MS**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 134449 — **Prep Batch: 134361**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.311	0.311		mg/Kg	☼	100	75 - 125

Lab Sample ID: 480-43956-1 MSD — **Client Sample ID: HOHAOC2-A-1 MSD**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 134449 — **Prep Batch: 134361**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.310	0.310		mg/Kg	☼	100	75 - 125	0	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 240-97940/9-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98249 — **Prep Batch: 97940**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.80	0.27	mg/Kg		08/19/13 07:10	08/20/13 00:00	1

Lab Sample ID: LCSI 240-97940/11-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98249 — **Prep Batch: 97940**

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	643	696.3		mg/Kg		108	75 - 125

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: LCSS 240-97940/10-A
Matrix: Solid
Analysis Batch: 98249

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97940

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	20.0	21.79		mg/Kg		109	90 - 110

Lab Sample ID: MB 240-98410/9-A
Matrix: Solid
Analysis Batch: 98550

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 98410

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.80	0.27	mg/Kg		08/21/13 13:55	08/22/13 00:00	1

Lab Sample ID: LCSI 240-98410/11-A
Matrix: Solid
Analysis Batch: 98550

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98410

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	643	560.7		mg/Kg		87	75 - 125

Lab Sample ID: LCSS 240-98410/10-A
Matrix: Solid
Analysis Batch: 98550

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98410

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	20.0	20.44		mg/Kg		102	90 - 110

Method: 9012A - Cyanide, Total and/or Amenable

Lab Sample ID: MB 480-134334/2-A
Matrix: Solid
Analysis Batch: 134436

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 134334

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.93	0.45	mg/Kg		08/16/13 06:40	08/16/13 12:31	1

Lab Sample ID: LCS 480-134334/1-A ^5
Matrix: Solid
Analysis Batch: 134436

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 134334

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	124	96.06		mg/Kg		77	29 - 122

Lab Sample ID: 480-43956-1 MS
Matrix: Solid
Analysis Batch: 134436

Client Sample ID: HOHAOC2-A-1 MS
Prep Type: Total/NA
Prep Batch: 134334

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	ND		9.75	9.85		mg/Kg	☼	101	85 - 115

Method: 9012A - Cyanide, Total and/or Amenable (Continued)

Lab Sample ID: 480-43956-1 MSD — **Client Sample ID: HOHAOC2-A-1 MSD**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 134436 — **Prep Batch: 134334**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	ND		9.68	9.78		mg/Kg	☼	101	85 - 115	1	15

Lab Sample ID: 480-43956-10 MS — **Client Sample ID: HOHAOC2-A-10**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 134436 — **Prep Batch: 134334**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	ND		9.77	9.55		mg/Kg	☼	98	85 - 115

Lab Sample ID: MB 480-134682/2-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 134753 — **Prep Batch: 134682**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.87	0.42	mg/Kg		08/19/13 06:45	08/19/13 15:18	1

Lab Sample ID: LCS 480-134682/1-A ^5 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 134753 — **Prep Batch: 134682**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	124	92.03		mg/Kg		74	29 - 122

Lab Sample ID: 480-43956-17 MS — **Client Sample ID: HOHAOC2-B-4**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 134753 — **Prep Batch: 134682**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	ND		9.83	8.76		mg/Kg	☼	89	85 - 115

Lab Sample ID: 480-43956-24 MS — **Client Sample ID: HOHAOC2-B-11**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 134753 — **Prep Batch: 134682**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	ND		9.89	8.27	F	mg/Kg	☼	84	85 - 115

Lab Sample ID: 480-43956-16 DU — **Client Sample ID: HOHAOC2-B-3**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 134753 — **Prep Batch: 134682**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	ND		ND		mg/Kg	☼	NC	15

GC/MS VOA

Analysis Batch: 134263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-1	HOHAOC2-A-1	Total/NA	Solid	8260B	134276
480-43956-1 MS	HOHAOC2-A-1 MS	Total/NA	Solid	8260B	134276
480-43956-1 MSD	HOHAOC2-A-1 MSD	Total/NA	Solid	8260B	134276
480-43956-2	HOHAOC2-A-2	Total/NA	Solid	8260B	134276
480-43956-3	HOHAOC2-A-3	Total/NA	Solid	8260B	134276
480-43956-4	HOHAOC2-A-4	Total/NA	Solid	8260B	134276
480-43956-5	HOHAOC2-A-5	Total/NA	Solid	8260B	134276
480-43956-6	HOHAOC2-A-6	Total/NA	Solid	8260B	134276
480-43956-7	HOHAOC2-A-7	Total/NA	Solid	8260B	134276
480-43956-8	HOHAOC2-A-8	Total/NA	Solid	8260B	134276
480-43956-9	HOHAOC2-A-9	Total/NA	Solid	8260B	134276
480-43956-10	HOHAOC2-A-10	Total/NA	Solid	8260B	134276
480-43956-11	HOHAOC2-A-11	Total/NA	Solid	8260B	134276
480-43956-13	HOHAOC2-A-13	Total/NA	Solid	8260B	134276
480-43956-14	HOHAOC2-B-1	Total/NA	Solid	8260B	134276
480-43956-15	HOHAOC2-B-2	Total/NA	Solid	8260B	134276
480-43956-16	HOHAOC2-B-3	Total/NA	Solid	8260B	134276
LCS 480-134263/4	Lab Control Sample	Total/NA	Solid	8260B	
MB 480-134263/5	Method Blank	Total/NA	Solid	8260B	

Prep Batch: 134276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-1	HOHAOC2-A-1	Total/NA	Solid	5035	
480-43956-1 MS	HOHAOC2-A-1 MS	Total/NA	Solid	5035	
480-43956-1 MSD	HOHAOC2-A-1 MSD	Total/NA	Solid	5035	
480-43956-2	HOHAOC2-A-2	Total/NA	Solid	5035	
480-43956-3	HOHAOC2-A-3	Total/NA	Solid	5035	
480-43956-4	HOHAOC2-A-4	Total/NA	Solid	5035	
480-43956-5	HOHAOC2-A-5	Total/NA	Solid	5035	
480-43956-6	HOHAOC2-A-6	Total/NA	Solid	5035	
480-43956-7	HOHAOC2-A-7	Total/NA	Solid	5035	
480-43956-8	HOHAOC2-A-8	Total/NA	Solid	5035	
480-43956-9	HOHAOC2-A-9	Total/NA	Solid	5035	
480-43956-10	HOHAOC2-A-10	Total/NA	Solid	5035	
480-43956-11	HOHAOC2-A-11	Total/NA	Solid	5035	
480-43956-13	HOHAOC2-A-13	Total/NA	Solid	5035	
480-43956-14	HOHAOC2-B-1	Total/NA	Solid	5035	
480-43956-15	HOHAOC2-B-2	Total/NA	Solid	5035	
480-43956-16	HOHAOC2-B-3	Total/NA	Solid	5035	

Analysis Batch: 134369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-12	HOHAOC2-A-12	Total/NA	Solid	8260B	134395
480-43956-18	HOHAOC2-B-5	Total/NA	Solid	8260B	134395
480-43956-19	HOHAOC2-B-6	Total/NA	Solid	8260B	134395
480-43956-20	HOHAOC2-B-7	Total/NA	Solid	8260B	134395
480-43956-21	HOHAOC2-B-8	Total/NA	Solid	8260B	134395
480-43956-23	HOHAOC2-B-10	Total/NA	Solid	8260B	134395
480-43956-24	HOHAOC2-B-11	Total/NA	Solid	8260B	134395
480-43956-25	HOHAOC2-B-12	Total/NA	Solid	8260B	134395
LCS 480-134369/4	Lab Control Sample	Total/NA	Solid	8260B	

GC/MS VOA (Continued)

Analysis Batch: 134369 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 480-134369/5	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 480-134369/7	Method Blank	Total/NA	Solid	8260B	

Prep Batch: 134395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-12	HOHAOC2-A-12	Total/NA	Solid	5035	
480-43956-18	HOHAOC2-B-5	Total/NA	Solid	5035	
480-43956-19	HOHAOC2-B-6	Total/NA	Solid	5035	
480-43956-20	HOHAOC2-B-7	Total/NA	Solid	5035	
480-43956-21	HOHAOC2-B-8	Total/NA	Solid	5035	
480-43956-23	HOHAOC2-B-10	Total/NA	Solid	5035	
480-43956-24	HOHAOC2-B-11	Total/NA	Solid	5035	
480-43956-25	HOHAOC2-B-12	Total/NA	Solid	5035	

Prep Batch: 134679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-17	HOHAOC2-B-4	Total/NA	Solid	5035	
480-43956-22	HOHAOC2-B-9	Total/NA	Solid	5035	

Analysis Batch: 134731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-17	HOHAOC2-B-4	Total/NA	Solid	8260B	134679
480-43956-22	HOHAOC2-B-9	Total/NA	Solid	8260B	134679
LCS 480-134731/6	Lab Control Sample	Total/NA	Solid	8260B	
MB 480-134731/7	Method Blank	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 134548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-1	HOHAOC2-A-1	Total/NA	Solid	3550B	
480-43956-1 MS	HOHAOC2-A-1 MS	Total/NA	Solid	3550B	
480-43956-1 MSD	HOHAOC2-A-1 MSD	Total/NA	Solid	3550B	
480-43956-2	HOHAOC2-A-2	Total/NA	Solid	3550B	
480-43956-3	HOHAOC2-A-3	Total/NA	Solid	3550B	
480-43956-4	HOHAOC2-A-4	Total/NA	Solid	3550B	
480-43956-5	HOHAOC2-A-5	Total/NA	Solid	3550B	
480-43956-6	HOHAOC2-A-6	Total/NA	Solid	3550B	
480-43956-7	HOHAOC2-A-7	Total/NA	Solid	3550B	
480-43956-8	HOHAOC2-A-8	Total/NA	Solid	3550B	
480-43956-9	HOHAOC2-A-9	Total/NA	Solid	3550B	
480-43956-10	HOHAOC2-A-10	Total/NA	Solid	3550B	
480-43956-11	HOHAOC2-A-11	Total/NA	Solid	3550B	
480-43956-12	HOHAOC2-A-12	Total/NA	Solid	3550B	
480-43956-13	HOHAOC2-A-13	Total/NA	Solid	3550B	
480-43956-14	HOHAOC2-B-1	Total/NA	Solid	3550B	
480-43956-15	HOHAOC2-B-2	Total/NA	Solid	3550B	
480-43956-16	HOHAOC2-B-3	Total/NA	Solid	3550B	
LCS 480-134548/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-134548/1-A	Method Blank	Total/NA	Solid	3550B	

GC/MS Semi VOA (Continued)

Prep Batch: 134554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-17	HOHAOC2-B-4	Total/NA	Solid	3550B	
480-43956-18	HOHAOC2-B-5	Total/NA	Solid	3550B	
480-43956-19	HOHAOC2-B-6	Total/NA	Solid	3550B	
480-43956-20	HOHAOC2-B-7	Total/NA	Solid	3550B	
480-43956-21	HOHAOC2-B-8	Total/NA	Solid	3550B	
480-43956-22	HOHAOC2-B-9	Total/NA	Solid	3550B	
480-43956-23	HOHAOC2-B-10	Total/NA	Solid	3550B	
480-43956-24	HOHAOC2-B-11	Total/NA	Solid	3550B	
480-43956-25	HOHAOC2-B-12	Total/NA	Solid	3550B	
LCS 480-134554/2-A	Lab Control Sample	Total/NA	Solid	3550B	
LCSD 480-134554/3-A	Lab Control Sample Dup	Total/NA	Solid	3550B	
MB 480-134554/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 134659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-1	HOHAOC2-A-1	Total/NA	Solid	8270C	134548
480-43956-1 MS	HOHAOC2-A-1 MS	Total/NA	Solid	8270C	134548
480-43956-1 MSD	HOHAOC2-A-1 MSD	Total/NA	Solid	8270C	134548
480-43956-2	HOHAOC2-A-2	Total/NA	Solid	8270C	134548
480-43956-3	HOHAOC2-A-3	Total/NA	Solid	8270C	134548
480-43956-4	HOHAOC2-A-4	Total/NA	Solid	8270C	134548
480-43956-5	HOHAOC2-A-5	Total/NA	Solid	8270C	134548
480-43956-6	HOHAOC2-A-6	Total/NA	Solid	8270C	134548
480-43956-17	HOHAOC2-B-4	Total/NA	Solid	8270C	134554
480-43956-18	HOHAOC2-B-5	Total/NA	Solid	8270C	134554
480-43956-19	HOHAOC2-B-6	Total/NA	Solid	8270C	134554
480-43956-20	HOHAOC2-B-7	Total/NA	Solid	8270C	134554
480-43956-21	HOHAOC2-B-8	Total/NA	Solid	8270C	134554
480-43956-22	HOHAOC2-B-9	Total/NA	Solid	8270C	134554
480-43956-23	HOHAOC2-B-10	Total/NA	Solid	8270C	134554
480-43956-24	HOHAOC2-B-11	Total/NA	Solid	8270C	134554
480-43956-25	HOHAOC2-B-12	Total/NA	Solid	8270C	134554
LCS 480-134548/2-A	Lab Control Sample	Total/NA	Solid	8270C	134548
LCS 480-134554/2-A	Lab Control Sample	Total/NA	Solid	8270C	134554
LCSD 480-134554/3-A	Lab Control Sample Dup	Total/NA	Solid	8270C	134554
MB 480-134554/1-A	Method Blank	Total/NA	Solid	8270C	134554

Analysis Batch: 134724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-7	HOHAOC2-A-7	Total/NA	Solid	8270C	134548
480-43956-8	HOHAOC2-A-8	Total/NA	Solid	8270C	134548
480-43956-9	HOHAOC2-A-9	Total/NA	Solid	8270C	134548
480-43956-10	HOHAOC2-A-10	Total/NA	Solid	8270C	134548
480-43956-11	HOHAOC2-A-11	Total/NA	Solid	8270C	134548
480-43956-12	HOHAOC2-A-12	Total/NA	Solid	8270C	134548
480-43956-13	HOHAOC2-A-13	Total/NA	Solid	8270C	134548
480-43956-14	HOHAOC2-B-1	Total/NA	Solid	8270C	134548
480-43956-15	HOHAOC2-B-2	Total/NA	Solid	8270C	134548
480-43956-16	HOHAOC2-B-3	Total/NA	Solid	8270C	134548
MB 480-134548/1-A	Method Blank	Total/NA	Solid	8270C	134548

GC Semi VOA

Prep Batch: 134465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-1	HOHAOC2-A-1	Total/NA	Solid	3550B	
480-43956-1 MS	HOHAOC2-A-1 MS	Total/NA	Solid	3550B	
480-43956-1 MSD	HOHAOC2-A-1 MSD	Total/NA	Solid	3550B	
480-43956-2	HOHAOC2-A-2	Total/NA	Solid	3550B	
480-43956-3	HOHAOC2-A-3	Total/NA	Solid	3550B	
480-43956-4	HOHAOC2-A-4	Total/NA	Solid	3550B	
480-43956-5	HOHAOC2-A-5	Total/NA	Solid	3550B	
480-43956-6	HOHAOC2-A-6	Total/NA	Solid	3550B	
480-43956-7	HOHAOC2-A-7	Total/NA	Solid	3550B	
480-43956-8	HOHAOC2-A-8	Total/NA	Solid	3550B	
480-43956-9	HOHAOC2-A-9	Total/NA	Solid	3550B	
480-43956-10	HOHAOC2-A-10	Total/NA	Solid	3550B	
480-43956-11	HOHAOC2-A-11	Total/NA	Solid	3550B	
480-43956-12	HOHAOC2-A-12	Total/NA	Solid	3550B	
480-43956-13	HOHAOC2-A-13	Total/NA	Solid	3550B	
LCS 480-134465/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-134465/1-A	Method Blank	Total/NA	Solid	3550B	

Prep Batch: 134469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-14	HOHAOC2-B-1	Total/NA	Solid	3550B	
480-43956-14 MS	HOHAOC2-B-1	Total/NA	Solid	3550B	
480-43956-14 MSD	HOHAOC2-B-1	Total/NA	Solid	3550B	
480-43956-15	HOHAOC2-B-2	Total/NA	Solid	3550B	
480-43956-16	HOHAOC2-B-3	Total/NA	Solid	3550B	
480-43956-17	HOHAOC2-B-4	Total/NA	Solid	3550B	
480-43956-18	HOHAOC2-B-5	Total/NA	Solid	3550B	
480-43956-19	HOHAOC2-B-6	Total/NA	Solid	3550B	
480-43956-20	HOHAOC2-B-7	Total/NA	Solid	3550B	
480-43956-21	HOHAOC2-B-8	Total/NA	Solid	3550B	
480-43956-22	HOHAOC2-B-9	Total/NA	Solid	3550B	
480-43956-23	HOHAOC2-B-10	Total/NA	Solid	3550B	
480-43956-24	HOHAOC2-B-11	Total/NA	Solid	3550B	
480-43956-25	HOHAOC2-B-12	Total/NA	Solid	3550B	
LCS 480-134469/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-134469/1-A	Method Blank	Total/NA	Solid	3550B	

Prep Batch: 134546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-1	HOHAOC2-A-1	Total/NA	Solid	3550B	
480-43956-1 MS	HOHAOC2-A-1 MS	Total/NA	Solid	3550B	
480-43956-1 MSD	HOHAOC2-A-1 MSD	Total/NA	Solid	3550B	
480-43956-2	HOHAOC2-A-2	Total/NA	Solid	3550B	
480-43956-3	HOHAOC2-A-3	Total/NA	Solid	3550B	
480-43956-4	HOHAOC2-A-4	Total/NA	Solid	3550B	
480-43956-5	HOHAOC2-A-5	Total/NA	Solid	3550B	
480-43956-6	HOHAOC2-A-6	Total/NA	Solid	3550B	
480-43956-7	HOHAOC2-A-7	Total/NA	Solid	3550B	
480-43956-8	HOHAOC2-A-8	Total/NA	Solid	3550B	
480-43956-9	HOHAOC2-A-9	Total/NA	Solid	3550B	
480-43956-10	HOHAOC2-A-10	Total/NA	Solid	3550B	

GC Semi VOA (Continued)

Prep Batch: 134546 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-11	HOHAOC2-A-11	Total/NA	Solid	3550B	
480-43956-12	HOHAOC2-A-12	Total/NA	Solid	3550B	
480-43956-13	HOHAOC2-A-13	Total/NA	Solid	3550B	
LCS 480-134546/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-134546/1-A	Method Blank	Total/NA	Solid	3550B	

Prep Batch: 134547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-14	HOHAOC2-B-1	Total/NA	Solid	3550B	
480-43956-15	HOHAOC2-B-2	Total/NA	Solid	3550B	
480-43956-16	HOHAOC2-B-3	Total/NA	Solid	3550B	
480-43956-17	HOHAOC2-B-4	Total/NA	Solid	3550B	
480-43956-18	HOHAOC2-B-5	Total/NA	Solid	3550B	
480-43956-19	HOHAOC2-B-6	Total/NA	Solid	3550B	
480-43956-20	HOHAOC2-B-7	Total/NA	Solid	3550B	
480-43956-21	HOHAOC2-B-8	Total/NA	Solid	3550B	
480-43956-22	HOHAOC2-B-9	Total/NA	Solid	3550B	
480-43956-23	HOHAOC2-B-10	Total/NA	Solid	3550B	
480-43956-24	HOHAOC2-B-11	Total/NA	Solid	3550B	
480-43956-25	HOHAOC2-B-12	Total/NA	Solid	3550B	
LCS 480-134547/2-A	Lab Control Sample	Total/NA	Solid	3550B	
LCSD 480-134547/3-A	Lab Control Sample Dup	Total/NA	Solid	3550B	
MB 480-134547/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 134645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-14	HOHAOC2-B-1	Total/NA	Solid	8081A	134547
480-43956-15	HOHAOC2-B-2	Total/NA	Solid	8081A	134547
480-43956-16	HOHAOC2-B-3	Total/NA	Solid	8081A	134547
480-43956-17	HOHAOC2-B-4	Total/NA	Solid	8081A	134547
480-43956-18	HOHAOC2-B-5	Total/NA	Solid	8081A	134547
480-43956-19	HOHAOC2-B-6	Total/NA	Solid	8081A	134547
480-43956-20	HOHAOC2-B-7	Total/NA	Solid	8081A	134547
480-43956-21	HOHAOC2-B-8	Total/NA	Solid	8081A	134547
480-43956-22	HOHAOC2-B-9	Total/NA	Solid	8081A	134547
480-43956-23	HOHAOC2-B-10	Total/NA	Solid	8081A	134547
480-43956-24	HOHAOC2-B-11	Total/NA	Solid	8081A	134547
480-43956-25	HOHAOC2-B-12	Total/NA	Solid	8081A	134547
LCS 480-134547/2-A	Lab Control Sample	Total/NA	Solid	8081A	134547
LCSD 480-134547/3-A	Lab Control Sample Dup	Total/NA	Solid	8081A	134547
MB 480-134547/1-A	Method Blank	Total/NA	Solid	8081A	134547

Analysis Batch: 134647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-1	HOHAOC2-A-1	Total/NA	Solid	8081A	134546
480-43956-1 MS	HOHAOC2-A-1 MS	Total/NA	Solid	8081A	134546
480-43956-1 MSD	HOHAOC2-A-1 MSD	Total/NA	Solid	8081A	134546
480-43956-2	HOHAOC2-A-2	Total/NA	Solid	8081A	134546
480-43956-3	HOHAOC2-A-3	Total/NA	Solid	8081A	134546
480-43956-4	HOHAOC2-A-4	Total/NA	Solid	8081A	134546
480-43956-5	HOHAOC2-A-5	Total/NA	Solid	8081A	134546

GC Semi VOA (Continued)

Analysis Batch: 134647 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-6	HOHAOC2-A-6	Total/NA	Solid	8081A	134546
480-43956-7	HOHAOC2-A-7	Total/NA	Solid	8081A	134546
480-43956-8	HOHAOC2-A-8	Total/NA	Solid	8081A	134546
480-43956-9	HOHAOC2-A-9	Total/NA	Solid	8081A	134546
480-43956-10	HOHAOC2-A-10	Total/NA	Solid	8081A	134546
480-43956-11	HOHAOC2-A-11	Total/NA	Solid	8081A	134546
480-43956-12	HOHAOC2-A-12	Total/NA	Solid	8081A	134546
480-43956-13	HOHAOC2-A-13	Total/NA	Solid	8081A	134546
LCS 480-134546/2-A	Lab Control Sample	Total/NA	Solid	8081A	134546
MB 480-134546/1-A	Method Blank	Total/NA	Solid	8081A	134546

Analysis Batch: 134799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-1	HOHAOC2-A-1	Total/NA	Solid	8082	134465
480-43956-1 MS	HOHAOC2-A-1 MS	Total/NA	Solid	8082	134465
480-43956-1 MSD	HOHAOC2-A-1 MSD	Total/NA	Solid	8082	134465
480-43956-2	HOHAOC2-A-2	Total/NA	Solid	8082	134465
480-43956-3	HOHAOC2-A-3	Total/NA	Solid	8082	134465
480-43956-4	HOHAOC2-A-4	Total/NA	Solid	8082	134465
480-43956-5	HOHAOC2-A-5	Total/NA	Solid	8082	134465
480-43956-6	HOHAOC2-A-6	Total/NA	Solid	8082	134465
480-43956-7	HOHAOC2-A-7	Total/NA	Solid	8082	134465
480-43956-8	HOHAOC2-A-8	Total/NA	Solid	8082	134465
480-43956-9	HOHAOC2-A-9	Total/NA	Solid	8082	134465
480-43956-10	HOHAOC2-A-10	Total/NA	Solid	8082	134465
480-43956-11	HOHAOC2-A-11	Total/NA	Solid	8082	134465
480-43956-12	HOHAOC2-A-12	Total/NA	Solid	8082	134465
480-43956-13	HOHAOC2-A-13	Total/NA	Solid	8082	134465
480-43956-14	HOHAOC2-B-1	Total/NA	Solid	8082	134469
480-43956-14 MS	HOHAOC2-B-1	Total/NA	Solid	8082	134469
480-43956-14 MSD	HOHAOC2-B-1	Total/NA	Solid	8082	134469
480-43956-15	HOHAOC2-B-2	Total/NA	Solid	8082	134469
480-43956-16	HOHAOC2-B-3	Total/NA	Solid	8082	134469
480-43956-17	HOHAOC2-B-4	Total/NA	Solid	8082	134469
480-43956-18	HOHAOC2-B-5	Total/NA	Solid	8082	134469
480-43956-19	HOHAOC2-B-6	Total/NA	Solid	8082	134469
480-43956-20	HOHAOC2-B-7	Total/NA	Solid	8082	134469
480-43956-21	HOHAOC2-B-8	Total/NA	Solid	8082	134469
480-43956-22	HOHAOC2-B-9	Total/NA	Solid	8082	134469
480-43956-23	HOHAOC2-B-10	Total/NA	Solid	8082	134469
480-43956-24	HOHAOC2-B-11	Total/NA	Solid	8082	134469
480-43956-25	HOHAOC2-B-12	Total/NA	Solid	8082	134469
LCS 480-134465/2-A	Lab Control Sample	Total/NA	Solid	8082	134465
LCS 480-134469/2-A	Lab Control Sample	Total/NA	Solid	8082	134469
MB 480-134465/1-A	Method Blank	Total/NA	Solid	8082	134465
MB 480-134469/1-A	Method Blank	Total/NA	Solid	8082	134469

Prep Batch: 134831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-1	HOHAOC2-A-1	Total/NA	Solid	8151A	
480-43956-1 MS	HOHAOC2-A-1 MS	Total/NA	Solid	8151A	

GC Semi VOA (Continued)

Prep Batch: 134831 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-1 MSD	HOHAOC2-A-1 MSD	Total/NA	Solid	8151A	
480-43956-2	HOHAOC2-A-2	Total/NA	Solid	8151A	
480-43956-3	HOHAOC2-A-3	Total/NA	Solid	8151A	
480-43956-4	HOHAOC2-A-4	Total/NA	Solid	8151A	
480-43956-5	HOHAOC2-A-5	Total/NA	Solid	8151A	
480-43956-6	HOHAOC2-A-6	Total/NA	Solid	8151A	
480-43956-7	HOHAOC2-A-7	Total/NA	Solid	8151A	
480-43956-8	HOHAOC2-A-8	Total/NA	Solid	8151A	
480-43956-9	HOHAOC2-A-9	Total/NA	Solid	8151A	
480-43956-10	HOHAOC2-A-10	Total/NA	Solid	8151A	
480-43956-11	HOHAOC2-A-11	Total/NA	Solid	8151A	
480-43956-12	HOHAOC2-A-12	Total/NA	Solid	8151A	
LCS 480-134831/2-A	Lab Control Sample	Total/NA	Solid	8151A	
MB 480-134831/1-A	Method Blank	Total/NA	Solid	8151A	

Prep Batch: 134837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-13	HOHAOC2-A-13	Total/NA	Solid	8151A	
480-43956-13 MS	HOHAOC2-A-13	Total/NA	Solid	8151A	
480-43956-13 MSD	HOHAOC2-A-13	Total/NA	Solid	8151A	
480-43956-14	HOHAOC2-B-1	Total/NA	Solid	8151A	
480-43956-15	HOHAOC2-B-2	Total/NA	Solid	8151A	
480-43956-16	HOHAOC2-B-3	Total/NA	Solid	8151A	
480-43956-17	HOHAOC2-B-4	Total/NA	Solid	8151A	
480-43956-18	HOHAOC2-B-5	Total/NA	Solid	8151A	
480-43956-19	HOHAOC2-B-6	Total/NA	Solid	8151A	
480-43956-20	HOHAOC2-B-7	Total/NA	Solid	8151A	
480-43956-21	HOHAOC2-B-8	Total/NA	Solid	8151A	
480-43956-22	HOHAOC2-B-9	Total/NA	Solid	8151A	
480-43956-23	HOHAOC2-B-10	Total/NA	Solid	8151A	
480-43956-24	HOHAOC2-B-11	Total/NA	Solid	8151A	
480-43956-25	HOHAOC2-B-12	Total/NA	Solid	8151A	
LCS 480-134837/2-A	Lab Control Sample	Total/NA	Solid	8151A	
MB 480-134837/1-A	Method Blank	Total/NA	Solid	8151A	

Analysis Batch: 135266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-1	HOHAOC2-A-1	Total/NA	Solid	8151A	134831
480-43956-1 MS	HOHAOC2-A-1 MS	Total/NA	Solid	8151A	134831
480-43956-1 MSD	HOHAOC2-A-1 MSD	Total/NA	Solid	8151A	134831
480-43956-2	HOHAOC2-A-2	Total/NA	Solid	8151A	134831
480-43956-3	HOHAOC2-A-3	Total/NA	Solid	8151A	134831
480-43956-4	HOHAOC2-A-4	Total/NA	Solid	8151A	134831
480-43956-5	HOHAOC2-A-5	Total/NA	Solid	8151A	134831
480-43956-6	HOHAOC2-A-6	Total/NA	Solid	8151A	134831
480-43956-7	HOHAOC2-A-7	Total/NA	Solid	8151A	134831
480-43956-8	HOHAOC2-A-8	Total/NA	Solid	8151A	134831
480-43956-9	HOHAOC2-A-9	Total/NA	Solid	8151A	134831
480-43956-10	HOHAOC2-A-10	Total/NA	Solid	8151A	134831
480-43956-11	HOHAOC2-A-11	Total/NA	Solid	8151A	134831
480-43956-12	HOHAOC2-A-12	Total/NA	Solid	8151A	134831

GC Semi VOA (Continued)

Analysis Batch: 135266 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-13	HOHAOC2-A-13	Total/NA	Solid	8151A	134837
480-43956-13 MS	HOHAOC2-A-13	Total/NA	Solid	8151A	134837
480-43956-13 MSD	HOHAOC2-A-13	Total/NA	Solid	8151A	134837
480-43956-14	HOHAOC2-B-1	Total/NA	Solid	8151A	134837
480-43956-15	HOHAOC2-B-2	Total/NA	Solid	8151A	134837
480-43956-16	HOHAOC2-B-3	Total/NA	Solid	8151A	134837
480-43956-17	HOHAOC2-B-4	Total/NA	Solid	8151A	134837
480-43956-18	HOHAOC2-B-5	Total/NA	Solid	8151A	134837
480-43956-19	HOHAOC2-B-6	Total/NA	Solid	8151A	134837
480-43956-20	HOHAOC2-B-7	Total/NA	Solid	8151A	134837
480-43956-21	HOHAOC2-B-8	Total/NA	Solid	8151A	134837
480-43956-22	HOHAOC2-B-9	Total/NA	Solid	8151A	134837
480-43956-23	HOHAOC2-B-10	Total/NA	Solid	8151A	134837
480-43956-24	HOHAOC2-B-11	Total/NA	Solid	8151A	134837
480-43956-25	HOHAOC2-B-12	Total/NA	Solid	8151A	134837
LCS 480-134831/2-A	Lab Control Sample	Total/NA	Solid	8151A	134831
LCS 480-134837/2-A	Lab Control Sample	Total/NA	Solid	8151A	134837
MB 480-134831/1-A	Method Blank	Total/NA	Solid	8151A	134831
MB 480-134837/1-A	Method Blank	Total/NA	Solid	8151A	134837

Metals

Prep Batch: 134350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-21	HOHAOC2-B-8	Total/NA	Solid	7471A	
480-43956-22	HOHAOC2-B-9	Total/NA	Solid	7471A	
480-43956-23	HOHAOC2-B-10	Total/NA	Solid	7471A	
480-43956-24	HOHAOC2-B-11	Total/NA	Solid	7471A	
480-43956-25	HOHAOC2-B-12	Total/NA	Solid	7471A	
480-43956-25 MS	HOHAOC2-B-12	Total/NA	Solid	7471A	
480-43956-25 MSD	HOHAOC2-B-12	Total/NA	Solid	7471A	
LCSSRM 480-134350/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 480-134350/1-A	Method Blank	Total/NA	Solid	7471A	

Prep Batch: 134361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-1	HOHAOC2-A-1	Total/NA	Solid	7471A	
480-43956-1 MS	HOHAOC2-A-1 MS	Total/NA	Solid	7471A	
480-43956-1 MSD	HOHAOC2-A-1 MSD	Total/NA	Solid	7471A	
480-43956-2	HOHAOC2-A-2	Total/NA	Solid	7471A	
480-43956-3	HOHAOC2-A-3	Total/NA	Solid	7471A	
480-43956-4	HOHAOC2-A-4	Total/NA	Solid	7471A	
480-43956-5	HOHAOC2-A-5	Total/NA	Solid	7471A	
480-43956-6	HOHAOC2-A-6	Total/NA	Solid	7471A	
480-43956-7	HOHAOC2-A-7	Total/NA	Solid	7471A	
480-43956-8	HOHAOC2-A-8	Total/NA	Solid	7471A	
480-43956-9	HOHAOC2-A-9	Total/NA	Solid	7471A	
480-43956-10	HOHAOC2-A-10	Total/NA	Solid	7471A	
480-43956-11	HOHAOC2-A-11	Total/NA	Solid	7471A	
480-43956-12	HOHAOC2-A-12	Total/NA	Solid	7471A	

Metals (Continued)

Prep Batch: 134361 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-13	HOHAOC2-A-13	Total/NA	Solid	7471A	
480-43956-14	HOHAOC2-B-1	Total/NA	Solid	7471A	
480-43956-15	HOHAOC2-B-2	Total/NA	Solid	7471A	
480-43956-16	HOHAOC2-B-3	Total/NA	Solid	7471A	
480-43956-17	HOHAOC2-B-4	Total/NA	Solid	7471A	
480-43956-18	HOHAOC2-B-5	Total/NA	Solid	7471A	
480-43956-19	HOHAOC2-B-6	Total/NA	Solid	7471A	
480-43956-20	HOHAOC2-B-7	Total/NA	Solid	7471A	
LCSSRM 480-134361/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 480-134361/1-A	Method Blank	Total/NA	Solid	7471A	

Prep Batch: 134366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-1	HOHAOC2-A-1	Total/NA	Solid	3050B	
480-43956-1 MS	HOHAOC2-A-1 MS	Total/NA	Solid	3050B	
480-43956-1 MSD	HOHAOC2-A-1 MSD	Total/NA	Solid	3050B	
480-43956-2	HOHAOC2-A-2	Total/NA	Solid	3050B	
480-43956-3	HOHAOC2-A-3	Total/NA	Solid	3050B	
480-43956-4	HOHAOC2-A-4	Total/NA	Solid	3050B	
480-43956-5	HOHAOC2-A-5	Total/NA	Solid	3050B	
480-43956-6	HOHAOC2-A-6	Total/NA	Solid	3050B	
480-43956-7	HOHAOC2-A-7	Total/NA	Solid	3050B	
480-43956-8	HOHAOC2-A-8	Total/NA	Solid	3050B	
480-43956-9	HOHAOC2-A-9	Total/NA	Solid	3050B	
480-43956-10	HOHAOC2-A-10	Total/NA	Solid	3050B	
480-43956-11	HOHAOC2-A-11	Total/NA	Solid	3050B	
480-43956-12	HOHAOC2-A-12	Total/NA	Solid	3050B	
480-43956-13	HOHAOC2-A-13	Total/NA	Solid	3050B	
480-43956-14	HOHAOC2-B-1	Total/NA	Solid	3050B	
480-43956-15	HOHAOC2-B-2	Total/NA	Solid	3050B	
480-43956-16	HOHAOC2-B-3	Total/NA	Solid	3050B	
480-43956-17	HOHAOC2-B-4	Total/NA	Solid	3050B	
480-43956-18	HOHAOC2-B-5	Total/NA	Solid	3050B	
480-43956-19	HOHAOC2-B-6	Total/NA	Solid	3050B	
480-43956-20	HOHAOC2-B-7	Total/NA	Solid	3050B	
LCSSRM 480-134366/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-134366/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 134367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-21	HOHAOC2-B-8	Total/NA	Solid	3050B	
480-43956-22	HOHAOC2-B-9	Total/NA	Solid	3050B	
480-43956-23	HOHAOC2-B-10	Total/NA	Solid	3050B	
480-43956-24	HOHAOC2-B-11	Total/NA	Solid	3050B	
480-43956-25	HOHAOC2-B-12	Total/NA	Solid	3050B	
LCSSRM 480-134367/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-134367/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 134449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-1	HOHAOC2-A-1	Total/NA	Solid	7471A	134361

Metals (Continued)

Analysis Batch: 134449 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-1 MS	HOHAOC2-A-1 MS	Total/NA	Solid	7471A	134361
480-43956-1 MSD	HOHAOC2-A-1 MSD	Total/NA	Solid	7471A	134361
480-43956-2	HOHAOC2-A-2	Total/NA	Solid	7471A	134361
480-43956-3	HOHAOC2-A-3	Total/NA	Solid	7471A	134361
480-43956-4	HOHAOC2-A-4	Total/NA	Solid	7471A	134361
480-43956-5	HOHAOC2-A-5	Total/NA	Solid	7471A	134361
480-43956-6	HOHAOC2-A-6	Total/NA	Solid	7471A	134361
480-43956-7	HOHAOC2-A-7	Total/NA	Solid	7471A	134361
480-43956-8	HOHAOC2-A-8	Total/NA	Solid	7471A	134361
480-43956-9	HOHAOC2-A-9	Total/NA	Solid	7471A	134361
480-43956-10	HOHAOC2-A-10	Total/NA	Solid	7471A	134361
480-43956-11	HOHAOC2-A-11	Total/NA	Solid	7471A	134361
480-43956-12	HOHAOC2-A-12	Total/NA	Solid	7471A	134361
480-43956-13	HOHAOC2-A-13	Total/NA	Solid	7471A	134361
480-43956-14	HOHAOC2-B-1	Total/NA	Solid	7471A	134361
480-43956-15	HOHAOC2-B-2	Total/NA	Solid	7471A	134361
480-43956-16	HOHAOC2-B-3	Total/NA	Solid	7471A	134361
480-43956-17	HOHAOC2-B-4	Total/NA	Solid	7471A	134361
480-43956-18	HOHAOC2-B-5	Total/NA	Solid	7471A	134361
480-43956-19	HOHAOC2-B-6	Total/NA	Solid	7471A	134361
480-43956-20	HOHAOC2-B-7	Total/NA	Solid	7471A	134361
480-43956-21	HOHAOC2-B-8	Total/NA	Solid	7471A	134350
480-43956-22	HOHAOC2-B-9	Total/NA	Solid	7471A	134350
480-43956-23	HOHAOC2-B-10	Total/NA	Solid	7471A	134350
480-43956-24	HOHAOC2-B-11	Total/NA	Solid	7471A	134350
480-43956-25	HOHAOC2-B-12	Total/NA	Solid	7471A	134350
480-43956-25 MS	HOHAOC2-B-12	Total/NA	Solid	7471A	134350
480-43956-25 MSD	HOHAOC2-B-12	Total/NA	Solid	7471A	134350
LCSSRM 480-134350/2-A	Lab Control Sample	Total/NA	Solid	7471A	134350
LCSSRM 480-134361/2-A	Lab Control Sample	Total/NA	Solid	7471A	134361
MB 480-134350/1-A	Method Blank	Total/NA	Solid	7471A	134350
MB 480-134361/1-A	Method Blank	Total/NA	Solid	7471A	134361

Analysis Batch: 134822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-21	HOHAOC2-B-8	Total/NA	Solid	6010B	134367
480-43956-22	HOHAOC2-B-9	Total/NA	Solid	6010B	134367
480-43956-23	HOHAOC2-B-10	Total/NA	Solid	6010B	134367
480-43956-24	HOHAOC2-B-11	Total/NA	Solid	6010B	134367
480-43956-25	HOHAOC2-B-12	Total/NA	Solid	6010B	134367
LCSSRM 480-134367/2-A	Lab Control Sample	Total/NA	Solid	6010B	134367
MB 480-134367/1-A	Method Blank	Total/NA	Solid	6010B	134367

Analysis Batch: 135080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-1	HOHAOC2-A-1	Total/NA	Solid	6010B	134366
480-43956-1 MS	HOHAOC2-A-1 MS	Total/NA	Solid	6010B	134366
480-43956-1 MSD	HOHAOC2-A-1 MSD	Total/NA	Solid	6010B	134366
480-43956-2	HOHAOC2-A-2	Total/NA	Solid	6010B	134366
480-43956-3	HOHAOC2-A-3	Total/NA	Solid	6010B	134366
480-43956-4	HOHAOC2-A-4	Total/NA	Solid	6010B	134366

Metals (Continued)

Analysis Batch: 135080 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-5	HOHAOC2-A-5	Total/NA	Solid	6010B	134366
480-43956-6	HOHAOC2-A-6	Total/NA	Solid	6010B	134366
480-43956-7	HOHAOC2-A-7	Total/NA	Solid	6010B	134366
480-43956-8	HOHAOC2-A-8	Total/NA	Solid	6010B	134366
480-43956-9	HOHAOC2-A-9	Total/NA	Solid	6010B	134366
480-43956-10	HOHAOC2-A-10	Total/NA	Solid	6010B	134366
480-43956-11	HOHAOC2-A-11	Total/NA	Solid	6010B	134366
480-43956-12	HOHAOC2-A-12	Total/NA	Solid	6010B	134366
480-43956-13	HOHAOC2-A-13	Total/NA	Solid	6010B	134366
480-43956-14	HOHAOC2-B-1	Total/NA	Solid	6010B	134366
480-43956-15	HOHAOC2-B-2	Total/NA	Solid	6010B	134366
480-43956-16	HOHAOC2-B-3	Total/NA	Solid	6010B	134366
480-43956-17	HOHAOC2-B-4	Total/NA	Solid	6010B	134366
480-43956-18	HOHAOC2-B-5	Total/NA	Solid	6010B	134366
480-43956-19	HOHAOC2-B-6	Total/NA	Solid	6010B	134366
480-43956-20	HOHAOC2-B-7	Total/NA	Solid	6010B	134366
LCSSRM 480-134366/2-A	Lab Control Sample	Total/NA	Solid	6010B	134366
MB 480-134366/1-A	Method Blank	Total/NA	Solid	6010B	134366

Analysis Batch: 135237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-21	HOHAOC2-B-8	Total/NA	Solid	6010B	134367
480-43956-22	HOHAOC2-B-9	Total/NA	Solid	6010B	134367
480-43956-23	HOHAOC2-B-10	Total/NA	Solid	6010B	134367
480-43956-24	HOHAOC2-B-11	Total/NA	Solid	6010B	134367
480-43956-25	HOHAOC2-B-12	Total/NA	Solid	6010B	134367

General Chemistry

Prep Batch: 97940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-1	HOHAOC2-A-1	Total/NA	Solid	3060A	
480-43956-2	HOHAOC2-A-2	Total/NA	Solid	3060A	
480-43956-3	HOHAOC2-A-3	Total/NA	Solid	3060A	
480-43956-4	HOHAOC2-A-4	Total/NA	Solid	3060A	
480-43956-5	HOHAOC2-A-5	Total/NA	Solid	3060A	
480-43956-6	HOHAOC2-A-6	Total/NA	Solid	3060A	
480-43956-7	HOHAOC2-A-7	Total/NA	Solid	3060A	
480-43956-8	HOHAOC2-A-8	Total/NA	Solid	3060A	
480-43956-9	HOHAOC2-A-9	Total/NA	Solid	3060A	
480-43956-10	HOHAOC2-A-10	Total/NA	Solid	3060A	
480-43956-11	HOHAOC2-A-11	Total/NA	Solid	3060A	
480-43956-12	HOHAOC2-A-12	Total/NA	Solid	3060A	
480-43956-13	HOHAOC2-A-13	Total/NA	Solid	3060A	
480-43956-14	HOHAOC2-B-1	Total/NA	Solid	3060A	
480-43956-15	HOHAOC2-B-2	Total/NA	Solid	3060A	
LCSI 240-97940/11-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 240-97940/10-A	Lab Control Sample	Total/NA	Solid	3060A	
MB 240-97940/9-A	Method Blank	Total/NA	Solid	3060A	

General Chemistry (Continued)

Analysis Batch: 98249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-1	HOHAOC2-A-1	Total/NA	Solid	7196A	97940
480-43956-2	HOHAOC2-A-2	Total/NA	Solid	7196A	97940
480-43956-3	HOHAOC2-A-3	Total/NA	Solid	7196A	97940
480-43956-4	HOHAOC2-A-4	Total/NA	Solid	7196A	97940
480-43956-5	HOHAOC2-A-5	Total/NA	Solid	7196A	97940
480-43956-6	HOHAOC2-A-6	Total/NA	Solid	7196A	97940
480-43956-7	HOHAOC2-A-7	Total/NA	Solid	7196A	97940
480-43956-8	HOHAOC2-A-8	Total/NA	Solid	7196A	97940
480-43956-9	HOHAOC2-A-9	Total/NA	Solid	7196A	97940
480-43956-10	HOHAOC2-A-10	Total/NA	Solid	7196A	97940
480-43956-11	HOHAOC2-A-11	Total/NA	Solid	7196A	97940
480-43956-12	HOHAOC2-A-12	Total/NA	Solid	7196A	97940
480-43956-13	HOHAOC2-A-13	Total/NA	Solid	7196A	97940
480-43956-14	HOHAOC2-B-1	Total/NA	Solid	7196A	97940
480-43956-15	HOHAOC2-B-2	Total/NA	Solid	7196A	97940
LCSI 240-97940/11-A	Lab Control Sample	Total/NA	Solid	7196A	97940
LCSS 240-97940/10-A	Lab Control Sample	Total/NA	Solid	7196A	97940
MB 240-97940/9-A	Method Blank	Total/NA	Solid	7196A	97940

Prep Batch: 98410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-16	HOHAOC2-B-3	Total/NA	Solid	3060A	
480-43956-17	HOHAOC2-B-4	Total/NA	Solid	3060A	
480-43956-18	HOHAOC2-B-5	Total/NA	Solid	3060A	
480-43956-19	HOHAOC2-B-6	Total/NA	Solid	3060A	
480-43956-20	HOHAOC2-B-7	Total/NA	Solid	3060A	
480-43956-21	HOHAOC2-B-8	Total/NA	Solid	3060A	
480-43956-22	HOHAOC2-B-9	Total/NA	Solid	3060A	
480-43956-23	HOHAOC2-B-10	Total/NA	Solid	3060A	
480-43956-24	HOHAOC2-B-11	Total/NA	Solid	3060A	
480-43956-25	HOHAOC2-B-12	Total/NA	Solid	3060A	
LCSI 240-98410/11-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 240-98410/10-A	Lab Control Sample	Total/NA	Solid	3060A	
MB 240-98410/9-A	Method Blank	Total/NA	Solid	3060A	

Analysis Batch: 98550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-16	HOHAOC2-B-3	Total/NA	Solid	7196A	98410
480-43956-17	HOHAOC2-B-4	Total/NA	Solid	7196A	98410
480-43956-18	HOHAOC2-B-5	Total/NA	Solid	7196A	98410
480-43956-19	HOHAOC2-B-6	Total/NA	Solid	7196A	98410
480-43956-20	HOHAOC2-B-7	Total/NA	Solid	7196A	98410
480-43956-21	HOHAOC2-B-8	Total/NA	Solid	7196A	98410
480-43956-22	HOHAOC2-B-9	Total/NA	Solid	7196A	98410
480-43956-23	HOHAOC2-B-10	Total/NA	Solid	7196A	98410
480-43956-24	HOHAOC2-B-11	Total/NA	Solid	7196A	98410
480-43956-25	HOHAOC2-B-12	Total/NA	Solid	7196A	98410
LCSI 240-98410/11-A	Lab Control Sample	Total/NA	Solid	7196A	98410
LCSS 240-98410/10-A	Lab Control Sample	Total/NA	Solid	7196A	98410
MB 240-98410/9-A	Method Blank	Total/NA	Solid	7196A	98410

General Chemistry (Continued)

Analysis Batch: 134264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-1	HOHAOC2-A-1	Total/NA	Solid	Moisture	
480-43956-1 MS	HOHAOC2-A-1 MS	Total/NA	Solid	Moisture	
480-43956-1 MSD	HOHAOC2-A-1 MSD	Total/NA	Solid	Moisture	
480-43956-2	HOHAOC2-A-2	Total/NA	Solid	Moisture	
480-43956-3	HOHAOC2-A-3	Total/NA	Solid	Moisture	
480-43956-4	HOHAOC2-A-4	Total/NA	Solid	Moisture	
480-43956-5	HOHAOC2-A-5	Total/NA	Solid	Moisture	
480-43956-6	HOHAOC2-A-6	Total/NA	Solid	Moisture	
480-43956-7	HOHAOC2-A-7	Total/NA	Solid	Moisture	
480-43956-8	HOHAOC2-A-8	Total/NA	Solid	Moisture	
480-43956-9	HOHAOC2-A-9	Total/NA	Solid	Moisture	
480-43956-10	HOHAOC2-A-10	Total/NA	Solid	Moisture	
480-43956-11	HOHAOC2-A-11	Total/NA	Solid	Moisture	
480-43956-12	HOHAOC2-A-12	Total/NA	Solid	Moisture	
480-43956-13	HOHAOC2-A-13	Total/NA	Solid	Moisture	
480-43956-14	HOHAOC2-B-1	Total/NA	Solid	Moisture	
480-43956-15	HOHAOC2-B-2	Total/NA	Solid	Moisture	
480-43956-16	HOHAOC2-B-3	Total/NA	Solid	Moisture	
480-43956-17	HOHAOC2-B-4	Total/NA	Solid	Moisture	
480-43956-18	HOHAOC2-B-5	Total/NA	Solid	Moisture	
480-43956-19	HOHAOC2-B-6	Total/NA	Solid	Moisture	
480-43956-20	HOHAOC2-B-7	Total/NA	Solid	Moisture	
480-43956-21	HOHAOC2-B-8	Total/NA	Solid	Moisture	
480-43956-22	HOHAOC2-B-9	Total/NA	Solid	Moisture	
480-43956-23	HOHAOC2-B-10	Total/NA	Solid	Moisture	
480-43956-24	HOHAOC2-B-11	Total/NA	Solid	Moisture	
480-43956-25	HOHAOC2-B-12	Total/NA	Solid	Moisture	

Prep Batch: 134334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-1	HOHAOC2-A-1	Total/NA	Solid	9012A	
480-43956-1 MS	HOHAOC2-A-1 MS	Total/NA	Solid	9012A	
480-43956-1 MSD	HOHAOC2-A-1 MSD	Total/NA	Solid	9012A	
480-43956-2	HOHAOC2-A-2	Total/NA	Solid	9012A	
480-43956-3	HOHAOC2-A-3	Total/NA	Solid	9012A	
480-43956-4	HOHAOC2-A-4	Total/NA	Solid	9012A	
480-43956-5	HOHAOC2-A-5	Total/NA	Solid	9012A	
480-43956-6	HOHAOC2-A-6	Total/NA	Solid	9012A	
480-43956-7	HOHAOC2-A-7	Total/NA	Solid	9012A	
480-43956-8	HOHAOC2-A-8	Total/NA	Solid	9012A	
480-43956-9	HOHAOC2-A-9	Total/NA	Solid	9012A	
480-43956-10	HOHAOC2-A-10	Total/NA	Solid	9012A	
480-43956-10 MS	HOHAOC2-A-10	Total/NA	Solid	9012A	
480-43956-11	HOHAOC2-A-11	Total/NA	Solid	9012A	
480-43956-12	HOHAOC2-A-12	Total/NA	Solid	9012A	
480-43956-13	HOHAOC2-A-13	Total/NA	Solid	9012A	
480-43956-14	HOHAOC2-B-1	Total/NA	Solid	9012A	
480-43956-15	HOHAOC2-B-2	Total/NA	Solid	9012A	
LCS 480-134334/1-A ^5	Lab Control Sample	Total/NA	Solid	9012A	
MB 480-134334/2-A	Method Blank	Total/NA	Solid	9012A	

General Chemistry (Continued)

Analysis Batch: 134436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-1	HOHAOC2-A-1	Total/NA	Solid	9012A	134334
480-43956-1 MS	HOHAOC2-A-1 MS	Total/NA	Solid	9012A	134334
480-43956-1 MSD	HOHAOC2-A-1 MSD	Total/NA	Solid	9012A	134334
480-43956-2	HOHAOC2-A-2	Total/NA	Solid	9012A	134334
480-43956-3	HOHAOC2-A-3	Total/NA	Solid	9012A	134334
480-43956-4	HOHAOC2-A-4	Total/NA	Solid	9012A	134334
480-43956-5	HOHAOC2-A-5	Total/NA	Solid	9012A	134334
480-43956-6	HOHAOC2-A-6	Total/NA	Solid	9012A	134334
480-43956-7	HOHAOC2-A-7	Total/NA	Solid	9012A	134334
480-43956-8	HOHAOC2-A-8	Total/NA	Solid	9012A	134334
480-43956-9	HOHAOC2-A-9	Total/NA	Solid	9012A	134334
480-43956-10	HOHAOC2-A-10	Total/NA	Solid	9012A	134334
480-43956-10 MS	HOHAOC2-A-10	Total/NA	Solid	9012A	134334
480-43956-11	HOHAOC2-A-11	Total/NA	Solid	9012A	134334
480-43956-12	HOHAOC2-A-12	Total/NA	Solid	9012A	134334
480-43956-13	HOHAOC2-A-13	Total/NA	Solid	9012A	134334
480-43956-14	HOHAOC2-B-1	Total/NA	Solid	9012A	134334
480-43956-15	HOHAOC2-B-2	Total/NA	Solid	9012A	134334
LCS 480-134334/1-A ^5	Lab Control Sample	Total/NA	Solid	9012A	134334
MB 480-134334/2-A	Method Blank	Total/NA	Solid	9012A	134334

Prep Batch: 134682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-16	HOHAOC2-B-3	Total/NA	Solid	9012A	
480-43956-16 DU	HOHAOC2-B-3	Total/NA	Solid	9012A	
480-43956-17	HOHAOC2-B-4	Total/NA	Solid	9012A	
480-43956-17 MS	HOHAOC2-B-4	Total/NA	Solid	9012A	
480-43956-18	HOHAOC2-B-5	Total/NA	Solid	9012A	
480-43956-19	HOHAOC2-B-6	Total/NA	Solid	9012A	
480-43956-20	HOHAOC2-B-7	Total/NA	Solid	9012A	
480-43956-21	HOHAOC2-B-8	Total/NA	Solid	9012A	
480-43956-22	HOHAOC2-B-9	Total/NA	Solid	9012A	
480-43956-23	HOHAOC2-B-10	Total/NA	Solid	9012A	
480-43956-24	HOHAOC2-B-11	Total/NA	Solid	9012A	
480-43956-24 MS	HOHAOC2-B-11	Total/NA	Solid	9012A	
480-43956-25	HOHAOC2-B-12	Total/NA	Solid	9012A	
LCS 480-134682/1-A ^5	Lab Control Sample	Total/NA	Solid	9012A	
MB 480-134682/2-A	Method Blank	Total/NA	Solid	9012A	

Analysis Batch: 134753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-16	HOHAOC2-B-3	Total/NA	Solid	9012A	134682
480-43956-16 DU	HOHAOC2-B-3	Total/NA	Solid	9012A	134682
480-43956-17	HOHAOC2-B-4	Total/NA	Solid	9012A	134682
480-43956-17 MS	HOHAOC2-B-4	Total/NA	Solid	9012A	134682
480-43956-18	HOHAOC2-B-5	Total/NA	Solid	9012A	134682
480-43956-19	HOHAOC2-B-6	Total/NA	Solid	9012A	134682
480-43956-20	HOHAOC2-B-7	Total/NA	Solid	9012A	134682
480-43956-21	HOHAOC2-B-8	Total/NA	Solid	9012A	134682
480-43956-22	HOHAOC2-B-9	Total/NA	Solid	9012A	134682
480-43956-23	HOHAOC2-B-10	Total/NA	Solid	9012A	134682

General Chemistry (Continued)

Analysis Batch: 134753 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-24	HOHAOC2-B-11	Total/NA	Solid	9012A	134682
480-43956-24 MS	HOHAOC2-B-11	Total/NA	Solid	9012A	134682
480-43956-25	HOHAOC2-B-12	Total/NA	Solid	9012A	134682
LCS 480-134682/1-A ^5	Lab Control Sample	Total/NA	Solid	9012A	134682
MB 480-134682/2-A	Method Blank	Total/NA	Solid	9012A	134682

Analysis Batch: 135406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-43956-1	HOHAOC2-A-1	Total/NA	Solid	SM 3500 CR D	
480-43956-2	HOHAOC2-A-2	Total/NA	Solid	SM 3500 CR D	
480-43956-3	HOHAOC2-A-3	Total/NA	Solid	SM 3500 CR D	
480-43956-4	HOHAOC2-A-4	Total/NA	Solid	SM 3500 CR D	
480-43956-5	HOHAOC2-A-5	Total/NA	Solid	SM 3500 CR D	
480-43956-6	HOHAOC2-A-6	Total/NA	Solid	SM 3500 CR D	
480-43956-7	HOHAOC2-A-7	Total/NA	Solid	SM 3500 CR D	
480-43956-8	HOHAOC2-A-8	Total/NA	Solid	SM 3500 CR D	
480-43956-9	HOHAOC2-A-9	Total/NA	Solid	SM 3500 CR D	
480-43956-10	HOHAOC2-A-10	Total/NA	Solid	SM 3500 CR D	
480-43956-11	HOHAOC2-A-11	Total/NA	Solid	SM 3500 CR D	
480-43956-12	HOHAOC2-A-12	Total/NA	Solid	SM 3500 CR D	
480-43956-13	HOHAOC2-A-13	Total/NA	Solid	SM 3500 CR D	
480-43956-14	HOHAOC2-B-1	Total/NA	Solid	SM 3500 CR D	
480-43956-15	HOHAOC2-B-2	Total/NA	Solid	SM 3500 CR D	
480-43956-16	HOHAOC2-B-3	Total/NA	Solid	SM 3500 CR D	
480-43956-17	HOHAOC2-B-4	Total/NA	Solid	SM 3500 CR D	
480-43956-18	HOHAOC2-B-5	Total/NA	Solid	SM 3500 CR D	
480-43956-19	HOHAOC2-B-6	Total/NA	Solid	SM 3500 CR D	
480-43956-20	HOHAOC2-B-7	Total/NA	Solid	SM 3500 CR D	
480-43956-21	HOHAOC2-B-8	Total/NA	Solid	SM 3500 CR D	
480-43956-22	HOHAOC2-B-9	Total/NA	Solid	SM 3500 CR D	
480-43956-23	HOHAOC2-B-10	Total/NA	Solid	SM 3500 CR D	
480-43956-24	HOHAOC2-B-11	Total/NA	Solid	SM 3500 CR D	
480-43956-25	HOHAOC2-B-12	Total/NA	Solid	SM 3500 CR D	

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-A-1

Lab Sample ID: 480-43956-1

Date Collected: 08/13/13 13:30
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 98.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134276	08/16/13 01:11	CDC	TAL BUF
Total/NA	Analysis	8260B		1	134263	08/16/13 02:58	PJQ	TAL BUF
Total/NA	Prep	3550B			134548	08/17/13 07:48	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134659	08/19/13 19:18	ANM	TAL BUF
Total/NA	Prep	3550B			134546	08/17/13 07:39	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134647	08/19/13 10:43	LMW	TAL BUF
Total/NA	Prep	3550B			134465	08/19/13 14:38	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 05:21	JMM	TAL BUF
Total/NA	Prep	8151A			134831	08/20/13 07:41	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 04:39	JAD	TAL BUF
Total/NA	Prep	7471A			134361	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 12:45	JRK	TAL BUF
Total/NA	Prep	3050B			134366	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	135080	08/20/13 21:32	LMH	TAL BUF
Total/NA	Prep	3060A			97940	08/19/13 07:10	KMG	TAL CAN
Total/NA	Analysis	7196A		1	98249	08/20/13 14:51	KMG	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 22:50	GTG	TAL BUF
Total/NA	Prep	9012A			134334	08/16/13 06:40	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134436	08/16/13 12:32	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Client Sample ID: HOHAOC2-A-2

Lab Sample ID: 480-43956-2

Date Collected: 08/13/13 15:00
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134276	08/16/13 01:11	CDC	TAL BUF
Total/NA	Analysis	8260B		1	134263	08/16/13 03:24	PJQ	TAL BUF
Total/NA	Prep	3550B			134548	08/17/13 07:48	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134659	08/19/13 19:42	ANM	TAL BUF
Total/NA	Prep	3550B			134546	08/17/13 07:39	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134647	08/19/13 11:01	LMW	TAL BUF
Total/NA	Prep	3550B			134465	08/19/13 14:38	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 05:35	JMM	TAL BUF
Total/NA	Prep	8151A			134831	08/20/13 07:41	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 05:09	JAD	TAL BUF
Total/NA	Prep	7471A			134361	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 12:56	JRK	TAL BUF
Total/NA	Prep	3050B			134366	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	135080	08/20/13 21:48	LMH	TAL BUF
Total/NA	Prep	3060A			97940	08/19/13 07:10	KMG	TAL CAN
Total/NA	Analysis	7196A		1	98249	08/20/13 13:12	KMG	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF

Client Sample ID: HOHAOC2-A-2

Lab Sample ID: 480-43956-2

Date Collected: 08/13/13 15:00
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9012A			134334	08/16/13 06:40	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134436	08/16/13 12:34	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Client Sample ID: HOHAOC2-A-3

Lab Sample ID: 480-43956-3

Date Collected: 08/13/13 15:20
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134276	08/16/13 01:11	CDC	TAL BUF
Total/NA	Analysis	8260B		1	134263	08/16/13 03:49	PJQ	TAL BUF
Total/NA	Prep	3550B			134548	08/17/13 07:48	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134659	08/19/13 20:06	ANM	TAL BUF
Total/NA	Prep	3550B			134546	08/17/13 07:39	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134647	08/19/13 11:18	LMW	TAL BUF
Total/NA	Prep	3550B			134465	08/19/13 14:38	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 05:50	JMM	TAL BUF
Total/NA	Prep	8151A			134831	08/20/13 07:41	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 05:39	JAD	TAL BUF
Total/NA	Prep	7471A			134361	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 12:58	JRK	TAL BUF
Total/NA	Prep	3050B			134366	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	135080	08/20/13 21:50	LMH	TAL BUF
Total/NA	Prep	3060A			97940	08/19/13 07:10	KMG	TAL CAN
Total/NA	Analysis	7196A		1	98249	08/20/13 13:14	KMG	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF
Total/NA	Prep	9012A			134334	08/16/13 06:40	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134436	08/16/13 12:35	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Client Sample ID: HOHAOC2-A-4

Lab Sample ID: 480-43956-4

Date Collected: 08/13/13 15:40
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 95.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134276	08/16/13 01:11	CDC	TAL BUF
Total/NA	Analysis	8260B		1	134263	08/16/13 04:14	PJQ	TAL BUF
Total/NA	Prep	3550B			134548	08/17/13 07:48	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134659	08/19/13 20:30	ANM	TAL BUF
Total/NA	Prep	3550B			134546	08/17/13 07:39	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134647	08/19/13 11:36	LMW	TAL BUF
Total/NA	Prep	3550B			134465	08/19/13 14:38	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 06:05	JMM	TAL BUF

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-A-4

Lab Sample ID: 480-43956-4

Date Collected: 08/13/13 15:40
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 95.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			134831	08/20/13 07:41	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 06:08	JAD	TAL BUF
Total/NA	Prep	7471A			134361	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 13:00	JRK	TAL BUF
Total/NA	Prep	3050B			134366	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	135080	08/20/13 21:52	LMH	TAL BUF
Total/NA	Prep	3060A			97940	08/19/13 07:10	KMG	TAL CAN
Total/NA	Analysis	7196A		1	98249	08/20/13 14:52	KMG	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF
Total/NA	Prep	9012A			134334	08/16/13 06:40	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134436	08/16/13 12:36	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Client Sample ID: HOHAOC2-A-5

Lab Sample ID: 480-43956-5

Date Collected: 08/13/13 16:00
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134276	08/16/13 01:11	CDC	TAL BUF
Total/NA	Analysis	8260B		1	134263	08/16/13 04:40	PJQ	TAL BUF
Total/NA	Prep	3550B			134548	08/17/13 07:48	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134659	08/19/13 20:55	ANM	TAL BUF
Total/NA	Prep	3550B			134546	08/17/13 07:39	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134647	08/19/13 11:53	LMW	TAL BUF
Total/NA	Prep	3550B			134465	08/19/13 14:38	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 06:20	JMM	TAL BUF
Total/NA	Prep	8151A			134831	08/20/13 07:41	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 06:38	JAD	TAL BUF
Total/NA	Prep	7471A			134361	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 13:01	JRK	TAL BUF
Total/NA	Prep	3050B			134366	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	135080	08/20/13 21:54	LMH	TAL BUF
Total/NA	Prep	3060A			97940	08/19/13 07:10	KMG	TAL CAN
Total/NA	Analysis	7196A		1	98249	08/20/13 13:28	KMG	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF
Total/NA	Prep	9012A			134334	08/16/13 06:40	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134436	08/16/13 12:37	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Client Sample ID: HOHAOC2-A-6

Lab Sample ID: 480-43956-6

Date Collected: 08/13/13 16:20

Matrix: Solid

Date Received: 08/15/13 09:00

Percent Solids: 97.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134276	08/16/13 01:11	CDC	TAL BUF
Total/NA	Analysis	8260B		1	134263	08/16/13 05:05	PJQ	TAL BUF
Total/NA	Prep	3550B			134548	08/17/13 07:48	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134659	08/19/13 21:19	ANM	TAL BUF
Total/NA	Prep	3550B			134546	08/17/13 07:39	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134647	08/19/13 12:11	LMW	TAL BUF
Total/NA	Prep	3550B			134465	08/19/13 14:38	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 07:04	JMM	TAL BUF
Total/NA	Prep	8151A			134831	08/20/13 07:41	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 07:07	JAD	TAL BUF
Total/NA	Prep	7471A			134361	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 13:03	JRK	TAL BUF
Total/NA	Prep	3050B			134366	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	135080	08/20/13 21:57	LMH	TAL BUF
Total/NA	Prep	3060A			97940	08/19/13 07:10	KMG	TAL CAN
Total/NA	Analysis	7196A		1	98249	08/20/13 14:52	KMG	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF
Total/NA	Prep	9012A			134334	08/16/13 06:40	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134436	08/16/13 12:38	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Client Sample ID: HOHAOC2-A-7

Lab Sample ID: 480-43956-7

Date Collected: 08/13/13 16:40

Matrix: Solid

Date Received: 08/15/13 09:00

Percent Solids: 97.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134276	08/16/13 01:11	CDC	TAL BUF
Total/NA	Analysis	8260B		1	134263	08/16/13 05:31	PJQ	TAL BUF
Total/NA	Prep	3550B			134548	08/17/13 07:48	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134724	08/20/13 09:03	ANM	TAL BUF
Total/NA	Prep	3550B			134546	08/17/13 07:39	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134647	08/19/13 13:42	LMW	TAL BUF
Total/NA	Prep	3550B			134465	08/19/13 14:38	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 07:19	JMM	TAL BUF
Total/NA	Prep	8151A			134831	08/20/13 07:41	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 08:07	JAD	TAL BUF
Total/NA	Prep	7471A			134361	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 13:05	JRK	TAL BUF
Total/NA	Prep	3050B			134366	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	135080	08/20/13 21:59	LMH	TAL BUF
Total/NA	Prep	3060A			97940	08/19/13 07:10	KMG	TAL CAN
Total/NA	Analysis	7196A		1	98249	08/20/13 13:35	KMG	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF

Client Sample ID: HOHAOC2-A-7

Lab Sample ID: 480-43956-7

Date Collected: 08/13/13 16:40
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9012A			134334	08/16/13 06:40	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134436	08/16/13 12:40	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Client Sample ID: HOHAOC2-A-8

Lab Sample ID: 480-43956-8

Date Collected: 08/13/13 17:00
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134276	08/16/13 01:11	CDC	TAL BUF
Total/NA	Analysis	8260B		1	134263	08/16/13 05:56	PJQ	TAL BUF
Total/NA	Prep	3550B			134548	08/17/13 07:48	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134724	08/20/13 01:06	ANM	TAL BUF
Total/NA	Prep	3550B			134546	08/17/13 07:39	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134647	08/19/13 13:59	LMW	TAL BUF
Total/NA	Prep	3550B			134465	08/19/13 14:38	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 07:34	JMM	TAL BUF
Total/NA	Prep	8151A			134831	08/20/13 07:41	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 08:36	JAD	TAL BUF
Total/NA	Prep	7471A			134361	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 13:07	JRK	TAL BUF
Total/NA	Prep	3050B			134366	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	135080	08/20/13 22:01	LMH	TAL BUF
Total/NA	Prep	3060A			97940	08/19/13 07:10	KMG	TAL CAN
Total/NA	Analysis	7196A		1	98249	08/20/13 14:52	KMG	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF
Total/NA	Prep	9012A			134334	08/16/13 06:40	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134436	08/16/13 12:41	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Client Sample ID: HOHAOC2-A-9

Lab Sample ID: 480-43956-9

Date Collected: 08/13/13 17:20
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134276	08/16/13 01:11	CDC	TAL BUF
Total/NA	Analysis	8260B		1	134263	08/16/13 06:22	PJQ	TAL BUF
Total/NA	Prep	3550B			134548	08/17/13 07:48	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134724	08/20/13 01:31	ANM	TAL BUF
Total/NA	Prep	3550B			134546	08/17/13 07:39	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134647	08/19/13 14:17	LMW	TAL BUF
Total/NA	Prep	3550B			134465	08/19/13 14:38	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 07:48	JMM	TAL BUF

Client Sample ID: HOHAOC2-A-9

Lab Sample ID: 480-43956-9

Date Collected: 08/13/13 17:20

Matrix: Solid

Date Received: 08/15/13 09:00

Percent Solids: 97.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			134831	08/20/13 07:41	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 09:06	JAD	TAL BUF
Total/NA	Prep	7471A			134361	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 13:08	JRK	TAL BUF
Total/NA	Prep	3050B			134366	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	135080	08/20/13 22:03	LMH	TAL BUF
Total/NA	Prep	3060A			97940	08/19/13 07:10	KMG	TAL CAN
Total/NA	Analysis	7196A		1	98249	08/20/13 13:49	KMG	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF
Total/NA	Prep	9012A			134334	08/16/13 06:40	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134436	08/16/13 12:42	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Client Sample ID: HOHAOC2-A-10

Lab Sample ID: 480-43956-10

Date Collected: 08/13/13 17:40

Matrix: Solid

Date Received: 08/15/13 09:00

Percent Solids: 97.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134276	08/16/13 01:11	CDC	TAL BUF
Total/NA	Analysis	8260B		1	134263	08/16/13 06:47	PJQ	TAL BUF
Total/NA	Prep	3550B			134548	08/17/13 07:48	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134724	08/20/13 01:56	ANM	TAL BUF
Total/NA	Prep	3550B			134546	08/17/13 07:39	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134647	08/19/13 14:34	LMW	TAL BUF
Total/NA	Prep	3550B			134465	08/19/13 14:38	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 08:03	JMM	TAL BUF
Total/NA	Prep	8151A			134831	08/20/13 07:41	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 09:35	JAD	TAL BUF
Total/NA	Prep	7471A			134361	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 13:15	JRK	TAL BUF
Total/NA	Prep	3050B			134366	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	135080	08/20/13 22:10	LMH	TAL BUF
Total/NA	Prep	3060A			97940	08/19/13 07:10	KMG	TAL CAN
Total/NA	Analysis	7196A		1	98249	08/20/13 14:53	KMG	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF
Total/NA	Prep	9012A			134334	08/16/13 06:40	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134436	08/16/13 12:43	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-A-11

Lab Sample ID: 480-43956-11

Date Collected: 08/13/13 18:00
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134276	08/16/13 01:11	CDC	TAL BUF
Total/NA	Analysis	8260B		1	134263	08/16/13 07:13	PJQ	TAL BUF
Total/NA	Prep	3550B			134548	08/17/13 07:48	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134724	08/20/13 02:20	ANM	TAL BUF
Total/NA	Prep	3550B			134546	08/17/13 07:39	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134647	08/19/13 14:52	LMW	TAL BUF
Total/NA	Prep	3550B			134465	08/19/13 14:38	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 08:18	JMM	TAL BUF
Total/NA	Prep	8151A			134831	08/20/13 07:41	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 10:05	JAD	TAL BUF
Total/NA	Prep	7471A			134361	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 13:17	JRK	TAL BUF
Total/NA	Prep	3050B			134366	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	135080	08/20/13 22:12	LMH	TAL BUF
Total/NA	Prep	3060A			97940	08/19/13 07:10	KMG	TAL CAN
Total/NA	Analysis	7196A		1	98249	08/20/13 13:56	KMG	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF
Total/NA	Prep	9012A			134334	08/16/13 06:40	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134436	08/16/13 12:45	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Client Sample ID: HOHAOC2-A-12

Lab Sample ID: 480-43956-12

Date Collected: 08/13/13 18:20
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134395	08/16/13 11:49	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	134369	08/16/13 15:00	PJQ	TAL BUF
Total/NA	Prep	3550B			134548	08/17/13 07:48	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134724	08/20/13 02:45	ANM	TAL BUF
Total/NA	Prep	3550B			134546	08/17/13 07:39	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134647	08/19/13 15:09	LMW	TAL BUF
Total/NA	Prep	3550B			134465	08/19/13 14:38	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 08:33	JMM	TAL BUF
Total/NA	Prep	8151A			134831	08/20/13 07:41	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 10:35	JAD	TAL BUF
Total/NA	Prep	7471A			134361	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 13:18	JRK	TAL BUF
Total/NA	Prep	3050B			134366	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	135080	08/20/13 22:14	LMH	TAL BUF
Total/NA	Prep	3060A			97940	08/19/13 07:10	KMG	TAL CAN
Total/NA	Analysis	7196A		1	98249	08/20/13 14:36	KMG	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF

Client Sample ID: HOHAOC2-A-12

Lab Sample ID: 480-43956-12

Date Collected: 08/13/13 18:20

Matrix: Solid

Date Received: 08/15/13 09:00

Percent Solids: 97.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9012A			134334	08/16/13 06:40	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134436	08/16/13 12:46	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Client Sample ID: HOHAOC2-A-13

Lab Sample ID: 480-43956-13

Date Collected: 08/13/13 18:40

Matrix: Solid

Date Received: 08/15/13 09:00

Percent Solids: 97.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134276	08/16/13 01:11	CDC	TAL BUF
Total/NA	Analysis	8260B		1	134263	08/16/13 08:04	PJQ	TAL BUF
Total/NA	Prep	3550B			134548	08/17/13 07:48	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134724	08/20/13 03:09	ANM	TAL BUF
Total/NA	Prep	3550B			134546	08/17/13 07:39	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134647	08/19/13 15:27	LMW	TAL BUF
Total/NA	Prep	3550B			134465	08/19/13 14:38	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 08:47	JMM	TAL BUF
Total/NA	Prep	8151A			134837	08/20/13 08:01	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 13:33	JAD	TAL BUF
Total/NA	Prep	7471A			134361	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 13:20	JRK	TAL BUF
Total/NA	Prep	3050B			134366	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	135080	08/20/13 22:17	LMH	TAL BUF
Total/NA	Prep	3060A			97940	08/19/13 07:10	KMG	TAL CAN
Total/NA	Analysis	7196A		1	98249	08/20/13 14:38	KMG	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF
Total/NA	Prep	9012A			134334	08/16/13 06:40	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134436	08/16/13 12:47	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Client Sample ID: HOHAOC2-B-1

Lab Sample ID: 480-43956-14

Date Collected: 08/14/13 11:30

Matrix: Solid

Date Received: 08/15/13 09:00

Percent Solids: 98.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134276	08/16/13 01:11	CDC	TAL BUF
Total/NA	Analysis	8260B		1	134263	08/16/13 08:30	PJQ	TAL BUF
Total/NA	Prep	3550B			134548	08/17/13 07:49	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134724	08/20/13 03:34	ANM	TAL BUF
Total/NA	Prep	3550B			134547	08/17/13 07:43	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134645	08/19/13 10:12	LMW	TAL BUF
Total/NA	Prep	3550B			134469	08/19/13 14:47	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 10:31	JMM	TAL BUF

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Client Sample ID: HOHAOC2-B-1

Lab Sample ID: 480-43956-14

Date Collected: 08/14/13 11:30
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 98.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			134837	08/20/13 08:01	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 14:02	JAD	TAL BUF
Total/NA	Prep	7471A			134361	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 13:22	JRK	TAL BUF
Total/NA	Prep	3050B			134366	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	135080	08/20/13 22:19	LMH	TAL BUF
Total/NA	Prep	3060A			97940	08/19/13 07:10	KMG	TAL CAN
Total/NA	Analysis	7196A		1	98249	08/20/13 14:54	KMG	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF
Total/NA	Prep	9012A			134334	08/16/13 06:40	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134436	08/16/13 12:47	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Client Sample ID: HOHAOC2-B-2

Lab Sample ID: 480-43956-15

Date Collected: 08/14/13 11:40
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 98.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134276	08/16/13 01:11	CDC	TAL BUF
Total/NA	Analysis	8260B		1	134263	08/16/13 08:55	PJQ	TAL BUF
Total/NA	Prep	3550B			134548	08/17/13 07:49	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134724	08/20/13 03:59	ANM	TAL BUF
Total/NA	Prep	3550B			134547	08/17/13 07:43	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134645	08/19/13 10:31	LMW	TAL BUF
Total/NA	Prep	3550B			134469	08/19/13 14:47	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 10:46	JMM	TAL BUF
Total/NA	Prep	8151A			134837	08/20/13 08:01	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 14:32	JAD	TAL BUF
Total/NA	Prep	7471A			134361	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 13:23	JRK	TAL BUF
Total/NA	Prep	3050B			134366	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	135080	08/20/13 22:21	LMH	TAL BUF
Total/NA	Prep	3060A			97940	08/19/13 07:10	KMG	TAL CAN
Total/NA	Analysis	7196A		1	98249	08/20/13 14:54	KMG	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF
Total/NA	Prep	9012A			134334	08/16/13 06:40	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134436	08/16/13 12:48	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Client Sample ID: HOHAOC2-B-3

Lab Sample ID: 480-43956-16

Date Collected: 08/14/13 11:50

Matrix: Solid

Date Received: 08/15/13 09:00

Percent Solids: 98.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134276	08/16/13 01:11	CDC	TAL BUF
Total/NA	Analysis	8260B		1	134263	08/16/13 09:21	PJQ	TAL BUF
Total/NA	Prep	3550B			134548	08/17/13 07:49	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134724	08/20/13 04:23	ANM	TAL BUF
Total/NA	Prep	3550B			134547	08/17/13 07:43	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134645	08/19/13 10:49	LMW	TAL BUF
Total/NA	Prep	3550B			134469	08/19/13 14:47	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 11:01	JMM	TAL BUF
Total/NA	Prep	8151A			134837	08/20/13 08:01	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 15:01	JAD	TAL BUF
Total/NA	Prep	7471A			134361	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 13:25	JRK	TAL BUF
Total/NA	Prep	3050B			134366	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	135080	08/20/13 22:23	LMH	TAL BUF
Total/NA	Prep	3060A			98410	08/21/13 13:55	RPP	TAL CAN
Total/NA	Analysis	7196A		1	98550	08/22/13 12:01	RPP	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF
Total/NA	Prep	9012A			134682	08/19/13 06:45	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134753	08/19/13 15:19	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Client Sample ID: HOHAOC2-B-4

Lab Sample ID: 480-43956-17

Date Collected: 08/14/13 12:00

Matrix: Solid

Date Received: 08/15/13 09:00

Percent Solids: 96.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134679	08/19/13 10:15	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	134731	08/19/13 18:56	PJQ	TAL BUF
Total/NA	Prep	3550B			134554	08/17/13 08:42	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134659	08/19/13 13:37	ANM	TAL BUF
Total/NA	Prep	3550B			134547	08/17/13 07:43	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134645	08/19/13 11:07	LMW	TAL BUF
Total/NA	Prep	3550B			134469	08/19/13 14:47	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 11:15	JMM	TAL BUF
Total/NA	Prep	8151A			134837	08/20/13 08:01	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 15:31	JAD	TAL BUF
Total/NA	Prep	7471A			134361	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 13:27	JRK	TAL BUF
Total/NA	Prep	3050B			134366	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	135080	08/20/13 22:26	LMH	TAL BUF
Total/NA	Prep	3060A			98410	08/21/13 13:55	RPP	TAL CAN
Total/NA	Analysis	7196A		1	98550	08/22/13 11:20	RPP	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF

Client Sample ID: HOHAOC2-B-4

Lab Sample ID: 480-43956-17

Date Collected: 08/14/13 12:00
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 96.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9012A			134682	08/19/13 06:45	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134753	08/19/13 15:21	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Client Sample ID: HOHAOC2-B-5

Lab Sample ID: 480-43956-18

Date Collected: 08/14/13 12:10
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 97.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134395	08/16/13 11:49	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	134369	08/16/13 15:51	PJQ	TAL BUF
Total/NA	Prep	3550B			134554	08/17/13 08:42	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134659	08/19/13 14:26	ANM	TAL BUF
Total/NA	Prep	3550B			134547	08/17/13 07:43	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134645	08/19/13 11:24	LMW	TAL BUF
Total/NA	Prep	3550B			134469	08/19/13 14:47	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 11:30	JMM	TAL BUF
Total/NA	Prep	8151A			134837	08/20/13 08:01	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 16:01	JAD	TAL BUF
Total/NA	Prep	7471A			134361	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 13:28	JRK	TAL BUF
Total/NA	Prep	3050B			134366	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	135080	08/20/13 22:28	LMH	TAL BUF
Total/NA	Prep	3060A			98410	08/21/13 13:55	RPP	TAL CAN
Total/NA	Analysis	7196A		1	98550	08/22/13 11:23	RPP	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF
Total/NA	Prep	9012A			134682	08/19/13 06:45	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134753	08/19/13 15:23	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Client Sample ID: HOHAOC2-B-6

Lab Sample ID: 480-43956-19

Date Collected: 08/14/13 12:20
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 96.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134395	08/16/13 11:49	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	134369	08/16/13 16:17	PJQ	TAL BUF
Total/NA	Prep	3550B			134554	08/17/13 08:42	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134659	08/19/13 14:51	ANM	TAL BUF
Total/NA	Prep	3550B			134547	08/17/13 07:43	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134645	08/19/13 11:42	LMW	TAL BUF
Total/NA	Prep	3550B			134469	08/19/13 14:47	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 11:45	JMM	TAL BUF

Client Sample ID: HOHAOC2-B-6

Lab Sample ID: 480-43956-19

Date Collected: 08/14/13 12:20

Matrix: Solid

Date Received: 08/15/13 09:00

Percent Solids: 96.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			134837	08/20/13 08:01	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 17:00	JAD	TAL BUF
Total/NA	Prep	7471A			134361	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 13:30	JRK	TAL BUF
Total/NA	Prep	3050B			134366	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	135080	08/20/13 22:30	LMH	TAL BUF
Total/NA	Prep	3060A			98410	08/21/13 13:55	RPP	TAL CAN
Total/NA	Analysis	7196A		1	98550	08/22/13 11:24	RPP	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF
Total/NA	Prep	9012A			134682	08/19/13 06:45	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134753	08/19/13 15:23	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Client Sample ID: HOHAOC2-B-7

Lab Sample ID: 480-43956-20

Date Collected: 08/14/13 12:30

Matrix: Solid

Date Received: 08/15/13 09:00

Percent Solids: 97.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134395	08/16/13 11:49	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	134369	08/16/13 16:43	PJQ	TAL BUF
Total/NA	Prep	3550B			134554	08/17/13 08:42	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134659	08/19/13 15:15	ANM	TAL BUF
Total/NA	Prep	3550B			134547	08/17/13 07:43	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134645	08/19/13 12:00	LMW	TAL BUF
Total/NA	Prep	3550B			134469	08/19/13 14:47	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 12:29	JMM	TAL BUF
Total/NA	Prep	8151A			134837	08/20/13 08:01	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 17:29	JAD	TAL BUF
Total/NA	Prep	7471A			134361	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 13:36	JRK	TAL BUF
Total/NA	Prep	3050B			134366	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	135080	08/20/13 22:37	LMH	TAL BUF
Total/NA	Prep	3060A			98410	08/21/13 13:55	RPP	TAL CAN
Total/NA	Analysis	7196A		1	98550	08/22/13 12:02	RPP	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF
Total/NA	Prep	9012A			134682	08/19/13 06:45	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134753	08/19/13 15:24	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Client Sample ID: HOHAOC2-B-8

Lab Sample ID: 480-43956-21

Date Collected: 08/14/13 12:40

Matrix: Solid

Date Received: 08/15/13 09:00

Percent Solids: 98.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134395	08/16/13 11:49	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	134369	08/16/13 17:08	PJQ	TAL BUF
Total/NA	Prep	3550B			134554	08/17/13 08:42	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134659	08/19/13 15:39	ANM	TAL BUF
Total/NA	Prep	3550B			134547	08/17/13 07:43	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134645	08/19/13 13:46	LMW	TAL BUF
Total/NA	Prep	3550B			134469	08/19/13 14:47	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 12:44	JMM	TAL BUF
Total/NA	Prep	8151A			134837	08/20/13 08:01	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 17:59	JAD	TAL BUF
Total/NA	Prep	7471A			134350	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 12:23	JRK	TAL BUF
Total/NA	Prep	3050B			134367	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	134822	08/20/13 02:19	LMH	TAL BUF
Total/NA	Analysis	6010B		1	135237	08/21/13 14:23	MDM	TAL BUF
Total/NA	Prep	3060A			98410	08/21/13 13:55	RPP	TAL CAN
Total/NA	Analysis	7196A		1	98550	08/22/13 11:40	RPP	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF
Total/NA	Prep	9012A			134682	08/19/13 06:45	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134753	08/19/13 15:25	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Client Sample ID: HOHAOC2-B-9

Lab Sample ID: 480-43956-22

Date Collected: 08/14/13 12:50

Matrix: Solid

Date Received: 08/15/13 09:00

Percent Solids: 98.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134679	08/19/13 10:15	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	134731	08/19/13 19:22	PJQ	TAL BUF
Total/NA	Prep	3550B			134554	08/17/13 08:42	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134659	08/19/13 16:04	ANM	TAL BUF
Total/NA	Prep	3550B			134547	08/17/13 07:43	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134645	08/19/13 14:04	LMW	TAL BUF
Total/NA	Prep	3550B			134469	08/19/13 14:47	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 13:00	JMM	TAL BUF
Total/NA	Prep	8151A			134837	08/20/13 08:01	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 18:29	JAD	TAL BUF
Total/NA	Prep	7471A			134350	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 12:25	JRK	TAL BUF
Total/NA	Prep	3050B			134367	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	134822	08/20/13 02:22	LMH	TAL BUF
Total/NA	Analysis	6010B		1	135237	08/21/13 14:26	MDM	TAL BUF
Total/NA	Prep	3060A			98410	08/21/13 13:55	RPP	TAL CAN

Client Sample ID: HOHAOC2-B-9

Lab Sample ID: 480-43956-22

Date Collected: 08/14/13 12:50
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 98.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1	98550	08/22/13 11:43	RPP	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF
Total/NA	Prep	9012A			134682	08/19/13 06:45	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134753	08/19/13 15:28	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Client Sample ID: HOHAOC2-B-10

Lab Sample ID: 480-43956-23

Date Collected: 08/14/13 13:00
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 99.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134395	08/16/13 11:49	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	134369	08/16/13 18:00	PJQ	TAL BUF
Total/NA	Prep	3550B			134554	08/17/13 08:42	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134659	08/19/13 16:28	ANM	TAL BUF
Total/NA	Prep	3550B			134547	08/17/13 07:43	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134645	08/19/13 14:21	LMW	TAL BUF
Total/NA	Prep	3550B			134469	08/19/13 14:47	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 13:15	JMM	TAL BUF
Total/NA	Prep	8151A			134837	08/20/13 08:01	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 18:58	JAD	TAL BUF
Total/NA	Prep	7471A			134350	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 12:30	JRK	TAL BUF
Total/NA	Prep	3050B			134367	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	134822	08/20/13 02:24	LMH	TAL BUF
Total/NA	Analysis	6010B		1	135237	08/21/13 14:28	MDM	TAL BUF
Total/NA	Prep	3060A			98410	08/21/13 13:55	RPP	TAL CAN
Total/NA	Analysis	7196A		1	98550	08/22/13 11:44	RPP	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF
Total/NA	Prep	9012A			134682	08/19/13 06:45	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134753	08/19/13 15:29	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Client Sample ID: HOHAOC2-B-11

Lab Sample ID: 480-43956-24

Date Collected: 08/14/13 13:10
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 98.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134395	08/16/13 11:49	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	134369	08/16/13 18:25	PJQ	TAL BUF
Total/NA	Prep	3550B			134554	08/17/13 08:42	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134659	08/19/13 16:52	ANM	TAL BUF
Total/NA	Prep	3550B			134547	08/17/13 07:43	DLE	TAL BUF

Client Sample ID: HOHAOC2-B-11

Lab Sample ID: 480-43956-24

Date Collected: 08/14/13 13:10
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 98.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8081A		1	134645	08/19/13 14:39	LMW	TAL BUF
Total/NA	Prep	3550B			134469	08/19/13 14:47	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 13:29	JMM	TAL BUF
Total/NA	Prep	8151A			134837	08/20/13 08:01	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 19:28	JAD	TAL BUF
Total/NA	Prep	7471A			134350	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 12:32	JRK	TAL BUF
Total/NA	Analysis	6010B		1	134822	08/20/13 02:27	LMH	TAL BUF
Total/NA	Prep	3050B			134367	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	135237	08/21/13 14:31	MDM	TAL BUF
Total/NA	Prep	3060A			98410	08/21/13 13:55	RPP	TAL CAN
Total/NA	Analysis	7196A		1	98550	08/22/13 11:54	RPP	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF
Total/NA	Prep	9012A			134682	08/19/13 06:45	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134753	08/19/13 15:30	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Client Sample ID: HOHAOC2-B-12

Lab Sample ID: 480-43956-25

Date Collected: 08/14/13 13:20
Matrix: Solid
Date Received: 08/15/13 09:00
Percent Solids: 98.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			134395	08/16/13 11:49	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	134369	08/16/13 18:51	PJQ	TAL BUF
Total/NA	Prep	3550B			134554	08/17/13 08:42	DLE	TAL BUF
Total/NA	Analysis	8270C		1	134659	08/19/13 17:16	ANM	TAL BUF
Total/NA	Prep	3550B			134547	08/17/13 07:43	DLE	TAL BUF
Total/NA	Analysis	8081A		1	134645	08/19/13 14:57	LMW	TAL BUF
Total/NA	Prep	3550B			134469	08/19/13 14:47	TRG	TAL BUF
Total/NA	Analysis	8082		1	134799	08/20/13 13:44	JMM	TAL BUF
Total/NA	Prep	8151A			134837	08/20/13 08:01	CAM	TAL BUF
Total/NA	Analysis	8151A		1	135266	08/22/13 19:58	JAD	TAL BUF
Total/NA	Prep	7471A			134350	08/16/13 10:05	JRK	TAL BUF
Total/NA	Analysis	7471A		1	134449	08/16/13 12:34	JRK	TAL BUF
Total/NA	Analysis	6010B		1	134822	08/20/13 02:30	LMH	TAL BUF
Total/NA	Prep	3050B			134367	08/16/13 13:30	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	135237	08/21/13 14:34	MDM	TAL BUF
Total/NA	Prep	3060A			98410	08/21/13 13:55	RPP	TAL CAN
Total/NA	Analysis	7196A		1	98550	08/22/13 12:03	RPP	TAL CAN
Total/NA	Analysis	Moisture		1	134264	08/15/13 23:04	GTG	TAL BUF
Total/NA	Prep	9012A			134682	08/19/13 06:45	LAW	TAL BUF
Total/NA	Analysis	9012A		1	134753	08/19/13 15:31	KWJ	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	135406	08/22/13 14:04	SW1	TAL BUF

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13 *
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13 *

Laboratory: TestAmerica Canton

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

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-13
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-13 *
Kansas	NELAP	7	E-10336	01-31-14
Kentucky	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-13
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Laboratory: TestAmerica Canton (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Ohio VAP	State Program	5	CL0024	01-19-14
Pennsylvania	NELAP	3	68-00340	08-31-13
Texas	NELAP	6		08-31-13
USDA	Federal		P330-11-00328	08-26-14
Virginia	NELAP	3	460175	09-14-13
Washington	State Program	10	C971	01-12-14
Wisconsin	State Program	5	999518190	08-31-13

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8081A	Organochlorine Pesticides (GC)	SW846	TAL BUF
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
8151A	Herbicides (GC)	SW846	TAL BUF
6010B	Metals (ICP)	SW846	TAL BUF
7471A	Mercury (CVAA)	SW846	TAL BUF
7196A	Chromium, Hexavalent	SW846	TAL CAN
9012A	Cyanide, Total and/or Amenable	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
SM 3500 CR D	Chromium, Trivalent	SM	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-43956-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-43956-1	HOHAOC2-A-1	Solid	08/13/13 13:30	08/15/13 09:00
480-43956-2	HOHAOC2-A-2	Solid	08/13/13 15:00	08/15/13 09:00
480-43956-3	HOHAOC2-A-3	Solid	08/13/13 15:20	08/15/13 09:00
480-43956-4	HOHAOC2-A-4	Solid	08/13/13 15:40	08/15/13 09:00
480-43956-5	HOHAOC2-A-5	Solid	08/13/13 16:00	08/15/13 09:00
480-43956-6	HOHAOC2-A-6	Solid	08/13/13 16:20	08/15/13 09:00
480-43956-7	HOHAOC2-A-7	Solid	08/13/13 16:40	08/15/13 09:00
480-43956-8	HOHAOC2-A-8	Solid	08/13/13 17:00	08/15/13 09:00
480-43956-9	HOHAOC2-A-9	Solid	08/13/13 17:20	08/15/13 09:00
480-43956-10	HOHAOC2-A-10	Solid	08/13/13 17:40	08/15/13 09:00
480-43956-11	HOHAOC2-A-11	Solid	08/13/13 18:00	08/15/13 09:00
480-43956-12	HOHAOC2-A-12	Solid	08/13/13 18:20	08/15/13 09:00
480-43956-13	HOHAOC2-A-13	Solid	08/13/13 18:40	08/15/13 09:00
480-43956-14	HOHAOC2-B-1	Solid	08/14/13 11:30	08/15/13 09:00
480-43956-15	HOHAOC2-B-2	Solid	08/14/13 11:40	08/15/13 09:00
480-43956-16	HOHAOC2-B-3	Solid	08/14/13 11:50	08/15/13 09:00
480-43956-17	HOHAOC2-B-4	Solid	08/14/13 12:00	08/15/13 09:00
480-43956-18	HOHAOC2-B-5	Solid	08/14/13 12:10	08/15/13 09:00
480-43956-19	HOHAOC2-B-6	Solid	08/14/13 12:20	08/15/13 09:00
480-43956-20	HOHAOC2-B-7	Solid	08/14/13 12:30	08/15/13 09:00
480-43956-21	HOHAOC2-B-8	Solid	08/14/13 12:40	08/15/13 09:00
480-43956-22	HOHAOC2-B-9	Solid	08/14/13 12:50	08/15/13 09:00
480-43956-23	HOHAOC2-B-10	Solid	08/14/13 13:00	08/15/13 09:00
480-43956-24	HOHAOC2-B-11	Solid	08/14/13 13:10	08/15/13 09:00
480-43956-25	HOHAOC2-B-12	Solid	08/14/13 13:20	08/15/13 09:00

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: L. Thotakura / D. Murray / A. Roberts	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-38447-10001.1
Client Contact: Michael Higgins	Phone: 585.259.4742	E-Mail: john.schove@testamericainc.com		Page: Page 1 of 6
Company: ARCADIS U.S., Inc.				Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested: 8/20/2013			
City: Syracuse	TAT Requested (days): 3-days			
State, Zip: NY, 13214-0066				
Phone: 713-432-2643(Tel)	PO #: SO# 0015107887			
Email: michael.higgins@arcadis-us.com	WO #:			
Project Name: CHEVRON - CVX Hastings, NY	Project #: 48003362			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

WBS 08.04
Special Instructions/Note:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOC - Custom List	3500_CR_D - Chromium, hexavalent	3500_CR3_D, 8151A	9012A - Cyanide, Total	8081A, 8082	8270C - SVOC - NY STARS plus List	6010B, 7471A	Total Number of containers
			Preservation Code:				N	N	N	N	N	N	N	
HOHAOC2-A-1	8/13/14	13:30	C	Solid				X	X	X	X	X	X	12
HOHAOC2-A-2		15:00		Solid										6
HOHAOC2-A-3		15:20		Solid										
HOHAOC2-A-4		15:40		Solid										
HOHAOC2-A-5		16:00		Solid										
HOHAOC2-A-6		16:20		Solid										
HOHAOC2-A-7		16:40		Solid										
HOHAOC2-A-8		17:00		Solid										
HOHAOC2-A-9		17:20		Solid										
HOHAOC2-A-10		17:40		Solid										
HOHAOC2-A-11		18:00		Solid										

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FED-EX	
Relinquished by: LALITHA THOTAKURA (LT)	Date/Time: 8/14/13 17:30	Company: ARCADIS	Received by:	Date/Time: 8/15/13 0900 Company: TA BUFFALO
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: #2 @ Login

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: L. THOTAKURA/D. MURRAY/A. ROBERTS	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-38447-10001.5
Client Contact: Michael Higgins	Phone: 585.259.4742	E-Mail: john.schove@testamericainc.com		Page: Page 4 of 5 6
Company: ARCADIS U.S., Inc.				Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested: 8/20/2013			
City: Syracuse	TAT Requested (days): 3-days			
State, Zip: NY, 13214-0066				
Phone: 713-432-2643(Tel)	PO #: SO# 0015107887			
Email: michael.higgins@arcadis-us.com	WO #:			
Project Name: CHEVRON - CVX Hastings, NY	Project #: 48003362			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

WBS 08.04

Special Instructions/Note:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOC - Custom List	3500_CR_D - Chromium, hexavalent	3500_CR3_D, 8151A	9012A - Cyanide, Total	8081A, 8082	8270C - SVOC - NY STARS plus List	6010B, 7471A	Total Number of containers
			Preservation Code:				N	N	N	N	N	N	N	
HOHAOC2-A-1	8/13/13	13:30	G	Solid			X							28
HOHAOC2-A-2		15:00												8
HOHAOC2-A-3		15:20												
HOHAOC2-A-4		15:40												
HOHAOC2-A-5		16:00												
HOHAOC2-A-6		16:20												
HOHAOC2-A-7		16:40												
HOHAOC2-A-8		17:00												
HOHAOC2-A-9		17:20												
HOHAOC2-A-10		17:40												
HOHAOC2-A-11	✓	18:00	✓	✓			✓							✓

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FED-EX	
Relinquished by: LALITHA THOTAKURA (LI)	Date/Time: 8/14/13 / 17:30	Company: ARCADIS	Received by:	Date/Time: 8/15/13 0900	Company: TA BUFFALO
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: #2 QC Login

8/23/2013

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: L.THOTAKURA/D.MURRAY/A.ROBERTS	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-38447-10001.3
Client Contact: Michael Higgins	Phone: 585.259.4742	E-Mail: john.schove@testamericainc.com		Page: Page 2 of 5 6
Company: ARCADIS U.S., Inc.				Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested: 8/20/2013			
City: Syracuse	TAT Requested (days): 3-days			
State, Zip: NY, 13214-0066				
Phone: 713-432-2643(Tel)	PO #: SO# 0015107887			
Email: michael.higgins@arcadis-us.com	WO #:			
Project Name: CHEVRON - CVX Hastings, NY	Project #: 48003362			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

WBS 08.04

Special Instructions/Note:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOC - Custom List	3500_CR_D - Chromium, hexavalent	3500_CR3_D, 8151A	9012A - Cyanide, Total	8081A, 8082	8270C - SVOC - NY STARS plus List	6010B, 7471A	Total Number of containers
			Preservation Code:				N	N	N	N	N	N	N	
HOHAOC2-A-12	8/13/14	18:20	C	Solid				X	X	X	X	X	X	6
HOHAOC2-A-13	8/13/14	18:40		Solid										
HOHAOC2-B-1	8/14/14	11:30		Solid										
HOHAOC2-B-2		11:40		Solid										
HOHAOC2-B-3		11:50		Solid										
HOHAOC2-B-4		12:00		Solid										
HOHAOC2-B-5		12:10		Solid										
HOHAOC2-B-6		12:20		Solid										
HOHAOC2-B-7		12:30		Solid										
HOHAOC2-B-8		12:40		Solid										
HOHAOC2-B-9		12:50		Solid										

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FED-EX

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
LAUTMA THOTAKURA (LT)	8/21/13 / 17:30	ARCADIS		8/15/13 0900	TA BUFFALO
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: #2 9C Login

8/23/2013

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: L. THOTAKURA/D. MURRAY/A. ROBERTS	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-38447-10001.5
Client Contact: Michael Higgins	Phone:	E-Mail: john.schove@testamericainc.com		Page: Page 5 of 6
Company: ARCADIS U.S., Inc.				Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested: 8/20/2013			
City: Syracuse	TAT Requested (days): 3-days			
State, Zip: NY, 13214-0066				
Phone: 713-432-2643(Tel)	PO #: SO# 0015107887			
Email: michael.higgins@arcadis-us.com	WO #:			
Project Name: CHEVRON - CVX Hastings, NY	Project #: 48003362			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

WBS 08.04

Special Instructions/Note:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOC - Custom List	3500_CR_D - Chromium, hexavalent	3500_CR3_D, 8151A	9012A - Cyanide, Total	8081A, 8082	8270C - SVOC - NY STARS plus List	6010B, 7471A							Total Number of containers
			Preservation Code:				N	N	N	N	N	N	N							
HOHAOC2-A-12	8/13/13	18:20	G	Solid			X													8
HOHAOC2-A-13	8/13/13	18:40																		
HOHAOC2-B-1	8/14/13	11:30																		
HOHAOC2-B-2		11:40																		
HOHAOC2-B-3		11:50																		
HOHAOC2-B-4		12:00																		
HOHAOC2-B-5		12:10																		
HOHAOC2-B-6		12:20																		
HOHAOC2-B-7		12:30																		
HOHAOC2-B-8		12:40																		
HOHAOC2-B-9		12:50																		

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FED-EX

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
LALITHA THOTAKURA (LT)	8/14/13 / 17:30	ARCADIS		8/15/13 0900	TA BUFFALO
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: #2 2@ login

8/23/2013

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: L THOTAKURA/D.MURRAY/A.ROBERTS	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-38447-10001.4
Client Contact: Michael Higgins	Phone: 585.259.4742	E-Mail: john.schove@testamericainc.com		Page: 3 LI Page 4 of 5 6
Company: ARCADIS U.S., Inc.				Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested:			
City: Syracuse	TAT Requested (days):			
State, Zip: NY, 13214-0066				
Phone: 713-432-2643(Tel)	PO #: SO# 0015107887			
Email: michael.higgins@arcadis-us.com	WO #:			
Project Name: CHEVRON - CVX Hastings, NY	Project #: 48003362			
Site: New York	SSOW#:			

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A - HCL	M - Hexane
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E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
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J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

WBS 08.04
Special Instructions/Note:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOC - Custom List	3500_CR_D - Chromium, hexavalent	3500_CR3_D, 8151A	9012A - Cyanide, Total	8081A, 8082	8270C - SVOC - NY STARS plus List	6010B, 7471A						Total Number of containers
			Preservation Code:				N	N	N	N	N	N	N						
HOHAOC-B-10	8/14/14	13:00	C	Solid				X	X	X	X	X	X						6
HOHAOC-B-11	8/14/14	13:10		Solid				X	X	X	X	X	X						6
HOHAOC-B-12	8/14/14	13:20		Solid				X	X	X	X	X	X						6
				Solid															
				Solid															
				Solid															
				Solid															
				Solid															
				Solid															
				Solid															
				Solid															
				Solid															

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FED-EX

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
LALITHA THOTAKURA (LI)	8/14/13 / 17:30	ARCADIS		8/15/13 0900	TA BUFFALO
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: #2 @ Login

8/23/2013

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: L. THOTAKURA / D. MURRAY / A. ROBERTS	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-38447-10001.5
Client Contact: Michael Higgins	Phone: 585.259.4742	E-Mail: john.schove@testamericainc.com		Page: 6 of 6
Company: ARCADIS U.S., Inc.				Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested: 8/20/2013			
City: Syracuse	TAT Requested (days): 3-days			
State, Zip: NY, 13214-0066				
Phone: 713-432-2643(Tel)	PO #: SO# 0015107887			
Email: michael.higgins@arcadis-us.com	WO #:			
Project Name: CHEVRON - CVX Hastings, NY	Project #: 48003362			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

WBS 08.04

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOC - Custom List	3500_CR_D - Chromium, hexavalent	3500_CR3_D, 8151A	9012A - Cyanide, Total	8081A, 8082	8270C - SVOC - NY STARS plus List	6010B, 7471A	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N		
HOHADC2-B-10	8/14/14	13:00	G	Solid			X							8	
HOHADC2-B-11	8/14/14	13:10	G	↓			X							8	
HOHADC2-B-12	8/14/14	13:20	G	↓			X							8	

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment: FED-EX	
Relinquished by: LALITHA THOTAKURA (LI)	Date/Time: 8/14/13 / 17:30	Company: ARCADIS	Received by:	Date/Time: 8/15/13 09:00	Company: TA BUFFALO		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: #2 9e Login

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-43956-1

Login Number: 43956

List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

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.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	ARCADIS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-44622-1
Client Project/Site: CHEVRON - CVX Hastings, NY

For:
ARCADIS U.S. Inc
Arcadis
295 Woodcliff Drive #2, 3rd Floor
Suite 301
Fairport, New York 14450

Attn: Geoff Greapentrog

Authorized for release by:
8/30/2013 11:47:49 AM

John Schove, Project Manager I
john.schove@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 6
Surrogate Summary 18
QC Sample Results 19
QC Association Summary 21
Lab Chronicle 22
Certification Summary 25
Method Summary 26
Sample Summary 27
Chain of Custody 28
Receipt Checklists 34

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44622-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Job ID: 480-44622-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-44622-1

Comments
No additional comments.

Receipt
The samples were received on 8/27/2013 11:34 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

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

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44622-1

Client Sample ID: HOHAOC2-B-1 — Lab Sample ID: 480-44622-14

No Detections.

Client Sample ID: HOHAOC2-B-2 — Lab Sample ID: 480-44622-15

No Detections.

Client Sample ID: HOHAOC2-B-3 — Lab Sample ID: 480-44622-16

No Detections.

Client Sample ID: HOHAOC2-B-4 — Lab Sample ID: 480-44622-17

No Detections.

Client Sample ID: HOHAOC2-B-5 — Lab Sample ID: 480-44622-18

No Detections.

Client Sample ID: HOHAOC2-B-6 — Lab Sample ID: 480-44622-19

No Detections.

Client Sample ID: HOHAOC2-B-7 — Lab Sample ID: 480-44622-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	3.0	J	5.4	2.5	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: HOHAOC2-B-8 — Lab Sample ID: 480-44622-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	9.4		4.3	2.0	ug/Kg	1	☼	8260B	Total/NA
Tetrachloroethene	0.62	J	4.3	0.57	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: HOHAOC2-B-9 — Lab Sample ID: 480-44622-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	12	J	21	3.6	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: HOHAOC2-B-10 — Lab Sample ID: 480-44622-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	6.1		4.3	2.0	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: HOHAOC2-B-11 — Lab Sample ID: 480-44622-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.9	J	26	4.4	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: HOHAOC2-B-12 — Lab Sample ID: 480-44622-25

No Detections.

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44622-1

Client Sample ID: HOHAOC2-B-1
Date Collected: 08/14/13 11:30
Date Received: 08/27/13 11:34

Lab Sample ID: 480-44622-14
Matrix: Solid
Percent Solids: 98.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.9	0.36	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
1,1-Dichloroethane	ND		4.9	0.60	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
1,1-Dichloroethene	ND		4.9	0.60	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
1,2-Dichlorobenzene	ND		4.9	0.38	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
1,2-Dichloroethane	ND		4.9	0.25	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
1,2-Dichloroethene, cis-	ND		4.9	0.63	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
1,2-Dichloroethene, trans-	ND		4.9	0.51	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
1,3-Dichlorobenzene	ND		4.9	0.25	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
1,4-Dichlorobenzene	ND		4.9	0.69	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
1,4-Dioxane	ND		200	24	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
Acetone	ND		25	4.1	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
Benzene	ND		4.9	0.24	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
Butylbenzene	ND		4.9	0.43	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
Carbon tetrachloride	ND		4.9	0.48	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
Chlorobenzene	ND		4.9	0.65	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
Chloroform	ND		4.9	0.30	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
Ethylbenzene	ND		4.9	0.34	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
Methyl Ethyl Ketone (2-Butanone)	ND		25	1.8	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
Methyl tert-butyl ether	ND		4.9	0.48	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
Methylene Chloride	ND		4.9	2.3	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
Propylbenzene, n-	ND		4.9	0.39	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
sec-Butylbenzene	ND		4.9	0.43	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
tert-Butylbenzene	ND		4.9	0.51	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
Tetrachloroethene	ND		4.9	0.66	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
Toluene	ND		4.9	0.37	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
Trichloroethene	ND		4.9	1.1	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
Trimethylbenzene, 1,2,4-	ND		4.9	0.94	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
Trimethylbenzene, 1,3,5-	ND		4.9	0.32	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
Vinyl chloride	ND		4.9	0.60	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1
Xylene (mixed)	ND		9.8	0.83	ug/Kg	☼	08/27/13 21:45	08/28/13 01:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*64 - 126*	*08/27/13 21:45*	*08/28/13 01:53*	*1*
4-Bromofluorobenzene (Surr)	*100*		*72 - 126*	*08/27/13 21:45*	*08/28/13 01:53*	*1*
Toluene-d8 (Surr)	*101*		*71 - 125*	*08/27/13 21:45*	*08/28/13 01:53*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44622-1

Client Sample ID: HOHAOC2-B-2
Date Collected: 08/14/13 11:40
Date Received: 08/27/13 11:34

Lab Sample ID: 480-44622-15
Matrix: Solid
Percent Solids: 98.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.5	0.40	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
1,1-Dichloroethane	ND		5.5	0.67	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
1,1-Dichloroethene	ND		5.5	0.67	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
1,2-Dichlorobenzene	ND		5.5	0.43	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
1,2-Dichloroethane	ND		5.5	0.27	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
1,2-Dichloroethene, cis-	ND		5.5	0.70	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
1,2-Dichloroethene, trans-	ND		5.5	0.56	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
1,3-Dichlorobenzene	ND		5.5	0.28	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
1,4-Dichlorobenzene	ND		5.5	0.76	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
1,4-Dioxane	ND		220	26	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
Acetone	ND		27	4.6	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
Benzene	ND		5.5	0.27	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
Butylbenzene	ND		5.5	0.47	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
Carbon tetrachloride	ND		5.5	0.53	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
Chlorobenzene	ND		5.5	0.72	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
Chloroform	ND		5.5	0.34	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
Ethylbenzene	ND		5.5	0.38	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
Methyl Ethyl Ketone (2-Butanone)	ND		27	2.0	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
Methyl tert-butyl ether	ND		5.5	0.54	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
Methylene Chloride	ND		5.5	2.5	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
Propylbenzene, n-	ND		5.5	0.44	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
sec-Butylbenzene	ND		5.5	0.47	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
tert-Butylbenzene	ND		5.5	0.57	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
Tetrachloroethene	ND		5.5	0.73	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
Toluene	ND		5.5	0.41	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
Trichloroethene	ND		5.5	1.2	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
Trimethylbenzene, 1,2,4-	ND		5.5	1.0	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
Trimethylbenzene, 1,3,5-	ND		5.5	0.35	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
Vinyl chloride	ND		5.5	0.67	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1
Xylene (mixed)	ND		11	0.92	ug/Kg	☼	08/27/13 21:45	08/28/13 02:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*64 - 126*	*08/27/13 21:45*	*08/28/13 02:19*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 126*	*08/27/13 21:45*	*08/28/13 02:19*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*08/27/13 21:45*	*08/28/13 02:19*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44622-1

Client Sample ID: HOHAOC2-B-3
Date Collected: 08/14/13 11:50
Date Received: 08/27/13 11:34

Lab Sample ID: 480-44622-16
Matrix: Solid
Percent Solids: 98.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.6	0.33	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
1,1-Dichloroethane	ND		4.6	0.56	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
1,1-Dichloroethene	ND		4.6	0.56	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
1,2-Dichlorobenzene	ND		4.6	0.36	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
1,2-Dichloroethane	ND		4.6	0.23	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
1,2-Dichloroethene, cis-	ND		4.6	0.59	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
1,2-Dichloroethene, trans-	ND		4.6	0.48	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
1,3-Dichlorobenzene	ND		4.6	0.24	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
1,4-Dichlorobenzene	ND		4.6	0.64	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
1,4-Dioxane	ND		180	22	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
Acetone	ND		23	3.9	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
Benzene	ND		4.6	0.23	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
Butylbenzene	ND		4.6	0.40	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
Carbon tetrachloride	ND		4.6	0.45	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
Chlorobenzene	ND		4.6	0.61	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
Chloroform	ND		4.6	0.28	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
Ethylbenzene	ND		4.6	0.32	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
Methyl Ethyl Ketone (2-Butanone)	ND		23	1.7	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
Methyl tert-butyl ether	ND		4.6	0.45	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
Methylene Chloride	ND		4.6	2.1	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
Propylbenzene, n-	ND		4.6	0.37	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
sec-Butylbenzene	ND		4.6	0.40	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
tert-Butylbenzene	ND		4.6	0.48	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
Tetrachloroethene	ND		4.6	0.62	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
Toluene	ND		4.6	0.35	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
Trichloroethene	ND		4.6	1.0	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
Trimethylbenzene, 1,2,4-	ND		4.6	0.88	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
Trimethylbenzene, 1,3,5-	ND		4.6	0.30	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
Vinyl chloride	ND		4.6	0.56	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1
Xylene (mixed)	ND		9.2	0.77	ug/Kg	☼	08/27/13 21:45	08/28/13 02:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*64 - 126*	*08/27/13 21:45*	*08/28/13 02:44*	*1*
4-Bromofluorobenzene (Surr)	*100*		*72 - 126*	*08/27/13 21:45*	*08/28/13 02:44*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*	*08/27/13 21:45*	*08/28/13 02:44*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44622-1

Client Sample ID: HOHAOC2-B-4
Date Collected: 08/14/13 12:00
Date Received: 08/27/13 11:34

Lab Sample ID: 480-44622-17
Matrix: Solid
Percent Solids: 96.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.9	0.21	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
1,1-Dichloroethane	ND		2.9	0.36	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
1,1-Dichloroethene	ND		2.9	0.36	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
1,2-Dichlorobenzene	ND		2.9	0.23	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
1,2-Dichloroethane	ND		2.9	0.15	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
1,2-Dichloroethene, cis-	ND		2.9	0.37	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
1,2-Dichloroethene, trans-	ND		2.9	0.30	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
1,3-Dichlorobenzene	ND		2.9	0.15	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
1,4-Dichlorobenzene	ND		2.9	0.41	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
1,4-Dioxane	ND		120	14	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
Acetone	ND		15	2.5	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
Benzene	ND		2.9	0.14	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
Butylbenzene	ND		2.9	0.25	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
Carbon tetrachloride	ND		2.9	0.28	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
Chlorobenzene	ND		2.9	0.39	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
Chloroform	ND		2.9	0.18	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
Ethylbenzene	ND		2.9	0.20	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
Methyl Ethyl Ketone (2-Butanone)	ND		15	1.1	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
Methyl tert-butyl ether	ND		2.9	0.29	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
Methylene Chloride	ND		2.9	1.3	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
Propylbenzene, n-	ND		2.9	0.23	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
sec-Butylbenzene	ND		2.9	0.25	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
tert-Butylbenzene	ND		2.9	0.30	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
Tetrachloroethene	ND		2.9	0.39	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
Toluene	ND		2.9	0.22	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
Trichloroethene	ND		2.9	0.64	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
Trimethylbenzene, 1,2,4-	ND		2.9	0.56	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
Trimethylbenzene, 1,3,5-	ND		2.9	0.19	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
Vinyl chloride	ND		2.9	0.36	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1
Xylene (mixed)	ND		5.8	0.49	ug/Kg	☼	08/27/13 21:45	08/28/13 03:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*64 - 126*	*08/27/13 21:45*	*08/28/13 03:09*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 126*	*08/27/13 21:45*	*08/28/13 03:09*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*	*08/27/13 21:45*	*08/28/13 03:09*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44622-1

Client Sample ID: HOHAOC2-B-5
Date Collected: 08/14/13 12:10
Date Received: 08/27/13 11:34

Lab Sample ID: 480-44622-18
Matrix: Solid
Percent Solids: 97.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.7	0.34	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
1,1-Dichloroethane	ND		4.7	0.58	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
1,1-Dichloroethene	ND		4.7	0.58	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
1,2-Dichlorobenzene	ND		4.7	0.37	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
1,2-Dichloroethane	ND		4.7	0.24	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
1,2-Dichloroethene, cis-	ND		4.7	0.61	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
1,2-Dichloroethene, trans-	ND		4.7	0.49	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
1,3-Dichlorobenzene	ND		4.7	0.24	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
1,4-Dichlorobenzene	ND		4.7	0.66	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
1,4-Dioxane	ND		190	23	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
Acetone	ND		24	4.0	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
Benzene	ND		4.7	0.23	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
Butylbenzene	ND		4.7	0.41	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
Carbon tetrachloride	ND		4.7	0.46	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
Chlorobenzene	ND		4.7	0.63	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
Chloroform	ND		4.7	0.29	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
Ethylbenzene	ND		4.7	0.33	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
Methyl Ethyl Ketone (2-Butanone)	ND		24	1.7	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
Methyl tert-butyl ether	ND		4.7	0.47	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
Methylene Chloride	ND		4.7	2.2	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
Propylbenzene, n-	ND		4.7	0.38	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
sec-Butylbenzene	ND		4.7	0.41	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
tert-Butylbenzene	ND		4.7	0.49	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
Tetrachloroethene	ND		4.7	0.64	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
Toluene	ND		4.7	0.36	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
Trichloroethene	ND		4.7	1.0	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
Trimethylbenzene, 1,2,4-	ND		4.7	0.91	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
Trimethylbenzene, 1,3,5-	ND		4.7	0.31	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
Vinyl chloride	ND		4.7	0.58	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1
Xylene (mixed)	ND		9.5	0.80	ug/Kg	☼	08/27/13 21:45	08/28/13 03:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*64 - 126*	*08/27/13 21:45*	*08/28/13 03:35*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 126*	*08/27/13 21:45*	*08/28/13 03:35*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*08/27/13 21:45*	*08/28/13 03:35*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44622-1

Client Sample ID: HOHAOC2-B-6
Date Collected: 08/14/13 12:20
Date Received: 08/27/13 11:34

Lab Sample ID: 480-44622-19
Matrix: Solid
Percent Solids: 96.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
1,1-Dichloroethane	ND		4.4	0.53	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
1,1-Dichloroethene	ND		4.4	0.53	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
1,2-Dichlorobenzene	ND		4.4	0.34	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
1,2-Dichloroethene, cis-	ND		4.4	0.56	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
1,2-Dichloroethene, trans-	ND		4.4	0.45	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
1,3-Dichlorobenzene	ND		4.4	0.22	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
1,4-Dichlorobenzene	ND		4.4	0.61	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
1,4-Dioxane	ND		170	21	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
Acetone	ND		22	3.7	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
Benzene	ND		4.4	0.21	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
Butylbenzene	ND		4.4	0.38	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
Carbon tetrachloride	ND		4.4	0.42	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
Chloroform	ND		4.4	0.27	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
Ethylbenzene	ND		4.4	0.30	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
Methyl Ethyl Ketone (2-Butanone)	ND		22	1.6	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
Methylene Chloride	ND		4.4	2.0	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
Propylbenzene, n-	ND		4.4	0.35	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
sec-Butylbenzene	ND		4.4	0.38	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
tert-Butylbenzene	ND		4.4	0.45	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
Tetrachloroethene	ND		4.4	0.58	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
Toluene	ND		4.4	0.33	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
Trichloroethene	ND		4.4	0.96	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
Trimethylbenzene, 1,2,4-	ND		4.4	0.84	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
Trimethylbenzene, 1,3,5-	ND		4.4	0.28	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
Vinyl chloride	ND		4.4	0.53	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1
Xylene (mixed)	ND		8.7	0.73	ug/Kg	☼	08/27/13 21:45	08/28/13 04:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*64 - 126*	*08/27/13 21:45*	*08/28/13 04:01*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 126*	*08/27/13 21:45*	*08/28/13 04:01*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*	*08/27/13 21:45*	*08/28/13 04:01*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44622-1

Client Sample ID: HOHAOC2-B-7
Date Collected: 08/14/13 12:30
Date Received: 08/27/13 11:34

Lab Sample ID: 480-44622-20
Matrix: Solid
Percent Solids: 97.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.4	0.39	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
1,1-Dichloroethane	ND		5.4	0.66	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
1,1-Dichloroethene	ND		5.4	0.66	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
1,2-Dichlorobenzene	ND		5.4	0.42	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
1,2-Dichloroethane	ND		5.4	0.27	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
1,2-Dichloroethene, cis-	ND		5.4	0.70	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
1,2-Dichloroethene, trans-	ND		5.4	0.56	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
1,3-Dichlorobenzene	ND		5.4	0.28	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
1,4-Dichlorobenzene	ND		5.4	0.76	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
1,4-Dioxane	ND		220	26	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
Acetone	ND		27	4.6	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
Benzene	ND		5.4	0.27	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
Butylbenzene	ND		5.4	0.47	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
Carbon tetrachloride	ND		5.4	0.53	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
Chlorobenzene	ND		5.4	0.72	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
Chloroform	ND		5.4	0.34	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
Ethylbenzene	ND		5.4	0.37	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
Methyl Ethyl Ketone (2-Butanone)	ND		27	2.0	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
Methyl tert-butyl ether	ND		5.4	0.53	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
Methylene Chloride	**3.0**	**J**	5.4	2.5	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
Propylbenzene, n-	ND		5.4	0.43	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
sec-Butylbenzene	ND		5.4	0.47	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
tert-Butylbenzene	ND		5.4	0.56	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
Tetrachloroethene	ND		5.4	0.73	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
Toluene	ND		5.4	0.41	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
Trichloroethene	ND		5.4	1.2	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
Trimethylbenzene, 1,2,4-	ND		5.4	1.0	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
Trimethylbenzene, 1,3,5-	ND		5.4	0.35	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
Vinyl chloride	ND		5.4	0.66	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1
Xylene (mixed)	ND		11	0.91	ug/Kg	☼	08/27/13 21:45	08/28/13 04:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*64 - 126*	*08/27/13 21:45*	*08/28/13 04:26*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*	*08/27/13 21:45*	*08/28/13 04:26*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*08/27/13 21:45*	*08/28/13 04:26*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44622-1

Client Sample ID: HOHAOC2-B-8
Date Collected: 08/14/13 12:40
Date Received: 08/27/13 11:34

Lab Sample ID: 480-44622-21
Matrix: Solid
Percent Solids: 98.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.3	0.31	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
1,1-Dichloroethane	ND		4.3	0.52	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
1,1-Dichloroethene	ND		4.3	0.52	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
1,2-Dichlorobenzene	ND		4.3	0.33	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
1,2-Dichloroethane	ND		4.3	0.21	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
1,2-Dichloroethene, cis-	ND		4.3	0.55	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
1,2-Dichloroethene, trans-	ND		4.3	0.44	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
1,3-Dichlorobenzene	ND		4.3	0.22	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
1,4-Dichlorobenzene	ND		4.3	0.60	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
1,4-Dioxane	ND		170	21	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
Acetone	ND		21	3.6	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
Benzene	ND		4.3	0.21	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
Butylbenzene	ND		4.3	0.37	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
Carbon tetrachloride	ND		4.3	0.41	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
Chlorobenzene	ND		4.3	0.56	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
Chloroform	ND		4.3	0.26	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
Ethylbenzene	ND		4.3	0.29	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.6	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
Methyl tert-butyl ether	ND		4.3	0.42	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
Methylene Chloride	**9.4**		4.3	2.0	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
Propylbenzene, n-	ND		4.3	0.34	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
sec-Butylbenzene	ND		4.3	0.37	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
tert-Butylbenzene	ND		4.3	0.44	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
Tetrachloroethene	**0.62**	**J**	4.3	0.57	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
Toluene	ND		4.3	0.32	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
Trichloroethene	ND		4.3	0.94	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
Trimethylbenzene, 1,2,4-	ND		4.3	0.82	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
Trimethylbenzene, 1,3,5-	ND		4.3	0.27	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
Vinyl chloride	ND		4.3	0.52	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1
Xylene (mixed)	ND		8.5	0.72	ug/Kg	☼	08/27/13 21:45	08/28/13 04:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*64 - 126*	*08/27/13 21:45*	*08/28/13 04:52*	*1*
4-Bromofluorobenzene (Surr)	*100*		*72 - 126*	*08/27/13 21:45*	*08/28/13 04:52*	*1*
Toluene-d8 (Surr)	*98*		*71 - 125*	*08/27/13 21:45*	*08/28/13 04:52*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44622-1

Client Sample ID: HOHAOC2-B-9
Date Collected: 08/14/13 12:50
Date Received: 08/27/13 11:34

Lab Sample ID: 480-44622-22
Matrix: Solid
Percent Solids: 98.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.2	0.31	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
1,1-Dichloroethane	ND		4.2	0.52	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
1,1-Dichloroethene	ND		4.2	0.52	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
1,2-Dichlorobenzene	ND		4.2	0.33	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
1,2-Dichloroethene, cis-	ND		4.2	0.54	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
1,2-Dichloroethene, trans-	ND		4.2	0.44	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
1,3-Dichlorobenzene	ND		4.2	0.22	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
1,4-Dichlorobenzene	ND		4.2	0.59	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
1,4-Dioxane	ND		170	20	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
Acetone	**12**	**J**	21	3.6	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
Benzene	ND		4.2	0.21	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
Butylbenzene	ND		4.2	0.37	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
Carbon tetrachloride	ND		4.2	0.41	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
Chlorobenzene	ND		4.2	0.56	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
Chloroform	ND		4.2	0.26	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.5	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
Methyl tert-butyl ether	ND		4.2	0.41	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
Methylene Chloride	ND		4.2	1.9	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
Propylbenzene, n-	ND		4.2	0.34	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
sec-Butylbenzene	ND		4.2	0.37	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
tert-Butylbenzene	ND		4.2	0.44	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
Tetrachloroethene	ND		4.2	0.57	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
Toluene	ND		4.2	0.32	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
Trichloroethene	ND		4.2	0.93	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
Trimethylbenzene, 1,2,4-	ND		4.2	0.81	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
Trimethylbenzene, 1,3,5-	ND		4.2	0.27	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
Vinyl chloride	ND		4.2	0.52	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1
Xylene (mixed)	ND		8.5	0.71	ug/Kg	☼	08/27/13 21:45	08/28/13 05:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*64 - 126*	*08/27/13 21:45*	*08/28/13 05:17*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 126*	*08/27/13 21:45*	*08/28/13 05:17*	*1*
Toluene-d8 (Surr)	*98*		*71 - 125*	*08/27/13 21:45*	*08/28/13 05:17*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44622-1

Client Sample ID: HOHAOC2-B-10
Date Collected: 08/14/13 13:00
Date Received: 08/27/13 11:34

Lab Sample ID: 480-44622-23
Matrix: Solid
Percent Solids: 99.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.3	0.31	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
1,1-Dichloroethane	ND		4.3	0.52	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
1,1-Dichloroethene	ND		4.3	0.52	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
1,2-Dichlorobenzene	ND		4.3	0.33	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
1,2-Dichloroethane	ND		4.3	0.21	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
1,2-Dichloroethene, cis-	ND		4.3	0.55	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
1,2-Dichloroethene, trans-	ND		4.3	0.44	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
1,3-Dichlorobenzene	ND		4.3	0.22	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
1,4-Dichlorobenzene	ND		4.3	0.60	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
1,4-Dioxane	ND		170	21	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
Acetone	ND		21	3.6	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
Benzene	ND		4.3	0.21	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
Butylbenzene	ND		4.3	0.37	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
Carbon tetrachloride	ND		4.3	0.41	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
Chlorobenzene	ND		4.3	0.56	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
Chloroform	ND		4.3	0.26	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
Ethylbenzene	ND		4.3	0.29	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.6	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
Methyl tert-butyl ether	ND		4.3	0.42	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
Methylene Chloride	**6.1**		4.3	2.0	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
Propylbenzene, n-	ND		4.3	0.34	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
sec-Butylbenzene	ND		4.3	0.37	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
tert-Butylbenzene	ND		4.3	0.44	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
Tetrachloroethene	ND		4.3	0.57	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
Toluene	ND		4.3	0.32	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
Trichloroethene	ND		4.3	0.94	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
Trimethylbenzene, 1,2,4-	ND		4.3	0.82	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
Trimethylbenzene, 1,3,5-	ND		4.3	0.28	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
Vinyl chloride	ND		4.3	0.52	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1
Xylene (mixed)	ND		8.5	0.72	ug/Kg	☼	08/27/13 21:45	08/28/13 05:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 126*	*08/27/13 21:45*	*08/28/13 05:42*	*1*
4-Bromofluorobenzene (Surr)	*100*		*72 - 126*	*08/27/13 21:45*	*08/28/13 05:42*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*08/27/13 21:45*	*08/28/13 05:42*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44622-1

Client Sample ID: HOHAOC2-B-11
Date Collected: 08/14/13 13:10
Date Received: 08/27/13 11:34

Lab Sample ID: 480-44622-24
Matrix: Solid
Percent Solids: 98.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.3	0.38	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
1,1-Dichloroethane	ND		5.3	0.64	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
1,1-Dichloroethene	ND		5.3	0.65	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
1,2-Dichlorobenzene	ND		5.3	0.41	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
1,2-Dichloroethane	ND		5.3	0.26	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
1,2-Dichloroethene, cis-	ND		5.3	0.68	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
1,2-Dichloroethene, trans-	ND		5.3	0.54	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
1,3-Dichlorobenzene	ND		5.3	0.27	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
1,4-Dichlorobenzene	ND		5.3	0.74	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
1,4-Dioxane	ND		210	25	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
Acetone	**4.9**	**J**	26	4.4	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
Benzene	ND		5.3	0.26	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
Butylbenzene	ND		5.3	0.46	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
Carbon tetrachloride	ND		5.3	0.51	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
Chlorobenzene	ND		5.3	0.70	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
Chloroform	ND		5.3	0.33	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
Ethylbenzene	ND		5.3	0.36	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
Methyl Ethyl Ketone (2-Butanone)	ND		26	1.9	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
Methyl tert-butyl ether	ND		5.3	0.52	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
Methylene Chloride	ND		5.3	2.4	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
Propylbenzene, n-	ND		5.3	0.42	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
sec-Butylbenzene	ND		5.3	0.46	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
tert-Butylbenzene	ND		5.3	0.55	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
Tetrachloroethene	ND		5.3	0.71	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
Toluene	ND		5.3	0.40	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
Trichloroethene	ND		5.3	1.2	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
Trimethylbenzene, 1,2,4-	ND		5.3	1.0	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
Trimethylbenzene, 1,3,5-	ND		5.3	0.34	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
Vinyl chloride	ND		5.3	0.64	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1
Xylene (mixed)	ND		11	0.89	ug/Kg	☼	08/27/13 21:45	08/28/13 06:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*64 - 126*	*08/27/13 21:45*	*08/28/13 06:08*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*	*08/27/13 21:45*	*08/28/13 06:08*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*08/27/13 21:45*	*08/28/13 06:08*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44622-1

Client Sample ID: HOHAOC2-B-12
Date Collected: 08/14/13 13:20
Date Received: 08/27/13 11:34

Lab Sample ID: 480-44622-25
Matrix: Solid
Percent Solids: 98.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
1,1-Dichloroethane	ND		4.4	0.53	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
1,1-Dichloroethene	ND		4.4	0.54	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
1,2-Dichlorobenzene	ND		4.4	0.34	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
1,2-Dichloroethene, cis-	ND		4.4	0.56	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
1,2-Dichloroethene, trans-	ND		4.4	0.45	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
1,3-Dichlorobenzene	ND		4.4	0.22	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
1,4-Dichlorobenzene	ND		4.4	0.61	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
1,4-Dioxane	ND		170	21	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
Acetone	ND		22	3.7	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
Benzene	ND		4.4	0.21	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
Butylbenzene	ND		4.4	0.38	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
Carbon tetrachloride	ND		4.4	0.42	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
Chloroform	ND		4.4	0.27	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
Ethylbenzene	ND		4.4	0.30	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
Methyl Ethyl Ketone (2-Butanone)	ND		22	1.6	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
Methylene Chloride	ND		4.4	2.0	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
Propylbenzene, n-	ND		4.4	0.35	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
sec-Butylbenzene	ND		4.4	0.38	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
tert-Butylbenzene	ND		4.4	0.45	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
Tetrachloroethene	ND		4.4	0.59	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
Toluene	ND		4.4	0.33	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
Trichloroethene	ND		4.4	0.96	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
Trimethylbenzene, 1,2,4-	ND		4.4	0.84	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
Trimethylbenzene, 1,3,5-	ND		4.4	0.28	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
Vinyl chloride	ND		4.4	0.53	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1
Xylene (mixed)	ND		8.7	0.73	ug/Kg	☼	08/27/13 21:45	08/28/13 06:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*64 - 126*	*08/27/13 21:45*	*08/28/13 06:34*	*1*
4-Bromofluorobenzene (Surr)	*97*		*72 - 126*	*08/27/13 21:45*	*08/28/13 06:34*	*1*
Toluene-d8 (Surr)	*98*		*71 - 125*	*08/27/13 21:45*	*08/28/13 06:34*	*1*

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44622-1

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(71-125)
480-44622-14	HOHAOC2-B-1	110	100	101
480-44622-15	HOHAOC2-B-2	106	99	99
480-44622-16	HOHAOC2-B-3	106	100	100
480-44622-17	HOHAOC2-B-4	111	99	100
480-44622-18	HOHAOC2-B-5	106	99	99
480-44622-19	HOHAOC2-B-6	109	99	100
480-44622-20	HOHAOC2-B-7	110	98	99
480-44622-21	HOHAOC2-B-8	108	100	98
480-44622-22	HOHAOC2-B-9	110	99	98
480-44622-23	HOHAOC2-B-10	107	100	99
480-44622-24	HOHAOC2-B-11	108	96	99
480-44622-25	HOHAOC2-B-12	109	97	98
LCS 480-136196/6	Lab Control Sample	101	102	102
MB 480-136196/7	Method Blank	100	98	100

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

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

Lab Sample ID: MB 480-136196/7
Matrix: Solid
Analysis Batch: 136196

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			08/27/13 23:36	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			08/27/13 23:36	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			08/27/13 23:36	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			08/27/13 23:36	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			08/27/13 23:36	1
1,2-Dichloroethene, cis-	ND		5.0	0.64	ug/Kg			08/27/13 23:36	1
1,2-Dichloroethene, trans-	ND		5.0	0.52	ug/Kg			08/27/13 23:36	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			08/27/13 23:36	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			08/27/13 23:36	1
1,4-Dioxane	ND		200	24	ug/Kg			08/27/13 23:36	1
Acetone	ND		25	4.2	ug/Kg			08/27/13 23:36	1
Benzene	ND		5.0	0.25	ug/Kg			08/27/13 23:36	1
Butylbenzene	ND		5.0	0.44	ug/Kg			08/27/13 23:36	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			08/27/13 23:36	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			08/27/13 23:36	1
Chloroform	ND		5.0	0.31	ug/Kg			08/27/13 23:36	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			08/27/13 23:36	1
Methyl Ethyl Ketone (2-Butanone)	ND		25	1.8	ug/Kg			08/27/13 23:36	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			08/27/13 23:36	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			08/27/13 23:36	1
Propylbenzene, n-	ND		5.0	0.40	ug/Kg			08/27/13 23:36	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg			08/27/13 23:36	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg			08/27/13 23:36	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/27/13 23:36	1
Toluene	ND		5.0	0.38	ug/Kg			08/27/13 23:36	1
Trichloroethene	ND		5.0	1.1	ug/Kg			08/27/13 23:36	1
Trimethylbenzene, 1,2,4-	ND		5.0	0.96	ug/Kg			08/27/13 23:36	1
Trimethylbenzene, 1,3,5-	ND		5.0	0.32	ug/Kg			08/27/13 23:36	1
Vinyl chloride	ND		5.0	0.61	ug/Kg			08/27/13 23:36	1
Xylene (mixed)	ND		10	0.84	ug/Kg			08/27/13 23:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*64 - 126*		*08/27/13 23:36*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*		*08/27/13 23:36*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*		*08/27/13 23:36*	*1*

Lab Sample ID: LCS 480-136196/6
Matrix: Solid
Analysis Batch: 136196

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	52.6		ug/Kg		105	73 - 126
1,1-Dichloroethene	50.0	53.3		ug/Kg		107	59 - 125
1,2-Dichlorobenzene	50.0	52.3		ug/Kg		105	75 - 120
1,2-Dichloroethane	50.0	51.9		ug/Kg		104	77 - 122
1,2-Dichloroethene, cis-	50.0	52.3		ug/Kg		105	81 - 117
1,2-Dichloroethene, trans-	50.0	53.8		ug/Kg		108	78 - 126
Benzene	50.0	52.3		ug/Kg		105	79 - 127

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

Lab Sample ID: LCS 480-136196/6
Matrix: Solid
Analysis Batch: 136196

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobenzene	50.0	51.8		ug/Kg		104	76 - 124
Ethylbenzene	50.0	52.5		ug/Kg		105	80 - 120
Methyl tert-butyl ether	50.0	52.8		ug/Kg		106	63 - 125
Tetrachloroethene	50.0	54.4		ug/Kg		109	74 - 122
Toluene	50.0	51.6		ug/Kg		103	74 - 128
Trichloroethene	50.0	53.0		ug/Kg		106	77 - 129
Trimethylbenzene, 1,2,4-	50.0	52.2		ug/Kg		104	74 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*64 - 126*
4-Bromofluorobenzene (Surr)	*102*		*72 - 126*
Toluene-d8 (Surr)	*102*		*71 - 125*

GC/MS VOA

Analysis Batch: 136196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44622-14	HOHAOC2-B-1	Total/NA	Solid	8260B	136202
480-44622-15	HOHAOC2-B-2	Total/NA	Solid	8260B	136202
480-44622-16	HOHAOC2-B-3	Total/NA	Solid	8260B	136202
480-44622-17	HOHAOC2-B-4	Total/NA	Solid	8260B	136202
480-44622-18	HOHAOC2-B-5	Total/NA	Solid	8260B	136202
480-44622-19	HOHAOC2-B-6	Total/NA	Solid	8260B	136202
480-44622-20	HOHAOC2-B-7	Total/NA	Solid	8260B	136202
480-44622-21	HOHAOC2-B-8	Total/NA	Solid	8260B	136202
480-44622-22	HOHAOC2-B-9	Total/NA	Solid	8260B	136202
480-44622-23	HOHAOC2-B-10	Total/NA	Solid	8260B	136202
480-44622-24	HOHAOC2-B-11	Total/NA	Solid	8260B	136202
480-44622-25	HOHAOC2-B-12	Total/NA	Solid	8260B	136202
LCS 480-136196/6	Lab Control Sample	Total/NA	Solid	8260B	
MB 480-136196/7	Method Blank	Total/NA	Solid	8260B	

Prep Batch: 136202

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44622-14	HOHAOC2-B-1	Total/NA	Solid	5035	
480-44622-15	HOHAOC2-B-2	Total/NA	Solid	5035	
480-44622-16	HOHAOC2-B-3	Total/NA	Solid	5035	
480-44622-17	HOHAOC2-B-4	Total/NA	Solid	5035	
480-44622-18	HOHAOC2-B-5	Total/NA	Solid	5035	
480-44622-19	HOHAOC2-B-6	Total/NA	Solid	5035	
480-44622-20	HOHAOC2-B-7	Total/NA	Solid	5035	
480-44622-21	HOHAOC2-B-8	Total/NA	Solid	5035	
480-44622-22	HOHAOC2-B-9	Total/NA	Solid	5035	
480-44622-23	HOHAOC2-B-10	Total/NA	Solid	5035	
480-44622-24	HOHAOC2-B-11	Total/NA	Solid	5035	
480-44622-25	HOHAOC2-B-12	Total/NA	Solid	5035	

General Chemistry

Analysis Batch: 136190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44622-14	HOHAOC2-B-1	Total/NA	Solid	Moisture	
480-44622-15	HOHAOC2-B-2	Total/NA	Solid	Moisture	
480-44622-16	HOHAOC2-B-3	Total/NA	Solid	Moisture	
480-44622-17	HOHAOC2-B-4	Total/NA	Solid	Moisture	
480-44622-18	HOHAOC2-B-5	Total/NA	Solid	Moisture	
480-44622-19	HOHAOC2-B-6	Total/NA	Solid	Moisture	
480-44622-20	HOHAOC2-B-7	Total/NA	Solid	Moisture	
480-44622-21	HOHAOC2-B-8	Total/NA	Solid	Moisture	
480-44622-22	HOHAOC2-B-9	Total/NA	Solid	Moisture	
480-44622-23	HOHAOC2-B-10	Total/NA	Solid	Moisture	
480-44622-24	HOHAOC2-B-11	Total/NA	Solid	Moisture	
480-44622-25	HOHAOC2-B-12	Total/NA	Solid	Moisture	

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44622-1

Client Sample ID: HOHAOC2-B-1

Lab Sample ID: 480-44622-14
Date Collected: 08/14/13 11:30
Matrix: Solid
Date Received: 08/27/13 11:34
Percent Solids: 98.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136202	08/27/13 21:45	CDC	TAL BUF
Total/NA	Analysis	8260B		1	136196	08/28/13 01:53	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136190	08/27/13 19:27	GTG	TAL BUF

Client Sample ID: HOHAOC2-B-2

Lab Sample ID: 480-44622-15
Date Collected: 08/14/13 11:40
Matrix: Solid
Date Received: 08/27/13 11:34
Percent Solids: 98.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136202	08/27/13 21:45	CDC	TAL BUF
Total/NA	Analysis	8260B		1	136196	08/28/13 02:19	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136190	08/27/13 19:27	GTG	TAL BUF

Client Sample ID: HOHAOC2-B-3

Lab Sample ID: 480-44622-16
Date Collected: 08/14/13 11:50
Matrix: Solid
Date Received: 08/27/13 11:34
Percent Solids: 98.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136202	08/27/13 21:45	CDC	TAL BUF
Total/NA	Analysis	8260B		1	136196	08/28/13 02:44	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136190	08/27/13 19:27	GTG	TAL BUF

Client Sample ID: HOHAOC2-B-4

Lab Sample ID: 480-44622-17
Date Collected: 08/14/13 12:00
Matrix: Solid
Date Received: 08/27/13 11:34
Percent Solids: 96.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136202	08/27/13 21:45	CDC	TAL BUF
Total/NA	Analysis	8260B		1	136196	08/28/13 03:09	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136190	08/27/13 19:27	GTG	TAL BUF

Client Sample ID: HOHAOC2-B-5

Lab Sample ID: 480-44622-18
Date Collected: 08/14/13 12:10
Matrix: Solid
Date Received: 08/27/13 11:34
Percent Solids: 97.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136202	08/27/13 21:45	CDC	TAL BUF
Total/NA	Analysis	8260B		1	136196	08/28/13 03:35	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136190	08/27/13 19:27	GTG	TAL BUF

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44622-1

Client Sample ID: HOHAOC2-B-6

Lab Sample ID: 480-44622-19

Date Collected: 08/14/13 12:20
Matrix: Solid
Date Received: 08/27/13 11:34
Percent Solids: 96.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136202	08/27/13 21:45	CDC	TAL BUF
Total/NA	Analysis	8260B		1	136196	08/28/13 04:01	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136190	08/27/13 19:27	GTG	TAL BUF

Client Sample ID: HOHAOC2-B-7

Lab Sample ID: 480-44622-20

Date Collected: 08/14/13 12:30
Matrix: Solid
Date Received: 08/27/13 11:34
Percent Solids: 97.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136202	08/27/13 21:45	CDC	TAL BUF
Total/NA	Analysis	8260B		1	136196	08/28/13 04:26	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136190	08/27/13 19:27	GTG	TAL BUF

Client Sample ID: HOHAOC2-B-8

Lab Sample ID: 480-44622-21

Date Collected: 08/14/13 12:40
Matrix: Solid
Date Received: 08/27/13 11:34
Percent Solids: 98.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136202	08/27/13 21:45	CDC	TAL BUF
Total/NA	Analysis	8260B		1	136196	08/28/13 04:52	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136190	08/27/13 19:27	GTG	TAL BUF

Client Sample ID: HOHAOC2-B-9

Lab Sample ID: 480-44622-22

Date Collected: 08/14/13 12:50
Matrix: Solid
Date Received: 08/27/13 11:34
Percent Solids: 98.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136202	08/27/13 21:45	CDC	TAL BUF
Total/NA	Analysis	8260B		1	136196	08/28/13 05:17	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136190	08/27/13 19:27	GTG	TAL BUF

Client Sample ID: HOHAOC2-B-10

Lab Sample ID: 480-44622-23

Date Collected: 08/14/13 13:00
Matrix: Solid
Date Received: 08/27/13 11:34
Percent Solids: 99.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136202	08/27/13 21:45	CDC	TAL BUF
Total/NA	Analysis	8260B		1	136196	08/28/13 05:42	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136190	08/27/13 19:27	GTG	TAL BUF

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44622-1

Client Sample ID: HOHAOC2-B-11

Lab Sample ID: 480-44622-24

Date Collected: 08/14/13 13:10
Matrix: Solid
Date Received: 08/27/13 11:34
Percent Solids: 98.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136202	08/27/13 21:45	CDC	TAL BUF
Total/NA	Analysis	8260B		1	136196	08/28/13 06:08	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136190	08/27/13 19:27	GTG	TAL BUF

Client Sample ID: HOHAOC2-B-12

Lab Sample ID: 480-44622-25

Date Collected: 08/14/13 13:20
Matrix: Solid
Date Received: 08/27/13 11:34
Percent Solids: 98.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136202	08/27/13 21:45	CDC	TAL BUF
Total/NA	Analysis	8260B		1	136196	08/28/13 06:34	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136190	08/27/13 19:27	GTG	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44622-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13 *
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13 *
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13 *

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44622-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44622-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-44622-14	HOHAOC2-B-1	Solid	08/14/13 11:30	08/27/13 11:34
480-44622-15	HOHAOC2-B-2	Solid	08/14/13 11:40	08/27/13 11:34
480-44622-16	HOHAOC2-B-3	Solid	08/14/13 11:50	08/27/13 11:34
480-44622-17	HOHAOC2-B-4	Solid	08/14/13 12:00	08/27/13 11:34
480-44622-18	HOHAOC2-B-5	Solid	08/14/13 12:10	08/27/13 11:34
480-44622-19	HOHAOC2-B-6	Solid	08/14/13 12:20	08/27/13 11:34
480-44622-20	HOHAOC2-B-7	Solid	08/14/13 12:30	08/27/13 11:34
480-44622-21	HOHAOC2-B-8	Solid	08/14/13 12:40	08/27/13 11:34
480-44622-22	HOHAOC2-B-9	Solid	08/14/13 12:50	08/27/13 11:34
480-44622-23	HOHAOC2-B-10	Solid	08/14/13 13:00	08/27/13 11:34
480-44622-24	HOHAOC2-B-11	Solid	08/14/13 13:10	08/27/13 11:34
480-44622-25	HOHAOC2-B-12	Solid	08/14/13 13:20	08/27/13 11:34

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: L. THOTAKURA/D. MURRAY/A. ROBERTS	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-38447-10001.5
Client Contact: Michael Higgins	Phone: 585.259.4742	E-Mail: john.schove@testamericainc.com		Page: Page 4 of 5 6
Company: ARCADIS U.S., Inc.				Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested: 8/20/2013			
City: Syracuse	TAT Requested (days): 3-days			
State, Zip: NY, 13214-0066				
Phone: 713-432-2643(Tel)	PO #: SO# 0015107887			
Email: michael.higgins@arcadis-us.com	WO #:			
Project Name: CHEVRON - CVX Hastings, NY	Project #: 48003362			
Site: New York	SSOW#:			

Analysis Requested

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

WBS 08.04
Special Instructions/Note:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOC - Custom List	3500_CR_D - Chromium, hexavalent	3500_CR3_D, 8151A	9012A - Cyanide, Total	8081A, 8082	8270C - SVOC - NY STARS plus List	6010B, 7471A	Total Number of containers
			Preservation Code:				N	N	N	N	N	N	N	
HOHAOC2-A-1	8/13/13	13:30	G	Solid			X							28
HOHAOC2-A-2		15:00												8
HOHAOC2-A-3		15:20												
HOHAOC2-A-4		15:40												
HOHAOC2-A-5		16:00												
HOHAOC2-A-6		16:20												
HOHAOC2-A-7		16:40												
HOHAOC2-A-8		17:00												
HOHAOC2-A-9		17:20												
HOHAOC2-A-10		17:40												
HOHAOC2-A-11		18:00												

480-44622 Chain of Custody

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: FED-EX

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
LALITHA THOTAKURA (LT)	8/14/13 / 17:30	ARCADIS		8/15/13 0900	TA BUFFALO

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: #2 RC Login

8/30/2013

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: L. THOTAKURA/D. MURRAY/A. ROBERTS	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-38447-10001.5
Client Contact: Michael Higgins	Phone:	E-Mail: john.schove@testamericainc.com		Page: Page 5 of 6
Company: ARCADIS U.S., Inc.				Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested: 8/20/2013	Analysis Requested		Preservation Codes:
City: Syracuse	TAT Requested (days): 3-days			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2SO3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - ph 4-5 L - EDA Z - other (specify)
State, Zip: NY, 13214-0066				
Phone: 713-432-2643(Tel)	PO #: SO# 0015107887			Other:
Email: michael.higgins@arcadis-us.com	WO #:			
Project Name: CHEVRON - CVX Hastings, NY	Project #: 48003362			WBS 08.04
Site: New York	SSOW#:			Special Instructions/Note:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOC - Custom List	3500_CR_D - Chromium, hexavalent	3500_CR3_D, 8151A	9012A - Cyanide, Total	8081A, 8082	8270C - SVOC - NY STARS plus List	6010B, 7471A	Total Number of containers
			Preservation Code:		X	X	N	N	N	N	N	N	N	X
HOHAOC2-A-12	8/13/13	18:20	G	Solid			X							3
HOHAOC2-A-13	8/13/13	18:40												
HOHAOC2-B-1	8/14/13	11:30												
HOHAOC2-B-2		11:40												
HOHAOC2-B-3		11:50												
HOHAOC2-B-4		12:00												
HOHAOC2-B-5		12:10												
HOHAOC2-B-6		12:20												
HOHAOC2-B-7		12:30												
HOHAOC2-B-8		12:40												
HOHAOC2-B-9		12:50												

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FED-EX	
Relinquished by: LALITHA THOTAKURA (LT)	Date/Time: 8/14/13 / 17:30	Company: ARCADIS	Received by:	Date/Time: 8/15/13 0900 Company: FA BUFFALO
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: #2 2@ Login

8/30/2013

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: L.THOTAKURA / D.MURRAY / A.ROBERTS	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-38447-10001.5
Client Contact: Michael Higgins	Phone: 585.259.4742	E-Mail: john.schove@testamericainc.com		Page: Page 8 of 5 6
Company: ARCADIS U.S., Inc.				Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested: 8/20/2013			
City: Syracuse	TAT Requested (days): 3-days			
State, Zip: NY, 13214-0066				
Phone: 713-432-2643(Tel)	PO #: SO# 0015107887			
Email: michael.higgins@arcadis-us.com	WO #:			
Project Name: CHEVRON - CVX Hastings, NY	Project #: 48003362			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

WBS 08.04
Special Instructions/Note:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOC - Custom List	3500_CR_D - Chromium, hexavalent	3500_CR3_D, 6151A	9012A - Cyanide, Total	8081A, 8082	8270C - SVOC - NY STARS plus List	6010B, 7471A	Total Number of containers
Preservation Code:							N	N	N	N	N	N	N	
HOHAOC2-B-10	8/14/14	13:00	G	Solid			X							8
HOHAOC2-B-11	8/14/14	13:10	G				X							8
HOHAOC2-B-12	8/14/14	13:20	G				X							8

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FED-EX				
Relinquished by: LALITHA THOTAKURA (LI)	Date/Time: 8/14/13 17:30	Company: ARCADIS	Received by:	Date/Time: 8/15/13 0900	Company: TA BUFFALO
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: #2 9@ Login

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: L. Thotakura / D. Murray / A. Roberts	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-38447-10001.1
Client Contact: Michael Higgins	Phone: 585.259.4742	E-Mail: john.schove@testamericainc.com		Page: Page 1 of 6
Company: ARCADIS U.S., Inc.				Job #:

Address: 6723 Towpath PO BOX 66	Due Date Requested: 8/20/2013
City: Syracuse	TAT Requested (days): 3-days
State, Zip: NY, 13214-0066	PO #: SO# 0015107887
Phone: 713-432-2643(Tel)	WO #:
Email: michael.higgins@arcadis-us.com	Project #: 48003362
Project Name: CHEVRON - CVX Hastings, NY	SSOW#:
Site: New York	

Analysis Requested

Preservation Codes:

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

Other:

WBS 08.04
Special Instructions/Note:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOC - Custom List	3500_CR_D - Chromium, hexavalent	3500_CR3_D, 8151A	9012A - Cyanide, Total	8081A, 8082	8270C - SVOC - NY STARS plus List	6010B, 7471A	Total Number of containers	
			Preservation Code:				N	N	N	N	N	N	N		
HOHAOC2-A-1	8/18/14	13:30	C	Solid				X	X	X	X	X	X	12	to Se-ls
HOHAOC2-A-2		15:00		Solid										6	
HOHAOC2-A-3		15:20		Solid											
HOHAOC2-A-4		15:40		Solid											
HOHAOC2-A-5		16:00		Solid											
HOHAOC2-A-6		16:20		Solid											
HOHAOC2-A-7		16:40		Solid											
HOHAOC2-A-8		17:00		Solid											
HOHAOC2-A-9		17:20		Solid											
HOHAOC2-A-10		17:40		Solid											
HOHAOC2-A-11		18:00		Solid											

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FED-EX

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
LALITHA THOTAKURA (LT)	8/14/13 17:30	ARCADIS		8/15/13 0900	TA BUFFALO
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks.	#2 PC Login

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: L.THOTAKURA/D.MURRAY/A.ROBERTS	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-38447-10001.3
Client Contact: Michael Higgins	Phone: 585.259.4742	E-Mail: john.schove@testamericainc.com		Page: Page 3 of 4 6
Company: ARCADIS U.S., Inc.		Analysis Requested		Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested: 8/20/2013			Preservation Codes:
City: Syracuse	TAT Requested (days): 3-days			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2SO3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - ph 4-5 L - EDA Z - other (specify)
State, Zip: NY, 13214-0066				
Phone: 713-432-2643(Tel)	PO #: SO# 0015107887			
Email: michael.higgins@arcadis-us.com	WO #:			Other:
Project Name: CHEVRON - CVX Hastings, NY	Project #: 48003362			
Site: New York	SSOW#:			WBS 08.04

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOC - Custom List	3500_CR_D - Chromium, hexavalent	3500_CR3_D, 8151A	9012A - Cyanide, Total	8081A, 8082	8270C - SVOC - NY STARS plus List	6010B, 7471A	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N		
HOHAOC2-A-12	8/13/14	18:20	C	Solid				X	X	X	X	X	X	6	
HOHAOC2-A-13	8/13/14	18:40		Solid											
HOHAOC2-B-1	8/14/14	11:30		Solid											
HOHAOC2-B-2		11:40		Solid											
HOHAOC2-B-3		11:50		Solid											
HOHAOC2-B-4		12:00		Solid											
HOHAOC2-B-5		12:10		Solid											
HOHAOC2-B-6		12:20		Solid											
HOHAOC2-B-7		12:30		Solid											
HOHAOC2-B-8		12:40		Solid											
HOHAOC2-B-9		12:50		Solid											

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FED-EX				
Relinquished by: LAUTMA THOTAKURA (LT)	Date/Time: 8/21/13 / 17:30	Company: ARCADIS	Received by:	Date/Time: 8/15/13 0900	Company: TA BUFFALO
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: #2 9C Login

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: L THOTAKURA/D.MURRAY/A.ROBERTS	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-38447-10001.4
Client Contact: Michael Higgins	Phone: 585.259.4742	E-Mail: john.schove@testamericainc.com		Page: 3 LT Page 4 of 5 6
Company: ARCADIS U.S., Inc.				Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested:	Analysis Requested		Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
City: Syracuse	TAT Requested (days):			Other:
State, Zip: NY, 13214-0066				
Phone: 713-432-2643(Tel)	PO #: SO# 0015107887			
Email: michael.higgins@arcadis-us.com	WO #:			
Project Name: CHEVRON - CVX Hastings, NY	Project #: 48003362			
Site: New York	SSOW#:			WBS 08.04 Special Instructions/Note:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOC - Custom List	3500_CR_D - Chromium, hexavalent	3500_CR3_D, 8151A	9012A - Cyanide, Total	8081A, 8082	8270C - SVOC - NY STARS plus List	6010B, 7471A	Total Number of containers
			Preservation Code:				N	N	N	N	N	N	N	
HOHAOC-B-10	8/14/14	13:00	C	Solid				X	X	X	X	X	X	6
HOHAOC-B-11	8/14/14	13:10		Solid				X	X	X	X	X	X	6
HOHAOC-B-12	8/14/14	13:20		Solid				X	X	X	X	X	X	6
				Solid										
				Solid										
				Solid										
				Solid										
				Solid										
				Solid										
				Solid										
				Solid										

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FED-EX				
Relinquished by: LAUTHA THOTAKURA (LT)	Date/Time: 8/14/13 / 17:30	Company: ARCADIS	Received by:	Date/Time: 8/15/13 0900	Company: TA Buffalo
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: #2 Relogin

8/30/2013

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-44622-1

Login Number: 44622

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kinecki, Kenneth P

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.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-44727-1
Client Project/Site: CHEVRON - CVX Hastings, NY

For:
ARCADIS U.S. Inc
Arcadis
295 Woodcliff Drive #2, 3rd Floor
Suite 301
Fairport, New York 14450

Attn: Geoff Greapentrog

Authorized for release by:
9/12/2013 11:20:40 AM

John Schove, Project Manager I
john.schove@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 6
Client Sample Results 8
Surrogate Summary 29
QC Sample Results 31
QC Association Summary 45
Lab Chronicle 49
Certification Summary 54
Method Summary 56
Sample Summary 57
Chain of Custody 58
Receipt Checklists 60

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

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

Job ID: 480-44727-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-44727-1

Comments
No additional comments.

Receipt
The samples were received on 8/28/2013 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.3º C.

GC/MS VOA
Method(s) 8260B: The method blank for batch 136764 contained Methylene chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 8260B: Surrogate recovery for the following sample was outside the upper control limit for 1,2-Dichloroethane-d4: HOHAOC2-A-11 GRAB2 (480-44727-17). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C: The continuing calibration verification (CCV) for multiple analytes associated with batch 137018 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No other analytical or quality issues were noted.

GC Semi VOA
Method(s) 8081A: All primary data is reported from the RTX-CLPI column.

Method(s) 8081A: The method blank MB 480-137173/1-A contained the analytes 4,4'-DDE, 4,4'-DDT and delta-BHC above the method detection limit. These target analyte concentrations were less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 8082: All primary data is reported from the ZB-5 column.

Method(s) 8082: The percent difference in a multi-component continuing calibration verification is assessed on the basis of the total amount, individual peak calculations are only listed for completeness.

Method(s) 8151A: The continuing calibration verification (CCV) for Silvex associated with batch 137354 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8151A: All primary data is reported from the RTX-CLPI column.

No other analytical or quality issues were noted.

Metals
Method(s) 6010B: The Method Blank for batch 480-137222 contained total manganese and zinc above the method detection limits. These target analyte concentrations were less than the reporting limits (RLs); therefore, re-extraction and/or re-analysis of sample HOHAOC2-A-1 COMP2 (480-44727-7) was not performed.

No other analytical or quality issues were noted.

General Chemistry
No analytical or quality issues were noted.

Job ID: 480-44727-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Organic Prep

Method(s) 3550B: The following sample required a Florisil clean-up, via EPA Method 3620C, to reduce matrix interferences: HOHAOC2-A-1 COMP2 (480-44727-7).

No other analytical or quality issues were noted.

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-1 GRAB2 — Lab Sample ID: 480-44727-1

No Detections.

Client Sample ID: HOHAOC2-A-1 GRAB3 — Lab Sample ID: 480-44727-2

No Detections.

Client Sample ID: HOHAOC2-A-1 GRAB4 — Lab Sample ID: 480-44727-3

No Detections.

Client Sample ID: HOHAOC2-A-1 GRAB5 — Lab Sample ID: 480-44727-4

No Detections.

Client Sample ID: HOHAOC2-A-1 GRAB6 — Lab Sample ID: 480-44727-5

No Detections.

Client Sample ID: HOHAOC2-A-1 GRAB7 — Lab Sample ID: 480-44727-6

No Detections.

Client Sample ID: HOHAOC2-A-1 COMP2 — Lab Sample ID: 480-44727-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	4.2	J	180	3.7	ug/Kg	1	☼	8270C	Total/NA
4,4'-DDT	0.28	J B	1.7	0.17	ug/Kg	1	☼	8081A	Total/NA
delta-BHC	0.30	J B	1.7	0.23	ug/Kg	1	☼	8081A	Total/NA
Arsenic	0.93	J	2.3	0.45	mg/Kg	1	☼	6010B	Total/NA
Barium	10.8		0.57	0.12	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.23		0.23	0.032	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.061	J	0.23	0.034	mg/Kg	1	☼	6010B	Total/NA
Chromium	5.2		0.57	0.23	mg/Kg	1	☼	6010B	Total/NA
Copper	119		1.1	0.24	mg/Kg	1	☼	6010B	Total/NA
Lead	3.2		1.1	0.27	mg/Kg	1	☼	6010B	Total/NA
Manganese	117	B	0.23	0.036	mg/Kg	1	☼	6010B	Total/NA
Nickel	16.0		5.7	0.26	mg/Kg	1	☼	6010B	Total/NA
Zinc	35.8	B	2.3	0.17	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	5.2		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-A-2 GRAB2 — Lab Sample ID: 480-44727-8

No Detections.

Client Sample ID: HOHAOC2-A-3 GRAB2 — Lab Sample ID: 480-44727-9

No Detections.

Client Sample ID: HOHAOC2-A-4 GRAB2 — Lab Sample ID: 480-44727-10

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-5 GRAB2 — **Lab Sample ID: 480-44727-11**

No Detections.

Client Sample ID: HOHAOC2-A-6 GRAB2 — **Lab Sample ID: 480-44727-12**

No Detections.

Client Sample ID: HOHAOC2-A-7 GRAB2 — **Lab Sample ID: 480-44727-13**

No Detections.

Client Sample ID: HOHAOC2-A-8 GRAB2 — **Lab Sample ID: 480-44727-14**

No Detections.

Client Sample ID: HOHAOC2-A-9 GRAB2 — **Lab Sample ID: 480-44727-15**

No Detections.

Client Sample ID: HOHAOC2-A-10 GRAB2 — **Lab Sample ID: 480-44727-16**

No Detections.

Client Sample ID: HOHAOC2-A-11 GRAB2 — **Lab Sample ID: 480-44727-17**

No Detections.

Client Sample ID: HOHAOC2-A-12 GRAB2 — **Lab Sample ID: 480-44727-18**

No Detections.

Client Sample ID: HOHAOC2-A-13 GRAB2 — **Lab Sample ID: 480-44727-19**

No Detections.

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-1 GRAB2
Date Collected: 08/27/13 12:05
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-1
Matrix: Solid
Percent Solids: 95.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
1,1-Dichloroethane	ND		4.4	0.53	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
1,1-Dichloroethene	ND		4.4	0.53	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
1,2-Dichlorobenzene	ND		4.4	0.34	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
1,2-Dichloroethene, cis-	ND		4.4	0.56	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
1,2-Dichloroethene, trans-	ND		4.4	0.45	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
1,3-Dichlorobenzene	ND		4.4	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
1,4-Dichlorobenzene	ND		4.4	0.61	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
1,4-Dioxane	ND		170	21	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Acetone	ND		22	3.7	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Benzene	ND		4.4	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Butylbenzene	ND		4.4	0.38	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Carbon tetrachloride	ND		4.4	0.42	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Chloroform	ND		4.4	0.27	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Ethylbenzene	ND		4.4	0.30	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Methyl Ethyl Ketone (2-Butanone)	ND		22	1.6	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Methylene Chloride	ND		4.4	2.0	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Propylbenzene, n-	ND		4.4	0.35	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
sec-Butylbenzene	ND		4.4	0.38	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
tert-Butylbenzene	ND		4.4	0.45	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Tetrachloroethene	ND		4.4	0.58	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Toluene	ND		4.4	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Trichloroethene	ND		4.4	0.96	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Trimethylbenzene, 1,2,4-	ND		4.4	0.84	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Trimethylbenzene, 1,3,5-	ND		4.4	0.28	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Vinyl chloride	ND		4.4	0.53	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Xylene (mixed)	ND		8.7	0.73	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*64 - 126*	*08/29/13 16:11*	*08/30/13 09:56*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*	*08/29/13 16:11*	*08/30/13 09:56*	*1*
Toluene-d8 (Surr)	*98*		*71 - 125*	*08/29/13 16:11*	*08/30/13 09:56*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-1 GRAB3
Date Collected: 08/27/13 12:15
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-2
Matrix: Solid
Percent Solids: 95.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
1,1-Dichloroethane	ND		4.4	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
1,1-Dichloroethene	ND		4.4	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
1,2-Dichlorobenzene	ND		4.4	0.35	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
1,2-Dichloroethene, cis-	ND		4.4	0.57	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
1,2-Dichloroethene, trans-	ND		4.4	0.46	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
1,3-Dichlorobenzene	ND		4.4	0.23	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
1,4-Dichlorobenzene	ND		4.4	0.62	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
1,4-Dioxane	ND		180	21	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Acetone	ND		22	3.7	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Benzene	ND		4.4	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Butylbenzene	ND		4.4	0.38	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Carbon tetrachloride	ND		4.4	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Chloroform	ND		4.4	0.27	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Ethylbenzene	ND		4.4	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Methyl Ethyl Ketone (2-Butanone)	ND		22	1.6	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Methylene Chloride	ND		4.4	2.0	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Propylbenzene, n-	ND		4.4	0.35	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
sec-Butylbenzene	ND		4.4	0.38	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
tert-Butylbenzene	ND		4.4	0.46	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Tetrachloroethene	ND		4.4	0.59	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Toluene	ND		4.4	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Trichloroethene	ND		4.4	0.97	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Trimethylbenzene, 1,2,4-	ND		4.4	0.85	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Trimethylbenzene, 1,3,5-	ND		4.4	0.28	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Vinyl chloride	ND		4.4	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Xylene (mixed)	ND		8.8	0.74	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*64 - 126*	*08/29/13 16:11*	*08/30/13 10:22*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*	*08/29/13 16:11*	*08/30/13 10:22*	*1*
Toluene-d8 (Surr)	*95*		*71 - 125*	*08/29/13 16:11*	*08/30/13 10:22*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-1 GRAB4
Date Collected: 08/27/13 12:25
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-3
Matrix: Solid
Percent Solids: 95.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.1	0.30	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
1,1-Dichloroethane	ND		4.1	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
1,1-Dichloroethene	ND		4.1	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
1,2-Dichlorobenzene	ND		4.1	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
1,2-Dichloroethane	ND		4.1	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
1,2-Dichloroethene, cis-	ND		4.1	0.53	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
1,2-Dichloroethene, trans-	ND		4.1	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
1,3-Dichlorobenzene	ND		4.1	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
1,4-Dichlorobenzene	ND		4.1	0.58	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
1,4-Dioxane	ND		170	20	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Acetone	ND		21	3.5	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Benzene	ND		4.1	0.20	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Butylbenzene	ND		4.1	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Carbon tetrachloride	ND		4.1	0.40	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Chlorobenzene	ND		4.1	0.55	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Chloroform	ND		4.1	0.26	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Ethylbenzene	ND		4.1	0.29	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.5	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Methyl tert-butyl ether	ND		4.1	0.41	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Methylene Chloride	ND		4.1	1.9	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Propylbenzene, n-	ND		4.1	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
sec-Butylbenzene	ND		4.1	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
tert-Butylbenzene	ND		4.1	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Tetrachloroethene	ND		4.1	0.56	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Toluene	ND		4.1	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Trichloroethene	ND		4.1	0.91	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Trimethylbenzene, 1,2,4-	ND		4.1	0.80	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Trimethylbenzene, 1,3,5-	ND		4.1	0.27	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Vinyl chloride	ND		4.1	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Xylene (mixed)	ND		8.3	0.70	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*64 - 126*	*08/29/13 16:11*	*08/30/13 15:58*	*1*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*	*08/29/13 16:11*	*08/30/13 15:58*	*1*
Toluene-d8 (Surr)	*94*		*71 - 125*	*08/29/13 16:11*	*08/30/13 15:58*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-1 GRAB5
Date Collected: 08/27/13 12:35
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-4
Matrix: Solid
Percent Solids: 95.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.2	0.30	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
1,1-Dichloroethane	ND		4.2	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
1,1-Dichloroethene	ND		4.2	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
1,2-Dichlorobenzene	ND		4.2	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
1,2-Dichloroethene, cis-	ND		4.2	0.53	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
1,2-Dichloroethene, trans-	ND		4.2	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
1,3-Dichlorobenzene	ND		4.2	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
1,4-Dichlorobenzene	ND		4.2	0.58	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
1,4-Dioxane	ND		170	20	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Acetone	ND		21	3.5	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Benzene	ND		4.2	0.20	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Butylbenzene	ND		4.2	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Carbon tetrachloride	ND		4.2	0.40	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Chlorobenzene	ND		4.2	0.55	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Chloroform	ND		4.2	0.26	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.5	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Methyl tert-butyl ether	ND		4.2	0.41	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Methylene Chloride	ND		4.2	1.9	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Propylbenzene, n-	ND		4.2	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
sec-Butylbenzene	ND		4.2	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
tert-Butylbenzene	ND		4.2	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Tetrachloroethene	ND		4.2	0.56	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Toluene	ND		4.2	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Trichloroethene	ND		4.2	0.91	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Trimethylbenzene, 1,2,4-	ND		4.2	0.80	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Trimethylbenzene, 1,3,5-	ND		4.2	0.27	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Vinyl chloride	ND		4.2	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Xylene (mixed)	ND		8.3	0.70	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*64 - 126*	*08/29/13 16:11*	*08/30/13 16:24*	*1*
4-Bromofluorobenzene (Surr)	*94*		*72 - 126*	*08/29/13 16:11*	*08/30/13 16:24*	*1*
Toluene-d8 (Surr)	*92*		*71 - 125*	*08/29/13 16:11*	*08/30/13 16:24*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-1 GRAB6
Date Collected: 08/27/13 12:45
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-5
Matrix: Solid
Percent Solids: 95.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.2	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
1,1-Dichloroethane	ND		4.2	0.52	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
1,1-Dichloroethene	ND		4.2	0.52	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
1,2-Dichlorobenzene	ND		4.2	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
1,2-Dichloroethene, cis-	ND		4.2	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
1,2-Dichloroethene, trans-	ND		4.2	0.44	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
1,3-Dichlorobenzene	ND		4.2	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
1,4-Dichlorobenzene	ND		4.2	0.59	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
1,4-Dioxane	ND		170	20	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Acetone	ND		21	3.6	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Benzene	ND		4.2	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Butylbenzene	ND		4.2	0.37	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Carbon tetrachloride	ND		4.2	0.41	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Chlorobenzene	ND		4.2	0.56	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Chloroform	ND		4.2	0.26	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.5	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Methyl tert-butyl ether	ND		4.2	0.41	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Methylene Chloride	ND		4.2	1.9	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Propylbenzene, n-	ND		4.2	0.34	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
sec-Butylbenzene	ND		4.2	0.37	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
tert-Butylbenzene	ND		4.2	0.44	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Tetrachloroethene	ND		4.2	0.57	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Toluene	ND		4.2	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Trichloroethene	ND		4.2	0.93	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Trimethylbenzene, 1,2,4-	ND		4.2	0.81	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Trimethylbenzene, 1,3,5-	ND		4.2	0.27	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Vinyl chloride	ND		4.2	0.52	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Xylene (mixed)	ND		8.4	0.71	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*64 - 126*	*08/29/13 16:11*	*08/30/13 16:50*	*1*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*	*08/29/13 16:11*	*08/30/13 16:50*	*1*
Toluene-d8 (Surr)	*94*		*71 - 125*	*08/29/13 16:11*	*08/30/13 16:50*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-1 GRAB7
Date Collected: 08/27/13 12:55
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-6
Matrix: Solid
Percent Solids: 95.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.3	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
1,1-Dichloroethane	ND		4.3	0.52	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
1,1-Dichloroethene	ND		4.3	0.52	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
1,2-Dichlorobenzene	ND		4.3	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
1,2-Dichloroethane	ND		4.3	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
1,2-Dichloroethene, cis-	ND		4.3	0.55	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
1,2-Dichloroethene, trans-	ND		4.3	0.44	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
1,3-Dichlorobenzene	ND		4.3	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
1,4-Dichlorobenzene	ND		4.3	0.60	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
1,4-Dioxane	ND		170	21	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Acetone	ND		21	3.6	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Benzene	ND		4.3	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Butylbenzene	ND		4.3	0.37	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Carbon tetrachloride	ND		4.3	0.41	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Chlorobenzene	ND		4.3	0.56	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Chloroform	ND		4.3	0.26	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Ethylbenzene	ND		4.3	0.29	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.6	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Methyl tert-butyl ether	ND		4.3	0.42	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Methylene Chloride	ND		4.3	2.0	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Propylbenzene, n-	ND		4.3	0.34	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
sec-Butylbenzene	ND		4.3	0.37	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
tert-Butylbenzene	ND		4.3	0.44	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Tetrachloroethene	ND		4.3	0.57	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Toluene	ND		4.3	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Trichloroethene	ND		4.3	0.94	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Trimethylbenzene, 1,2,4-	ND		4.3	0.82	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Trimethylbenzene, 1,3,5-	ND		4.3	0.28	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Vinyl chloride	ND		4.3	0.52	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Xylene (mixed)	ND		8.5	0.72	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*64 - 126*	*08/29/13 16:11*	*08/30/13 17:16*	*1*
4-Bromofluorobenzene (Surr)	*94*		*72 - 126*	*08/29/13 16:11*	*08/30/13 17:16*	*1*
Toluene-d8 (Surr)	*91*		*71 - 125*	*08/29/13 16:11*	*08/30/13 17:16*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-1 COMP2
Date Collected: 08/27/13 13:05
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-7
Matrix: Solid
Percent Solids: 95.9

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dihydroxyanthraquinone	ND		690	120	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
1-Hydroxyanthraquinone	ND		690	260	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2,2'-oxybis[1-chloropropane]	ND		180	18	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2,4,5-Trichlorophenol	ND		180	38	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2,4,6-Trichlorophenol	ND		180	12	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2,4-Dichlorophenol	ND		180	9.2	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2,4-Dimethylphenol	ND		180	47	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2,4-Dinitrophenol	ND		340	61	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2,4-Dinitrotoluene	ND		180	27	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2,6-Dinitrotoluene	ND		180	43	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2-Chloroaniline	ND		340	31	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2-Chloronaphthalene	ND		180	12	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2-Chlorophenol	ND		180	8.9	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2-Methylnaphthalene	ND		180	2.1	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2-Methylphenol	ND		180	5.4	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2-Nitroaniline	ND		340	56	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2-Nitrophenol	ND		180	8.0	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
3,3'-Dichlorobenzidine	ND		180	150	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
3-Nitroaniline	ND		340	40	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
4,6-Dinitro-2-methylphenol	ND		340	61	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
4-Bromophenyl phenyl ether	ND		180	56	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
4-Chloro-3-methylphenol	ND		180	7.2	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
4-Chloroaniline	ND		180	51	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
4-Chlorophenyl phenyl ether	ND		180	3.7	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
4-Methylphenol	ND		340	9.8	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
4-Nitroaniline	ND		340	20	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
4-Nitrophenol	ND		340	42	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
9,10-Anthracenedione	ND		340	160	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
9-Octadecenamide	ND		3400	850	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Acenaphthene	ND		180	2.1	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Acenaphthylene	ND		180	1.4	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Acetophenone	ND		180	9.0	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Anthracene	ND		180	4.5	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Atrazine	ND		180	7.8	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Benzaldehyde	ND		180	19	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Benzo(a)anthracene	ND		180	3.0	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Benzo(a)pyrene	ND		180	4.2	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Benzo(b)fluoranthene	ND		180	3.4	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Benzo(g,h,i)perylene	ND		180	2.1	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Benzo(k)fluoranthene	ND		180	1.9	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Biphenyl	ND		180	11	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Bis(2-chloroethoxy)methane	ND		180	9.5	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Bis(2-chloroethyl)ether	ND		180	15	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Bis(2-ethylhexyl) phthalate	ND		180	56	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Butyl benzyl phthalate	ND		180	47	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Caprolactam	ND		180	76	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Carbazole	ND		180	2.0	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Chrysene	ND		180	1.8	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Dibenz(a,h)anthracene	ND		180	2.1	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-1 COMP2
Date Collected: 08/27/13 13:05
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-7
Matrix: Solid
Percent Solids: 95.9

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	ND		180	1.8	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Diethyl phthalate	ND		180	5.3	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Dimethyl phthalate	ND		180	4.6	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Di-n-butyl phthalate	ND		180	61	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Di-n-octyl phthalate	ND		180	4.1	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Fluoranthene	ND		180	2.5	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Fluorene	ND		180	4.0	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Hexachlorobenzene	ND		180	8.7	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Hexachlorobutadiene	ND		180	9.0	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Hexachlorocyclopentadiene	ND		180	53	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Hexachloroethane	ND		180	14	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Indeno(1,2,3-cd)pyrene	ND		180	4.8	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Isophorone	ND		180	8.8	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Naphthalene	ND		180	2.9	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Nitrobenzene	ND		180	7.8	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
N-Nitrosodi-n-propylamine	ND		180	14	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
N-Nitrosodiphenylamine	ND		180	9.6	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
o-Toluidine	ND		340	72	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Pentachlorophenol	ND		340	60	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Phenanthrene	**4.2**	**J**	180	3.7	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Phenol	ND		180	18	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
p-Toluidine	ND		340	170	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Pyrene	ND		180	1.1	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*81*		*39 - 146*	*08/30/13 07:29*	*09/03/13 15:22*	*1*
2-Fluorobiphenyl	*78*		*37 - 120*	*08/30/13 07:29*	*09/03/13 15:22*	*1*
2-Fluorophenol	*62*		*18 - 120*	*08/30/13 07:29*	*09/03/13 15:22*	*1*
Nitrobenzene-d5	*71*		*34 - 132*	*08/30/13 07:29*	*09/03/13 15:22*	*1*
Phenol-d5	*74*		*11 - 120*	*08/30/13 07:29*	*09/03/13 15:22*	*1*
p-Terphenyl-d14	*95*		*65 - 153*	*08/30/13 07:29*	*09/03/13 15:22*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	09/04/13 08:02	09/09/13 13:29	1
4,4'-DDE	ND		1.7	0.26	ug/Kg	☼	09/04/13 08:02	09/09/13 13:29	1
4,4'-DDT	**0.28**	**J B**	1.7	0.17	ug/Kg	☼	09/04/13 08:02	09/09/13 13:29	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	09/04/13 08:02	09/09/13 13:29	1
alpha-BHC	ND		1.7	0.31	ug/Kg	☼	09/04/13 08:02	09/09/13 13:29	1
alpha-Chlordane	ND		1.7	0.85	ug/Kg	☼	09/04/13 08:02	09/09/13 13:29	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	09/04/13 08:02	09/09/13 13:29	1
delta-BHC	**0.30**	**J B**	1.7	0.23	ug/Kg	☼	09/04/13 08:02	09/09/13 13:29	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	09/04/13 08:02	09/09/13 13:29	1
Endosulfan I	ND		1.7	0.22	ug/Kg	☼	09/04/13 08:02	09/09/13 13:29	1
Endosulfan II	ND		1.7	0.31	ug/Kg	☼	09/04/13 08:02	09/09/13 13:29	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	09/04/13 08:02	09/09/13 13:29	1
Endrin	ND		1.7	0.24	ug/Kg	☼	09/04/13 08:02	09/09/13 13:29	1
Heptachlor	ND		1.7	0.27	ug/Kg	☼	09/04/13 08:02	09/09/13 13:29	1
Lindane	ND		1.7	0.21	ug/Kg	☼	09/04/13 08:02	09/09/13 13:29	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-1 COMP2
Date Collected: 08/27/13 13:05
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-7
Matrix: Solid
Percent Solids: 95.9

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	108		32 - 136	09/04/13 08:02	09/09/13 13:29	1
Tetrachloro-m-xylene	56		30 - 124	09/04/13 08:02	09/09/13 13:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.20	0.038	mg/Kg	☼	09/04/13 14:44	09/06/13 02:52	1
PCB-1221	ND		0.20	0.038	mg/Kg	☼	09/04/13 14:44	09/06/13 02:52	1
PCB-1232	ND		0.20	0.038	mg/Kg	☼	09/04/13 14:44	09/06/13 02:52	1
PCB-1242	ND		0.20	0.038	mg/Kg	☼	09/04/13 14:44	09/06/13 02:52	1
PCB-1248	ND		0.20	0.038	mg/Kg	☼	09/04/13 14:44	09/06/13 02:52	1
PCB-1254	ND		0.20	0.092	mg/Kg	☼	09/04/13 14:44	09/06/13 02:52	1
PCB-1260	ND		0.20	0.092	mg/Kg	☼	09/04/13 14:44	09/06/13 02:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	124		47 - 176	09/04/13 14:44	09/06/13 02:52	1
Tetrachloro-m-xylene	95		46 - 175	09/04/13 14:44	09/06/13 02:52	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.2	ug/Kg	☼	09/04/13 08:45	09/05/13 14:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	93		39 - 120	09/04/13 08:45	09/05/13 14:00	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.93	J	2.3	0.45	mg/Kg	☼	09/04/13 11:20	09/04/13 17:39	1
Barium	10.8		0.57	0.12	mg/Kg	☼	09/04/13 11:20	09/04/13 17:39	1
Beryllium	0.23		0.23	0.032	mg/Kg	☼	09/04/13 11:20	09/04/13 17:39	1
Cadmium	0.061	J	0.23	0.034	mg/Kg	☼	09/04/13 11:20	09/04/13 17:39	1
Chromium	5.2		0.57	0.23	mg/Kg	☼	09/04/13 11:20	09/04/13 17:39	1
Copper	119		1.1	0.24	mg/Kg	☼	09/04/13 11:20	09/04/13 17:39	1
Lead	3.2		1.1	0.27	mg/Kg	☼	09/04/13 11:20	09/04/13 17:39	1
Manganese	117	B	0.23	0.036	mg/Kg	☼	09/04/13 11:20	09/04/13 17:39	1
Nickel	16.0		5.7	0.26	mg/Kg	☼	09/04/13 11:20	09/04/13 17:39	1
Selenium	ND		4.5	0.45	mg/Kg	☼	09/04/13 11:20	09/04/13 17:39	1
Silver	ND		0.57	0.23	mg/Kg	☼	09/04/13 11:20	09/04/13 17:39	1
Zinc	35.8	B	2.3	0.17	mg/Kg	☼	09/04/13 11:20	09/04/13 17:39	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0079	mg/Kg	☼	09/04/13 11:45	09/04/13 14:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.83	0.28	mg/Kg	☼	09/09/13 07:14	09/09/13 15:08	1
Cyanide, Total	ND		0.91	0.44	mg/Kg	☼	09/03/13 17:25	09/03/13 21:04	1
Cr (III)	5.2		1.5	0.63	mg/Kg			09/09/13 17:14	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-2 GRAB2
Date Collected: 08/27/13 13:15
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-8
Matrix: Solid
Percent Solids: 92.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
1,1-Dichloroethane	ND		4.4	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
1,1-Dichloroethene	ND		4.4	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
1,2-Dichlorobenzene	ND		4.4	0.35	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
1,2-Dichloroethene, cis-	ND		4.4	0.57	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
1,2-Dichloroethene, trans-	ND		4.4	0.46	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
1,3-Dichlorobenzene	ND		4.4	0.23	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
1,4-Dichlorobenzene	ND		4.4	0.62	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
1,4-Dioxane	ND		180	21	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Acetone	ND		22	3.7	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Benzene	ND		4.4	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Butylbenzene	ND		4.4	0.39	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Carbon tetrachloride	ND		4.4	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Chloroform	ND		4.4	0.27	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Ethylbenzene	ND		4.4	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Methyl Ethyl Ketone (2-Butanone)	ND		22	1.6	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Methylene Chloride	ND		4.4	2.0	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Propylbenzene, n-	ND		4.4	0.35	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
sec-Butylbenzene	ND		4.4	0.39	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
tert-Butylbenzene	ND		4.4	0.46	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Tetrachloroethene	ND		4.4	0.59	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Toluene	ND		4.4	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Trichloroethene	ND		4.4	0.97	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Trimethylbenzene, 1,2,4-	ND		4.4	0.85	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Trimethylbenzene, 1,3,5-	ND		4.4	0.29	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Vinyl chloride	ND		4.4	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Xylene (mixed)	ND		8.9	0.74	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*64 - 126*	*08/29/13 16:11*	*08/30/13 17:42*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*	*08/29/13 16:11*	*08/30/13 17:42*	*1*
Toluene-d8 (Surr)	*95*		*71 - 125*	*08/29/13 16:11*	*08/30/13 17:42*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-3 GRAB2
Date Collected: 08/27/13 13:25
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-9
Matrix: Solid
Percent Solids: 93.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.5	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
1,1-Dichloroethane	ND		4.5	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
1,1-Dichloroethene	ND		4.5	0.55	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
1,2-Dichlorobenzene	ND		4.5	0.35	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
1,2-Dichloroethane	ND		4.5	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
1,2-Dichloroethene, cis-	ND		4.5	0.57	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
1,2-Dichloroethene, trans-	ND		4.5	0.46	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
1,3-Dichlorobenzene	ND		4.5	0.23	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
1,4-Dichlorobenzene	ND		4.5	0.62	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
1,4-Dioxane	ND		180	21	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Acetone	ND		22	3.8	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Benzene	ND		4.5	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Butylbenzene	ND		4.5	0.39	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Carbon tetrachloride	ND		4.5	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Chlorobenzene	ND		4.5	0.59	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Chloroform	ND		4.5	0.28	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Ethylbenzene	ND		4.5	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Methyl Ethyl Ketone (2-Butanone)	ND		22	1.6	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Methyl tert-butyl ether	ND		4.5	0.44	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Methylene Chloride	ND		4.5	2.0	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Propylbenzene, n-	ND		4.5	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
sec-Butylbenzene	ND		4.5	0.39	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
tert-Butylbenzene	ND		4.5	0.46	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Tetrachloroethene	ND		4.5	0.60	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Toluene	ND		4.5	0.34	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Trichloroethene	ND		4.5	0.98	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Trimethylbenzene, 1,2,4-	ND		4.5	0.86	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Trimethylbenzene, 1,3,5-	ND		4.5	0.29	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Vinyl chloride	ND		4.5	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Xylene (mixed)	ND		8.9	0.75	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*64 - 126*	*08/29/13 16:11*	*08/30/13 18:07*	*1*
4-Bromofluorobenzene (Surr)	*94*		*72 - 126*	*08/29/13 16:11*	*08/30/13 18:07*	*1*
Toluene-d8 (Surr)	*93*		*71 - 125*	*08/29/13 16:11*	*08/30/13 18:07*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-4 GRAB2
Date Collected: 08/27/13 13:35
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-10
Matrix: Solid
Percent Solids: 94.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.2	0.30	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
1,1-Dichloroethane	ND		4.2	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
1,1-Dichloroethene	ND		4.2	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
1,2-Dichlorobenzene	ND		4.2	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
1,2-Dichloroethene, cis-	ND		4.2	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
1,2-Dichloroethene, trans-	ND		4.2	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
1,3-Dichlorobenzene	ND		4.2	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
1,4-Dichlorobenzene	ND		4.2	0.59	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
1,4-Dioxane	ND		170	20	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Acetone	ND		21	3.5	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Benzene	ND		4.2	0.20	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Butylbenzene	ND		4.2	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Carbon tetrachloride	ND		4.2	0.40	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Chlorobenzene	ND		4.2	0.55	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Chloroform	ND		4.2	0.26	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.5	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Methyl tert-butyl ether	ND		4.2	0.41	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Methylene Chloride	ND		4.2	1.9	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Propylbenzene, n-	ND		4.2	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
sec-Butylbenzene	ND		4.2	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
tert-Butylbenzene	ND		4.2	0.44	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Tetrachloroethene	ND		4.2	0.56	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Toluene	ND		4.2	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Trichloroethene	ND		4.2	0.92	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Trimethylbenzene, 1,2,4-	ND		4.2	0.80	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Trimethylbenzene, 1,3,5-	ND		4.2	0.27	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Vinyl chloride	ND		4.2	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Xylene (mixed)	ND		8.4	0.70	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*123*		*64 - 126*	*08/29/13 16:11*	*08/30/13 18:32*	*1*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*	*08/29/13 16:11*	*08/30/13 18:32*	*1*
Toluene-d8 (Surr)	*93*		*71 - 125*	*08/29/13 16:11*	*08/30/13 18:32*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-5 GRAB2
Date Collected: 08/27/13 13:45
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-11
Matrix: Solid
Percent Solids: 94.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.1	0.30	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
1,1-Dichloroethane	ND		4.1	0.50	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
1,1-Dichloroethene	ND		4.1	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
1,2-Dichlorobenzene	ND		4.1	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
1,2-Dichloroethane	ND		4.1	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
1,2-Dichloroethene, cis-	ND		4.1	0.53	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
1,2-Dichloroethene, trans-	ND		4.1	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
1,3-Dichlorobenzene	ND		4.1	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
1,4-Dichlorobenzene	ND		4.1	0.58	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
1,4-Dioxane	ND		170	20	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Acetone	ND		21	3.5	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Benzene	ND		4.1	0.20	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Butylbenzene	ND		4.1	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Carbon tetrachloride	ND		4.1	0.40	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Chlorobenzene	ND		4.1	0.55	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Chloroform	ND		4.1	0.26	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Ethylbenzene	ND		4.1	0.29	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.5	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Methyl tert-butyl ether	ND		4.1	0.41	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Methylene Chloride	ND		4.1	1.9	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Propylbenzene, n-	ND		4.1	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
sec-Butylbenzene	ND		4.1	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
tert-Butylbenzene	ND		4.1	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Tetrachloroethene	ND		4.1	0.55	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Toluene	ND		4.1	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Trichloroethene	ND		4.1	0.91	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Trimethylbenzene, 1,2,4-	ND		4.1	0.79	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Trimethylbenzene, 1,3,5-	ND		4.1	0.27	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Vinyl chloride	ND		4.1	0.50	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Xylene (mixed)	ND		8.3	0.69	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*125*		*64 - 126*	*08/29/13 16:11*	*08/30/13 18:58*	*1*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*	*08/29/13 16:11*	*08/30/13 18:58*	*1*
Toluene-d8 (Surr)	*93*		*71 - 125*	*08/29/13 16:11*	*08/30/13 18:58*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-6 GRAB2
Date Collected: 08/27/13 13:55
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-12
Matrix: Solid
Percent Solids: 93.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.3	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
1,1-Dichloroethane	ND		4.3	0.52	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
1,1-Dichloroethene	ND		4.3	0.52	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
1,2-Dichlorobenzene	ND		4.3	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
1,2-Dichloroethane	ND		4.3	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
1,2-Dichloroethene, cis-	ND		4.3	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
1,2-Dichloroethene, trans-	ND		4.3	0.44	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
1,3-Dichlorobenzene	ND		4.3	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
1,4-Dichlorobenzene	ND		4.3	0.60	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
1,4-Dioxane	ND		170	21	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Acetone	ND		21	3.6	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Benzene	ND		4.3	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Butylbenzene	ND		4.3	0.37	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Carbon tetrachloride	ND		4.3	0.41	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Chlorobenzene	ND		4.3	0.56	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Chloroform	ND		4.3	0.26	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Ethylbenzene	ND		4.3	0.29	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.6	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Methyl tert-butyl ether	ND		4.3	0.42	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Methylene Chloride	ND		4.3	2.0	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Propylbenzene, n-	ND		4.3	0.34	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
sec-Butylbenzene	ND		4.3	0.37	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
tert-Butylbenzene	ND		4.3	0.44	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Tetrachloroethene	ND		4.3	0.57	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Toluene	ND		4.3	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Trichloroethene	ND		4.3	0.94	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Trimethylbenzene, 1,2,4-	ND		4.3	0.82	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Trimethylbenzene, 1,3,5-	ND		4.3	0.27	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Vinyl chloride	ND		4.3	0.52	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Xylene (mixed)	ND		8.5	0.71	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*64 - 126*	*08/29/13 16:11*	*08/30/13 19:23*	*1*
4-Bromofluorobenzene (Surr)	*94*		*72 - 126*	*08/29/13 16:11*	*08/30/13 19:23*	*1*
Toluene-d8 (Surr)	*93*		*71 - 125*	*08/29/13 16:11*	*08/30/13 19:23*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-7 GRAB2
Date Collected: 08/27/13 14:05
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-13
Matrix: Solid
Percent Solids: 92.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.1	0.30	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
1,1-Dichloroethane	ND		4.1	0.50	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
1,1-Dichloroethene	ND		4.1	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
1,2-Dichlorobenzene	ND		4.1	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
1,2-Dichloroethane	ND		4.1	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
1,2-Dichloroethene, cis-	ND		4.1	0.53	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
1,2-Dichloroethene, trans-	ND		4.1	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
1,3-Dichlorobenzene	ND		4.1	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
1,4-Dichlorobenzene	ND		4.1	0.58	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
1,4-Dioxane	ND		170	20	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Acetone	ND		21	3.5	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Benzene	ND		4.1	0.20	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Butylbenzene	ND		4.1	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Carbon tetrachloride	ND		4.1	0.40	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Chlorobenzene	ND		4.1	0.55	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Chloroform	ND		4.1	0.26	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Ethylbenzene	ND		4.1	0.29	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.5	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Methyl tert-butyl ether	ND		4.1	0.41	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Methylene Chloride	ND		4.1	1.9	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Propylbenzene, n-	ND		4.1	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
sec-Butylbenzene	ND		4.1	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
tert-Butylbenzene	ND		4.1	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Tetrachloroethene	ND		4.1	0.56	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Toluene	ND		4.1	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Trichloroethene	ND		4.1	0.91	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Trimethylbenzene, 1,2,4-	ND		4.1	0.79	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Trimethylbenzene, 1,3,5-	ND		4.1	0.27	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Vinyl chloride	ND		4.1	0.50	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Xylene (mixed)	ND		8.3	0.70	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*64 - 126*	*08/29/13 16:11*	*08/30/13 19:49*	*1*
4-Bromofluorobenzene (Surr)	*92*		*72 - 126*	*08/29/13 16:11*	*08/30/13 19:49*	*1*
Toluene-d8 (Surr)	*91*		*71 - 125*	*08/29/13 16:11*	*08/30/13 19:49*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-8 GRAB2
Date Collected: 08/27/13 14:15
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-14
Matrix: Solid
Percent Solids: 93.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.1	0.30	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
1,1-Dichloroethane	ND		4.1	0.50	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
1,1-Dichloroethene	ND		4.1	0.50	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
1,2-Dichlorobenzene	ND		4.1	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
1,2-Dichloroethane	ND		4.1	0.20	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
1,2-Dichloroethene, cis-	ND		4.1	0.52	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
1,2-Dichloroethene, trans-	ND		4.1	0.42	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
1,3-Dichlorobenzene	ND		4.1	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
1,4-Dichlorobenzene	ND		4.1	0.57	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
1,4-Dioxane	ND		160	20	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Acetone	ND		20	3.4	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Benzene	ND		4.1	0.20	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Butylbenzene	ND		4.1	0.35	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Carbon tetrachloride	ND		4.1	0.39	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Chlorobenzene	ND		4.1	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Chloroform	ND		4.1	0.25	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Ethylbenzene	ND		4.1	0.28	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Methyl Ethyl Ketone (2-Butanone)	ND		20	1.5	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Methyl tert-butyl ether	ND		4.1	0.40	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Methylene Chloride	ND		4.1	1.9	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Propylbenzene, n-	ND		4.1	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
sec-Butylbenzene	ND		4.1	0.35	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
tert-Butylbenzene	ND		4.1	0.42	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Tetrachloroethene	ND		4.1	0.55	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Toluene	ND		4.1	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Trichloroethene	ND		4.1	0.90	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Trimethylbenzene, 1,2,4-	ND		4.1	0.78	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Trimethylbenzene, 1,3,5-	ND		4.1	0.26	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Vinyl chloride	ND		4.1	0.50	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Xylene (mixed)	ND		8.2	0.68	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*125*		*64 - 126*	*08/29/13 16:11*	*08/30/13 20:14*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*	*08/29/13 16:11*	*08/30/13 20:14*	*1*
Toluene-d8 (Surr)	*94*		*71 - 125*	*08/29/13 16:11*	*08/30/13 20:14*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-9 GRAB2
Date Collected: 08/27/13 14:25
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-15
Matrix: Solid
Percent Solids: 93.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.1	0.29	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
1,1-Dichloroethane	ND		4.1	0.50	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
1,1-Dichloroethene	ND		4.1	0.50	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
1,2-Dichlorobenzene	ND		4.1	0.32	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
1,2-Dichloroethane	ND		4.1	0.20	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
1,2-Dichloroethene, cis-	ND		4.1	0.52	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
1,2-Dichloroethene, trans-	ND		4.1	0.42	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
1,3-Dichlorobenzene	ND		4.1	0.21	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
1,4-Dichlorobenzene	ND		4.1	0.57	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
1,4-Dioxane	ND		160	20	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Acetone	ND		20	3.4	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Benzene	ND		4.1	0.20	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Butylbenzene	ND		4.1	0.35	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Carbon tetrachloride	ND		4.1	0.39	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Chlorobenzene	ND		4.1	0.54	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Chloroform	ND		4.1	0.25	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Ethylbenzene	ND		4.1	0.28	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Methyl Ethyl Ketone (2-Butanone)	ND		20	1.5	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Methyl tert-butyl ether	ND		4.1	0.40	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Methylene Chloride	ND		4.1	1.9	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Propylbenzene, n-	ND		4.1	0.32	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
sec-Butylbenzene	ND		4.1	0.35	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
tert-Butylbenzene	ND		4.1	0.42	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Tetrachloroethene	ND		4.1	0.54	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Toluene	ND		4.1	0.31	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Trichloroethene	ND		4.1	0.89	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Trimethylbenzene, 1,2,4-	ND		4.1	0.78	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Trimethylbenzene, 1,3,5-	ND		4.1	0.26	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Vinyl chloride	ND		4.1	0.50	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Xylene (mixed)	ND		8.1	0.68	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*64 - 126*	*08/31/13 00:23*	*08/31/13 02:33*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*	*08/31/13 00:23*	*08/31/13 02:33*	*1*
Toluene-d8 (Surr)	*102*		*71 - 125*	*08/31/13 00:23*	*08/31/13 02:33*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-10 GRAB2
Date Collected: 08/27/13 14:35
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-16
Matrix: Solid
Percent Solids: 93.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.8	0.28	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
1,1-Dichloroethane	ND		3.8	0.46	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
1,1-Dichloroethene	ND		3.8	0.46	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
1,2-Dichlorobenzene	ND		3.8	0.30	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
1,2-Dichloroethane	ND		3.8	0.19	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
1,2-Dichloroethene, cis-	ND		3.8	0.49	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
1,2-Dichloroethene, trans-	ND		3.8	0.39	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
1,3-Dichlorobenzene	ND		3.8	0.19	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
1,4-Dichlorobenzene	ND		3.8	0.53	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
1,4-Dioxane	ND		150	18	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Acetone	ND		19	3.2	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Benzene	ND		3.8	0.19	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Butylbenzene	ND		3.8	0.33	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Carbon tetrachloride	ND		3.8	0.37	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Chlorobenzene	ND		3.8	0.50	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Chloroform	ND		3.8	0.23	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Ethylbenzene	ND		3.8	0.26	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Methyl Ethyl Ketone (2-Butanone)	ND		19	1.4	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Methyl tert-butyl ether	ND		3.8	0.37	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Methylene Chloride	ND		3.8	1.7	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Propylbenzene, n-	ND		3.8	0.30	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
sec-Butylbenzene	ND		3.8	0.33	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
tert-Butylbenzene	ND		3.8	0.39	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Tetrachloroethene	ND		3.8	0.51	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Toluene	ND		3.8	0.29	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Trichloroethene	ND		3.8	0.83	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Trimethylbenzene, 1,2,4-	ND		3.8	0.73	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Trimethylbenzene, 1,3,5-	ND		3.8	0.24	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Vinyl chloride	ND		3.8	0.46	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Xylene (mixed)	ND		7.6	0.64	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*64 - 126*	*08/31/13 00:23*	*08/31/13 02:59*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 126*	*08/31/13 00:23*	*08/31/13 02:59*	*1*
Toluene-d8 (Surr)	*103*		*71 - 125*	*08/31/13 00:23*	*08/31/13 02:59*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-11 GRAB2
Date Collected: 08/27/13 14:45
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-17
Matrix: Solid
Percent Solids: 94.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.1	0.30	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
1,1-Dichloroethane	ND		4.1	0.50	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
1,1-Dichloroethene	ND		4.1	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
1,2-Dichlorobenzene	ND		4.1	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
1,2-Dichloroethane	ND		4.1	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
1,2-Dichloroethene, cis-	ND		4.1	0.53	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
1,2-Dichloroethene, trans-	ND		4.1	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
1,3-Dichlorobenzene	ND		4.1	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
1,4-Dichlorobenzene	ND		4.1	0.58	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
1,4-Dioxane	ND		170	20	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Acetone	ND		21	3.5	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Benzene	ND		4.1	0.20	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Butylbenzene	ND		4.1	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Carbon tetrachloride	ND		4.1	0.40	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Chlorobenzene	ND		4.1	0.55	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Chloroform	ND		4.1	0.26	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Ethylbenzene	ND		4.1	0.28	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.5	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Methyl tert-butyl ether	ND		4.1	0.41	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Methylene Chloride	ND		4.1	1.9	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Propylbenzene, n-	ND		4.1	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
sec-Butylbenzene	ND		4.1	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
tert-Butylbenzene	ND		4.1	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Tetrachloroethene	ND		4.1	0.55	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Toluene	ND		4.1	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Trichloroethene	ND		4.1	0.91	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Trimethylbenzene, 1,2,4-	ND		4.1	0.79	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Trimethylbenzene, 1,3,5-	ND		4.1	0.27	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Vinyl chloride	ND		4.1	0.50	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Xylene (mixed)	ND		8.3	0.69	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*128*	*X*	*64 - 126*	*08/29/13 16:11*	*08/30/13 21:30*	*1*
4-Bromofluorobenzene (Surr)	*91*		*72 - 126*	*08/29/13 16:11*	*08/30/13 21:30*	*1*
Toluene-d8 (Surr)	*91*		*71 - 125*	*08/29/13 16:11*	*08/30/13 21:30*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-12 GRAB2
Date Collected: 08/27/13 14:55
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-18
Matrix: Solid
Percent Solids: 95.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.5	0.25	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
1,1-Dichloroethane	ND		3.5	0.43	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
1,1-Dichloroethene	ND		3.5	0.43	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
1,2-Dichlorobenzene	ND		3.5	0.27	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
1,2-Dichloroethane	ND		3.5	0.18	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
1,2-Dichloroethene, cis-	ND		3.5	0.45	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
1,2-Dichloroethene, trans-	ND		3.5	0.36	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
1,3-Dichlorobenzene	ND		3.5	0.18	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
1,4-Dichlorobenzene	ND		3.5	0.49	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
1,4-Dioxane	ND		140	17	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Acetone	ND		17	2.9	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Benzene	ND		3.5	0.17	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Butylbenzene	ND		3.5	0.30	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Carbon tetrachloride	ND		3.5	0.34	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Chlorobenzene	ND		3.5	0.46	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Chloroform	ND		3.5	0.22	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Ethylbenzene	ND		3.5	0.24	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Methyl Ethyl Ketone (2-Butanone)	ND		17	1.3	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Methyl tert-butyl ether	ND		3.5	0.34	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Methylene Chloride	ND		3.5	1.6	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Propylbenzene, n-	ND		3.5	0.28	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
sec-Butylbenzene	ND		3.5	0.30	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
tert-Butylbenzene	ND		3.5	0.36	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Tetrachloroethene	ND		3.5	0.47	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Toluene	ND		3.5	0.26	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Trichloroethene	ND		3.5	0.77	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Trimethylbenzene, 1,2,4-	ND		3.5	0.67	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Trimethylbenzene, 1,3,5-	ND		3.5	0.22	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Vinyl chloride	ND		3.5	0.43	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Xylene (mixed)	ND		7.0	0.59	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*64 - 126*	*08/31/13 00:23*	*08/31/13 03:51*	*1*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*	*08/31/13 00:23*	*08/31/13 03:51*	*1*
Toluene-d8 (Surr)	*102*		*71 - 125*	*08/31/13 00:23*	*08/31/13 03:51*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-13 GRAB2
Date Collected: 08/27/13 15:05
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-19
Matrix: Solid
Percent Solids: 93.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.9	0.28	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
1,1-Dichloroethane	ND		3.9	0.48	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
1,1-Dichloroethene	ND		3.9	0.48	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
1,2-Dichlorobenzene	ND		3.9	0.31	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
1,2-Dichloroethane	ND		3.9	0.20	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
1,2-Dichloroethene, cis-	ND		3.9	0.50	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
1,2-Dichloroethene, trans-	ND		3.9	0.40	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
1,3-Dichlorobenzene	ND		3.9	0.20	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
1,4-Dichlorobenzene	ND		3.9	0.55	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
1,4-Dioxane	ND		160	19	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Acetone	ND		20	3.3	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Benzene	ND		3.9	0.19	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Butylbenzene	ND		3.9	0.34	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Carbon tetrachloride	ND		3.9	0.38	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Chlorobenzene	ND		3.9	0.52	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Chloroform	ND		3.9	0.24	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Ethylbenzene	ND		3.9	0.27	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Methyl Ethyl Ketone (2-Butanone)	ND		20	1.4	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Methyl tert-butyl ether	ND		3.9	0.38	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Methylene Chloride	ND		3.9	1.8	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Propylbenzene, n-	ND		3.9	0.31	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
sec-Butylbenzene	ND		3.9	0.34	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
tert-Butylbenzene	ND		3.9	0.41	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Tetrachloroethene	ND		3.9	0.53	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Toluene	ND		3.9	0.30	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Trichloroethene	ND		3.9	0.86	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Trimethylbenzene, 1,2,4-	ND		3.9	0.75	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Trimethylbenzene, 1,3,5-	ND		3.9	0.25	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Vinyl chloride	ND		3.9	0.48	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Xylene (mixed)	ND		7.8	0.66	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*64 - 126*	*08/31/13 00:23*	*08/31/13 04:16*	*1*
4-Bromofluorobenzene (Surr)	*97*		*72 - 126*	*08/31/13 00:23*	*08/31/13 04:16*	*1*
Toluene-d8 (Surr)	*103*		*71 - 125*	*08/31/13 00:23*	*08/31/13 04:16*	*1*

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		12DCE	BFB	TOL							
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(71-125)							
480-44727-1	HOHAOC2-A-1 GRAB2	113	98	98							
480-44727-2	HOHAOC2-A-1 GRAB3	114	96	95							
480-44727-3	HOHAOC2-A-1 GRAB4	119	95	94							
480-44727-4	HOHAOC2-A-1 GRAB5	118	94	92							
480-44727-5	HOHAOC2-A-1 GRAB6	118	95	94							
480-44727-6	HOHAOC2-A-1 GRAB7	119	94	91							
480-44727-8	HOHAOC2-A-2 GRAB2	120	96	95							
480-44727-9	HOHAOC2-A-3 GRAB2	121	94	93							
480-44727-10	HOHAOC2-A-4 GRAB2	123	95	93							
480-44727-11	HOHAOC2-A-5 GRAB2	125	95	93							
480-44727-12	HOHAOC2-A-6 GRAB2	120	94	93							
480-44727-13	HOHAOC2-A-7 GRAB2	122	92	91							
480-44727-14	HOHAOC2-A-8 GRAB2	125	96	94							
480-44727-15	HOHAOC2-A-9 GRAB2	108	96	102							
480-44727-16	HOHAOC2-A-10 GRAB2	116	99	103							
480-44727-17	HOHAOC2-A-11 GRAB2	128 X	91	91							
480-44727-18	HOHAOC2-A-12 GRAB2	110	95	102							
480-44727-19	HOHAOC2-A-13 GRAB2	111	97	103							
LCS 480-136665/4	Lab Control Sample	104	100	97							
LCS 480-136764/4	Lab Control Sample	112	97	96							
LCS 480-136887/4	Lab Control Sample	105	101	103							
LCSD 480-136665/22	Lab Control Sample Dup	106	96	95							
LCSD 480-136764/5	Lab Control Sample Dup	115	99	97							
MB 480-136665/5	Method Blank	108	98	98							
MB 480-136764/24	Method Blank	117	95	96							
MB 480-136887/27	Method Blank	106	97	105							

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TBP	FBP	2FP	NBZ	PHL	TPH		
Lab Sample ID	Client Sample ID	(39-146)	(37-120)	(18-120)	(34-132)	(11-120)	(65-153)		
480-44727-7	HOHAOC2-A-1 COMP2	81	78	62	71	74	95		
LCS 480-136685/2-A	Lab Control Sample	92	92	72	85	83	100		
MB 480-136685/1-A	Method Blank	81	88	73	79	83	102		

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPH = p-Terphenyl-d14

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCB1	TCX1								
Lab Sample ID	Client Sample ID	(32-136)	(30-124)								
480-44727-7	HOHAOC2-A-1 COMP2	108	56								
LCS 480-137173/2-A	Lab Control Sample	73	55								
MB 480-137173/1-A	Method Blank	78	57								

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCB1	TCX1								
Lab Sample ID	Client Sample ID	(47-176)	(46-175)								
480-44727-7	HOHAOC2-A-1 COMP2	124	95								
LCS 480-137285/2-A	Lab Control Sample	142	116								
MB 480-137285/1-A	Method Blank	122	94								

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8151A - Herbicides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCPA1									
Lab Sample ID	Client Sample ID	(39-120)									
480-44727-7	HOHAOC2-A-1 COMP2	93									
480-44727-7 MS	HOHAOC2-A-1 COMP2	96									
480-44727-7 MSD	HOHAOC2-A-1 COMP2	92									
LCS 480-137182/2-A	Lab Control Sample	97									
MB 480-137182/1-A	Method Blank	90									

Surrogate Legend

DCPA = 2,4-Dichlorophenylacetic acid

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

Lab Sample ID: MB 480-136665/5
Matrix: Solid
Analysis Batch: 136665

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			08/30/13 04:11	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			08/30/13 04:11	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			08/30/13 04:11	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			08/30/13 04:11	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			08/30/13 04:11	1
1,2-Dichloroethene, cis-	ND		5.0	0.64	ug/Kg			08/30/13 04:11	1
1,2-Dichloroethene, trans-	ND		5.0	0.52	ug/Kg			08/30/13 04:11	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			08/30/13 04:11	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			08/30/13 04:11	1
1,4-Dioxane	ND		200	24	ug/Kg			08/30/13 04:11	1
Acetone	ND		25	4.2	ug/Kg			08/30/13 04:11	1
Benzene	ND		5.0	0.25	ug/Kg			08/30/13 04:11	1
Butylbenzene	ND		5.0	0.44	ug/Kg			08/30/13 04:11	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			08/30/13 04:11	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			08/30/13 04:11	1
Chloroform	ND		5.0	0.31	ug/Kg			08/30/13 04:11	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			08/30/13 04:11	1
Methyl Ethyl Ketone (2-Butanone)	ND		25	1.8	ug/Kg			08/30/13 04:11	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			08/30/13 04:11	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			08/30/13 04:11	1
Propylbenzene, n-	ND		5.0	0.40	ug/Kg			08/30/13 04:11	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg			08/30/13 04:11	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg			08/30/13 04:11	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/30/13 04:11	1
Toluene	ND		5.0	0.38	ug/Kg			08/30/13 04:11	1
Trichloroethene	ND		5.0	1.1	ug/Kg			08/30/13 04:11	1
Trimethylbenzene, 1,2,4-	ND		5.0	0.96	ug/Kg			08/30/13 04:11	1
Trimethylbenzene, 1,3,5-	ND		5.0	0.32	ug/Kg			08/30/13 04:11	1
Vinyl chloride	ND		5.0	0.61	ug/Kg			08/30/13 04:11	1
Xylene (mixed)	ND		10	0.84	ug/Kg			08/30/13 04:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*64 - 126*		*08/30/13 04:11*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*		*08/30/13 04:11*	*1*
Toluene-d8 (Surr)	*98*		*71 - 125*		*08/30/13 04:11*	*1*

Lab Sample ID: LCS 480-136665/4
Matrix: Solid
Analysis Batch: 136665

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	53.5		ug/Kg		107	73 - 126
1,1-Dichloroethene	50.0	53.0		ug/Kg		106	59 - 125
1,2-Dichlorobenzene	50.0	49.6		ug/Kg		99	75 - 120
1,2-Dichloroethane	50.0	53.6		ug/Kg		107	77 - 122
1,2-Dichloroethene, cis-	50.0	53.5		ug/Kg		107	81 - 117
1,2-Dichloroethene, trans-	50.0	53.2		ug/Kg		106	78 - 126
Benzene	50.0	52.5		ug/Kg		105	79 - 127

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

Lab Sample ID: LCS 480-136665/4
Matrix: Solid
Analysis Batch: 136665

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chlorobenzene			50.0	48.9		ug/Kg		98	76 - 124		
Ethylbenzene			50.0	48.9		ug/Kg		98	80 - 120		
Methyl tert-butyl ether			50.0	54.3		ug/Kg		109	63 - 125		
Tetrachloroethene			50.0	49.2		ug/Kg		98	74 - 122		
Toluene			50.0	48.1		ug/Kg		96	74 - 128		
Trichloroethene			50.0	52.9		ug/Kg		106	77 - 129		
Trimethylbenzene, 1,2,4-			50.0	48.4		ug/Kg		97	74 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*64 - 126*
4-Bromofluorobenzene (Surr)	*100*		*72 - 126*
Toluene-d8 (Surr)	*97*		*71 - 125*

Lab Sample ID: LCSD 480-136665/22
Matrix: Solid
Analysis Batch: 136665

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-Dichloroethane			50.0	56.4		ug/Kg		113	73 - 126	5	20
1,1-Dichloroethene			50.0	56.5		ug/Kg		113	59 - 125	6	20
1,2-Dichlorobenzene			50.0	46.9		ug/Kg		94	75 - 120	6	20
1,2-Dichloroethane			50.0	55.5		ug/Kg		111	77 - 122	3	20
1,2-Dichloroethene, cis-			50.0	56.3		ug/Kg		113	81 - 117	5	20
1,2-Dichloroethene, trans-			50.0	56.6		ug/Kg		113	78 - 126	6	20
Benzene			50.0	55.2		ug/Kg		110	79 - 127	5	20
Chlorobenzene			50.0	47.9		ug/Kg		96	76 - 124	2	20
Ethylbenzene			50.0	48.4		ug/Kg		97	80 - 120	1	20
Methyl tert-butyl ether			50.0	53.1		ug/Kg		106	63 - 125	2	20
Tetrachloroethene			50.0	49.5		ug/Kg		99	74 - 122	1	20
Toluene			50.0	47.7		ug/Kg		95	74 - 128	1	20
Trichloroethene			50.0	57.5		ug/Kg		115	77 - 129	8	20
Trimethylbenzene, 1,2,4-			50.0	47.4		ug/Kg		95	74 - 120	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*64 - 126*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*
Toluene-d8 (Surr)	*95*		*71 - 125*

Lab Sample ID: MB 480-136764/24
Matrix: Solid
Analysis Batch: 136764

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			08/30/13 14:56	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			08/30/13 14:56	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			08/30/13 14:56	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			08/30/13 14:56	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			08/30/13 14:56	1

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

Lab Sample ID: MB 480-136764/24
Matrix: Solid
Analysis Batch: 136764

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, cis-	ND		5.0	0.64	ug/Kg			08/30/13 14:56	1
1,2-Dichloroethene, trans-	ND		5.0	0.52	ug/Kg			08/30/13 14:56	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			08/30/13 14:56	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			08/30/13 14:56	1
1,4-Dioxane	ND		200	24	ug/Kg			08/30/13 14:56	1
Acetone	ND		25	4.2	ug/Kg			08/30/13 14:56	1
Benzene	ND		5.0	0.25	ug/Kg			08/30/13 14:56	1
Butylbenzene	ND		5.0	0.44	ug/Kg			08/30/13 14:56	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			08/30/13 14:56	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			08/30/13 14:56	1
Chloroform	ND		5.0	0.31	ug/Kg			08/30/13 14:56	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			08/30/13 14:56	1
Methyl Ethyl Ketone (2-Butanone)	ND		25	1.8	ug/Kg			08/30/13 14:56	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			08/30/13 14:56	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			08/30/13 14:56	1
Propylbenzene, n-	ND		5.0	0.40	ug/Kg			08/30/13 14:56	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg			08/30/13 14:56	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg			08/30/13 14:56	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/30/13 14:56	1
Toluene	ND		5.0	0.38	ug/Kg			08/30/13 14:56	1
Trichloroethene	ND		5.0	1.1	ug/Kg			08/30/13 14:56	1
Trimethylbenzene, 1,2,4-	ND		5.0	0.96	ug/Kg			08/30/13 14:56	1
Trimethylbenzene, 1,3,5-	ND		5.0	0.32	ug/Kg			08/30/13 14:56	1
Vinyl chloride	ND		5.0	0.61	ug/Kg			08/30/13 14:56	1
Xylene (mixed)	ND		10	0.84	ug/Kg			08/30/13 14:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*64 - 126*		*08/30/13 14:56*	*1*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*		*08/30/13 14:56*	*1*
Toluene-d8 (Surr)	*96*		*71 - 125*		*08/30/13 14:56*	*1*

Lab Sample ID: LCS 480-136764/4
Matrix: Solid
Analysis Batch: 136764

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	55.1		ug/Kg		110	73 - 126
1,1-Dichloroethene	50.0	53.4		ug/Kg		107	59 - 125
1,2-Dichlorobenzene	50.0	46.1		ug/Kg		92	75 - 120
1,2-Dichloroethane	50.0	56.4		ug/Kg		113	77 - 122
1,2-Dichloroethene, cis-	50.0	55.2		ug/Kg		110	81 - 117
1,2-Dichloroethene, trans-	50.0	54.7		ug/Kg		109	78 - 126
Benzene	50.0	53.9		ug/Kg		108	79 - 127
Chlorobenzene	50.0	47.1		ug/Kg		94	76 - 124
Ethylbenzene	50.0	46.8		ug/Kg		94	80 - 120
Methyl tert-butyl ether	50.0	55.1		ug/Kg		110	63 - 125
Tetrachloroethene	50.0	46.9		ug/Kg		94	74 - 122
Toluene	50.0	46.1		ug/Kg		92	74 - 128

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

Lab Sample ID: LCS 480-136764/4
Matrix: Solid
Analysis Batch: 136764

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Trichloroethene			50.0	54.5		ug/Kg		109	77 - 129		
Trimethylbenzene, 1,2,4-			50.0	45.6		ug/Kg		91	74 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*64 - 126*
4-Bromofluorobenzene (Surr)	*97*		*72 - 126*
Toluene-d8 (Surr)	*96*		*71 - 125*

Lab Sample ID: LCSD 480-136764/5
Matrix: Solid
Analysis Batch: 136764

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-Dichloroethane			50.0	54.0		ug/Kg		108	73 - 126	2	20
1,1-Dichloroethene			50.0	52.2		ug/Kg		104	59 - 125	2	20
1,2-Dichlorobenzene			50.0	45.5		ug/Kg		91	75 - 120	1	20
1,2-Dichloroethane			50.0	56.4		ug/Kg		113	77 - 122	0	20
1,2-Dichloroethene, cis-			50.0	54.5		ug/Kg		109	81 - 117	1	20
1,2-Dichloroethene, trans-			50.0	62.5		ug/Kg		125	78 - 126	13	20
Benzene			50.0	53.4		ug/Kg		107	79 - 127	1	20
Chlorobenzene			50.0	46.6		ug/Kg		93	76 - 124	1	20
Ethylbenzene			50.0	46.2		ug/Kg		92	80 - 120	1	20
Methyl tert-butyl ether			50.0	55.3		ug/Kg		111	63 - 125	0	20
Tetrachloroethene			50.0	46.4		ug/Kg		93	74 - 122	1	20
Toluene			50.0	45.7		ug/Kg		91	74 - 128	1	20
Trichloroethene			50.0	54.1		ug/Kg		108	77 - 129	1	20
Trimethylbenzene, 1,2,4-			50.0	45.2		ug/Kg		90	74 - 120	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*115*		*64 - 126*
4-Bromofluorobenzene (Surr)	*99*		*72 - 126*
Toluene-d8 (Surr)	*97*		*71 - 125*

Lab Sample ID: MB 480-136887/27
Matrix: Solid
Analysis Batch: 136887

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			08/31/13 01:57	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			08/31/13 01:57	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			08/31/13 01:57	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			08/31/13 01:57	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			08/31/13 01:57	1
1,2-Dichloroethene, cis-	ND		5.0	0.64	ug/Kg			08/31/13 01:57	1
1,2-Dichloroethene, trans-	ND		5.0	0.52	ug/Kg			08/31/13 01:57	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			08/31/13 01:57	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			08/31/13 01:57	1
1,4-Dioxane	ND		200	24	ug/Kg			08/31/13 01:57	1

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

Lab Sample ID: MB 480-136887/27
Matrix: Solid
Analysis Batch: 136887

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	4.2	ug/Kg			08/31/13 01:57	1
Benzene	ND		5.0	0.25	ug/Kg			08/31/13 01:57	1
Butylbenzene	ND		5.0	0.44	ug/Kg			08/31/13 01:57	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			08/31/13 01:57	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			08/31/13 01:57	1
Chloroform	ND		5.0	0.31	ug/Kg			08/31/13 01:57	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			08/31/13 01:57	1
Methyl Ethyl Ketone (2-Butanone)	ND		25	1.8	ug/Kg			08/31/13 01:57	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			08/31/13 01:57	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			08/31/13 01:57	1
Propylbenzene, n-	ND		5.0	0.40	ug/Kg			08/31/13 01:57	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg			08/31/13 01:57	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg			08/31/13 01:57	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/31/13 01:57	1
Toluene	ND		5.0	0.38	ug/Kg			08/31/13 01:57	1
Trichloroethene	ND		5.0	1.1	ug/Kg			08/31/13 01:57	1
Trimethylbenzene, 1,2,4-	ND		5.0	0.96	ug/Kg			08/31/13 01:57	1
Trimethylbenzene, 1,3,5-	ND		5.0	0.32	ug/Kg			08/31/13 01:57	1
Vinyl chloride	ND		5.0	0.61	ug/Kg			08/31/13 01:57	1
Xylene (mixed)	ND		10	0.84	ug/Kg			08/31/13 01:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*64 - 126*		*08/31/13 01:57*	*1*
4-Bromofluorobenzene (Surr)	*97*		*72 - 126*		*08/31/13 01:57*	*1*
Toluene-d8 (Surr)	*105*		*71 - 125*		*08/31/13 01:57*	*1*

Lab Sample ID: LCS 480-136887/4
Matrix: Solid
Analysis Batch: 136887

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	49.9		ug/Kg		100	73 - 126
1,1-Dichloroethene	50.0	50.1		ug/Kg		100	59 - 125
1,2-Dichlorobenzene	50.0	51.7		ug/Kg		103	75 - 120
1,2-Dichloroethane	50.0	50.8		ug/Kg		102	77 - 122
1,2-Dichloroethene, cis-	50.0	49.6		ug/Kg		99	81 - 117
1,2-Dichloroethene, trans-	50.0	59.0		ug/Kg		118	78 - 126
Benzene	50.0	49.1		ug/Kg		98	79 - 127
Chlorobenzene	50.0	50.6		ug/Kg		101	76 - 124
Ethylbenzene	50.0	50.8		ug/Kg		102	80 - 120
Methyl tert-butyl ether	50.0	48.3		ug/Kg		97	63 - 125
Tetrachloroethene	50.0	51.5		ug/Kg		103	74 - 122
Toluene	50.0	50.0		ug/Kg		100	74 - 128
Trichloroethene	50.0	50.5		ug/Kg		101	77 - 129
Trimethylbenzene, 1,2,4-	50.0	51.7		ug/Kg		103	74 - 120

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

Lab Sample ID: LCS 480-136887/4
Matrix: Solid
Analysis Batch: 136887

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*105*		*64 - 126*
4-Bromofluorobenzene (Surr)	*101*		*72 - 126*
Toluene-d8 (Surr)	*103*		*71 - 125*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-136685/1-A
Matrix: Solid
Analysis Batch: 137018

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 136685

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dihydroxyanthraquinone	ND		650	110	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
1-Hydroxyanthraquinone	ND		650	250	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2,2'-oxybis[1-chloropropane]	ND		170	17	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2,4,5-Trichlorophenol	ND		170	36	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2,4,6-Trichlorophenol	ND		170	11	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2,4-Dichlorophenol	ND		170	8.8	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2,4-Dimethylphenol	ND		170	45	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2,4-Dinitrophenol	ND		330	58	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2,4-Dinitrotoluene	ND		170	26	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2,6-Dinitrotoluene	ND		170	41	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2-Chloroaniline	ND		330	29	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2-Chloronaphthalene	ND		170	11	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2-Chlorophenol	ND		170	8.5	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2-Methylnaphthalene	ND		170	2.0	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2-Methylphenol	ND		170	5.1	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2-Nitroaniline	ND		330	54	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2-Nitrophenol	ND		170	7.6	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
3,3'-Dichlorobenzidine	ND		170	150	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
3-Nitroaniline	ND		330	38	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
4,6-Dinitro-2-methylphenol	ND		330	58	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
4-Bromophenyl phenyl ether	ND		170	53	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
4-Chloro-3-methylphenol	ND		170	6.9	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
4-Chloroaniline	ND		170	49	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
4-Chlorophenyl phenyl ether	ND		170	3.6	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
4-Methylphenol	ND		330	9.3	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
4-Nitroaniline	ND		330	19	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
4-Nitrophenol	ND		330	40	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
9,10-Anthracenedione	ND		330	150	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
9-Octadecenamide	ND		3300	810	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Acenaphthene	ND		170	2.0	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Acenaphthylene	ND		170	1.4	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Acetophenone	ND		170	8.6	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Anthracene	ND		170	4.3	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Atrazine	ND		170	7.4	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Benzaldehyde	ND		170	18	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Benzo(a)pyrene	ND		170	4.0	ug/Kg		08/30/13 07:29	09/03/13 14:08	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-136685/1-A
Matrix: Solid
Analysis Batch: 137018

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 136685

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo(b)fluoranthene	ND		170	3.2	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Benzo(k)fluoranthene	ND		170	1.8	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Biphenyl	ND		170	10	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Bis(2-chloroethoxy)methane	ND		170	9.1	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Bis(2-chloroethyl)ether	ND		170	14	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Bis(2-ethylhexyl) phthalate	ND		170	54	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Butyl benzyl phthalate	ND		170	45	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Caprolactam	ND		170	72	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Carbazole	ND		170	1.9	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Chrysene	ND		170	1.7	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Dibenzofuran	ND		170	1.7	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Diethyl phthalate	ND		170	5.0	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Dimethyl phthalate	ND		170	4.4	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Di-n-butyl phthalate	ND		170	58	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Di-n-octyl phthalate	ND		170	3.9	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Fluoranthene	ND		170	2.4	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Fluorene	ND		170	3.8	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Hexachlorobenzene	ND		170	8.3	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Hexachlorobutadiene	ND		170	8.5	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Hexachlorocyclopentadiene	ND		170	50	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Hexachloroethane	ND		170	13	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Indeno(1,2,3-cd)pyrene	ND		170	4.6	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Isophorone	ND		170	8.3	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Naphthalene	ND		170	2.8	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Nitrobenzene	ND		170	7.4	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
N-Nitrosodi-n-propylamine	ND		170	13	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
N-Nitrosodiphenylamine	ND		170	9.1	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
o-Toluidine	ND		330	68	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Pentachlorophenol	ND		330	57	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Phenanthrene	ND		170	3.5	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Phenol	ND		170	18	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
p-Toluidine	ND		330	160	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Pyrene	ND		170	1.1	ug/Kg		08/30/13 07:29	09/03/13 14:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*81*		*39 - 146*	*08/30/13 07:29*	*09/03/13 14:08*	*1*
2-Fluorobiphenyl	*88*		*37 - 120*	*08/30/13 07:29*	*09/03/13 14:08*	*1*
2-Fluorophenol	*73*		*18 - 120*	*08/30/13 07:29*	*09/03/13 14:08*	*1*
Nitrobenzene-d5	*79*		*34 - 132*	*08/30/13 07:29*	*09/03/13 14:08*	*1*
Phenol-d5	*83*		*11 - 120*	*08/30/13 07:29*	*09/03/13 14:08*	*1*
p-Terphenyl-d14	*102*		*65 - 153*	*08/30/13 07:29*	*09/03/13 14:08*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-136685/2-A
Matrix: Solid
Analysis Batch: 137018

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 136685

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2'-oxybis[1-chloropropane]	1640	1440		ug/Kg		88	44 - 120
2,4,5-Trichlorophenol	1640	1490		ug/Kg		91	59 - 126
2,4,6-Trichlorophenol	1640	1490		ug/Kg		91	59 - 123
2,4-Dichlorophenol	1640	1400		ug/Kg		86	52 - 120
2,4-Dimethylphenol	1640	1440		ug/Kg		88	36 - 120
2,4-Dinitrophenol	3270	2600		ug/Kg		79	35 - 146
2,4-Dinitrotoluene	1640	1530		ug/Kg		93	55 - 125
2,6-Dinitrotoluene	1640	1540		ug/Kg		94	66 - 128
2-Chloronaphthalene	1640	1540		ug/Kg		94	57 - 120
2-Chlorophenol	1640	1280		ug/Kg		78	38 - 120
2-Methylnaphthalene	1640	1420		ug/Kg		87	47 - 120
2-Methylphenol	1640	1430		ug/Kg		87	48 - 120
2-Nitroaniline	1640	1630		ug/Kg		100	61 - 130
2-Nitrophenol	1640	1370		ug/Kg		84	50 - 120
3,3'-Dichlorobenzidine	1640	1280		ug/Kg		78	48 - 126
3-Nitroaniline	1640	1600		ug/Kg		98	61 - 127
4,6-Dinitro-2-methylphenol	3270	3130		ug/Kg		96	49 - 155
4-Bromophenyl phenyl ether	1640	1500		ug/Kg		92	58 - 131
4-Chloro-3-methylphenol	1640	1400		ug/Kg		86	49 - 125
4-Chloroaniline	1640	1160		ug/Kg		71	49 - 120
4-Chlorophenyl phenyl ether	1640	1570		ug/Kg		96	63 - 124
4-Methylphenol	1640	1330		ug/Kg		81	50 - 119
4-Nitroaniline	1640	1820		ug/Kg		111	63 - 128
4-Nitrophenol	3270	3230		ug/Kg		99	43 - 137
Acenaphthene	1640	1550		ug/Kg		95	53 - 120
Acenaphthylene	1640	1480		ug/Kg		91	58 - 121
Acetophenone	1640	1170		ug/Kg		71	66 - 120
Anthracene	1640	1610		ug/Kg		98	62 - 129
Atrazine	1640	2100		ug/Kg		128	60 - 164
Benzaldehyde	1640	892		ug/Kg		55	21 - 120
Benzo(a)anthracene	1640	1550		ug/Kg		95	65 - 133
Benzo(a)pyrene	1640	1540		ug/Kg		94	64 - 127
Benzo(b)fluoranthene	1640	1550		ug/Kg		95	64 - 135
Benzo(g,h,i)perylene	1640	1540		ug/Kg		94	50 - 152
Benzo(k)fluoranthene	1640	1590		ug/Kg		98	58 - 138
Biphenyl	1640	1460		ug/Kg		89	71 - 120
Bis(2-chloroethoxy)methane	1640	1390		ug/Kg		85	61 - 133
Bis(2-chloroethyl)ether	1640	1270		ug/Kg		78	45 - 120
Bis(2-ethylhexyl) phthalate	1640	1600		ug/Kg		98	61 - 133
Butyl benzyl phthalate	1640	1560		ug/Kg		96	61 - 129
Caprolactam	1640	1660		ug/Kg		101	54 - 133
Carbazole	1640	1600		ug/Kg		98	59 - 129
Chrysene	1640	1570		ug/Kg		96	64 - 131
Dibenz(a,h)anthracene	1640	1580		ug/Kg		97	54 - 148
Dibenzofuran	1640	1520		ug/Kg		93	56 - 120
Diethyl phthalate	1640	1430		ug/Kg		87	66 - 126
Dimethyl phthalate	1640	1550		ug/Kg		95	65 - 124
Di-n-butyl phthalate	1640	1450		ug/Kg		89	58 - 130

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-136685/2-A
Matrix: Solid
Analysis Batch: 137018

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 136685

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Di-n-octyl phthalate	1640	1590		ug/Kg		97	62 - 133
Fluoranthene	1640	1630		ug/Kg		100	62 - 131
Fluorene	1640	1570		ug/Kg		96	63 - 126
Hexachlorobenzene	1640	1520		ug/Kg		93	60 - 132
Hexachlorobutadiene	1640	1380		ug/Kg		84	45 - 120
Hexachlorocyclopentadiene	1640	975		ug/Kg		60	31 - 120
Hexachloroethane	1640	1210		ug/Kg		74	41 - 120
Indeno(1,2,3-cd)pyrene	1640	1560		ug/Kg		96	56 - 149
Isophorone	1640	1380		ug/Kg		84	56 - 120
Naphthalene	1640	1370		ug/Kg		84	46 - 120
Nitrobenzene	1640	1410		ug/Kg		86	49 - 120
N-Nitrosodi-n-propylamine	1640	1300		ug/Kg		80	46 - 120
Pentachlorophenol	3270	2380		ug/Kg		73	33 - 136
Phenanthrene	1640	1610		ug/Kg		99	60 - 130
Phenol	1640	1340		ug/Kg		82	36 - 120
Pyrene	1640	1600		ug/Kg		98	51 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*92*		*39 - 146*
2-Fluorobiphenyl	*92*		*37 - 120*
2-Fluorophenol	*72*		*18 - 120*
Nitrobenzene-d5	*85*		*34 - 132*
Phenol-d5	*83*		*11 - 120*
p-Terphenyl-d14	*100*		*65 - 153*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-137173/1-A
Matrix: Solid
Analysis Batch: 137916

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 137173

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.32	ug/Kg		09/04/13 08:02	09/09/13 08:42	1
4,4'-DDE	0.285	J	1.7	0.25	ug/Kg		09/04/13 08:02	09/09/13 08:42	1
4,4'-DDT	0.320	J	1.7	0.17	ug/Kg		09/04/13 08:02	09/09/13 08:42	1
Aldrin	ND		1.7	0.41	ug/Kg		09/04/13 08:02	09/09/13 08:42	1
alpha-BHC	ND		1.7	0.30	ug/Kg		09/04/13 08:02	09/09/13 08:42	1
alpha-Chlordane	ND		1.7	0.82	ug/Kg		09/04/13 08:02	09/09/13 08:42	1
beta-BHC	ND		1.7	0.18	ug/Kg		09/04/13 08:02	09/09/13 08:42	1
delta-BHC	0.299	J	1.7	0.22	ug/Kg		09/04/13 08:02	09/09/13 08:42	1
Dieldrin	ND		1.7	0.40	ug/Kg		09/04/13 08:02	09/09/13 08:42	1
Endosulfan I	ND		1.7	0.21	ug/Kg		09/04/13 08:02	09/09/13 08:42	1
Endosulfan II	ND		1.7	0.30	ug/Kg		09/04/13 08:02	09/09/13 08:42	1
Endosulfan sulfate	ND		1.7	0.31	ug/Kg		09/04/13 08:02	09/09/13 08:42	1
Endrin	ND		1.7	0.23	ug/Kg		09/04/13 08:02	09/09/13 08:42	1
Heptachlor	ND		1.7	0.26	ug/Kg		09/04/13 08:02	09/09/13 08:42	1
Lindane	ND		1.7	0.20	ug/Kg		09/04/13 08:02	09/09/13 08:42	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 480-137173/1-A
Matrix: Solid
Analysis Batch: 137916

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 137173

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	78		32 - 136	09/04/13 08:02	09/09/13 08:42	1
Tetrachloro-m-xylene	57		30 - 124	09/04/13 08:02	09/09/13 08:42	1

Lab Sample ID: LCS 480-137173/2-A
Matrix: Solid
Analysis Batch: 137916

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 137173

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.6	11.5		ug/Kg		69	52 - 138
4,4'-DDE	16.6	11.3		ug/Kg		68	52 - 131
4,4'-DDT	16.6	11.8		ug/Kg		71	52 - 131
Aldrin	16.6	10.7		ug/Kg		64	35 - 120
alpha-BHC	16.6	10.1		ug/Kg		61	49 - 120
alpha-Chlordane	16.6	10.9		ug/Kg		66	40 - 133
beta-BHC	16.6	10.5		ug/Kg		63	52 - 127
delta-BHC	16.6	10.5		ug/Kg		63	45 - 123
Dieldrin	16.6	11.8		ug/Kg		72	53 - 131
Endosulfan I	16.6	11.6		ug/Kg		70	53 - 121
Endosulfan II	16.6	12.0		ug/Kg		73	48 - 134
Endosulfan sulfate	16.6	12.1		ug/Kg		73	46 - 144
Endrin	16.6	12.9		ug/Kg		78	56 - 134
Heptachlor	16.6	12.0		ug/Kg		73	54 - 121
Lindane	16.6	10.3		ug/Kg		62	50 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	73		32 - 136
Tetrachloro-m-xylene	55		30 - 124

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

Lab Sample ID: MB 480-137285/1-A
Matrix: Solid
Analysis Batch: 137368

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 137285

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.20	0.039	mg/Kg		09/04/13 14:44	09/06/13 01:38	1
PCB-1221	ND		0.20	0.039	mg/Kg		09/04/13 14:44	09/06/13 01:38	1
PCB-1232	ND		0.20	0.039	mg/Kg		09/04/13 14:44	09/06/13 01:38	1
PCB-1242	ND		0.20	0.039	mg/Kg		09/04/13 14:44	09/06/13 01:38	1
PCB-1248	ND		0.20	0.039	mg/Kg		09/04/13 14:44	09/06/13 01:38	1
PCB-1254	ND		0.20	0.092	mg/Kg		09/04/13 14:44	09/06/13 01:38	1
PCB-1260	ND		0.20	0.092	mg/Kg		09/04/13 14:44	09/06/13 01:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	122		47 - 176	09/04/13 14:44	09/06/13 01:38	1
Tetrachloro-m-xylene	94		46 - 175	09/04/13 14:44	09/06/13 01:38	1

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

Lab Sample ID: LCS 480-137285/2-A
Matrix: Solid
Analysis Batch: 137368

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 137285

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	2.05	2.51		mg/Kg		123	51 - 185
PCB-1260	2.05	2.33		mg/Kg		114	61 - 184

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*142*		*47 - 176*
Tetrachloro-m-xylene	*116*		*46 - 175*

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 480-137182/1-A
Matrix: Solid
Analysis Batch: 137354

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 137182

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		16	5.9	ug/Kg		09/04/13 08:45	09/05/13 12:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*90*		*39 - 120*	*09/04/13 08:45*	*09/05/13 12:01*	*1*

Lab Sample ID: LCS 480-137182/2-A
Matrix: Solid
Analysis Batch: 137354

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 137182

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silvex (2,4,5-TP)	65.0	63.7		ug/Kg		98	49 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*97*		*39 - 120*

Lab Sample ID: 480-44727-7 MS
Matrix: Solid
Analysis Batch: 137354

Client Sample ID: HOHAOC2-A-1 COMP2
Prep Type: Total/NA
Prep Batch: 137182

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silvex (2,4,5-TP)	ND		68.1	64.0		ug/Kg	☼	94	32 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*96*		*39 - 120*

Lab Sample ID: 480-44727-7 MSD
Matrix: Solid
Analysis Batch: 137354

Client Sample ID: HOHAOC2-A-1 COMP2
Prep Type: Total/NA
Prep Batch: 137182

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silvex (2,4,5-TP)	ND		68.2	59.0		ug/Kg	☼	87	32 - 125	8	50

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: 480-44727-7 MSD
Matrix: Solid
Analysis Batch: 137354

Client Sample ID: HOHAOC2-A-1 COMP2
Prep Type: Total/NA
Prep Batch: 137182

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*92*		*39 - 120*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 480-137222/1-A
Matrix: Solid
Analysis Batch: 137418

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 137222

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.1	0.43	mg/Kg		09/04/13 11:20	09/04/13 17:15	1
Barium	ND		0.53	0.12	mg/Kg		09/04/13 11:20	09/04/13 17:15	1
Beryllium	ND		0.21	0.030	mg/Kg		09/04/13 11:20	09/04/13 17:15	1
Cadmium	ND		0.21	0.032	mg/Kg		09/04/13 11:20	09/04/13 17:15	1
Chromium	ND		0.53	0.21	mg/Kg		09/04/13 11:20	09/04/13 17:15	1
Copper	ND		1.1	0.22	mg/Kg		09/04/13 11:20	09/04/13 17:15	1
Lead	ND		1.1	0.26	mg/Kg		09/04/13 11:20	09/04/13 17:15	1
Manganese	0.0416	J	0.21	0.034	mg/Kg		09/04/13 11:20	09/04/13 17:15	1
Nickel	ND		5.3	0.25	mg/Kg		09/04/13 11:20	09/04/13 17:15	1
Selenium	ND		4.3	0.43	mg/Kg		09/04/13 11:20	09/04/13 17:15	1
Silver	ND		0.53	0.21	mg/Kg		09/04/13 11:20	09/04/13 17:15	1
Zinc	0.309	J	2.1	0.16	mg/Kg		09/04/13 11:20	09/04/13 17:15	1

Lab Sample ID: LCSSRM 480-137222/2-A
Matrix: Solid
Analysis Batch: 137418

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 137222

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	182	191.5		mg/Kg		105.1	70.9 - 129.7
Barium	143	142.8		mg/Kg		99.7	72.7 - 128.0
Beryllium	98.4	103.2		mg/Kg		104.9	74.6 - 125.1
Cadmium	60.5	61.26		mg/Kg		101.3	73.2 - 129.3
Chromium	125	122.9		mg/Kg		98.2	69.8 - 129.6
Copper	80.2	82.50		mg/Kg		102.9	73.7 - 129.8
Lead	136	143.9		mg/Kg		105.6	73.1 - 127.2
Manganese	279	263.2		mg/Kg		94.2	74.2 - 126.2
Nickel	128	136.5		mg/Kg		106.5	73.1 - 129.7
Selenium	86.0	89.48		mg/Kg		104.0	63.9 - 136.2
Silver	61.4	60.38		mg/Kg		98.4	66.9 - 133.1
Zinc	204	196.2		mg/Kg		96.0	69.6 - 129.9

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 480-137235/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 137296 — **Prep Batch: 137235**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0083	mg/Kg		09/04/13 11:45	09/04/13 14:16	1

Lab Sample ID: LCDSRM 480-137235/3-A LCDSRM — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 137296 — **Prep Batch: 137235**

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			3.77	2.92		mg/Kg		77.3	50.9 - 149.1	13	30

Lab Sample ID: LCSSRM 480-137235/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 137296 — **Prep Batch: 137235**

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury			3.77	3.31		mg/Kg		87.7	50.9 - 149.1

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 240-100582/9-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 100722 — **Prep Batch: 100582**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.80	0.27	mg/Kg		09/09/13 07:14	09/09/13 00:00	1

Lab Sample ID: LCSI 240-100582/11-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 100722 — **Prep Batch: 100582**

Analyte			Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)			643	595.1		mg/Kg		93	75 - 125

Lab Sample ID: LCSS 240-100582/10-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 100722 — **Prep Batch: 100582**

Analyte			Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)			20.0	21.35		mg/Kg		107	90 - 110

Method: 9012A - Cyanide, Total and/or Amenable

Lab Sample ID: MB 480-137116/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 137128 — **Prep Batch: 137116**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.89	0.43	mg/Kg		09/03/13 17:25	09/03/13 20:57	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Method: 9012A - Cyanide, Total and/or Amenable (Continued)

Lab Sample ID: LCS 480-137116/2-A ^5
Matrix: Solid
Analysis Batch: 137128

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 137116

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	124	72.94		mg/Kg		59	29 - 122

GC/MS VOA

Prep Batch: 136624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-1	HOHAOC2-A-1 GRAB2	Total/NA	Solid	5035	
480-44727-2	HOHAOC2-A-1 GRAB3	Total/NA	Solid	5035	
480-44727-3	HOHAOC2-A-1 GRAB4	Total/NA	Solid	5035	
480-44727-4	HOHAOC2-A-1 GRAB5	Total/NA	Solid	5035	
480-44727-5	HOHAOC2-A-1 GRAB6	Total/NA	Solid	5035	
480-44727-6	HOHAOC2-A-1 GRAB7	Total/NA	Solid	5035	
480-44727-8	HOHAOC2-A-2 GRAB2	Total/NA	Solid	5035	
480-44727-9	HOHAOC2-A-3 GRAB2	Total/NA	Solid	5035	
480-44727-10	HOHAOC2-A-4 GRAB2	Total/NA	Solid	5035	
480-44727-11	HOHAOC2-A-5 GRAB2	Total/NA	Solid	5035	
480-44727-12	HOHAOC2-A-6 GRAB2	Total/NA	Solid	5035	
480-44727-13	HOHAOC2-A-7 GRAB2	Total/NA	Solid	5035	
480-44727-14	HOHAOC2-A-8 GRAB2	Total/NA	Solid	5035	
480-44727-17	HOHAOC2-A-11 GRAB2	Total/NA	Solid	5035	

Analysis Batch: 136665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-1	HOHAOC2-A-1 GRAB2	Total/NA	Solid	8260B	136624
480-44727-2	HOHAOC2-A-1 GRAB3	Total/NA	Solid	8260B	136624
LCS 480-136665/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 480-136665/22	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 480-136665/5	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 136764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-3	HOHAOC2-A-1 GRAB4	Total/NA	Solid	8260B	136624
480-44727-4	HOHAOC2-A-1 GRAB5	Total/NA	Solid	8260B	136624
480-44727-5	HOHAOC2-A-1 GRAB6	Total/NA	Solid	8260B	136624
480-44727-6	HOHAOC2-A-1 GRAB7	Total/NA	Solid	8260B	136624
480-44727-8	HOHAOC2-A-2 GRAB2	Total/NA	Solid	8260B	136624
480-44727-9	HOHAOC2-A-3 GRAB2	Total/NA	Solid	8260B	136624
480-44727-10	HOHAOC2-A-4 GRAB2	Total/NA	Solid	8260B	136624
480-44727-11	HOHAOC2-A-5 GRAB2	Total/NA	Solid	8260B	136624
480-44727-12	HOHAOC2-A-6 GRAB2	Total/NA	Solid	8260B	136624
480-44727-13	HOHAOC2-A-7 GRAB2	Total/NA	Solid	8260B	136624
480-44727-14	HOHAOC2-A-8 GRAB2	Total/NA	Solid	8260B	136624
480-44727-17	HOHAOC2-A-11 GRAB2	Total/NA	Solid	8260B	136624
LCS 480-136764/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 480-136764/5	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 480-136764/24	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 136887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-15	HOHAOC2-A-9 GRAB2	Total/NA	Solid	8260B	136895
480-44727-16	HOHAOC2-A-10 GRAB2	Total/NA	Solid	8260B	136895
480-44727-18	HOHAOC2-A-12 GRAB2	Total/NA	Solid	8260B	136895
480-44727-19	HOHAOC2-A-13 GRAB2	Total/NA	Solid	8260B	136895
LCS 480-136887/4	Lab Control Sample	Total/NA	Solid	8260B	
MB 480-136887/27	Method Blank	Total/NA	Solid	8260B	

GC/MS VOA (Continued)

Prep Batch: 136895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-15	HOHAOC2-A-9 GRAB2	Total/NA	Solid	5035	
480-44727-16	HOHAOC2-A-10 GRAB2	Total/NA	Solid	5035	
480-44727-18	HOHAOC2-A-12 GRAB2	Total/NA	Solid	5035	
480-44727-19	HOHAOC2-A-13 GRAB2	Total/NA	Solid	5035	

GC/MS Semi VOA

Prep Batch: 136685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-7	HOHAOC2-A-1 COMP2	Total/NA	Solid	3550B	
LCS 480-136685/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-136685/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 137018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-7	HOHAOC2-A-1 COMP2	Total/NA	Solid	8270C	136685
LCS 480-136685/2-A	Lab Control Sample	Total/NA	Solid	8270C	136685
MB 480-136685/1-A	Method Blank	Total/NA	Solid	8270C	136685

GC Semi VOA

Prep Batch: 137173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-7	HOHAOC2-A-1 COMP2	Total/NA	Solid	3550B	
LCS 480-137173/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-137173/1-A	Method Blank	Total/NA	Solid	3550B	

Prep Batch: 137182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-7	HOHAOC2-A-1 COMP2	Total/NA	Solid	8151A	
480-44727-7 MS	HOHAOC2-A-1 COMP2	Total/NA	Solid	8151A	
480-44727-7 MSD	HOHAOC2-A-1 COMP2	Total/NA	Solid	8151A	
LCS 480-137182/2-A	Lab Control Sample	Total/NA	Solid	8151A	
MB 480-137182/1-A	Method Blank	Total/NA	Solid	8151A	

Prep Batch: 137285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-7	HOHAOC2-A-1 COMP2	Total/NA	Solid	3550B	
LCS 480-137285/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-137285/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 137354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-7	HOHAOC2-A-1 COMP2	Total/NA	Solid	8151A	137182
480-44727-7 MS	HOHAOC2-A-1 COMP2	Total/NA	Solid	8151A	137182
480-44727-7 MSD	HOHAOC2-A-1 COMP2	Total/NA	Solid	8151A	137182
LCS 480-137182/2-A	Lab Control Sample	Total/NA	Solid	8151A	137182
MB 480-137182/1-A	Method Blank	Total/NA	Solid	8151A	137182

GC Semi VOA (Continued)

Analysis Batch: 137368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-7	HOHAOC2-A-1 COMP2	Total/NA	Solid	8082	137285
LCS 480-137285/2-A	Lab Control Sample	Total/NA	Solid	8082	137285
MB 480-137285/1-A	Method Blank	Total/NA	Solid	8082	137285

Analysis Batch: 137916

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-7	HOHAOC2-A-1 COMP2	Total/NA	Solid	8081A	137173
LCS 480-137173/2-A	Lab Control Sample	Total/NA	Solid	8081A	137173
MB 480-137173/1-A	Method Blank	Total/NA	Solid	8081A	137173

Metals

Prep Batch: 137222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-7	HOHAOC2-A-1 COMP2	Total/NA	Solid	3050B	
LCSSRM 480-137222/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-137222/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 137235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-7	HOHAOC2-A-1 COMP2	Total/NA	Solid	7471A	
LCDSRM 480-137235/3-A LCDS	Lab Control Sample Dup	Total/NA	Solid	7471A	
LCSSRM 480-137235/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 480-137235/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 137296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-7	HOHAOC2-A-1 COMP2	Total/NA	Solid	7471A	137235
LCDSRM 480-137235/3-A LCDS	Lab Control Sample Dup	Total/NA	Solid	7471A	137235
LCSSRM 480-137235/2-A	Lab Control Sample	Total/NA	Solid	7471A	137235
MB 480-137235/1-A	Method Blank	Total/NA	Solid	7471A	137235

Analysis Batch: 137418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-7	HOHAOC2-A-1 COMP2	Total/NA	Solid	6010B	137222
LCSSRM 480-137222/2-A	Lab Control Sample	Total/NA	Solid	6010B	137222
MB 480-137222/1-A	Method Blank	Total/NA	Solid	6010B	137222

General Chemistry

Prep Batch: 100582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-7	HOHAOC2-A-1 COMP2	Total/NA	Solid	3060A	
LCSI 240-100582/11-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 240-100582/10-A	Lab Control Sample	Total/NA	Solid	3060A	
MB 240-100582/9-A	Method Blank	Total/NA	Solid	3060A	

Analysis Batch: 100722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-7	HOHAOC2-A-1 COMP2	Total/NA	Solid	7196A	100582

General Chemistry (Continued)

Analysis Batch: 100722 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSI 240-100582/11-A	Lab Control Sample	Total/NA	Solid	7196A	100582
LCSS 240-100582/10-A	Lab Control Sample	Total/NA	Solid	7196A	100582
MB 240-100582/9-A	Method Blank	Total/NA	Solid	7196A	100582

Analysis Batch: 136421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-7	HOHAOC2-A-1 COMP2	Total/NA	Solid	Moisture	

Analysis Batch: 136627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-1	HOHAOC2-A-1 GRAB2	Total/NA	Solid	Moisture	
480-44727-2	HOHAOC2-A-1 GRAB3	Total/NA	Solid	Moisture	
480-44727-3	HOHAOC2-A-1 GRAB4	Total/NA	Solid	Moisture	
480-44727-4	HOHAOC2-A-1 GRAB5	Total/NA	Solid	Moisture	
480-44727-5	HOHAOC2-A-1 GRAB6	Total/NA	Solid	Moisture	
480-44727-6	HOHAOC2-A-1 GRAB7	Total/NA	Solid	Moisture	
480-44727-8	HOHAOC2-A-2 GRAB2	Total/NA	Solid	Moisture	
480-44727-9	HOHAOC2-A-3 GRAB2	Total/NA	Solid	Moisture	
480-44727-10	HOHAOC2-A-4 GRAB2	Total/NA	Solid	Moisture	
480-44727-11	HOHAOC2-A-5 GRAB2	Total/NA	Solid	Moisture	
480-44727-12	HOHAOC2-A-6 GRAB2	Total/NA	Solid	Moisture	
480-44727-13	HOHAOC2-A-7 GRAB2	Total/NA	Solid	Moisture	
480-44727-14	HOHAOC2-A-8 GRAB2	Total/NA	Solid	Moisture	
480-44727-15	HOHAOC2-A-9 GRAB2	Total/NA	Solid	Moisture	
480-44727-16	HOHAOC2-A-10 GRAB2	Total/NA	Solid	Moisture	
480-44727-17	HOHAOC2-A-11 GRAB2	Total/NA	Solid	Moisture	
480-44727-18	HOHAOC2-A-12 GRAB2	Total/NA	Solid	Moisture	
480-44727-19	HOHAOC2-A-13 GRAB2	Total/NA	Solid	Moisture	

Prep Batch: 137116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-7	HOHAOC2-A-1 COMP2	Total/NA	Solid	9012A	
LCS 480-137116/2-A ^5	Lab Control Sample	Total/NA	Solid	9012A	
MB 480-137116/1-A	Method Blank	Total/NA	Solid	9012A	

Analysis Batch: 137128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-7	HOHAOC2-A-1 COMP2	Total/NA	Solid	9012A	137116
LCS 480-137116/2-A ^5	Lab Control Sample	Total/NA	Solid	9012A	137116
MB 480-137116/1-A	Method Blank	Total/NA	Solid	9012A	137116

Analysis Batch: 138062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-7	HOHAOC2-A-1 COMP2	Total/NA	Solid	SM 3500 CR D	

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-1 GRAB2

Lab Sample ID: 480-44727-1
Date Collected: 08/27/13 12:05
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136665	08/30/13 09:56	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-1 GRAB3

Lab Sample ID: 480-44727-2
Date Collected: 08/27/13 12:15
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136665	08/30/13 10:22	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-1 GRAB4

Lab Sample ID: 480-44727-3
Date Collected: 08/27/13 12:25
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136764	08/30/13 15:58	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-1 GRAB5

Lab Sample ID: 480-44727-4
Date Collected: 08/27/13 12:35
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136764	08/30/13 16:24	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-1 GRAB6

Lab Sample ID: 480-44727-5
Date Collected: 08/27/13 12:45
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136764	08/30/13 16:50	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-1 GRAB7

Lab Sample ID: 480-44727-6

Date Collected: 08/27/13 12:55
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136764	08/30/13 17:16	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-1 COMP2

Lab Sample ID: 480-44727-7

Date Collected: 08/27/13 13:05
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 95.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			136685	08/30/13 07:29	MRB	TAL BUF
Total/NA	Analysis	8270C		1	137018	09/03/13 15:22	RMM	TAL BUF
Total/NA	Prep	8151A			137182	09/04/13 08:45	KEB	TAL BUF
Total/NA	Analysis	8151A		1	137354	09/05/13 14:00	JAD	TAL BUF
Total/NA	Prep	3550B			137285	09/04/13 14:44	KEB	TAL BUF
Total/NA	Analysis	8082		1	137368	09/06/13 02:52	JMM	TAL BUF
Total/NA	Prep	3550B			137173	09/04/13 08:02	KEB	TAL BUF
Total/NA	Analysis	8081A		1	137916	09/09/13 13:29	LMW	TAL BUF
Total/NA	Prep	7471A			137235	09/04/13 11:45	JRK	TAL BUF
Total/NA	Analysis	7471A		1	137296	09/04/13 14:29	JRK	TAL BUF
Total/NA	Prep	3050B			137222	09/04/13 11:20	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	137418	09/04/13 17:39	AMH	TAL BUF
Total/NA	Prep	3060A			100582	09/09/13 07:14	LKG	TAL CAN
Total/NA	Analysis	7196A		1	100722	09/09/13 15:08	LKG	TAL CAN
Total/NA	Analysis	Moisture		1	136421	08/28/13 20:26	GTG	TAL BUF
Total/NA	Prep	9012A			137116	09/03/13 17:25	NCH	TAL BUF
Total/NA	Analysis	9012A		1	137128	09/03/13 21:04	JME	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	138062	09/09/13 17:14	SW1	TAL BUF

Client Sample ID: HOHAOC2-A-2 GRAB2

Lab Sample ID: 480-44727-8

Date Collected: 08/27/13 13:15
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 92.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136764	08/30/13 17:42	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-3 GRAB2

Lab Sample ID: 480-44727-9

Date Collected: 08/27/13 13:25
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 93.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-3 GRAB2

Lab Sample ID: 480-44727-9
Date Collected: 08/27/13 13:25
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 93.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	136764	08/30/13 18:07	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-4 GRAB2

Lab Sample ID: 480-44727-10
Date Collected: 08/27/13 13:35
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136764	08/30/13 18:32	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-5 GRAB2

Lab Sample ID: 480-44727-11
Date Collected: 08/27/13 13:45
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 94.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136764	08/30/13 18:58	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-6 GRAB2

Lab Sample ID: 480-44727-12
Date Collected: 08/27/13 13:55
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 93.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136764	08/30/13 19:23	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-7 GRAB2

Lab Sample ID: 480-44727-13
Date Collected: 08/27/13 14:05
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 92.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136764	08/30/13 19:49	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-8 GRAB2

Lab Sample ID: 480-44727-14

Date Collected: 08/27/13 14:15
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 93.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136764	08/30/13 20:14	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-9 GRAB2

Lab Sample ID: 480-44727-15

Date Collected: 08/27/13 14:25
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136895	08/31/13 00:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	136887	08/31/13 02:33	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-10 GRAB2

Lab Sample ID: 480-44727-16

Date Collected: 08/27/13 14:35
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 93.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136895	08/31/13 00:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	136887	08/31/13 02:59	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-11 GRAB2

Lab Sample ID: 480-44727-17

Date Collected: 08/27/13 14:45
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 94.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136764	08/30/13 21:30	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-12 GRAB2

Lab Sample ID: 480-44727-18

Date Collected: 08/27/13 14:55
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 95.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136895	08/31/13 00:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	136887	08/31/13 03:51	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-13 GRAB2
Date Collected: 08/27/13 15:05
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-19
Matrix: Solid
Percent Solids: 93.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136895	08/31/13 00:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	136887	08/31/13 04:16	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	10-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	956	03-31-09 *
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	N/A	03-31-09 *
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-01-09 *
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-08 *
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-09 *
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13 *
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	09-30-13

Laboratory: TestAmerica Canton

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

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-13
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-13 *
Kansas	NELAP	7	E-10336	01-31-14
Kentucky	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Nevada	State Program	9	OH-000482008A	07-31-14

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Laboratory: TestAmerica Canton (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	01-19-14
Pennsylvania	NELAP	3	68-00340	08-31-14 *
Texas	NELAP	6		08-31-14 *
USDA	Federal		P330-11-00328	08-26-14
Virginia	NELAP	3	460175	09-14-13
Washington	State Program	10	C971	01-12-14
Wisconsin	State Program	5	999518190	08-31-14

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8081A	Organochlorine Pesticides (GC)	SW846	TAL BUF
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
8151A	Herbicides (GC)	SW846	TAL BUF
6010B	Metals (ICP)	SW846	TAL BUF
7471A	Mercury (CVAA)	SW846	TAL BUF
7196A	Chromium, Hexavalent	SW846	TAL CAN
9012A	Cyanide, Total and/or Amenable	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
SM 3500 CR D	Chromium, Trivalent	SM	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-44727-1	HOHAOC2-A-1 GRAB2	Solid	08/27/13 12:05	08/28/13 10:00
480-44727-2	HOHAOC2-A-1 GRAB3	Solid	08/27/13 12:15	08/28/13 10:00
480-44727-3	HOHAOC2-A-1 GRAB4	Solid	08/27/13 12:25	08/28/13 10:00
480-44727-4	HOHAOC2-A-1 GRAB5	Solid	08/27/13 12:35	08/28/13 10:00
480-44727-5	HOHAOC2-A-1 GRAB6	Solid	08/27/13 12:45	08/28/13 10:00
480-44727-6	HOHAOC2-A-1 GRAB7	Solid	08/27/13 12:55	08/28/13 10:00
480-44727-7	HOHAOC2-A-1 COMP2	Solid	08/27/13 13:05	08/28/13 10:00
480-44727-8	HOHAOC2-A-2 GRAB2	Solid	08/27/13 13:15	08/28/13 10:00
480-44727-9	HOHAOC2-A-3 GRAB2	Solid	08/27/13 13:25	08/28/13 10:00
480-44727-10	HOHAOC2-A-4 GRAB2	Solid	08/27/13 13:35	08/28/13 10:00
480-44727-11	HOHAOC2-A-5 GRAB2	Solid	08/27/13 13:45	08/28/13 10:00
480-44727-12	HOHAOC2-A-6 GRAB2	Solid	08/27/13 13:55	08/28/13 10:00
480-44727-13	HOHAOC2-A-7 GRAB2	Solid	08/27/13 14:05	08/28/13 10:00
480-44727-14	HOHAOC2-A-8 GRAB2	Solid	08/27/13 14:15	08/28/13 10:00
480-44727-15	HOHAOC2-A-9 GRAB2	Solid	08/27/13 14:25	08/28/13 10:00
480-44727-16	HOHAOC2-A-10 GRAB2	Solid	08/27/13 14:35	08/28/13 10:00
480-44727-17	HOHAOC2-A-11 GRAB2	Solid	08/27/13 14:45	08/28/13 10:00
480-44727-18	HOHAOC2-A-12 GRAB2	Solid	08/27/13 14:55	08/28/13 10:00
480-44727-19	HOHAOC2-A-13 GRAB2	Solid	08/27/13 15:05	08/28/13 10:00

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: ANDREW ROBERTS	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-38588-10156.3
Client Contact: ~~Mr. Andy Korik~~ MIKE HIGGINS	Phone: 585.202.4399	E-Mail: john.schove@testamericainc.com		Page: Page ~~3 of 3~~ 1 OF 2
Company: ARCADIS U.S. Inc				Job #:

Address: 6723 Towpath Road PO BOX 66	Due Date Requested: 9/3/13 OR EARLIER	Analysis Requested
City: Syracuse	TAT Requested (days): 3 DAYS	
State, Zip: NY, 13214		
Phone: 713-432-2643(Tel)	PO #: SO# 0015107887	
Email: andrew.korik@arcadis-us.com	WO #:	
Project Name: CHEVRON - CVX Hastings, NY	Project #: 48003362	
Site: New York	SSOW#:	

Preservation Codes:

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

Other:

WBS 08.04

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOC - Custom List	8270C - SVOC - NY STARS plus List	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N		
HOHAOC2-A-1GRAB2	8/27/13	1205	G	Solid			X		4	
HOHAOC2-A-1GRAB3		1215	G	Solid			X		4	
HOHAOC2-A-1GRAB4		1225	G	Solid			X		4	
HOHAOC2-A-1GRAB5		1235	G	Solid			X		4	
HOHAOC2-A-1GRAB6		1245	G	Solid			X		4	
HOHAOC2-A-1GRAB7		1255	G	Solid			X		4	
HOHAOC2-A-1COMP2		1305	C	Solid				X	6	
HOHAOC2-A-2GRAB2		1315	G	Solid			X		4	
HOHAOC2-A-3GRAB2		1325	G				X		4	
HOHAOC2-A-4GRAB2		1335	G				X		4	
HOHAOC2-A-5GRAB2		1345	G				X		4	

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: DELIVERY BY ARCADIS

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	8/28/13 @ 1000			8/28/13 1100	
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: # 3 2.3

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
MIKE HIGGINS / ARCADIS	SCHOVE, JOHN R		249989
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 2 of 2
6723 TOWPATH RD PO BOX 66			
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
SYRACUSE / NY / 13214	MARY ROBERTS		
Project Name and Location (State)	**Carrier/Waybill Number**		
CHEVRON - CVX HASTINGS, NY			
Contract/Purchase Order/Quote No.			
SO# 501510 7887			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed	Soil	Containers & Preservatives: Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: CVOC by 8260B	Special Instructions/ Conditions of Receipt
HOHAOC2-A-6 GRAB2	8/27/13	1355				X							X	WBS 08.04
HOH AOC2-A-7 GRAB2		1405				X							X	
HOH AOC2-A-8 GRAB2		1415				X							X	
HOHAOC2-A-9 GRAB2		1425				X							X	
HOHAOC2-A-10 GRAB2		1435				X							X	
HOHAOC2-A-11 GRAB2		1445				X							X	
HOH AOC2-A-12 GRAB2		1455				X							X	
HOHAOC2 A-13 GRAB2		1505				X							X	

Possible Hazard Identification
☐ Non-Hazard ☑ Flammable ☑ Skin Irritant ☐ Poison B ☐ Unknown

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	8/28/13	1000	1. Received By	8/29/13	1000
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

#3 2.3

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-44727-1

Login Number: 44727

List Source: TestAmerica Buffalo

List Number: 1

Creator: Robison, Zachary J

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.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	ARCADIS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-44727-1
Client Project/Site: CHEVRON - CVX Hastings, NY

For:
ARCADIS U.S. Inc
Arcadis
295 Woodcliff Drive #2, 3rd Floor
Suite 301
Fairport, New York 14450

Attn: Geoff Greapentrog

Melissa Deyo

Authorized for release by:
9/4/2013 10:55:24 AM
Melissa Deyo, Project Manager I
melissa.deyo@testamericainc.com

Designee for

John Schove, Project Manager I
john.schove@testamericainc.com

Preliminary Data

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Detection Summary 4
Client Sample Results 6
Surrogate Summary 26
QC Sample Results 27
QC Association Summary 36
Lab Chronicle 38
Certification Summary 42
Method Summary 43
Sample Summary 44
Chain of Custody 45
Receipt Checklists 47

Preliminary Data

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Preliminary Data

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-1 GRAB2 — **Lab Sample ID: 480-44727-1**

No Detections.

Client Sample ID: HOHAOC2-A-1 GRAB3 — **Lab Sample ID: 480-44727-2**

No Detections.

Client Sample ID: HOHAOC2-A-1 GRAB4 — **Lab Sample ID: 480-44727-3**

No Detections.

Client Sample ID: HOHAOC2-A-1 GRAB5 — **Lab Sample ID: 480-44727-4**

No Detections.

Client Sample ID: HOHAOC2-A-1 GRAB6 — **Lab Sample ID: 480-44727-5**

No Detections.

Client Sample ID: HOHAOC2-A-1 GRAB7 — **Lab Sample ID: 480-44727-6**

No Detections.

Client Sample ID: HOHAOC2-A-1 COMP2 — **Lab Sample ID: 480-44727-7**

Sample Analysis Not Complete.

Client Sample ID: HOHAOC2-A-2 GRAB2 — **Lab Sample ID: 480-44727-8**

No Detections.

Client Sample ID: HOHAOC2-A-3 GRAB2 — **Lab Sample ID: 480-44727-9**

No Detections.

Client Sample ID: HOHAOC2-A-4 GRAB2 — **Lab Sample ID: 480-44727-10**

No Detections.

Client Sample ID: HOHAOC2-A-5 GRAB2 — **Lab Sample ID: 480-44727-11**

No Detections.

Client Sample ID: HOHAOC2-A-6 GRAB2 — **Lab Sample ID: 480-44727-12**

No Detections.

Client Sample ID: HOHAOC2-A-7 GRAB2 — **Lab Sample ID: 480-44727-13**

No Detections.

Client Sample ID: HOHAOC2-A-8 GRAB2 — **Lab Sample ID: 480-44727-14**

No Detections.

Preliminary Data

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-9 GRAB2 — **Lab Sample ID: 480-44727-15**

No Detections.

Client Sample ID: HOHAOC2-A-10 GRAB2 — **Lab Sample ID: 480-44727-16**

No Detections.

Client Sample ID: HOHAOC2-A-11 GRAB2 — **Lab Sample ID: 480-44727-17**

No Detections.

Client Sample ID: HOHAOC2-A-12 GRAB2 — **Lab Sample ID: 480-44727-18**

No Detections.

Client Sample ID: HOHAOC2-A-13 GRAB2 — **Lab Sample ID: 480-44727-19**

No Detections.

Preliminary Data

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-1 GRAB2
Date Collected: 08/27/13 12:05
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-1
Matrix: Solid
Percent Solids: 95.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
1,1-Dichloroethane	ND		4.4	0.53	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
1,1-Dichloroethene	ND		4.4	0.53	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
1,2-Dichlorobenzene	ND		4.4	0.34	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
1,2-Dichloroethene, cis-	ND		4.4	0.56	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
1,2-Dichloroethene, trans-	ND		4.4	0.45	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
1,3-Dichlorobenzene	ND		4.4	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
1,4-Dichlorobenzene	ND		4.4	0.61	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
1,4-Dioxane	ND		170	21	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Acetone	ND		22	3.7	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Benzene	ND		4.4	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Butylbenzene	ND		4.4	0.38	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Carbon tetrachloride	ND		4.4	0.42	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Chloroform	ND		4.4	0.27	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Ethylbenzene	ND		4.4	0.30	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Methyl Ethyl Ketone (2-Butanone)	ND		22	1.6	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Methylene Chloride	ND		4.4	2.0	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Propylbenzene, n-	ND		4.4	0.35	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
sec-Butylbenzene	ND		4.4	0.38	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
tert-Butylbenzene	ND		4.4	0.45	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Tetrachloroethene	ND		4.4	0.58	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Toluene	ND		4.4	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Trichloroethene	ND		4.4	0.96	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Trimethylbenzene, 1,2,4-	ND		4.4	0.84	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Trimethylbenzene, 1,3,5-	ND		4.4	0.28	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Vinyl chloride	ND		4.4	0.53	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1
Xylene (mixed)	ND		8.7	0.73	ug/Kg	☼	08/29/13 16:11	08/30/13 09:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*64 - 126*	*08/29/13 16:11*	*08/30/13 09:56*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*	*08/29/13 16:11*	*08/30/13 09:56*	*1*
Toluene-d8 (Surr)	*98*		*71 - 125*	*08/29/13 16:11*	*08/30/13 09:56*	*1*

Preliminary Data

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-1 GRAB3
Date Collected: 08/27/13 12:15
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-2
Matrix: Solid
Percent Solids: 95.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
1,1-Dichloroethane	ND		4.4	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
1,1-Dichloroethene	ND		4.4	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
1,2-Dichlorobenzene	ND		4.4	0.35	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
1,2-Dichloroethene, cis-	ND		4.4	0.57	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
1,2-Dichloroethene, trans-	ND		4.4	0.46	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
1,3-Dichlorobenzene	ND		4.4	0.23	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
1,4-Dichlorobenzene	ND		4.4	0.62	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
1,4-Dioxane	ND		180	21	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Acetone	ND		22	3.7	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Benzene	ND		4.4	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Butylbenzene	ND		4.4	0.38	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Carbon tetrachloride	ND		4.4	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Chloroform	ND		4.4	0.27	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Ethylbenzene	ND		4.4	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Methyl Ethyl Ketone (2-Butanone)	ND		22	1.6	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Methylene Chloride	ND		4.4	2.0	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Propylbenzene, n-	ND		4.4	0.35	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
sec-Butylbenzene	ND		4.4	0.38	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
tert-Butylbenzene	ND		4.4	0.46	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Tetrachloroethene	ND		4.4	0.59	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Toluene	ND		4.4	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Trichloroethene	ND		4.4	0.97	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Trimethylbenzene, 1,2,4-	ND		4.4	0.85	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Trimethylbenzene, 1,3,5-	ND		4.4	0.28	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Vinyl chloride	ND		4.4	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1
Xylene (mixed)	ND		8.8	0.74	ug/Kg	☼	08/29/13 16:11	08/30/13 10:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*64 - 126*	*08/29/13 16:11*	*08/30/13 10:22*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*	*08/29/13 16:11*	*08/30/13 10:22*	*1*
Toluene-d8 (Surr)	*95*		*71 - 125*	*08/29/13 16:11*	*08/30/13 10:22*	*1*

Preliminary Data

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-1 GRAB4
Date Collected: 08/27/13 12:25
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-3
Matrix: Solid
Percent Solids: 95.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.1	0.30	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
1,1-Dichloroethane	ND		4.1	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
1,1-Dichloroethene	ND		4.1	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
1,2-Dichlorobenzene	ND		4.1	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
1,2-Dichloroethane	ND		4.1	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
1,2-Dichloroethene, cis-	ND		4.1	0.53	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
1,2-Dichloroethene, trans-	ND		4.1	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
1,3-Dichlorobenzene	ND		4.1	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
1,4-Dichlorobenzene	ND		4.1	0.58	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
1,4-Dioxane	ND		170	20	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Acetone	ND		21	3.5	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Benzene	ND		4.1	0.20	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Butylbenzene	ND		4.1	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Carbon tetrachloride	ND		4.1	0.40	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Chlorobenzene	ND		4.1	0.55	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Chloroform	ND		4.1	0.26	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Ethylbenzene	ND		4.1	0.29	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.5	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Methyl tert-butyl ether	ND		4.1	0.41	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Methylene Chloride	ND		4.1	1.9	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Propylbenzene, n-	ND		4.1	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
sec-Butylbenzene	ND		4.1	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
tert-Butylbenzene	ND		4.1	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Tetrachloroethene	ND		4.1	0.56	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Toluene	ND		4.1	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Trichloroethene	ND		4.1	0.91	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Trimethylbenzene, 1,2,4-	ND		4.1	0.80	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Trimethylbenzene, 1,3,5-	ND		4.1	0.27	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Vinyl chloride	ND		4.1	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1
Xylene (mixed)	ND		8.3	0.70	ug/Kg	☼	08/29/13 16:11	08/30/13 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*64 - 126*	*08/29/13 16:11*	*08/30/13 15:58*	*1*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*	*08/29/13 16:11*	*08/30/13 15:58*	*1*
Toluene-d8 (Surr)	*94*		*71 - 125*	*08/29/13 16:11*	*08/30/13 15:58*	*1*

Preliminary Data

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-1 GRAB5
Date Collected: 08/27/13 12:35
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-4
Matrix: Solid
Percent Solids: 95.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.2	0.30	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
1,1-Dichloroethane	ND		4.2	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
1,1-Dichloroethene	ND		4.2	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
1,2-Dichlorobenzene	ND		4.2	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
1,2-Dichloroethene, cis-	ND		4.2	0.53	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
1,2-Dichloroethene, trans-	ND		4.2	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
1,3-Dichlorobenzene	ND		4.2	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
1,4-Dichlorobenzene	ND		4.2	0.58	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
1,4-Dioxane	ND		170	20	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Acetone	ND		21	3.5	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Benzene	ND		4.2	0.20	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Butylbenzene	ND		4.2	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Carbon tetrachloride	ND		4.2	0.40	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Chlorobenzene	ND		4.2	0.55	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Chloroform	ND		4.2	0.26	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.5	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Methyl tert-butyl ether	ND		4.2	0.41	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Methylene Chloride	ND		4.2	1.9	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Propylbenzene, n-	ND		4.2	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
sec-Butylbenzene	ND		4.2	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
tert-Butylbenzene	ND		4.2	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Tetrachloroethene	ND		4.2	0.56	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Toluene	ND		4.2	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Trichloroethene	ND		4.2	0.91	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Trimethylbenzene, 1,2,4-	ND		4.2	0.80	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Trimethylbenzene, 1,3,5-	ND		4.2	0.27	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Vinyl chloride	ND		4.2	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1
Xylene (mixed)	ND		8.3	0.70	ug/Kg	☼	08/29/13 16:11	08/30/13 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*64 - 126*	*08/29/13 16:11*	*08/30/13 16:24*	*1*
4-Bromofluorobenzene (Surr)	*94*		*72 - 126*	*08/29/13 16:11*	*08/30/13 16:24*	*1*
Toluene-d8 (Surr)	*92*		*71 - 125*	*08/29/13 16:11*	*08/30/13 16:24*	*1*

Preliminary Data

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-1 GRAB6
Date Collected: 08/27/13 12:45
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-5
Matrix: Solid
Percent Solids: 95.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.2	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
1,1-Dichloroethane	ND		4.2	0.52	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
1,1-Dichloroethene	ND		4.2	0.52	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
1,2-Dichlorobenzene	ND		4.2	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
1,2-Dichloroethene, cis-	ND		4.2	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
1,2-Dichloroethene, trans-	ND		4.2	0.44	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
1,3-Dichlorobenzene	ND		4.2	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
1,4-Dichlorobenzene	ND		4.2	0.59	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
1,4-Dioxane	ND		170	20	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Acetone	ND		21	3.6	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Benzene	ND		4.2	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Butylbenzene	ND		4.2	0.37	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Carbon tetrachloride	ND		4.2	0.41	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Chlorobenzene	ND		4.2	0.56	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Chloroform	ND		4.2	0.26	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.5	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Methyl tert-butyl ether	ND		4.2	0.41	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Methylene Chloride	ND		4.2	1.9	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Propylbenzene, n-	ND		4.2	0.34	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
sec-Butylbenzene	ND		4.2	0.37	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
tert-Butylbenzene	ND		4.2	0.44	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Tetrachloroethene	ND		4.2	0.57	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Toluene	ND		4.2	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Trichloroethene	ND		4.2	0.93	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Trimethylbenzene, 1,2,4-	ND		4.2	0.81	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Trimethylbenzene, 1,3,5-	ND		4.2	0.27	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Vinyl chloride	ND		4.2	0.52	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1
Xylene (mixed)	ND		8.4	0.71	ug/Kg	☼	08/29/13 16:11	08/30/13 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*64 - 126*	*08/29/13 16:11*	*08/30/13 16:50*	*1*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*	*08/29/13 16:11*	*08/30/13 16:50*	*1*
Toluene-d8 (Surr)	*94*		*71 - 125*	*08/29/13 16:11*	*08/30/13 16:50*	*1*

Preliminary Data

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-1 GRAB7
Date Collected: 08/27/13 12:55
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-6
Matrix: Solid
Percent Solids: 95.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.3	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
1,1-Dichloroethane	ND		4.3	0.52	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
1,1-Dichloroethene	ND		4.3	0.52	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
1,2-Dichlorobenzene	ND		4.3	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
1,2-Dichloroethane	ND		4.3	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
1,2-Dichloroethene, cis-	ND		4.3	0.55	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
1,2-Dichloroethene, trans-	ND		4.3	0.44	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
1,3-Dichlorobenzene	ND		4.3	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
1,4-Dichlorobenzene	ND		4.3	0.60	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
1,4-Dioxane	ND		170	21	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Acetone	ND		21	3.6	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Benzene	ND		4.3	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Butylbenzene	ND		4.3	0.37	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Carbon tetrachloride	ND		4.3	0.41	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Chlorobenzene	ND		4.3	0.56	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Chloroform	ND		4.3	0.26	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Ethylbenzene	ND		4.3	0.29	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.6	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Methyl tert-butyl ether	ND		4.3	0.42	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Methylene Chloride	ND		4.3	2.0	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Propylbenzene, n-	ND		4.3	0.34	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
sec-Butylbenzene	ND		4.3	0.37	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
tert-Butylbenzene	ND		4.3	0.44	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Tetrachloroethene	ND		4.3	0.57	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Toluene	ND		4.3	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Trichloroethene	ND		4.3	0.94	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Trimethylbenzene, 1,2,4-	ND		4.3	0.82	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Trimethylbenzene, 1,3,5-	ND		4.3	0.28	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Vinyl chloride	ND		4.3	0.52	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1
Xylene (mixed)	ND		8.5	0.72	ug/Kg	☼	08/29/13 16:11	08/30/13 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*64 - 126*	*08/29/13 16:11*	*08/30/13 17:16*	*1*
4-Bromofluorobenzene (Surr)	*94*		*72 - 126*	*08/29/13 16:11*	*08/30/13 17:16*	*1*
Toluene-d8 (Surr)	*91*		*71 - 125*	*08/29/13 16:11*	*08/30/13 17:16*	*1*

Preliminary Data

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-1 COMP2
Date Collected: 08/27/13 13:05
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-7
Matrix: Solid
Percent Solids: 95.9

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dihydroxyanthraquinone	ND		690	120	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
1-Hydroxyanthraquinone	ND		690	260	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2,2'-oxybis[1-chloropropane]	ND		180	18	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2,4,5-Trichlorophenol	ND		180	38	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2,4,6-Trichlorophenol	ND		180	12	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2,4-Dichlorophenol	ND		180	9.2	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2,4-Dimethylphenol	ND		180	47	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2,4-Dinitrophenol	ND		340	61	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2,4-Dinitrotoluene	ND		180	27	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2,6-Dinitrotoluene	ND		180	43	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2-Chloroaniline	ND		340	31	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2-Chloronaphthalene	ND		180	12	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2-Chlorophenol	ND		180	8.9	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2-Methylnaphthalene	ND		180	2.1	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2-Methylphenol	ND		180	5.4	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2-Nitroaniline	ND		340	56	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
2-Nitrophenol	ND		180	8.0	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
3,3'-Dichlorobenzidine	ND		180	150	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
3-Nitroaniline	ND		340	40	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
4,6-Dinitro-2-methylphenol	ND		340	61	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
4-Bromophenyl phenyl ether	ND		180	56	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
4-Chloro-3-methylphenol	ND		180	7.2	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
4-Chloroaniline	ND		180	51	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
4-Chlorophenyl phenyl ether	ND		180	3.7	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
4-Methylphenol	ND		340	9.8	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
4-Nitroaniline	ND		340	20	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
4-Nitrophenol	ND		340	42	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
9,10-Anthracenedione	ND		340	160	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
9-Octadecenamide	ND		3400	850	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Acenaphthene	ND		180	2.1	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Acenaphthylene	ND		180	1.4	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Acetophenone	ND		180	9.0	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Anthracene	ND		180	4.5	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Atrazine	ND		180	7.8	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Benzaldehyde	ND		180	19	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Benzo(a)anthracene	ND		180	3.0	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Benzo(a)pyrene	ND		180	4.2	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Benzo(b)fluoranthene	ND		180	3.4	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Benzo(g,h,i)perylene	ND		180	2.1	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Benzo(k)fluoranthene	ND		180	1.9	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Biphenyl	ND		180	11	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Bis(2-chloroethoxy)methane	ND		180	9.5	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Bis(2-chloroethyl)ether	ND		180	15	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Bis(2-ethylhexyl) phthalate	ND		180	56	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Butyl benzyl phthalate	ND		180	47	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Caprolactam	ND		180	76	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Carbazole	ND		180	2.0	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Chrysene	ND		180	1.8	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Dibenz(a,h)anthracene	ND		180	2.1	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1

Preliminary Data

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-1 COMP2
Date Collected: 08/27/13 13:05
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-7
Matrix: Solid
Percent Solids: 95.9

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	ND		180	1.8	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Diethyl phthalate	ND		180	5.3	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Dimethyl phthalate	ND		180	4.6	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Di-n-butyl phthalate	ND		180	61	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Di-n-octyl phthalate	ND		180	4.1	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Fluoranthene	ND		180	2.5	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Fluorene	ND		180	4.0	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Hexachlorobenzene	ND		180	8.7	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Hexachlorobutadiene	ND		180	9.0	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Hexachlorocyclopentadiene	ND		180	53	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Hexachloroethane	ND		180	14	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Indeno(1,2,3-cd)pyrene	ND		180	4.8	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Isophorone	ND		180	8.8	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Naphthalene	ND		180	2.9	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Nitrobenzene	ND		180	7.8	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
N-Nitrosodi-n-propylamine	ND		180	14	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
N-Nitrosodiphenylamine	ND		180	9.6	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
o-Toluidine	ND		340	72	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Pentachlorophenol	ND		340	60	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Phenanthrene	**4.2**	**J**	180	3.7	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Phenol	ND		180	18	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
p-Toluidine	ND		340	170	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1
Pyrene	ND		180	1.1	ug/Kg	☼	08/30/13 07:29	09/03/13 15:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*81*		*39 - 146*	*08/30/13 07:29*	*09/03/13 15:22*	*1*
2-Fluorobiphenyl	*78*		*37 - 120*	*08/30/13 07:29*	*09/03/13 15:22*	*1*
2-Fluorophenol	*62*		*18 - 120*	*08/30/13 07:29*	*09/03/13 15:22*	*1*
Nitrobenzene-d5	*71*		*34 - 132*	*08/30/13 07:29*	*09/03/13 15:22*	*1*
Phenol-d5	*74*		*11 - 120*	*08/30/13 07:29*	*09/03/13 15:22*	*1*
p-Terphenyl-d14	*95*		*65 - 153*	*08/30/13 07:29*	*09/03/13 15:22*	*1*

Preliminary Data

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-2 GRAB2
Date Collected: 08/27/13 13:15
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-8
Matrix: Solid
Percent Solids: 92.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
1,1-Dichloroethane	ND		4.4	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
1,1-Dichloroethene	ND		4.4	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
1,2-Dichlorobenzene	ND		4.4	0.35	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
1,2-Dichloroethene, cis-	ND		4.4	0.57	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
1,2-Dichloroethene, trans-	ND		4.4	0.46	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
1,3-Dichlorobenzene	ND		4.4	0.23	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
1,4-Dichlorobenzene	ND		4.4	0.62	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
1,4-Dioxane	ND		180	21	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Acetone	ND		22	3.7	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Benzene	ND		4.4	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Butylbenzene	ND		4.4	0.39	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Carbon tetrachloride	ND		4.4	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Chloroform	ND		4.4	0.27	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Ethylbenzene	ND		4.4	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Methyl Ethyl Ketone (2-Butanone)	ND		22	1.6	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Methylene Chloride	ND		4.4	2.0	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Propylbenzene, n-	ND		4.4	0.35	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
sec-Butylbenzene	ND		4.4	0.39	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
tert-Butylbenzene	ND		4.4	0.46	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Tetrachloroethene	ND		4.4	0.59	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Toluene	ND		4.4	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Trichloroethene	ND		4.4	0.97	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Trimethylbenzene, 1,2,4-	ND		4.4	0.85	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Trimethylbenzene, 1,3,5-	ND		4.4	0.29	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Vinyl chloride	ND		4.4	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1
Xylene (mixed)	ND		8.9	0.74	ug/Kg	☼	08/29/13 16:11	08/30/13 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*64 - 126*	*08/29/13 16:11*	*08/30/13 17:42*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*	*08/29/13 16:11*	*08/30/13 17:42*	*1*
Toluene-d8 (Surr)	*95*		*71 - 125*	*08/29/13 16:11*	*08/30/13 17:42*	*1*

Preliminary Data

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-3 GRAB2
Date Collected: 08/27/13 13:25
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-9
Matrix: Solid
Percent Solids: 93.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.5	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
1,1-Dichloroethane	ND		4.5	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
1,1-Dichloroethene	ND		4.5	0.55	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
1,2-Dichlorobenzene	ND		4.5	0.35	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
1,2-Dichloroethane	ND		4.5	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
1,2-Dichloroethene, cis-	ND		4.5	0.57	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
1,2-Dichloroethene, trans-	ND		4.5	0.46	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
1,3-Dichlorobenzene	ND		4.5	0.23	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
1,4-Dichlorobenzene	ND		4.5	0.62	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
1,4-Dioxane	ND		180	21	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Acetone	ND		22	3.8	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Benzene	ND		4.5	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Butylbenzene	ND		4.5	0.39	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Carbon tetrachloride	ND		4.5	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Chlorobenzene	ND		4.5	0.59	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Chloroform	ND		4.5	0.28	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Ethylbenzene	ND		4.5	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Methyl Ethyl Ketone (2-Butanone)	ND		22	1.6	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Methyl tert-butyl ether	ND		4.5	0.44	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Methylene Chloride	ND		4.5	2.0	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Propylbenzene, n-	ND		4.5	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
sec-Butylbenzene	ND		4.5	0.39	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
tert-Butylbenzene	ND		4.5	0.46	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Tetrachloroethene	ND		4.5	0.60	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Toluene	ND		4.5	0.34	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Trichloroethene	ND		4.5	0.98	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Trimethylbenzene, 1,2,4-	ND		4.5	0.86	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Trimethylbenzene, 1,3,5-	ND		4.5	0.29	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Vinyl chloride	ND		4.5	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1
Xylene (mixed)	ND		8.9	0.75	ug/Kg	☼	08/29/13 16:11	08/30/13 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*64 - 126*	*08/29/13 16:11*	*08/30/13 18:07*	*1*
4-Bromofluorobenzene (Surr)	*94*		*72 - 126*	*08/29/13 16:11*	*08/30/13 18:07*	*1*
Toluene-d8 (Surr)	*93*		*71 - 125*	*08/29/13 16:11*	*08/30/13 18:07*	*1*

Preliminary Data

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-4 GRAB2
Date Collected: 08/27/13 13:35
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-10
Matrix: Solid
Percent Solids: 94.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.2	0.30	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
1,1-Dichloroethane	ND		4.2	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
1,1-Dichloroethene	ND		4.2	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
1,2-Dichlorobenzene	ND		4.2	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
1,2-Dichloroethene, cis-	ND		4.2	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
1,2-Dichloroethene, trans-	ND		4.2	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
1,3-Dichlorobenzene	ND		4.2	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
1,4-Dichlorobenzene	ND		4.2	0.59	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
1,4-Dioxane	ND		170	20	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Acetone	ND		21	3.5	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Benzene	ND		4.2	0.20	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Butylbenzene	ND		4.2	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Carbon tetrachloride	ND		4.2	0.40	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Chlorobenzene	ND		4.2	0.55	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Chloroform	ND		4.2	0.26	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.5	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Methyl tert-butyl ether	ND		4.2	0.41	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Methylene Chloride	ND		4.2	1.9	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Propylbenzene, n-	ND		4.2	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
sec-Butylbenzene	ND		4.2	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
tert-Butylbenzene	ND		4.2	0.44	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Tetrachloroethene	ND		4.2	0.56	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Toluene	ND		4.2	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Trichloroethene	ND		4.2	0.92	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Trimethylbenzene, 1,2,4-	ND		4.2	0.80	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Trimethylbenzene, 1,3,5-	ND		4.2	0.27	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Vinyl chloride	ND		4.2	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1
Xylene (mixed)	ND		8.4	0.70	ug/Kg	☼	08/29/13 16:11	08/30/13 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*123*		*64 - 126*	*08/29/13 16:11*	*08/30/13 18:32*	*1*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*	*08/29/13 16:11*	*08/30/13 18:32*	*1*
Toluene-d8 (Surr)	*93*		*71 - 125*	*08/29/13 16:11*	*08/30/13 18:32*	*1*

Preliminary Data

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-5 GRAB2
Date Collected: 08/27/13 13:45
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-11
Matrix: Solid
Percent Solids: 94.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.1	0.30	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
1,1-Dichloroethane	ND		4.1	0.50	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
1,1-Dichloroethene	ND		4.1	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
1,2-Dichlorobenzene	ND		4.1	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
1,2-Dichloroethane	ND		4.1	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
1,2-Dichloroethene, cis-	ND		4.1	0.53	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
1,2-Dichloroethene, trans-	ND		4.1	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
1,3-Dichlorobenzene	ND		4.1	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
1,4-Dichlorobenzene	ND		4.1	0.58	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
1,4-Dioxane	ND		170	20	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Acetone	ND		21	3.5	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Benzene	ND		4.1	0.20	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Butylbenzene	ND		4.1	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Carbon tetrachloride	ND		4.1	0.40	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Chlorobenzene	ND		4.1	0.55	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Chloroform	ND		4.1	0.26	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Ethylbenzene	ND		4.1	0.29	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.5	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Methyl tert-butyl ether	ND		4.1	0.41	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Methylene Chloride	ND		4.1	1.9	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Propylbenzene, n-	ND		4.1	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
sec-Butylbenzene	ND		4.1	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
tert-Butylbenzene	ND		4.1	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Tetrachloroethene	ND		4.1	0.55	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Toluene	ND		4.1	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Trichloroethene	ND		4.1	0.91	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Trimethylbenzene, 1,2,4-	ND		4.1	0.79	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Trimethylbenzene, 1,3,5-	ND		4.1	0.27	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Vinyl chloride	ND		4.1	0.50	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1
Xylene (mixed)	ND		8.3	0.69	ug/Kg	☼	08/29/13 16:11	08/30/13 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*125*		*64 - 126*	*08/29/13 16:11*	*08/30/13 18:58*	*1*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*	*08/29/13 16:11*	*08/30/13 18:58*	*1*
Toluene-d8 (Surr)	*93*		*71 - 125*	*08/29/13 16:11*	*08/30/13 18:58*	*1*

Preliminary Data

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-6 GRAB2
Date Collected: 08/27/13 13:55
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-12
Matrix: Solid
Percent Solids: 93.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.3	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
1,1-Dichloroethane	ND		4.3	0.52	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
1,1-Dichloroethene	ND		4.3	0.52	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
1,2-Dichlorobenzene	ND		4.3	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
1,2-Dichloroethane	ND		4.3	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
1,2-Dichloroethene, cis-	ND		4.3	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
1,2-Dichloroethene, trans-	ND		4.3	0.44	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
1,3-Dichlorobenzene	ND		4.3	0.22	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
1,4-Dichlorobenzene	ND		4.3	0.60	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
1,4-Dioxane	ND		170	21	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Acetone	ND		21	3.6	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Benzene	ND		4.3	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Butylbenzene	ND		4.3	0.37	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Carbon tetrachloride	ND		4.3	0.41	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Chlorobenzene	ND		4.3	0.56	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Chloroform	ND		4.3	0.26	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Ethylbenzene	ND		4.3	0.29	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.6	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Methyl tert-butyl ether	ND		4.3	0.42	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Methylene Chloride	ND		4.3	2.0	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Propylbenzene, n-	ND		4.3	0.34	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
sec-Butylbenzene	ND		4.3	0.37	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
tert-Butylbenzene	ND		4.3	0.44	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Tetrachloroethene	ND		4.3	0.57	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Toluene	ND		4.3	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Trichloroethene	ND		4.3	0.94	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Trimethylbenzene, 1,2,4-	ND		4.3	0.82	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Trimethylbenzene, 1,3,5-	ND		4.3	0.27	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Vinyl chloride	ND		4.3	0.52	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1
Xylene (mixed)	ND		8.5	0.71	ug/Kg	☼	08/29/13 16:11	08/30/13 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*64 - 126*	*08/29/13 16:11*	*08/30/13 19:23*	*1*
4-Bromofluorobenzene (Surr)	*94*		*72 - 126*	*08/29/13 16:11*	*08/30/13 19:23*	*1*
Toluene-d8 (Surr)	*93*		*71 - 125*	*08/29/13 16:11*	*08/30/13 19:23*	*1*

Preliminary Data

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-7 GRAB2
Date Collected: 08/27/13 14:05
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-13
Matrix: Solid
Percent Solids: 92.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.1	0.30	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
1,1-Dichloroethane	ND		4.1	0.50	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
1,1-Dichloroethene	ND		4.1	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
1,2-Dichlorobenzene	ND		4.1	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
1,2-Dichloroethane	ND		4.1	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
1,2-Dichloroethene, cis-	ND		4.1	0.53	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
1,2-Dichloroethene, trans-	ND		4.1	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
1,3-Dichlorobenzene	ND		4.1	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
1,4-Dichlorobenzene	ND		4.1	0.58	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
1,4-Dioxane	ND		170	20	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Acetone	ND		21	3.5	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Benzene	ND		4.1	0.20	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Butylbenzene	ND		4.1	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Carbon tetrachloride	ND		4.1	0.40	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Chlorobenzene	ND		4.1	0.55	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Chloroform	ND		4.1	0.26	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Ethylbenzene	ND		4.1	0.29	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.5	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Methyl tert-butyl ether	ND		4.1	0.41	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Methylene Chloride	ND		4.1	1.9	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Propylbenzene, n-	ND		4.1	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
sec-Butylbenzene	ND		4.1	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
tert-Butylbenzene	ND		4.1	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Tetrachloroethene	ND		4.1	0.56	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Toluene	ND		4.1	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Trichloroethene	ND		4.1	0.91	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Trimethylbenzene, 1,2,4-	ND		4.1	0.79	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Trimethylbenzene, 1,3,5-	ND		4.1	0.27	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Vinyl chloride	ND		4.1	0.50	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1
Xylene (mixed)	ND		8.3	0.70	ug/Kg	☼	08/29/13 16:11	08/30/13 19:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*64 - 126*	*08/29/13 16:11*	*08/30/13 19:49*	*1*
4-Bromofluorobenzene (Surr)	*92*		*72 - 126*	*08/29/13 16:11*	*08/30/13 19:49*	*1*
Toluene-d8 (Surr)	*91*		*71 - 125*	*08/29/13 16:11*	*08/30/13 19:49*	*1*

Preliminary Data

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-8 GRAB2
Date Collected: 08/27/13 14:15
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-14
Matrix: Solid
Percent Solids: 93.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.1	0.30	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
1,1-Dichloroethane	ND		4.1	0.50	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
1,1-Dichloroethene	ND		4.1	0.50	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
1,2-Dichlorobenzene	ND		4.1	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
1,2-Dichloroethane	ND		4.1	0.20	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
1,2-Dichloroethene, cis-	ND		4.1	0.52	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
1,2-Dichloroethene, trans-	ND		4.1	0.42	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
1,3-Dichlorobenzene	ND		4.1	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
1,4-Dichlorobenzene	ND		4.1	0.57	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
1,4-Dioxane	ND		160	20	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Acetone	ND		20	3.4	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Benzene	ND		4.1	0.20	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Butylbenzene	ND		4.1	0.35	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Carbon tetrachloride	ND		4.1	0.39	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Chlorobenzene	ND		4.1	0.54	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Chloroform	ND		4.1	0.25	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Ethylbenzene	ND		4.1	0.28	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Methyl Ethyl Ketone (2-Butanone)	ND		20	1.5	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Methyl tert-butyl ether	ND		4.1	0.40	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Methylene Chloride	ND		4.1	1.9	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Propylbenzene, n-	ND		4.1	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
sec-Butylbenzene	ND		4.1	0.35	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
tert-Butylbenzene	ND		4.1	0.42	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Tetrachloroethene	ND		4.1	0.55	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Toluene	ND		4.1	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Trichloroethene	ND		4.1	0.90	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Trimethylbenzene, 1,2,4-	ND		4.1	0.78	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Trimethylbenzene, 1,3,5-	ND		4.1	0.26	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Vinyl chloride	ND		4.1	0.50	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1
Xylene (mixed)	ND		8.2	0.68	ug/Kg	☼	08/29/13 16:11	08/30/13 20:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*125*		*64 - 126*	*08/29/13 16:11*	*08/30/13 20:14*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*	*08/29/13 16:11*	*08/30/13 20:14*	*1*
Toluene-d8 (Surr)	*94*		*71 - 125*	*08/29/13 16:11*	*08/30/13 20:14*	*1*

Preliminary Data

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-9 GRAB2
Date Collected: 08/27/13 14:25
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-15
Matrix: Solid
Percent Solids: 93.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.1	0.29	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
1,1-Dichloroethane	ND		4.1	0.50	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
1,1-Dichloroethene	ND		4.1	0.50	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
1,2-Dichlorobenzene	ND		4.1	0.32	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
1,2-Dichloroethane	ND		4.1	0.20	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
1,2-Dichloroethene, cis-	ND		4.1	0.52	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
1,2-Dichloroethene, trans-	ND		4.1	0.42	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
1,3-Dichlorobenzene	ND		4.1	0.21	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
1,4-Dichlorobenzene	ND		4.1	0.57	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
1,4-Dioxane	ND		160	20	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Acetone	ND		20	3.4	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Benzene	ND		4.1	0.20	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Butylbenzene	ND		4.1	0.35	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Carbon tetrachloride	ND		4.1	0.39	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Chlorobenzene	ND		4.1	0.54	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Chloroform	ND		4.1	0.25	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Ethylbenzene	ND		4.1	0.28	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Methyl Ethyl Ketone (2-Butanone)	ND		20	1.5	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Methyl tert-butyl ether	ND		4.1	0.40	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Methylene Chloride	ND		4.1	1.9	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Propylbenzene, n-	ND		4.1	0.32	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
sec-Butylbenzene	ND		4.1	0.35	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
tert-Butylbenzene	ND		4.1	0.42	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Tetrachloroethene	ND		4.1	0.54	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Toluene	ND		4.1	0.31	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Trichloroethene	ND		4.1	0.89	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Trimethylbenzene, 1,2,4-	ND		4.1	0.78	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Trimethylbenzene, 1,3,5-	ND		4.1	0.26	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Vinyl chloride	ND		4.1	0.50	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1
Xylene (mixed)	ND		8.1	0.68	ug/Kg	☼	08/31/13 00:23	08/31/13 02:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*64 - 126*	*08/31/13 00:23*	*08/31/13 02:33*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*	*08/31/13 00:23*	*08/31/13 02:33*	*1*
Toluene-d8 (Surr)	*102*		*71 - 125*	*08/31/13 00:23*	*08/31/13 02:33*	*1*

Preliminary Data

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-10 GRAB2
Date Collected: 08/27/13 14:35
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-16
Matrix: Solid
Percent Solids: 93.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.8	0.28	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
1,1-Dichloroethane	ND		3.8	0.46	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
1,1-Dichloroethene	ND		3.8	0.46	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
1,2-Dichlorobenzene	ND		3.8	0.30	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
1,2-Dichloroethane	ND		3.8	0.19	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
1,2-Dichloroethene, cis-	ND		3.8	0.49	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
1,2-Dichloroethene, trans-	ND		3.8	0.39	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
1,3-Dichlorobenzene	ND		3.8	0.19	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
1,4-Dichlorobenzene	ND		3.8	0.53	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
1,4-Dioxane	ND		150	18	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Acetone	ND		19	3.2	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Benzene	ND		3.8	0.19	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Butylbenzene	ND		3.8	0.33	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Carbon tetrachloride	ND		3.8	0.37	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Chlorobenzene	ND		3.8	0.50	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Chloroform	ND		3.8	0.23	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Ethylbenzene	ND		3.8	0.26	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Methyl Ethyl Ketone (2-Butanone)	ND		19	1.4	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Methyl tert-butyl ether	ND		3.8	0.37	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Methylene Chloride	ND		3.8	1.7	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Propylbenzene, n-	ND		3.8	0.30	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
sec-Butylbenzene	ND		3.8	0.33	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
tert-Butylbenzene	ND		3.8	0.39	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Tetrachloroethene	ND		3.8	0.51	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Toluene	ND		3.8	0.29	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Trichloroethene	ND		3.8	0.83	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Trimethylbenzene, 1,2,4-	ND		3.8	0.73	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Trimethylbenzene, 1,3,5-	ND		3.8	0.24	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Vinyl chloride	ND		3.8	0.46	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1
Xylene (mixed)	ND		7.6	0.64	ug/Kg	☼	08/31/13 00:23	08/31/13 02:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*64 - 126*	*08/31/13 00:23*	*08/31/13 02:59*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 126*	*08/31/13 00:23*	*08/31/13 02:59*	*1*
Toluene-d8 (Surr)	*103*		*71 - 125*	*08/31/13 00:23*	*08/31/13 02:59*	*1*

Preliminary Data

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-11 GRAB2
Date Collected: 08/27/13 14:45
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-17
Matrix: Solid
Percent Solids: 94.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.1	0.30	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
1,1-Dichloroethane	ND		4.1	0.50	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
1,1-Dichloroethene	ND		4.1	0.51	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
1,2-Dichlorobenzene	ND		4.1	0.32	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
1,2-Dichloroethane	ND		4.1	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
1,2-Dichloroethene, cis-	ND		4.1	0.53	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
1,2-Dichloroethene, trans-	ND		4.1	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
1,3-Dichlorobenzene	ND		4.1	0.21	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
1,4-Dichlorobenzene	ND		4.1	0.58	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
1,4-Dioxane	ND		170	20	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Acetone	ND		21	3.5	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Benzene	ND		4.1	0.20	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Butylbenzene	ND		4.1	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Carbon tetrachloride	ND		4.1	0.40	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Chlorobenzene	ND		4.1	0.55	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Chloroform	ND		4.1	0.26	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Ethylbenzene	ND		4.1	0.28	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.5	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Methyl tert-butyl ether	ND		4.1	0.41	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Methylene Chloride	ND		4.1	1.9	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Propylbenzene, n-	ND		4.1	0.33	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
sec-Butylbenzene	ND		4.1	0.36	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
tert-Butylbenzene	ND		4.1	0.43	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Tetrachloroethene	ND		4.1	0.55	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Toluene	ND		4.1	0.31	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Trichloroethene	ND		4.1	0.91	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Trimethylbenzene, 1,2,4-	ND		4.1	0.79	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Trimethylbenzene, 1,3,5-	ND		4.1	0.27	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Vinyl chloride	ND		4.1	0.50	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1
Xylene (mixed)	ND		8.3	0.69	ug/Kg	☼	08/29/13 16:11	08/30/13 21:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*128*	*X*	*64 - 126*	*08/29/13 16:11*	*08/30/13 21:30*	*1*
4-Bromofluorobenzene (Surr)	*91*		*72 - 126*	*08/29/13 16:11*	*08/30/13 21:30*	*1*
Toluene-d8 (Surr)	*91*		*71 - 125*	*08/29/13 16:11*	*08/30/13 21:30*	*1*

Preliminary Data

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-12 GRAB2
Date Collected: 08/27/13 14:55
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-18
Matrix: Solid
Percent Solids: 95.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.5	0.25	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
1,1-Dichloroethane	ND		3.5	0.43	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
1,1-Dichloroethene	ND		3.5	0.43	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
1,2-Dichlorobenzene	ND		3.5	0.27	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
1,2-Dichloroethane	ND		3.5	0.18	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
1,2-Dichloroethene, cis-	ND		3.5	0.45	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
1,2-Dichloroethene, trans-	ND		3.5	0.36	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
1,3-Dichlorobenzene	ND		3.5	0.18	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
1,4-Dichlorobenzene	ND		3.5	0.49	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
1,4-Dioxane	ND		140	17	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Acetone	ND		17	2.9	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Benzene	ND		3.5	0.17	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Butylbenzene	ND		3.5	0.30	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Carbon tetrachloride	ND		3.5	0.34	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Chlorobenzene	ND		3.5	0.46	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Chloroform	ND		3.5	0.22	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Ethylbenzene	ND		3.5	0.24	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Methyl Ethyl Ketone (2-Butanone)	ND		17	1.3	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Methyl tert-butyl ether	ND		3.5	0.34	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Methylene Chloride	ND		3.5	1.6	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Propylbenzene, n-	ND		3.5	0.28	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
sec-Butylbenzene	ND		3.5	0.30	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
tert-Butylbenzene	ND		3.5	0.36	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Tetrachloroethene	ND		3.5	0.47	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Toluene	ND		3.5	0.26	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Trichloroethene	ND		3.5	0.77	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Trimethylbenzene, 1,2,4-	ND		3.5	0.67	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Trimethylbenzene, 1,3,5-	ND		3.5	0.22	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Vinyl chloride	ND		3.5	0.43	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1
Xylene (mixed)	ND		7.0	0.59	ug/Kg	☼	08/31/13 00:23	08/31/13 03:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*64 - 126*	*08/31/13 00:23*	*08/31/13 03:51*	*1*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*	*08/31/13 00:23*	*08/31/13 03:51*	*1*
Toluene-d8 (Surr)	*102*		*71 - 125*	*08/31/13 00:23*	*08/31/13 03:51*	*1*

Preliminary Data

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-13 GRAB2
Date Collected: 08/27/13 15:05
Date Received: 08/28/13 10:00

Lab Sample ID: 480-44727-19
Matrix: Solid
Percent Solids: 93.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.9	0.28	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
1,1-Dichloroethane	ND		3.9	0.48	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
1,1-Dichloroethene	ND		3.9	0.48	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
1,2-Dichlorobenzene	ND		3.9	0.31	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
1,2-Dichloroethane	ND		3.9	0.20	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
1,2-Dichloroethene, cis-	ND		3.9	0.50	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
1,2-Dichloroethene, trans-	ND		3.9	0.40	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
1,3-Dichlorobenzene	ND		3.9	0.20	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
1,4-Dichlorobenzene	ND		3.9	0.55	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
1,4-Dioxane	ND		160	19	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Acetone	ND		20	3.3	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Benzene	ND		3.9	0.19	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Butylbenzene	ND		3.9	0.34	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Carbon tetrachloride	ND		3.9	0.38	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Chlorobenzene	ND		3.9	0.52	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Chloroform	ND		3.9	0.24	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Ethylbenzene	ND		3.9	0.27	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Methyl Ethyl Ketone (2-Butanone)	ND		20	1.4	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Methyl tert-butyl ether	ND		3.9	0.38	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Methylene Chloride	ND		3.9	1.8	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Propylbenzene, n-	ND		3.9	0.31	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
sec-Butylbenzene	ND		3.9	0.34	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
tert-Butylbenzene	ND		3.9	0.41	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Tetrachloroethene	ND		3.9	0.53	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Toluene	ND		3.9	0.30	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Trichloroethene	ND		3.9	0.86	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Trimethylbenzene, 1,2,4-	ND		3.9	0.75	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Trimethylbenzene, 1,3,5-	ND		3.9	0.25	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Vinyl chloride	ND		3.9	0.48	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1
Xylene (mixed)	ND		7.8	0.66	ug/Kg	☼	08/31/13 00:23	08/31/13 04:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*64 - 126*	*08/31/13 00:23*	*08/31/13 04:16*	*1*
4-Bromofluorobenzene (Surr)	*97*		*72 - 126*	*08/31/13 00:23*	*08/31/13 04:16*	*1*
Toluene-d8 (Surr)	*103*		*71 - 125*	*08/31/13 00:23*	*08/31/13 04:16*	*1*

Preliminary Data

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(71-125)
480-44727-1	HOHAOC2-A-1 GRAB2	113	98	98
480-44727-2	HOHAOC2-A-1 GRAB3	114	96	95
480-44727-3	HOHAOC2-A-1 GRAB4	119	95	94
480-44727-4	HOHAOC2-A-1 GRAB5	118	94	92
480-44727-5	HOHAOC2-A-1 GRAB6	118	95	94
480-44727-6	HOHAOC2-A-1 GRAB7	119	94	91
480-44727-8	HOHAOC2-A-2 GRAB2	120	96	95
480-44727-9	HOHAOC2-A-3 GRAB2	121	94	93
480-44727-10	HOHAOC2-A-4 GRAB2	123	95	93
480-44727-11	HOHAOC2-A-5 GRAB2	125	95	93
480-44727-12	HOHAOC2-A-6 GRAB2	120	94	93
480-44727-13	HOHAOC2-A-7 GRAB2	122	92	91
480-44727-14	HOHAOC2-A-8 GRAB2	125	96	94
480-44727-15	HOHAOC2-A-9 GRAB2	108	96	102
480-44727-16	HOHAOC2-A-10 GRAB2	116	99	103
480-44727-17	HOHAOC2-A-11 GRAB2	128 X	91	91
480-44727-18	HOHAOC2-A-12 GRAB2	110	95	102
480-44727-19	HOHAOC2-A-13 GRAB2	111	97	103
LCS 480-136665/4	Lab Control Sample	104	100	97
LCS 480-136764/4	Lab Control Sample	112	97	96
LCS 480-136887/4	Lab Control Sample	105	101	103
LCSD 480-136665/22	Lab Control Sample Dup	106	96	95
LCSD 480-136764/5	Lab Control Sample Dup	115	99	97
MB 480-136665/5	Method Blank	108	98	98
MB 480-136764/24	Method Blank	117	95	96
MB 480-136887/27	Method Blank	106	97	105

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(39-146)	(37-120)	(18-120)	(34-132)	(11-120)	(65-153)
480-44727-7	HOHAOC2-A-1 COMP2	81	78	62	71	74	95
LCS 480-136685/2-A	Lab Control Sample	92	92	72	85	83	100
MB 480-136685/1-A	Method Blank	81	88	73	79	83	102

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPH = p-Terphenyl-d14

Preliminary Data

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

Lab Sample ID: MB 480-136665/5
Matrix: Solid
Analysis Batch: 136665

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			08/30/13 04:11	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			08/30/13 04:11	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			08/30/13 04:11	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			08/30/13 04:11	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			08/30/13 04:11	1
1,2-Dichloroethene, cis-	ND		5.0	0.64	ug/Kg			08/30/13 04:11	1
1,2-Dichloroethene, trans-	ND		5.0	0.52	ug/Kg			08/30/13 04:11	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			08/30/13 04:11	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			08/30/13 04:11	1
1,4-Dioxane	ND		200	24	ug/Kg			08/30/13 04:11	1
Acetone	ND		25	4.2	ug/Kg			08/30/13 04:11	1
Benzene	ND		5.0	0.25	ug/Kg			08/30/13 04:11	1
Butylbenzene	ND		5.0	0.44	ug/Kg			08/30/13 04:11	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			08/30/13 04:11	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			08/30/13 04:11	1
Chloroform	ND		5.0	0.31	ug/Kg			08/30/13 04:11	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			08/30/13 04:11	1
Methyl Ethyl Ketone (2-Butanone)	ND		25	1.8	ug/Kg			08/30/13 04:11	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			08/30/13 04:11	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			08/30/13 04:11	1
Propylbenzene, n-	ND		5.0	0.40	ug/Kg			08/30/13 04:11	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg			08/30/13 04:11	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg			08/30/13 04:11	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/30/13 04:11	1
Toluene	ND		5.0	0.38	ug/Kg			08/30/13 04:11	1
Trichloroethene	ND		5.0	1.1	ug/Kg			08/30/13 04:11	1
Trimethylbenzene, 1,2,4-	ND		5.0	0.96	ug/Kg			08/30/13 04:11	1
Trimethylbenzene, 1,3,5-	ND		5.0	0.32	ug/Kg			08/30/13 04:11	1
Vinyl chloride	ND		5.0	0.61	ug/Kg			08/30/13 04:11	1
Xylene (mixed)	ND		10	0.84	ug/Kg			08/30/13 04:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*64 - 126*		*08/30/13 04:11*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*		*08/30/13 04:11*	*1*
Toluene-d8 (Surr)	*98*		*71 - 125*		*08/30/13 04:11*	*1*

Lab Sample ID: LCS 480-136665/4
Matrix: Solid
Analysis Batch: 136665

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	53.5		ug/Kg		107	73 - 126
1,1-Dichloroethene	50.0	53.0		ug/Kg		106	59 - 125
1,2-Dichlorobenzene	50.0	49.6		ug/Kg		99	75 - 120
1,2-Dichloroethane	50.0	53.6		ug/Kg		107	77 - 122
1,2-Dichloroethene, cis-	50.0	53.5		ug/Kg		107	81 - 117
1,2-Dichloroethene, trans-	50.0	53.2		ug/Kg		106	78 - 126
Benzene	50.0	52.5		ug/Kg		105	79 - 127

Preliminary Data

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

Lab Sample ID: LCS 480-136665/4
Matrix: Solid
Analysis Batch: 136665

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chlorobenzene			50.0	48.9		ug/Kg		98	76 - 124		
Ethylbenzene			50.0	48.9		ug/Kg		98	80 - 120		
Methyl tert-butyl ether			50.0	54.3		ug/Kg		109	63 - 125		
Tetrachloroethene			50.0	49.2		ug/Kg		98	74 - 122		
Toluene			50.0	48.1		ug/Kg		96	74 - 128		
Trichloroethene			50.0	52.9		ug/Kg		106	77 - 129		
Trimethylbenzene, 1,2,4-			50.0	48.4		ug/Kg		97	74 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*64 - 126*
4-Bromofluorobenzene (Surr)	*100*		*72 - 126*
Toluene-d8 (Surr)	*97*		*71 - 125*

Lab Sample ID: LCSD 480-136665/22
Matrix: Solid
Analysis Batch: 136665

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-Dichloroethane			50.0	56.4		ug/Kg		113	73 - 126	5	20
1,1-Dichloroethene			50.0	56.5		ug/Kg		113	59 - 125	6	20
1,2-Dichlorobenzene			50.0	46.9		ug/Kg		94	75 - 120	6	20
1,2-Dichloroethane			50.0	55.5		ug/Kg		111	77 - 122	3	20
1,2-Dichloroethene, cis-			50.0	56.3		ug/Kg		113	81 - 117	5	20
1,2-Dichloroethene, trans-			50.0	56.6		ug/Kg		113	78 - 126	6	20
Benzene			50.0	55.2		ug/Kg		110	79 - 127	5	20
Chlorobenzene			50.0	47.9		ug/Kg		96	76 - 124	2	20
Ethylbenzene			50.0	48.4		ug/Kg		97	80 - 120	1	20
Methyl tert-butyl ether			50.0	53.1		ug/Kg		106	63 - 125	2	20
Tetrachloroethene			50.0	49.5		ug/Kg		99	74 - 122	1	20
Toluene			50.0	47.7		ug/Kg		95	74 - 128	1	20
Trichloroethene			50.0	57.5		ug/Kg		115	77 - 129	8	20
Trimethylbenzene, 1,2,4-			50.0	47.4		ug/Kg		95	74 - 120	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*64 - 126*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*
Toluene-d8 (Surr)	*95*		*71 - 125*

Lab Sample ID: MB 480-136764/24
Matrix: Solid
Analysis Batch: 136764

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			08/30/13 14:56	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			08/30/13 14:56	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			08/30/13 14:56	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			08/30/13 14:56	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			08/30/13 14:56	1

Preliminary Data

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

Lab Sample ID: MB 480-136764/24
Matrix: Solid
Analysis Batch: 136764

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, cis-	ND		5.0	0.64	ug/Kg			08/30/13 14:56	1
1,2-Dichloroethene, trans-	ND		5.0	0.52	ug/Kg			08/30/13 14:56	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			08/30/13 14:56	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			08/30/13 14:56	1
1,4-Dioxane	ND		200	24	ug/Kg			08/30/13 14:56	1
Acetone	ND		25	4.2	ug/Kg			08/30/13 14:56	1
Benzene	ND		5.0	0.25	ug/Kg			08/30/13 14:56	1
Butylbenzene	ND		5.0	0.44	ug/Kg			08/30/13 14:56	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			08/30/13 14:56	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			08/30/13 14:56	1
Chloroform	ND		5.0	0.31	ug/Kg			08/30/13 14:56	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			08/30/13 14:56	1
Methyl Ethyl Ketone (2-Butanone)	ND		25	1.8	ug/Kg			08/30/13 14:56	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			08/30/13 14:56	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			08/30/13 14:56	1
Propylbenzene, n-	ND		5.0	0.40	ug/Kg			08/30/13 14:56	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg			08/30/13 14:56	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg			08/30/13 14:56	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/30/13 14:56	1
Toluene	ND		5.0	0.38	ug/Kg			08/30/13 14:56	1
Trichloroethene	ND		5.0	1.1	ug/Kg			08/30/13 14:56	1
Trimethylbenzene, 1,2,4-	ND		5.0	0.96	ug/Kg			08/30/13 14:56	1
Trimethylbenzene, 1,3,5-	ND		5.0	0.32	ug/Kg			08/30/13 14:56	1
Vinyl chloride	ND		5.0	0.61	ug/Kg			08/30/13 14:56	1
Xylene (mixed)	ND		10	0.84	ug/Kg			08/30/13 14:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*64 - 126*		*08/30/13 14:56*	*1*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*		*08/30/13 14:56*	*1*
Toluene-d8 (Surr)	*96*		*71 - 125*		*08/30/13 14:56*	*1*

Lab Sample ID: LCS 480-136764/4
Matrix: Solid
Analysis Batch: 136764

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	55.1		ug/Kg		110	73 - 126
1,1-Dichloroethene	50.0	53.4		ug/Kg		107	59 - 125
1,2-Dichlorobenzene	50.0	46.1		ug/Kg		92	75 - 120
1,2-Dichloroethane	50.0	56.4		ug/Kg		113	77 - 122
1,2-Dichloroethene, cis-	50.0	55.2		ug/Kg		110	81 - 117
1,2-Dichloroethene, trans-	50.0	54.7		ug/Kg		109	78 - 126
Benzene	50.0	53.9		ug/Kg		108	79 - 127
Chlorobenzene	50.0	47.1		ug/Kg		94	76 - 124
Ethylbenzene	50.0	46.8		ug/Kg		94	80 - 120
Methyl tert-butyl ether	50.0	55.1		ug/Kg		110	63 - 125
Tetrachloroethene	50.0	46.9		ug/Kg		94	74 - 122
Toluene	50.0	46.1		ug/Kg		92	74 - 128

Preliminary Data

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

Lab Sample ID: LCS 480-136764/4
Matrix: Solid
Analysis Batch: 136764

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Trichloroethene			50.0	54.5		ug/Kg		109	77 - 129		
Trimethylbenzene, 1,2,4-			50.0	45.6		ug/Kg		91	74 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*64 - 126*
4-Bromofluorobenzene (Surr)	*97*		*72 - 126*
Toluene-d8 (Surr)	*96*		*71 - 125*

Lab Sample ID: LCSD 480-136764/5
Matrix: Solid
Analysis Batch: 136764

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-Dichloroethane			50.0	54.0		ug/Kg		108	73 - 126	2	20
1,1-Dichloroethene			50.0	52.2		ug/Kg		104	59 - 125	2	20
1,2-Dichlorobenzene			50.0	45.5		ug/Kg		91	75 - 120	1	20
1,2-Dichloroethane			50.0	56.4		ug/Kg		113	77 - 122	0	20
1,2-Dichloroethene, cis-			50.0	54.5		ug/Kg		109	81 - 117	1	20
1,2-Dichloroethene, trans-			50.0	62.5		ug/Kg		125	78 - 126	13	20
Benzene			50.0	53.4		ug/Kg		107	79 - 127	1	20
Chlorobenzene			50.0	46.6		ug/Kg		93	76 - 124	1	20
Ethylbenzene			50.0	46.2		ug/Kg		92	80 - 120	1	20
Methyl tert-butyl ether			50.0	55.3		ug/Kg		111	63 - 125	0	20
Tetrachloroethene			50.0	46.4		ug/Kg		93	74 - 122	1	20
Toluene			50.0	45.7		ug/Kg		91	74 - 128	1	20
Trichloroethene			50.0	54.1		ug/Kg		108	77 - 129	1	20
Trimethylbenzene, 1,2,4-			50.0	45.2		ug/Kg		90	74 - 120	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*115*		*64 - 126*
4-Bromofluorobenzene (Surr)	*99*		*72 - 126*
Toluene-d8 (Surr)	*97*		*71 - 125*

Lab Sample ID: MB 480-136887/27
Matrix: Solid
Analysis Batch: 136887

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			08/31/13 01:57	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			08/31/13 01:57	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			08/31/13 01:57	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			08/31/13 01:57	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			08/31/13 01:57	1
1,2-Dichloroethene, cis-	ND		5.0	0.64	ug/Kg			08/31/13 01:57	1
1,2-Dichloroethene, trans-	ND		5.0	0.52	ug/Kg			08/31/13 01:57	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			08/31/13 01:57	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			08/31/13 01:57	1
1,4-Dioxane	ND		200	24	ug/Kg			08/31/13 01:57	1

Preliminary Data

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

Lab Sample ID: MB 480-136887/27
Matrix: Solid
Analysis Batch: 136887

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	4.2	ug/Kg			08/31/13 01:57	1
Benzene	ND		5.0	0.25	ug/Kg			08/31/13 01:57	1
Butylbenzene	ND		5.0	0.44	ug/Kg			08/31/13 01:57	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			08/31/13 01:57	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			08/31/13 01:57	1
Chloroform	ND		5.0	0.31	ug/Kg			08/31/13 01:57	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			08/31/13 01:57	1
Methyl Ethyl Ketone (2-Butanone)	ND		25	1.8	ug/Kg			08/31/13 01:57	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			08/31/13 01:57	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			08/31/13 01:57	1
Propylbenzene, n-	ND		5.0	0.40	ug/Kg			08/31/13 01:57	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg			08/31/13 01:57	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg			08/31/13 01:57	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/31/13 01:57	1
Toluene	ND		5.0	0.38	ug/Kg			08/31/13 01:57	1
Trichloroethene	ND		5.0	1.1	ug/Kg			08/31/13 01:57	1
Trimethylbenzene, 1,2,4-	ND		5.0	0.96	ug/Kg			08/31/13 01:57	1
Trimethylbenzene, 1,3,5-	ND		5.0	0.32	ug/Kg			08/31/13 01:57	1
Vinyl chloride	ND		5.0	0.61	ug/Kg			08/31/13 01:57	1
Xylene (mixed)	ND		10	0.84	ug/Kg			08/31/13 01:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*64 - 126*		*08/31/13 01:57*	*1*
4-Bromofluorobenzene (Surr)	*97*		*72 - 126*		*08/31/13 01:57*	*1*
Toluene-d8 (Surr)	*105*		*71 - 125*		*08/31/13 01:57*	*1*

Lab Sample ID: LCS 480-136887/4
Matrix: Solid
Analysis Batch: 136887

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	49.9		ug/Kg		100	73 - 126
1,1-Dichloroethene	50.0	50.1		ug/Kg		100	59 - 125
1,2-Dichlorobenzene	50.0	51.7		ug/Kg		103	75 - 120
1,2-Dichloroethane	50.0	50.8		ug/Kg		102	77 - 122
1,2-Dichloroethene, cis-	50.0	49.6		ug/Kg		99	81 - 117
1,2-Dichloroethene, trans-	50.0	59.0		ug/Kg		118	78 - 126
Benzene	50.0	49.1		ug/Kg		98	79 - 127
Chlorobenzene	50.0	50.6		ug/Kg		101	76 - 124
Ethylbenzene	50.0	50.8		ug/Kg		102	80 - 120
Methyl tert-butyl ether	50.0	48.3		ug/Kg		97	63 - 125
Tetrachloroethene	50.0	51.5		ug/Kg		103	74 - 122
Toluene	50.0	50.0		ug/Kg		100	74 - 128
Trichloroethene	50.0	50.5		ug/Kg		101	77 - 129
Trimethylbenzene, 1,2,4-	50.0	51.7		ug/Kg		103	74 - 120

Preliminary Data

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

Lab Sample ID: LCS 480-136887/4
Matrix: Solid
Analysis Batch: 136887

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*105*		*64 - 126*
4-Bromofluorobenzene (Surr)	*101*		*72 - 126*
Toluene-d8 (Surr)	*103*		*71 - 125*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-136685/1-A
Matrix: Solid
Analysis Batch: 137018

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 136685

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dihydroxyanthraquinone	ND		650	110	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
1-Hydroxyanthraquinone	ND		650	250	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2,2'-oxybis[1-chloropropane]	ND		170	17	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2,4,5-Trichlorophenol	ND		170	36	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2,4,6-Trichlorophenol	ND		170	11	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2,4-Dichlorophenol	ND		170	8.8	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2,4-Dimethylphenol	ND		170	45	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2,4-Dinitrophenol	ND		330	58	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2,4-Dinitrotoluene	ND		170	26	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2,6-Dinitrotoluene	ND		170	41	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2-Chloroaniline	ND		330	29	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2-Chloronaphthalene	ND		170	11	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2-Chlorophenol	ND		170	8.5	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2-Methylnaphthalene	ND		170	2.0	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2-Methylphenol	ND		170	5.1	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2-Nitroaniline	ND		330	54	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
2-Nitrophenol	ND		170	7.6	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
3,3'-Dichlorobenzidine	ND		170	150	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
3-Nitroaniline	ND		330	38	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
4,6-Dinitro-2-methylphenol	ND		330	58	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
4-Bromophenyl phenyl ether	ND		170	53	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
4-Chloro-3-methylphenol	ND		170	6.9	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
4-Chloroaniline	ND		170	49	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
4-Chlorophenyl phenyl ether	ND		170	3.6	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
4-Methylphenol	ND		330	9.3	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
4-Nitroaniline	ND		330	19	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
4-Nitrophenol	ND		330	40	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
9,10-Anthracenedione	ND		330	150	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
9-Octadecenamide	ND		3300	810	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Acenaphthene	ND		170	2.0	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Acenaphthylene	ND		170	1.4	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Acetophenone	ND		170	8.6	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Anthracene	ND		170	4.3	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Atrazine	ND		170	7.4	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Benzaldehyde	ND		170	18	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Benzo(a)pyrene	ND		170	4.0	ug/Kg		08/30/13 07:29	09/03/13 14:08	1

Preliminary Data

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-136685/1-A
Matrix: Solid
Analysis Batch: 137018

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 136685

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo(b)fluoranthene	ND		170	3.2	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Benzo(k)fluoranthene	ND		170	1.8	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Biphenyl	ND		170	10	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Bis(2-chloroethoxy)methane	ND		170	9.1	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Bis(2-chloroethyl)ether	ND		170	14	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Bis(2-ethylhexyl) phthalate	ND		170	54	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Butyl benzyl phthalate	ND		170	45	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Caprolactam	ND		170	72	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Carbazole	ND		170	1.9	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Chrysene	ND		170	1.7	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Dibenzofuran	ND		170	1.7	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Diethyl phthalate	ND		170	5.0	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Dimethyl phthalate	ND		170	4.4	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Di-n-butyl phthalate	ND		170	58	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Di-n-octyl phthalate	ND		170	3.9	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Fluoranthene	ND		170	2.4	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Fluorene	ND		170	3.8	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Hexachlorobenzene	ND		170	8.3	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Hexachlorobutadiene	ND		170	8.5	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Hexachlorocyclopentadiene	ND		170	50	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Hexachloroethane	ND		170	13	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Indeno(1,2,3-cd)pyrene	ND		170	4.6	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Isophorone	ND		170	8.3	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Naphthalene	ND		170	2.8	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Nitrobenzene	ND		170	7.4	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
N-Nitrosodi-n-propylamine	ND		170	13	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
N-Nitrosodiphenylamine	ND		170	9.1	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
o-Toluidine	ND		330	68	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Pentachlorophenol	ND		330	57	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Phenanthrene	ND		170	3.5	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Phenol	ND		170	18	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
p-Toluidine	ND		330	160	ug/Kg		08/30/13 07:29	09/03/13 14:08	1
Pyrene	ND		170	1.1	ug/Kg		08/30/13 07:29	09/03/13 14:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*81*		*39 - 146*	*08/30/13 07:29*	*09/03/13 14:08*	*1*
2-Fluorobiphenyl	*88*		*37 - 120*	*08/30/13 07:29*	*09/03/13 14:08*	*1*
2-Fluorophenol	*73*		*18 - 120*	*08/30/13 07:29*	*09/03/13 14:08*	*1*
Nitrobenzene-d5	*79*		*34 - 132*	*08/30/13 07:29*	*09/03/13 14:08*	*1*
Phenol-d5	*83*		*11 - 120*	*08/30/13 07:29*	*09/03/13 14:08*	*1*
p-Terphenyl-d14	*102*		*65 - 153*	*08/30/13 07:29*	*09/03/13 14:08*	*1*

Preliminary Data

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-136685/2-A
Matrix: Solid
Analysis Batch: 137018

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 136685

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2'-oxybis[1-chloropropane]	1640	1440		ug/Kg		88	44 - 120
2,4,5-Trichlorophenol	1640	1490		ug/Kg		91	59 - 126
2,4,6-Trichlorophenol	1640	1490		ug/Kg		91	59 - 123
2,4-Dichlorophenol	1640	1400		ug/Kg		86	52 - 120
2,4-Dimethylphenol	1640	1440		ug/Kg		88	36 - 120
2,4-Dinitrophenol	3270	2600		ug/Kg		79	35 - 146
2,4-Dinitrotoluene	1640	1530		ug/Kg		93	55 - 125
2,6-Dinitrotoluene	1640	1540		ug/Kg		94	66 - 128
2-Chloronaphthalene	1640	1540		ug/Kg		94	57 - 120
2-Chlorophenol	1640	1280		ug/Kg		78	38 - 120
2-Methylnaphthalene	1640	1420		ug/Kg		87	47 - 120
2-Methylphenol	1640	1430		ug/Kg		87	48 - 120
2-Nitroaniline	1640	1630		ug/Kg		100	61 - 130
2-Nitrophenol	1640	1370		ug/Kg		84	50 - 120
3,3'-Dichlorobenzidine	1640	1280		ug/Kg		78	48 - 126
3-Nitroaniline	1640	1600		ug/Kg		98	61 - 127
4,6-Dinitro-2-methylphenol	3270	3130		ug/Kg		96	49 - 155
4-Bromophenyl phenyl ether	1640	1500		ug/Kg		92	58 - 131
4-Chloro-3-methylphenol	1640	1400		ug/Kg		86	49 - 125
4-Chloroaniline	1640	1160		ug/Kg		71	49 - 120
4-Chlorophenyl phenyl ether	1640	1570		ug/Kg		96	63 - 124
4-Methylphenol	1640	1330		ug/Kg		81	50 - 119
4-Nitroaniline	1640	1820		ug/Kg		111	63 - 128
4-Nitrophenol	3270	3230		ug/Kg		99	43 - 137
Acenaphthene	1640	1550		ug/Kg		95	53 - 120
Acenaphthylene	1640	1480		ug/Kg		91	58 - 121
Acetophenone	1640	1170		ug/Kg		71	66 - 120
Anthracene	1640	1610		ug/Kg		98	62 - 129
Atrazine	1640	2100		ug/Kg		128	60 - 164
Benzaldehyde	1640	892		ug/Kg		55	21 - 120
Benzo(a)anthracene	1640	1550		ug/Kg		95	65 - 133
Benzo(a)pyrene	1640	1540		ug/Kg		94	64 - 127
Benzo(b)fluoranthene	1640	1550		ug/Kg		95	64 - 135
Benzo(g,h,i)perylene	1640	1540		ug/Kg		94	50 - 152
Benzo(k)fluoranthene	1640	1590		ug/Kg		98	58 - 138
Biphenyl	1640	1460		ug/Kg		89	71 - 120
Bis(2-chloroethoxy)methane	1640	1390		ug/Kg		85	61 - 133
Bis(2-chloroethyl)ether	1640	1270		ug/Kg		78	45 - 120
Bis(2-ethylhexyl) phthalate	1640	1600		ug/Kg		98	61 - 133
Butyl benzyl phthalate	1640	1560		ug/Kg		96	61 - 129
Caprolactam	1640	1660		ug/Kg		101	54 - 133
Carbazole	1640	1600		ug/Kg		98	59 - 129
Chrysene	1640	1570		ug/Kg		96	64 - 131
Dibenz(a,h)anthracene	1640	1580		ug/Kg		97	54 - 148
Dibenzofuran	1640	1520		ug/Kg		93	56 - 120
Diethyl phthalate	1640	1430		ug/Kg		87	66 - 126
Dimethyl phthalate	1640	1550		ug/Kg		95	65 - 124
Di-n-butyl phthalate	1640	1450		ug/Kg		89	58 - 130

Preliminary Data

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-136685/2-A
Matrix: Solid
Analysis Batch: 137018

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 136685

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Di-n-octyl phthalate	1640	1590		ug/Kg		97	62 - 133
Fluoranthene	1640	1630		ug/Kg		100	62 - 131
Fluorene	1640	1570		ug/Kg		96	63 - 126
Hexachlorobenzene	1640	1520		ug/Kg		93	60 - 132
Hexachlorobutadiene	1640	1380		ug/Kg		84	45 - 120
Hexachlorocyclopentadiene	1640	975		ug/Kg		60	31 - 120
Hexachloroethane	1640	1210		ug/Kg		74	41 - 120
Indeno(1,2,3-cd)pyrene	1640	1560		ug/Kg		96	56 - 149
Isophorone	1640	1380		ug/Kg		84	56 - 120
Naphthalene	1640	1370		ug/Kg		84	46 - 120
Nitrobenzene	1640	1410		ug/Kg		86	49 - 120
N-Nitrosodi-n-propylamine	1640	1300		ug/Kg		80	46 - 120
Pentachlorophenol	3270	2380		ug/Kg		73	33 - 136
Phenanthrene	1640	1610		ug/Kg		99	60 - 130
Phenol	1640	1340		ug/Kg		82	36 - 120
Pyrene	1640	1600		ug/Kg		98	51 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*92*		*39 - 146*
2-Fluorobiphenyl	*92*		*37 - 120*
2-Fluorophenol	*72*		*18 - 120*
Nitrobenzene-d5	*85*		*34 - 132*
Phenol-d5	*83*		*11 - 120*
p-Terphenyl-d14	*100*		*65 - 153*

Preliminary Data

GC/MS VOA

Prep Batch: 136624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-1	HOHAOC2-A-1 GRAB2	Total/NA	Solid	5035	
480-44727-2	HOHAOC2-A-1 GRAB3	Total/NA	Solid	5035	
480-44727-3	HOHAOC2-A-1 GRAB4	Total/NA	Solid	5035	
480-44727-4	HOHAOC2-A-1 GRAB5	Total/NA	Solid	5035	
480-44727-5	HOHAOC2-A-1 GRAB6	Total/NA	Solid	5035	
480-44727-6	HOHAOC2-A-1 GRAB7	Total/NA	Solid	5035	
480-44727-8	HOHAOC2-A-2 GRAB2	Total/NA	Solid	5035	
480-44727-9	HOHAOC2-A-3 GRAB2	Total/NA	Solid	5035	
480-44727-10	HOHAOC2-A-4 GRAB2	Total/NA	Solid	5035	
480-44727-11	HOHAOC2-A-5 GRAB2	Total/NA	Solid	5035	
480-44727-12	HOHAOC2-A-6 GRAB2	Total/NA	Solid	5035	
480-44727-13	HOHAOC2-A-7 GRAB2	Total/NA	Solid	5035	
480-44727-14	HOHAOC2-A-8 GRAB2	Total/NA	Solid	5035	
480-44727-17	HOHAOC2-A-11 GRAB2	Total/NA	Solid	5035	

Analysis Batch: 136665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-1	HOHAOC2-A-1 GRAB2	Total/NA	Solid	8260B	136624
480-44727-2	HOHAOC2-A-1 GRAB3	Total/NA	Solid	8260B	136624
LCS 480-136665/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 480-136665/22	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 480-136665/5	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 136764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-3	HOHAOC2-A-1 GRAB4	Total/NA	Solid	8260B	136624
480-44727-4	HOHAOC2-A-1 GRAB5	Total/NA	Solid	8260B	136624
480-44727-5	HOHAOC2-A-1 GRAB6	Total/NA	Solid	8260B	136624
480-44727-6	HOHAOC2-A-1 GRAB7	Total/NA	Solid	8260B	136624
480-44727-8	HOHAOC2-A-2 GRAB2	Total/NA	Solid	8260B	136624
480-44727-9	HOHAOC2-A-3 GRAB2	Total/NA	Solid	8260B	136624
480-44727-10	HOHAOC2-A-4 GRAB2	Total/NA	Solid	8260B	136624
480-44727-11	HOHAOC2-A-5 GRAB2	Total/NA	Solid	8260B	136624
480-44727-12	HOHAOC2-A-6 GRAB2	Total/NA	Solid	8260B	136624
480-44727-13	HOHAOC2-A-7 GRAB2	Total/NA	Solid	8260B	136624
480-44727-14	HOHAOC2-A-8 GRAB2	Total/NA	Solid	8260B	136624
480-44727-17	HOHAOC2-A-11 GRAB2	Total/NA	Solid	8260B	136624
LCS 480-136764/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 480-136764/5	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 480-136764/24	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 136887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-15	HOHAOC2-A-9 GRAB2	Total/NA	Solid	8260B	136895
480-44727-16	HOHAOC2-A-10 GRAB2	Total/NA	Solid	8260B	136895
480-44727-18	HOHAOC2-A-12 GRAB2	Total/NA	Solid	8260B	136895
480-44727-19	HOHAOC2-A-13 GRAB2	Total/NA	Solid	8260B	136895
LCS 480-136887/4	Lab Control Sample	Total/NA	Solid	8260B	
MB 480-136887/27	Method Blank	Total/NA	Solid	8260B	

Preliminary Data

GC/MS VOA (Continued)

Prep Batch: 136895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-15	HOHAOC2-A-9 GRAB2	Total/NA	Solid	5035	
480-44727-16	HOHAOC2-A-10 GRAB2	Total/NA	Solid	5035	
480-44727-18	HOHAOC2-A-12 GRAB2	Total/NA	Solid	5035	
480-44727-19	HOHAOC2-A-13 GRAB2	Total/NA	Solid	5035	

GC/MS Semi VOA

Prep Batch: 136685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-7	HOHAOC2-A-1 COMP2	Total/NA	Solid	3550B	
LCS 480-136685/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-136685/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 137018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-7	HOHAOC2-A-1 COMP2	Total/NA	Solid	8270C	136685
LCS 480-136685/2-A	Lab Control Sample	Total/NA	Solid	8270C	136685
MB 480-136685/1-A	Method Blank	Total/NA	Solid	8270C	136685

General Chemistry

Analysis Batch: 136421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-7	HOHAOC2-A-1 COMP2	Total/NA	Solid	Moisture	

Analysis Batch: 136627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44727-1	HOHAOC2-A-1 GRAB2	Total/NA	Solid	Moisture	
480-44727-2	HOHAOC2-A-1 GRAB3	Total/NA	Solid	Moisture	
480-44727-3	HOHAOC2-A-1 GRAB4	Total/NA	Solid	Moisture	
480-44727-4	HOHAOC2-A-1 GRAB5	Total/NA	Solid	Moisture	
480-44727-5	HOHAOC2-A-1 GRAB6	Total/NA	Solid	Moisture	
480-44727-6	HOHAOC2-A-1 GRAB7	Total/NA	Solid	Moisture	
480-44727-8	HOHAOC2-A-2 GRAB2	Total/NA	Solid	Moisture	
480-44727-9	HOHAOC2-A-3 GRAB2	Total/NA	Solid	Moisture	
480-44727-10	HOHAOC2-A-4 GRAB2	Total/NA	Solid	Moisture	
480-44727-11	HOHAOC2-A-5 GRAB2	Total/NA	Solid	Moisture	
480-44727-12	HOHAOC2-A-6 GRAB2	Total/NA	Solid	Moisture	
480-44727-13	HOHAOC2-A-7 GRAB2	Total/NA	Solid	Moisture	
480-44727-14	HOHAOC2-A-8 GRAB2	Total/NA	Solid	Moisture	
480-44727-15	HOHAOC2-A-9 GRAB2	Total/NA	Solid	Moisture	
480-44727-16	HOHAOC2-A-10 GRAB2	Total/NA	Solid	Moisture	
480-44727-17	HOHAOC2-A-11 GRAB2	Total/NA	Solid	Moisture	
480-44727-18	HOHAOC2-A-12 GRAB2	Total/NA	Solid	Moisture	
480-44727-19	HOHAOC2-A-13 GRAB2	Total/NA	Solid	Moisture	

Preliminary Data

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-1 GRAB2

Lab Sample ID: 480-44727-1
Date Collected: 08/27/13 12:05
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136665	08/30/13 09:56	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-1 GRAB3

Lab Sample ID: 480-44727-2
Date Collected: 08/27/13 12:15
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136665	08/30/13 10:22	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-1 GRAB4

Lab Sample ID: 480-44727-3
Date Collected: 08/27/13 12:25
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136764	08/30/13 15:58	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-1 GRAB5

Lab Sample ID: 480-44727-4
Date Collected: 08/27/13 12:35
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136764	08/30/13 16:24	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-1 GRAB6

Lab Sample ID: 480-44727-5
Date Collected: 08/27/13 12:45
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136764	08/30/13 16:50	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Preliminary Data

Client Sample ID: HOHAOC2-A-1 GRAB7

Lab Sample ID: 480-44727-6

Date Collected: 08/27/13 12:55
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136764	08/30/13 17:16	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-1 COMP2

Lab Sample ID: 480-44727-7

Date Collected: 08/27/13 13:05
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 95.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			136685	08/30/13 07:29	MRB	TAL BUF
Total/NA	Analysis	8270C		1	137018	09/03/13 15:22	RMM	TAL BUF
Total/NA	Analysis	Moisture		1	136421	08/28/13 20:26	GTG	TAL BUF

Client Sample ID: HOHAOC2-A-2 GRAB2

Lab Sample ID: 480-44727-8

Date Collected: 08/27/13 13:15
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 92.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136764	08/30/13 17:42	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-3 GRAB2

Lab Sample ID: 480-44727-9

Date Collected: 08/27/13 13:25
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 93.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136764	08/30/13 18:07	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-4 GRAB2

Lab Sample ID: 480-44727-10

Date Collected: 08/27/13 13:35
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136764	08/30/13 18:32	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Preliminary Data

Client Sample ID: HOHAOC2-A-5 GRAB2

Lab Sample ID: 480-44727-11

Date Collected: 08/27/13 13:45
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 94.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136764	08/30/13 18:58	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-6 GRAB2

Lab Sample ID: 480-44727-12

Date Collected: 08/27/13 13:55
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 93.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136764	08/30/13 19:23	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-7 GRAB2

Lab Sample ID: 480-44727-13

Date Collected: 08/27/13 14:05
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 92.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136764	08/30/13 19:49	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-8 GRAB2

Lab Sample ID: 480-44727-14

Date Collected: 08/27/13 14:15
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 93.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136764	08/30/13 20:14	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-9 GRAB2

Lab Sample ID: 480-44727-15

Date Collected: 08/27/13 14:25
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136895	08/31/13 00:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	136887	08/31/13 02:33	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Preliminary Data

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Client Sample ID: HOHAOC2-A-10 GRAB2

Lab Sample ID: 480-44727-16

Date Collected: 08/27/13 14:35
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 93.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136895	08/31/13 00:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	136887	08/31/13 02:59	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-11 GRAB2

Lab Sample ID: 480-44727-17

Date Collected: 08/27/13 14:45
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 94.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136624	08/29/13 16:11	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	136764	08/30/13 21:30	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-12 GRAB2

Lab Sample ID: 480-44727-18

Date Collected: 08/27/13 14:55
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 95.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136895	08/31/13 00:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	136887	08/31/13 03:51	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Client Sample ID: HOHAOC2-A-13 GRAB2

Lab Sample ID: 480-44727-19

Date Collected: 08/27/13 15:05
Matrix: Solid
Date Received: 08/28/13 10:00
Percent Solids: 93.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			136895	08/31/13 00:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	136887	08/31/13 04:16	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	136627	08/29/13 16:40	PJQ	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Preliminary Data

Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	04-01-14

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

Analysis Method	Prep Method	Matrix	Analyte
8270C	3550B	Solid	2-Chloroaniline
8270C	3550B	Solid	o-Toluidine

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8270C	3550B	Solid	1,4-Dihydroxyanthraquinone
8270C	3550B	Solid	1-Hydroxyanthraquinone
8270C	3550B	Solid	4-Nitrophenol
8270C	3550B	Solid	9,10-Anthracenedione
8270C	3550B	Solid	9-Octadecenamide
8270C	3550B	Solid	p-Toluidine
Moisture		Solid	Percent Solids

Preliminary Data

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Preliminary Data

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-44727-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-44727-1	HOHAOC2-A-1 GRAB2	Solid	08/27/13 12:05	08/28/13 10:00
480-44727-2	HOHAOC2-A-1 GRAB3	Solid	08/27/13 12:15	08/28/13 10:00
480-44727-3	HOHAOC2-A-1 GRAB4	Solid	08/27/13 12:25	08/28/13 10:00
480-44727-4	HOHAOC2-A-1 GRAB5	Solid	08/27/13 12:35	08/28/13 10:00
480-44727-5	HOHAOC2-A-1 GRAB6	Solid	08/27/13 12:45	08/28/13 10:00
480-44727-6	HOHAOC2-A-1 GRAB7	Solid	08/27/13 12:55	08/28/13 10:00
480-44727-7	HOHAOC2-A-1 COMP2	Solid	08/27/13 13:05	08/28/13 10:00
480-44727-8	HOHAOC2-A-2 GRAB2	Solid	08/27/13 13:15	08/28/13 10:00
480-44727-9	HOHAOC2-A-3 GRAB2	Solid	08/27/13 13:25	08/28/13 10:00
480-44727-10	HOHAOC2-A-4 GRAB2	Solid	08/27/13 13:35	08/28/13 10:00
480-44727-11	HOHAOC2-A-5 GRAB2	Solid	08/27/13 13:45	08/28/13 10:00
480-44727-12	HOHAOC2-A-6 GRAB2	Solid	08/27/13 13:55	08/28/13 10:00
480-44727-13	HOHAOC2-A-7 GRAB2	Solid	08/27/13 14:05	08/28/13 10:00
480-44727-14	HOHAOC2-A-8 GRAB2	Solid	08/27/13 14:15	08/28/13 10:00
480-44727-15	HOHAOC2-A-9 GRAB2	Solid	08/27/13 14:25	08/28/13 10:00
480-44727-16	HOHAOC2-A-10 GRAB2	Solid	08/27/13 14:35	08/28/13 10:00
480-44727-17	HOHAOC2-A-11 GRAB2	Solid	08/27/13 14:45	08/28/13 10:00
480-44727-18	HOHAOC2-A-12 GRAB2	Solid	08/27/13 14:55	08/28/13 10:00
480-44727-19	HOHAOC2-A-13 GRAB2	Solid	08/27/13 15:05	08/28/13 10:00

Preliminary Data

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: ANDREW ROBERTS	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-38588-10156.3
Client Contact: ~~Mr. Andy Korik~~ MIKE HIGGINS	Phone: 585.202.4399	E-Mail: john.schove@testamericainc.com		Page: Page ~~3 of 3~~ 1 OF 2
Company: ARCADIS U.S. Inc				Job #:

Address: 6723 Towpath Road PO BOX 66	Due Date Requested: 9/3/13 OR EARLIER
City: Syracuse	TAT Requested (days): 3 DAYS
State, Zip: NY, 13214	
Phone: 713-432-2643(Tel)	PO #: SO# 0015107887
Email: andrew.korik@arcadis-us.com	WO #:
Project Name: CHEVRON - CVX Hastings, NY	Project #: 48003362
Site: New York	SSOW#:

Analysis Requested

Preservation Codes:

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

Other:

WBS 08.04

Special Instructions/Note:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOC - Custom List	8270C - SVOC - NY STARS plus List	Total Number of containers
			Preservation Code:				N	N	
HOHAOC2-A-1GRAB2	8/27/13	1205	G	Solid			X		4
HOHAOC2-A-1GRAB3		1215	G	Solid			X		4
HOHAOC2-A-1GRAB4		1225	G	Solid			X		4
HOHAOC2-A-1GRAB5		1235	G	Solid			X		4
HOHAOC2-A-1GRAB6		1245	G	Solid			X		4
HOHAOC2-A-1GRAB7		1255	G	Solid			X		4
HOHAOC2-A-1COMP2		1305	C	Solid				X	6
HOHAOC2-A-2GRAB2		1315	G	Solid			X		4
HOHAOC2-A-3GRAB2		1325	G				X		4
HOHAOC2-A-4GRAB2		1335	G				X		4
HOHAOC2-A-5GRAB2		1345	G				X		4

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: DELIVERY BY ARCADIS		
Relinquished by:	Date/Time: 8/28/13 @ 1000	Company	Received by:	Date/Time: 8/28/13 1000	Company TA
Relinquished by	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: # 3 2.3

Page 45 of 47
9/4/2013

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
MIKE HIGGINS / ARCADIS	SCHOVE, JOHN R		249989
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 2 of 2
6723 TOWPATH RD PO BOX 66			
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	**Analysis (Attach list if more space is needed)**
SYRACUSE / NY / 13214	ANDY ROBERTS		CA STLC 6 ST 8260 B: VOC
Project Name and Location (State)	**Carrier/Waybill Number**		
CHEVRON - CVX HASTINGS, NY			
Contract/Purchase Order/Quote No.			
SO# 501510 7887			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed	Soil	Containers & Preservatives: Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	8260 B: VOC	Special Instructions/ Conditions of Receipt
HOHAOC2-A-6 GRAB2	8/27/13	1355				X							X	WBS 08.04
HOH AOC2-A-7 GRAB2		1405				X							X	
HOH AOC2-A-8 GRAB2		1415				X							X	
HOHAOC2-A-9 GRAB2		1425				X							X	
HOHAOC2-A-10 GRAB2		1435				X							X	
HOHAOC2-A-11 GRAB2		1445				X							X	
HOH AOC2-A-12 GRAB2		1455				X							X	
HOHAOC2 A-13 GRAB2		1505				X							X	

Possible Hazard Identification
☐ Non-Hazard ☑ Flammable ☑ Skin Irritant ☐ Poison B ☐ Unknown

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	8/28/13	1000	1. Received By	8/29/13	1000
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

#3 2.3

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-44727-1

Login Number: 44727

List Source: TestAmerica Buffalo

List Number: 1

Creator: Robison, Zachary J

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.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	ARCADIS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Preliminary Data

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-45092-1
Client Project/Site: CHEVRON - CVX Hastings, NY

For:
ARCADIS U.S. Inc
Arcadis
295 Woodcliff Drive #2, 3rd Floor
Suite 301
Fairport, New York 14450

Attn: Geoff Greapentrog

Authorized for release by:
9/9/2013 5:11:30 PM
Rebecca Jones, Project Mgmt. Assistant
rebecca.jones@testamericainc.com

Designee for

John Schove, Project Manager I
john.schove@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 6
QC Sample Results 7
QC Association Summary 10
Lab Chronicle 12
Certification Summary 13
Method Summary 15
Sample Summary 16
Chain of Custody 17
Receipt Checklists 18

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-45092-1

Qualifiers

Metals

Qualifier	Qualifier Description
B7	Target analyte detected in method blank at or above method reporting limit . Concentration found in the sample was 10 times above the concentration found in the blank.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Job ID: 480-45092-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-45092-1

Comments
No additional comments.

Receipt
The sample was received on 9/4/2013 9:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6° C.

Metals
No analytical or quality issues were noted.

General Chemistry
No analytical or quality issues were noted.

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-45092-1

Client Sample ID: HOHAOC2-CONCRETE-GRAB-1

Lab Sample ID: 480-45092-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.6		2.2	0.45	mg/Kg	1	☼	6010B	Total/NA
Barium	397		0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.24		0.22	0.031	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.65		0.22	0.034	mg/Kg	1	☼	6010B	Total/NA
Chromium	12.2		0.56	0.22	mg/Kg	1	☼	6010B	Total/NA
Copper	42.1		1.1	0.24	mg/Kg	1	☼	6010B	Total/NA
Lead	35.2		1.1	0.27	mg/Kg	1	☼	6010B	Total/NA
Manganese	366	B7	0.22	0.036	mg/Kg	1	☼	6010B	Total/NA
Nickel	7.8		5.6	0.26	mg/Kg	1	☼	6010B	Total/NA
Zinc	250	B7	2.2	0.17	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.57		0.020	0.0081	mg/Kg	1	☼	7471A	Total/NA
Cyanide, Total	1.1		1.1	0.52	mg/Kg	1	☼	9012A	Total/NA
Cr (III)	12.2		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-45092-1

Client Sample ID: HOHAOC2-CONCRETE-GRAB-1
Date Collected: 09/03/13 13:30
Date Received: 09/04/13 09:00

Lab Sample ID: 480-45092-1
Matrix: Solid
Percent Solids: 91.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.6		2.2	0.45	mg/Kg	☼	09/05/13 11:45	09/05/13 19:45	1
Barium	397		0.56	0.12	mg/Kg	☼	09/05/13 11:45	09/05/13 19:45	1
Beryllium	0.24		0.22	0.031	mg/Kg	☼	09/05/13 11:45	09/05/13 19:45	1
Cadmium	0.65		0.22	0.034	mg/Kg	☼	09/05/13 11:45	09/05/13 19:45	1
Chromium	12.2		0.56	0.22	mg/Kg	☼	09/05/13 11:45	09/05/13 19:45	1
Copper	42.1		1.1	0.24	mg/Kg	☼	09/05/13 11:45	09/05/13 19:45	1
Lead	35.2		1.1	0.27	mg/Kg	☼	09/05/13 11:45	09/05/13 19:45	1
Manganese	366	B7	0.22	0.036	mg/Kg	☼	09/05/13 11:45	09/05/13 19:45	1
Nickel	7.8		5.6	0.26	mg/Kg	☼	09/05/13 11:45	09/05/13 19:45	1
Selenium	ND		4.5	0.45	mg/Kg	☼	09/05/13 11:45	09/05/13 19:45	1
Silver	ND		0.56	0.22	mg/Kg	☼	09/05/13 11:45	09/05/13 19:45	1
Zinc	250	B7	2.2	0.17	mg/Kg	☼	09/05/13 11:45	09/05/13 19:45	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.57		0.020	0.0081	mg/Kg	☼	09/05/13 10:47	09/05/13 13:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.88	0.30	mg/Kg	☼	09/09/13 07:14	09/09/13 15:06	1
Cyanide, Total	1.1		1.1	0.52	mg/Kg	☼	09/06/13 02:40	09/07/13 12:29	1
Cr (III)	12.2		1.5	0.63	mg/Kg			09/09/13 16:58	1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 480-137455/1-A
Matrix: Solid
Analysis Batch: 137621

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 137455

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.9	0.38	mg/Kg		09/05/13 11:45	09/05/13 19:38	1
Barium	ND		0.47	0.10	mg/Kg		09/05/13 11:45	09/05/13 19:38	1
Beryllium	ND		0.19	0.026	mg/Kg		09/05/13 11:45	09/05/13 19:38	1
Cadmium	ND		0.19	0.028	mg/Kg		09/05/13 11:45	09/05/13 19:38	1
Chromium	ND		0.47	0.19	mg/Kg		09/05/13 11:45	09/05/13 19:38	1
Copper	ND		0.95	0.20	mg/Kg		09/05/13 11:45	09/05/13 19:38	1
Lead	ND		0.95	0.23	mg/Kg		09/05/13 11:45	09/05/13 19:38	1
Manganese	0.0416	J	0.19	0.030	mg/Kg		09/05/13 11:45	09/05/13 19:38	1
Nickel	ND		4.7	0.22	mg/Kg		09/05/13 11:45	09/05/13 19:38	1
Selenium	0.479	J	3.8	0.38	mg/Kg		09/05/13 11:45	09/05/13 19:38	1
Silver	ND		0.47	0.19	mg/Kg		09/05/13 11:45	09/05/13 19:38	1
Zinc	0.218	J	1.9	0.14	mg/Kg		09/05/13 11:45	09/05/13 19:38	1

Lab Sample ID: LCDSRM 480-137455/3-A LCDSRM
Matrix: Solid
Analysis Batch: 137621

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 137455

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic			182	150.0		mg/Kg		82.3	70.9 - 129.7	3	20
Barium			143	115.2		mg/Kg		80.5	72.7 - 128.0	5	20
Beryllium			98.5	80.92		mg/Kg		82.2	74.6 - 125.1	2	20
Cadmium			60.5	47.06		mg/Kg		77.8	73.2 - 129.3	1	20
Chromium			125	98.28		mg/Kg		78.5	69.8 - 129.6	2	20
Copper			80.2	63.18		mg/Kg		78.8	73.7 - 129.8	2	20
Lead			136	113.3		mg/Kg		83.2	73.1 - 127.2	3	20
Manganese			279	222.6		mg/Kg		79.6	74.2 - 126.2	3	20
Nickel			128	106.7		mg/Kg		83.2	73.1 - 129.7	1	20
Selenium			86.0	70.73		mg/Kg		82.2	63.9 - 136.2	3	20
Silver			61.4	50.74		mg/Kg		82.6	66.9 - 133.1	3	20
Zinc			204	165.0		mg/Kg		80.7	69.6 - 129.9	3	20

Lab Sample ID: LCSSRM 480-137455/2-A
Matrix: Solid
Analysis Batch: 137621

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 137455

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic			182	146.2		mg/Kg		80.2	70.9 - 129.7
Barium			143	109.7		mg/Kg		76.6	72.7 - 128.0

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-137455/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 137621 — **Prep Batch: 137455**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	98.4	79.60		mg/Kg		80.9	74.6 - 125.1
Cadmium	60.5	46.59		mg/Kg		77.0	73.2 - 129.3
Chromium	125	96.55		mg/Kg		77.1	69.8 - 129.6
Copper	80.2	62.12		mg/Kg		77.5	73.7 - 129.8
Lead	136	110.2		mg/Kg		80.9	73.1 - 127.2
Manganese	279	216.9		mg/Kg		77.6	74.2 - 126.2
Nickel	128	105.5		mg/Kg		82.3	73.1 - 129.7
Selenium	86.0	68.96		mg/Kg		80.2	63.9 - 136.2
Silver	61.4	49.08		mg/Kg		80.0	66.9 - 133.1
Zinc	204	160.5		mg/Kg		78.6	69.6 - 129.9

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 480-137445/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 137492 — **Prep Batch: 137445**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.018	0.0074	mg/Kg		09/05/13 10:12	09/05/13 13:19	1

Lab Sample ID: LCDSRM 480-137445/3-A LCDSRM — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 137492 — **Prep Batch: 137445**

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	3.77	3.67		mg/Kg		97.5	50.9 - 149.1	11	30

Lab Sample ID: LCSSRM 480-137445/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 137492 — **Prep Batch: 137445**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	3.77	3.29		mg/Kg		87.2	50.9 - 149.1

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 240-100582/9-A
Matrix: Solid
Analysis Batch: 100722

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 100582

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.80	0.27	mg/Kg		09/09/13 07:14	09/09/13 00:00	1

Lab Sample ID: LCSI 240-100582/11-A
Matrix: Solid
Analysis Batch: 100722

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 100582

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	643	595.1		mg/Kg		93	75 - 125

Lab Sample ID: LCSS 240-100582/10-A
Matrix: Solid
Analysis Batch: 100722

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 100582

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	20.0	21.35		mg/Kg		107	90 - 110

Method: 9012A - Cyanide, Total and/or Amenable

Lab Sample ID: MB 480-137573/2-A
Matrix: Solid
Analysis Batch: 137844

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 137573

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.93	0.45	mg/Kg		09/06/13 02:40	09/07/13 12:25	1

Lab Sample ID: LCS 480-137573/1-A ^5
Matrix: Solid
Analysis Batch: 137844

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 137573

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	124	99.80		mg/Kg		80	29 - 122

Metals

Prep Batch: 137445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45092-1	HOHAOC2-CONCRETE-GRAB-1	Total/NA	Solid	7471A	
LCDSRM 480-137445/3-A LCDS	Lab Control Sample Dup	Total/NA	Solid	7471A	
LCSSRM 480-137445/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 480-137445/1-A	Method Blank	Total/NA	Solid	7471A	

Prep Batch: 137455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45092-1	HOHAOC2-CONCRETE-GRAB-1	Total/NA	Solid	3050B	
LCDSRM 480-137455/3-A LCDS	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-137455/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-137455/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 137492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45092-1	HOHAOC2-CONCRETE-GRAB-1	Total/NA	Solid	7471A	137445
LCDSRM 480-137445/3-A LCDS	Lab Control Sample Dup	Total/NA	Solid	7471A	137445
LCSSRM 480-137445/2-A	Lab Control Sample	Total/NA	Solid	7471A	137445
MB 480-137445/1-A	Method Blank	Total/NA	Solid	7471A	137445

Analysis Batch: 137621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45092-1	HOHAOC2-CONCRETE-GRAB-1	Total/NA	Solid	6010B	137455
LCDSRM 480-137455/3-A LCDS	Lab Control Sample Dup	Total/NA	Solid	6010B	137455
LCSSRM 480-137455/2-A	Lab Control Sample	Total/NA	Solid	6010B	137455
MB 480-137455/1-A	Method Blank	Total/NA	Solid	6010B	137455

General Chemistry

Prep Batch: 100582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45092-1	HOHAOC2-CONCRETE-GRAB-1	Total/NA	Solid	3060A	
LCSI 240-100582/11-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 240-100582/10-A	Lab Control Sample	Total/NA	Solid	3060A	
MB 240-100582/9-A	Method Blank	Total/NA	Solid	3060A	

Analysis Batch: 100722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45092-1	HOHAOC2-CONCRETE-GRAB-1	Total/NA	Solid	7196A	100582
LCSI 240-100582/11-A	Lab Control Sample	Total/NA	Solid	7196A	100582
LCSS 240-100582/10-A	Lab Control Sample	Total/NA	Solid	7196A	100582
MB 240-100582/9-A	Method Blank	Total/NA	Solid	7196A	100582

Analysis Batch: 137332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45092-1	HOHAOC2-CONCRETE-GRAB-1	Total/NA	Solid	Moisture	

Prep Batch: 137573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45092-1	HOHAOC2-CONCRETE-GRAB-1	Total/NA	Solid	9012A	
LCS 480-137573/1-A ^5	Lab Control Sample	Total/NA	Solid	9012A	

General Chemistry (Continued)

Prep Batch: 137573 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-137573/2-A	Method Blank	Total/NA	Solid	9012A	

Analysis Batch: 137844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45092-1	HOHAOC2-CONCRETE-GRAB-1	Total/NA	Solid	9012A	137573
LCS 480-137573/1-A ^5	Lab Control Sample	Total/NA	Solid	9012A	137573
MB 480-137573/2-A	Method Blank	Total/NA	Solid	9012A	137573

Analysis Batch: 138060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45092-1	HOHAOC2-CONCRETE-GRAB-1	Total/NA	Solid	SM 3500 CR D	

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-45092-1

Client Sample ID: HOHAOC2-CONCRETE-GRAB-1 — **Lab Sample ID: 480-45092-1**
Date Collected: 09/03/13 13:30 — **Matrix: Solid**
Date Received: 09/04/13 09:00 — **Percent Solids: 91.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			137445	09/05/13 10:47	JRK	TAL BUF
Total/NA	Analysis	7471A		1	137492	09/05/13 13:43	JRK	TAL BUF
Total/NA	Prep	3050B			137455	09/05/13 11:45	NMD2	TAL BUF
Total/NA	Analysis	6010B		1	137621	09/05/13 19:45	AMH	TAL BUF
Total/NA	Prep	3060A			100582	09/09/13 07:14	LKG	TAL CAN
Total/NA	Analysis	7196A		1	100722	09/09/13 15:06	LKG	TAL CAN
Total/NA	Analysis	Moisture		1	137332	09/04/13 19:30	GTG	TAL BUF
Total/NA	Prep	9012A			137573	09/06/13 02:40	LAW	TAL BUF
Total/NA	Analysis	9012A		1	137844	09/07/13 12:29	EGN	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	138060	09/09/13 16:58	SW1	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-45092-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	10-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	956	03-31-09 *
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	N/A	03-31-09 *
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-01-09 *
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-08 *
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-09 *
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13 *
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	09-30-13

Laboratory: TestAmerica Canton

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

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-13
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-13 *
Kansas	NELAP	7	E-10336	01-31-14
Kentucky	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Nevada	State Program	9	OH-000482008A	07-31-14

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-45092-1

Laboratory: TestAmerica Canton (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	01-19-14
Pennsylvania	NELAP	3	68-00340	08-31-14 *
Texas	NELAP	6		08-31-14 *
USDA	Federal		P330-11-00328	08-26-14
Virginia	NELAP	3	460175	09-14-13
Washington	State Program	10	C971	01-12-14
Wisconsin	State Program	5	999518190	08-31-14

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-45092-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL BUF
7471A	Mercury (CVAA)	SW846	TAL BUF
7196A	Chromium, Hexavalent	SW846	TAL CAN
9012A	Cyanide, Total and/or Amenable	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
SM 3500 CR D	Chromium, Trivalent	SM	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-45092-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-45092-1	HOHAOC2-CONCRETE-GRAB-1	Solid	09/03/13 13:30	09/04/13 09:00

Chain of Custody Record

TAL-4124 (1007)

Temperature on Receipt ______

Drinking Water? Yes ☐ No ☑

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client: MIKE HIGGINS / ARCADIS	Project Manager: GEOFF GREARPENTRLOG	Date: 9/3/13	Chain of Custody Number: 249990
Address: 6723 TOWPATH RD PO BOX 66	Telephone Number (Area Code)/Fax Number: (585) 662-4020	Lab Number:	Page 1 of 1
City: SYRACUSE; State: NY; Zip Code: 13214	Site Contact: ANDREW ROGERTS; Lab Contact: JOHN SCHOVE		
Project Name and Location (State): CHEVRON - CVX HASTINGS, NY	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: SO # 0015107887			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	METALS 6010B	CHROMIUM 3500CR3	CYANIDE 9012 A	Special Instructions/Conditions of Receipt
HOHACC 2 - COAL PETE ~~SITE~~ - GRAB - 1	9/3/13	1330				X	X						X	X	X	3 WBS 08.07

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 3 DAY TAT

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	9/3/13	1600	1. Received By: [signature]	9/4/13	0910
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments: 3.6 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-45092-1

Login Number: 45092

List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

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	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	arcadis
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-46264-1
Client Project/Site: CHEVRON - CVX Hastings, NY

For:
ARCADIS U.S. Inc
Arcadis
295 Woodcliff Drive #2, 3rd Floor
Suite 301
Fairport, New York 14450

Attn: Geoff Greapentrog

Authorized for release by:
9/27/2013 3:17:51 PM
Rebecca Jones, Project Mgmt. Assistant
rebecca.jones@testamericainc.com

Designee for

John Schove, Project Manager I
(716)691-2600
john.schove@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 6
Client Sample Results 12
Surrogate Summary 60
QC Sample Results 63
QC Association Summary 74
Lab Chronicle 82
Certification Summary 94
Method Summary 96
Sample Summary 97
Chain of Custody 98
Receipt Checklists 102

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F	MS/MSD Recovery and/or RPD exceeds the control limits

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Job ID: 480-46264-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-46264-1

Comments
No additional comments.

Receipt
The samples were received on 9/20/2013 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 3.6º C, 3.8º C, 4.2º C and 5.0º C.

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

GC/MS Semi VOA
Method(s) 8270C: Two compounds were outside control limits in the continuing calibration verification (CCV) associated with batch 140941. These compounds are not classified as Calibration Check Compounds (CCCs) in the reference method. Due to the large number of analytes contained in the CCV, the laboratory's SOP allows for four analytes to be outside limits; therefore, the data have been reported.

No other analytical or quality issues were noted.

GC Semi VOA
Method(s) 8081A: All primary data is reported from the RTX-CLPII column.

Method(s) 8082: The surrogate percent difference in the associated continuing calibration verifications (CCV) for Decachlorobiphenyl exceeded 15% on the ZB-5 column, indicating a high bias. (CCV 480-140499/26), (CCV 480-140499/8)

Method(s) 8082: The surrogate percent difference in the associated continuing calibration verifications (CCV) for Decachlorobiphenyl exceeded 15% on the ZB-5 column, indicating a high bias. (CCV 480-140499/14), (CCV 480-140499/37)

Method(s) 8082: All primary data is reported from the ZB-5 column.

Method(s) 8082: The percent difference in a multi-component continuing calibration verification is assessed on the basis of the total amount, individual peak calculations are only listed for completeness.

Method(s) 8151A: The continuing calibration verification (CCV) for Silvex (2,4,5-TP) associated with batch 141052 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8151A: The surrogate percent difference in the associated continuing calibration verifications (CCV) for 2,4-Dichlorophenylacetic acid exceeded 15%, indicating a high bias: (CCV 480-141052/14), (CCV 480-141052/25), (CCV 480-141052/28), (CCV 480-141052/3).

Method(s) 8151A: All primary data is reported from the RTX-CLPI column.

No other analytical or quality issues were noted.

Metals
Method(s) 6010B: The Matrix Spike/ Matrix Spike Duplicate ((480-46264-25 MS), (480-46264-25 MSD)) recoveries for Total Copper in batch 480-140467 were outside control limits. Sample matrix is suspected. The associated Laboratory Control Sample (LCS) met acceptance criteria, therefore no corrective action was necessary.

Method(s) 6010B: The Method Blank for batch 480-140467 contained Total Zinc above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples HOHAOC2-C-COMP-1 (480-46264-25), HOHAOC2-C-COMP-10 (480-46264-34), HOHAOC2-C-COMP-11 (480-46264-35), HOHAOC2-C-COMP-12

Job ID: 480-46264-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

(480-46264-36), HOHAOC2-C-COMP-2 (480-46264-26), HOHAOC2-C-COMP-3 (480-46264-27), HOHAOC2-C-COMP-4 (480-46264-28), HOHAOC2-C-COMP-5 (480-46264-29), HOHAOC2-C-COMP-6 (480-46264-30), HOHAOC2-C-COMP-7 (480-46264-31), HOHAOC2-C-COMP-8 (480-46264-32), HOHAOC2-C-COMP-9 (480-46264-33) was not performed.

No other analytical or quality issues were noted.

General Chemistry
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-1-GRAB-1 — Lab Sample ID: 480-46264-1

No Detections.

Client Sample ID: HOHAOC2-C-1-GRAB-2 — Lab Sample ID: 480-46264-2

No Detections.

Client Sample ID: HOHAOC2-C-2-GRAB-1 — Lab Sample ID: 480-46264-3

No Detections.

Client Sample ID: HOHAOC2-C-2-GRAB-2 — Lab Sample ID: 480-46264-4

No Detections.

Client Sample ID: HOHAOC2-C-3-GRAB-1 — Lab Sample ID: 480-46264-5

No Detections.

Client Sample ID: HOHAOC2-C-3-GRAB-2 — Lab Sample ID: 480-46264-6

No Detections.

Client Sample ID: HOHAOC2-C-4-GRAB-1 — Lab Sample ID: 480-46264-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.3	J	12	2.0	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: HOHAOC2-C-4-GRAB-2 — Lab Sample ID: 480-46264-8

No Detections.

Client Sample ID: HOHAOC2-C-5-GRAB-1 — Lab Sample ID: 480-46264-9

No Detections.

Client Sample ID: HOHAOC2-C-5-GRAB-2 — Lab Sample ID: 480-46264-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.7	J	23	3.9	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: HOHAOC2-C-6-GRAB-1 — Lab Sample ID: 480-46264-11

No Detections.

Client Sample ID: HOHAOC2-C-6-GRAB-2 — Lab Sample ID: 480-46264-12

No Detections.

Client Sample ID: HOHAOC2-C-7-GRAB-1 — Lab Sample ID: 480-46264-13

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-7-GRAB-2 — Lab Sample ID: 480-46264-14

No Detections.

Client Sample ID: HOHAOC2-C-8-GRAB-1 — Lab Sample ID: 480-46264-15

No Detections.

Client Sample ID: HOHAOC2-C-8-GRAB-2 — Lab Sample ID: 480-46264-16

No Detections.

Client Sample ID: HOHAOC2-C-9-GRAB-1 — Lab Sample ID: 480-46264-17

No Detections.

Client Sample ID: HOHAOC2-C-9-GRAB-2 — Lab Sample ID: 480-46264-18

No Detections.

Client Sample ID: HOHAOC2-C-10-GRAB-1 — Lab Sample ID: 480-46264-19

No Detections.

Client Sample ID: HOHAOC2-C-10-GRAB-2 — Lab Sample ID: 480-46264-20

No Detections.

Client Sample ID: HOHAOC2-C-11-GRAB-1 — Lab Sample ID: 480-46264-21

No Detections.

Client Sample ID: HOHAOC2-C-11-GRAB-2 — Lab Sample ID: 480-46264-22

No Detections.

Client Sample ID: HOHAOC2-C-12-GRAB-1 — Lab Sample ID: 480-46264-23

No Detections.

Client Sample ID: HOHAOC2-C-12-GRAB-2 — Lab Sample ID: 480-46264-24

No Detections.

Client Sample ID: HOHAOC2-C-COMP-1 — Lab Sample ID: 480-46264-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.4	J	2.2	0.44	mg/Kg	1	☼	6010B	Total/NA
Barium	13.4		0.55	0.12	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.12	J	0.22	0.031	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.072	J	0.22	0.033	mg/Kg	1	☼	6010B	Total/NA
Chromium	7.0		0.55	0.22	mg/Kg	1	☼	6010B	Total/NA
Copper	119		1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Lead	2.4		1.1	0.26	mg/Kg	1	☼	6010B	Total/NA
Manganese	128		0.22	0.035	mg/Kg	1	☼	6010B	Total/NA
Nickel	18.6		5.5	0.25	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOHAOC2-C-COMP-1 (Continued) — Lab Sample ID: 480-46264-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	35.9	B	2.2	0.17	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	7.0		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-C-COMP-2 — Lab Sample ID: 480-46264-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.2	J	1.8	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	9.7		0.45	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.12	J	0.18	0.025	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.048	J	0.18	0.027	mg/Kg	1	☼	6010B	Total/NA
Chromium	6.0		0.45	0.18	mg/Kg	1	☼	6010B	Total/NA
Copper	112		0.91	0.19	mg/Kg	1	☼	6010B	Total/NA
Lead	2.4		0.91	0.22	mg/Kg	1	☼	6010B	Total/NA
Manganese	116		0.18	0.029	mg/Kg	1	☼	6010B	Total/NA
Nickel	17.0		4.5	0.21	mg/Kg	1	☼	6010B	Total/NA
Zinc	30.8	B	1.8	0.14	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	6.0		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-C-COMP-3 — Lab Sample ID: 480-46264-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.1	J	2.1	0.42	mg/Kg	1	☼	6010B	Total/NA
Barium	10.1		0.52	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.14	J	0.21	0.029	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.057	J	0.21	0.031	mg/Kg	1	☼	6010B	Total/NA
Chromium	5.2		0.52	0.21	mg/Kg	1	☼	6010B	Total/NA
Copper	136		1.0	0.22	mg/Kg	1	☼	6010B	Total/NA
Lead	4.4		1.0	0.25	mg/Kg	1	☼	6010B	Total/NA
Manganese	128		0.21	0.033	mg/Kg	1	☼	6010B	Total/NA
Nickel	17.8		5.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Zinc	37.1	B	2.1	0.16	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	5.2		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-C-COMP-4 — Lab Sample ID: 480-46264-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.3	J	1.9	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	10.1		0.47	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.12	J	0.19	0.026	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.066	J	0.19	0.028	mg/Kg	1	☼	6010B	Total/NA
Chromium	6.1		0.47	0.19	mg/Kg	1	☼	6010B	Total/NA
Copper	112		0.93	0.20	mg/Kg	1	☼	6010B	Total/NA
Lead	2.8		0.93	0.22	mg/Kg	1	☼	6010B	Total/NA
Manganese	128		0.19	0.030	mg/Kg	1	☼	6010B	Total/NA
Nickel	17.0		4.7	0.21	mg/Kg	1	☼	6010B	Total/NA
Zinc	37.7	B	1.9	0.14	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	6.1		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-C-COMP-5 — Lab Sample ID: 480-46264-29

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOHAOC2-C-COMP-5 (Continued) — Lab Sample ID: 480-46264-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.0	J	2.1	0.43	mg/Kg	1	☼	6010B	Total/NA
Barium	10.6		0.53	0.12	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.13	J	0.21	0.030	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.075	J	0.21	0.032	mg/Kg	1	☼	6010B	Total/NA
Chromium	4.5		0.53	0.21	mg/Kg	1	☼	6010B	Total/NA
Copper	118		1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Lead	2.6		1.1	0.26	mg/Kg	1	☼	6010B	Total/NA
Manganese	128		0.21	0.034	mg/Kg	1	☼	6010B	Total/NA
Nickel	16.2		5.3	0.25	mg/Kg	1	☼	6010B	Total/NA
Zinc	34.4	B	2.1	0.16	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	4.5		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-C-COMP-6 — Lab Sample ID: 480-46264-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.2	J	2.5	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	11.3		0.62	0.14	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.15	J	0.25	0.035	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.046	J	0.25	0.037	mg/Kg	1	☼	6010B	Total/NA
Chromium	3.9		0.62	0.25	mg/Kg	1	☼	6010B	Total/NA
Copper	161		1.2	0.26	mg/Kg	1	☼	6010B	Total/NA
Lead	2.6		1.2	0.30	mg/Kg	1	☼	6010B	Total/NA
Manganese	148		0.25	0.040	mg/Kg	1	☼	6010B	Total/NA
Nickel	18.3		6.2	0.29	mg/Kg	1	☼	6010B	Total/NA
Zinc	41.7	B	2.5	0.19	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	3.9		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-C-COMP-7 — Lab Sample ID: 480-46264-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDT	0.69	J	1.9	0.19	ug/Kg	1	☼	8081A	Total/NA
Arsenic	1.5	J	2.2	0.44	mg/Kg	1	☼	6010B	Total/NA
Barium	10.9		0.55	0.12	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.17	J	0.22	0.031	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.061	J	0.22	0.033	mg/Kg	1	☼	6010B	Total/NA
Chromium	7.3		0.55	0.22	mg/Kg	1	☼	6010B	Total/NA
Copper	153		1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Lead	2.9		1.1	0.26	mg/Kg	1	☼	6010B	Total/NA
Manganese	167		0.22	0.035	mg/Kg	1	☼	6010B	Total/NA
Nickel	19.3		5.5	0.25	mg/Kg	1	☼	6010B	Total/NA
Zinc	40.3	B	2.2	0.17	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	7.3		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-C-COMP-8 — Lab Sample ID: 480-46264-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.2	J	2.0	0.40	mg/Kg	1	☼	6010B	Total/NA
Barium	8.3		0.50	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.14	J	0.20	0.028	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.065	J	0.20	0.030	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOHAOC2-C-COMP-8 (Continued) — Lab Sample ID: 480-46264-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	4.2		0.50	0.20	mg/Kg	1	☼	6010B	Total/NA
Copper	128		0.99	0.21	mg/Kg	1	☼	6010B	Total/NA
Lead	2.3		0.99	0.24	mg/Kg	1	☼	6010B	Total/NA
Manganese	118		0.20	0.032	mg/Kg	1	☼	6010B	Total/NA
Nickel	16.7		5.0	0.23	mg/Kg	1	☼	6010B	Total/NA
Zinc	35.0	B	2.0	0.15	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	4.2		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-C-COMP-9 — Lab Sample ID: 480-46264-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.2	J	2.2	0.45	mg/Kg	1	☼	6010B	Total/NA
Barium	10.6		0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.14	J	0.22	0.031	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.068	J	0.22	0.033	mg/Kg	1	☼	6010B	Total/NA
Chromium	5.1		0.56	0.22	mg/Kg	1	☼	6010B	Total/NA
Copper	144		1.1	0.23	mg/Kg	1	☼	6010B	Total/NA
Lead	3.4		1.1	0.27	mg/Kg	1	☼	6010B	Total/NA
Manganese	128		0.22	0.036	mg/Kg	1	☼	6010B	Total/NA
Nickel	17.2		5.6	0.26	mg/Kg	1	☼	6010B	Total/NA
Zinc	42.2	B	2.2	0.17	mg/Kg	1	☼	6010B	Total/NA
Cyanide, Total	6.8		1.0	0.51	mg/Kg	1	☼	9012A	Total/NA
Cr (III)	5.1		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-C-COMP-10 — Lab Sample ID: 480-46264-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDT	0.63	J	1.7	0.17	ug/Kg	1	☼	8081A	Total/NA
Arsenic	1.2	J	2.2	0.45	mg/Kg	1	☼	6010B	Total/NA
Barium	11.0		0.56	0.12	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.12	J	0.22	0.031	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.045	J	0.22	0.034	mg/Kg	1	☼	6010B	Total/NA
Chromium	5.8		0.56	0.22	mg/Kg	1	☼	6010B	Total/NA
Copper	136		1.1	0.24	mg/Kg	1	☼	6010B	Total/NA
Lead	2.3		1.1	0.27	mg/Kg	1	☼	6010B	Total/NA
Manganese	124		0.22	0.036	mg/Kg	1	☼	6010B	Total/NA
Nickel	16.6		5.6	0.26	mg/Kg	1	☼	6010B	Total/NA
Zinc	33.4	B	2.2	0.17	mg/Kg	1	☼	6010B	Total/NA
Cr (III)	5.8		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-C-COMP-11 — Lab Sample ID: 480-46264-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.2	J	2.0	0.40	mg/Kg	1	☼	6010B	Total/NA
Barium	8.2		0.50	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.14	J	0.20	0.028	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.055	J	0.20	0.030	mg/Kg	1	☼	6010B	Total/NA
Chromium	3.0		0.50	0.20	mg/Kg	1	☼	6010B	Total/NA
Copper	136		1.0	0.21	mg/Kg	1	☼	6010B	Total/NA
Lead	4.7		1.0	0.24	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOHAOC2-C-COMP-11 (Continued)

Lab Sample ID: 480-46264-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	143		0.20	0.032	mg/Kg	1	☼	6010B	Total/NA
Nickel	17.7		5.0	0.23	mg/Kg	1	☼	6010B	Total/NA
Zinc	47.3	B	2.0	0.15	mg/Kg	1	☼	6010B	Total/NA
Cr (VI)	0.31	J B	0.84	0.28	mg/Kg	1	☼	7196A	Total/NA
Cr (III)	2.7		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: HOHAOC2-C-COMP-12

Lab Sample ID: 480-46264-36

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDT	0.61	J	1.7	0.17	ug/Kg	1	☼	8081A	Total/NA
Arsenic	1.4	J	1.8	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	8.0		0.46	0.10	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.12	J	0.18	0.026	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.057	J	0.18	0.028	mg/Kg	1	☼	6010B	Total/NA
Chromium	4.8		0.46	0.18	mg/Kg	1	☼	6010B	Total/NA
Copper	131		0.92	0.19	mg/Kg	1	☼	6010B	Total/NA
Lead	3.0		0.92	0.22	mg/Kg	1	☼	6010B	Total/NA
Manganese	112		0.18	0.029	mg/Kg	1	☼	6010B	Total/NA
Nickel	17.7		4.6	0.21	mg/Kg	1	☼	6010B	Total/NA
Zinc	31.8	B	1.8	0.14	mg/Kg	1	☼	6010B	Total/NA
Cr (VI)	0.30	J B	0.83	0.28	mg/Kg	1	☼	7196A	Total/NA
Cr (III)	4.5		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-1-GRAB-1
Date Collected: 09/19/13 09:30
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-1
Matrix: Solid
Percent Solids: 94.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.4	0.17	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
1,1-Dichloroethane	ND		2.4	0.29	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
1,1-Dichloroethene	ND		2.4	0.29	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
1,2-Dichlorobenzene	ND		2.4	0.19	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
1,2-Dichloroethane	ND		2.4	0.12	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
1,2-Dichloroethene, cis-	ND		2.4	0.31	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
1,2-Dichloroethene, trans-	ND		2.4	0.25	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
1,3-Dichlorobenzene	ND		2.4	0.12	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
1,4-Dichlorobenzene	ND		2.4	0.33	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
1,4-Dioxane	ND		96	12	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
Acetone	ND		12	2.0	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
Benzene	ND		2.4	0.12	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
Butylbenzene	ND		2.4	0.21	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
Carbon tetrachloride	ND		2.4	0.23	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
Chlorobenzene	ND		2.4	0.32	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
Chloroform	ND		2.4	0.15	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
Ethylbenzene	ND		2.4	0.16	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
Methyl Ethyl Ketone (2-Butanone)	ND		12	0.87	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
Methyl tert-butyl ether	ND		2.4	0.23	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
Methylene Chloride	ND		2.4	1.1	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
Propylbenzene, n-	ND		2.4	0.19	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
sec-Butylbenzene	ND		2.4	0.21	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
tert-Butylbenzene	ND		2.4	0.25	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
Tetrachloroethene	ND		2.4	0.32	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
Toluene	ND		2.4	0.18	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
Trichloroethene	ND		2.4	0.53	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
Trimethylbenzene, 1,2,4-	ND		2.4	0.46	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
Trimethylbenzene, 1,3,5-	ND		2.4	0.15	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
Vinyl chloride	ND		2.4	0.29	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1
Xylene (mixed)	ND		4.8	0.40	ug/Kg	☼	09/22/13 23:23	09/23/13 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*	*09/22/13 23:23*	*09/23/13 15:59*	*1*
4-Bromofluorobenzene (Surr)	*107*		*72 - 126*	*09/22/13 23:23*	*09/23/13 15:59*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*	*09/22/13 23:23*	*09/23/13 15:59*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-1-GRAB-2
Date Collected: 09/19/13 09:40
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-2
Matrix: Solid
Percent Solids: 96.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.5	0.18	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
1,1-Dichloroethane	ND		2.5	0.30	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
1,1-Dichloroethene	ND		2.5	0.30	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
1,2-Dichlorobenzene	ND		2.5	0.19	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
1,2-Dichloroethane	ND		2.5	0.12	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
1,2-Dichloroethene, cis-	ND		2.5	0.32	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
1,2-Dichloroethene, trans-	ND		2.5	0.26	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
1,3-Dichlorobenzene	ND		2.5	0.13	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
1,4-Dichlorobenzene	ND		2.5	0.35	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
1,4-Dioxane	ND		99	12	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
Acetone	ND		12	2.1	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
Benzene	ND		2.5	0.12	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
Butylbenzene	ND		2.5	0.22	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
Carbon tetrachloride	ND		2.5	0.24	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
Chlorobenzene	ND		2.5	0.33	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
Chloroform	ND		2.5	0.15	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
Ethylbenzene	ND		2.5	0.17	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
Methyl Ethyl Ketone (2-Butanone)	ND		12	0.91	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
Methyl tert-butyl ether	ND		2.5	0.24	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
Methylene Chloride	ND		2.5	1.1	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
Propylbenzene, n-	ND		2.5	0.20	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
sec-Butylbenzene	ND		2.5	0.22	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
tert-Butylbenzene	ND		2.5	0.26	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
Tetrachloroethene	ND		2.5	0.33	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
Toluene	ND		2.5	0.19	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
Trichloroethene	ND		2.5	0.55	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
Trimethylbenzene, 1,2,4-	ND		2.5	0.48	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
Trimethylbenzene, 1,3,5-	ND		2.5	0.16	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
Vinyl chloride	ND		2.5	0.30	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1
Xylene (mixed)	ND		5.0	0.42	ug/Kg	☼	09/22/13 23:23	09/23/13 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*64 - 126*	*09/22/13 23:23*	*09/23/13 16:25*	*1*
4-Bromofluorobenzene (Surr)	*106*		*72 - 126*	*09/22/13 23:23*	*09/23/13 16:25*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*	*09/22/13 23:23*	*09/23/13 16:25*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-2-GRAB-1
Date Collected: 09/19/13 09:50
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-3
Matrix: Solid
Percent Solids: 96.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.3	0.24	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
1,1-Dichloroethane	ND		3.3	0.41	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
1,1-Dichloroethene	ND		3.3	0.41	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
1,2-Dichlorobenzene	ND		3.3	0.26	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
1,2-Dichloroethane	ND		3.3	0.17	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
1,2-Dichloroethene, cis-	ND		3.3	0.43	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
1,2-Dichloroethene, trans-	ND		3.3	0.34	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
1,3-Dichlorobenzene	ND		3.3	0.17	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
1,4-Dichlorobenzene	ND		3.3	0.46	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
1,4-Dioxane	ND		130	16	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
Acetone	ND		17	2.8	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
Benzene	ND		3.3	0.16	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
Butylbenzene	ND		3.3	0.29	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
Carbon tetrachloride	ND		3.3	0.32	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
Chlorobenzene	ND		3.3	0.44	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
Chloroform	ND		3.3	0.21	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
Ethylbenzene	ND		3.3	0.23	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
Methyl Ethyl Ketone (2-Butanone)	ND		17	1.2	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
Methyl tert-butyl ether	ND		3.3	0.33	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
Methylene Chloride	ND		3.3	1.5	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
Propylbenzene, n-	ND		3.3	0.27	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
sec-Butylbenzene	ND		3.3	0.29	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
tert-Butylbenzene	ND		3.3	0.35	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
Tetrachloroethene	ND		3.3	0.45	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
Toluene	ND		3.3	0.25	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
Trichloroethene	ND		3.3	0.73	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
Trimethylbenzene, 1,2,4-	ND		3.3	0.64	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
Trimethylbenzene, 1,3,5-	ND		3.3	0.21	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
Vinyl chloride	ND		3.3	0.41	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1
Xylene (mixed)	ND		6.6	0.56	ug/Kg	☼	09/22/13 23:23	09/23/13 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*64 - 126*	*09/22/13 23:23*	*09/23/13 16:51*	*1*
4-Bromofluorobenzene (Surr)	*105*		*72 - 126*	*09/22/13 23:23*	*09/23/13 16:51*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*09/22/13 23:23*	*09/23/13 16:51*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-2-GRAB-2
Date Collected: 09/19/13 10:00
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-4
Matrix: Solid
Percent Solids: 96.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.6	0.19	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
1,1-Dichloroethane	ND		2.6	0.32	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
1,1-Dichloroethene	ND		2.6	0.32	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
1,2-Dichlorobenzene	ND		2.6	0.20	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
1,2-Dichloroethane	ND		2.6	0.13	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
1,2-Dichloroethene, cis-	ND		2.6	0.33	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
1,2-Dichloroethene, trans-	ND		2.6	0.27	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
1,3-Dichlorobenzene	ND		2.6	0.13	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
1,4-Dichlorobenzene	ND		2.6	0.36	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
1,4-Dioxane	ND		100	12	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
Acetone	ND		13	2.2	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
Benzene	ND		2.6	0.13	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
Butylbenzene	ND		2.6	0.22	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
Carbon tetrachloride	ND		2.6	0.25	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
Chlorobenzene	ND		2.6	0.34	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
Chloroform	ND		2.6	0.16	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
Ethylbenzene	ND		2.6	0.18	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
Methyl Ethyl Ketone (2-Butanone)	ND		13	0.95	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
Methyl tert-butyl ether	ND		2.6	0.25	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
Methylene Chloride	ND		2.6	1.2	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
Propylbenzene, n-	ND		2.6	0.21	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
sec-Butylbenzene	ND		2.6	0.22	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
tert-Butylbenzene	ND		2.6	0.27	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
Tetrachloroethene	ND		2.6	0.35	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
Toluene	ND		2.6	0.20	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
Trichloroethene	ND		2.6	0.57	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
Trimethylbenzene, 1,2,4-	ND		2.6	0.50	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
Trimethylbenzene, 1,3,5-	ND		2.6	0.17	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
Vinyl chloride	ND		2.6	0.32	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1
Xylene (mixed)	ND		5.2	0.43	ug/Kg	☼	09/22/13 23:23	09/23/13 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*64 - 126*	*09/22/13 23:23*	*09/23/13 17:17*	*1*
4-Bromofluorobenzene (Surr)	*104*		*72 - 126*	*09/22/13 23:23*	*09/23/13 17:17*	*1*
Toluene-d8 (Surr)	*98*		*71 - 125*	*09/22/13 23:23*	*09/23/13 17:17*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-3-GRAB-1
Date Collected: 09/19/13 10:10
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-5
Matrix: Solid
Percent Solids: 97.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.8	0.20	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
1,1-Dichloroethane	ND		2.8	0.34	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
1,1-Dichloroethene	ND		2.8	0.34	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
1,2-Dichlorobenzene	ND		2.8	0.22	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
1,2-Dichloroethane	ND		2.8	0.14	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
1,2-Dichloroethene, cis-	ND		2.8	0.35	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
1,2-Dichloroethene, trans-	ND		2.8	0.28	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
1,3-Dichlorobenzene	ND		2.8	0.14	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
1,4-Dichlorobenzene	ND		2.8	0.39	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
1,4-Dioxane	ND		110	13	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
Acetone	ND		14	2.3	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
Benzene	ND		2.8	0.13	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
Butylbenzene	ND		2.8	0.24	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
Carbon tetrachloride	ND		2.8	0.27	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
Chlorobenzene	ND		2.8	0.36	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
Chloroform	ND		2.8	0.17	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
Ethylbenzene	ND		2.8	0.19	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
Methyl Ethyl Ketone (2-Butanone)	ND		14	1.0	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
Methyl tert-butyl ether	ND		2.8	0.27	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
Methylene Chloride	ND		2.8	1.3	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
Propylbenzene, n-	ND		2.8	0.22	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
sec-Butylbenzene	ND		2.8	0.24	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
tert-Butylbenzene	ND		2.8	0.29	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
Tetrachloroethene	ND		2.8	0.37	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
Toluene	ND		2.8	0.21	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
Trichloroethene	ND		2.8	0.61	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
Trimethylbenzene, 1,2,4-	ND		2.8	0.53	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
Trimethylbenzene, 1,3,5-	ND		2.8	0.18	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
Vinyl chloride	ND		2.8	0.34	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1
Xylene (mixed)	ND		5.5	0.46	ug/Kg	☼	09/22/13 23:23	09/23/13 00:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*64 - 126*	*09/22/13 23:23*	*09/23/13 00:15*	*1*
4-Bromofluorobenzene (Surr)	*104*		*72 - 126*	*09/22/13 23:23*	*09/23/13 00:15*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*	*09/22/13 23:23*	*09/23/13 00:15*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-3-GRAB-2
Date Collected: 09/19/13 10:20
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-6
Matrix: Solid
Percent Solids: 97.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.6	0.19	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
1,1-Dichloroethane	ND		2.6	0.32	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
1,1-Dichloroethene	ND		2.6	0.32	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
1,2-Dichlorobenzene	ND		2.6	0.20	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
1,2-Dichloroethane	ND		2.6	0.13	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
1,2-Dichloroethene, cis-	ND		2.6	0.34	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
1,2-Dichloroethene, trans-	ND		2.6	0.27	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
1,3-Dichlorobenzene	ND		2.6	0.13	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
1,4-Dichlorobenzene	ND		2.6	0.37	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
1,4-Dioxane	ND		100	13	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
Acetone	ND		13	2.2	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
Benzene	ND		2.6	0.13	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
Butylbenzene	ND		2.6	0.23	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
Carbon tetrachloride	ND		2.6	0.25	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
Chlorobenzene	ND		2.6	0.35	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
Chloroform	ND		2.6	0.16	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
Ethylbenzene	ND		2.6	0.18	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
Methyl Ethyl Ketone (2-Butanone)	ND		13	0.96	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
Methyl tert-butyl ether	ND		2.6	0.26	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
Methylene Chloride	ND		2.6	1.2	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
Propylbenzene, n-	ND		2.6	0.21	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
sec-Butylbenzene	ND		2.6	0.23	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
tert-Butylbenzene	ND		2.6	0.27	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
Tetrachloroethene	ND		2.6	0.35	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
Toluene	ND		2.6	0.20	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
Trichloroethene	ND		2.6	0.58	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
Trimethylbenzene, 1,2,4-	ND		2.6	0.50	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
Trimethylbenzene, 1,3,5-	ND		2.6	0.17	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
Vinyl chloride	ND		2.6	0.32	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1
Xylene (mixed)	ND		5.2	0.44	ug/Kg	☼	09/22/13 23:23	09/23/13 00:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*	*09/22/13 23:23*	*09/23/13 00:40*	*1*
4-Bromofluorobenzene (Surr)	*105*		*72 - 126*	*09/22/13 23:23*	*09/23/13 00:40*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*09/22/13 23:23*	*09/23/13 00:40*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-4-GRAB-1
Date Collected: 09/19/13 10:30
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-7
Matrix: Solid
Percent Solids: 97.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.3	0.17	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
1,1-Dichloroethane	ND		2.3	0.29	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
1,1-Dichloroethene	ND		2.3	0.29	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
1,2-Dichlorobenzene	ND		2.3	0.18	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
1,2-Dichloroethane	ND		2.3	0.12	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
1,2-Dichloroethene, cis-	ND		2.3	0.30	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
1,2-Dichloroethene, trans-	ND		2.3	0.24	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
1,3-Dichlorobenzene	ND		2.3	0.12	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
1,4-Dichlorobenzene	ND		2.3	0.33	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
1,4-Dioxane	ND		94	11	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
Acetone	**3.3**	**J**	12	2.0	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
Benzene	ND		2.3	0.11	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
Butylbenzene	ND		2.3	0.20	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
Carbon tetrachloride	ND		2.3	0.23	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
Chlorobenzene	ND		2.3	0.31	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
Chloroform	ND		2.3	0.14	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
Ethylbenzene	ND		2.3	0.16	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
Methyl Ethyl Ketone (2-Butanone)	ND		12	0.86	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
Methyl tert-butyl ether	ND		2.3	0.23	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
Methylene Chloride	ND		2.3	1.1	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
Propylbenzene, n-	ND		2.3	0.19	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
sec-Butylbenzene	ND		2.3	0.20	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
tert-Butylbenzene	ND		2.3	0.24	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
Tetrachloroethene	ND		2.3	0.31	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
Toluene	ND		2.3	0.18	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
Trichloroethene	ND		2.3	0.52	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
Trimethylbenzene, 1,2,4-	ND		2.3	0.45	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
Trimethylbenzene, 1,3,5-	ND		2.3	0.15	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
Vinyl chloride	ND		2.3	0.29	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1
Xylene (mixed)	ND		4.7	0.39	ug/Kg	☼	09/22/13 23:23	09/23/13 01:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*	*09/22/13 23:23*	*09/23/13 01:06*	*1*
4-Bromofluorobenzene (Surr)	*106*		*72 - 126*	*09/22/13 23:23*	*09/23/13 01:06*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*09/22/13 23:23*	*09/23/13 01:06*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-4-GRAB-2
Date Collected: 09/19/13 10:40
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-8
Matrix: Solid
Percent Solids: 96.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.9	0.36	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
1,1-Dichloroethane	ND		4.9	0.60	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
1,1-Dichloroethene	ND		4.9	0.60	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
1,2-Dichlorobenzene	ND		4.9	0.38	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
1,2-Dichloroethane	ND		4.9	0.25	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
1,2-Dichloroethene, cis-	ND		4.9	0.63	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
1,2-Dichloroethene, trans-	ND		4.9	0.50	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
1,3-Dichlorobenzene	ND		4.9	0.25	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
1,4-Dichlorobenzene	ND		4.9	0.68	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
1,4-Dioxane	ND		200	24	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
Acetone	ND		24	4.1	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
Benzene	ND		4.9	0.24	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
Butylbenzene	ND		4.9	0.43	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
Carbon tetrachloride	ND		4.9	0.47	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
Chlorobenzene	ND		4.9	0.65	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
Chloroform	ND		4.9	0.30	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
Ethylbenzene	ND		4.9	0.34	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
Methyl Ethyl Ketone (2-Butanone)	ND		24	1.8	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
Methyl tert-butyl ether	ND		4.9	0.48	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
Methylene Chloride	ND		4.9	2.3	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
Propylbenzene, n-	ND		4.9	0.39	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
sec-Butylbenzene	ND		4.9	0.43	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
tert-Butylbenzene	ND		4.9	0.51	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
Tetrachloroethene	ND		4.9	0.66	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
Toluene	ND		4.9	0.37	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
Trichloroethene	ND		4.9	1.1	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
Trimethylbenzene, 1,2,4-	ND		4.9	0.94	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
Trimethylbenzene, 1,3,5-	ND		4.9	0.32	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
Vinyl chloride	ND		4.9	0.60	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1
Xylene (mixed)	ND		9.8	0.82	ug/Kg	☼	09/22/13 23:23	09/23/13 01:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*64 - 126*	*09/22/13 23:23*	*09/23/13 01:32*	*1*
4-Bromofluorobenzene (Surr)	*104*		*72 - 126*	*09/22/13 23:23*	*09/23/13 01:32*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*	*09/22/13 23:23*	*09/23/13 01:32*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-5-GRAB-1
Date Collected: 09/19/13 10:50
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-9
Matrix: Solid
Percent Solids: 94.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.1	0.15	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
1,1-Dichloroethane	ND		2.1	0.26	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
1,1-Dichloroethene	ND		2.1	0.26	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
1,2-Dichlorobenzene	ND		2.1	0.16	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
1,2-Dichloroethane	ND		2.1	0.11	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
1,2-Dichloroethene, cis-	ND		2.1	0.27	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
1,2-Dichloroethene, trans-	ND		2.1	0.22	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
1,3-Dichlorobenzene	ND		2.1	0.11	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
1,4-Dichlorobenzene	ND		2.1	0.29	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
1,4-Dioxane	ND		84	10	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
Acetone	ND		11	1.8	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
Benzene	ND		2.1	0.10	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
Butylbenzene	ND		2.1	0.18	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
Carbon tetrachloride	ND		2.1	0.20	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
Chlorobenzene	ND		2.1	0.28	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
Chloroform	ND		2.1	0.13	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
Ethylbenzene	ND		2.1	0.15	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
Methyl Ethyl Ketone (2-Butanone)	ND		11	0.77	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
Methyl tert-butyl ether	ND		2.1	0.21	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
Methylene Chloride	ND		2.1	0.97	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
Propylbenzene, n-	ND		2.1	0.17	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
sec-Butylbenzene	ND		2.1	0.18	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
tert-Butylbenzene	ND		2.1	0.22	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
Tetrachloroethene	ND		2.1	0.28	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
Toluene	ND		2.1	0.16	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
Trichloroethene	ND		2.1	0.46	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
Trimethylbenzene, 1,2,4-	ND		2.1	0.40	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
Trimethylbenzene, 1,3,5-	ND		2.1	0.14	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
Vinyl chloride	ND		2.1	0.26	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1
Xylene (mixed)	ND		4.2	0.35	ug/Kg	☼	09/22/13 23:23	09/23/13 01:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*64 - 126*	*09/22/13 23:23*	*09/23/13 01:57*	*1*
4-Bromofluorobenzene (Surr)	*106*		*72 - 126*	*09/22/13 23:23*	*09/23/13 01:57*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*09/22/13 23:23*	*09/23/13 01:57*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-5-GRAB-2
Date Collected: 09/19/13 11:00
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-10
Matrix: Solid
Percent Solids: 96.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.6	0.33	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
1,1-Dichloroethane	ND		4.6	0.56	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
1,1-Dichloroethene	ND		4.6	0.56	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
1,2-Dichlorobenzene	ND		4.6	0.36	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
1,2-Dichloroethane	ND		4.6	0.23	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
1,2-Dichloroethene, cis-	ND		4.6	0.59	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
1,2-Dichloroethene, trans-	ND		4.6	0.47	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
1,3-Dichlorobenzene	ND		4.6	0.24	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
1,4-Dichlorobenzene	ND		4.6	0.64	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
1,4-Dioxane	ND		180	22	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
Acetone	**6.7**	**J**	23	3.9	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
Benzene	ND		4.6	0.23	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
Butylbenzene	ND		4.6	0.40	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
Carbon tetrachloride	ND		4.6	0.44	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
Chlorobenzene	ND		4.6	0.61	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
Chloroform	ND		4.6	0.28	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
Ethylbenzene	ND		4.6	0.32	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
Methyl Ethyl Ketone (2-Butanone)	ND		23	1.7	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
Methyl tert-butyl ether	ND		4.6	0.45	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
Methylene Chloride	ND		4.6	2.1	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
Propylbenzene, n-	ND		4.6	0.37	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
sec-Butylbenzene	ND		4.6	0.40	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
tert-Butylbenzene	ND		4.6	0.48	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
Tetrachloroethene	ND		4.6	0.62	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
Toluene	ND		4.6	0.35	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
Trichloroethene	ND		4.6	1.0	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
Trimethylbenzene, 1,2,4-	ND		4.6	0.88	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
Trimethylbenzene, 1,3,5-	ND		4.6	0.30	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
Vinyl chloride	ND		4.6	0.56	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1
Xylene (mixed)	ND		9.2	0.77	ug/Kg	☼	09/22/13 23:23	09/23/13 02:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*64 - 126*	*09/22/13 23:23*	*09/23/13 02:23*	*1*
4-Bromofluorobenzene (Surr)	*106*		*72 - 126*	*09/22/13 23:23*	*09/23/13 02:23*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*	*09/22/13 23:23*	*09/23/13 02:23*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-6-GRAB-1
Date Collected: 09/19/13 11:10
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-11
Matrix: Solid
Percent Solids: 92.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.5	0.33	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
1,1-Dichloroethane	ND		4.5	0.55	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
1,1-Dichloroethene	ND		4.5	0.56	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
1,2-Dichlorobenzene	ND		4.5	0.36	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
1,2-Dichloroethane	ND		4.5	0.23	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
1,2-Dichloroethene, cis-	ND		4.5	0.58	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
1,2-Dichloroethene, trans-	ND		4.5	0.47	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
1,3-Dichlorobenzene	ND		4.5	0.23	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
1,4-Dichlorobenzene	ND		4.5	0.64	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
1,4-Dioxane	ND		180	22	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
Acetone	ND		23	3.8	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
Benzene	ND		4.5	0.22	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
Butylbenzene	ND		4.5	0.40	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
Carbon tetrachloride	ND		4.5	0.44	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
Chlorobenzene	ND		4.5	0.60	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
Chloroform	ND		4.5	0.28	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
Ethylbenzene	ND		4.5	0.31	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
Methyl Ethyl Ketone (2-Butanone)	ND		23	1.7	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
Methyl tert-butyl ether	ND		4.5	0.45	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
Methylene Chloride	ND		4.5	2.1	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
Propylbenzene, n-	ND		4.5	0.36	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
sec-Butylbenzene	ND		4.5	0.40	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
tert-Butylbenzene	ND		4.5	0.47	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
Tetrachloroethene	ND		4.5	0.61	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
Toluene	ND		4.5	0.34	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
Trichloroethene	ND		4.5	1.0	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
Trimethylbenzene, 1,2,4-	ND		4.5	0.87	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
Trimethylbenzene, 1,3,5-	ND		4.5	0.29	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
Vinyl chloride	ND		4.5	0.55	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1
Xylene (mixed)	ND		9.1	0.76	ug/Kg	☼	09/22/13 23:23	09/23/13 02:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*64 - 126*	*09/22/13 23:23*	*09/23/13 02:48*	*1*
4-Bromofluorobenzene (Surr)	*105*		*72 - 126*	*09/22/13 23:23*	*09/23/13 02:48*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*09/22/13 23:23*	*09/23/13 02:48*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-6-GRAB-2
Date Collected: 09/19/13 11:20
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-12
Matrix: Solid
Percent Solids: 95.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.1	0.30	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
1,1-Dichloroethane	ND		4.1	0.51	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
1,1-Dichloroethene	ND		4.1	0.51	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
1,2-Dichlorobenzene	ND		4.1	0.32	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
1,2-Dichloroethane	ND		4.1	0.21	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
1,2-Dichloroethene, cis-	ND		4.1	0.53	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
1,2-Dichloroethene, trans-	ND		4.1	0.43	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
1,3-Dichlorobenzene	ND		4.1	0.21	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
1,4-Dichlorobenzene	ND		4.1	0.58	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
1,4-Dioxane	ND		170	20	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
Acetone	ND		21	3.5	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
Benzene	ND		4.1	0.20	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
Butylbenzene	ND		4.1	0.36	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
Carbon tetrachloride	ND		4.1	0.40	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
Chlorobenzene	ND		4.1	0.55	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
Chloroform	ND		4.1	0.26	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
Ethylbenzene	ND		4.1	0.29	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.5	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
Methyl tert-butyl ether	ND		4.1	0.41	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
Methylene Chloride	ND		4.1	1.9	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
Propylbenzene, n-	ND		4.1	0.33	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
sec-Butylbenzene	ND		4.1	0.36	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
tert-Butylbenzene	ND		4.1	0.43	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
Tetrachloroethene	ND		4.1	0.56	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
Toluene	ND		4.1	0.31	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
Trichloroethene	ND		4.1	0.91	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
Trimethylbenzene, 1,2,4-	ND		4.1	0.80	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
Trimethylbenzene, 1,3,5-	ND		4.1	0.27	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
Vinyl chloride	ND		4.1	0.51	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1
Xylene (mixed)	ND		8.3	0.70	ug/Kg	☼	09/22/13 23:23	09/23/13 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*64 - 126*	*09/22/13 23:23*	*09/23/13 17:42*	*1*
4-Bromofluorobenzene (Surr)	*106*		*72 - 126*	*09/22/13 23:23*	*09/23/13 17:42*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*	*09/22/13 23:23*	*09/23/13 17:42*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-7-GRAB-1
Date Collected: 09/19/13 11:30
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-13
Matrix: Solid
Percent Solids: 95.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.1	0.37	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
1,1-Dichloroethane	ND		5.1	0.62	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
1,1-Dichloroethene	ND		5.1	0.63	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
1,2-Dichlorobenzene	ND		5.1	0.40	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
1,2-Dichloroethane	ND		5.1	0.26	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
1,2-Dichloroethene, cis-	ND		5.1	0.66	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
1,2-Dichloroethene, trans-	ND		5.1	0.53	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
1,3-Dichlorobenzene	ND		5.1	0.26	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
1,4-Dichlorobenzene	ND		5.1	0.72	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
1,4-Dioxane	ND		200	25	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
Acetone	ND		26	4.3	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
Benzene	ND		5.1	0.25	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
Butylbenzene	ND		5.1	0.45	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
Carbon tetrachloride	ND		5.1	0.50	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
Chlorobenzene	ND		5.1	0.68	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
Chloroform	ND		5.1	0.32	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
Ethylbenzene	ND		5.1	0.35	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
Methyl Ethyl Ketone (2-Butanone)	ND		26	1.9	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
Methyl tert-butyl ether	ND		5.1	0.50	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
Methylene Chloride	ND		5.1	2.4	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
Propylbenzene, n-	ND		5.1	0.41	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
sec-Butylbenzene	ND		5.1	0.45	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
tert-Butylbenzene	ND		5.1	0.53	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
Tetrachloroethene	ND		5.1	0.69	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
Toluene	ND		5.1	0.39	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
Trichloroethene	ND		5.1	1.1	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
Trimethylbenzene, 1,2,4-	ND		5.1	0.98	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
Trimethylbenzene, 1,3,5-	ND		5.1	0.33	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
Vinyl chloride	ND		5.1	0.62	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1
Xylene (mixed)	ND		10	0.86	ug/Kg	☼	09/22/13 23:23	09/23/13 03:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*64 - 126*	*09/22/13 23:23*	*09/23/13 03:39*	*1*
4-Bromofluorobenzene (Surr)	*106*		*72 - 126*	*09/22/13 23:23*	*09/23/13 03:39*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*	*09/22/13 23:23*	*09/23/13 03:39*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-7-GRAB-2
Date Collected: 09/19/13 11:40
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-14
Matrix: Solid
Percent Solids: 96.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.2	0.30	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
1,1-Dichloroethane	ND		4.2	0.51	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
1,1-Dichloroethene	ND		4.2	0.51	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
1,2-Dichlorobenzene	ND		4.2	0.33	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
1,2-Dichloroethene, cis-	ND		4.2	0.53	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
1,2-Dichloroethene, trans-	ND		4.2	0.43	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
1,3-Dichlorobenzene	ND		4.2	0.21	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
1,4-Dichlorobenzene	ND		4.2	0.58	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
1,4-Dioxane	ND		170	20	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
Acetone	ND		21	3.5	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
Benzene	ND		4.2	0.20	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
Butylbenzene	ND		4.2	0.36	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
Carbon tetrachloride	ND		4.2	0.40	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
Chlorobenzene	ND		4.2	0.55	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
Chloroform	ND		4.2	0.26	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.5	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
Methyl tert-butyl ether	ND		4.2	0.41	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
Methylene Chloride	ND		4.2	1.9	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
Propylbenzene, n-	ND		4.2	0.33	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
sec-Butylbenzene	ND		4.2	0.36	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
tert-Butylbenzene	ND		4.2	0.43	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
Tetrachloroethene	ND		4.2	0.56	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
Toluene	ND		4.2	0.31	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
Trichloroethene	ND		4.2	0.92	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
Trimethylbenzene, 1,2,4-	ND		4.2	0.80	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
Trimethylbenzene, 1,3,5-	ND		4.2	0.27	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
Vinyl chloride	ND		4.2	0.51	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1
Xylene (mixed)	ND		8.3	0.70	ug/Kg	☼	09/22/13 23:23	09/23/13 04:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*64 - 126*	*09/22/13 23:23*	*09/23/13 04:05*	*1*
4-Bromofluorobenzene (Surr)	*108*		*72 - 126*	*09/22/13 23:23*	*09/23/13 04:05*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*	*09/22/13 23:23*	*09/23/13 04:05*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-8-GRAB-1
Date Collected: 09/19/13 11:50
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-15
Matrix: Solid
Percent Solids: 96.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
1,2-Dichloroethene, cis-	ND		5.0	0.64	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
1,2-Dichloroethene, trans-	ND		5.0	0.51	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
1,4-Dioxane	ND		200	24	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
Acetone	ND		25	4.2	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
Benzene	ND		5.0	0.24	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
Butylbenzene	ND		5.0	0.43	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
Chlorobenzene	ND		5.0	0.66	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
Chloroform	ND		5.0	0.31	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
Ethylbenzene	ND		5.0	0.34	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
Methyl Ethyl Ketone (2-Butanone)	ND		25	1.8	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
Methylene Chloride	ND		5.0	2.3	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
Propylbenzene, n-	ND		5.0	0.40	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
sec-Butylbenzene	ND		5.0	0.43	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
Toluene	ND		5.0	0.38	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
Trichloroethene	ND		5.0	1.1	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
Trimethylbenzene, 1,2,4-	ND		5.0	0.96	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
Trimethylbenzene, 1,3,5-	ND		5.0	0.32	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
Vinyl chloride	ND		5.0	0.61	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1
Xylene (mixed)	ND		10	0.84	ug/Kg	☼	09/22/13 23:23	09/23/13 04:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*64 - 126*	*09/22/13 23:23*	*09/23/13 04:30*	*1*
4-Bromofluorobenzene (Surr)	*106*		*72 - 126*	*09/22/13 23:23*	*09/23/13 04:30*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*09/22/13 23:23*	*09/23/13 04:30*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-8-GRAB-2
Date Collected: 09/19/13 12:00
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-16
Matrix: Solid
Percent Solids: 97.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.9	0.35	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
1,1-Dichloroethane	ND		4.9	0.59	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
1,1-Dichloroethene	ND		4.9	0.59	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
1,2-Dichlorobenzene	ND		4.9	0.38	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
1,2-Dichloroethane	ND		4.9	0.24	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
1,2-Dichloroethene, cis-	ND		4.9	0.62	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
1,2-Dichloroethene, trans-	ND		4.9	0.50	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
1,3-Dichlorobenzene	ND		4.9	0.25	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
1,4-Dichlorobenzene	ND		4.9	0.68	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
1,4-Dioxane	ND		190	23	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
Acetone	ND		24	4.1	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
Benzene	ND		4.9	0.24	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
Butylbenzene	ND		4.9	0.42	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
Carbon tetrachloride	ND		4.9	0.47	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
Chlorobenzene	ND		4.9	0.64	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
Chloroform	ND		4.9	0.30	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
Ethylbenzene	ND		4.9	0.33	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
Methyl Ethyl Ketone (2-Butanone)	ND		24	1.8	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
Methyl tert-butyl ether	ND		4.9	0.48	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
Methylene Chloride	ND		4.9	2.2	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
Propylbenzene, n-	ND		4.9	0.39	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
sec-Butylbenzene	ND		4.9	0.42	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
tert-Butylbenzene	ND		4.9	0.50	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
Tetrachloroethene	ND		4.9	0.65	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
Toluene	ND		4.9	0.37	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
Trichloroethene	ND		4.9	1.1	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
Trimethylbenzene, 1,2,4-	ND		4.9	0.93	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
Trimethylbenzene, 1,3,5-	ND		4.9	0.31	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
Vinyl chloride	ND		4.9	0.59	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1
Xylene (mixed)	ND		9.7	0.82	ug/Kg	☼	09/22/13 23:23	09/23/13 04:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*64 - 126*	*09/22/13 23:23*	*09/23/13 04:55*	*1*
4-Bromofluorobenzene (Surr)	*107*		*72 - 126*	*09/22/13 23:23*	*09/23/13 04:55*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*	*09/22/13 23:23*	*09/23/13 04:55*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-9-GRAB-1
Date Collected: 09/19/13 12:10
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-17
Matrix: Solid
Percent Solids: 98.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.6	0.33	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
1,1-Dichloroethane	ND		4.6	0.56	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
1,1-Dichloroethene	ND		4.6	0.56	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
1,2-Dichlorobenzene	ND		4.6	0.36	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
1,2-Dichloroethane	ND		4.6	0.23	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
1,2-Dichloroethene, cis-	ND		4.6	0.59	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
1,2-Dichloroethene, trans-	ND		4.6	0.47	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
1,3-Dichlorobenzene	ND		4.6	0.24	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
1,4-Dichlorobenzene	ND		4.6	0.64	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
1,4-Dioxane	ND		180	22	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
Acetone	ND		23	3.9	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
Benzene	ND		4.6	0.23	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
Butylbenzene	ND		4.6	0.40	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
Carbon tetrachloride	ND		4.6	0.44	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
Chlorobenzene	ND		4.6	0.61	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
Chloroform	ND		4.6	0.28	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
Ethylbenzene	ND		4.6	0.32	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
Methyl Ethyl Ketone (2-Butanone)	ND		23	1.7	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
Methyl tert-butyl ether	ND		4.6	0.45	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
Methylene Chloride	ND		4.6	2.1	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
Propylbenzene, n-	ND		4.6	0.37	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
sec-Butylbenzene	ND		4.6	0.40	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
tert-Butylbenzene	ND		4.6	0.48	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
Tetrachloroethene	ND		4.6	0.62	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
Toluene	ND		4.6	0.35	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
Trichloroethene	ND		4.6	1.0	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
Trimethylbenzene, 1,2,4-	ND		4.6	0.88	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
Trimethylbenzene, 1,3,5-	ND		4.6	0.30	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
Vinyl chloride	ND		4.6	0.56	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1
Xylene (mixed)	ND		9.2	0.77	ug/Kg	☼	09/22/13 23:23	09/23/13 05:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*64 - 126*	*09/22/13 23:23*	*09/23/13 05:21*	*1*
4-Bromofluorobenzene (Surr)	*106*		*72 - 126*	*09/22/13 23:23*	*09/23/13 05:21*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*	*09/22/13 23:23*	*09/23/13 05:21*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-9-GRAB-2
Date Collected: 09/19/13 12:20
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-18
Matrix: Solid
Percent Solids: 97.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.2	0.30	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
1,1-Dichloroethane	ND		4.2	0.51	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
1,1-Dichloroethene	ND		4.2	0.51	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
1,2-Dichlorobenzene	ND		4.2	0.33	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
1,2-Dichloroethene, cis-	ND		4.2	0.54	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
1,2-Dichloroethene, trans-	ND		4.2	0.43	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
1,3-Dichlorobenzene	ND		4.2	0.22	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
1,4-Dichlorobenzene	ND		4.2	0.59	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
1,4-Dioxane	ND		170	20	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
Acetone	ND		21	3.5	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
Benzene	ND		4.2	0.21	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
Butylbenzene	ND		4.2	0.36	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
Carbon tetrachloride	ND		4.2	0.41	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
Chlorobenzene	ND		4.2	0.55	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
Chloroform	ND		4.2	0.26	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.5	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
Methyl tert-butyl ether	ND		4.2	0.41	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
Methylene Chloride	ND		4.2	1.9	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
Propylbenzene, n-	ND		4.2	0.33	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
sec-Butylbenzene	ND		4.2	0.36	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
tert-Butylbenzene	ND		4.2	0.44	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
Tetrachloroethene	ND		4.2	0.56	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
Toluene	ND		4.2	0.32	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
Trichloroethene	ND		4.2	0.92	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
Trimethylbenzene, 1,2,4-	ND		4.2	0.80	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
Trimethylbenzene, 1,3,5-	ND		4.2	0.27	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
Vinyl chloride	ND		4.2	0.51	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1
Xylene (mixed)	ND		8.4	0.70	ug/Kg	☼	09/22/13 23:23	09/23/13 05:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*64 - 126*	*09/22/13 23:23*	*09/23/13 05:47*	*1*
4-Bromofluorobenzene (Surr)	*105*		*72 - 126*	*09/22/13 23:23*	*09/23/13 05:47*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*09/22/13 23:23*	*09/23/13 05:47*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-10-GRAB-1
Date Collected: 09/19/13 12:30
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-19
Matrix: Solid
Percent Solids: 98.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.7	0.34	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
1,1-Dichloroethane	ND		4.7	0.57	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
1,1-Dichloroethene	ND		4.7	0.58	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
1,2-Dichlorobenzene	ND		4.7	0.37	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
1,2-Dichloroethane	ND		4.7	0.24	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
1,2-Dichloroethene, cis-	ND		4.7	0.60	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
1,2-Dichloroethene, trans-	ND		4.7	0.49	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
1,3-Dichlorobenzene	ND		4.7	0.24	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
1,4-Dichlorobenzene	ND		4.7	0.66	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
1,4-Dioxane	ND		190	23	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
Acetone	ND		24	4.0	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
Benzene	ND		4.7	0.23	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
Butylbenzene	ND		4.7	0.41	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
Carbon tetrachloride	ND		4.7	0.46	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
Chlorobenzene	ND		4.7	0.62	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
Chloroform	ND		4.7	0.29	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
Ethylbenzene	ND		4.7	0.32	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
Methyl Ethyl Ketone (2-Butanone)	ND		24	1.7	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
Methyl tert-butyl ether	ND		4.7	0.46	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
Methylene Chloride	ND		4.7	2.2	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
Propylbenzene, n-	ND		4.7	0.38	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
sec-Butylbenzene	ND		4.7	0.41	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
tert-Butylbenzene	ND		4.7	0.49	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
Tetrachloroethene	ND		4.7	0.63	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
Toluene	ND		4.7	0.36	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
Trichloroethene	ND		4.7	1.0	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
Trimethylbenzene, 1,2,4-	ND		4.7	0.90	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
Trimethylbenzene, 1,3,5-	ND		4.7	0.30	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
Vinyl chloride	ND		4.7	0.57	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1
Xylene (mixed)	ND		9.4	0.79	ug/Kg	☼	09/22/13 23:23	09/23/13 06:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*64 - 126*	*09/22/13 23:23*	*09/23/13 06:12*	*1*
4-Bromofluorobenzene (Surr)	*108*		*72 - 126*	*09/22/13 23:23*	*09/23/13 06:12*	*1*
Toluene-d8 (Surr)	*96*		*71 - 125*	*09/22/13 23:23*	*09/23/13 06:12*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-10-GRAB-2
Date Collected: 09/19/13 12:40
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-20
Matrix: Solid
Percent Solids: 95.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
1,1-Dichloroethane	ND		4.4	0.54	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
1,1-Dichloroethene	ND		4.4	0.54	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
1,2-Dichlorobenzene	ND		4.4	0.35	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
1,2-Dichloroethene, cis-	ND		4.4	0.57	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
1,2-Dichloroethene, trans-	ND		4.4	0.46	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
1,3-Dichlorobenzene	ND		4.4	0.23	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
1,4-Dichlorobenzene	ND		4.4	0.62	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
1,4-Dioxane	ND		180	21	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
Acetone	ND		22	3.7	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
Benzene	ND		4.4	0.22	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
Butylbenzene	ND		4.4	0.38	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
Carbon tetrachloride	ND		4.4	0.43	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
Chloroform	ND		4.4	0.27	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
Ethylbenzene	ND		4.4	0.31	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
Methyl Ethyl Ketone (2-Butanone)	ND		22	1.6	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
Methylene Chloride	ND		4.4	2.0	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
Propylbenzene, n-	ND		4.4	0.35	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
sec-Butylbenzene	ND		4.4	0.38	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
tert-Butylbenzene	ND		4.4	0.46	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
Tetrachloroethene	ND		4.4	0.59	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
Toluene	ND		4.4	0.33	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
Trichloroethene	ND		4.4	0.97	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
Trimethylbenzene, 1,2,4-	ND		4.4	0.85	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
Trimethylbenzene, 1,3,5-	ND		4.4	0.28	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
Vinyl chloride	ND		4.4	0.54	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1
Xylene (mixed)	ND		8.8	0.74	ug/Kg	☼	09/22/13 23:45	09/23/13 06:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*64 - 126*	*09/22/13 23:45*	*09/23/13 06:37*	*1*
4-Bromofluorobenzene (Surr)	*106*		*72 - 126*	*09/22/13 23:45*	*09/23/13 06:37*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*	*09/22/13 23:45*	*09/23/13 06:37*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-11-GRAB-1
Date Collected: 09/19/13 12:50
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-21
Matrix: Solid
Percent Solids: 97.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.9	0.35	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
1,1-Dichloroethane	ND		4.9	0.60	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
1,1-Dichloroethene	ND		4.9	0.60	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
1,2-Dichlorobenzene	ND		4.9	0.38	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
1,2-Dichloroethane	ND		4.9	0.25	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
1,2-Dichloroethene, cis-	ND		4.9	0.63	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
1,2-Dichloroethene, trans-	ND		4.9	0.50	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
1,3-Dichlorobenzene	ND		4.9	0.25	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
1,4-Dichlorobenzene	ND		4.9	0.68	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
1,4-Dioxane	ND		200	24	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
Acetone	ND		24	4.1	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
Benzene	ND		4.9	0.24	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
Butylbenzene	ND		4.9	0.43	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
Carbon tetrachloride	ND		4.9	0.47	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
Chlorobenzene	ND		4.9	0.65	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
Chloroform	ND		4.9	0.30	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
Ethylbenzene	ND		4.9	0.34	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
Methyl Ethyl Ketone (2-Butanone)	ND		24	1.8	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
Methyl tert-butyl ether	ND		4.9	0.48	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
Methylene Chloride	ND		4.9	2.2	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
Propylbenzene, n-	ND		4.9	0.39	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
sec-Butylbenzene	ND		4.9	0.43	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
tert-Butylbenzene	ND		4.9	0.51	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
Tetrachloroethene	ND		4.9	0.66	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
Toluene	ND		4.9	0.37	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
Trichloroethene	ND		4.9	1.1	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
Trimethylbenzene, 1,2,4-	ND		4.9	0.94	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
Trimethylbenzene, 1,3,5-	ND		4.9	0.31	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
Vinyl chloride	ND		4.9	0.60	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1
Xylene (mixed)	ND		9.8	0.82	ug/Kg	☼	09/22/13 23:45	09/23/13 07:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*64 - 126*	*09/22/13 23:45*	*09/23/13 07:03*	*1*
4-Bromofluorobenzene (Surr)	*105*		*72 - 126*	*09/22/13 23:45*	*09/23/13 07:03*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*	*09/22/13 23:45*	*09/23/13 07:03*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-11-GRAB-2
Date Collected: 09/19/13 13:00
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-22
Matrix: Solid
Percent Solids: 95.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	0.29	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
1,1-Dichloroethane	ND		4.0	0.49	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
1,1-Dichloroethene	ND		4.0	0.49	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
1,2-Dichlorobenzene	ND		4.0	0.31	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
1,2-Dichloroethane	ND		4.0	0.20	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
1,2-Dichloroethene, cis-	ND		4.0	0.51	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
1,2-Dichloroethene, trans-	ND		4.0	0.41	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
1,3-Dichlorobenzene	ND		4.0	0.21	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
1,4-Dichlorobenzene	ND		4.0	0.56	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
1,4-Dioxane	ND		160	19	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
Acetone	ND		20	3.4	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
Benzene	ND		4.0	0.20	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
Butylbenzene	ND		4.0	0.35	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
Carbon tetrachloride	ND		4.0	0.39	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
Chlorobenzene	ND		4.0	0.53	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
Chloroform	ND		4.0	0.25	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
Ethylbenzene	ND		4.0	0.28	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
Methyl Ethyl Ketone (2-Butanone)	ND		20	1.5	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
Methyl tert-butyl ether	ND		4.0	0.39	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
Methylene Chloride	ND		4.0	1.8	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
Propylbenzene, n-	ND		4.0	0.32	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
sec-Butylbenzene	ND		4.0	0.35	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
tert-Butylbenzene	ND		4.0	0.42	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
Tetrachloroethene	ND		4.0	0.54	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
Toluene	ND		4.0	0.30	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
Trichloroethene	ND		4.0	0.88	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
Trimethylbenzene, 1,2,4-	ND		4.0	0.77	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
Trimethylbenzene, 1,3,5-	ND		4.0	0.26	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
Vinyl chloride	ND		4.0	0.49	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1
Xylene (mixed)	ND		8.0	0.67	ug/Kg	☼	09/22/13 23:45	09/23/13 07:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*64 - 126*	*09/22/13 23:45*	*09/23/13 07:29*	*1*
4-Bromofluorobenzene (Surr)	*106*		*72 - 126*	*09/22/13 23:45*	*09/23/13 07:29*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*09/22/13 23:45*	*09/23/13 07:29*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-12-GRAB-1
Date Collected: 09/19/13 13:10
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-23
Matrix: Solid
Percent Solids: 98.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.2	0.31	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
1,1-Dichloroethane	ND		4.2	0.52	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
1,1-Dichloroethene	ND		4.2	0.52	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
1,2-Dichlorobenzene	ND		4.2	0.33	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
1,2-Dichloroethene, cis-	ND		4.2	0.54	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
1,2-Dichloroethene, trans-	ND		4.2	0.44	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
1,3-Dichlorobenzene	ND		4.2	0.22	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
1,4-Dichlorobenzene	ND		4.2	0.59	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
1,4-Dioxane	ND		170	20	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
Acetone	ND		21	3.6	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
Benzene	ND		4.2	0.21	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
Butylbenzene	ND		4.2	0.37	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
Carbon tetrachloride	ND		4.2	0.41	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
Chlorobenzene	ND		4.2	0.56	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
Chloroform	ND		4.2	0.26	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
Methyl Ethyl Ketone (2-Butanone)	ND		21	1.6	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
Methyl tert-butyl ether	ND		4.2	0.42	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
Methylene Chloride	ND		4.2	2.0	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
Propylbenzene, n-	ND		4.2	0.34	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
sec-Butylbenzene	ND		4.2	0.37	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
tert-Butylbenzene	ND		4.2	0.44	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
Tetrachloroethene	ND		4.2	0.57	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
Toluene	ND		4.2	0.32	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
Trichloroethene	ND		4.2	0.93	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
Trimethylbenzene, 1,2,4-	ND		4.2	0.82	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
Trimethylbenzene, 1,3,5-	ND		4.2	0.27	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
Vinyl chloride	ND		4.2	0.52	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1
Xylene (mixed)	ND		8.5	0.71	ug/Kg	☼	09/22/13 23:45	09/23/13 07:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*	*09/22/13 23:45*	*09/23/13 07:55*	*1*
4-Bromofluorobenzene (Surr)	*108*		*72 - 126*	*09/22/13 23:45*	*09/23/13 07:55*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*09/22/13 23:45*	*09/23/13 07:55*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-12-GRAB-2
Date Collected: 09/19/13 13:20
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-24
Matrix: Solid
Percent Solids: 96.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
1,1-Dichloroethane	ND		4.4	0.54	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
1,1-Dichloroethene	ND		4.4	0.54	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
1,2-Dichlorobenzene	ND		4.4	0.35	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
1,2-Dichloroethene, cis-	ND		4.4	0.57	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
1,2-Dichloroethene, trans-	ND		4.4	0.46	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
1,3-Dichlorobenzene	ND		4.4	0.23	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
1,4-Dichlorobenzene	ND		4.4	0.62	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
1,4-Dioxane	ND		180	21	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
Acetone	ND		22	3.7	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
Benzene	ND		4.4	0.22	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
Butylbenzene	ND		4.4	0.38	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
Carbon tetrachloride	ND		4.4	0.43	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
Chloroform	ND		4.4	0.27	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
Ethylbenzene	ND		4.4	0.31	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
Methyl Ethyl Ketone (2-Butanone)	ND		22	1.6	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
Methylene Chloride	ND		4.4	2.0	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
Propylbenzene, n-	ND		4.4	0.35	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
sec-Butylbenzene	ND		4.4	0.38	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
tert-Butylbenzene	ND		4.4	0.46	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
Tetrachloroethene	ND		4.4	0.59	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
Toluene	ND		4.4	0.33	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
Trichloroethene	ND		4.4	0.97	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
Trimethylbenzene, 1,2,4-	ND		4.4	0.85	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
Trimethylbenzene, 1,3,5-	ND		4.4	0.28	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
Vinyl chloride	ND		4.4	0.54	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1
Xylene (mixed)	ND		8.8	0.74	ug/Kg	☼	09/23/13 12:18	09/23/13 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*64 - 126*	*09/23/13 12:18*	*09/23/13 18:08*	*1*
4-Bromofluorobenzene (Surr)	*107*		*72 - 126*	*09/23/13 12:18*	*09/23/13 18:08*	*1*
Toluene-d8 (Surr)	*103*		*71 - 125*	*09/23/13 12:18*	*09/23/13 18:08*	*1*

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-COMP-1
Date Collected: 09/19/13 13:30
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-25
Matrix: Solid
Percent Solids: 95.7

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 04:16	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	09/24/13 06:47	09/25/13 04:16	1
Anthracene	ND		170	4.4	ug/Kg	☼	09/24/13 06:47	09/25/13 04:16	1
Benzo(a)anthracene	ND		170	3.0	ug/Kg	☼	09/24/13 06:47	09/25/13 04:16	1
Benzo(a)pyrene	ND		170	4.2	ug/Kg	☼	09/24/13 06:47	09/25/13 04:16	1
Benzo(b)fluoranthene	ND		170	3.4	ug/Kg	☼	09/24/13 06:47	09/25/13 04:16	1
Benzo(g,h,i)perylene	ND		170	2.1	ug/Kg	☼	09/24/13 06:47	09/25/13 04:16	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	09/24/13 06:47	09/25/13 04:16	1
Chrysene	ND		170	1.7	ug/Kg	☼	09/24/13 06:47	09/25/13 04:16	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 04:16	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	09/24/13 06:47	09/25/13 04:16	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	09/24/13 06:47	09/25/13 04:16	1
Fluorene	ND		170	4.0	ug/Kg	☼	09/24/13 06:47	09/25/13 04:16	1
Hexachlorobenzene	ND		170	8.6	ug/Kg	☼	09/24/13 06:47	09/25/13 04:16	1
Indeno(1,2,3-cd)pyrene	ND		170	4.8	ug/Kg	☼	09/24/13 06:47	09/25/13 04:16	1
m & p - Cresol	ND		340	9.6	ug/Kg	☼	09/24/13 06:47	09/25/13 04:16	1
Naphthalene	ND		170	2.9	ug/Kg	☼	09/24/13 06:47	09/25/13 04:16	1
o-Cresol	ND		170	5.3	ug/Kg	☼	09/24/13 06:47	09/25/13 04:16	1
Pentachlorophenol	ND		340	59	ug/Kg	☼	09/24/13 06:47	09/25/13 04:16	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	09/24/13 06:47	09/25/13 04:16	1
Phenol	ND		170	18	ug/Kg	☼	09/24/13 06:47	09/25/13 04:16	1
Pyrene	ND		170	1.1	ug/Kg	☼	09/24/13 06:47	09/25/13 04:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*106*		*39 - 146*	*09/24/13 06:47*	*09/25/13 04:16*	*1*
2-Fluorobiphenyl	*96*		*37 - 120*	*09/24/13 06:47*	*09/25/13 04:16*	*1*
2-Fluorophenol	*84*		*18 - 120*	*09/24/13 06:47*	*09/25/13 04:16*	*1*
Nitrobenzene-d5	*90*		*34 - 132*	*09/24/13 06:47*	*09/25/13 04:16*	*1*
Phenol-d5	*92*		*11 - 120*	*09/24/13 06:47*	*09/25/13 04:16*	*1*
p-Terphenyl-d14	*116*		*65 - 153*	*09/24/13 06:47*	*09/25/13 04:16*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	09/24/13 06:37	09/25/13 13:45	1
4,4'-DDE	ND		1.7	0.26	ug/Kg	☼	09/24/13 06:37	09/25/13 13:45	1
4,4'-DDT	ND		1.7	0.18	ug/Kg	☼	09/24/13 06:37	09/25/13 13:45	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	09/24/13 06:37	09/25/13 13:45	1
alpha-BHC	ND		1.7	0.31	ug/Kg	☼	09/24/13 06:37	09/25/13 13:45	1
alpha-Chlordane	ND		1.7	0.86	ug/Kg	☼	09/24/13 06:37	09/25/13 13:45	1
beta-BHC	ND		1.7	0.19	ug/Kg	☼	09/24/13 06:37	09/25/13 13:45	1
delta-BHC	ND		1.7	0.23	ug/Kg	☼	09/24/13 06:37	09/25/13 13:45	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	09/24/13 06:37	09/25/13 13:45	1
Endosulfan I	ND		1.7	0.22	ug/Kg	☼	09/24/13 06:37	09/25/13 13:45	1
Endosulfan II	ND		1.7	0.31	ug/Kg	☼	09/24/13 06:37	09/25/13 13:45	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	09/24/13 06:37	09/25/13 13:45	1
Endrin	ND		1.7	0.24	ug/Kg	☼	09/24/13 06:37	09/25/13 13:45	1
Heptachlor	ND		1.7	0.27	ug/Kg	☼	09/24/13 06:37	09/25/13 13:45	1
Lindane	ND		1.7	0.21	ug/Kg	☼	09/24/13 06:37	09/25/13 13:45	1

Client Sample ID: HOHAOC2-C-COMP-1

Date Collected: 09/19/13 13:30
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-25

Matrix: Solid
Percent Solids: 95.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	*89*		*32 - 136*	*09/24/13 06:37*	*09/25/13 13:45*	*1*
Tetrachloro-m-xylene	*78*		*30 - 124*	*09/24/13 06:37*	*09/25/13 13:45*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.24	0.047	mg/Kg	☼	09/21/13 09:03	09/23/13 11:28	1
PCB-1221	ND		0.24	0.047	mg/Kg	☼	09/21/13 09:03	09/23/13 11:28	1
PCB-1232	ND		0.24	0.047	mg/Kg	☼	09/21/13 09:03	09/23/13 11:28	1
PCB-1242	ND		0.24	0.047	mg/Kg	☼	09/21/13 09:03	09/23/13 11:28	1
PCB-1248	ND		0.24	0.047	mg/Kg	☼	09/21/13 09:03	09/23/13 11:28	1
PCB-1254	ND		0.24	0.11	mg/Kg	☼	09/21/13 09:03	09/23/13 11:28	1
PCB-1260	ND		0.24	0.11	mg/Kg	☼	09/21/13 09:03	09/23/13 11:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	*138*		*47 - 176*	*09/21/13 09:03*	*09/23/13 11:28*	*1*
Tetrachloro-m-xylene	*113*		*46 - 175*	*09/21/13 09:03*	*09/23/13 11:28*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.2	ug/Kg	☼	09/23/13 15:11	09/25/13 11:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	*110*		*39 - 120*	*09/23/13 15:11*	*09/25/13 11:09*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.4**	**J**	2.2	0.44	mg/Kg	☼	09/21/13 10:30	09/23/13 20:50	1
Barium	**13.4**		0.55	0.12	mg/Kg	☼	09/21/13 10:30	09/23/13 20:50	1
Beryllium	**0.12**	**J**	0.22	0.031	mg/Kg	☼	09/21/13 10:30	09/23/13 20:50	1
Cadmium	**0.072**	**J**	0.22	0.033	mg/Kg	☼	09/21/13 10:30	09/23/13 20:50	1
Chromium	**7.0**		0.55	0.22	mg/Kg	☼	09/21/13 10:30	09/23/13 20:50	1
Copper	**119**		1.1	0.23	mg/Kg	☼	09/21/13 10:30	09/23/13 20:50	1
Lead	**2.4**		1.1	0.26	mg/Kg	☼	09/21/13 10:30	09/23/13 20:50	1
Manganese	**128**		0.22	0.035	mg/Kg	☼	09/21/13 10:30	09/23/13 20:50	1
Nickel	**18.6**		5.5	0.25	mg/Kg	☼	09/21/13 10:30	09/23/13 20:50	1
Selenium	ND		4.4	0.44	mg/Kg	☼	09/21/13 10:30	09/23/13 20:50	1
Silver	ND		0.55	0.22	mg/Kg	☼	09/21/13 10:30	09/23/13 20:50	1
Zinc	**35.9**	**B**	2.2	0.17	mg/Kg	☼	09/21/13 10:30	09/23/13 20:50	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0079	mg/Kg	☼	09/23/13 07:50	09/23/13 11:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.84	0.28	mg/Kg	☼	09/24/13 23:20	09/25/13 12:42	1
Cyanide, Total	ND		1.0	0.50	mg/Kg	☼	09/24/13 04:43	09/24/13 13:22	1
Cr (III)	**7.0**		1.5	0.63	mg/Kg			09/26/13 13:16	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-COMP-2
Date Collected: 09/19/13 13:40
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-26
Matrix: Solid
Percent Solids: 96.9

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 04:41	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	09/24/13 06:47	09/25/13 04:41	1
Anthracene	ND		170	4.4	ug/Kg	☼	09/24/13 06:47	09/25/13 04:41	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg	☼	09/24/13 06:47	09/25/13 04:41	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	09/24/13 06:47	09/25/13 04:41	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	09/24/13 06:47	09/25/13 04:41	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 04:41	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	09/24/13 06:47	09/25/13 04:41	1
Chrysene	ND		170	1.7	ug/Kg	☼	09/24/13 06:47	09/25/13 04:41	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 04:41	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	09/24/13 06:47	09/25/13 04:41	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	09/24/13 06:47	09/25/13 04:41	1
Fluorene	ND		170	3.9	ug/Kg	☼	09/24/13 06:47	09/25/13 04:41	1
Hexachlorobenzene	ND		170	8.5	ug/Kg	☼	09/24/13 06:47	09/25/13 04:41	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg	☼	09/24/13 06:47	09/25/13 04:41	1
m & p - Cresol	ND		330	9.5	ug/Kg	☼	09/24/13 06:47	09/25/13 04:41	1
Naphthalene	ND		170	2.8	ug/Kg	☼	09/24/13 06:47	09/25/13 04:41	1
o-Cresol	ND		170	5.2	ug/Kg	☼	09/24/13 06:47	09/25/13 04:41	1
Pentachlorophenol	ND		330	58	ug/Kg	☼	09/24/13 06:47	09/25/13 04:41	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	09/24/13 06:47	09/25/13 04:41	1
Phenol	ND		170	18	ug/Kg	☼	09/24/13 06:47	09/25/13 04:41	1
Pyrene	ND		170	1.1	ug/Kg	☼	09/24/13 06:47	09/25/13 04:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*103*		*39 - 146*	*09/24/13 06:47*	*09/25/13 04:41*	*1*
2-Fluorobiphenyl	*96*		*37 - 120*	*09/24/13 06:47*	*09/25/13 04:41*	*1*
2-Fluorophenol	*85*		*18 - 120*	*09/24/13 06:47*	*09/25/13 04:41*	*1*
Nitrobenzene-d5	*93*		*34 - 132*	*09/24/13 06:47*	*09/25/13 04:41*	*1*
Phenol-d5	*92*		*11 - 120*	*09/24/13 06:47*	*09/25/13 04:41*	*1*
p-Terphenyl-d14	*117*		*65 - 153*	*09/24/13 06:47*	*09/25/13 04:41*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	09/24/13 06:37	09/25/13 14:03	1
4,4'-DDE	ND		1.7	0.26	ug/Kg	☼	09/24/13 06:37	09/25/13 14:03	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	09/24/13 06:37	09/25/13 14:03	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	09/24/13 06:37	09/25/13 14:03	1
alpha-BHC	ND		1.7	0.31	ug/Kg	☼	09/24/13 06:37	09/25/13 14:03	1
alpha-Chlordane	ND		1.7	0.85	ug/Kg	☼	09/24/13 06:37	09/25/13 14:03	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	09/24/13 06:37	09/25/13 14:03	1
delta-BHC	ND		1.7	0.23	ug/Kg	☼	09/24/13 06:37	09/25/13 14:03	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	09/24/13 06:37	09/25/13 14:03	1
Endosulfan I	ND		1.7	0.22	ug/Kg	☼	09/24/13 06:37	09/25/13 14:03	1
Endosulfan II	ND		1.7	0.31	ug/Kg	☼	09/24/13 06:37	09/25/13 14:03	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	09/24/13 06:37	09/25/13 14:03	1
Endrin	ND		1.7	0.24	ug/Kg	☼	09/24/13 06:37	09/25/13 14:03	1
Heptachlor	ND		1.7	0.27	ug/Kg	☼	09/24/13 06:37	09/25/13 14:03	1
Lindane	ND		1.7	0.21	ug/Kg	☼	09/24/13 06:37	09/25/13 14:03	1

Client Sample ID: HOHAOC2-C-COMP-2

Date Collected: 09/19/13 13:40
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-26

Matrix: Solid
Percent Solids: 96.9

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	*86*		*32 - 136*	*09/24/13 06:37*	*09/25/13 14:03*	*1*
Tetrachloro-m-xylene	*76*		*30 - 124*	*09/24/13 06:37*	*09/25/13 14:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.23	0.044	mg/Kg	☼	09/21/13 09:03	09/23/13 11:43	1
PCB-1221	ND		0.23	0.044	mg/Kg	☼	09/21/13 09:03	09/23/13 11:43	1
PCB-1232	ND		0.23	0.044	mg/Kg	☼	09/21/13 09:03	09/23/13 11:43	1
PCB-1242	ND		0.23	0.044	mg/Kg	☼	09/21/13 09:03	09/23/13 11:43	1
PCB-1248	ND		0.23	0.044	mg/Kg	☼	09/21/13 09:03	09/23/13 11:43	1
PCB-1254	ND		0.23	0.11	mg/Kg	☼	09/21/13 09:03	09/23/13 11:43	1
PCB-1260	ND		0.23	0.11	mg/Kg	☼	09/21/13 09:03	09/23/13 11:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	*136*		*47 - 176*	*09/21/13 09:03*	*09/23/13 11:43*	*1*
Tetrachloro-m-xylene	*112*		*46 - 175*	*09/21/13 09:03*	*09/23/13 11:43*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.1	ug/Kg	☼	09/23/13 15:11	09/25/13 11:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	*77*		*39 - 120*	*09/23/13 15:11*	*09/25/13 11:38*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.2**	**J**	1.8	0.36	mg/Kg	☼	09/21/13 10:30	09/23/13 21:07	1
Barium	**9.7**		0.45	0.10	mg/Kg	☼	09/21/13 10:30	09/23/13 21:07	1
Beryllium	**0.12**	**J**	0.18	0.025	mg/Kg	☼	09/21/13 10:30	09/23/13 21:07	1
Cadmium	**0.048**	**J**	0.18	0.027	mg/Kg	☼	09/21/13 10:30	09/23/13 21:07	1
Chromium	**6.0**		0.45	0.18	mg/Kg	☼	09/21/13 10:30	09/23/13 21:07	1
Copper	**112**		0.91	0.19	mg/Kg	☼	09/21/13 10:30	09/23/13 21:07	1
Lead	**2.4**		0.91	0.22	mg/Kg	☼	09/21/13 10:30	09/23/13 21:07	1
Manganese	**116**		0.18	0.029	mg/Kg	☼	09/21/13 10:30	09/23/13 21:07	1
Nickel	**17.0**		4.5	0.21	mg/Kg	☼	09/21/13 10:30	09/23/13 21:07	1
Selenium	ND		3.6	0.36	mg/Kg	☼	09/21/13 10:30	09/23/13 21:07	1
Silver	ND		0.45	0.18	mg/Kg	☼	09/21/13 10:30	09/23/13 21:07	1
Zinc	**30.8**	**B**	1.8	0.14	mg/Kg	☼	09/21/13 10:30	09/23/13 21:07	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0077	mg/Kg	☼	09/23/13 07:50	09/23/13 11:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.83	0.28	mg/Kg	☼	09/24/13 23:20	09/25/13 12:43	1
Cyanide, Total	ND		1.0	0.49	mg/Kg	☼	09/24/13 04:43	09/24/13 13:23	1
Cr (III)	**6.0**		1.5	0.63	mg/Kg			09/26/13 13:16	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-COMP-3
Date Collected: 09/19/13 13:50
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-27
Matrix: Solid
Percent Solids: 96.6

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 05:06	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	09/24/13 06:47	09/25/13 05:06	1
Anthracene	ND		170	4.4	ug/Kg	☼	09/24/13 06:47	09/25/13 05:06	1
Benzo(a)anthracene	ND		170	3.0	ug/Kg	☼	09/24/13 06:47	09/25/13 05:06	1
Benzo(a)pyrene	ND		170	4.2	ug/Kg	☼	09/24/13 06:47	09/25/13 05:06	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	09/24/13 06:47	09/25/13 05:06	1
Benzo(g,h,i)perylene	ND		170	2.1	ug/Kg	☼	09/24/13 06:47	09/25/13 05:06	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	09/24/13 06:47	09/25/13 05:06	1
Chrysene	ND		170	1.7	ug/Kg	☼	09/24/13 06:47	09/25/13 05:06	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 05:06	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	09/24/13 06:47	09/25/13 05:06	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	09/24/13 06:47	09/25/13 05:06	1
Fluorene	ND		170	4.0	ug/Kg	☼	09/24/13 06:47	09/25/13 05:06	1
Hexachlorobenzene	ND		170	8.6	ug/Kg	☼	09/24/13 06:47	09/25/13 05:06	1
Indeno(1,2,3-cd)pyrene	ND		170	4.8	ug/Kg	☼	09/24/13 06:47	09/25/13 05:06	1
m & p - Cresol	ND		340	9.6	ug/Kg	☼	09/24/13 06:47	09/25/13 05:06	1
Naphthalene	ND		170	2.9	ug/Kg	☼	09/24/13 06:47	09/25/13 05:06	1
o-Cresol	ND		170	5.3	ug/Kg	☼	09/24/13 06:47	09/25/13 05:06	1
Pentachlorophenol	ND		340	59	ug/Kg	☼	09/24/13 06:47	09/25/13 05:06	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	09/24/13 06:47	09/25/13 05:06	1
Phenol	ND		170	18	ug/Kg	☼	09/24/13 06:47	09/25/13 05:06	1
Pyrene	ND		170	1.1	ug/Kg	☼	09/24/13 06:47	09/25/13 05:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*108*		*39 - 146*	*09/24/13 06:47*	*09/25/13 05:06*	*1*
2-Fluorobiphenyl	*95*		*37 - 120*	*09/24/13 06:47*	*09/25/13 05:06*	*1*
2-Fluorophenol	*81*		*18 - 120*	*09/24/13 06:47*	*09/25/13 05:06*	*1*
Nitrobenzene-d5	*85*		*34 - 132*	*09/24/13 06:47*	*09/25/13 05:06*	*1*
Phenol-d5	*90*		*11 - 120*	*09/24/13 06:47*	*09/25/13 05:06*	*1*
p-Terphenyl-d14	*111*		*65 - 153*	*09/24/13 06:47*	*09/25/13 05:06*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	09/24/13 06:37	09/25/13 14:20	1
4,4'-DDE	ND		1.7	0.26	ug/Kg	☼	09/24/13 06:37	09/25/13 14:20	1
4,4'-DDT	ND		1.7	0.18	ug/Kg	☼	09/24/13 06:37	09/25/13 14:20	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	09/24/13 06:37	09/25/13 14:20	1
alpha-BHC	ND		1.7	0.31	ug/Kg	☼	09/24/13 06:37	09/25/13 14:20	1
alpha-Chlordane	ND		1.7	0.86	ug/Kg	☼	09/24/13 06:37	09/25/13 14:20	1
beta-BHC	ND		1.7	0.19	ug/Kg	☼	09/24/13 06:37	09/25/13 14:20	1
delta-BHC	ND		1.7	0.23	ug/Kg	☼	09/24/13 06:37	09/25/13 14:20	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	09/24/13 06:37	09/25/13 14:20	1
Endosulfan I	ND		1.7	0.22	ug/Kg	☼	09/24/13 06:37	09/25/13 14:20	1
Endosulfan II	ND		1.7	0.31	ug/Kg	☼	09/24/13 06:37	09/25/13 14:20	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	09/24/13 06:37	09/25/13 14:20	1
Endrin	ND		1.7	0.24	ug/Kg	☼	09/24/13 06:37	09/25/13 14:20	1
Heptachlor	ND		1.7	0.27	ug/Kg	☼	09/24/13 06:37	09/25/13 14:20	1
Lindane	ND		1.7	0.21	ug/Kg	☼	09/24/13 06:37	09/25/13 14:20	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-COMP-3
Date Collected: 09/19/13 13:50
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-27
Matrix: Solid
Percent Solids: 96.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	86		32 - 136	09/24/13 06:37	09/25/13 14:20	1
Tetrachloro-m-xylene	84		30 - 124	09/24/13 06:37	09/25/13 14:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.20	0.039	mg/Kg	☼	09/21/13 09:03	09/23/13 11:58	1
PCB-1221	ND		0.20	0.039	mg/Kg	☼	09/21/13 09:03	09/23/13 11:58	1
PCB-1232	ND		0.20	0.039	mg/Kg	☼	09/21/13 09:03	09/23/13 11:58	1
PCB-1242	ND		0.20	0.039	mg/Kg	☼	09/21/13 09:03	09/23/13 11:58	1
PCB-1248	ND		0.20	0.039	mg/Kg	☼	09/21/13 09:03	09/23/13 11:58	1
PCB-1254	ND		0.20	0.094	mg/Kg	☼	09/21/13 09:03	09/23/13 11:58	1
PCB-1260	ND		0.20	0.094	mg/Kg	☼	09/21/13 09:03	09/23/13 11:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	137		47 - 176	09/21/13 09:03	09/23/13 11:58	1
Tetrachloro-m-xylene	109		46 - 175	09/21/13 09:03	09/23/13 11:58	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.1	ug/Kg	☼	09/23/13 15:11	09/25/13 12:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	93		39 - 120	09/23/13 15:11	09/25/13 12:08	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.1**	**J**	2.1	0.42	mg/Kg	☼	09/21/13 10:30	09/23/13 21:10	1
Barium	**10.1**		0.52	0.11	mg/Kg	☼	09/21/13 10:30	09/23/13 21:10	1
Beryllium	**0.14**	**J**	0.21	0.029	mg/Kg	☼	09/21/13 10:30	09/23/13 21:10	1
Cadmium	**0.057**	**J**	0.21	0.031	mg/Kg	☼	09/21/13 10:30	09/23/13 21:10	1
Chromium	**5.2**		0.52	0.21	mg/Kg	☼	09/21/13 10:30	09/23/13 21:10	1
Copper	**136**		1.0	0.22	mg/Kg	☼	09/21/13 10:30	09/23/13 21:10	1
Lead	**4.4**		1.0	0.25	mg/Kg	☼	09/21/13 10:30	09/23/13 21:10	1
Manganese	**128**		0.21	0.033	mg/Kg	☼	09/21/13 10:30	09/23/13 21:10	1
Nickel	**17.8**		5.2	0.24	mg/Kg	☼	09/21/13 10:30	09/23/13 21:10	1
Selenium	ND		4.2	0.42	mg/Kg	☼	09/21/13 10:30	09/23/13 21:10	1
Silver	ND		0.52	0.21	mg/Kg	☼	09/21/13 10:30	09/23/13 21:10	1
Zinc	**37.1**	**B**	2.1	0.16	mg/Kg	☼	09/21/13 10:30	09/23/13 21:10	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0082	mg/Kg	☼	09/23/13 07:50	09/23/13 11:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.83	0.28	mg/Kg	☼	09/24/13 23:20	09/25/13 13:02	1
Cyanide, Total	ND		1.0	0.49	mg/Kg	☼	09/24/13 04:43	09/24/13 13:24	1
Cr (III)	**5.2**		1.5	0.63	mg/Kg			09/26/13 13:16	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-COMP-4
Date Collected: 09/19/13 14:00
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-28
Matrix: Solid
Percent Solids: 97.0

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 05:31	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	09/24/13 06:47	09/25/13 05:31	1
Anthracene	ND		170	4.4	ug/Kg	☼	09/24/13 06:47	09/25/13 05:31	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg	☼	09/24/13 06:47	09/25/13 05:31	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	09/24/13 06:47	09/25/13 05:31	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	09/24/13 06:47	09/25/13 05:31	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 05:31	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	09/24/13 06:47	09/25/13 05:31	1
Chrysene	ND		170	1.7	ug/Kg	☼	09/24/13 06:47	09/25/13 05:31	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 05:31	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	09/24/13 06:47	09/25/13 05:31	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	09/24/13 06:47	09/25/13 05:31	1
Fluorene	ND		170	3.9	ug/Kg	☼	09/24/13 06:47	09/25/13 05:31	1
Hexachlorobenzene	ND		170	8.5	ug/Kg	☼	09/24/13 06:47	09/25/13 05:31	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg	☼	09/24/13 06:47	09/25/13 05:31	1
m & p - Cresol	ND		330	9.5	ug/Kg	☼	09/24/13 06:47	09/25/13 05:31	1
Naphthalene	ND		170	2.8	ug/Kg	☼	09/24/13 06:47	09/25/13 05:31	1
o-Cresol	ND		170	5.2	ug/Kg	☼	09/24/13 06:47	09/25/13 05:31	1
Pentachlorophenol	ND		330	59	ug/Kg	☼	09/24/13 06:47	09/25/13 05:31	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	09/24/13 06:47	09/25/13 05:31	1
Phenol	ND		170	18	ug/Kg	☼	09/24/13 06:47	09/25/13 05:31	1
Pyrene	ND		170	1.1	ug/Kg	☼	09/24/13 06:47	09/25/13 05:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*106*		*39 - 146*	*09/24/13 06:47*	*09/25/13 05:31*	*1*
2-Fluorobiphenyl	*98*		*37 - 120*	*09/24/13 06:47*	*09/25/13 05:31*	*1*
2-Fluorophenol	*81*		*18 - 120*	*09/24/13 06:47*	*09/25/13 05:31*	*1*
Nitrobenzene-d5	*87*		*34 - 132*	*09/24/13 06:47*	*09/25/13 05:31*	*1*
Phenol-d5	*90*		*11 - 120*	*09/24/13 06:47*	*09/25/13 05:31*	*1*
p-Terphenyl-d14	*114*		*65 - 153*	*09/24/13 06:47*	*09/25/13 05:31*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	09/24/13 06:37	09/25/13 14:38	1
4,4'-DDE	ND		1.7	0.25	ug/Kg	☼	09/24/13 06:37	09/25/13 14:38	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	09/24/13 06:37	09/25/13 14:38	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	09/24/13 06:37	09/25/13 14:38	1
alpha-BHC	ND		1.7	0.31	ug/Kg	☼	09/24/13 06:37	09/25/13 14:38	1
alpha-Chlordane	ND		1.7	0.85	ug/Kg	☼	09/24/13 06:37	09/25/13 14:38	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	09/24/13 06:37	09/25/13 14:38	1
delta-BHC	ND		1.7	0.22	ug/Kg	☼	09/24/13 06:37	09/25/13 14:38	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	09/24/13 06:37	09/25/13 14:38	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	09/24/13 06:37	09/25/13 14:38	1
Endosulfan II	ND		1.7	0.31	ug/Kg	☼	09/24/13 06:37	09/25/13 14:38	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	09/24/13 06:37	09/25/13 14:38	1
Endrin	ND		1.7	0.23	ug/Kg	☼	09/24/13 06:37	09/25/13 14:38	1
Heptachlor	ND		1.7	0.27	ug/Kg	☼	09/24/13 06:37	09/25/13 14:38	1
Lindane	ND		1.7	0.21	ug/Kg	☼	09/24/13 06:37	09/25/13 14:38	1

Client Sample ID: HOHAOC2-C-COMP-4

Date Collected: 09/19/13 14:00
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-28

Matrix: Solid
Percent Solids: 97.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	*84*		*32 - 136*	*09/24/13 06:37*	*09/25/13 14:38*	*1*
Tetrachloro-m-xylene	*84*		*30 - 124*	*09/24/13 06:37*	*09/25/13 14:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.21	0.041	mg/Kg	☼	09/21/13 09:03	09/23/13 12:42	1
PCB-1221	ND		0.21	0.041	mg/Kg	☼	09/21/13 09:03	09/23/13 12:42	1
PCB-1232	ND		0.21	0.041	mg/Kg	☼	09/21/13 09:03	09/23/13 12:42	1
PCB-1242	ND		0.21	0.041	mg/Kg	☼	09/21/13 09:03	09/23/13 12:42	1
PCB-1248	ND		0.21	0.041	mg/Kg	☼	09/21/13 09:03	09/23/13 12:42	1
PCB-1254	ND		0.21	0.097	mg/Kg	☼	09/21/13 09:03	09/23/13 12:42	1
PCB-1260	ND		0.21	0.097	mg/Kg	☼	09/21/13 09:03	09/23/13 12:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	*137*		*47 - 176*	*09/21/13 09:03*	*09/23/13 12:42*	*1*
Tetrachloro-m-xylene	*113*		*46 - 175*	*09/21/13 09:03*	*09/23/13 12:42*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.1	ug/Kg	☼	09/23/13 15:11	09/25/13 12:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	*92*		*39 - 120*	*09/23/13 15:11*	*09/25/13 12:38*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.3**	**J**	1.9	0.37	mg/Kg	☼	09/21/13 10:30	09/23/13 21:12	1
Barium	**10.1**		0.47	0.10	mg/Kg	☼	09/21/13 10:30	09/23/13 21:12	1
Beryllium	**0.12**	**J**	0.19	0.026	mg/Kg	☼	09/21/13 10:30	09/23/13 21:12	1
Cadmium	**0.066**	**J**	0.19	0.028	mg/Kg	☼	09/21/13 10:30	09/23/13 21:12	1
Chromium	**6.1**		0.47	0.19	mg/Kg	☼	09/21/13 10:30	09/23/13 21:12	1
Copper	**112**		0.93	0.20	mg/Kg	☼	09/21/13 10:30	09/23/13 21:12	1
Lead	**2.8**		0.93	0.22	mg/Kg	☼	09/21/13 10:30	09/23/13 21:12	1
Manganese	**128**		0.19	0.030	mg/Kg	☼	09/21/13 10:30	09/23/13 21:12	1
Nickel	**17.0**		4.7	0.21	mg/Kg	☼	09/21/13 10:30	09/23/13 21:12	1
Selenium	ND		3.7	0.37	mg/Kg	☼	09/21/13 10:30	09/23/13 21:12	1
Silver	ND		0.47	0.19	mg/Kg	☼	09/21/13 10:30	09/23/13 21:12	1
Zinc	**37.7**	**B**	1.9	0.14	mg/Kg	☼	09/21/13 10:30	09/23/13 21:12	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.0084	mg/Kg	☼	09/23/13 07:50	09/23/13 11:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.82	0.28	mg/Kg	☼	09/24/13 23:20	09/25/13 13:04	1
Cyanide, Total	ND		1.0	0.49	mg/Kg	☼	09/24/13 04:43	09/24/13 13:25	1
Cr (III)	**6.1**		1.5	0.63	mg/Kg			09/26/13 13:16	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-COMP-5
Date Collected: 09/19/13 14:10
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-29
Matrix: Solid
Percent Solids: 95.6

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 05:55	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	09/24/13 06:47	09/25/13 05:55	1
Anthracene	ND		170	4.4	ug/Kg	☼	09/24/13 06:47	09/25/13 05:55	1
Benzo(a)anthracene	ND		170	3.0	ug/Kg	☼	09/24/13 06:47	09/25/13 05:55	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	09/24/13 06:47	09/25/13 05:55	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	09/24/13 06:47	09/25/13 05:55	1
Benzo(g,h,i)perylene	ND		170	2.1	ug/Kg	☼	09/24/13 06:47	09/25/13 05:55	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	09/24/13 06:47	09/25/13 05:55	1
Chrysene	ND		170	1.7	ug/Kg	☼	09/24/13 06:47	09/25/13 05:55	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 05:55	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	09/24/13 06:47	09/25/13 05:55	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	09/24/13 06:47	09/25/13 05:55	1
Fluorene	ND		170	4.0	ug/Kg	☼	09/24/13 06:47	09/25/13 05:55	1
Hexachlorobenzene	ND		170	8.6	ug/Kg	☼	09/24/13 06:47	09/25/13 05:55	1
Indeno(1,2,3-cd)pyrene	ND		170	4.8	ug/Kg	☼	09/24/13 06:47	09/25/13 05:55	1
m & p - Cresol	ND		340	9.6	ug/Kg	☼	09/24/13 06:47	09/25/13 05:55	1
Naphthalene	ND		170	2.9	ug/Kg	☼	09/24/13 06:47	09/25/13 05:55	1
o-Cresol	ND		170	5.3	ug/Kg	☼	09/24/13 06:47	09/25/13 05:55	1
Pentachlorophenol	ND		340	59	ug/Kg	☼	09/24/13 06:47	09/25/13 05:55	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	09/24/13 06:47	09/25/13 05:55	1
Phenol	ND		170	18	ug/Kg	☼	09/24/13 06:47	09/25/13 05:55	1
Pyrene	ND		170	1.1	ug/Kg	☼	09/24/13 06:47	09/25/13 05:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*106*		*39 - 146*	*09/24/13 06:47*	*09/25/13 05:55*	*1*
2-Fluorobiphenyl	*98*		*37 - 120*	*09/24/13 06:47*	*09/25/13 05:55*	*1*
2-Fluorophenol	*84*		*18 - 120*	*09/24/13 06:47*	*09/25/13 05:55*	*1*
Nitrobenzene-d5	*90*		*34 - 132*	*09/24/13 06:47*	*09/25/13 05:55*	*1*
Phenol-d5	*96*		*11 - 120*	*09/24/13 06:47*	*09/25/13 05:55*	*1*
p-Terphenyl-d14	*117*		*65 - 153*	*09/24/13 06:47*	*09/25/13 05:55*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	09/24/13 06:37	09/25/13 14:56	1
4,4'-DDE	ND		1.7	0.26	ug/Kg	☼	09/24/13 06:37	09/25/13 14:56	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	09/24/13 06:37	09/25/13 14:56	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	09/24/13 06:37	09/25/13 14:56	1
alpha-BHC	ND		1.7	0.31	ug/Kg	☼	09/24/13 06:37	09/25/13 14:56	1
alpha-Chlordane	ND		1.7	0.85	ug/Kg	☼	09/24/13 06:37	09/25/13 14:56	1
beta-BHC	ND		1.7	0.19	ug/Kg	☼	09/24/13 06:37	09/25/13 14:56	1
delta-BHC	ND		1.7	0.23	ug/Kg	☼	09/24/13 06:37	09/25/13 14:56	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	09/24/13 06:37	09/25/13 14:56	1
Endosulfan I	ND		1.7	0.22	ug/Kg	☼	09/24/13 06:37	09/25/13 14:56	1
Endosulfan II	ND		1.7	0.31	ug/Kg	☼	09/24/13 06:37	09/25/13 14:56	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	09/24/13 06:37	09/25/13 14:56	1
Endrin	ND		1.7	0.24	ug/Kg	☼	09/24/13 06:37	09/25/13 14:56	1
Heptachlor	ND		1.7	0.27	ug/Kg	☼	09/24/13 06:37	09/25/13 14:56	1
Lindane	ND		1.7	0.21	ug/Kg	☼	09/24/13 06:37	09/25/13 14:56	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-COMP-5
Date Collected: 09/19/13 14:10
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-29
Matrix: Solid
Percent Solids: 95.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	83		32 - 136	09/24/13 06:37	09/25/13 14:56	1
Tetrachloro-m-xylene	77		30 - 124	09/24/13 06:37	09/25/13 14:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.24	0.046	mg/Kg	☼	09/21/13 09:03	09/23/13 12:57	1
PCB-1221	ND		0.24	0.046	mg/Kg	☼	09/21/13 09:03	09/23/13 12:57	1
PCB-1232	ND		0.24	0.046	mg/Kg	☼	09/21/13 09:03	09/23/13 12:57	1
PCB-1242	ND		0.24	0.046	mg/Kg	☼	09/21/13 09:03	09/23/13 12:57	1
PCB-1248	ND		0.24	0.046	mg/Kg	☼	09/21/13 09:03	09/23/13 12:57	1
PCB-1254	ND		0.24	0.11	mg/Kg	☼	09/21/13 09:03	09/23/13 12:57	1
PCB-1260	ND		0.24	0.11	mg/Kg	☼	09/21/13 09:03	09/23/13 12:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	138		47 - 176	09/21/13 09:03	09/23/13 12:57	1
Tetrachloro-m-xylene	113		46 - 175	09/21/13 09:03	09/23/13 12:57	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.2	ug/Kg	☼	09/23/13 15:11	09/25/13 13:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	94		39 - 120	09/23/13 15:11	09/25/13 13:07	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.0**	**J**	2.1	0.43	mg/Kg	☼	09/21/13 10:30	09/23/13 21:14	1
Barium	**10.6**		0.53	0.12	mg/Kg	☼	09/21/13 10:30	09/23/13 21:14	1
Beryllium	**0.13**	**J**	0.21	0.030	mg/Kg	☼	09/21/13 10:30	09/23/13 21:14	1
Cadmium	**0.075**	**J**	0.21	0.032	mg/Kg	☼	09/21/13 10:30	09/23/13 21:14	1
Chromium	**4.5**		0.53	0.21	mg/Kg	☼	09/21/13 10:30	09/23/13 21:14	1
Copper	**118**		1.1	0.22	mg/Kg	☼	09/21/13 10:30	09/23/13 21:14	1
Lead	**2.6**		1.1	0.26	mg/Kg	☼	09/21/13 10:30	09/23/13 21:14	1
Manganese	**128**		0.21	0.034	mg/Kg	☼	09/21/13 10:30	09/23/13 21:14	1
Nickel	**16.2**		5.3	0.25	mg/Kg	☼	09/21/13 10:30	09/23/13 21:14	1
Selenium	ND		4.3	0.43	mg/Kg	☼	09/21/13 10:30	09/23/13 21:14	1
Silver	ND		0.53	0.21	mg/Kg	☼	09/21/13 10:30	09/23/13 21:14	1
Zinc	**34.4**	**B**	2.1	0.16	mg/Kg	☼	09/21/13 10:30	09/23/13 21:14	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0079	mg/Kg	☼	09/23/13 07:50	09/23/13 11:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.84	0.28	mg/Kg	☼	09/24/13 23:20	09/25/13 13:07	1
Cyanide, Total	ND		1.0	0.50	mg/Kg	☼	09/24/13 04:43	09/24/13 13:29	1
Cr (III)	**4.5**		1.5	0.63	mg/Kg			09/26/13 13:16	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-COMP-6
Date Collected: 09/19/13 14:20
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-30
Matrix: Solid
Percent Solids: 88.7

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		190	2.2	ug/Kg	☼	09/24/13 06:47	09/25/13 06:20	1
Acenaphthylene	ND		190	1.5	ug/Kg	☼	09/24/13 06:47	09/25/13 06:20	1
Anthracene	ND		190	4.8	ug/Kg	☼	09/24/13 06:47	09/25/13 06:20	1
Benzo(a)anthracene	ND		190	3.3	ug/Kg	☼	09/24/13 06:47	09/25/13 06:20	1
Benzo(a)pyrene	ND		190	4.6	ug/Kg	☼	09/24/13 06:47	09/25/13 06:20	1
Benzo(b)fluoranthene	ND		190	3.7	ug/Kg	☼	09/24/13 06:47	09/25/13 06:20	1
Benzo(g,h,i)perylene	ND		190	2.3	ug/Kg	☼	09/24/13 06:47	09/25/13 06:20	1
Benzo(k)fluoranthene	ND		190	2.1	ug/Kg	☼	09/24/13 06:47	09/25/13 06:20	1
Chrysene	ND		190	1.9	ug/Kg	☼	09/24/13 06:47	09/25/13 06:20	1
Dibenz(a,h)anthracene	ND		190	2.2	ug/Kg	☼	09/24/13 06:47	09/25/13 06:20	1
Dibenzofuran	ND		190	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 06:20	1
Fluoranthene	ND		190	2.7	ug/Kg	☼	09/24/13 06:47	09/25/13 06:20	1
Fluorene	ND		190	4.4	ug/Kg	☼	09/24/13 06:47	09/25/13 06:20	1
Hexachlorobenzene	ND		190	9.4	ug/Kg	☼	09/24/13 06:47	09/25/13 06:20	1
Indeno(1,2,3-cd)pyrene	ND		190	5.2	ug/Kg	☼	09/24/13 06:47	09/25/13 06:20	1
m & p - Cresol	ND		370	11	ug/Kg	☼	09/24/13 06:47	09/25/13 06:20	1
Naphthalene	ND		190	3.1	ug/Kg	☼	09/24/13 06:47	09/25/13 06:20	1
o-Cresol	ND		190	5.8	ug/Kg	☼	09/24/13 06:47	09/25/13 06:20	1
Pentachlorophenol	ND		370	65	ug/Kg	☼	09/24/13 06:47	09/25/13 06:20	1
Phenanthrene	ND		190	4.0	ug/Kg	☼	09/24/13 06:47	09/25/13 06:20	1
Phenol	ND		190	20	ug/Kg	☼	09/24/13 06:47	09/25/13 06:20	1
Pyrene	ND		190	1.2	ug/Kg	☼	09/24/13 06:47	09/25/13 06:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*102*		*39 - 146*	*09/24/13 06:47*	*09/25/13 06:20*	*1*
2-Fluorobiphenyl	*93*		*37 - 120*	*09/24/13 06:47*	*09/25/13 06:20*	*1*
2-Fluorophenol	*78*		*18 - 120*	*09/24/13 06:47*	*09/25/13 06:20*	*1*
Nitrobenzene-d5	*84*		*34 - 132*	*09/24/13 06:47*	*09/25/13 06:20*	*1*
Phenol-d5	*87*		*11 - 120*	*09/24/13 06:47*	*09/25/13 06:20*	*1*
p-Terphenyl-d14	*105*		*65 - 153*	*09/24/13 06:47*	*09/25/13 06:20*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.8	0.36	ug/Kg	☼	09/24/13 06:37	09/25/13 15:14	1
4,4'-DDE	ND		1.8	0.27	ug/Kg	☼	09/24/13 06:37	09/25/13 15:14	1
4,4'-DDT	ND		1.8	0.19	ug/Kg	☼	09/24/13 06:37	09/25/13 15:14	1
Aldrin	ND		1.8	0.45	ug/Kg	☼	09/24/13 06:37	09/25/13 15:14	1
alpha-BHC	ND		1.8	0.33	ug/Kg	☼	09/24/13 06:37	09/25/13 15:14	1
alpha-Chlordane	ND		1.8	0.91	ug/Kg	☼	09/24/13 06:37	09/25/13 15:14	1
beta-BHC	ND		1.8	0.20	ug/Kg	☼	09/24/13 06:37	09/25/13 15:14	1
delta-BHC	ND		1.8	0.24	ug/Kg	☼	09/24/13 06:37	09/25/13 15:14	1
Dieldrin	ND		1.8	0.44	ug/Kg	☼	09/24/13 06:37	09/25/13 15:14	1
Endosulfan I	ND		1.8	0.23	ug/Kg	☼	09/24/13 06:37	09/25/13 15:14	1
Endosulfan II	ND		1.8	0.33	ug/Kg	☼	09/24/13 06:37	09/25/13 15:14	1
Endosulfan sulfate	ND		1.8	0.34	ug/Kg	☼	09/24/13 06:37	09/25/13 15:14	1
Endrin	ND		1.8	0.25	ug/Kg	☼	09/24/13 06:37	09/25/13 15:14	1
Heptachlor	ND		1.8	0.29	ug/Kg	☼	09/24/13 06:37	09/25/13 15:14	1
Lindane	ND		1.8	0.23	ug/Kg	☼	09/24/13 06:37	09/25/13 15:14	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-COMP-6
Date Collected: 09/19/13 14:20
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-30
Matrix: Solid
Percent Solids: 88.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	84		32 - 136	09/24/13 06:37	09/25/13 15:14	1
Tetrachloro-m-xylene	77		30 - 124	09/24/13 06:37	09/25/13 15:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.22	0.042	mg/Kg	☼	09/21/13 09:03	09/23/13 13:12	1
PCB-1221	ND		0.22	0.042	mg/Kg	☼	09/21/13 09:03	09/23/13 13:12	1
PCB-1232	ND		0.22	0.042	mg/Kg	☼	09/21/13 09:03	09/23/13 13:12	1
PCB-1242	ND		0.22	0.042	mg/Kg	☼	09/21/13 09:03	09/23/13 13:12	1
PCB-1248	ND		0.22	0.042	mg/Kg	☼	09/21/13 09:03	09/23/13 13:12	1
PCB-1254	ND		0.22	0.10	mg/Kg	☼	09/21/13 09:03	09/23/13 13:12	1
PCB-1260	ND		0.22	0.10	mg/Kg	☼	09/21/13 09:03	09/23/13 13:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	137		47 - 176	09/21/13 09:03	09/23/13 13:12	1
Tetrachloro-m-xylene	113		46 - 175	09/21/13 09:03	09/23/13 13:12	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		19	6.7	ug/Kg	☼	09/23/13 15:11	09/25/13 13:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	101		39 - 120	09/23/13 15:11	09/25/13 13:37	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.2**	**J**	2.5	0.50	mg/Kg	☼	09/21/13 10:30	09/23/13 21:17	1
Barium	**11.3**		0.62	0.14	mg/Kg	☼	09/21/13 10:30	09/23/13 21:17	1
Beryllium	**0.15**	**J**	0.25	0.035	mg/Kg	☼	09/21/13 10:30	09/23/13 21:17	1
Cadmium	**0.046**	**J**	0.25	0.037	mg/Kg	☼	09/21/13 10:30	09/23/13 21:17	1
Chromium	**3.9**		0.62	0.25	mg/Kg	☼	09/21/13 10:30	09/23/13 21:17	1
Copper	**161**		1.2	0.26	mg/Kg	☼	09/21/13 10:30	09/23/13 21:17	1
Lead	**2.6**		1.2	0.30	mg/Kg	☼	09/21/13 10:30	09/23/13 21:17	1
Manganese	**148**		0.25	0.040	mg/Kg	☼	09/21/13 10:30	09/23/13 21:17	1
Nickel	**18.3**		6.2	0.29	mg/Kg	☼	09/21/13 10:30	09/23/13 21:17	1
Selenium	ND		5.0	0.50	mg/Kg	☼	09/21/13 10:30	09/23/13 21:17	1
Silver	ND		0.62	0.25	mg/Kg	☼	09/21/13 10:30	09/23/13 21:17	1
Zinc	**41.7**	**B**	2.5	0.19	mg/Kg	☼	09/21/13 10:30	09/23/13 21:17	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.023	0.0093	mg/Kg	☼	09/23/13 07:50	09/23/13 11:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.90	0.30	mg/Kg	☼	09/24/13 23:20	09/25/13 13:08	1
Cyanide, Total	ND		1.1	0.54	mg/Kg	☼	09/24/13 04:43	09/24/13 13:30	1
Cr (III)	**3.9**		1.5	0.63	mg/Kg			09/26/13 13:16	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-COMP-7
Date Collected: 09/19/13 14:30
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-31
Matrix: Solid
Percent Solids: 89.6

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		190	2.2	ug/Kg	☼	09/24/13 06:47	09/25/13 06:45	1
Acenaphthylene	ND		190	1.5	ug/Kg	☼	09/24/13 06:47	09/25/13 06:45	1
Anthracene	ND		190	4.8	ug/Kg	☼	09/24/13 06:47	09/25/13 06:45	1
Benzo(a)anthracene	ND		190	3.2	ug/Kg	☼	09/24/13 06:47	09/25/13 06:45	1
Benzo(a)pyrene	ND		190	4.5	ug/Kg	☼	09/24/13 06:47	09/25/13 06:45	1
Benzo(b)fluoranthene	ND		190	3.6	ug/Kg	☼	09/24/13 06:47	09/25/13 06:45	1
Benzo(g,h,i)perylene	ND		190	2.2	ug/Kg	☼	09/24/13 06:47	09/25/13 06:45	1
Benzo(k)fluoranthene	ND		190	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 06:45	1
Chrysene	ND		190	1.9	ug/Kg	☼	09/24/13 06:47	09/25/13 06:45	1
Dibenz(a,h)anthracene	ND		190	2.2	ug/Kg	☼	09/24/13 06:47	09/25/13 06:45	1
Dibenzofuran	ND		190	1.9	ug/Kg	☼	09/24/13 06:47	09/25/13 06:45	1
Fluoranthene	ND		190	2.7	ug/Kg	☼	09/24/13 06:47	09/25/13 06:45	1
Fluorene	ND		190	4.3	ug/Kg	☼	09/24/13 06:47	09/25/13 06:45	1
Hexachlorobenzene	ND		190	9.2	ug/Kg	☼	09/24/13 06:47	09/25/13 06:45	1
Indeno(1,2,3-cd)pyrene	ND		190	5.1	ug/Kg	☼	09/24/13 06:47	09/25/13 06:45	1
m & p - Cresol	ND		360	10	ug/Kg	☼	09/24/13 06:47	09/25/13 06:45	1
Naphthalene	ND		190	3.1	ug/Kg	☼	09/24/13 06:47	09/25/13 06:45	1
o-Cresol	ND		190	5.7	ug/Kg	☼	09/24/13 06:47	09/25/13 06:45	1
Pentachlorophenol	ND		360	64	ug/Kg	☼	09/24/13 06:47	09/25/13 06:45	1
Phenanthrene	ND		190	3.9	ug/Kg	☼	09/24/13 06:47	09/25/13 06:45	1
Phenol	ND		190	20	ug/Kg	☼	09/24/13 06:47	09/25/13 06:45	1
Pyrene	ND		190	1.2	ug/Kg	☼	09/24/13 06:47	09/25/13 06:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*102*		*39 - 146*	*09/24/13 06:47*	*09/25/13 06:45*	*1*
2-Fluorobiphenyl	*94*		*37 - 120*	*09/24/13 06:47*	*09/25/13 06:45*	*1*
2-Fluorophenol	*84*		*18 - 120*	*09/24/13 06:47*	*09/25/13 06:45*	*1*
Nitrobenzene-d5	*89*		*34 - 132*	*09/24/13 06:47*	*09/25/13 06:45*	*1*
Phenol-d5	*94*		*11 - 120*	*09/24/13 06:47*	*09/25/13 06:45*	*1*
p-Terphenyl-d14	*110*		*65 - 153*	*09/24/13 06:47*	*09/25/13 06:45*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.36	ug/Kg	☼	09/24/13 06:37	09/25/13 15:31	1
4,4'-DDE	ND		1.9	0.28	ug/Kg	☼	09/24/13 06:37	09/25/13 15:31	1
4,4'-DDT	**0.69**	**J**	1.9	0.19	ug/Kg	☼	09/24/13 06:37	09/25/13 15:31	1
Aldrin	ND		1.9	0.45	ug/Kg	☼	09/24/13 06:37	09/25/13 15:31	1
alpha-BHC	ND		1.9	0.33	ug/Kg	☼	09/24/13 06:37	09/25/13 15:31	1
alpha-Chlordane	ND		1.9	0.92	ug/Kg	☼	09/24/13 06:37	09/25/13 15:31	1
beta-BHC	ND		1.9	0.20	ug/Kg	☼	09/24/13 06:37	09/25/13 15:31	1
delta-BHC	ND		1.9	0.24	ug/Kg	☼	09/24/13 06:37	09/25/13 15:31	1
Dieldrin	ND		1.9	0.44	ug/Kg	☼	09/24/13 06:37	09/25/13 15:31	1
Endosulfan I	ND		1.9	0.23	ug/Kg	☼	09/24/13 06:37	09/25/13 15:31	1
Endosulfan II	ND		1.9	0.33	ug/Kg	☼	09/24/13 06:37	09/25/13 15:31	1
Endosulfan sulfate	ND		1.9	0.34	ug/Kg	☼	09/24/13 06:37	09/25/13 15:31	1
Endrin	ND		1.9	0.26	ug/Kg	☼	09/24/13 06:37	09/25/13 15:31	1
Heptachlor	ND		1.9	0.29	ug/Kg	☼	09/24/13 06:37	09/25/13 15:31	1
Lindane	ND		1.9	0.23	ug/Kg	☼	09/24/13 06:37	09/25/13 15:31	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-COMP-7
Date Collected: 09/19/13 14:30
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-31
Matrix: Solid
Percent Solids: 89.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	84		32 - 136	09/24/13 06:37	09/25/13 15:31	1
Tetrachloro-m-xylene	77		30 - 124	09/24/13 06:37	09/25/13 15:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.21	0.042	mg/Kg	☼	09/21/13 09:03	09/23/13 13:26	1
PCB-1221	ND		0.21	0.042	mg/Kg	☼	09/21/13 09:03	09/23/13 13:26	1
PCB-1232	ND		0.21	0.042	mg/Kg	☼	09/21/13 09:03	09/23/13 13:26	1
PCB-1242	ND		0.21	0.042	mg/Kg	☼	09/21/13 09:03	09/23/13 13:26	1
PCB-1248	ND		0.21	0.042	mg/Kg	☼	09/21/13 09:03	09/23/13 13:26	1
PCB-1254	ND		0.21	0.10	mg/Kg	☼	09/21/13 09:03	09/23/13 13:26	1
PCB-1260	ND		0.21	0.10	mg/Kg	☼	09/21/13 09:03	09/23/13 13:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	137		47 - 176	09/21/13 09:03	09/23/13 13:26	1
Tetrachloro-m-xylene	112		46 - 175	09/21/13 09:03	09/23/13 13:26	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		18	6.5	ug/Kg	☼	09/23/13 15:11	09/25/13 14:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	101		39 - 120	09/23/13 15:11	09/25/13 14:06	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.5**	**J**	2.2	0.44	mg/Kg	☼	09/21/13 10:30	09/23/13 21:19	1
Barium	**10.9**		0.55	0.12	mg/Kg	☼	09/21/13 10:30	09/23/13 21:19	1
Beryllium	**0.17**	**J**	0.22	0.031	mg/Kg	☼	09/21/13 10:30	09/23/13 21:19	1
Cadmium	**0.061**	**J**	0.22	0.033	mg/Kg	☼	09/21/13 10:30	09/23/13 21:19	1
Chromium	**7.3**		0.55	0.22	mg/Kg	☼	09/21/13 10:30	09/23/13 21:19	1
Copper	**153**		1.1	0.23	mg/Kg	☼	09/21/13 10:30	09/23/13 21:19	1
Lead	**2.9**		1.1	0.26	mg/Kg	☼	09/21/13 10:30	09/23/13 21:19	1
Manganese	**167**		0.22	0.035	mg/Kg	☼	09/21/13 10:30	09/23/13 21:19	1
Nickel	**19.3**		5.5	0.25	mg/Kg	☼	09/21/13 10:30	09/23/13 21:19	1
Selenium	ND		4.4	0.44	mg/Kg	☼	09/21/13 10:30	09/23/13 21:19	1
Silver	ND		0.55	0.22	mg/Kg	☼	09/21/13 10:30	09/23/13 21:19	1
Zinc	**40.3**	**B**	2.2	0.17	mg/Kg	☼	09/21/13 10:30	09/23/13 21:19	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.022	0.0087	mg/Kg	☼	09/23/13 07:50	09/23/13 11:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.89	0.30	mg/Kg	☼	09/24/13 23:20	09/25/13 13:11	1
Cyanide, Total	ND		1.1	0.54	mg/Kg	☼	09/24/13 04:43	09/24/13 13:30	1
Cr (III)	**7.3**		1.5	0.63	mg/Kg			09/26/13 13:16	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-COMP-8
Date Collected: 09/19/13 14:40
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-32
Matrix: Solid
Percent Solids: 97.6

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 07:09	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	09/24/13 06:47	09/25/13 07:09	1
Anthracene	ND		170	4.3	ug/Kg	☼	09/24/13 06:47	09/25/13 07:09	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg	☼	09/24/13 06:47	09/25/13 07:09	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	09/24/13 06:47	09/25/13 07:09	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	09/24/13 06:47	09/25/13 07:09	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 07:09	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	09/24/13 06:47	09/25/13 07:09	1
Chrysene	ND		170	1.7	ug/Kg	☼	09/24/13 06:47	09/25/13 07:09	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 07:09	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	09/24/13 06:47	09/25/13 07:09	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	09/24/13 06:47	09/25/13 07:09	1
Fluorene	ND		170	3.9	ug/Kg	☼	09/24/13 06:47	09/25/13 07:09	1
Hexachlorobenzene	ND		170	8.4	ug/Kg	☼	09/24/13 06:47	09/25/13 07:09	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg	☼	09/24/13 06:47	09/25/13 07:09	1
m & p - Cresol	ND		330	9.4	ug/Kg	☼	09/24/13 06:47	09/25/13 07:09	1
Naphthalene	ND		170	2.8	ug/Kg	☼	09/24/13 06:47	09/25/13 07:09	1
o-Cresol	ND		170	5.2	ug/Kg	☼	09/24/13 06:47	09/25/13 07:09	1
Pentachlorophenol	ND		330	58	ug/Kg	☼	09/24/13 06:47	09/25/13 07:09	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	09/24/13 06:47	09/25/13 07:09	1
Phenol	ND		170	18	ug/Kg	☼	09/24/13 06:47	09/25/13 07:09	1
Pyrene	ND		170	1.1	ug/Kg	☼	09/24/13 06:47	09/25/13 07:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*101*		*39 - 146*	*09/24/13 06:47*	*09/25/13 07:09*	*1*
2-Fluorobiphenyl	*98*		*37 - 120*	*09/24/13 06:47*	*09/25/13 07:09*	*1*
2-Fluorophenol	*88*		*18 - 120*	*09/24/13 06:47*	*09/25/13 07:09*	*1*
Nitrobenzene-d5	*95*		*34 - 132*	*09/24/13 06:47*	*09/25/13 07:09*	*1*
Phenol-d5	*95*		*11 - 120*	*09/24/13 06:47*	*09/25/13 07:09*	*1*
p-Terphenyl-d14	*115*		*65 - 153*	*09/24/13 06:47*	*09/25/13 07:09*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	09/24/13 06:37	09/25/13 15:49	1
4,4'-DDE	ND		1.7	0.26	ug/Kg	☼	09/24/13 06:37	09/25/13 15:49	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	09/24/13 06:37	09/25/13 15:49	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	09/24/13 06:37	09/25/13 15:49	1
alpha-BHC	ND		1.7	0.31	ug/Kg	☼	09/24/13 06:37	09/25/13 15:49	1
alpha-Chlordane	ND		1.7	0.85	ug/Kg	☼	09/24/13 06:37	09/25/13 15:49	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	09/24/13 06:37	09/25/13 15:49	1
delta-BHC	ND		1.7	0.22	ug/Kg	☼	09/24/13 06:37	09/25/13 15:49	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	09/24/13 06:37	09/25/13 15:49	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	09/24/13 06:37	09/25/13 15:49	1
Endosulfan II	ND		1.7	0.31	ug/Kg	☼	09/24/13 06:37	09/25/13 15:49	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	09/24/13 06:37	09/25/13 15:49	1
Endrin	ND		1.7	0.24	ug/Kg	☼	09/24/13 06:37	09/25/13 15:49	1
Heptachlor	ND		1.7	0.27	ug/Kg	☼	09/24/13 06:37	09/25/13 15:49	1
Lindane	ND		1.7	0.21	ug/Kg	☼	09/24/13 06:37	09/25/13 15:49	1

Client Sample ID: HOHAOC2-C-COMP-8
Date Collected: 09/19/13 14:40
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-32
Matrix: Solid
Percent Solids: 97.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	83		32 - 136	09/24/13 06:37	09/25/13 15:49	1
Tetrachloro-m-xylene	75		30 - 124	09/24/13 06:37	09/25/13 15:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.20	0.040	mg/Kg	☼	09/21/13 09:03	09/23/13 13:41	1
PCB-1221	ND		0.20	0.040	mg/Kg	☼	09/21/13 09:03	09/23/13 13:41	1
PCB-1232	ND		0.20	0.040	mg/Kg	☼	09/21/13 09:03	09/23/13 13:41	1
PCB-1242	ND		0.20	0.040	mg/Kg	☼	09/21/13 09:03	09/23/13 13:41	1
PCB-1248	ND		0.20	0.040	mg/Kg	☼	09/21/13 09:03	09/23/13 13:41	1
PCB-1254	ND		0.20	0.095	mg/Kg	☼	09/21/13 09:03	09/23/13 13:41	1
PCB-1260	ND		0.20	0.095	mg/Kg	☼	09/21/13 09:03	09/23/13 13:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	138		47 - 176	09/21/13 09:03	09/23/13 13:41	1
Tetrachloro-m-xylene	113		46 - 175	09/21/13 09:03	09/23/13 13:41	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.1	ug/Kg	☼	09/23/13 15:11	09/25/13 14:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	79		39 - 120	09/23/13 15:11	09/25/13 14:36	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.2**	**J**	2.0	0.40	mg/Kg	☼	09/21/13 10:30	09/23/13 21:22	1
Barium	**8.3**		0.50	0.11	mg/Kg	☼	09/21/13 10:30	09/23/13 21:22	1
Beryllium	**0.14**	**J**	0.20	0.028	mg/Kg	☼	09/21/13 10:30	09/23/13 21:22	1
Cadmium	**0.065**	**J**	0.20	0.030	mg/Kg	☼	09/21/13 10:30	09/23/13 21:22	1
Chromium	**4.2**		0.50	0.20	mg/Kg	☼	09/21/13 10:30	09/23/13 21:22	1
Copper	**128**		0.99	0.21	mg/Kg	☼	09/21/13 10:30	09/23/13 21:22	1
Lead	**2.3**		0.99	0.24	mg/Kg	☼	09/21/13 10:30	09/23/13 21:22	1
Manganese	**118**		0.20	0.032	mg/Kg	☼	09/21/13 10:30	09/23/13 21:22	1
Nickel	**16.7**		5.0	0.23	mg/Kg	☼	09/21/13 10:30	09/23/13 21:22	1
Selenium	ND		4.0	0.40	mg/Kg	☼	09/21/13 10:30	09/23/13 21:22	1
Silver	ND		0.50	0.20	mg/Kg	☼	09/21/13 10:30	09/23/13 21:22	1
Zinc	**35.0**	**B**	2.0	0.15	mg/Kg	☼	09/21/13 10:30	09/23/13 21:22	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0076	mg/Kg	☼	09/23/13 07:50	09/23/13 11:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.82	0.28	mg/Kg	☼	09/24/13 23:20	09/25/13 13:11	1
Cyanide, Total	ND		1.0	0.49	mg/Kg	☼	09/24/13 04:43	09/24/13 13:31	1
Cr (III)	**4.2**		1.5	0.63	mg/Kg			09/26/13 13:16	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-COMP-9
Date Collected: 09/19/13 14:50
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-33
Matrix: Solid
Percent Solids: 95.4

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		180	2.1	ug/Kg	☼	09/24/13 06:47	09/25/13 07:34	1
Acenaphthylene	ND		180	1.4	ug/Kg	☼	09/24/13 06:47	09/25/13 07:34	1
Anthracene	ND		180	4.5	ug/Kg	☼	09/24/13 06:47	09/25/13 07:34	1
Benzo(a)anthracene	ND		180	3.0	ug/Kg	☼	09/24/13 06:47	09/25/13 07:34	1
Benzo(a)pyrene	ND		180	4.2	ug/Kg	☼	09/24/13 06:47	09/25/13 07:34	1
Benzo(b)fluoranthene	ND		180	3.4	ug/Kg	☼	09/24/13 06:47	09/25/13 07:34	1
Benzo(g,h,i)perylene	ND		180	2.1	ug/Kg	☼	09/24/13 06:47	09/25/13 07:34	1
Benzo(k)fluoranthene	ND		180	1.9	ug/Kg	☼	09/24/13 06:47	09/25/13 07:34	1
Chrysene	ND		180	1.8	ug/Kg	☼	09/24/13 06:47	09/25/13 07:34	1
Dibenz(a,h)anthracene	ND		180	2.1	ug/Kg	☼	09/24/13 06:47	09/25/13 07:34	1
Dibenzofuran	ND		180	1.8	ug/Kg	☼	09/24/13 06:47	09/25/13 07:34	1
Fluoranthene	ND		180	2.5	ug/Kg	☼	09/24/13 06:47	09/25/13 07:34	1
Fluorene	ND		180	4.1	ug/Kg	☼	09/24/13 06:47	09/25/13 07:34	1
Hexachlorobenzene	ND		180	8.7	ug/Kg	☼	09/24/13 06:47	09/25/13 07:34	1
Indeno(1,2,3-cd)pyrene	ND		180	4.9	ug/Kg	☼	09/24/13 06:47	09/25/13 07:34	1
m & p - Cresol	ND		340	9.8	ug/Kg	☼	09/24/13 06:47	09/25/13 07:34	1
Naphthalene	ND		180	2.9	ug/Kg	☼	09/24/13 06:47	09/25/13 07:34	1
o-Cresol	ND		180	5.4	ug/Kg	☼	09/24/13 06:47	09/25/13 07:34	1
Pentachlorophenol	ND		340	60	ug/Kg	☼	09/24/13 06:47	09/25/13 07:34	1
Phenanthrene	ND		180	3.7	ug/Kg	☼	09/24/13 06:47	09/25/13 07:34	1
Phenol	ND		180	19	ug/Kg	☼	09/24/13 06:47	09/25/13 07:34	1
Pyrene	ND		180	1.1	ug/Kg	☼	09/24/13 06:47	09/25/13 07:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*107*		*39 - 146*	*09/24/13 06:47*	*09/25/13 07:34*	*1*
2-Fluorobiphenyl	*96*		*37 - 120*	*09/24/13 06:47*	*09/25/13 07:34*	*1*
2-Fluorophenol	*81*		*18 - 120*	*09/24/13 06:47*	*09/25/13 07:34*	*1*
Nitrobenzene-d5	*91*		*34 - 132*	*09/24/13 06:47*	*09/25/13 07:34*	*1*
Phenol-d5	*91*		*11 - 120*	*09/24/13 06:47*	*09/25/13 07:34*	*1*
p-Terphenyl-d14	*115*		*65 - 153*	*09/24/13 06:47*	*09/25/13 07:34*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.34	ug/Kg	☼	09/24/13 06:37	09/25/13 16:07	1
4,4'-DDE	ND		1.7	0.26	ug/Kg	☼	09/24/13 06:37	09/25/13 16:07	1
4,4'-DDT	ND		1.7	0.18	ug/Kg	☼	09/24/13 06:37	09/25/13 16:07	1
Aldrin	ND		1.7	0.43	ug/Kg	☼	09/24/13 06:37	09/25/13 16:07	1
alpha-BHC	ND		1.7	0.31	ug/Kg	☼	09/24/13 06:37	09/25/13 16:07	1
alpha-Chlordane	ND		1.7	0.86	ug/Kg	☼	09/24/13 06:37	09/25/13 16:07	1
beta-BHC	ND		1.7	0.19	ug/Kg	☼	09/24/13 06:37	09/25/13 16:07	1
delta-BHC	ND		1.7	0.23	ug/Kg	☼	09/24/13 06:37	09/25/13 16:07	1
Dieldrin	ND		1.7	0.42	ug/Kg	☼	09/24/13 06:37	09/25/13 16:07	1
Endosulfan I	ND		1.7	0.22	ug/Kg	☼	09/24/13 06:37	09/25/13 16:07	1
Endosulfan II	ND		1.7	0.31	ug/Kg	☼	09/24/13 06:37	09/25/13 16:07	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	09/24/13 06:37	09/25/13 16:07	1
Endrin	ND		1.7	0.24	ug/Kg	☼	09/24/13 06:37	09/25/13 16:07	1
Heptachlor	ND		1.7	0.27	ug/Kg	☼	09/24/13 06:37	09/25/13 16:07	1
Lindane	ND		1.7	0.21	ug/Kg	☼	09/24/13 06:37	09/25/13 16:07	1

Client Sample ID: HOHAOC2-C-COMP-9
Date Collected: 09/19/13 14:50
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-33
Matrix: Solid
Percent Solids: 95.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	85		32 - 136	09/24/13 06:37	09/25/13 16:07	1
Tetrachloro-m-xylene	83		30 - 124	09/24/13 06:37	09/25/13 16:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.21	0.041	mg/Kg	☼	09/21/13 09:03	09/23/13 13:56	1
PCB-1221	ND		0.21	0.041	mg/Kg	☼	09/21/13 09:03	09/23/13 13:56	1
PCB-1232	ND		0.21	0.041	mg/Kg	☼	09/21/13 09:03	09/23/13 13:56	1
PCB-1242	ND		0.21	0.041	mg/Kg	☼	09/21/13 09:03	09/23/13 13:56	1
PCB-1248	ND		0.21	0.041	mg/Kg	☼	09/21/13 09:03	09/23/13 13:56	1
PCB-1254	ND		0.21	0.098	mg/Kg	☼	09/21/13 09:03	09/23/13 13:56	1
PCB-1260	ND		0.21	0.098	mg/Kg	☼	09/21/13 09:03	09/23/13 13:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	136		47 - 176	09/21/13 09:03	09/23/13 13:56	1
Tetrachloro-m-xylene	111		46 - 175	09/21/13 09:03	09/23/13 13:56	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.2	ug/Kg	☼	09/23/13 15:11	09/25/13 15:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	99		39 - 120	09/23/13 15:11	09/25/13 15:06	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.2	J	2.2	0.45	mg/Kg	☼	09/21/13 10:30	09/23/13 21:24	1
Barium	10.6		0.56	0.12	mg/Kg	☼	09/21/13 10:30	09/23/13 21:24	1
Beryllium	0.14	J	0.22	0.031	mg/Kg	☼	09/21/13 10:30	09/23/13 21:24	1
Cadmium	0.068	J	0.22	0.033	mg/Kg	☼	09/21/13 10:30	09/23/13 21:24	1
Chromium	5.1		0.56	0.22	mg/Kg	☼	09/21/13 10:30	09/23/13 21:24	1
Copper	144		1.1	0.23	mg/Kg	☼	09/21/13 10:30	09/23/13 21:24	1
Lead	3.4		1.1	0.27	mg/Kg	☼	09/21/13 10:30	09/23/13 21:24	1
Manganese	128		0.22	0.036	mg/Kg	☼	09/21/13 10:30	09/23/13 21:24	1
Nickel	17.2		5.6	0.26	mg/Kg	☼	09/21/13 10:30	09/23/13 21:24	1
Selenium	ND		4.5	0.45	mg/Kg	☼	09/21/13 10:30	09/23/13 21:24	1
Silver	ND		0.56	0.22	mg/Kg	☼	09/21/13 10:30	09/23/13 21:24	1
Zinc	42.2	B	2.2	0.17	mg/Kg	☼	09/21/13 10:30	09/23/13 21:24	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.0086	mg/Kg	☼	09/23/13 07:50	09/23/13 12:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.84	0.28	mg/Kg	☼	09/24/13 23:20	09/25/13 13:21	1
Cyanide, Total	6.8		1.0	0.51	mg/Kg	☼	09/24/13 04:43	09/24/13 13:32	1
Cr (III)	5.1		1.5	0.63	mg/Kg			09/26/13 13:16	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-COMP-10
Date Collected: 09/19/13 16:00
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-34
Matrix: Solid
Percent Solids: 97.0

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 07:59	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	09/24/13 06:47	09/25/13 07:59	1
Anthracene	ND		170	4.4	ug/Kg	☼	09/24/13 06:47	09/25/13 07:59	1
Benzo(a)anthracene	ND		170	3.0	ug/Kg	☼	09/24/13 06:47	09/25/13 07:59	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	09/24/13 06:47	09/25/13 07:59	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	09/24/13 06:47	09/25/13 07:59	1
Benzo(g,h,i)perylene	ND		170	2.1	ug/Kg	☼	09/24/13 06:47	09/25/13 07:59	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	09/24/13 06:47	09/25/13 07:59	1
Chrysene	ND		170	1.7	ug/Kg	☼	09/24/13 06:47	09/25/13 07:59	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 07:59	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	09/24/13 06:47	09/25/13 07:59	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	09/24/13 06:47	09/25/13 07:59	1
Fluorene	ND		170	4.0	ug/Kg	☼	09/24/13 06:47	09/25/13 07:59	1
Hexachlorobenzene	ND		170	8.5	ug/Kg	☼	09/24/13 06:47	09/25/13 07:59	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg	☼	09/24/13 06:47	09/25/13 07:59	1
m & p - Cresol	ND		340	9.6	ug/Kg	☼	09/24/13 06:47	09/25/13 07:59	1
Naphthalene	ND		170	2.9	ug/Kg	☼	09/24/13 06:47	09/25/13 07:59	1
o-Cresol	ND		170	5.3	ug/Kg	☼	09/24/13 06:47	09/25/13 07:59	1
Pentachlorophenol	ND		340	59	ug/Kg	☼	09/24/13 06:47	09/25/13 07:59	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	09/24/13 06:47	09/25/13 07:59	1
Phenol	ND		170	18	ug/Kg	☼	09/24/13 06:47	09/25/13 07:59	1
Pyrene	ND		170	1.1	ug/Kg	☼	09/24/13 06:47	09/25/13 07:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*97*		*39 - 146*	*09/24/13 06:47*	*09/25/13 07:59*	*1*
2-Fluorobiphenyl	*97*		*37 - 120*	*09/24/13 06:47*	*09/25/13 07:59*	*1*
2-Fluorophenol	*85*		*18 - 120*	*09/24/13 06:47*	*09/25/13 07:59*	*1*
Nitrobenzene-d5	*89*		*34 - 132*	*09/24/13 06:47*	*09/25/13 07:59*	*1*
Phenol-d5	*93*		*11 - 120*	*09/24/13 06:47*	*09/25/13 07:59*	*1*
p-Terphenyl-d14	*113*		*65 - 153*	*09/24/13 06:47*	*09/25/13 07:59*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	09/24/13 06:37	09/25/13 16:25	1
4,4'-DDE	ND		1.7	0.26	ug/Kg	☼	09/24/13 06:37	09/25/13 16:25	1
4,4'-DDT	**0.63**	**J**	1.7	0.17	ug/Kg	☼	09/24/13 06:37	09/25/13 16:25	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	09/24/13 06:37	09/25/13 16:25	1
alpha-BHC	ND		1.7	0.31	ug/Kg	☼	09/24/13 06:37	09/25/13 16:25	1
alpha-Chlordane	ND		1.7	0.85	ug/Kg	☼	09/24/13 06:37	09/25/13 16:25	1
beta-BHC	ND		1.7	0.19	ug/Kg	☼	09/24/13 06:37	09/25/13 16:25	1
delta-BHC	ND		1.7	0.23	ug/Kg	☼	09/24/13 06:37	09/25/13 16:25	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	09/24/13 06:37	09/25/13 16:25	1
Endosulfan I	ND		1.7	0.22	ug/Kg	☼	09/24/13 06:37	09/25/13 16:25	1
Endosulfan II	ND		1.7	0.31	ug/Kg	☼	09/24/13 06:37	09/25/13 16:25	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	09/24/13 06:37	09/25/13 16:25	1
Endrin	ND		1.7	0.24	ug/Kg	☼	09/24/13 06:37	09/25/13 16:25	1
Heptachlor	ND		1.7	0.27	ug/Kg	☼	09/24/13 06:37	09/25/13 16:25	1
Lindane	ND		1.7	0.21	ug/Kg	☼	09/24/13 06:37	09/25/13 16:25	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-COMP-10
Date Collected: 09/19/13 16:00
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-34
Matrix: Solid
Percent Solids: 97.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	83		32 - 136	09/24/13 06:37	09/25/13 16:25	1
Tetrachloro-m-xylene	74		30 - 124	09/24/13 06:37	09/25/13 16:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.24	0.046	mg/Kg	☼	09/21/13 09:03	09/23/13 14:11	1
PCB-1221	ND		0.24	0.046	mg/Kg	☼	09/21/13 09:03	09/23/13 14:11	1
PCB-1232	ND		0.24	0.046	mg/Kg	☼	09/21/13 09:03	09/23/13 14:11	1
PCB-1242	ND		0.24	0.046	mg/Kg	☼	09/21/13 09:03	09/23/13 14:11	1
PCB-1248	ND		0.24	0.046	mg/Kg	☼	09/21/13 09:03	09/23/13 14:11	1
PCB-1254	ND		0.24	0.11	mg/Kg	☼	09/21/13 09:03	09/23/13 14:11	1
PCB-1260	ND		0.24	0.11	mg/Kg	☼	09/21/13 09:03	09/23/13 14:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	137		47 - 176	09/21/13 09:03	09/23/13 14:11	1
Tetrachloro-m-xylene	112		46 - 175	09/21/13 09:03	09/23/13 14:11	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.1	ug/Kg	☼	09/23/13 15:11	09/25/13 15:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	94		39 - 120	09/23/13 15:11	09/25/13 15:35	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.2**	**J**	2.2	0.45	mg/Kg	☼	09/21/13 10:30	09/23/13 21:26	1
Barium	**11.0**		0.56	0.12	mg/Kg	☼	09/21/13 10:30	09/23/13 21:26	1
Beryllium	**0.12**	**J**	0.22	0.031	mg/Kg	☼	09/21/13 10:30	09/23/13 21:26	1
Cadmium	**0.045**	**J**	0.22	0.034	mg/Kg	☼	09/21/13 10:30	09/23/13 21:26	1
Chromium	**5.8**		0.56	0.22	mg/Kg	☼	09/21/13 10:30	09/23/13 21:26	1
Copper	**136**		1.1	0.24	mg/Kg	☼	09/21/13 10:30	09/23/13 21:26	1
Lead	**2.3**		1.1	0.27	mg/Kg	☼	09/21/13 10:30	09/23/13 21:26	1
Manganese	**124**		0.22	0.036	mg/Kg	☼	09/21/13 10:30	09/23/13 21:26	1
Nickel	**16.6**		5.6	0.26	mg/Kg	☼	09/21/13 10:30	09/23/13 21:26	1
Selenium	ND		4.5	0.45	mg/Kg	☼	09/21/13 10:30	09/23/13 21:26	1
Silver	ND		0.56	0.22	mg/Kg	☼	09/21/13 10:30	09/23/13 21:26	1
Zinc	**33.4**	**B**	2.2	0.17	mg/Kg	☼	09/21/13 10:30	09/23/13 21:26	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0082	mg/Kg	☼	09/23/13 07:50	09/23/13 12:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.83	0.28	mg/Kg	☼	09/24/13 23:20	09/25/13 13:21	1
Cyanide, Total	ND		1.0	0.50	mg/Kg	☼	09/24/13 04:43	09/24/13 13:33	1
Cr (III)	**5.8**		1.5	0.63	mg/Kg			09/26/13 13:16	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-COMP-11
Date Collected: 09/19/13 16:10
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-35
Matrix: Solid
Percent Solids: 95.7

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		180	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 08:24	1
Acenaphthylene	ND		180	1.4	ug/Kg	☼	09/24/13 06:47	09/25/13 08:24	1
Anthracene	ND		180	4.5	ug/Kg	☼	09/24/13 06:47	09/25/13 08:24	1
Benzo(a)anthracene	ND		180	3.0	ug/Kg	☼	09/24/13 06:47	09/25/13 08:24	1
Benzo(a)pyrene	ND		180	4.2	ug/Kg	☼	09/24/13 06:47	09/25/13 08:24	1
Benzo(b)fluoranthene	ND		180	3.4	ug/Kg	☼	09/24/13 06:47	09/25/13 08:24	1
Benzo(g,h,i)perylene	ND		180	2.1	ug/Kg	☼	09/24/13 06:47	09/25/13 08:24	1
Benzo(k)fluoranthene	ND		180	1.9	ug/Kg	☼	09/24/13 06:47	09/25/13 08:24	1
Chrysene	ND		180	1.7	ug/Kg	☼	09/24/13 06:47	09/25/13 08:24	1
Dibenz(a,h)anthracene	ND		180	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 08:24	1
Dibenzofuran	ND		180	1.8	ug/Kg	☼	09/24/13 06:47	09/25/13 08:24	1
Fluoranthene	ND		180	2.5	ug/Kg	☼	09/24/13 06:47	09/25/13 08:24	1
Fluorene	ND		180	4.0	ug/Kg	☼	09/24/13 06:47	09/25/13 08:24	1
Hexachlorobenzene	ND		180	8.7	ug/Kg	☼	09/24/13 06:47	09/25/13 08:24	1
Indeno(1,2,3-cd)pyrene	ND		180	4.8	ug/Kg	☼	09/24/13 06:47	09/25/13 08:24	1
m & p - Cresol	ND		340	9.7	ug/Kg	☼	09/24/13 06:47	09/25/13 08:24	1
Naphthalene	ND		180	2.9	ug/Kg	☼	09/24/13 06:47	09/25/13 08:24	1
o-Cresol	ND		180	5.4	ug/Kg	☼	09/24/13 06:47	09/25/13 08:24	1
Pentachlorophenol	ND		340	60	ug/Kg	☼	09/24/13 06:47	09/25/13 08:24	1
Phenanthrene	ND		180	3.7	ug/Kg	☼	09/24/13 06:47	09/25/13 08:24	1
Phenol	ND		180	18	ug/Kg	☼	09/24/13 06:47	09/25/13 08:24	1
Pyrene	ND		180	1.1	ug/Kg	☼	09/24/13 06:47	09/25/13 08:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*101*		*39 - 146*	*09/24/13 06:47*	*09/25/13 08:24*	*1*
2-Fluorobiphenyl	*94*		*37 - 120*	*09/24/13 06:47*	*09/25/13 08:24*	*1*
2-Fluorophenol	*79*		*18 - 120*	*09/24/13 06:47*	*09/25/13 08:24*	*1*
Nitrobenzene-d5	*89*		*34 - 132*	*09/24/13 06:47*	*09/25/13 08:24*	*1*
Phenol-d5	*89*		*11 - 120*	*09/24/13 06:47*	*09/25/13 08:24*	*1*
p-Terphenyl-d14	*115*		*65 - 153*	*09/24/13 06:47*	*09/25/13 08:24*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	09/24/13 06:37	09/25/13 17:18	1
4,4'-DDE	ND		1.7	0.25	ug/Kg	☼	09/24/13 06:37	09/25/13 17:18	1
4,4'-DDT	ND		1.7	0.17	ug/Kg	☼	09/24/13 06:37	09/25/13 17:18	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	09/24/13 06:37	09/25/13 17:18	1
alpha-BHC	ND		1.7	0.31	ug/Kg	☼	09/24/13 06:37	09/25/13 17:18	1
alpha-Chlordane	ND		1.7	0.85	ug/Kg	☼	09/24/13 06:37	09/25/13 17:18	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	09/24/13 06:37	09/25/13 17:18	1
delta-BHC	ND		1.7	0.22	ug/Kg	☼	09/24/13 06:37	09/25/13 17:18	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	09/24/13 06:37	09/25/13 17:18	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	09/24/13 06:37	09/25/13 17:18	1
Endosulfan II	ND		1.7	0.31	ug/Kg	☼	09/24/13 06:37	09/25/13 17:18	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	09/24/13 06:37	09/25/13 17:18	1
Endrin	ND		1.7	0.23	ug/Kg	☼	09/24/13 06:37	09/25/13 17:18	1
Heptachlor	ND		1.7	0.27	ug/Kg	☼	09/24/13 06:37	09/25/13 17:18	1
Lindane	ND		1.7	0.21	ug/Kg	☼	09/24/13 06:37	09/25/13 17:18	1

Client Sample ID: HOHAOC2-C-COMP-11

Date Collected: 09/19/13 16:10
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-35

Matrix: Solid
Percent Solids: 95.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	86		32 - 136	09/24/13 06:37	09/25/13 17:18	1
Tetrachloro-m-xylene	81		30 - 124	09/24/13 06:37	09/25/13 17:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.22	0.043	mg/Kg	☼	09/21/13 09:03	09/23/13 14:25	1
PCB-1221	ND		0.22	0.043	mg/Kg	☼	09/21/13 09:03	09/23/13 14:25	1
PCB-1232	ND		0.22	0.043	mg/Kg	☼	09/21/13 09:03	09/23/13 14:25	1
PCB-1242	ND		0.22	0.043	mg/Kg	☼	09/21/13 09:03	09/23/13 14:25	1
PCB-1248	ND		0.22	0.043	mg/Kg	☼	09/21/13 09:03	09/23/13 14:25	1
PCB-1254	ND		0.22	0.10	mg/Kg	☼	09/21/13 09:03	09/23/13 14:25	1
PCB-1260	ND		0.22	0.10	mg/Kg	☼	09/21/13 09:03	09/23/13 14:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	138		47 - 176	09/21/13 09:03	09/23/13 14:25	1
Tetrachloro-m-xylene	113		46 - 175	09/21/13 09:03	09/23/13 14:25	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.2	ug/Kg	☼	09/23/13 15:11	09/25/13 16:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	90		39 - 120	09/23/13 15:11	09/25/13 16:35	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.2**	**J**	2.0	0.40	mg/Kg	☼	09/21/13 10:30	09/23/13 21:29	1
Barium	**8.2**		0.50	0.11	mg/Kg	☼	09/21/13 10:30	09/23/13 21:29	1
Beryllium	**0.14**	**J**	0.20	0.028	mg/Kg	☼	09/21/13 10:30	09/23/13 21:29	1
Cadmium	**0.055**	**J**	0.20	0.030	mg/Kg	☼	09/21/13 10:30	09/23/13 21:29	1
Chromium	**3.0**		0.50	0.20	mg/Kg	☼	09/21/13 10:30	09/23/13 21:29	1
Copper	**136**		1.0	0.21	mg/Kg	☼	09/21/13 10:30	09/23/13 21:29	1
Lead	**4.7**		1.0	0.24	mg/Kg	☼	09/21/13 10:30	09/23/13 21:29	1
Manganese	**143**		0.20	0.032	mg/Kg	☼	09/21/13 10:30	09/23/13 21:29	1
Nickel	**17.7**		5.0	0.23	mg/Kg	☼	09/21/13 10:30	09/23/13 21:29	1
Selenium	ND		4.0	0.40	mg/Kg	☼	09/21/13 10:30	09/23/13 21:29	1
Silver	ND		0.50	0.20	mg/Kg	☼	09/21/13 10:30	09/23/13 21:29	1
Zinc	**47.3**	**B**	2.0	0.15	mg/Kg	☼	09/21/13 10:30	09/23/13 21:29	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.0085	mg/Kg	☼	09/23/13 07:50	09/23/13 12:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	**0.31**	**J B**	0.84	0.28	mg/Kg	☼	09/24/13 23:20	09/25/13 13:28	1
Cyanide, Total	ND		1.0	0.50	mg/Kg	☼	09/24/13 04:43	09/24/13 13:34	1
Cr (III)	**2.7**		1.5	0.63	mg/Kg			09/26/13 13:16	1

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-COMP-12
Date Collected: 09/19/13 16:20
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-36
Matrix: Solid
Percent Solids: 96.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 08:48	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	09/24/13 06:47	09/25/13 08:48	1
Anthracene	ND		170	4.4	ug/Kg	☼	09/24/13 06:47	09/25/13 08:48	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg	☼	09/24/13 06:47	09/25/13 08:48	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg	☼	09/24/13 06:47	09/25/13 08:48	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg	☼	09/24/13 06:47	09/25/13 08:48	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 08:48	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg	☼	09/24/13 06:47	09/25/13 08:48	1
Chrysene	ND		170	1.7	ug/Kg	☼	09/24/13 06:47	09/25/13 08:48	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	09/24/13 06:47	09/25/13 08:48	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	09/24/13 06:47	09/25/13 08:48	1
Fluoranthene	ND		170	2.5	ug/Kg	☼	09/24/13 06:47	09/25/13 08:48	1
Fluorene	ND		170	3.9	ug/Kg	☼	09/24/13 06:47	09/25/13 08:48	1
Hexachlorobenzene	ND		170	8.5	ug/Kg	☼	09/24/13 06:47	09/25/13 08:48	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg	☼	09/24/13 06:47	09/25/13 08:48	1
m & p - Cresol	ND		330	9.5	ug/Kg	☼	09/24/13 06:47	09/25/13 08:48	1
Naphthalene	ND		170	2.8	ug/Kg	☼	09/24/13 06:47	09/25/13 08:48	1
o-Cresol	ND		170	5.2	ug/Kg	☼	09/24/13 06:47	09/25/13 08:48	1
Pentachlorophenol	ND		330	58	ug/Kg	☼	09/24/13 06:47	09/25/13 08:48	1
Phenanthrene	ND		170	3.6	ug/Kg	☼	09/24/13 06:47	09/25/13 08:48	1
Phenol	ND		170	18	ug/Kg	☼	09/24/13 06:47	09/25/13 08:48	1
Pyrene	ND		170	1.1	ug/Kg	☼	09/24/13 06:47	09/25/13 08:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*95*		*39 - 146*	*09/24/13 06:47*	*09/25/13 08:48*	*1*
2-Fluorobiphenyl	*92*		*37 - 120*	*09/24/13 06:47*	*09/25/13 08:48*	*1*
2-Fluorophenol	*78*		*18 - 120*	*09/24/13 06:47*	*09/25/13 08:48*	*1*
Nitrobenzene-d5	*84*		*34 - 132*	*09/24/13 06:47*	*09/25/13 08:48*	*1*
Phenol-d5	*87*		*11 - 120*	*09/24/13 06:47*	*09/25/13 08:48*	*1*
p-Terphenyl-d14	*110*		*65 - 153*	*09/24/13 06:47*	*09/25/13 08:48*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	09/24/13 06:37	09/25/13 17:36	1
4,4'-DDE	ND		1.7	0.25	ug/Kg	☼	09/24/13 06:37	09/25/13 17:36	1
4,4'-DDT	**0.61**	**J**	1.7	0.17	ug/Kg	☼	09/24/13 06:37	09/25/13 17:36	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	09/24/13 06:37	09/25/13 17:36	1
alpha-BHC	ND		1.7	0.30	ug/Kg	☼	09/24/13 06:37	09/25/13 17:36	1
alpha-Chlordane	ND		1.7	0.84	ug/Kg	☼	09/24/13 06:37	09/25/13 17:36	1
beta-BHC	ND		1.7	0.18	ug/Kg	☼	09/24/13 06:37	09/25/13 17:36	1
delta-BHC	ND		1.7	0.22	ug/Kg	☼	09/24/13 06:37	09/25/13 17:36	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	09/24/13 06:37	09/25/13 17:36	1
Endosulfan I	ND		1.7	0.21	ug/Kg	☼	09/24/13 06:37	09/25/13 17:36	1
Endosulfan II	ND		1.7	0.30	ug/Kg	☼	09/24/13 06:37	09/25/13 17:36	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	09/24/13 06:37	09/25/13 17:36	1
Endrin	ND		1.7	0.23	ug/Kg	☼	09/24/13 06:37	09/25/13 17:36	1
Heptachlor	ND		1.7	0.26	ug/Kg	☼	09/24/13 06:37	09/25/13 17:36	1
Lindane	ND		1.7	0.21	ug/Kg	☼	09/24/13 06:37	09/25/13 17:36	1

Client Sample ID: HOHAOC2-C-COMP-12
Date Collected: 09/19/13 16:20
Date Received: 09/20/13 09:00

Lab Sample ID: 480-46264-36
Matrix: Solid
Percent Solids: 96.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	85		32 - 136	09/24/13 06:37	09/25/13 17:36	1
Tetrachloro-m-xylene	79		30 - 124	09/24/13 06:37	09/25/13 17:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.21	0.042	mg/Kg	☼	09/21/13 09:03	09/23/13 14:40	1
PCB-1221	ND		0.21	0.042	mg/Kg	☼	09/21/13 09:03	09/23/13 14:40	1
PCB-1232	ND		0.21	0.042	mg/Kg	☼	09/21/13 09:03	09/23/13 14:40	1
PCB-1242	ND		0.21	0.042	mg/Kg	☼	09/21/13 09:03	09/23/13 14:40	1
PCB-1248	ND		0.21	0.042	mg/Kg	☼	09/21/13 09:03	09/23/13 14:40	1
PCB-1254	ND		0.21	0.099	mg/Kg	☼	09/21/13 09:03	09/23/13 14:40	1
PCB-1260	ND		0.21	0.099	mg/Kg	☼	09/21/13 09:03	09/23/13 14:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	139		47 - 176	09/21/13 09:03	09/23/13 14:40	1
Tetrachloro-m-xylene	113		46 - 175	09/21/13 09:03	09/23/13 14:40	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	6.1	ug/Kg	☼	09/23/13 15:11	09/25/13 17:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	89		39 - 120	09/23/13 15:11	09/25/13 17:04	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.4	J	1.8	0.37	mg/Kg	☼	09/21/13 10:30	09/23/13 21:36	1
Barium	8.0		0.46	0.10	mg/Kg	☼	09/21/13 10:30	09/23/13 21:36	1
Beryllium	0.12	J	0.18	0.026	mg/Kg	☼	09/21/13 10:30	09/23/13 21:36	1
Cadmium	0.057	J	0.18	0.028	mg/Kg	☼	09/21/13 10:30	09/23/13 21:36	1
Chromium	4.8		0.46	0.18	mg/Kg	☼	09/21/13 10:30	09/23/13 21:36	1
Copper	131		0.92	0.19	mg/Kg	☼	09/21/13 10:30	09/23/13 21:36	1
Lead	3.0		0.92	0.22	mg/Kg	☼	09/21/13 10:30	09/23/13 21:36	1
Manganese	112		0.18	0.029	mg/Kg	☼	09/21/13 10:30	09/23/13 21:36	1
Nickel	17.7		4.6	0.21	mg/Kg	☼	09/21/13 10:30	09/23/13 21:36	1
Selenium	ND		3.7	0.37	mg/Kg	☼	09/21/13 10:30	09/23/13 21:36	1
Silver	ND		0.46	0.18	mg/Kg	☼	09/21/13 10:30	09/23/13 21:36	1
Zinc	31.8	B	1.8	0.14	mg/Kg	☼	09/21/13 10:30	09/23/13 21:36	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.0084	mg/Kg	☼	09/23/13 07:50	09/23/13 12:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.30	J B	0.83	0.28	mg/Kg	☼	09/24/13 23:20	09/25/13 13:28	1
Cyanide, Total	ND		1.0	0.49	mg/Kg	☼	09/24/13 04:43	09/24/13 13:35	1
Cr (III)	4.5		1.5	0.63	mg/Kg			09/26/13 13:16	1

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		12DCE	BFB	TOL							
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(71-125)							
480-46264-1	HOHAOC2-C-1-GRAB-1	102	107	100							
480-46264-2	HOHAOC2-C-1-GRAB-2	101	106	100							
480-46264-3	HOHAOC2-C-2-GRAB-1	99	105	99							
480-46264-4	HOHAOC2-C-2-GRAB-2	101	104	98							
480-46264-5	HOHAOC2-C-3-GRAB-1	96	104	100							
480-46264-6	HOHAOC2-C-3-GRAB-2	102	105	99							
480-46264-7	HOHAOC2-C-4-GRAB-1	102	106	99							
480-46264-8	HOHAOC2-C-4-GRAB-2	98	104	100							
480-46264-9	HOHAOC2-C-5-GRAB-1	100	106	99							
480-46264-10	HOHAOC2-C-5-GRAB-2	101	106	100							
480-46264-11	HOHAOC2-C-6-GRAB-1	100	105	99							
480-46264-12	HOHAOC2-C-6-GRAB-2	97	106	100							
480-46264-13	HOHAOC2-C-7-GRAB-1	98	106	100							
480-46264-14	HOHAOC2-C-7-GRAB-2	103	108	100							
480-46264-15	HOHAOC2-C-8-GRAB-1	100	106	99							
480-46264-16	HOHAOC2-C-8-GRAB-2	100	107	100							
480-46264-17	HOHAOC2-C-9-GRAB-1	100	106	100							
480-46264-18	HOHAOC2-C-9-GRAB-2	103	105	99							
480-46264-19	HOHAOC2-C-10-GRAB-1	112	108	96							
480-46264-20	HOHAOC2-C-10-GRAB-2	101	106	100							
480-46264-21	HOHAOC2-C-11-GRAB-1	100	105	100							
480-46264-22	HOHAOC2-C-11-GRAB-2	104	106	99							
480-46264-23	HOHAOC2-C-12-GRAB-1	102	108	99							
480-46264-24	HOHAOC2-C-12-GRAB-2	97	107	103							
LCS 480-140517/6	Lab Control Sample	94	108	102							
LCS 480-140655/6	Lab Control Sample	97	107	100							
LCSD 480-140517/28	Lab Control Sample Dup	99	108	100							
MB 480-140517/7	Method Blank	92	104	100							
MB 480-140655/7	Method Blank	97	106	99							

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TBP	FBP	2FP	NBZ	PHL	TPH		
Lab Sample ID	Client Sample ID	(39-146)	(37-120)	(18-120)	(34-132)	(11-120)	(65-153)		
480-46264-25	HOHAOC2-C-COMP-1	106	96	84	90	92	116		
480-46264-26	HOHAOC2-C-COMP-2	103	96	85	93	92	117		
480-46264-27	HOHAOC2-C-COMP-3	108	95	81	85	90	111		
480-46264-28	HOHAOC2-C-COMP-4	106	98	81	87	90	114		
480-46264-29	HOHAOC2-C-COMP-5	106	98	84	90	96	117		
480-46264-30	HOHAOC2-C-COMP-6	102	93	78	84	87	105		
480-46264-31	HOHAOC2-C-COMP-7	102	94	84	89	94	110		
480-46264-32	HOHAOC2-C-COMP-8	101	98	88	95	95	115		

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(39-146)	(37-120)	(18-120)	(34-132)	(11-120)	(65-153)
480-46264-33	HOHAOC2-C-COMP-9	107	96	81	91	91	115
480-46264-34	HOHAOC2-C-COMP-10	97	97	85	89	93	113
480-46264-35	HOHAOC2-C-COMP-11	101	94	79	89	89	115
480-46264-36	HOHAOC2-C-COMP-12	95	92	78	84	87	110
LCS 480-140766/2-A	Lab Control Sample	91	73	61	68	69	83
MB 480-140766/1-A	Method Blank	86	73	67	69	75	89

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPH = p-Terphenyl-d14

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB2	TCX2
Lab Sample ID	Client Sample ID	(32-136)	(30-124)
480-46264-25	HOHAOC2-C-COMP-1	89	78
480-46264-26	HOHAOC2-C-COMP-2	86	76
480-46264-27	HOHAOC2-C-COMP-3	86	84
480-46264-28	HOHAOC2-C-COMP-4	84	84
480-46264-29	HOHAOC2-C-COMP-5	83	77
480-46264-30	HOHAOC2-C-COMP-6	84	77
480-46264-31	HOHAOC2-C-COMP-7	84	77
480-46264-32	HOHAOC2-C-COMP-8	83	75
480-46264-33	HOHAOC2-C-COMP-9	85	83
480-46264-34	HOHAOC2-C-COMP-10	83	74
480-46264-35	HOHAOC2-C-COMP-11	86	81
480-46264-36	HOHAOC2-C-COMP-12	85	79
LCS 480-140764/2-A	Lab Control Sample	88	72
MB 480-140764/1-A	Method Blank	89	65

Surrogate Legend

DCB = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB1	TCX1
Lab Sample ID	Client Sample ID	(47-176)	(46-175)
480-46264-25	HOHAOC2-C-COMP-1	138	113
480-46264-26	HOHAOC2-C-COMP-2	136	112
480-46264-27	HOHAOC2-C-COMP-3	137	109
480-46264-28	HOHAOC2-C-COMP-4	137	113

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	DCB1 (47-176)	TCX1 (46-175)								
480-46264-29	HOHAOC2-C-COMP-5	138	113								
480-46264-30	HOHAOC2-C-COMP-6	137	113								
480-46264-31	HOHAOC2-C-COMP-7	137	112								
480-46264-32	HOHAOC2-C-COMP-8	138	113								
480-46264-33	HOHAOC2-C-COMP-9	136	111								
480-46264-34	HOHAOC2-C-COMP-10	137	112								
480-46264-35	HOHAOC2-C-COMP-11	138	113								
480-46264-36	HOHAOC2-C-COMP-12	139	113								
LCS 480-140465/2-A	Lab Control Sample	151	134								
MB 480-140465/1-A	Method Blank	133	112								

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8151A - Herbicides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	DCPA1 (39-120)									
480-46264-25	HOHAOC2-C-COMP-1	110									
480-46264-26	HOHAOC2-C-COMP-2	77									
480-46264-27	HOHAOC2-C-COMP-3	93									
480-46264-28	HOHAOC2-C-COMP-4	92									
480-46264-29	HOHAOC2-C-COMP-5	94									
480-46264-30	HOHAOC2-C-COMP-6	101									
480-46264-31	HOHAOC2-C-COMP-7	101									
480-46264-32	HOHAOC2-C-COMP-8	79									
480-46264-33	HOHAOC2-C-COMP-9	99									
480-46264-34	HOHAOC2-C-COMP-10	94									
480-46264-35	HOHAOC2-C-COMP-11	90									
480-46264-36	HOHAOC2-C-COMP-12	89									
LCS 480-140689/2-A	Lab Control Sample	107									
MB 480-140689/1-A	Method Blank	90									

Surrogate Legend

DCPA = 2,4-Dichlorophenylacetic acid

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

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

Lab Sample ID: MB 480-140517/7
Matrix: Solid
Analysis Batch: 140517

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			09/22/13 22:59	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			09/22/13 22:59	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			09/22/13 22:59	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			09/22/13 22:59	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			09/22/13 22:59	1
1,2-Dichloroethene, cis-	ND		5.0	0.64	ug/Kg			09/22/13 22:59	1
1,2-Dichloroethene, trans-	ND		5.0	0.52	ug/Kg			09/22/13 22:59	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			09/22/13 22:59	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			09/22/13 22:59	1
1,4-Dioxane	ND		200	24	ug/Kg			09/22/13 22:59	1
Acetone	ND		25	4.2	ug/Kg			09/22/13 22:59	1
Benzene	ND		5.0	0.25	ug/Kg			09/22/13 22:59	1
Butylbenzene	ND		5.0	0.44	ug/Kg			09/22/13 22:59	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			09/22/13 22:59	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			09/22/13 22:59	1
Chloroform	ND		5.0	0.31	ug/Kg			09/22/13 22:59	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			09/22/13 22:59	1
Methyl Ethyl Ketone (2-Butanone)	ND		25	1.8	ug/Kg			09/22/13 22:59	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			09/22/13 22:59	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			09/22/13 22:59	1
Propylbenzene, n-	ND		5.0	0.40	ug/Kg			09/22/13 22:59	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg			09/22/13 22:59	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg			09/22/13 22:59	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			09/22/13 22:59	1
Toluene	ND		5.0	0.38	ug/Kg			09/22/13 22:59	1
Trichloroethene	ND		5.0	1.1	ug/Kg			09/22/13 22:59	1
Trimethylbenzene, 1,2,4-	ND		5.0	0.96	ug/Kg			09/22/13 22:59	1
Trimethylbenzene, 1,3,5-	ND		5.0	0.32	ug/Kg			09/22/13 22:59	1
Vinyl chloride	ND		5.0	0.61	ug/Kg			09/22/13 22:59	1
Xylene (mixed)	ND		10	0.84	ug/Kg			09/22/13 22:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*64 - 126*		*09/22/13 22:59*	*1*
4-Bromofluorobenzene (Surr)	*104*		*72 - 126*		*09/22/13 22:59*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*		*09/22/13 22:59*	*1*

Lab Sample ID: LCS 480-140517/6
Matrix: Solid
Analysis Batch: 140517

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	50.4		ug/Kg		101	73 - 126
1,1-Dichloroethene	50.0	52.1		ug/Kg		104	59 - 125
1,2-Dichlorobenzene	50.0	54.6		ug/Kg		109	75 - 120
1,2-Dichloroethane	50.0	50.7		ug/Kg		101	77 - 122
1,2-Dichloroethene, cis-	50.0	53.1		ug/Kg		106	81 - 117
1,2-Dichloroethene, trans-	50.0	51.9		ug/Kg		104	78 - 126
Benzene	50.0	50.5		ug/Kg		101	79 - 127

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

Lab Sample ID: LCS 480-140517/6
Matrix: Solid
Analysis Batch: 140517

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobenzene	50.0	55.4		ug/Kg		111	76 - 124
Ethylbenzene	50.0	53.8		ug/Kg		108	80 - 120
Methyl tert-butyl ether	50.0	49.4		ug/Kg		99	63 - 125
Tetrachloroethene	50.0	57.4		ug/Kg		115	74 - 122
Toluene	50.0	52.6		ug/Kg		105	74 - 128
Trichloroethene	50.0	52.1		ug/Kg		104	77 - 129
Trimethylbenzene, 1,2,4-	50.0	51.6		ug/Kg		103	74 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*64 - 126*
4-Bromofluorobenzene (Surr)	*108*		*72 - 126*
Toluene-d8 (Surr)	*102*		*71 - 125*

Lab Sample ID: LCSD 480-140517/28
Matrix: Solid
Analysis Batch: 140517

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-Dichloroethane	50.0	49.1		ug/Kg		98	73 - 126	3	20
1,1-Dichloroethene	50.0	51.9		ug/Kg		104	59 - 125	0	20
1,2-Dichlorobenzene	50.0	49.4		ug/Kg		99	75 - 120	10	20
1,2-Dichloroethane	50.0	50.8		ug/Kg		102	77 - 122	0	20
1,2-Dichloroethene, cis-	50.0	51.8		ug/Kg		104	81 - 117	3	20
1,2-Dichloroethene, trans-	50.0	51.4		ug/Kg		103	78 - 126	1	20
Benzene	50.0	49.3		ug/Kg		99	79 - 127	2	20
Chlorobenzene	50.0	51.8		ug/Kg		104	76 - 124	7	20
Ethylbenzene	50.0	50.5		ug/Kg		101	80 - 120	6	20
Methyl tert-butyl ether	50.0	47.3		ug/Kg		95	63 - 125	4	20
Tetrachloroethene	50.0	53.6		ug/Kg		107	74 - 122	7	20
Toluene	50.0	49.4		ug/Kg		99	74 - 128	6	20
Trichloroethene	50.0	51.9		ug/Kg		104	77 - 129	0	20
Trimethylbenzene, 1,2,4-	50.0	46.6		ug/Kg		93	74 - 120	10	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*64 - 126*
4-Bromofluorobenzene (Surr)	*108*		*72 - 126*
Toluene-d8 (Surr)	*100*		*71 - 125*

Lab Sample ID: MB 480-140655/7
Matrix: Solid
Analysis Batch: 140655

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			09/23/13 14:59	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			09/23/13 14:59	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			09/23/13 14:59	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			09/23/13 14:59	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			09/23/13 14:59	1

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

Lab Sample ID: MB 480-140655/7
Matrix: Solid
Analysis Batch: 140655

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, cis-	ND		5.0	0.64	ug/Kg			09/23/13 14:59	1
1,2-Dichloroethene, trans-	ND		5.0	0.52	ug/Kg			09/23/13 14:59	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			09/23/13 14:59	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			09/23/13 14:59	1
1,4-Dioxane	ND		200	24	ug/Kg			09/23/13 14:59	1
Acetone	ND		25	4.2	ug/Kg			09/23/13 14:59	1
Benzene	ND		5.0	0.25	ug/Kg			09/23/13 14:59	1
Butylbenzene	ND		5.0	0.44	ug/Kg			09/23/13 14:59	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			09/23/13 14:59	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			09/23/13 14:59	1
Chloroform	ND		5.0	0.31	ug/Kg			09/23/13 14:59	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			09/23/13 14:59	1
Methyl Ethyl Ketone (2-Butanone)	ND		25	1.8	ug/Kg			09/23/13 14:59	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			09/23/13 14:59	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			09/23/13 14:59	1
Propylbenzene, n-	ND		5.0	0.40	ug/Kg			09/23/13 14:59	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg			09/23/13 14:59	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg			09/23/13 14:59	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			09/23/13 14:59	1
Toluene	ND		5.0	0.38	ug/Kg			09/23/13 14:59	1
Trichloroethene	ND		5.0	1.1	ug/Kg			09/23/13 14:59	1
Trimethylbenzene, 1,2,4-	ND		5.0	0.96	ug/Kg			09/23/13 14:59	1
Trimethylbenzene, 1,3,5-	ND		5.0	0.32	ug/Kg			09/23/13 14:59	1
Vinyl chloride	ND		5.0	0.61	ug/Kg			09/23/13 14:59	1
Xylene (mixed)	ND		10	0.84	ug/Kg			09/23/13 14:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*64 - 126*		*09/23/13 14:59*	*1*
4-Bromofluorobenzene (Surr)	*106*		*72 - 126*		*09/23/13 14:59*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*		*09/23/13 14:59*	*1*

Lab Sample ID: LCS 480-140655/6
Matrix: Solid
Analysis Batch: 140655

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	47.2		ug/Kg		94	73 - 126
1,1-Dichloroethene	50.0	41.8		ug/Kg		84	59 - 125
1,2-Dichlorobenzene	50.0	54.6		ug/Kg		109	75 - 120
1,2-Dichloroethane	50.0	50.6		ug/Kg		101	77 - 122
1,2-Dichloroethene, cis-	50.0	49.8		ug/Kg		100	81 - 117
1,2-Dichloroethene, trans-	50.0	50.5		ug/Kg		101	78 - 126
Benzene	50.0	48.7		ug/Kg		97	79 - 127
Chlorobenzene	50.0	55.3		ug/Kg		111	76 - 124
Ethylbenzene	50.0	54.3		ug/Kg		109	80 - 120
Methyl tert-butyl ether	50.0	47.8		ug/Kg		96	63 - 125
Tetrachloroethene	50.0	57.8		ug/Kg		116	74 - 122
Toluene	50.0	53.2		ug/Kg		106	74 - 128

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

Lab Sample ID: LCS 480-140655/6
Matrix: Solid
Analysis Batch: 140655

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichloroethene	50.0	49.6		ug/Kg		99	77 - 129
Trimethylbenzene, 1,2,4-	50.0	51.7		ug/Kg		103	74 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*64 - 126*
4-Bromofluorobenzene (Surr)	*107*		*72 - 126*
Toluene-d8 (Surr)	*100*		*71 - 125*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-140766/1-A
Matrix: Solid
Analysis Batch: 140941

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 140766

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	2.0	ug/Kg		09/24/13 06:47	09/25/13 02:38	1
Acenaphthylene	ND		170	1.4	ug/Kg		09/24/13 06:47	09/25/13 02:38	1
Anthracene	ND		170	4.3	ug/Kg		09/24/13 06:47	09/25/13 02:38	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg		09/24/13 06:47	09/25/13 02:38	1
Benzo(a)pyrene	ND		170	4.1	ug/Kg		09/24/13 06:47	09/25/13 02:38	1
Benzo(b)fluoranthene	ND		170	3.3	ug/Kg		09/24/13 06:47	09/25/13 02:38	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg		09/24/13 06:47	09/25/13 02:38	1
Benzo(k)fluoranthene	ND		170	1.9	ug/Kg		09/24/13 06:47	09/25/13 02:38	1
Chrysene	ND		170	1.7	ug/Kg		09/24/13 06:47	09/25/13 02:38	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg		09/24/13 06:47	09/25/13 02:38	1
Dibenzofuran	ND		170	1.8	ug/Kg		09/24/13 06:47	09/25/13 02:38	1
Fluoranthene	ND		170	2.4	ug/Kg		09/24/13 06:47	09/25/13 02:38	1
Fluorene	ND		170	3.9	ug/Kg		09/24/13 06:47	09/25/13 02:38	1
Hexachlorobenzene	ND		170	8.4	ug/Kg		09/24/13 06:47	09/25/13 02:38	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg		09/24/13 06:47	09/25/13 02:38	1
m & p - Cresol	ND		330	9.4	ug/Kg		09/24/13 06:47	09/25/13 02:38	1
Naphthalene	ND		170	2.8	ug/Kg		09/24/13 06:47	09/25/13 02:38	1
o-Cresol	ND		170	5.2	ug/Kg		09/24/13 06:47	09/25/13 02:38	1
Pentachlorophenol	ND		330	58	ug/Kg		09/24/13 06:47	09/25/13 02:38	1
Phenanthrene	ND		170	3.5	ug/Kg		09/24/13 06:47	09/25/13 02:38	1
Phenol	ND		170	18	ug/Kg		09/24/13 06:47	09/25/13 02:38	1
Pyrene	ND		170	1.1	ug/Kg		09/24/13 06:47	09/25/13 02:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*86*		*39 - 146*	*09/24/13 06:47*	*09/25/13 02:38*	*1*
2-Fluorobiphenyl	*73*		*37 - 120*	*09/24/13 06:47*	*09/25/13 02:38*	*1*
2-Fluorophenol	*67*		*18 - 120*	*09/24/13 06:47*	*09/25/13 02:38*	*1*
Nitrobenzene-d5	*69*		*34 - 132*	*09/24/13 06:47*	*09/25/13 02:38*	*1*
Phenol-d5	*75*		*11 - 120*	*09/24/13 06:47*	*09/25/13 02:38*	*1*
p-Terphenyl-d14	*89*		*65 - 153*	*09/24/13 06:47*	*09/25/13 02:38*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-140766/2-A
Matrix: Solid
Analysis Batch: 140941

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 140766

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	1630	1230		ug/Kg		75	53 - 120
Acenaphthylene	1630	1140		ug/Kg		70	58 - 121
Anthracene	1630	1180		ug/Kg		72	62 - 129
Benzo(a)anthracene	1630	1210		ug/Kg		74	65 - 133
Benzo(a)pyrene	1630	1260		ug/Kg		77	64 - 127
Benzo(b)fluoranthene	1630	1360		ug/Kg		84	64 - 135
Benzo(g,h,i)perylene	1630	1230		ug/Kg		75	50 - 152
Benzo(k)fluoranthene	1630	1150		ug/Kg		71	58 - 138
Chrysene	1630	1190		ug/Kg		73	64 - 131
Dibenz(a,h)anthracene	1630	1380		ug/Kg		85	54 - 148
Fluoranthene	1630	1190		ug/Kg		73	62 - 131
Fluorene	1630	1160		ug/Kg		71	63 - 126
Indeno(1,2,3-cd)pyrene	1630	1310		ug/Kg		80	56 - 149
Naphthalene	1630	1010		ug/Kg		62	46 - 120
Pentachlorophenol	3260	1990		ug/Kg		61	33 - 136
Phenanthrene	1630	1200		ug/Kg		74	60 - 130
Phenol	1630	1120		ug/Kg		68	36 - 120
Pyrene	1630	1270		ug/Kg		78	51 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*91*		*39 - 146*
2-Fluorobiphenyl	*73*		*37 - 120*
2-Fluorophenol	*61*		*18 - 120*
Nitrobenzene-d5	*68*		*34 - 132*
Phenol-d5	*69*		*11 - 120*
p-Terphenyl-d14	*83*		*65 - 153*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-140764/1-A
Matrix: Solid
Analysis Batch: 141014

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 140764

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.32	ug/Kg		09/24/13 06:37	09/25/13 09:33	1
4,4'-DDE	ND		1.7	0.25	ug/Kg		09/24/13 06:37	09/25/13 09:33	1
4,4'-DDT	ND		1.7	0.17	ug/Kg		09/24/13 06:37	09/25/13 09:33	1
Aldrin	ND		1.7	0.41	ug/Kg		09/24/13 06:37	09/25/13 09:33	1
alpha-BHC	ND		1.7	0.30	ug/Kg		09/24/13 06:37	09/25/13 09:33	1
alpha-Chlordane	ND		1.7	0.82	ug/Kg		09/24/13 06:37	09/25/13 09:33	1
beta-BHC	ND		1.7	0.18	ug/Kg		09/24/13 06:37	09/25/13 09:33	1
delta-BHC	ND		1.7	0.22	ug/Kg		09/24/13 06:37	09/25/13 09:33	1
Dieldrin	ND		1.7	0.40	ug/Kg		09/24/13 06:37	09/25/13 09:33	1
Endosulfan I	ND		1.7	0.21	ug/Kg		09/24/13 06:37	09/25/13 09:33	1
Endosulfan II	ND		1.7	0.30	ug/Kg		09/24/13 06:37	09/25/13 09:33	1
Endosulfan sulfate	ND		1.7	0.31	ug/Kg		09/24/13 06:37	09/25/13 09:33	1
Endrin	ND		1.7	0.23	ug/Kg		09/24/13 06:37	09/25/13 09:33	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 480-140764/1-A
Matrix: Solid
Analysis Batch: 141014

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 140764

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor	ND		1.7	0.26	ug/Kg		09/24/13 06:37	09/25/13 09:33	1
Lindane	ND		1.7	0.20	ug/Kg		09/24/13 06:37	09/25/13 09:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*89*		*32 - 136*	*09/24/13 06:37*	*09/25/13 09:33*	*1*
Tetrachloro-m-xylene	*65*		*30 - 124*	*09/24/13 06:37*	*09/25/13 09:33*	*1*

Lab Sample ID: LCS 480-140764/2-A
Matrix: Solid
Analysis Batch: 141014

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 140764

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.6	14.4		ug/Kg		87	52 - 138
4,4'-DDE	16.6	14.1		ug/Kg		85	52 - 131
4,4'-DDT	16.6	12.9		ug/Kg		78	52 - 131
Aldrin	16.6	12.7		ug/Kg		77	35 - 120
alpha-BHC	16.6	12.4		ug/Kg		75	49 - 120
alpha-Chlordane	16.6	14.0		ug/Kg		84	40 - 133
beta-BHC	16.6	13.7		ug/Kg		83	52 - 127
delta-BHC	16.6	13.4		ug/Kg		81	45 - 123
Dieldrin	16.6	13.9		ug/Kg		84	53 - 131
Endosulfan I	16.6	13.0		ug/Kg		79	53 - 121
Endosulfan II	16.6	13.8		ug/Kg		83	48 - 134
Endosulfan sulfate	16.6	15.1		ug/Kg		91	46 - 144
Endrin	16.6	14.3		ug/Kg		86	56 - 134
Heptachlor	16.6	13.0		ug/Kg		78	54 - 121
Lindane	16.6	12.9		ug/Kg		78	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*88*		*32 - 136*
Tetrachloro-m-xylene	*72*		*30 - 124*

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

Lab Sample ID: MB 480-140465/1-A
Matrix: Solid
Analysis Batch: 140499

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 140465

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.23	0.045	mg/Kg		09/21/13 09:03	09/23/13 08:16	1
PCB-1221	ND		0.23	0.045	mg/Kg		09/21/13 09:03	09/23/13 08:16	1
PCB-1232	ND		0.23	0.045	mg/Kg		09/21/13 09:03	09/23/13 08:16	1
PCB-1242	ND		0.23	0.045	mg/Kg		09/21/13 09:03	09/23/13 08:16	1
PCB-1248	ND		0.23	0.045	mg/Kg		09/21/13 09:03	09/23/13 08:16	1
PCB-1254	ND		0.23	0.11	mg/Kg		09/21/13 09:03	09/23/13 08:16	1
PCB-1260	ND		0.23	0.11	mg/Kg		09/21/13 09:03	09/23/13 08:16	1

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

Lab Sample ID: MB 480-140465/1-A
Matrix: Solid
Analysis Batch: 140499

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 140465

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	133		47 - 176	09/21/13 09:03	09/23/13 08:16	1
Tetrachloro-m-xylene	112		46 - 175	09/21/13 09:03	09/23/13 08:16	1

Lab Sample ID: LCS 480-140465/2-A
Matrix: Solid
Analysis Batch: 140499

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 140465

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	2.16	2.87		mg/Kg		133	51 - 185
PCB-1260	2.16	2.93		mg/Kg		136	61 - 184

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	151		47 - 176
Tetrachloro-m-xylene	134		46 - 175

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 480-140689/1-A
Matrix: Solid
Analysis Batch: 141052

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 140689

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		17	5.9	ug/Kg		09/23/13 15:11	09/25/13 05:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	90		39 - 120	09/23/13 15:11	09/25/13 05:44	1

Lab Sample ID: LCS 480-140689/2-A
Matrix: Solid
Analysis Batch: 141052

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 140689

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silvex (2,4,5-TP)	66.2	75.7		ug/Kg		114	49 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4-Dichlorophenylacetic acid	107		39 - 120

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 480-140467/1-A
Matrix: Solid
Analysis Batch: 140801

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 140467

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.9	0.38	mg/Kg		09/21/13 10:30	09/23/13 20:43	1
Barium	ND		0.47	0.10	mg/Kg		09/21/13 10:30	09/23/13 20:43	1
Beryllium	ND		0.19	0.027	mg/Kg		09/21/13 10:30	09/23/13 20:43	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 480-140467/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 140801 — **Prep Batch: 140467**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.19	0.028	mg/Kg		09/21/13 10:30	09/23/13 20:43	1
Chromium	ND		0.47	0.19	mg/Kg		09/21/13 10:30	09/23/13 20:43	1
Copper	ND		0.95	0.20	mg/Kg		09/21/13 10:30	09/23/13 20:43	1
Lead	ND		0.95	0.23	mg/Kg		09/21/13 10:30	09/23/13 20:43	1
Manganese	ND		0.19	0.030	mg/Kg		09/21/13 10:30	09/23/13 20:43	1
Nickel	ND		4.7	0.22	mg/Kg		09/21/13 10:30	09/23/13 20:43	1
Selenium	ND		3.8	0.38	mg/Kg		09/21/13 10:30	09/23/13 20:43	1
Silver	ND		0.47	0.19	mg/Kg		09/21/13 10:30	09/23/13 20:43	1
Zinc	0.262	J	1.9	0.14	mg/Kg		09/21/13 10:30	09/23/13 20:43	1

Lab Sample ID: LCDSRM 480-140467/3-A LCDSRM — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 140801 — **Prep Batch: 140467**

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	182	184.4		mg/Kg		101.3	70.9 - 129.7	0	20
Barium	143	135.8		mg/Kg		94.9	72.7 - 128.0	2	20
Beryllium	98.3	101.7		mg/Kg		103.5	74.6 - 125.1	0	20
Cadmium	60.4	59.73		mg/Kg		98.9	73.2 - 129.3	0	20
Chromium	125	120.6		mg/Kg		96.5	69.8 - 129.6	0	20
Copper	80.1	80.70		mg/Kg		100.7	73.7 - 129.8	1	20
Lead	136	141.1		mg/Kg		103.8	73.1 - 127.2	2	20
Manganese	279	270.7		mg/Kg		97.0	74.2 - 126.2	3	20
Nickel	128	133.3		mg/Kg		104.1	73.1 - 129.7	0	20
Selenium	85.9	86.80		mg/Kg		101.0	63.9 - 136.2	0	20
Silver	61.3	59.53		mg/Kg		97.1	66.9 - 133.1	0	20
Zinc	204	191.8		mg/Kg		94.0	69.6 - 129.9	1	20

Lab Sample ID: LCSSRM 480-140467/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 140801 — **Prep Batch: 140467**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	182	184.5		mg/Kg		101.4	70.9 - 129.7
Barium	143	138.3		mg/Kg		96.7	72.7 - 128.0
Beryllium	98.3	101.8		mg/Kg		103.6	74.6 - 125.1
Cadmium	60.4	59.58		mg/Kg		98.7	73.2 - 129.3

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-140467/2-A
Matrix: Solid
Analysis Batch: 140801

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 140467

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	125	120.7		mg/Kg		96.6	69.8 - 129.6
Copper	80.1	81.20		mg/Kg		101.4	73.7 - 129.8
Lead	136	138.7		mg/Kg		102.0	73.1 - 127.2
Manganese	279	263.2		mg/Kg		94.4	74.2 - 126.2
Nickel	128	132.7		mg/Kg		103.7	73.1 - 129.7
Selenium	85.9	86.98		mg/Kg		101.3	63.9 - 136.2
Silver	61.3	59.40		mg/Kg		96.9	66.9 - 133.1
Zinc	204	190.6		mg/Kg		93.5	69.6 - 129.9

Lab Sample ID: 480-46264-25 MS
Matrix: Solid
Analysis Batch: 140801

Client Sample ID: HOHAOC2-C-COMP-1
Prep Type: Total/NA
Prep Batch: 140467

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.4	J	39.9	40.21		mg/Kg	☼	97	75 - 125
Barium	13.4		39.9	51.19		mg/Kg	☼	95	75 - 125
Beryllium	0.12	J	39.9	39.73		mg/Kg	☼	99	75 - 125
Cadmium	0.072	J	39.9	39.34		mg/Kg	☼	98	75 - 125
Chromium	7.0		39.9	45.13		mg/Kg	☼	96	75 - 125
Copper	119		39.9	210.0	F	mg/Kg	☼	227	75 - 125
Lead	2.4		39.9	43.07		mg/Kg	☼	102	75 - 125
Manganese	128		39.9	158.0		mg/Kg	☼	76	75 - 125
Nickel	18.6		39.9	57.26		mg/Kg	☼	97	75 - 125
Selenium	ND		39.9	38.39		mg/Kg	☼	96	75 - 125
Silver	ND		9.98	9.93		mg/Kg	☼	99	75 - 125
Zinc	35.9	B	39.9	68.89		mg/Kg	☼	83	75 - 125

Lab Sample ID: 480-46264-25 MSD
Matrix: Solid
Analysis Batch: 140801

Client Sample ID: HOHAOC2-C-COMP-1
Prep Type: Total/NA
Prep Batch: 140467

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	1.4	J	45.1	44.65		mg/Kg	☼	96	75 - 125	10	20
Barium	13.4		45.1	54.78		mg/Kg	☼	92	75 - 125	7	20
Beryllium	0.12	J	45.1	44.28		mg/Kg	☼	98	75 - 125	11	20
Cadmium	0.072	J	45.1	43.80		mg/Kg	☼	97	75 - 125	11	20
Chromium	7.0		45.1	48.37		mg/Kg	☼	92	75 - 125	7	20
Copper	119		45.1	180.0	F	mg/Kg	☼	134	75 - 125	15	20
Lead	2.4		45.1	47.26		mg/Kg	☼	100	75 - 125	9	20
Manganese	128		45.1	172.4		mg/Kg	☼	99	75 - 125	9	20
Nickel	18.6		45.1	61.58		mg/Kg	☼	95	75 - 125	7	20
Selenium	ND		45.1	42.63		mg/Kg	☼	95	75 - 125	10	20
Silver	ND		11.3	10.98		mg/Kg	☼	97	75 - 125	10	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 480-46264-25 MSD — **Client Sample ID: HOHAOC2-C-COMP-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 140801 — **Prep Batch: 140467**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Zinc	35.9	B	45.1	74.01		mg/Kg	☼	85	75 - 125	7	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 480-140472/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 140673 — **Prep Batch: 140472**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0077	mg/Kg		09/23/13 07:50	09/23/13 11:40	1

Lab Sample ID: LCSSRM 480-140472/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 140673 — **Prep Batch: 140472**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	3.77	2.87		mg/Kg		76.1	50.9 - 149.1

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 240-102790/9-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 102901 — **Prep Batch: 102790**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.290	J	0.80	0.27	mg/Kg		09/24/13 23:20	09/25/13 00:00	1

Lab Sample ID: LCSI 240-102790/11-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 102901 — **Prep Batch: 102790**

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	643	629.2		mg/Kg		98	75 - 125

Lab Sample ID: LCSS 240-102790/10-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 102901 — **Prep Batch: 102790**

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	20.0	20.52		mg/Kg		103	90 - 110

Method: 9012A - Cyanide, Total and/or Amenable

Lab Sample ID: MB 480-140756/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 140887 — **Prep Batch: 140756**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.98	0.47	mg/Kg		09/24/13 04:43	09/24/13 13:18	1

Lab Sample ID: LCS 480-140756/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 140887 — **Prep Batch: 140756**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	60.7	21.94		mg/Kg		36	29 - 122

Lab Sample ID: 480-46264-27 MS — **Client Sample ID: HOHAOC2-C-COMP-3**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 140887 — **Prep Batch: 140756**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	ND		10.3	9.82		mg/Kg	☼	96	85 - 115

Lab Sample ID: 480-46264-36 MS — **Client Sample ID: HOHAOC2-C-COMP-12**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 140887 — **Prep Batch: 140756**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	ND		10.2	9.91		mg/Kg	☼	97	85 - 115

Lab Sample ID: 480-46264-28 DU — **Client Sample ID: HOHAOC2-C-COMP-4**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 140887 — **Prep Batch: 140756**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	ND		ND		mg/Kg	☼	NC	15

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Analysis Batch: 140517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-5	HOHAOC2-C-3-GRAB-1	Total/NA	Solid	8260B	140520
480-46264-6	HOHAOC2-C-3-GRAB-2	Total/NA	Solid	8260B	140520
480-46264-7	HOHAOC2-C-4-GRAB-1	Total/NA	Solid	8260B	140520
480-46264-8	HOHAOC2-C-4-GRAB-2	Total/NA	Solid	8260B	140520
480-46264-9	HOHAOC2-C-5-GRAB-1	Total/NA	Solid	8260B	140520
480-46264-10	HOHAOC2-C-5-GRAB-2	Total/NA	Solid	8260B	140520
480-46264-11	HOHAOC2-C-6-GRAB-1	Total/NA	Solid	8260B	140520
480-46264-13	HOHAOC2-C-7-GRAB-1	Total/NA	Solid	8260B	140520
480-46264-14	HOHAOC2-C-7-GRAB-2	Total/NA	Solid	8260B	140520
480-46264-15	HOHAOC2-C-8-GRAB-1	Total/NA	Solid	8260B	140520
480-46264-16	HOHAOC2-C-8-GRAB-2	Total/NA	Solid	8260B	140520
480-46264-17	HOHAOC2-C-9-GRAB-1	Total/NA	Solid	8260B	140520
480-46264-18	HOHAOC2-C-9-GRAB-2	Total/NA	Solid	8260B	140520
480-46264-19	HOHAOC2-C-10-GRAB-1	Total/NA	Solid	8260B	140520
480-46264-20	HOHAOC2-C-10-GRAB-2	Total/NA	Solid	8260B	140520
480-46264-21	HOHAOC2-C-11-GRAB-1	Total/NA	Solid	8260B	140520
480-46264-22	HOHAOC2-C-11-GRAB-2	Total/NA	Solid	8260B	140520
480-46264-23	HOHAOC2-C-12-GRAB-1	Total/NA	Solid	8260B	140520
LCS 480-140517/6	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 480-140517/28	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 480-140517/7	Method Blank	Total/NA	Solid	8260B	

Prep Batch: 140520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-1	HOHAOC2-C-1-GRAB-1	Total/NA	Solid	5035	
480-46264-2	HOHAOC2-C-1-GRAB-2	Total/NA	Solid	5035	
480-46264-3	HOHAOC2-C-2-GRAB-1	Total/NA	Solid	5035	
480-46264-4	HOHAOC2-C-2-GRAB-2	Total/NA	Solid	5035	
480-46264-5	HOHAOC2-C-3-GRAB-1	Total/NA	Solid	5035	
480-46264-6	HOHAOC2-C-3-GRAB-2	Total/NA	Solid	5035	
480-46264-7	HOHAOC2-C-4-GRAB-1	Total/NA	Solid	5035	
480-46264-8	HOHAOC2-C-4-GRAB-2	Total/NA	Solid	5035	
480-46264-9	HOHAOC2-C-5-GRAB-1	Total/NA	Solid	5035	
480-46264-10	HOHAOC2-C-5-GRAB-2	Total/NA	Solid	5035	
480-46264-11	HOHAOC2-C-6-GRAB-1	Total/NA	Solid	5035	
480-46264-12	HOHAOC2-C-6-GRAB-2	Total/NA	Solid	5035	
480-46264-13	HOHAOC2-C-7-GRAB-1	Total/NA	Solid	5035	
480-46264-14	HOHAOC2-C-7-GRAB-2	Total/NA	Solid	5035	
480-46264-15	HOHAOC2-C-8-GRAB-1	Total/NA	Solid	5035	
480-46264-16	HOHAOC2-C-8-GRAB-2	Total/NA	Solid	5035	
480-46264-17	HOHAOC2-C-9-GRAB-1	Total/NA	Solid	5035	
480-46264-18	HOHAOC2-C-9-GRAB-2	Total/NA	Solid	5035	
480-46264-19	HOHAOC2-C-10-GRAB-1	Total/NA	Solid	5035	
480-46264-20	HOHAOC2-C-10-GRAB-2	Total/NA	Solid	5035	
480-46264-21	HOHAOC2-C-11-GRAB-1	Total/NA	Solid	5035	
480-46264-22	HOHAOC2-C-11-GRAB-2	Total/NA	Solid	5035	
480-46264-23	HOHAOC2-C-12-GRAB-1	Total/NA	Solid	5035	

Prep Batch: 140653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-24	HOHAOC2-C-12-GRAB-2	Total/NA	Solid	5035	

GC/MS VOA (Continued)

Analysis Batch: 140655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-1	HOHAOC2-C-1-GRAB-1	Total/NA	Solid	8260B	140520
480-46264-2	HOHAOC2-C-1-GRAB-2	Total/NA	Solid	8260B	140520
480-46264-3	HOHAOC2-C-2-GRAB-1	Total/NA	Solid	8260B	140520
480-46264-4	HOHAOC2-C-2-GRAB-2	Total/NA	Solid	8260B	140520
480-46264-12	HOHAOC2-C-6-GRAB-2	Total/NA	Solid	8260B	140520
480-46264-24	HOHAOC2-C-12-GRAB-2	Total/NA	Solid	8260B	140653
LCS 480-140655/6	Lab Control Sample	Total/NA	Solid	8260B	
MB 480-140655/7	Method Blank	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 140766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-25	HOHAOC2-C-COMP-1	Total/NA	Solid	3550B	
480-46264-26	HOHAOC2-C-COMP-2	Total/NA	Solid	3550B	
480-46264-27	HOHAOC2-C-COMP-3	Total/NA	Solid	3550B	
480-46264-28	HOHAOC2-C-COMP-4	Total/NA	Solid	3550B	
480-46264-29	HOHAOC2-C-COMP-5	Total/NA	Solid	3550B	
480-46264-30	HOHAOC2-C-COMP-6	Total/NA	Solid	3550B	
480-46264-31	HOHAOC2-C-COMP-7	Total/NA	Solid	3550B	
480-46264-32	HOHAOC2-C-COMP-8	Total/NA	Solid	3550B	
480-46264-33	HOHAOC2-C-COMP-9	Total/NA	Solid	3550B	
480-46264-34	HOHAOC2-C-COMP-10	Total/NA	Solid	3550B	
480-46264-35	HOHAOC2-C-COMP-11	Total/NA	Solid	3550B	
480-46264-36	HOHAOC2-C-COMP-12	Total/NA	Solid	3550B	
LCS 480-140766/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-140766/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 140941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-25	HOHAOC2-C-COMP-1	Total/NA	Solid	8270C	140766
480-46264-26	HOHAOC2-C-COMP-2	Total/NA	Solid	8270C	140766
480-46264-27	HOHAOC2-C-COMP-3	Total/NA	Solid	8270C	140766
480-46264-28	HOHAOC2-C-COMP-4	Total/NA	Solid	8270C	140766
480-46264-29	HOHAOC2-C-COMP-5	Total/NA	Solid	8270C	140766
480-46264-30	HOHAOC2-C-COMP-6	Total/NA	Solid	8270C	140766
480-46264-31	HOHAOC2-C-COMP-7	Total/NA	Solid	8270C	140766
480-46264-32	HOHAOC2-C-COMP-8	Total/NA	Solid	8270C	140766
480-46264-33	HOHAOC2-C-COMP-9	Total/NA	Solid	8270C	140766
480-46264-34	HOHAOC2-C-COMP-10	Total/NA	Solid	8270C	140766
480-46264-35	HOHAOC2-C-COMP-11	Total/NA	Solid	8270C	140766
480-46264-36	HOHAOC2-C-COMP-12	Total/NA	Solid	8270C	140766
LCS 480-140766/2-A	Lab Control Sample	Total/NA	Solid	8270C	140766
MB 480-140766/1-A	Method Blank	Total/NA	Solid	8270C	140766

GC Semi VOA

Prep Batch: 140465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-25	HOHAOC2-C-COMP-1	Total/NA	Solid	3550B	

GC Semi VOA (Continued)

Prep Batch: 140465 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-26	HOHAOC2-C-COMP-2	Total/NA	Solid	3550B	
480-46264-27	HOHAOC2-C-COMP-3	Total/NA	Solid	3550B	
480-46264-28	HOHAOC2-C-COMP-4	Total/NA	Solid	3550B	
480-46264-29	HOHAOC2-C-COMP-5	Total/NA	Solid	3550B	
480-46264-30	HOHAOC2-C-COMP-6	Total/NA	Solid	3550B	
480-46264-31	HOHAOC2-C-COMP-7	Total/NA	Solid	3550B	
480-46264-32	HOHAOC2-C-COMP-8	Total/NA	Solid	3550B	
480-46264-33	HOHAOC2-C-COMP-9	Total/NA	Solid	3550B	
480-46264-34	HOHAOC2-C-COMP-10	Total/NA	Solid	3550B	
480-46264-35	HOHAOC2-C-COMP-11	Total/NA	Solid	3550B	
480-46264-36	HOHAOC2-C-COMP-12	Total/NA	Solid	3550B	
LCS 480-140465/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-140465/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 140499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-25	HOHAOC2-C-COMP-1	Total/NA	Solid	8082	140465
480-46264-26	HOHAOC2-C-COMP-2	Total/NA	Solid	8082	140465
480-46264-27	HOHAOC2-C-COMP-3	Total/NA	Solid	8082	140465
480-46264-28	HOHAOC2-C-COMP-4	Total/NA	Solid	8082	140465
480-46264-29	HOHAOC2-C-COMP-5	Total/NA	Solid	8082	140465
480-46264-30	HOHAOC2-C-COMP-6	Total/NA	Solid	8082	140465
480-46264-31	HOHAOC2-C-COMP-7	Total/NA	Solid	8082	140465
480-46264-32	HOHAOC2-C-COMP-8	Total/NA	Solid	8082	140465
480-46264-33	HOHAOC2-C-COMP-9	Total/NA	Solid	8082	140465
480-46264-34	HOHAOC2-C-COMP-10	Total/NA	Solid	8082	140465
480-46264-35	HOHAOC2-C-COMP-11	Total/NA	Solid	8082	140465
480-46264-36	HOHAOC2-C-COMP-12	Total/NA	Solid	8082	140465
LCS 480-140465/2-A	Lab Control Sample	Total/NA	Solid	8082	140465
MB 480-140465/1-A	Method Blank	Total/NA	Solid	8082	140465

Prep Batch: 140689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-25	HOHAOC2-C-COMP-1	Total/NA	Solid	8151A	
480-46264-26	HOHAOC2-C-COMP-2	Total/NA	Solid	8151A	
480-46264-27	HOHAOC2-C-COMP-3	Total/NA	Solid	8151A	
480-46264-28	HOHAOC2-C-COMP-4	Total/NA	Solid	8151A	
480-46264-29	HOHAOC2-C-COMP-5	Total/NA	Solid	8151A	
480-46264-30	HOHAOC2-C-COMP-6	Total/NA	Solid	8151A	
480-46264-31	HOHAOC2-C-COMP-7	Total/NA	Solid	8151A	
480-46264-32	HOHAOC2-C-COMP-8	Total/NA	Solid	8151A	
480-46264-33	HOHAOC2-C-COMP-9	Total/NA	Solid	8151A	
480-46264-34	HOHAOC2-C-COMP-10	Total/NA	Solid	8151A	
480-46264-35	HOHAOC2-C-COMP-11	Total/NA	Solid	8151A	
480-46264-36	HOHAOC2-C-COMP-12	Total/NA	Solid	8151A	
LCS 480-140689/2-A	Lab Control Sample	Total/NA	Solid	8151A	
MB 480-140689/1-A	Method Blank	Total/NA	Solid	8151A	

Prep Batch: 140764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-25	HOHAOC2-C-COMP-1	Total/NA	Solid	3550B	

GC Semi VOA (Continued)

Prep Batch: 140764 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-26	HOHAOC2-C-COMP-2	Total/NA	Solid	3550B	
480-46264-27	HOHAOC2-C-COMP-3	Total/NA	Solid	3550B	
480-46264-28	HOHAOC2-C-COMP-4	Total/NA	Solid	3550B	
480-46264-29	HOHAOC2-C-COMP-5	Total/NA	Solid	3550B	
480-46264-30	HOHAOC2-C-COMP-6	Total/NA	Solid	3550B	
480-46264-31	HOHAOC2-C-COMP-7	Total/NA	Solid	3550B	
480-46264-32	HOHAOC2-C-COMP-8	Total/NA	Solid	3550B	
480-46264-33	HOHAOC2-C-COMP-9	Total/NA	Solid	3550B	
480-46264-34	HOHAOC2-C-COMP-10	Total/NA	Solid	3550B	
480-46264-35	HOHAOC2-C-COMP-11	Total/NA	Solid	3550B	
480-46264-36	HOHAOC2-C-COMP-12	Total/NA	Solid	3550B	
LCS 480-140764/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-140764/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 141014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-25	HOHAOC2-C-COMP-1	Total/NA	Solid	8081A	140764
480-46264-26	HOHAOC2-C-COMP-2	Total/NA	Solid	8081A	140764
480-46264-27	HOHAOC2-C-COMP-3	Total/NA	Solid	8081A	140764
480-46264-28	HOHAOC2-C-COMP-4	Total/NA	Solid	8081A	140764
480-46264-29	HOHAOC2-C-COMP-5	Total/NA	Solid	8081A	140764
480-46264-30	HOHAOC2-C-COMP-6	Total/NA	Solid	8081A	140764
480-46264-31	HOHAOC2-C-COMP-7	Total/NA	Solid	8081A	140764
480-46264-32	HOHAOC2-C-COMP-8	Total/NA	Solid	8081A	140764
480-46264-33	HOHAOC2-C-COMP-9	Total/NA	Solid	8081A	140764
480-46264-34	HOHAOC2-C-COMP-10	Total/NA	Solid	8081A	140764
480-46264-35	HOHAOC2-C-COMP-11	Total/NA	Solid	8081A	140764
480-46264-36	HOHAOC2-C-COMP-12	Total/NA	Solid	8081A	140764
LCS 480-140764/2-A	Lab Control Sample	Total/NA	Solid	8081A	140764
MB 480-140764/1-A	Method Blank	Total/NA	Solid	8081A	140764

Analysis Batch: 141052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-25	HOHAOC2-C-COMP-1	Total/NA	Solid	8151A	140689
480-46264-26	HOHAOC2-C-COMP-2	Total/NA	Solid	8151A	140689
480-46264-27	HOHAOC2-C-COMP-3	Total/NA	Solid	8151A	140689
480-46264-28	HOHAOC2-C-COMP-4	Total/NA	Solid	8151A	140689
480-46264-29	HOHAOC2-C-COMP-5	Total/NA	Solid	8151A	140689
480-46264-30	HOHAOC2-C-COMP-6	Total/NA	Solid	8151A	140689
480-46264-31	HOHAOC2-C-COMP-7	Total/NA	Solid	8151A	140689
480-46264-32	HOHAOC2-C-COMP-8	Total/NA	Solid	8151A	140689
480-46264-33	HOHAOC2-C-COMP-9	Total/NA	Solid	8151A	140689
480-46264-34	HOHAOC2-C-COMP-10	Total/NA	Solid	8151A	140689
480-46264-35	HOHAOC2-C-COMP-11	Total/NA	Solid	8151A	140689
480-46264-36	HOHAOC2-C-COMP-12	Total/NA	Solid	8151A	140689
LCS 480-140689/2-A	Lab Control Sample	Total/NA	Solid	8151A	140689
MB 480-140689/1-A	Method Blank	Total/NA	Solid	8151A	140689

Metals

Prep Batch: 140467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-25	HOHAOC2-C-COMP-1	Total/NA	Solid	3050B	
480-46264-25 MS	HOHAOC2-C-COMP-1	Total/NA	Solid	3050B	
480-46264-25 MSD	HOHAOC2-C-COMP-1	Total/NA	Solid	3050B	
480-46264-26	HOHAOC2-C-COMP-2	Total/NA	Solid	3050B	
480-46264-27	HOHAOC2-C-COMP-3	Total/NA	Solid	3050B	
480-46264-28	HOHAOC2-C-COMP-4	Total/NA	Solid	3050B	
480-46264-29	HOHAOC2-C-COMP-5	Total/NA	Solid	3050B	
480-46264-30	HOHAOC2-C-COMP-6	Total/NA	Solid	3050B	
480-46264-31	HOHAOC2-C-COMP-7	Total/NA	Solid	3050B	
480-46264-32	HOHAOC2-C-COMP-8	Total/NA	Solid	3050B	
480-46264-33	HOHAOC2-C-COMP-9	Total/NA	Solid	3050B	
480-46264-34	HOHAOC2-C-COMP-10	Total/NA	Solid	3050B	
480-46264-35	HOHAOC2-C-COMP-11	Total/NA	Solid	3050B	
480-46264-36	HOHAOC2-C-COMP-12	Total/NA	Solid	3050B	
LCDSRM 480-140467/3-A LCDS	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-140467/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-140467/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 140472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-25	HOHAOC2-C-COMP-1	Total/NA	Solid	7471A	
480-46264-26	HOHAOC2-C-COMP-2	Total/NA	Solid	7471A	
480-46264-27	HOHAOC2-C-COMP-3	Total/NA	Solid	7471A	
480-46264-28	HOHAOC2-C-COMP-4	Total/NA	Solid	7471A	
480-46264-29	HOHAOC2-C-COMP-5	Total/NA	Solid	7471A	
480-46264-30	HOHAOC2-C-COMP-6	Total/NA	Solid	7471A	
480-46264-31	HOHAOC2-C-COMP-7	Total/NA	Solid	7471A	
480-46264-32	HOHAOC2-C-COMP-8	Total/NA	Solid	7471A	
480-46264-33	HOHAOC2-C-COMP-9	Total/NA	Solid	7471A	
480-46264-34	HOHAOC2-C-COMP-10	Total/NA	Solid	7471A	
480-46264-35	HOHAOC2-C-COMP-11	Total/NA	Solid	7471A	
480-46264-36	HOHAOC2-C-COMP-12	Total/NA	Solid	7471A	
LCSSRM 480-140472/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 480-140472/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 140673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-25	HOHAOC2-C-COMP-1	Total/NA	Solid	7471A	140472
480-46264-26	HOHAOC2-C-COMP-2	Total/NA	Solid	7471A	140472
480-46264-27	HOHAOC2-C-COMP-3	Total/NA	Solid	7471A	140472
480-46264-28	HOHAOC2-C-COMP-4	Total/NA	Solid	7471A	140472
480-46264-29	HOHAOC2-C-COMP-5	Total/NA	Solid	7471A	140472
480-46264-30	HOHAOC2-C-COMP-6	Total/NA	Solid	7471A	140472
480-46264-31	HOHAOC2-C-COMP-7	Total/NA	Solid	7471A	140472
480-46264-32	HOHAOC2-C-COMP-8	Total/NA	Solid	7471A	140472
480-46264-33	HOHAOC2-C-COMP-9	Total/NA	Solid	7471A	140472
480-46264-34	HOHAOC2-C-COMP-10	Total/NA	Solid	7471A	140472
480-46264-35	HOHAOC2-C-COMP-11	Total/NA	Solid	7471A	140472
480-46264-36	HOHAOC2-C-COMP-12	Total/NA	Solid	7471A	140472
LCSSRM 480-140472/2-A	Lab Control Sample	Total/NA	Solid	7471A	140472
MB 480-140472/1-A	Method Blank	Total/NA	Solid	7471A	140472

Metals (Continued)

Analysis Batch: 140801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-25	HOHAOC2-C-COMP-1	Total/NA	Solid	6010B	140467
480-46264-25 MS	HOHAOC2-C-COMP-1	Total/NA	Solid	6010B	140467
480-46264-25 MSD	HOHAOC2-C-COMP-1	Total/NA	Solid	6010B	140467
480-46264-26	HOHAOC2-C-COMP-2	Total/NA	Solid	6010B	140467
480-46264-27	HOHAOC2-C-COMP-3	Total/NA	Solid	6010B	140467
480-46264-28	HOHAOC2-C-COMP-4	Total/NA	Solid	6010B	140467
480-46264-29	HOHAOC2-C-COMP-5	Total/NA	Solid	6010B	140467
480-46264-30	HOHAOC2-C-COMP-6	Total/NA	Solid	6010B	140467
480-46264-31	HOHAOC2-C-COMP-7	Total/NA	Solid	6010B	140467
480-46264-32	HOHAOC2-C-COMP-8	Total/NA	Solid	6010B	140467
480-46264-33	HOHAOC2-C-COMP-9	Total/NA	Solid	6010B	140467
480-46264-34	HOHAOC2-C-COMP-10	Total/NA	Solid	6010B	140467
480-46264-35	HOHAOC2-C-COMP-11	Total/NA	Solid	6010B	140467
480-46264-36	HOHAOC2-C-COMP-12	Total/NA	Solid	6010B	140467
LCDSRM 480-140467/3-A LCDS	Lab Control Sample Dup	Total/NA	Solid	6010B	140467
LCSSRM 480-140467/2-A	Lab Control Sample	Total/NA	Solid	6010B	140467
MB 480-140467/1-A	Method Blank	Total/NA	Solid	6010B	140467

General Chemistry

Prep Batch: 102790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-25	HOHAOC2-C-COMP-1	Total/NA	Solid	3060A	
480-46264-26	HOHAOC2-C-COMP-2	Total/NA	Solid	3060A	
480-46264-27	HOHAOC2-C-COMP-3	Total/NA	Solid	3060A	
480-46264-28	HOHAOC2-C-COMP-4	Total/NA	Solid	3060A	
480-46264-29	HOHAOC2-C-COMP-5	Total/NA	Solid	3060A	
480-46264-30	HOHAOC2-C-COMP-6	Total/NA	Solid	3060A	
480-46264-31	HOHAOC2-C-COMP-7	Total/NA	Solid	3060A	
480-46264-32	HOHAOC2-C-COMP-8	Total/NA	Solid	3060A	
480-46264-33	HOHAOC2-C-COMP-9	Total/NA	Solid	3060A	
480-46264-34	HOHAOC2-C-COMP-10	Total/NA	Solid	3060A	
480-46264-35	HOHAOC2-C-COMP-11	Total/NA	Solid	3060A	
480-46264-36	HOHAOC2-C-COMP-12	Total/NA	Solid	3060A	
LCSI 240-102790/11-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 240-102790/10-A	Lab Control Sample	Total/NA	Solid	3060A	
MB 240-102790/9-A	Method Blank	Total/NA	Solid	3060A	

Analysis Batch: 102901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-25	HOHAOC2-C-COMP-1	Total/NA	Solid	7196A	102790
480-46264-26	HOHAOC2-C-COMP-2	Total/NA	Solid	7196A	102790
480-46264-27	HOHAOC2-C-COMP-3	Total/NA	Solid	7196A	102790
480-46264-28	HOHAOC2-C-COMP-4	Total/NA	Solid	7196A	102790
480-46264-29	HOHAOC2-C-COMP-5	Total/NA	Solid	7196A	102790
480-46264-30	HOHAOC2-C-COMP-6	Total/NA	Solid	7196A	102790
480-46264-31	HOHAOC2-C-COMP-7	Total/NA	Solid	7196A	102790
480-46264-32	HOHAOC2-C-COMP-8	Total/NA	Solid	7196A	102790
480-46264-33	HOHAOC2-C-COMP-9	Total/NA	Solid	7196A	102790
480-46264-34	HOHAOC2-C-COMP-10	Total/NA	Solid	7196A	102790

General Chemistry (Continued)

Analysis Batch: 102901 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-35	HOHAOC2-C-COMP-11	Total/NA	Solid	7196A	102790
480-46264-36	HOHAOC2-C-COMP-12	Total/NA	Solid	7196A	102790
LCSI 240-102790/11-A	Lab Control Sample	Total/NA	Solid	7196A	102790
LCSS 240-102790/10-A	Lab Control Sample	Total/NA	Solid	7196A	102790
MB 240-102790/9-A	Method Blank	Total/NA	Solid	7196A	102790

Analysis Batch: 140431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-25	HOHAOC2-C-COMP-1	Total/NA	Solid	Moisture	
480-46264-26	HOHAOC2-C-COMP-2	Total/NA	Solid	Moisture	
480-46264-27	HOHAOC2-C-COMP-3	Total/NA	Solid	Moisture	
480-46264-28	HOHAOC2-C-COMP-4	Total/NA	Solid	Moisture	
480-46264-29	HOHAOC2-C-COMP-5	Total/NA	Solid	Moisture	
480-46264-30	HOHAOC2-C-COMP-6	Total/NA	Solid	Moisture	
480-46264-31	HOHAOC2-C-COMP-7	Total/NA	Solid	Moisture	
480-46264-32	HOHAOC2-C-COMP-8	Total/NA	Solid	Moisture	
480-46264-33	HOHAOC2-C-COMP-9	Total/NA	Solid	Moisture	
480-46264-34	HOHAOC2-C-COMP-10	Total/NA	Solid	Moisture	
480-46264-35	HOHAOC2-C-COMP-11	Total/NA	Solid	Moisture	
480-46264-36	HOHAOC2-C-COMP-12	Total/NA	Solid	Moisture	

Analysis Batch: 140666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-1	HOHAOC2-C-1-GRAB-1	Total/NA	Solid	Moisture	
480-46264-2	HOHAOC2-C-1-GRAB-2	Total/NA	Solid	Moisture	
480-46264-3	HOHAOC2-C-2-GRAB-1	Total/NA	Solid	Moisture	
480-46264-4	HOHAOC2-C-2-GRAB-2	Total/NA	Solid	Moisture	
480-46264-5	HOHAOC2-C-3-GRAB-1	Total/NA	Solid	Moisture	
480-46264-6	HOHAOC2-C-3-GRAB-2	Total/NA	Solid	Moisture	
480-46264-7	HOHAOC2-C-4-GRAB-1	Total/NA	Solid	Moisture	
480-46264-8	HOHAOC2-C-4-GRAB-2	Total/NA	Solid	Moisture	
480-46264-9	HOHAOC2-C-5-GRAB-1	Total/NA	Solid	Moisture	
480-46264-10	HOHAOC2-C-5-GRAB-2	Total/NA	Solid	Moisture	
480-46264-11	HOHAOC2-C-6-GRAB-1	Total/NA	Solid	Moisture	
480-46264-12	HOHAOC2-C-6-GRAB-2	Total/NA	Solid	Moisture	
480-46264-13	HOHAOC2-C-7-GRAB-1	Total/NA	Solid	Moisture	
480-46264-14	HOHAOC2-C-7-GRAB-2	Total/NA	Solid	Moisture	
480-46264-15	HOHAOC2-C-8-GRAB-1	Total/NA	Solid	Moisture	
480-46264-16	HOHAOC2-C-8-GRAB-2	Total/NA	Solid	Moisture	
480-46264-17	HOHAOC2-C-9-GRAB-1	Total/NA	Solid	Moisture	
480-46264-18	HOHAOC2-C-9-GRAB-2	Total/NA	Solid	Moisture	
480-46264-19	HOHAOC2-C-10-GRAB-1	Total/NA	Solid	Moisture	
480-46264-20	HOHAOC2-C-10-GRAB-2	Total/NA	Solid	Moisture	
480-46264-21	HOHAOC2-C-11-GRAB-1	Total/NA	Solid	Moisture	
480-46264-22	HOHAOC2-C-11-GRAB-2	Total/NA	Solid	Moisture	
480-46264-23	HOHAOC2-C-12-GRAB-1	Total/NA	Solid	Moisture	
480-46264-24	HOHAOC2-C-12-GRAB-2	Total/NA	Solid	Moisture	

Prep Batch: 140756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-25	HOHAOC2-C-COMP-1	Total/NA	Solid	9012A	

General Chemistry (Continued)

Prep Batch: 140756 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-26	HOHAOC2-C-COMP-2	Total/NA	Solid	9012A	
480-46264-27	HOHAOC2-C-COMP-3	Total/NA	Solid	9012A	
480-46264-27 MS	HOHAOC2-C-COMP-3	Total/NA	Solid	9012A	
480-46264-28	HOHAOC2-C-COMP-4	Total/NA	Solid	9012A	
480-46264-28 DU	HOHAOC2-C-COMP-4	Total/NA	Solid	9012A	
480-46264-29	HOHAOC2-C-COMP-5	Total/NA	Solid	9012A	
480-46264-30	HOHAOC2-C-COMP-6	Total/NA	Solid	9012A	
480-46264-31	HOHAOC2-C-COMP-7	Total/NA	Solid	9012A	
480-46264-32	HOHAOC2-C-COMP-8	Total/NA	Solid	9012A	
480-46264-33	HOHAOC2-C-COMP-9	Total/NA	Solid	9012A	
480-46264-34	HOHAOC2-C-COMP-10	Total/NA	Solid	9012A	
480-46264-35	HOHAOC2-C-COMP-11	Total/NA	Solid	9012A	
480-46264-36	HOHAOC2-C-COMP-12	Total/NA	Solid	9012A	
480-46264-36 MS	HOHAOC2-C-COMP-12	Total/NA	Solid	9012A	
LCS 480-140756/2-A	Lab Control Sample	Total/NA	Solid	9012A	
MB 480-140756/1-A	Method Blank	Total/NA	Solid	9012A	

Analysis Batch: 140887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-25	HOHAOC2-C-COMP-1	Total/NA	Solid	9012A	140756
480-46264-26	HOHAOC2-C-COMP-2	Total/NA	Solid	9012A	140756
480-46264-27	HOHAOC2-C-COMP-3	Total/NA	Solid	9012A	140756
480-46264-27 MS	HOHAOC2-C-COMP-3	Total/NA	Solid	9012A	140756
480-46264-28	HOHAOC2-C-COMP-4	Total/NA	Solid	9012A	140756
480-46264-28 DU	HOHAOC2-C-COMP-4	Total/NA	Solid	9012A	140756
480-46264-29	HOHAOC2-C-COMP-5	Total/NA	Solid	9012A	140756
480-46264-30	HOHAOC2-C-COMP-6	Total/NA	Solid	9012A	140756
480-46264-31	HOHAOC2-C-COMP-7	Total/NA	Solid	9012A	140756
480-46264-32	HOHAOC2-C-COMP-8	Total/NA	Solid	9012A	140756
480-46264-33	HOHAOC2-C-COMP-9	Total/NA	Solid	9012A	140756
480-46264-34	HOHAOC2-C-COMP-10	Total/NA	Solid	9012A	140756
480-46264-35	HOHAOC2-C-COMP-11	Total/NA	Solid	9012A	140756
480-46264-36	HOHAOC2-C-COMP-12	Total/NA	Solid	9012A	140756
480-46264-36 MS	HOHAOC2-C-COMP-12	Total/NA	Solid	9012A	140756
LCS 480-140756/2-A	Lab Control Sample	Total/NA	Solid	9012A	140756
MB 480-140756/1-A	Method Blank	Total/NA	Solid	9012A	140756

Analysis Batch: 141341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46264-25	HOHAOC2-C-COMP-1	Total/NA	Solid	SM 3500 CR D	
480-46264-26	HOHAOC2-C-COMP-2	Total/NA	Solid	SM 3500 CR D	
480-46264-27	HOHAOC2-C-COMP-3	Total/NA	Solid	SM 3500 CR D	
480-46264-28	HOHAOC2-C-COMP-4	Total/NA	Solid	SM 3500 CR D	
480-46264-29	HOHAOC2-C-COMP-5	Total/NA	Solid	SM 3500 CR D	
480-46264-30	HOHAOC2-C-COMP-6	Total/NA	Solid	SM 3500 CR D	
480-46264-31	HOHAOC2-C-COMP-7	Total/NA	Solid	SM 3500 CR D	
480-46264-32	HOHAOC2-C-COMP-8	Total/NA	Solid	SM 3500 CR D	
480-46264-33	HOHAOC2-C-COMP-9	Total/NA	Solid	SM 3500 CR D	
480-46264-34	HOHAOC2-C-COMP-10	Total/NA	Solid	SM 3500 CR D	
480-46264-35	HOHAOC2-C-COMP-11	Total/NA	Solid	SM 3500 CR D	
480-46264-36	HOHAOC2-C-COMP-12	Total/NA	Solid	SM 3500 CR D	

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-1-GRAB-1

Lab Sample ID: 480-46264-1
Date Collected: 09/19/13 09:30
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 94.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140520	09/22/13 23:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	140655	09/23/13 15:59	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Client Sample ID: HOHAOC2-C-1-GRAB-2

Lab Sample ID: 480-46264-2
Date Collected: 09/19/13 09:40
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 96.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140520	09/22/13 23:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	140655	09/23/13 16:25	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Client Sample ID: HOHAOC2-C-2-GRAB-1

Lab Sample ID: 480-46264-3
Date Collected: 09/19/13 09:50
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 96.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140520	09/22/13 23:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	140655	09/23/13 16:51	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Client Sample ID: HOHAOC2-C-2-GRAB-2

Lab Sample ID: 480-46264-4
Date Collected: 09/19/13 10:00
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 96.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140520	09/22/13 23:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	140655	09/23/13 17:17	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Client Sample ID: HOHAOC2-C-3-GRAB-1

Lab Sample ID: 480-46264-5
Date Collected: 09/19/13 10:10
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 97.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140520	09/22/13 23:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	140517	09/23/13 00:15	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-3-GRAB-2

Lab Sample ID: 480-46264-6
Date Collected: 09/19/13 10:20
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 97.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140520	09/22/13 23:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	140517	09/23/13 00:40	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Client Sample ID: HOHAOC2-C-4-GRAB-1

Lab Sample ID: 480-46264-7
Date Collected: 09/19/13 10:30
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 97.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140520	09/22/13 23:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	140517	09/23/13 01:06	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Client Sample ID: HOHAOC2-C-4-GRAB-2

Lab Sample ID: 480-46264-8
Date Collected: 09/19/13 10:40
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 96.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140520	09/22/13 23:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	140517	09/23/13 01:32	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Client Sample ID: HOHAOC2-C-5-GRAB-1

Lab Sample ID: 480-46264-9
Date Collected: 09/19/13 10:50
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 94.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140520	09/22/13 23:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	140517	09/23/13 01:57	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Client Sample ID: HOHAOC2-C-5-GRAB-2

Lab Sample ID: 480-46264-10
Date Collected: 09/19/13 11:00
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 96.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140520	09/22/13 23:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	140517	09/23/13 02:23	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-6-GRAB-1

Lab Sample ID: 480-46264-11
Date Collected: 09/19/13 11:10
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 92.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140520	09/22/13 23:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	140517	09/23/13 02:48	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Client Sample ID: HOHAOC2-C-6-GRAB-2

Lab Sample ID: 480-46264-12
Date Collected: 09/19/13 11:20
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140520	09/22/13 23:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	140655	09/23/13 17:42	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Client Sample ID: HOHAOC2-C-7-GRAB-1

Lab Sample ID: 480-46264-13
Date Collected: 09/19/13 11:30
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 95.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140520	09/22/13 23:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	140517	09/23/13 03:39	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Client Sample ID: HOHAOC2-C-7-GRAB-2

Lab Sample ID: 480-46264-14
Date Collected: 09/19/13 11:40
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 96.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140520	09/22/13 23:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	140517	09/23/13 04:05	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Client Sample ID: HOHAOC2-C-8-GRAB-1

Lab Sample ID: 480-46264-15
Date Collected: 09/19/13 11:50
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 96.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140520	09/22/13 23:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	140517	09/23/13 04:30	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Client Sample ID: HOHAOC2-C-8-GRAB-2

Lab Sample ID: 480-46264-16
Date Collected: 09/19/13 12:00
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 97.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140520	09/22/13 23:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	140517	09/23/13 04:55	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Client Sample ID: HOHAOC2-C-9-GRAB-1

Lab Sample ID: 480-46264-17
Date Collected: 09/19/13 12:10
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 98.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140520	09/22/13 23:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	140517	09/23/13 05:21	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Client Sample ID: HOHAOC2-C-9-GRAB-2

Lab Sample ID: 480-46264-18
Date Collected: 09/19/13 12:20
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 97.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140520	09/22/13 23:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	140517	09/23/13 05:47	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Client Sample ID: HOHAOC2-C-10-GRAB-1

Lab Sample ID: 480-46264-19
Date Collected: 09/19/13 12:30
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 98.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140520	09/22/13 23:23	CDC	TAL BUF
Total/NA	Analysis	8260B		1	140517	09/23/13 06:12	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Client Sample ID: HOHAOC2-C-10-GRAB-2

Lab Sample ID: 480-46264-20
Date Collected: 09/19/13 12:40
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 95.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140520	09/22/13 23:45	CDC	TAL BUF
Total/NA	Analysis	8260B		1	140517	09/23/13 06:37	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Client Sample ID: HOHAOC2-C-11-GRAB-1

Lab Sample ID: 480-46264-21

Date Collected: 09/19/13 12:50
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 97.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140520	09/22/13 23:45	CDC	TAL BUF
Total/NA	Analysis	8260B		1	140517	09/23/13 07:03	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Client Sample ID: HOHAOC2-C-11-GRAB-2

Lab Sample ID: 480-46264-22

Date Collected: 09/19/13 13:00
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140520	09/22/13 23:45	CDC	TAL BUF
Total/NA	Analysis	8260B		1	140517	09/23/13 07:29	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Client Sample ID: HOHAOC2-C-12-GRAB-1

Lab Sample ID: 480-46264-23

Date Collected: 09/19/13 13:10
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 98.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140520	09/22/13 23:45	CDC	TAL BUF
Total/NA	Analysis	8260B		1	140517	09/23/13 07:55	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Client Sample ID: HOHAOC2-C-12-GRAB-2

Lab Sample ID: 480-46264-24

Date Collected: 09/19/13 13:20
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 96.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			140653	09/23/13 12:18	PJQ	TAL BUF
Total/NA	Analysis	8260B		1	140655	09/23/13 18:08	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	140666	09/23/13 13:20	PJQ	TAL BUF

Client Sample ID: HOHAOC2-C-COMP-1

Lab Sample ID: 480-46264-25

Date Collected: 09/19/13 13:30
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 95.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			140766	09/24/13 06:47	DLE	TAL BUF
Total/NA	Analysis	8270C		1	140941	09/25/13 04:16	RMM	TAL BUF
Total/NA	Prep	3550B			140465	09/21/13 09:03	KEB	TAL BUF
Total/NA	Analysis	8082		1	140499	09/23/13 11:28	JMM	TAL BUF
Total/NA	Prep	3550B			140764	09/24/13 06:37	DLE	TAL BUF
Total/NA	Analysis	8081A		1	141014	09/25/13 13:45	LMW	TAL BUF

Client Sample ID: HOHAOC2-C-COMP-1

Lab Sample ID: 480-46264-25

Date Collected: 09/19/13 13:30
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 95.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			140689	09/23/13 15:11	TRG	TAL BUF
Total/NA	Analysis	8151A		1	141052	09/25/13 11:09	JAD	TAL BUF
Total/NA	Prep	7471A			140472	09/23/13 07:50	JRK	TAL BUF
Total/NA	Analysis	7471A		1	140673	09/23/13 11:44	JRK	TAL BUF
Total/NA	Prep	3050B			140467	09/21/13 10:30	SS1	TAL BUF
Total/NA	Analysis	6010B		1	140801	09/23/13 20:50	LMH	TAL BUF
Total/NA	Prep	3060A			102790	09/24/13 23:20	RPP	TAL CAN
Total/NA	Analysis	7196A		1	102901	09/25/13 12:42	RPP	TAL CAN
Total/NA	Analysis	Moisture		1	140431	09/20/13 21:41	GTG	TAL BUF
Total/NA	Prep	9012A			140756	09/24/13 04:43	KWJ	TAL BUF
Total/NA	Analysis	9012A		1	140887	09/24/13 13:22	EGN	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	141341	09/26/13 13:16	SW1	TAL BUF

Client Sample ID: HOHAOC2-C-COMP-2

Lab Sample ID: 480-46264-26

Date Collected: 09/19/13 13:40
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 96.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			140766	09/24/13 06:47	DLE	TAL BUF
Total/NA	Analysis	8270C		1	140941	09/25/13 04:41	RMM	TAL BUF
Total/NA	Prep	3550B			140465	09/21/13 09:03	KEB	TAL BUF
Total/NA	Analysis	8082		1	140499	09/23/13 11:43	JMM	TAL BUF
Total/NA	Prep	3550B			140764	09/24/13 06:37	DLE	TAL BUF
Total/NA	Analysis	8081A		1	141014	09/25/13 14:03	LMW	TAL BUF
Total/NA	Prep	8151A			140689	09/23/13 15:11	TRG	TAL BUF
Total/NA	Analysis	8151A		1	141052	09/25/13 11:38	JAD	TAL BUF
Total/NA	Prep	7471A			140472	09/23/13 07:50	JRK	TAL BUF
Total/NA	Analysis	7471A		1	140673	09/23/13 11:45	JRK	TAL BUF
Total/NA	Prep	3050B			140467	09/21/13 10:30	SS1	TAL BUF
Total/NA	Analysis	6010B		1	140801	09/23/13 21:07	LMH	TAL BUF
Total/NA	Prep	3060A			102790	09/24/13 23:20	RPP	TAL CAN
Total/NA	Analysis	7196A		1	102901	09/25/13 12:43	RPP	TAL CAN
Total/NA	Analysis	Moisture		1	140431	09/20/13 21:41	GTG	TAL BUF
Total/NA	Prep	9012A			140756	09/24/13 04:43	KWJ	TAL BUF
Total/NA	Analysis	9012A		1	140887	09/24/13 13:23	EGN	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	141341	09/26/13 13:16	SW1	TAL BUF

Client Sample ID: HOHAOC2-C-COMP-3

Lab Sample ID: 480-46264-27

Date Collected: 09/19/13 13:50
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 96.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			140766	09/24/13 06:47	DLE	TAL BUF

Client Sample ID: HOHAOC2-C-COMP-3

Lab Sample ID: 480-46264-27

Date Collected: 09/19/13 13:50
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 96.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C		1	140941	09/25/13 05:06	RMM	TAL BUF
Total/NA	Prep	3550B			140465	09/21/13 09:03	KEB	TAL BUF
Total/NA	Analysis	8082		1	140499	09/23/13 11:58	JMM	TAL BUF
Total/NA	Prep	3550B			140764	09/24/13 06:37	DLE	TAL BUF
Total/NA	Analysis	8081A		1	141014	09/25/13 14:20	LMW	TAL BUF
Total/NA	Prep	8151A			140689	09/23/13 15:11	TRG	TAL BUF
Total/NA	Analysis	8151A		1	141052	09/25/13 12:08	JAD	TAL BUF
Total/NA	Prep	7471A			140472	09/23/13 07:50	JRK	TAL BUF
Total/NA	Analysis	7471A		1	140673	09/23/13 11:47	JRK	TAL BUF
Total/NA	Prep	3050B			140467	09/21/13 10:30	SS1	TAL BUF
Total/NA	Analysis	6010B		1	140801	09/23/13 21:10	LMH	TAL BUF
Total/NA	Prep	3060A			102790	09/24/13 23:20	RPP	TAL CAN
Total/NA	Analysis	7196A		1	102901	09/25/13 13:02	RPP	TAL CAN
Total/NA	Analysis	Moisture		1	140431	09/20/13 21:41	GTG	TAL BUF
Total/NA	Prep	9012A			140756	09/24/13 04:43	KWJ	TAL BUF
Total/NA	Analysis	9012A		1	140887	09/24/13 13:24	EGN	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	141341	09/26/13 13:16	SW1	TAL BUF

Client Sample ID: HOHAOC2-C-COMP-4

Lab Sample ID: 480-46264-28

Date Collected: 09/19/13 14:00
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 97.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			140766	09/24/13 06:47	DLE	TAL BUF
Total/NA	Analysis	8270C		1	140941	09/25/13 05:31	RMM	TAL BUF
Total/NA	Prep	3550B			140465	09/21/13 09:03	KEB	TAL BUF
Total/NA	Analysis	8082		1	140499	09/23/13 12:42	JMM	TAL BUF
Total/NA	Prep	3550B			140764	09/24/13 06:37	DLE	TAL BUF
Total/NA	Analysis	8081A		1	141014	09/25/13 14:38	LMW	TAL BUF
Total/NA	Prep	8151A			140689	09/23/13 15:11	TRG	TAL BUF
Total/NA	Analysis	8151A		1	141052	09/25/13 12:38	JAD	TAL BUF
Total/NA	Prep	7471A			140472	09/23/13 07:50	JRK	TAL BUF
Total/NA	Analysis	7471A		1	140673	09/23/13 11:49	JRK	TAL BUF
Total/NA	Prep	3050B			140467	09/21/13 10:30	SS1	TAL BUF
Total/NA	Analysis	6010B		1	140801	09/23/13 21:12	LMH	TAL BUF
Total/NA	Prep	3060A			102790	09/24/13 23:20	RPP	TAL CAN
Total/NA	Analysis	7196A		1	102901	09/25/13 13:04	RPP	TAL CAN
Total/NA	Analysis	Moisture		1	140431	09/20/13 21:41	GTG	TAL BUF
Total/NA	Prep	9012A			140756	09/24/13 04:43	KWJ	TAL BUF
Total/NA	Analysis	9012A		1	140887	09/24/13 13:25	EGN	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	141341	09/26/13 13:16	SW1	TAL BUF

Client Sample ID: HOHAOC2-C-COMP-5

Lab Sample ID: 480-46264-29

Date Collected: 09/19/13 14:10

Matrix: Solid

Date Received: 09/20/13 09:00

Percent Solids: 95.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			140766	09/24/13 06:47	DLE	TAL BUF
Total/NA	Analysis	8270C		1	140941	09/25/13 05:55	RMM	TAL BUF
Total/NA	Prep	3550B			140465	09/21/13 09:03	KEB	TAL BUF
Total/NA	Analysis	8082		1	140499	09/23/13 12:57	JMM	TAL BUF
Total/NA	Prep	3550B			140764	09/24/13 06:37	DLE	TAL BUF
Total/NA	Analysis	8081A		1	141014	09/25/13 14:56	LMW	TAL BUF
Total/NA	Prep	8151A			140689	09/23/13 15:11	TRG	TAL BUF
Total/NA	Analysis	8151A		1	141052	09/25/13 13:07	JAD	TAL BUF
Total/NA	Prep	7471A			140472	09/23/13 07:50	JRK	TAL BUF
Total/NA	Analysis	7471A		1	140673	09/23/13 11:51	JRK	TAL BUF
Total/NA	Prep	3050B			140467	09/21/13 10:30	SS1	TAL BUF
Total/NA	Analysis	6010B		1	140801	09/23/13 21:14	LMH	TAL BUF
Total/NA	Prep	3060A			102790	09/24/13 23:20	RPP	TAL CAN
Total/NA	Analysis	7196A		1	102901	09/25/13 13:07	RPP	TAL CAN
Total/NA	Analysis	Moisture		1	140431	09/20/13 21:41	GTG	TAL BUF
Total/NA	Prep	9012A			140756	09/24/13 04:43	KWJ	TAL BUF
Total/NA	Analysis	9012A		1	140887	09/24/13 13:29	EGN	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	141341	09/26/13 13:16	SW1	TAL BUF

Client Sample ID: HOHAOC2-C-COMP-6

Lab Sample ID: 480-46264-30

Date Collected: 09/19/13 14:20

Matrix: Solid

Date Received: 09/20/13 09:00

Percent Solids: 88.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			140766	09/24/13 06:47	DLE	TAL BUF
Total/NA	Analysis	8270C		1	140941	09/25/13 06:20	RMM	TAL BUF
Total/NA	Prep	3550B			140465	09/21/13 09:03	KEB	TAL BUF
Total/NA	Analysis	8082		1	140499	09/23/13 13:12	JMM	TAL BUF
Total/NA	Prep	3550B			140764	09/24/13 06:37	DLE	TAL BUF
Total/NA	Analysis	8081A		1	141014	09/25/13 15:14	LMW	TAL BUF
Total/NA	Prep	8151A			140689	09/23/13 15:11	TRG	TAL BUF
Total/NA	Analysis	8151A		1	141052	09/25/13 13:37	JAD	TAL BUF
Total/NA	Prep	7471A			140472	09/23/13 07:50	JRK	TAL BUF
Total/NA	Analysis	7471A		1	140673	09/23/13 11:53	JRK	TAL BUF
Total/NA	Prep	3050B			140467	09/21/13 10:30	SS1	TAL BUF
Total/NA	Analysis	6010B		1	140801	09/23/13 21:17	LMH	TAL BUF
Total/NA	Prep	3060A			102790	09/24/13 23:20	RPP	TAL CAN
Total/NA	Analysis	7196A		1	102901	09/25/13 13:08	RPP	TAL CAN
Total/NA	Analysis	Moisture		1	140431	09/20/13 21:41	GTG	TAL BUF
Total/NA	Prep	9012A			140756	09/24/13 04:43	KWJ	TAL BUF
Total/NA	Analysis	9012A		1	140887	09/24/13 13:30	EGN	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	141341	09/26/13 13:16	SW1	TAL BUF

Client Sample ID: HOHAOC2-C-COMP-7

Lab Sample ID: 480-46264-31

Date Collected: 09/19/13 14:30
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 89.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			140766	09/24/13 06:47	DLE	TAL BUF
Total/NA	Analysis	8270C		1	140941	09/25/13 06:45	RMM	TAL BUF
Total/NA	Prep	3550B			140465	09/21/13 09:03	KEB	TAL BUF
Total/NA	Analysis	8082		1	140499	09/23/13 13:26	JMM	TAL BUF
Total/NA	Prep	3550B			140764	09/24/13 06:37	DLE	TAL BUF
Total/NA	Analysis	8081A		1	141014	09/25/13 15:31	LMW	TAL BUF
Total/NA	Prep	8151A			140689	09/23/13 15:11	TRG	TAL BUF
Total/NA	Analysis	8151A		1	141052	09/25/13 14:06	JAD	TAL BUF
Total/NA	Prep	7471A			140472	09/23/13 07:50	JRK	TAL BUF
Total/NA	Analysis	7471A		1	140673	09/23/13 11:55	JRK	TAL BUF
Total/NA	Prep	3050B			140467	09/21/13 10:30	SS1	TAL BUF
Total/NA	Analysis	6010B		1	140801	09/23/13 21:19	LMH	TAL BUF
Total/NA	Prep	3060A			102790	09/24/13 23:20	RPP	TAL CAN
Total/NA	Analysis	7196A		1	102901	09/25/13 13:11	RPP	TAL CAN
Total/NA	Analysis	Moisture		1	140431	09/20/13 21:41	GTG	TAL BUF
Total/NA	Prep	9012A			140756	09/24/13 04:43	KWJ	TAL BUF
Total/NA	Analysis	9012A		1	140887	09/24/13 13:30	EGN	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	141341	09/26/13 13:16	SW1	TAL BUF

Client Sample ID: HOHAOC2-C-COMP-8

Lab Sample ID: 480-46264-32

Date Collected: 09/19/13 14:40
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 97.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			140766	09/24/13 06:47	DLE	TAL BUF
Total/NA	Analysis	8270C		1	140941	09/25/13 07:09	RMM	TAL BUF
Total/NA	Prep	3550B			140465	09/21/13 09:03	KEB	TAL BUF
Total/NA	Analysis	8082		1	140499	09/23/13 13:41	JMM	TAL BUF
Total/NA	Prep	3550B			140764	09/24/13 06:37	DLE	TAL BUF
Total/NA	Analysis	8081A		1	141014	09/25/13 15:49	LMW	TAL BUF
Total/NA	Prep	8151A			140689	09/23/13 15:11	TRG	TAL BUF
Total/NA	Analysis	8151A		1	141052	09/25/13 14:36	JAD	TAL BUF
Total/NA	Prep	7471A			140472	09/23/13 07:50	JRK	TAL BUF
Total/NA	Analysis	7471A		1	140673	09/23/13 11:57	JRK	TAL BUF
Total/NA	Prep	3050B			140467	09/21/13 10:30	SS1	TAL BUF
Total/NA	Analysis	6010B		1	140801	09/23/13 21:22	LMH	TAL BUF
Total/NA	Prep	3060A			102790	09/24/13 23:20	RPP	TAL CAN
Total/NA	Analysis	7196A		1	102901	09/25/13 13:11	RPP	TAL CAN
Total/NA	Analysis	Moisture		1	140431	09/20/13 21:41	GTG	TAL BUF
Total/NA	Prep	9012A			140756	09/24/13 04:43	KWJ	TAL BUF
Total/NA	Analysis	9012A		1	140887	09/24/13 13:31	EGN	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	141341	09/26/13 13:16	SW1	TAL BUF

Client Sample ID: HOHAOC2-C-COMP-9

Lab Sample ID: 480-46264-33

Date Collected: 09/19/13 14:50
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 95.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			140766	09/24/13 06:47	DLE	TAL BUF
Total/NA	Analysis	8270C		1	140941	09/25/13 07:34	RMM	TAL BUF
Total/NA	Prep	3550B			140465	09/21/13 09:03	KEB	TAL BUF
Total/NA	Analysis	8082		1	140499	09/23/13 13:56	JMM	TAL BUF
Total/NA	Prep	3550B			140764	09/24/13 06:37	DLE	TAL BUF
Total/NA	Analysis	8081A		1	141014	09/25/13 16:07	LMW	TAL BUF
Total/NA	Prep	8151A			140689	09/23/13 15:11	TRG	TAL BUF
Total/NA	Analysis	8151A		1	141052	09/25/13 15:06	JAD	TAL BUF
Total/NA	Prep	7471A			140472	09/23/13 07:50	JRK	TAL BUF
Total/NA	Analysis	7471A		1	140673	09/23/13 12:02	JRK	TAL BUF
Total/NA	Prep	3050B			140467	09/21/13 10:30	SS1	TAL BUF
Total/NA	Analysis	6010B		1	140801	09/23/13 21:24	LMH	TAL BUF
Total/NA	Prep	3060A			102790	09/24/13 23:20	RPP	TAL CAN
Total/NA	Analysis	7196A		1	102901	09/25/13 13:21	RPP	TAL CAN
Total/NA	Analysis	Moisture		1	140431	09/20/13 21:41	GTG	TAL BUF
Total/NA	Prep	9012A			140756	09/24/13 04:43	KWJ	TAL BUF
Total/NA	Analysis	9012A		1	140887	09/24/13 13:32	EGN	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	141341	09/26/13 13:16	SW1	TAL BUF

Client Sample ID: HOHAOC2-C-COMP-10

Lab Sample ID: 480-46264-34

Date Collected: 09/19/13 16:00
Matrix: Solid
Date Received: 09/20/13 09:00
Percent Solids: 97.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			140766	09/24/13 06:47	DLE	TAL BUF
Total/NA	Analysis	8270C		1	140941	09/25/13 07:59	RMM	TAL BUF
Total/NA	Prep	3550B			140465	09/21/13 09:03	KEB	TAL BUF
Total/NA	Analysis	8082		1	140499	09/23/13 14:11	JMM	TAL BUF
Total/NA	Prep	3550B			140764	09/24/13 06:37	DLE	TAL BUF
Total/NA	Analysis	8081A		1	141014	09/25/13 16:25	LMW	TAL BUF
Total/NA	Prep	8151A			140689	09/23/13 15:11	TRG	TAL BUF
Total/NA	Analysis	8151A		1	141052	09/25/13 15:35	JAD	TAL BUF
Total/NA	Prep	7471A			140472	09/23/13 07:50	JRK	TAL BUF
Total/NA	Analysis	7471A		1	140673	09/23/13 12:04	JRK	TAL BUF
Total/NA	Prep	3050B			140467	09/21/13 10:30	SS1	TAL BUF
Total/NA	Analysis	6010B		1	140801	09/23/13 21:26	LMH	TAL BUF
Total/NA	Prep	3060A			102790	09/24/13 23:20	RPP	TAL CAN
Total/NA	Analysis	7196A		1	102901	09/25/13 13:21	RPP	TAL CAN
Total/NA	Analysis	Moisture		1	140431	09/20/13 21:41	GTG	TAL BUF
Total/NA	Prep	9012A			140756	09/24/13 04:43	KWJ	TAL BUF
Total/NA	Analysis	9012A		1	140887	09/24/13 13:33	EGN	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	141341	09/26/13 13:16	SW1	TAL BUF

Client Sample ID: HOHAOC2-C-COMP-11

Lab Sample ID: 480-46264-35

Date Collected: 09/19/13 16:10

Matrix: Solid

Date Received: 09/20/13 09:00

Percent Solids: 95.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			140766	09/24/13 06:47	DLE	TAL BUF
Total/NA	Analysis	8270C		1	140941	09/25/13 08:24	RMM	TAL BUF
Total/NA	Prep	3550B			140465	09/21/13 09:03	KEB	TAL BUF
Total/NA	Analysis	8082		1	140499	09/23/13 14:25	JMM	TAL BUF
Total/NA	Prep	3550B			140764	09/24/13 06:37	DLE	TAL BUF
Total/NA	Analysis	8081A		1	141014	09/25/13 17:18	LMW	TAL BUF
Total/NA	Prep	8151A			140689	09/23/13 15:11	TRG	TAL BUF
Total/NA	Analysis	8151A		1	141052	09/25/13 16:35	JAD	TAL BUF
Total/NA	Prep	7471A			140472	09/23/13 07:50	JRK	TAL BUF
Total/NA	Analysis	7471A		1	140673	09/23/13 12:06	JRK	TAL BUF
Total/NA	Prep	3050B			140467	09/21/13 10:30	SS1	TAL BUF
Total/NA	Analysis	6010B		1	140801	09/23/13 21:29	LMH	TAL BUF
Total/NA	Prep	3060A			102790	09/24/13 23:20	RPP	TAL CAN
Total/NA	Analysis	7196A		1	102901	09/25/13 13:28	RPP	TAL CAN
Total/NA	Analysis	Moisture		1	140431	09/20/13 21:41	GTG	TAL BUF
Total/NA	Prep	9012A			140756	09/24/13 04:43	KWJ	TAL BUF
Total/NA	Analysis	9012A		1	140887	09/24/13 13:34	EGN	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	141341	09/26/13 13:16	SW1	TAL BUF

Client Sample ID: HOHAOC2-C-COMP-12

Lab Sample ID: 480-46264-36

Date Collected: 09/19/13 16:20

Matrix: Solid

Date Received: 09/20/13 09:00

Percent Solids: 96.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			140766	09/24/13 06:47	DLE	TAL BUF
Total/NA	Analysis	8270C		1	140941	09/25/13 08:48	RMM	TAL BUF
Total/NA	Prep	3550B			140465	09/21/13 09:03	KEB	TAL BUF
Total/NA	Analysis	8082		1	140499	09/23/13 14:40	JMM	TAL BUF
Total/NA	Prep	3550B			140764	09/24/13 06:37	DLE	TAL BUF
Total/NA	Analysis	8081A		1	141014	09/25/13 17:36	LMW	TAL BUF
Total/NA	Prep	8151A			140689	09/23/13 15:11	TRG	TAL BUF
Total/NA	Analysis	8151A		1	141052	09/25/13 17:04	JAD	TAL BUF
Total/NA	Prep	7471A			140472	09/23/13 07:50	JRK	TAL BUF
Total/NA	Analysis	7471A		1	140673	09/23/13 12:08	JRK	TAL BUF
Total/NA	Prep	3050B			140467	09/21/13 10:30	SS1	TAL BUF
Total/NA	Analysis	6010B		1	140801	09/23/13 21:36	LMH	TAL BUF
Total/NA	Prep	3060A			102790	09/24/13 23:20	RPP	TAL CAN
Total/NA	Analysis	7196A		1	102901	09/25/13 13:28	RPP	TAL CAN
Total/NA	Analysis	Moisture		1	140431	09/20/13 21:41	GTG	TAL BUF
Total/NA	Prep	9012A			140756	09/24/13 04:43	KWJ	TAL BUF
Total/NA	Analysis	9012A		1	140887	09/24/13 13:35	EGN	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	141341	09/26/13 13:16	SW1	TAL BUF

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	10-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-14

Laboratory: TestAmerica Canton

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

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-13
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-14 *
Kansas	NELAP	7	E-10336	01-31-14
Kentucky	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	01-19-14
Pennsylvania	NELAP	3	68-00340	08-31-14 *
Texas	NELAP	6		08-31-14 *

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Laboratory: TestAmerica Canton (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
USDA	Federal		P330-11-00328	08-26-14
Virginia	NELAP	3	460175	09-14-14
Washington	State Program	10	C971	01-12-14
Wisconsin	State Program	5	999518190	08-31-14

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8081A	Organochlorine Pesticides (GC)	SW846	TAL BUF
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
8151A	Herbicides (GC)	SW846	TAL BUF
6010B	Metals (ICP)	SW846	TAL BUF
7471A	Mercury (CVAA)	SW846	TAL BUF
7196A	Chromium, Hexavalent	SW846	TAL CAN
9012A	Cyanide, Total and/or Amenable	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
SM 3500 CR D	Chromium, Trivalent	SM	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX Hastings, NY

TestAmerica Job ID: 480-46264-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-46264-1	HOHAOC2-C-1-GRAB-1	Solid	09/19/13 09:30	09/20/13 09:00
480-46264-2	HOHAOC2-C-1-GRAB-2	Solid	09/19/13 09:40	09/20/13 09:00
480-46264-3	HOHAOC2-C-2-GRAB-1	Solid	09/19/13 09:50	09/20/13 09:00
480-46264-4	HOHAOC2-C-2-GRAB-2	Solid	09/19/13 10:00	09/20/13 09:00
480-46264-5	HOHAOC2-C-3-GRAB-1	Solid	09/19/13 10:10	09/20/13 09:00
480-46264-6	HOHAOC2-C-3-GRAB-2	Solid	09/19/13 10:20	09/20/13 09:00
480-46264-7	HOHAOC2-C-4-GRAB-1	Solid	09/19/13 10:30	09/20/13 09:00
480-46264-8	HOHAOC2-C-4-GRAB-2	Solid	09/19/13 10:40	09/20/13 09:00
480-46264-9	HOHAOC2-C-5-GRAB-1	Solid	09/19/13 10:50	09/20/13 09:00
480-46264-10	HOHAOC2-C-5-GRAB-2	Solid	09/19/13 11:00	09/20/13 09:00
480-46264-11	HOHAOC2-C-6-GRAB-1	Solid	09/19/13 11:10	09/20/13 09:00
480-46264-12	HOHAOC2-C-6-GRAB-2	Solid	09/19/13 11:20	09/20/13 09:00
480-46264-13	HOHAOC2-C-7-GRAB-1	Solid	09/19/13 11:30	09/20/13 09:00
480-46264-14	HOHAOC2-C-7-GRAB-2	Solid	09/19/13 11:40	09/20/13 09:00
480-46264-15	HOHAOC2-C-8-GRAB-1	Solid	09/19/13 11:50	09/20/13 09:00
480-46264-16	HOHAOC2-C-8-GRAB-2	Solid	09/19/13 12:00	09/20/13 09:00
480-46264-17	HOHAOC2-C-9-GRAB-1	Solid	09/19/13 12:10	09/20/13 09:00
480-46264-18	HOHAOC2-C-9-GRAB-2	Solid	09/19/13 12:20	09/20/13 09:00
480-46264-19	HOHAOC2-C-10-GRAB-1	Solid	09/19/13 12:30	09/20/13 09:00
480-46264-20	HOHAOC2-C-10-GRAB-2	Solid	09/19/13 12:40	09/20/13 09:00
480-46264-21	HOHAOC2-C-11-GRAB-1	Solid	09/19/13 12:50	09/20/13 09:00
480-46264-22	HOHAOC2-C-11-GRAB-2	Solid	09/19/13 13:00	09/20/13 09:00
480-46264-23	HOHAOC2-C-12-GRAB-1	Solid	09/19/13 13:10	09/20/13 09:00
480-46264-24	HOHAOC2-C-12-GRAB-2	Solid	09/19/13 13:20	09/20/13 09:00
480-46264-25	HOHAOC2-C-COMP-1	Solid	09/19/13 13:30	09/20/13 09:00
480-46264-26	HOHAOC2-C-COMP-2	Solid	09/19/13 13:40	09/20/13 09:00
480-46264-27	HOHAOC2-C-COMP-3	Solid	09/19/13 13:50	09/20/13 09:00
480-46264-28	HOHAOC2-C-COMP-4	Solid	09/19/13 14:00	09/20/13 09:00
480-46264-29	HOHAOC2-C-COMP-5	Solid	09/19/13 14:10	09/20/13 09:00
480-46264-30	HOHAOC2-C-COMP-6	Solid	09/19/13 14:20	09/20/13 09:00
480-46264-31	HOHAOC2-C-COMP-7	Solid	09/19/13 14:30	09/20/13 09:00
480-46264-32	HOHAOC2-C-COMP-8	Solid	09/19/13 14:40	09/20/13 09:00
480-46264-33	HOHAOC2-C-COMP-9	Solid	09/19/13 14:50	09/20/13 09:00
480-46264-34	HOHAOC2-C-COMP-10	Solid	09/19/13 16:00	09/20/13 09:00
480-46264-35	HOHAOC2-C-COMP-11	Solid	09/19/13 16:10	09/20/13 09:00
480-46264-36	HOHAOC2-C-COMP-12	Solid	09/19/13 16:20	09/20/13 09:00

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information
Client Contact: Michael Higgins
Company: ARCADIS U.S., Inc.
Address: 6723 Towpath PO BOX 66
City: Syracuse
State, Zip: NY, 13214-0066
Phone: 713-432-2643(Tel)
Email: michael.higgins@arcadis-us.com
Project Name: CHEVRON - CVX Hastings, NY
Site: New York

Sampler: A ROBERTS / A BLANVELT / A REDDY
Phone: 585-202-4389

Lab PM: Schove, John R
E-Mail: john.schove@testamericainc.com

Carrier Tracking No(s):

COC No: 480-39469-10001.2
Page: 1 OF 4
Page ~~2 of 3~~

Job #:

Due Date Requested:

TAT Requested (days): 5 DAYS

PO #: SO# 0015118324
WO #: NWENVSFD000060201
Project #: 48003362
SSOW#:

Analysis Requested

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

WBS 08.04

Special Instructions/Note:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOC - Custom List	3500_CR_D - Chromium, hexavalent	3500_CR3_D, 8151A	9012A - Cyanide, Total	8081A, 8082	8270C - SVOC - NY STARS plus List	6010B, 7471A	Total Number of containers
			Preservation Code:				N	N	N	N	N	N	N	
HOHAOC2-C-1GRAB-1	9/19/13	0930	G	Solid			X							4
HOHAOC2-C-1GRAB-2		0940	G	Solid			X							4
HOHAOC2-C-2-GRAB-1		0950	G	Solid			X							4
HOHAOC2-C-2-GRAB-2		0900	G	Solid			X							4
HOHAOC2-C-3-GRAB-1		1010	G	Solid			X							4
HOHAOC2-C-3-GRAB-2		1020	G	Solid			X							4
HOHAOC2-C-4-GRAB-1		1030	G	Solid			X							4
HOHAOC2-C-4-GRAB-2		1040	G	Solid			X							4
HOHAOC2-C-5-GRAB-1		1050	G	Solid			X							4
HOHAOC2-C-5-GRAB-2		1100	G	Solid			X							4
HOHAOC2-C-6-GRAB-1		1110	G	Solid			X							4

480-46264 Chain of Custody

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

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

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

Special Instructions/QC Requirements:

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

	Date/Time	Company		Date/Time	Company
Relinquished by:	9/19/13 1700		Received by:	9/20/13 0900	TA
Relinquished by:			Received by:		
Relinquished by:			Received by:		

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 4.2 5.0 3.6 3.8 #1

Page 89 of 102
9/27/2013

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information
Client Contact: Michael Higgins
Company: ARCADIS U.S., Inc.
Address: 6723 Towpath PO BOX 66
City: Syracuse
State, Zip: NY, 13214-0066
Phone: 713-432-2643(Tel)
Email: michael.higgins@arcadis-us.com
Project Name: CHEVRON - CVX Hastings, NY
Site: New York

Sampler: A Roberts / A Blauvelt / A Izbdy
Phone: 585-202-4389
Lab PM: Schove, John R
E-Mail: john.schove@testamericainc.com
Carrier Tracking No(s):
COC No: 480-39469-10001.1
Page: 2 of 4
Page 1 of 3
Job #:

Due Date Requested:
TAT Requested (days): 5 DAYS
PO #: SO# 0015118324
WO #: NWENVSFD000060201
Project #: 48003362
SSOW#:

Analysis Requested

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

WBS 08.04

Special Instructions/Note:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOC - Custom List	3500_CR_D - Chromium, hexavalent	3500_CR3_D, 8151A	9012A - Cyanide, Total	8081A, 8082	8270C - SVOC - NY STARS plus List	6010B, 7471A	Total Number of containers
			Preservation Code:				N	N	N	N	N	N	N	
HOHAOC2-C-6-GRAB-2	9/19/13	1120	G	Solid			X							
HOHAOC2-C-7-GRAB-1		1130	G	Solid			X							
HOHAOC2-C-[redacted]-GRAB-2		1140	G	Solid			X							
HOHAOC2-C-8-GRAB-1		1150	G	Solid			X							
HOHAOC2-C-8-GRAB-2		1200	G	Solid			X							
HOHAOC2-C-9-GRAB-1		1210	G	Solid			X							
HOHAOC2-C-9-GRAB-2		1220	G	Solid			X							
HOHAOC2-C-10-GRAB-1		1230	G	Solid			X							
HOHAOC2-C-10-GRAB-2		1240	G	Solid			X							
HOHAOC2-C-11-GRAB-1		1250	G	Solid			X							
HOHAOC2-C-[redacted]-GRAB-2	↓	1300	G	Solid			X							

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

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

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

Special Instructions/QC Requirements:

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

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	9/19/13 1700		Received by:	9/20/13 0900	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: A ROBERTS / A BLANKET / A REDIN	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-39469-10001.2
Client Contact: Michael Higgins	Phone: 585-202-4389	E-Mail: john.schove@testamericainc.com		Page: 3 of 4 ~~Page 2 of 3~~
Company: ARCADIS U.S., Inc.				Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested:			
City: Syracuse	TAT Requested (days): 5 DAYS			
State, Zip: NY, 13214-0066				
Phone: 713-432-2643(Tel)	PO #: SO# 0015118324			
Email: michael.higgins@arcadis-us.com	WO #: NWENVSFD000060201			
Project Name: CHEVRON - CVX Hastings, NY	Project #: 48003362			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

WBS 08.04

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOC - Custom List	3500_CR_D - Chromium, hexavalent	3500_CR3_D, 8151A	9012A - Cyanide, Total	8081A, 8082	8270C - SVOC - NY STARS plus List	6010B, 7471A								Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N									
HOHAOC2-C-12-GRAB-1	9/19/13	1310	G	Solid			X														4	
HOHAOC2-C-12-GRAB-2		1320	G	Solid			X														4	
HOHAOC2-C-COMP-1		1330	C	Solid				X	X	X	X	X	X								6	
HOHAOC2-C-COMP-2		1340	C	Solid				X	X	X	X	X	X								6	
HOHAOC2-C-COMP-3		1350	C	Solid				X	X	X	X	X	X								6	
HOHAOC2-C-COMP-4		1400	C	Solid				X	X	X	X	X	X								6	
HOHAOC2-C-COMP-5		1410	C	Solid				X	X	X	X	X	X								6	
HOHAOC2-C-COMP-6		1420	C	Solid				X	X	X	X	X	X								6	
HOHAOC2-C-COMP-7		1430	C	Solid				X	X	X	X	X	X								6	
HOHAOC2-C-COMP-8		1440	C	Solid				X	X	X	X	X	X								6	
HOHAOC2-C-COMP-9		1450	C	Solid				X	X	X	X	X	X								6	

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:				
Relinquished by:	Date/Time: 9/19/13 1702	Company	Received by:	Date/Time: 9/20/13 0900	Company TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: A BLANVELT / A ROBERTS / A REDDY	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-39469-10001.2
Client Contact: Michael Higgins	Phone: 585-202-4389	E-Mail: john.schove@testamericainc.com		Page: Page 2 of 3 4 OF 4
Company: ARCADIS U.S., Inc.				Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested:			
City: Syracuse	TAT Requested (days): 5 DAYS			
State, Zip: NY, 13214-0066				
Phone: 713-432-2643(Tel)	PO #: SO# 0015118324			
Email: michael.higgins@arcadis-us.com	WO #: NWENVSFD000060201			
Project Name: CHEVRON - CVX Hastings, NY	Project #: 48003362			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

WBS 08.04

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOC - Custom List	3500_CR_D - Chromium, hexavalent	3500_CR3_D, 8151A	9012A - Cyanide, Total	8081A, 8082	8270C - SVOC - NY STARS plus List	6010B, 7471A	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N		
HOHAOC2-C-COMP-10	9/19/13	1600	C	Solid				X	X	X	X	X	X	6	
HOHAOC2-C-COMP-11	"	1610	C	Solid				X	X	X	X	X	X	6	
HOHAOC2-C-COMP-12	"	1620	C	Solid				X	X	X	X	X	X	6	
				Solid											
				Solid											
				Solid											
				Solid											
				Solid											
				Solid											
				Solid											
				Solid											

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	9/19/13 1702				
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-46264-1

Login Number: 46264

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	N/A	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

AMERICAN ANALYTICAL LABORATORIES

NYSDOH 11418
NJDEP NY050
CTDOH PH-0205
PADEP 68-00573

Thursday, October 03, 2013

Mike Casazza
American Environmental Assessment Corp.
188 Long Island Avenue
Wyandanch, NY 11798

TEL: (631) 586-2000
FAX (631) 586-9605

RE: Island Park- Topsoil

Order No.: 1310009

Dear Mike Casazza:

American Analytical Laboratories, LLC. received 36 sample(s) on 10/1/2013 for the analyses presented in the following report.

Samples were analyzed in accordance with the test procedures documented on the chain of custody and detailed throughout the text of this report.

The results reported herein relate only to the items tested or to the samples as received by the laboratory. This report may not be reproduced, except in full, without the approval of American Analytical Laboratories, LLC and is not considered complete without a cover page and chain of custody documentation. The limits (LOQ) provided in the data package are analytical reporting limits and not Federal or Local mandated values to which the sample results should be compared.

There were no problems with the analyses and all data for associated QC met laboratory specifications. If there are any exceptions a Case Narrative is provided in the report or the data is qualified either on the sample results or in the QC section of the report. This package has been reviewed by American Analytical Laboratories' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal. This report consists of 123 pages.

If you have any questions regarding these tests results, please do not hesitate to call (631) 454-6100 or email me directly at lbeyer@american-analytical.com.

Sincerely,

Lori Beyer
Lab Director

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

CLIENT: American Environmental Assessment Corp.
Project: Island Park- Topsoil
Lab Order: 1310009

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date Collected	Date Received
1310009-01A	Topsoil-1-Grab-1	10/1/2013 10:50:00 AM	10/1/2013
1310009-02A	Topsoil-1-Grab-2	10/1/2013 11:00:00 AM	10/1/2013
1310009-03A	Topsoil-1-Grab-3	10/1/2013 11:10:00 AM	10/1/2013
1310009-04A	Topsoil-1-Grab-4	10/1/2013 11:20:00 AM	10/1/2013
1310009-05A	Topsoil-1-Grab-5	10/1/2013 11:30:00 AM	10/1/2013
1310009-06A	Topsoil-1-Grab-6	10/1/2013 11:40:00 AM	10/1/2013
1310009-07A	Topsoil-1-Grab-7	10/1/2013 11:50:00 AM	10/1/2013
1310009-08A	Topsoil-2-Grab-1	10/1/2013 12:00:00 PM	10/1/2013
1310009-09A	Topsoil-2-Grab-2	10/1/2013 12:10:00 PM	10/1/2013
1310009-10A	Topsoil-3-Grab-1	10/1/2013 12:20:00 PM	10/1/2013
1310009-11A	Topsoil-3-Grab-2	10/1/2013 12:30:00 PM	10/1/2013
1310009-12A	Topsoil-4-Grab-1	10/1/2013 12:40:00 PM	10/1/2013
1310009-13A	Topsoil-4-Grab-2	10/1/2013 12:50:00 AM	10/1/2013
1310009-14A	Topsoil-5-Grab-1	10/1/2013 1:00:00 PM	10/1/2013
1310009-15A	Topsoil-5-Grab-2	10/1/2013 1:10:00 PM	10/1/2013
1310009-16A	Topsoil-6-Grab-1	10/1/2013 1:20:00 PM	10/1/2013
1310009-17A	Topsoil-6-Grab-2	10/1/2013 1:30:00 PM	10/1/2013
1310009-18A	Topsoil-7-Grab-1	10/1/2013 1:40:00 PM	10/1/2013
1310009-19A	Topsoil-7-Grab-2	10/1/2013 1:50:00 PM	10/1/2013
1310009-20A	Topsoil-8-Grab-1	10/1/2013 2:00:00 PM	10/1/2013
1310009-21A	Topsoil-8-Grab-2	10/1/2013 2:10:00 PM	10/1/2013
1310009-22A	Topsoil-9-Grab-1	10/1/2013 2:20:00 PM	10/1/2013
1310009-23A	Topsoil-9-Grab-2	10/1/2013 2:30:00 PM	10/1/2013
1310009-24A	Topsoil-10-Grab-1	10/1/2013 2:40:00 PM	10/1/2013
1310009-25A	Topsoil-10-Grab-2	10/1/2013 2:50:00 PM	10/1/2013
1310009-26A	Topsoil-1-Comp-1	10/1/2013 9:00:00 AM	10/1/2013
1310009-26B	Topsoil-1-Comp-1	10/1/2013 9:00:00 AM	10/1/2013
1310009-27A	Topsoil-1-Comp-2	10/1/2013 9:10:00 AM	10/1/2013
1310009-27B	Topsoil-1-Comp-2	10/1/2013 9:10:00 AM	10/1/2013
1310009-28A	Topsoil-2-Comp-1	10/1/2013 9:20:00 AM	10/1/2013
1310009-28B	Topsoil-2-Comp-1	10/1/2013 9:20:00 AM	10/1/2013
1310009-29A	Topsoil-3-Comp-1	10/1/2013 9:30:00 AM	10/1/2013
1310009-29B	Topsoil-3-Comp-1	10/1/2013 9:30:00 AM	10/1/2013
1310009-30A	Topsoil-4-Comp-1	10/1/2013 9:40:00 AM	10/1/2013
1310009-30B	Topsoil-4-Comp-1	10/1/2013 9:40:00 AM	10/1/2013
1310009-31A	Topsoil-5-Comp-1	10/1/2013 9:50:00 AM	10/1/2013

CLIENT: American Environmental Assessment Corp.
Project: Island Park- Topsoil
Lab Order: 1310009

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date Collected	Date Received
1310009-31B	Topsoil-5-Comp-1	10/1/2013 9:50:00 AM	10/1/2013
1310009-32A	Topsoil-6-Comp-1	10/1/2013 10:00:00 AM	10/1/2013
1310009-32B	Topsoil-6-Comp-1	10/1/2013 10:00:00 AM	10/1/2013
1310009-33A	Topsoil-7-Comp-1	10/1/2013 10:10:00 AM	10/1/2013
1310009-33B	Topsoil-7-Comp-1	10/1/2013 10:10:00 AM	10/1/2013
1310009-34A	Topsoil-8-Comp-1	10/1/2013 10:20:00 AM	10/1/2013
1310009-34B	Topsoil-8-Comp-1	10/1/2013 10:20:00 AM	10/1/2013
1310009-35A	Topsoil-9-Comp-1	10/1/2013 10:30:00 AM	10/1/2013
1310009-35B	Topsoil-9-Comp-1	10/1/2013 10:30:00 AM	10/1/2013
1310009-36A	Topsoil-10-Comp-1	10/1/2013 10:40:00 AM	10/1/2013
1310009-36B	Topsoil-10-Comp-1	10/1/2013 10:40:00 AM	10/1/2013

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
~~SEAN~~ MIKE CASAZZA / AMERICAN ENVIRONMENTAL ASSESSMENT		10/1/13	249987
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 3**
188 LONG ISLAND AVENUE	631-586-2050		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
WYANDANCH / NY / 11798			
Project Name and Location (State)	**Carrier/Waybill Number**		
Island Park Topsoil			
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: BVOC	3500-CR-D	3500-CR-D, 6010A	9013A	8081A, 8082	8270D	6010B, 7471A	Special Instructions/ Conditions of Receipt
ISLAND PARK - TOPSOIL - 1 - GRAB-1	10-1-13	1050				X							X							#OF CONTAINERS - 4
ISLAND PARK - TOPSOIL - 1 - GRAB-2		1100				X							X							4
ISLAND PARK - TOPSOIL - 1 - GRAB-3		1110				X							X							4
ISLAND PARK - TOPSOIL - 1 - GRAB-4		1120				X							X							4
ISLAND PARK - TOPSOIL - 1 - GRAB-5		1130				X							X							4
ISLAND PARK - TOPSOIL - 1 - GRAB-6		1140				X							X							4
ISLAND PARK - TOPSOIL - 1 - GRAB-7		1150				X							X							4
ISLAND PARK - TOPSOIL - 2 - GRAB-1		1200				X							X							4
ISLAND PARK - TOPSOIL - 2 - GRAB-2		1210				X							X							4
ISLAND PARK - TOPSOIL - 3 - GRAB-1		1220				X							X							4
ISLAND PARK - TOPSOIL - 3 - GRAB-2		1230				X							X							4
ISLAND PARK - TOPSOIL - 4 - GRAB-1		1240				X							X							4

Possible Hazard Identification
☐ Non-Hazard ☒ Flammable ☒ Skin Irritant ☐ Poison B ☐ Unknown

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

Turn Around Time Required
☐ 24 Hours ☒ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.		10/1/13	1500	AAL.	10/1/13	1500
2.						
3.						

Comments

EMAIL TO: mcasazza@american-environmental.net, chadevenson@reconservices.com

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
		10/1/13	249988
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 2 of 3**
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	**Analysis (Attach list if more space is needed)**
Project Name and Location (State)	**Carrier/Waybill Number**		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/NaOH	BTEX & VOC	# OF CONTAINERS
ISLAND PARK - TOPSOIL - 4 - GRAB - 2	10-1-13	1250				X							X	4
ISLAND PARK - TOPSOIL - 5 - GRAB - 1		1300				X							X	4
ISLAND PARK - TOPSOIL - 5 - GRAB - 2		1310				X							X	4
ISLAND PARK - TOPSOIL - 6 - GRAB - 1		1320				X							X	4
ISLAND PARK - TOPSOIL - 6 - GRAB - 2		1330				X							X	4
ISLAND PARK - TOPSOIL - 7 - GRAB - 1		1340				X							X	4
ISLAND PARK - TOPSOIL - 7 - GRAB - 2		1350				X							X	4
ISLAND PARK - TOPSOIL - 8 - GRAB - 1		1400				X							X	4
ISLAND PARK - TOPSOIL - 8 - GRAB - 2		1410				X							X	4
ISLAND PARK - TOPSOIL - 9 - GRAB - 1		1420				X							X	4
ISLAND PARK - TOPSOIL - 9 - GRAB - 2		1430				X							X	4
ISLAND PARK - TOPSOIL - 10 - GRAB - 1		1440				X							X	4

Special Instructions/ Conditions of Receipt

Possible Hazard Identification

☐ Non-Hazard ☒ Flammable ☒ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

☐ 24 Hours ☒ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	10-1-13	1500	1. Received By AAL	10/1/13	15.00
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
		10/1/13	250198
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 3 of 3**
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Project Name and Location (State)	**Carrier/Waybill Number**		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: 8260B: VOC	3500-Cr D	3500-Cr B; D851A	9012A	8081A, 8082	8270D	6010B, 7471A	# OF CONTAINERS
ISLAND PARK - TOPSOIL - 10 - GRAB - 2	10-1-13	1450				X							X							4
ISLAND PARK - TOPSOIL - 1 - COMP - 1		0900				X								X	X	X	X	X	X	6
ISLAND PARK - TOPSOIL - 1 - COMP 2		0910				X								X	X	X	X	X	X	6
ISLAND PARK - TOPSOIL - 2 - COMP - 1		0920				X								X	X	X	X	X	X	6
ISLAND PARK - TOPSOIL - 3 - COMP - 1		0930				X								X	X	X	X	X	X	6
ISLAND PARK - TOPSOIL - 4 - COMP - 1		0940				X								X	X	X	X	X	X	6
ISLAND PARK - TOPSOIL - 5 - COMP - 1		0950				X								X	X	X	X	X	X	6
ISLAND PARK - TOPSOIL - 6 - COMP - 1		1000				X								X	X	X	X	X	X	6
ISLAND PARK - TOPSOIL - 7 - COMP - 1		1010				X								X	X	X	X	X	X	6
ISLAND PARK - TOPSOIL - 8 - COMP - 1		1020				X								X	X	X	X	X	X	6
ISLAND PARK - TOPSOIL - 9 - COMP - 1		1030				X								X	X	X	X	X	X	6
ISLAND PARK - TOPSOIL - 10 - COMP - 1	"	1040				X								X	X	X	X	X	X	6

Special Instructions/ Conditions of Receipt

Possible Hazard Identification

☐ Non-Hazard ☒ Flammable ☒ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

☐ 24 Hours ☒ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	10/1/13	1500	1. Received By AAL	10/1/13	15:00
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

American Analytical Laboratories, LLC.

Sample Receipt Checklist

Client Name AEAC | Date and Time Receive 10/1/2013 1:16:01 PM

Work Order Numbe 1310009 | RcptNo: 1 | Received by JM

COC_ID: | CoolerID:

Checklist completed by C Terran (Signature) 10/01/13 (Date) | Reviewed by JB (Initials) 10/1/13 (Date)

Matrix: | Carrier name AAL

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Presen ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Presen ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☐

Adjusted? _____ Checked b _____

Any No and/or NA (not applicable) response must be detailed in the comments section be

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments:

Corrective Action _____

American Analytical Laboratories, LLC. **Date:** *03-Oct-13*

CLIENT: American Environmental Assessment Corp.
Project: Island Park- Topsoil
Lab Order: 1310009

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846 and additional methods as detailed throughout the text of the report.

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives with exceptions notated in this Narrative discussion and/or in the QC Summary Section of the lab report with appropriate qualifiers.

Additional quality control information such as surrogate recovery values for organic testing is provided as part of the analytical results.

Volatile LCS are analyzed with preservatives - HCL/NaHSO4/Methanol depending on level of analysis (high/low) similar to sample analysis. Outliers can be attributed to the presence of chemical preservatives.

Pesticide analysis by Method 8081B (if applicable to this work order) is analyzed on two distinct columns. Once a target compound is qualitatively confirmed by detection on both columns and quantitation is determined to be >40% between the two columns, AAL's policy is to report the lower of the values as suggested by SW846 Method 8000C in cases where no interference exists. If in the professional judgment of the laboratory, the higher value must be utilized this is explained in the lab report.

The test results meet the requirements of the NYSDOH and NELAC standards, except where noted. The information contained in this analytical reports is the sole property of American Analytical Laboratories, LLC. or the client for which this report was issued. The results contained in this report are only representative of the samples received. American Analytical is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt for those samples that were not collected by NYS ELAP certified laboratory personnel. The sample receipt checklist is included as part of this lab report. Conditions can vary at different times and at different sampling conditions. American Analytical is not responsible for the use or interpretation of the data included herein.

Lori Beyer
Laboratory Director

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-1-Grab-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 10:50:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-01A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	4.34	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM
1,1-Dichloroethane	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM
1,1-Dichloroethene	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM
1,2,4-Trimethylbenzene	U	0.94	4.7	C	µg/Kg-dry	1	10/1/2013 9:46:00 PM
1,2-Dichlorobenzene	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM
1,2-Dichloroethane	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM
1,3,5-Trimethylbenzene	U	0.94	4.7	C	µg/Kg-dry	1	10/1/2013 9:46:00 PM
1,3-Dichlorobenzene	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM
1,4-Dichlorobenzene	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM
1,4-Dioxane	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM
2-Butanone	U	4.7	9.4		µg/Kg-dry	1	10/1/2013 9:46:00 PM
Acetone	6.3	4.7	9.4	JB	µg/Kg-dry	1	10/1/2013 9:46:00 PM
Benzene	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM
Carbon tetrachloride	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM
Chlorobenzene	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM
Chloroform	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM
cis-1,2-Dichloroethene	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM
Ethylbenzene	U	0.94	4.7	C	µg/Kg-dry	1	10/1/2013 9:46:00 PM
m,p-Xylene	U	1.9	9.4	C	µg/Kg-dry	1	10/1/2013 9:46:00 PM
Methyl tert-butyl ether	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM
Methylene chloride	0.98	0.94	4.7	JBC	µg/Kg-dry	1	10/1/2013 9:46:00 PM
n-Butylbenzene	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM
n-Propylbenzene	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM
o-Xylene	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM
sec-Butylbenzene	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM
tert-Butylbenzene	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM
Tetrachloroethene	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM
Toluene	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM
trans-1,2-Dichloroethene	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM
Trichloroethene	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM

American Analytical Laboratories, LLC., 56 Toledo Street, Farmingdale, NY, Zip - 11735
Tel - 6314546100 Fax - 6314548027 www.American-Analytical.com

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-1-Grab-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 10:50:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-01A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	0.94	4.7		µg/Kg-dry	1	10/1/2013 9:46:00 PM
Surr: 4-Bromofluorobenzene	95.9	0	56-133		%REC	1	10/1/2013 9:46:00 PM
Surr: Dibromofluoromethane	110	0	60-132		%REC	1	10/1/2013 9:46:00 PM
Surr: Toluene-d8	96.4	0	69-125		%REC	1	10/1/2013 9:46:00 PM

American Analytical Laboratories, LLC., 56 Toledo Street, Farmingdale, NY, Zip - 11735
Tel - 6314546100 Fax - 6314548027 www.American-Analytical.com

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-1-Grab-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 11:00:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-02A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	3.47	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM
1,1-Dichloroethane	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM
1,1-Dichloroethene	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM
1,2,4-Trimethylbenzene	U	0.98	4.9	C	µg/Kg-dry	1	10/1/2013 10:11:00 PM
1,2-Dichlorobenzene	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM
1,2-Dichloroethane	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM
1,3,5-Trimethylbenzene	U	0.98	4.9	C	µg/Kg-dry	1	10/1/2013 10:11:00 PM
1,3-Dichlorobenzene	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM
1,4-Dichlorobenzene	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM
1,4-Dioxane	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM
2-Butanone	U	4.9	9.8		µg/Kg-dry	1	10/1/2013 10:11:00 PM
Acetone	11	4.9	9.8	B	µg/Kg-dry	1	10/1/2013 10:11:00 PM
Benzene	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM
Carbon tetrachloride	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM
Chlorobenzene	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM
Chloroform	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM
cis-1,2-Dichloroethene	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM
Ethylbenzene	U	0.98	4.9	C	µg/Kg-dry	1	10/1/2013 10:11:00 PM
m,p-Xylene	U	2	9.8	C	µg/Kg-dry	1	10/1/2013 10:11:00 PM
Methyl tert-butyl ether	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM
Methylene chloride	1.5	0.98	4.9	JBC	µg/Kg-dry	1	10/1/2013 10:11:00 PM
n-Butylbenzene	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM
n-Propylbenzene	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM
o-Xylene	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM
sec-Butylbenzene	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM
tert-Butylbenzene	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM
Tetrachloroethene	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM
Toluene	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM
trans-1,2-Dichloroethene	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM
Trichloroethene	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM

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Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-1-Grab-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 11:00:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-02A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	0.98	4.9		µg/Kg-dry	1	10/1/2013 10:11:00 PM
Surr: 4-Bromofluorobenzene	98.1	0	56-133		%REC	1	10/1/2013 10:11:00 PM
Surr: Dibromofluoromethane	104	0	60-132		%REC	1	10/1/2013 10:11:00 PM
Surr: Toluene-d8	91.2	0	69-125		%REC	1	10/1/2013 10:11:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-1-Grab-3
Lab Order:	1310009	**Collection Date:**	10/1/2013 11:10:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-03A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	4.54	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	1.1	5.3		µg/Kg-dry	1	10/1/2013 10:36:00 PM
1,1-Dichloroethane	U	1.1	5.3		µg/Kg-dry	1	10/1/2013 10:36:00 PM
1,1-Dichloroethene	U	1.1	5.3		µg/Kg-dry	1	10/1/2013 10:36:00 PM
1,2,4-Trimethylbenzene	U	1.1	5.3	C	µg/Kg-dry	1	10/1/2013 10:36:00 PM
1,2-Dichlorobenzene	U	1.1	5.3		µg/Kg-dry	1	10/1/2013 10:36:00 PM
1,2-Dichloroethane	U	1.1	5.3		µg/Kg-dry	1	10/1/2013 10:36:00 PM
1,3,5-Trimethylbenzene	U	1.1	5.3	C	µg/Kg-dry	1	10/1/2013 10:36:00 PM
1,3-Dichlorobenzene	U	1.1	5.3		µg/Kg-dry	1	10/1/2013 10:36:00 PM
1,4-Dichlorobenzene	U	1.1	5.3		µg/Kg-dry	1	10/1/2013 10:36:00 PM
1,4-Dioxane	U	1.1	5.3		µg/Kg-dry	1	10/1/2013 10:36:00 PM
2-Butanone	U	5.3	11		µg/Kg-dry	1	10/1/2013 10:36:00 PM
Acetone	7.7	5.3	11	JB	µg/Kg-dry	1	10/1/2013 10:36:00 PM
Benzene	U	1.1	5.3		µg/Kg-dry	1	10/1/2013 10:36:00 PM
Carbon tetrachloride	U	1.1	5.3		µg/Kg-dry	1	10/1/2013 10:36:00 PM
Chlorobenzene	U	1.1	5.3		µg/Kg-dry	1	10/1/2013 10:36:00 PM
Chloroform	U	1.1	5.3		µg/Kg-dry	1	10/1/2013 10:36:00 PM
cis-1,2-Dichloroethene	U	1.1	5.3		µg/Kg-dry	1	10/1/2013 10:36:00 PM
Ethylbenzene	U	1.1	5.3	C	µg/Kg-dry	1	10/1/2013 10:36:00 PM
m,p-Xylene	U	2.1	11	C	µg/Kg-dry	1	10/1/2013 10:36:00 PM
Methyl tert-butyl ether	U	1.1	5.3		µg/Kg-dry	1	10/1/2013 10:36:00 PM
Methylene chloride	1.1	1.1	5.3	JBC	µg/Kg-dry	1	10/1/2013 10:36:00 PM
n-Butylbenzene	U	1.1	5.3		µg/Kg-dry	1	10/1/2013 10:36:00 PM
n-Propylbenzene	U	1.1	5.3		µg/Kg-dry	1	10/1/2013 10:36:00 PM
o-Xylene	U	1.1	5.3		µg/Kg-dry	1	10/1/2013 10:36:00 PM
sec-Butylbenzene	U	1.1	5.3		µg/Kg-dry	1	10/1/2013 10:36:00 PM
tert-Butylbenzene	U	1.1	5.3		µg/Kg-dry	1	10/1/2013 10:36:00 PM
Tetrachloroethene	U	1.1	5.3		µg/Kg-dry	1	10/1/2013 10:36:00 PM
Toluene	2.3	1.1	5.3	J	µg/Kg-dry	1	10/1/2013 10:36:00 PM
trans-1,2-Dichloroethene	U	1.1	5.3		µg/Kg-dry	1	10/1/2013 10:36:00 PM
Trichloroethene	U	1.1	5.3		µg/Kg-dry	1	10/1/2013 10:36:00 PM

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Qualifiers:

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-1-Grab-3
Lab Order:	1310009	**Collection Date:**	10/1/2013 11:10:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-03A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	1.1	5.3		µg/Kg-dry	1	10/1/2013 10:36:00 PM
Surr: 4-Bromofluorobenzene	94.8	0	56-133		%REC	1	10/1/2013 10:36:00 PM
Surr: Dibromofluoromethane	112	0	60-132		%REC	1	10/1/2013 10:36:00 PM
Surr: Toluene-d8	92.6	0	69-125		%REC	1	10/1/2013 10:36:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-1-Grab-4
Lab Order:	1310009	**Collection Date:**	10/1/2013 11:20:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-04A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	9.24	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	1	5.1		µg/Kg-dry	1	10/2/2013 12:15:00 PM
1,1-Dichloroethane	U	1	5.1		µg/Kg-dry	1	10/2/2013 12:15:00 PM
1,1-Dichloroethene	U	1	5.1		µg/Kg-dry	1	10/2/2013 12:15:00 PM
1,2,4-Trimethylbenzene	U	1	5.1	C	µg/Kg-dry	1	10/2/2013 12:15:00 PM
1,2-Dichlorobenzene	U	1	5.1		µg/Kg-dry	1	10/2/2013 12:15:00 PM
1,2-Dichloroethane	U	1	5.1		µg/Kg-dry	1	10/2/2013 12:15:00 PM
1,3,5-Trimethylbenzene	U	1	5.1	C	µg/Kg-dry	1	10/2/2013 12:15:00 PM
1,3-Dichlorobenzene	U	1	5.1		µg/Kg-dry	1	10/2/2013 12:15:00 PM
1,4-Dichlorobenzene	U	1	5.1		µg/Kg-dry	1	10/2/2013 12:15:00 PM
1,4-Dioxane	U	1	5.1		µg/Kg-dry	1	10/2/2013 12:15:00 PM
2-Butanone	U	5.1	10		µg/Kg-dry	1	10/2/2013 12:15:00 PM
Acetone	10	5.1	10	JB	µg/Kg-dry	1	10/2/2013 12:15:00 PM
Benzene	U	1	5.1		µg/Kg-dry	1	10/2/2013 12:15:00 PM
Carbon tetrachloride	U	1	5.1		µg/Kg-dry	1	10/2/2013 12:15:00 PM
Chlorobenzene	U	1	5.1		µg/Kg-dry	1	10/2/2013 12:15:00 PM
Chloroform	U	1	5.1		µg/Kg-dry	1	10/2/2013 12:15:00 PM
cis-1,2-Dichloroethene	U	1	5.1		µg/Kg-dry	1	10/2/2013 12:15:00 PM
Ethylbenzene	U	1	5.1	C	µg/Kg-dry	1	10/2/2013 12:15:00 PM
m,p-Xylene	U	2	10	C	µg/Kg-dry	1	10/2/2013 12:15:00 PM
Methyl tert-butyl ether	U	1	5.1		µg/Kg-dry	1	10/2/2013 12:15:00 PM
Methylene chloride	1.2	1	5.1	JBC	µg/Kg-dry	1	10/2/2013 12:15:00 PM
n-Butylbenzene	U	1	5.1		µg/Kg-dry	1	10/2/2013 12:15:00 PM
n-Propylbenzene	U	1	5.1		µg/Kg-dry	1	10/2/2013 12:15:00 PM
o-Xylene	U	1	5.1		µg/Kg-dry	1	10/2/2013 12:15:00 PM
sec-Butylbenzene	U	1	5.1		µg/Kg-dry	1	10/2/2013 12:15:00 PM
tert-Butylbenzene	U	1	5.1		µg/Kg-dry	1	10/2/2013 12:15:00 PM
Tetrachloroethene	U	1	5.1		µg/Kg-dry	1	10/2/2013 12:15:00 PM
Toluene	1.5	1	5.1	J	µg/Kg-dry	1	10/2/2013 12:15:00 PM
trans-1,2-Dichloroethene	U	1	5.1		µg/Kg-dry	1	10/2/2013 12:15:00 PM
Trichloroethene	U	1	5.1		µg/Kg-dry	1	10/2/2013 12:15:00 PM

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Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-1-Grab-4
Lab Order:	1310009	**Collection Date:**	10/1/2013 11:20:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-04A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	1	5.1		µg/Kg-dry	1	10/2/2013 12:15:00 PM
Surr: 4-Bromofluorobenzene	95.0	0	56-133		%REC	1	10/2/2013 12:15:00 PM
Surr: Dibromofluoromethane	105	0	60-132		%REC	1	10/2/2013 12:15:00 PM
Surr: Toluene-d8	95.7	0	69-125		%REC	1	10/2/2013 12:15:00 PM

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Qualifiers:

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-1-Grab-5
Lab Order:	1310009	**Collection Date:**	10/1/2013 11:30:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-05A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	9.56	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM
1,1-Dichloroethane	U	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM
1,1-Dichloroethene	U	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM
1,2,4-Trimethylbenzene	U	1	5.2	C	µg/Kg-dry	1	10/1/2013 11:25:00 PM
1,2-Dichlorobenzene	U	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM
1,2-Dichloroethane	U	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM
1,3,5-Trimethylbenzene	U	1	5.2	C	µg/Kg-dry	1	10/1/2013 11:25:00 PM
1,3-Dichlorobenzene	U	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM
1,4-Dichlorobenzene	U	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM
1,4-Dioxane	U	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM
2-Butanone	U	5.2	10		µg/Kg-dry	1	10/1/2013 11:25:00 PM
Acetone	13	5.2	10	B	µg/Kg-dry	1	10/1/2013 11:25:00 PM
Benzene	U	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM
Carbon tetrachloride	U	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM
Chlorobenzene	U	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM
Chloroform	U	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM
cis-1,2-Dichloroethene	U	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM
Ethylbenzene	U	1	5.2	C	µg/Kg-dry	1	10/1/2013 11:25:00 PM
m,p-Xylene	U	2.1	10	C	µg/Kg-dry	1	10/1/2013 11:25:00 PM
Methyl tert-butyl ether	U	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM
Methylene chloride	1.4	1	5.2	JBC	µg/Kg-dry	1	10/1/2013 11:25:00 PM
n-Butylbenzene	U	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM
n-Propylbenzene	U	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM
o-Xylene	U	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM
sec-Butylbenzene	U	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM
tert-Butylbenzene	U	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM
Tetrachloroethene	U	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM
Toluene	6.6	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM
trans-1,2-Dichloroethene	U	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM
Trichloroethene	U	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM

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Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-1-Grab-5
Lab Order:	1310009	**Collection Date:**	10/1/2013 11:30:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-05A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	1	5.2		µg/Kg-dry	1	10/1/2013 11:25:00 PM
Surr: 4-Bromofluorobenzene	97.3	0	56-133		%REC	1	10/1/2013 11:25:00 PM
Surr: Dibromofluoromethane	113	0	60-132		%REC	1	10/1/2013 11:25:00 PM
Surr: Toluene-d8	101	0	69-125		%REC	1	10/1/2013 11:25:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-1-Grab-6
Lab Order:	1310009	**Collection Date:**	10/1/2013 11:40:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-06A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	5.83	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM
1,1-Dichloroethane	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM
1,1-Dichloroethene	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM
1,2,4-Trimethylbenzene	U	1.1	5.6	C	µg/Kg-dry	1	10/1/2013 11:50:00 PM
1,2-Dichlorobenzene	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM
1,2-Dichloroethane	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM
1,3,5-Trimethylbenzene	U	1.1	5.6	C	µg/Kg-dry	1	10/1/2013 11:50:00 PM
1,3-Dichlorobenzene	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM
1,4-Dichlorobenzene	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM
1,4-Dioxane	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM
2-Butanone	U	5.6	11		µg/Kg-dry	1	10/1/2013 11:50:00 PM
Acetone	8.3	5.6	11	JB	µg/Kg-dry	1	10/1/2013 11:50:00 PM
Benzene	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM
Carbon tetrachloride	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM
Chlorobenzene	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM
Chloroform	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM
cis-1,2-Dichloroethene	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM
Ethylbenzene	U	1.1	5.6	C	µg/Kg-dry	1	10/1/2013 11:50:00 PM
m,p-Xylene	U	2.3	11	C	µg/Kg-dry	1	10/1/2013 11:50:00 PM
Methyl tert-butyl ether	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM
Methylene chloride	1.5	1.1	5.6	JBC	µg/Kg-dry	1	10/1/2013 11:50:00 PM
n-Butylbenzene	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM
n-Propylbenzene	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM
o-Xylene	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM
sec-Butylbenzene	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM
tert-Butylbenzene	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM
Tetrachloroethene	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM
Toluene	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM
trans-1,2-Dichloroethene	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM
Trichloroethene	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM

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Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-1-Grab-6
Lab Order:	1310009	**Collection Date:**	10/1/2013 11:40:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-06A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	1.1	5.6		µg/Kg-dry	1	10/1/2013 11:50:00 PM
Surr: 4-Bromofluorobenzene	97.6	0	56-133		%REC	1	10/1/2013 11:50:00 PM
Surr: Dibromofluoromethane	106	0	60-132		%REC	1	10/1/2013 11:50:00 PM
Surr: Toluene-d8	102	0	69-125		%REC	1	10/1/2013 11:50:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-1-Grab-7
Lab Order:	1310009	**Collection Date:**	10/1/2013 11:50:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-07A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	8.20	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM
1,1-Dichloroethane	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM
1,1-Dichloroethene	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM
1,2,4-Trimethylbenzene	U	1.2	6.1	C	µg/Kg-dry	1	10/2/2013 12:15:00 AM
1,2-Dichlorobenzene	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM
1,2-Dichloroethane	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM
1,3,5-Trimethylbenzene	U	1.2	6.1	C	µg/Kg-dry	1	10/2/2013 12:15:00 AM
1,3-Dichlorobenzene	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM
1,4-Dichlorobenzene	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM
1,4-Dioxane	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM
2-Butanone	U	6.1	12		µg/Kg-dry	1	10/2/2013 12:15:00 AM
Acetone	8.1	6.1	12	JB	µg/Kg-dry	1	10/2/2013 12:15:00 AM
Benzene	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM
Carbon tetrachloride	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM
Chlorobenzene	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM
Chloroform	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM
cis-1,2-Dichloroethene	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM
Ethylbenzene	U	1.2	6.1	C	µg/Kg-dry	1	10/2/2013 12:15:00 AM
m,p-Xylene	U	2.4	12	C	µg/Kg-dry	1	10/2/2013 12:15:00 AM
Methyl tert-butyl ether	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM
Methylene chloride	1.7	1.2	6.1	JBC	µg/Kg-dry	1	10/2/2013 12:15:00 AM
n-Butylbenzene	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM
n-Propylbenzene	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM
o-Xylene	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM
sec-Butylbenzene	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM
tert-Butylbenzene	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM
Tetrachloroethene	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM
Toluene	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM
trans-1,2-Dichloroethene	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM
Trichloroethene	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM

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Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-1-Grab-7
Lab Order:	1310009	**Collection Date:**	10/1/2013 11:50:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-07A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	1.2	6.1		µg/Kg-dry	1	10/2/2013 12:15:00 AM
Surr: 4-Bromofluorobenzene	96.5	0	56-133		%REC	1	10/2/2013 12:15:00 AM
Surr: Dibromofluoromethane	105	0	60-132		%REC	1	10/2/2013 12:15:00 AM
Surr: Toluene-d8	99.2	0	69-125		%REC	1	10/2/2013 12:15:00 AM

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Qualifiers:

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-2-Grab-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 12:00:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-08A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	5.14	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM
1,1-Dichloroethane	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM
1,1-Dichloroethene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM
1,2,4-Trimethylbenzene	U	0.97	4.8	C	µg/Kg-dry	1	10/2/2013 12:40:00 AM
1,2-Dichlorobenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM
1,2-Dichloroethane	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM
1,3,5-Trimethylbenzene	U	0.97	4.8	C	µg/Kg-dry	1	10/2/2013 12:40:00 AM
1,3-Dichlorobenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM
1,4-Dichlorobenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM
1,4-Dioxane	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM
2-Butanone	U	4.8	9.7		µg/Kg-dry	1	10/2/2013 12:40:00 AM
Acetone	8.7	4.8	9.7	JB	µg/Kg-dry	1	10/2/2013 12:40:00 AM
Benzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM
Carbon tetrachloride	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM
Chlorobenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM
Chloroform	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM
cis-1,2-Dichloroethene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM
Ethylbenzene	U	0.97	4.8	C	µg/Kg-dry	1	10/2/2013 12:40:00 AM
m,p-Xylene	U	1.9	9.7	C	µg/Kg-dry	1	10/2/2013 12:40:00 AM
Methyl tert-butyl ether	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM
Methylene chloride	1.6	0.97	4.8	JBC	µg/Kg-dry	1	10/2/2013 12:40:00 AM
n-Butylbenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM
n-Propylbenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM
o-Xylene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM
sec-Butylbenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM
tert-Butylbenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM
Tetrachloroethene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM
Toluene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM
trans-1,2-Dichloroethene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM
Trichloroethene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM

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Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-2-Grab-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 12:00:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-08A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 12:40:00 AM
Surr: 4-Bromofluorobenzene	95.5	0	56-133		%REC	1	10/2/2013 12:40:00 AM
Surr: Dibromofluoromethane	117	0	60-132		%REC	1	10/2/2013 12:40:00 AM
Surr: Toluene-d8	98.4	0	69-125		%REC	1	10/2/2013 12:40:00 AM

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Qualifiers:

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-2-Grab-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 12:10:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-09A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	7.60	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM
1,1-Dichloroethane	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM
1,1-Dichloroethene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM
1,2,4-Trimethylbenzene	U	0.97	4.8	C	µg/Kg-dry	1	10/2/2013 1:04:00 AM
1,2-Dichlorobenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM
1,2-Dichloroethane	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM
1,3,5-Trimethylbenzene	U	0.97	4.8	C	µg/Kg-dry	1	10/2/2013 1:04:00 AM
1,3-Dichlorobenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM
1,4-Dichlorobenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM
1,4-Dioxane	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM
2-Butanone	U	4.8	9.7		µg/Kg-dry	1	10/2/2013 1:04:00 AM
Acetone	8.3	4.8	9.7	JB	µg/Kg-dry	1	10/2/2013 1:04:00 AM
Benzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM
Carbon tetrachloride	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM
Chlorobenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM
Chloroform	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM
cis-1,2-Dichloroethene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM
Ethylbenzene	U	0.97	4.8	C	µg/Kg-dry	1	10/2/2013 1:04:00 AM
m,p-Xylene	U	1.9	9.7	C	µg/Kg-dry	1	10/2/2013 1:04:00 AM
Methyl tert-butyl ether	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM
Methylene chloride	1.5	0.97	4.8	JBC	µg/Kg-dry	1	10/2/2013 1:04:00 AM
n-Butylbenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM
n-Propylbenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM
o-Xylene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM
sec-Butylbenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM
tert-Butylbenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM
Tetrachloroethene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM
Toluene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM
trans-1,2-Dichloroethene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM
Trichloroethene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM

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Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-2-Grab-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 12:10:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-09A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 1:04:00 AM
Surr: 4-Bromofluorobenzene	96.5	0	56-133		%REC	1	10/2/2013 1:04:00 AM
Surr: Dibromofluoromethane	111	0	60-132		%REC	1	10/2/2013 1:04:00 AM
Surr: Toluene-d8	99.1	0	69-125		%REC	1	10/2/2013 1:04:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-3-Grab-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 12:20:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-10A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	4.60	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM
1,1-Dichloroethane	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM
1,1-Dichloroethene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM
1,2,4-Trimethylbenzene	U	0.9	4.5	C	µg/Kg-dry	1	10/2/2013 1:29:00 AM
1,2-Dichlorobenzene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM
1,2-Dichloroethane	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM
1,3,5-Trimethylbenzene	U	0.9	4.5	C	µg/Kg-dry	1	10/2/2013 1:29:00 AM
1,3-Dichlorobenzene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM
1,4-Dichlorobenzene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM
1,4-Dioxane	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM
2-Butanone	U	4.5	9.0		µg/Kg-dry	1	10/2/2013 1:29:00 AM
Acetone	10	4.5	9.0	B	µg/Kg-dry	1	10/2/2013 1:29:00 AM
Benzene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM
Carbon tetrachloride	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM
Chlorobenzene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM
Chloroform	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM
cis-1,2-Dichloroethene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM
Ethylbenzene	U	0.9	4.5	C	µg/Kg-dry	1	10/2/2013 1:29:00 AM
m,p-Xylene	U	1.8	9.0	C	µg/Kg-dry	1	10/2/2013 1:29:00 AM
Methyl tert-butyl ether	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM
Methylene chloride	1.4	0.9	4.5	JBC	µg/Kg-dry	1	10/2/2013 1:29:00 AM
n-Butylbenzene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM
n-Propylbenzene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM
o-Xylene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM
sec-Butylbenzene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM
tert-Butylbenzene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM
Tetrachloroethene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM
Toluene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM
trans-1,2-Dichloroethene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM
Trichloroethene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM

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Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-3-Grab-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 12:20:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-10A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 1:29:00 AM
Surr: 4-Bromofluorobenzene	92.3	0	56-133		%REC	1	10/2/2013 1:29:00 AM
Surr: Dibromofluoromethane	117	0	60-132		%REC	1	10/2/2013 1:29:00 AM
Surr: Toluene-d8	96.9	0	69-125		%REC	1	10/2/2013 1:29:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-3-Grab-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 12:30:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-11A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	7.21	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM
1,1-Dichloroethane	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM
1,1-Dichloroethene	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM
1,2,4-Trimethylbenzene	U	0.93	4.7	C	µg/Kg-dry	1	10/2/2013 1:54:00 AM
1,2-Dichlorobenzene	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM
1,2-Dichloroethane	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM
1,3,5-Trimethylbenzene	U	0.93	4.7	C	µg/Kg-dry	1	10/2/2013 1:54:00 AM
1,3-Dichlorobenzene	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM
1,4-Dichlorobenzene	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM
1,4-Dioxane	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM
2-Butanone	U	4.7	9.3		µg/Kg-dry	1	10/2/2013 1:54:00 AM
Acetone	8.0	4.7	9.3	JB	µg/Kg-dry	1	10/2/2013 1:54:00 AM
Benzene	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM
Carbon tetrachloride	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM
Chlorobenzene	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM
Chloroform	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM
cis-1,2-Dichloroethene	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM
Ethylbenzene	U	0.93	4.7	C	µg/Kg-dry	1	10/2/2013 1:54:00 AM
m,p-Xylene	U	1.9	9.3	C	µg/Kg-dry	1	10/2/2013 1:54:00 AM
Methyl tert-butyl ether	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM
Methylene chloride	1.5	0.93	4.7	JBC	µg/Kg-dry	1	10/2/2013 1:54:00 AM
n-Butylbenzene	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM
n-Propylbenzene	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM
o-Xylene	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM
sec-Butylbenzene	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM
tert-Butylbenzene	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM
Tetrachloroethene	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM
Toluene	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM
trans-1,2-Dichloroethene	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM
Trichloroethene	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM

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Qualifiers:

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-3-Grab-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 12:30:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-11A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	0.93	4.7		µg/Kg-dry	1	10/2/2013 1:54:00 AM
Surr: 4-Bromofluorobenzene	101	0	56-133		%REC	1	10/2/2013 1:54:00 AM
Surr: Dibromofluoromethane	110	0	60-132		%REC	1	10/2/2013 1:54:00 AM
Surr: Toluene-d8	97.4	0	69-125		%REC	1	10/2/2013 1:54:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-4-Grab-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 12:40:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-12A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	5.99	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM
1,1-Dichloroethane	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM
1,1-Dichloroethene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM
1,2,4-Trimethylbenzene	U	0.92	4.6	C	µg/Kg-dry	1	10/2/2013 2:19:00 AM
1,2-Dichlorobenzene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM
1,2-Dichloroethane	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM
1,3,5-Trimethylbenzene	U	0.92	4.6	C	µg/Kg-dry	1	10/2/2013 2:19:00 AM
1,3-Dichlorobenzene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM
1,4-Dichlorobenzene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM
1,4-Dioxane	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM
2-Butanone	U	4.6	9.2		µg/Kg-dry	1	10/2/2013 2:19:00 AM
Acetone	10	4.6	9.2	B	µg/Kg-dry	1	10/2/2013 2:19:00 AM
Benzene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM
Carbon tetrachloride	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM
Chlorobenzene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM
Chloroform	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM
cis-1,2-Dichloroethene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM
Ethylbenzene	U	0.92	4.6	C	µg/Kg-dry	1	10/2/2013 2:19:00 AM
m,p-Xylene	U	1.8	9.2	C	µg/Kg-dry	1	10/2/2013 2:19:00 AM
Methyl tert-butyl ether	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM
Methylene chloride	1.7	0.92	4.6	JBC	µg/Kg-dry	1	10/2/2013 2:19:00 AM
n-Butylbenzene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM
n-Propylbenzene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM
o-Xylene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM
sec-Butylbenzene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM
tert-Butylbenzene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM
Tetrachloroethene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM
Toluene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM
trans-1,2-Dichloroethene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM
Trichloroethene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM

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Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-4-Grab-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 12:40:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-12A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 2:19:00 AM
Surr: 4-Bromofluorobenzene	97.6	0	56-133		%REC	1	10/2/2013 2:19:00 AM
Surr: Dibromofluoromethane	115	0	60-132		%REC	1	10/2/2013 2:19:00 AM
Surr: Toluene-d8	96.7	0	69-125		%REC	1	10/2/2013 2:19:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-4-Grab-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 12:50:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-13A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	1.26	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM
1,1-Dichloroethane	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM
1,1-Dichloroethene	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM
1,2,4-Trimethylbenzene	U	1.1	5.4	C	µg/Kg-dry	1	10/2/2013 2:44:00 AM
1,2-Dichlorobenzene	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM
1,2-Dichloroethane	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM
1,3,5-Trimethylbenzene	U	1.1	5.4	C	µg/Kg-dry	1	10/2/2013 2:44:00 AM
1,3-Dichlorobenzene	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM
1,4-Dichlorobenzene	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM
1,4-Dioxane	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM
2-Butanone	U	5.4	11		µg/Kg-dry	1	10/2/2013 2:44:00 AM
Acetone	11	5.4	11	JB	µg/Kg-dry	1	10/2/2013 2:44:00 AM
Benzene	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM
Carbon tetrachloride	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM
Chlorobenzene	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM
Chloroform	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM
cis-1,2-Dichloroethene	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM
Ethylbenzene	U	1.1	5.4	C	µg/Kg-dry	1	10/2/2013 2:44:00 AM
m,p-Xylene	U	2.2	11	C	µg/Kg-dry	1	10/2/2013 2:44:00 AM
Methyl tert-butyl ether	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM
Methylene chloride	2.3	1.1	5.4	JBC	µg/Kg-dry	1	10/2/2013 2:44:00 AM
n-Butylbenzene	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM
n-Propylbenzene	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM
o-Xylene	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM
sec-Butylbenzene	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM
tert-Butylbenzene	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM
Tetrachloroethene	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM
Toluene	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM
trans-1,2-Dichloroethene	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM
Trichloroethene	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM

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Qualifiers:

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
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U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-4-Grab-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 12:50:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-13A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	1.1	5.4		µg/Kg-dry	1	10/2/2013 2:44:00 AM
Surr: 4-Bromofluorobenzene	92.5	0	56-133		%REC	1	10/2/2013 2:44:00 AM
Surr: Dibromofluoromethane	110	0	60-132		%REC	1	10/2/2013 2:44:00 AM
Surr: Toluene-d8	93.7	0	69-125		%REC	1	10/2/2013 2:44:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-5-Grab-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 1:00:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-14A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	5.06	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM
1,1-Dichloroethane	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM
1,1-Dichloroethene	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM
1,2,4-Trimethylbenzene	U	0.94	4.7	C	µg/Kg-dry	1	10/2/2013 7:16:00 AM
1,2-Dichlorobenzene	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM
1,2-Dichloroethane	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM
1,3,5-Trimethylbenzene	U	0.94	4.7	C	µg/Kg-dry	1	10/2/2013 7:16:00 AM
1,3-Dichlorobenzene	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM
1,4-Dichlorobenzene	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM
1,4-Dioxane	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM
2-Butanone	U	4.7	9.4		µg/Kg-dry	1	10/2/2013 7:16:00 AM
Acetone	9.9	4.7	9.4	B	µg/Kg-dry	1	10/2/2013 7:16:00 AM
Benzene	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM
Carbon tetrachloride	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM
Chlorobenzene	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM
Chloroform	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM
cis-1,2-Dichloroethene	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM
Ethylbenzene	U	0.94	4.7	C	µg/Kg-dry	1	10/2/2013 7:16:00 AM
m,p-Xylene	U	1.9	9.4	C	µg/Kg-dry	1	10/2/2013 7:16:00 AM
Methyl tert-butyl ether	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM
Methylene chloride	1.6	0.94	4.7	JBC	µg/Kg-dry	1	10/2/2013 7:16:00 AM
n-Butylbenzene	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM
n-Propylbenzene	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM
o-Xylene	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM
sec-Butylbenzene	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM
tert-Butylbenzene	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM
Tetrachloroethene	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM
Toluene	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM
trans-1,2-Dichloroethene	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM
Trichloroethene	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM

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Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-5-Grab-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 1:00:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-14A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	0.94	4.7		µg/Kg-dry	1	10/2/2013 7:16:00 AM
Surr: 4-Bromofluorobenzene	96.7	0	56-133		%REC	1	10/2/2013 7:16:00 AM
Surr: Dibromofluoromethane	124	0	60-132		%REC	1	10/2/2013 7:16:00 AM
Surr: Toluene-d8	101	0	69-125		%REC	1	10/2/2013 7:16:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-5-Grab-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 1:10:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-15A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	8.40	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM
1,1-Dichloroethane	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM
1,1-Dichloroethene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM
1,2,4-Trimethylbenzene	U	0.9	4.5	C	µg/Kg-dry	1	10/2/2013 7:41:00 AM
1,2-Dichlorobenzene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM
1,2-Dichloroethane	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM
1,3,5-Trimethylbenzene	U	0.9	4.5	C	µg/Kg-dry	1	10/2/2013 7:41:00 AM
1,3-Dichlorobenzene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM
1,4-Dichlorobenzene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM
1,4-Dioxane	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM
2-Butanone	U	4.5	9.0		µg/Kg-dry	1	10/2/2013 7:41:00 AM
Acetone	7.4	4.5	9.0	JB	µg/Kg-dry	1	10/2/2013 7:41:00 AM
Benzene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM
Carbon tetrachloride	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM
Chlorobenzene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM
Chloroform	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM
cis-1,2-Dichloroethene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM
Ethylbenzene	U	0.9	4.5	C	µg/Kg-dry	1	10/2/2013 7:41:00 AM
m,p-Xylene	U	1.8	9.0	C	µg/Kg-dry	1	10/2/2013 7:41:00 AM
Methyl tert-butyl ether	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM
Methylene chloride	1.6	0.9	4.5	JBC	µg/Kg-dry	1	10/2/2013 7:41:00 AM
n-Butylbenzene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM
n-Propylbenzene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM
o-Xylene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM
sec-Butylbenzene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM
tert-Butylbenzene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM
Tetrachloroethene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM
Toluene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM
trans-1,2-Dichloroethene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM
Trichloroethene	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM

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Qualifiers:

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-5-Grab-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 1:10:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-15A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	0.9	4.5		µg/Kg-dry	1	10/2/2013 7:41:00 AM
Surr: 4-Bromofluorobenzene	95.9	0	56-133		%REC	1	10/2/2013 7:41:00 AM
Surr: Dibromofluoromethane	125	0	60-132		%REC	1	10/2/2013 7:41:00 AM
Surr: Toluene-d8	103	0	69-125		%REC	1	10/2/2013 7:41:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-6-Grab-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 1:20:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-16A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	5.97	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM
1,1-Dichloroethane	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM
1,1-Dichloroethene	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM
1,2,4-Trimethylbenzene	U	0.91	4.5	C	µg/Kg-dry	1	10/2/2013 8:06:00 AM
1,2-Dichlorobenzene	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM
1,2-Dichloroethane	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM
1,3,5-Trimethylbenzene	U	0.91	4.5	C	µg/Kg-dry	1	10/2/2013 8:06:00 AM
1,3-Dichlorobenzene	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM
1,4-Dichlorobenzene	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM
1,4-Dioxane	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM
2-Butanone	U	4.5	9.1		µg/Kg-dry	1	10/2/2013 8:06:00 AM
Acetone	12	4.5	9.1	B	µg/Kg-dry	1	10/2/2013 8:06:00 AM
Benzene	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM
Carbon tetrachloride	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM
Chlorobenzene	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM
Chloroform	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM
cis-1,2-Dichloroethene	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM
Ethylbenzene	U	0.91	4.5	C	µg/Kg-dry	1	10/2/2013 8:06:00 AM
m,p-Xylene	U	1.8	9.1	C	µg/Kg-dry	1	10/2/2013 8:06:00 AM
Methyl tert-butyl ether	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM
Methylene chloride	1.3	0.91	4.5	JBC	µg/Kg-dry	1	10/2/2013 8:06:00 AM
n-Butylbenzene	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM
n-Propylbenzene	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM
o-Xylene	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM
sec-Butylbenzene	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM
tert-Butylbenzene	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM
Tetrachloroethene	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM
Toluene	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM
trans-1,2-Dichloroethene	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM
Trichloroethene	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM

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Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-6-Grab-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 1:20:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-16A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	0.91	4.5		µg/Kg-dry	1	10/2/2013 8:06:00 AM
Surr: 4-Bromofluorobenzene	96.7	0	56-133		%REC	1	10/2/2013 8:06:00 AM
Surr: Dibromofluoromethane	116	0	60-132		%REC	1	10/2/2013 8:06:00 AM
Surr: Toluene-d8	103	0	69-125		%REC	1	10/2/2013 8:06:00 AM

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Qualifiers:

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-6-Grab-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 1:30:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-17A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	0.870	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	0.95	4.7		µg/Kg-dry	1	10/2/2013 8:31:00 AM
1,1-Dichloroethane	U	0.95	4.7		µg/Kg-dry	1	10/2/2013 8:31:00 AM
1,1-Dichloroethene	U	0.95	4.7		µg/Kg-dry	1	10/2/2013 8:31:00 AM
1,2,4-Trimethylbenzene	U	0.95	4.7	C	µg/Kg-dry	1	10/2/2013 8:31:00 AM
1,2-Dichlorobenzene	U	0.95	4.7		µg/Kg-dry	1	10/2/2013 8:31:00 AM
1,2-Dichloroethane	U	0.95	4.7		µg/Kg-dry	1	10/2/2013 8:31:00 AM
1,3,5-Trimethylbenzene	U	0.95	4.7	C	µg/Kg-dry	1	10/2/2013 8:31:00 AM
1,3-Dichlorobenzene	U	0.95	4.7		µg/Kg-dry	1	10/2/2013 8:31:00 AM
1,4-Dichlorobenzene	U	0.95	4.7		µg/Kg-dry	1	10/2/2013 8:31:00 AM
1,4-Dioxane	U	0.95	4.7		µg/Kg-dry	1	10/2/2013 8:31:00 AM
2-Butanone	U	4.7	9.5		µg/Kg-dry	1	10/2/2013 8:31:00 AM
Acetone	10	4.7	9.5	B	µg/Kg-dry	1	10/2/2013 8:31:00 AM
Benzene	U	0.95	4.7		µg/Kg-dry	1	10/2/2013 8:31:00 AM
Carbon tetrachloride	U	0.95	4.7		µg/Kg-dry	1	10/2/2013 8:31:00 AM
Chlorobenzene	U	0.95	4.7		µg/Kg-dry	1	10/2/2013 8:31:00 AM
Chloroform	U	0.95	4.7		µg/Kg-dry	1	10/2/2013 8:31:00 AM
cis-1,2-Dichloroethene	U	0.95	4.7		µg/Kg-dry	1	10/2/2013 8:31:00 AM
Ethylbenzene	U	0.95	4.7	C	µg/Kg-dry	1	10/2/2013 8:31:00 AM
m,p-Xylene	U	1.9	9.5	C	µg/Kg-dry	1	10/2/2013 8:31:00 AM
Methyl tert-butyl ether	U	0.95	4.7		µg/Kg-dry	1	10/2/2013 8:31:00 AM
Methylene chloride	2.1	0.95	4.7	JBC	µg/Kg-dry	1	10/2/2013 8:31:00 AM
n-Butylbenzene	U	0.95	4.7		µg/Kg-dry	1	10/2/2013 8:31:00 AM
n-Propylbenzene	U	0.95	4.7		µg/Kg-dry	1	10/2/2013 8:31:00 AM
o-Xylene	U	0.95	4.7		µg/Kg-dry	1	10/2/2013 8:31:00 AM
sec-Butylbenzene	U	0.95	4.7		µg/Kg-dry	1	10/2/2013 8:31:00 AM
tert-Butylbenzene	U	0.95	4.7		µg/Kg-dry	1	10/2/2013 8:31:00 AM
Tetrachloroethene	U	0.95	4.7		µg/Kg-dry	1	10/2/2013 8:31:00 AM
Toluene	1.1	0.95	4.7	J	µg/Kg-dry	1	10/2/2013 8:31:00 AM
trans-1,2-Dichloroethene	U	0.95	4.7		µg/Kg-dry	1	10/2/2013 8:31:00 AM
Trichloroethene	U	0.95	4.7		µg/Kg-dry	1	10/2/2013 8:31:00 AM

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Qualifiers:

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J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
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U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-6-Grab-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 1:30:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-17A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	0.95	4.7		µg/Kg-dry	1	10/2/2013 8:31:00 AM
Surr: 4-Bromofluorobenzene	98.1	0	56-133		%REC	1	10/2/2013 8:31:00 AM
Surr: Dibromofluoromethane	125	0	60-132		%REC	1	10/2/2013 8:31:00 AM
Surr: Toluene-d8	97.4	0	69-125		%REC	1	10/2/2013 8:31:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-7-Grab-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 1:40:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-18A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	4.08	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM
1,1-Dichloroethane	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM
1,1-Dichloroethene	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM
1,2,4-Trimethylbenzene	U	0.93	4.6	C	µg/Kg-dry	1	10/2/2013 8:56:00 AM
1,2-Dichlorobenzene	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM
1,2-Dichloroethane	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM
1,3,5-Trimethylbenzene	U	0.93	4.6	C	µg/Kg-dry	1	10/2/2013 8:56:00 AM
1,3-Dichlorobenzene	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM
1,4-Dichlorobenzene	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM
1,4-Dioxane	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM
2-Butanone	U	4.6	9.3		µg/Kg-dry	1	10/2/2013 8:56:00 AM
Acetone	14	4.6	9.3	B	µg/Kg-dry	1	10/2/2013 8:56:00 AM
Benzene	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM
Carbon tetrachloride	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM
Chlorobenzene	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM
Chloroform	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM
cis-1,2-Dichloroethene	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM
Ethylbenzene	U	0.93	4.6	C	µg/Kg-dry	1	10/2/2013 8:56:00 AM
m,p-Xylene	U	1.9	9.3	C	µg/Kg-dry	1	10/2/2013 8:56:00 AM
Methyl tert-butyl ether	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM
Methylene chloride	1.9	0.93	4.6	JBC	µg/Kg-dry	1	10/2/2013 8:56:00 AM
n-Butylbenzene	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM
n-Propylbenzene	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM
o-Xylene	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM
sec-Butylbenzene	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM
tert-Butylbenzene	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM
Tetrachloroethene	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM
Toluene	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM
trans-1,2-Dichloroethene	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM
Trichloroethene	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM

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Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-7-Grab-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 1:40:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-18A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	0.93	4.6		µg/Kg-dry	1	10/2/2013 8:56:00 AM
Surr: 4-Bromofluorobenzene	96.3	0	56-133		%REC	1	10/2/2013 8:56:00 AM
Surr: Dibromofluoromethane	129	0	60-132		%REC	1	10/2/2013 8:56:00 AM
Surr: Toluene-d8	99.6	0	69-125		%REC	1	10/2/2013 8:56:00 AM

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-7-Grab-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 1:50:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-19A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	14.6	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM
1,1-Dichloroethane	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM
1,1-Dichloroethene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM
1,2,4-Trimethylbenzene	U	0.92	4.6	C	µg/Kg-dry	1	10/2/2013 9:21:00 AM
1,2-Dichlorobenzene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM
1,2-Dichloroethane	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM
1,3,5-Trimethylbenzene	U	0.92	4.6	C	µg/Kg-dry	1	10/2/2013 9:21:00 AM
1,3-Dichlorobenzene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM
1,4-Dichlorobenzene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM
1,4-Dioxane	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM
2-Butanone	U	4.6	9.2		µg/Kg-dry	1	10/2/2013 9:21:00 AM
Acetone	20	4.6	9.2	B	µg/Kg-dry	1	10/2/2013 9:21:00 AM
Benzene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM
Carbon tetrachloride	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM
Chlorobenzene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM
Chloroform	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM
cis-1,2-Dichloroethene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM
Ethylbenzene	U	0.92	4.6	C	µg/Kg-dry	1	10/2/2013 9:21:00 AM
m,p-Xylene	U	1.8	9.2	C	µg/Kg-dry	1	10/2/2013 9:21:00 AM
Methyl tert-butyl ether	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM
Methylene chloride	1.7	0.92	4.6	JBC	µg/Kg-dry	1	10/2/2013 9:21:00 AM
n-Butylbenzene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM
n-Propylbenzene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM
o-Xylene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM
sec-Butylbenzene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM
tert-Butylbenzene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM
Tetrachloroethene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM
Toluene	5.1	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM
trans-1,2-Dichloroethene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM
Trichloroethene	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM

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Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-7-Grab-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 1:50:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-19A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	0.92	4.6		µg/Kg-dry	1	10/2/2013 9:21:00 AM
Surr: 4-Bromofluorobenzene	98.5	0	56-133		%REC	1	10/2/2013 9:21:00 AM
Surr: Dibromofluoromethane	120	0	60-132		%REC	1	10/2/2013 9:21:00 AM
Surr: Toluene-d8	100	0	69-125		%REC	1	10/2/2013 9:21:00 AM

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Qualifiers:

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-8-Grab-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 2:00:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-20A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	3.95	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
1,1-Dichloroethane	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
1,1-Dichloroethene	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
1,2,4-Trimethylbenzene	U	0.79	3.9	C	µg/Kg-dry	1	10/2/2013 9:46:00 AM
1,2-Dichlorobenzene	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
1,2-Dichloroethane	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
1,3,5-Trimethylbenzene	U	0.79	3.9	C	µg/Kg-dry	1	10/2/2013 9:46:00 AM
1,3-Dichlorobenzene	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
1,4-Dichlorobenzene	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
1,4-Dioxane	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
2-Butanone	U	3.9	7.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
Acetone	10	3.9	7.9	B	µg/Kg-dry	1	10/2/2013 9:46:00 AM
Benzene	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
Carbon tetrachloride	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
Chlorobenzene	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
Chloroform	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
cis-1,2-Dichloroethene	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
Ethylbenzene	U	0.79	3.9	C	µg/Kg-dry	1	10/2/2013 9:46:00 AM
m,p-Xylene	U	1.6	7.9	C	µg/Kg-dry	1	10/2/2013 9:46:00 AM
Methyl tert-butyl ether	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
Methylene chloride	1.2	0.79	3.9	JBC	µg/Kg-dry	1	10/2/2013 9:46:00 AM
n-Butylbenzene	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
n-Propylbenzene	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
o-Xylene	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
sec-Butylbenzene	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
tert-Butylbenzene	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
Tetrachloroethene	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
Toluene	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
trans-1,2-Dichloroethene	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
Trichloroethene	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM

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Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-8-Grab-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 2:00:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-20A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	0.79	3.9		µg/Kg-dry	1	10/2/2013 9:46:00 AM
Surr: 4-Bromofluorobenzene	98.4	0	56-133		%REC	1	10/2/2013 9:46:00 AM
Surr: Dibromofluoromethane	113	0	60-132		%REC	1	10/2/2013 9:46:00 AM
Surr: Toluene-d8	97.7	0	69-125		%REC	1	10/2/2013 9:46:00 AM

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Qualifiers:

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-8-Grab-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 2:10:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-21A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	11.8	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	0.96	4.8		µg/Kg-dry	1	10/2/2013 10:11:00 AM
1,1-Dichloroethane	U	0.96	4.8		µg/Kg-dry	1	10/2/2013 10:11:00 AM
1,1-Dichloroethene	U	0.96	4.8		µg/Kg-dry	1	10/2/2013 10:11:00 AM
1,2,4-Trimethylbenzene	U	0.96	4.8	C	µg/Kg-dry	1	10/2/2013 10:11:00 AM
1,2-Dichlorobenzene	U	0.96	4.8		µg/Kg-dry	1	10/2/2013 10:11:00 AM
1,2-Dichloroethane	U	0.96	4.8		µg/Kg-dry	1	10/2/2013 10:11:00 AM
1,3,5-Trimethylbenzene	U	0.96	4.8	C	µg/Kg-dry	1	10/2/2013 10:11:00 AM
1,3-Dichlorobenzene	U	0.96	4.8		µg/Kg-dry	1	10/2/2013 10:11:00 AM
1,4-Dichlorobenzene	U	0.96	4.8		µg/Kg-dry	1	10/2/2013 10:11:00 AM
1,4-Dioxane	U	0.96	4.8		µg/Kg-dry	1	10/2/2013 10:11:00 AM
2-Butanone	U	4.8	9.6		µg/Kg-dry	1	10/2/2013 10:11:00 AM
Acetone	16	4.8	9.6	B	µg/Kg-dry	1	10/2/2013 10:11:00 AM
Benzene	U	0.96	4.8		µg/Kg-dry	1	10/2/2013 10:11:00 AM
Carbon tetrachloride	U	0.96	4.8		µg/Kg-dry	1	10/2/2013 10:11:00 AM
Chlorobenzene	U	0.96	4.8		µg/Kg-dry	1	10/2/2013 10:11:00 AM
Chloroform	U	0.96	4.8		µg/Kg-dry	1	10/2/2013 10:11:00 AM
cis-1,2-Dichloroethene	U	0.96	4.8		µg/Kg-dry	1	10/2/2013 10:11:00 AM
Ethylbenzene	U	0.96	4.8	C	µg/Kg-dry	1	10/2/2013 10:11:00 AM
m,p-Xylene	U	1.9	9.6	C	µg/Kg-dry	1	10/2/2013 10:11:00 AM
Methyl tert-butyl ether	U	0.96	4.8		µg/Kg-dry	1	10/2/2013 10:11:00 AM
Methylene chloride	1.5	0.96	4.8	JBC	µg/Kg-dry	1	10/2/2013 10:11:00 AM
n-Butylbenzene	U	0.96	4.8		µg/Kg-dry	1	10/2/2013 10:11:00 AM
n-Propylbenzene	U	0.96	4.8		µg/Kg-dry	1	10/2/2013 10:11:00 AM
o-Xylene	U	0.96	4.8		µg/Kg-dry	1	10/2/2013 10:11:00 AM
sec-Butylbenzene	U	0.96	4.8		µg/Kg-dry	1	10/2/2013 10:11:00 AM
tert-Butylbenzene	U	0.96	4.8		µg/Kg-dry	1	10/2/2013 10:11:00 AM
Tetrachloroethene	U	0.96	4.8		µg/Kg-dry	1	10/2/2013 10:11:00 AM
Toluene	2.6	0.96	4.8	J	µg/Kg-dry	1	10/2/2013 10:11:00 AM
trans-1,2-Dichloroethene	U	0.96	4.8		µg/Kg-dry	1	10/2/2013 10:11:00 AM
Trichloroethene	U	0.96	4.8		µg/Kg-dry	1	10/2/2013 10:11:00 AM

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Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-8-Grab-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 2:10:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-21A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	0.96	4.8		µg/Kg-dry	1	10/2/2013 10:11:00 AM
Surr: 4-Bromofluorobenzene	93.9	0	56-133		%REC	1	10/2/2013 10:11:00 AM
Surr: Dibromofluoromethane	115	0	60-132		%REC	1	10/2/2013 10:11:00 AM
Surr: Toluene-d8	99.3	0	69-125		%REC	1	10/2/2013 10:11:00 AM

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Qualifiers:

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-9-Grab-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 2:20:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-22A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	3.07	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM
1,1-Dichloroethane	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM
1,1-Dichloroethene	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM
1,2,4-Trimethylbenzene	U	0.86	4.3	C	µg/Kg-dry	1	10/2/2013 10:36:00 AM
1,2-Dichlorobenzene	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM
1,2-Dichloroethane	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM
1,3,5-Trimethylbenzene	U	0.86	4.3	C	µg/Kg-dry	1	10/2/2013 10:36:00 AM
1,3-Dichlorobenzene	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM
1,4-Dichlorobenzene	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM
1,4-Dioxane	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM
2-Butanone	U	4.3	8.6		µg/Kg-dry	1	10/2/2013 10:36:00 AM
Acetone	13	4.3	8.6	B	µg/Kg-dry	1	10/2/2013 10:36:00 AM
Benzene	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM
Carbon tetrachloride	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM
Chlorobenzene	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM
Chloroform	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM
cis-1,2-Dichloroethene	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM
Ethylbenzene	U	0.86	4.3	C	µg/Kg-dry	1	10/2/2013 10:36:00 AM
m,p-Xylene	U	1.7	8.6	C	µg/Kg-dry	1	10/2/2013 10:36:00 AM
Methyl tert-butyl ether	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM
Methylene chloride	1.2	0.86	4.3	JBC	µg/Kg-dry	1	10/2/2013 10:36:00 AM
n-Butylbenzene	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM
n-Propylbenzene	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM
o-Xylene	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM
sec-Butylbenzene	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM
tert-Butylbenzene	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM
Tetrachloroethene	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM
Toluene	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM
trans-1,2-Dichloroethene	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM
Trichloroethene	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM

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Qualifiers:

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-9-Grab-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 2:20:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-22A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	0.86	4.3		µg/Kg-dry	1	10/2/2013 10:36:00 AM
Surr: 4-Bromofluorobenzene	97.4	0	56-133		%REC	1	10/2/2013 10:36:00 AM
Surr: Dibromofluoromethane	106	0	60-132		%REC	1	10/2/2013 10:36:00 AM
Surr: Toluene-d8	93.6	0	69-125		%REC	1	10/2/2013 10:36:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-9-Grab-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 2:30:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-23A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	3.73	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM
1,1-Dichloroethane	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM
1,1-Dichloroethene	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM
1,2,4-Trimethylbenzene	U	0.88	4.4	C	µg/Kg-dry	1	10/2/2013 11:00:00 AM
1,2-Dichlorobenzene	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM
1,2-Dichloroethane	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM
1,3,5-Trimethylbenzene	U	0.88	4.4	C	µg/Kg-dry	1	10/2/2013 11:00:00 AM
1,3-Dichlorobenzene	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM
1,4-Dichlorobenzene	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM
1,4-Dioxane	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM
2-Butanone	U	4.4	8.8		µg/Kg-dry	1	10/2/2013 11:00:00 AM
Acetone	14	4.4	8.8	B	µg/Kg-dry	1	10/2/2013 11:00:00 AM
Benzene	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM
Carbon tetrachloride	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM
Chlorobenzene	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM
Chloroform	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM
cis-1,2-Dichloroethene	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM
Ethylbenzene	U	0.88	4.4	C	µg/Kg-dry	1	10/2/2013 11:00:00 AM
m,p-Xylene	U	1.8	8.8	C	µg/Kg-dry	1	10/2/2013 11:00:00 AM
Methyl tert-butyl ether	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM
Methylene chloride	1.4	0.88	4.4	JBC	µg/Kg-dry	1	10/2/2013 11:00:00 AM
n-Butylbenzene	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM
n-Propylbenzene	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM
o-Xylene	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM
sec-Butylbenzene	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM
tert-Butylbenzene	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM
Tetrachloroethene	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM
Toluene	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM
trans-1,2-Dichloroethene	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM
Trichloroethene	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM

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Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-9-Grab-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 2:30:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-23A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	0.88	4.4		µg/Kg-dry	1	10/2/2013 11:00:00 AM
Surr: 4-Bromofluorobenzene	98.5	0	56-133		%REC	1	10/2/2013 11:00:00 AM
Surr: Dibromofluoromethane	114	0	60-132		%REC	1	10/2/2013 11:00:00 AM
Surr: Toluene-d8	96.1	0	69-125		%REC	1	10/2/2013 11:00:00 AM

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Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-10-Grab-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 2:40:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-24A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	2.63	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM
1,1-Dichloroethane	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM
1,1-Dichloroethene	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM
1,2,4-Trimethylbenzene	U	0.87	4.4	C	µg/Kg-dry	1	10/2/2013 11:25:00 AM
1,2-Dichlorobenzene	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM
1,2-Dichloroethane	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM
1,3,5-Trimethylbenzene	U	0.87	4.4	C	µg/Kg-dry	1	10/2/2013 11:25:00 AM
1,3-Dichlorobenzene	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM
1,4-Dichlorobenzene	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM
1,4-Dioxane	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM
2-Butanone	U	4.4	8.7		µg/Kg-dry	1	10/2/2013 11:25:00 AM
Acetone	11	4.4	8.7	B	µg/Kg-dry	1	10/2/2013 11:25:00 AM
Benzene	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM
Carbon tetrachloride	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM
Chlorobenzene	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM
Chloroform	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM
cis-1,2-Dichloroethene	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM
Ethylbenzene	U	0.87	4.4	C	µg/Kg-dry	1	10/2/2013 11:25:00 AM
m,p-Xylene	U	1.7	8.7	C	µg/Kg-dry	1	10/2/2013 11:25:00 AM
Methyl tert-butyl ether	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM
Methylene chloride	1.2	0.87	4.4	JBC	µg/Kg-dry	1	10/2/2013 11:25:00 AM
n-Butylbenzene	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM
n-Propylbenzene	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM
o-Xylene	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM
sec-Butylbenzene	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM
tert-Butylbenzene	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM
Tetrachloroethene	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM
Toluene	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM
trans-1,2-Dichloroethene	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM
Trichloroethene	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM

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Qualifiers:

- B Analyte detected in the associated Method Blank
- C Calibration acceptability criteria exceeded for this analyte
- E Value above quantitation range
- H Holding time was exceeded
- J Analyte detected below quantitation limits
- LOD Limit of Detection
- LOQ Limit of Quantitation
- N Parameter not offered by NY ELAP
- P >40% diff for detected conc between the two GC columns
- S Spike Recovery outside accepted recovery limits
- U Compound was analyzed but not detected.

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-10-Grab-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 2:40:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-24A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	0.87	4.4		µg/Kg-dry	1	10/2/2013 11:25:00 AM
Surr: 4-Bromofluorobenzene	96.7	0	56-133		%REC	1	10/2/2013 11:25:00 AM
Surr: Dibromofluoromethane	117	0	60-132		%REC	1	10/2/2013 11:25:00 AM
Surr: Toluene-d8	100	0	69-125		%REC	1	10/2/2013 11:25:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range
H	Holding time was exceeded
J	Analyte detected below quantitation limits
LOD	Limit of Detection
LOQ	Limit of Quantitation
N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns
S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-10-Grab-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 2:50:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-25A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	4.04	0	0	N	wt%	1	10/2/2013
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1-Trichloroethane	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM
1,1-Dichloroethane	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM
1,1-Dichloroethene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM
1,2,4-Trimethylbenzene	U	0.97	4.8	C	µg/Kg-dry	1	10/2/2013 11:50:00 AM
1,2-Dichlorobenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM
1,2-Dichloroethane	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM
1,3,5-Trimethylbenzene	U	0.97	4.8	C	µg/Kg-dry	1	10/2/2013 11:50:00 AM
1,3-Dichlorobenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM
1,4-Dichlorobenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM
1,4-Dioxane	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM
2-Butanone	U	4.8	9.7		µg/Kg-dry	1	10/2/2013 11:50:00 AM
Acetone	16	4.8	9.7	B	µg/Kg-dry	1	10/2/2013 11:50:00 AM
Benzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM
Carbon tetrachloride	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM
Chlorobenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM
Chloroform	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM
cis-1,2-Dichloroethene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM
Ethylbenzene	U	0.97	4.8	C	µg/Kg-dry	1	10/2/2013 11:50:00 AM
m,p-Xylene	U	1.9	9.7	C	µg/Kg-dry	1	10/2/2013 11:50:00 AM
Methyl tert-butyl ether	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM
Methylene chloride	1.4	0.97	4.8	JBC	µg/Kg-dry	1	10/2/2013 11:50:00 AM
n-Butylbenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM
n-Propylbenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM
o-Xylene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM
sec-Butylbenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM
tert-Butylbenzene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM
Tetrachloroethene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM
Toluene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM
trans-1,2-Dichloroethene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM
Trichloroethene	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM

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Qualifiers:

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-10-Grab-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 2:50:00 PM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-25A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
Vinyl chloride	U	0.97	4.8		µg/Kg-dry	1	10/2/2013 11:50:00 AM
Surr: 4-Bromofluorobenzene	98.2	0	56-133		%REC	1	10/2/2013 11:50:00 AM
Surr: Dibromofluoromethane	121	0	60-132		%REC	1	10/2/2013 11:50:00 AM
Surr: Toluene-d8	94.7	0	69-125		%REC	1	10/2/2013 11:50:00 AM

Qualifiers:

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-1-Comp-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:00:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-26A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
MERCURY			**SW7471B**		**SW7471B**		Analyst: **JP**
Mercury	0.0494	0.005	0.0101		mg/Kg-dry	1	10/2/2013 9:04:31 AM
HERBICIDES SW-846 8151			**SW8151A**		**SW8151**		Analyst: **SB**
2,4,5-TP	U	1.08	3.2		µg/Kg-dry	1	10/2/2013 11:35:00 AM
Surr: 2,4-DCAA	68.3	0	12-156		%REC	1	10/2/2013 11:35:00 AM
PCB'S AS AROCLORS SW-846 METHOD 8082			**SW8082A**		**SW3546**		Analyst: **SB**
Aroclor 1016	U	10.5	21		µg/Kg-dry	1	10/3/2013 2:46:00 AM
Aroclor 1221	U	10.5	21		µg/Kg-dry	1	10/3/2013 2:46:00 AM
Aroclor 1232	U	10.5	21		µg/Kg-dry	1	10/3/2013 2:46:00 AM
Aroclor 1242	U	10.5	21		µg/Kg-dry	1	10/3/2013 2:46:00 AM
Aroclor 1248	U	10.5	21		µg/Kg-dry	1	10/3/2013 2:46:00 AM
Aroclor 1254	U	10.5	21		µg/Kg-dry	1	10/3/2013 2:46:00 AM
Aroclor 1260	U	10.5	21		µg/Kg-dry	1	10/3/2013 2:46:00 AM
Aroclor 1262	U	10.5	21		µg/Kg-dry	1	10/3/2013 2:46:00 AM
Aroclor 1268	U	10.5	21		µg/Kg-dry	1	10/3/2013 2:46:00 AM
Surr: TCX	69.7	0	13-145		%REC	1	10/3/2013 2:46:00 AM
Surr: DCB	63.9	0	12-144		%REC	1	10/3/2013 2:46:00 AM
PESTICIDES SW-846 METHOD 8081			**SW8081B**		**SW3546**		Analyst: **SB**
4,4´-DDD	22	1.05	2.6		µg/Kg-dry	1	10/2/2013 2:43:00 PM
4,4´-DDE	16	1.05	2.6		µg/Kg-dry	1	10/2/2013 2:43:00 PM
4,4´-DDT	28	1.05	2.6		µg/Kg-dry	1	10/2/2013 2:43:00 PM
Aldrin	U	1.05	2.6		µg/Kg-dry	1	10/2/2013 2:43:00 PM
alpha-BHC	U	1.05	2.6		µg/Kg-dry	1	10/2/2013 2:43:00 PM
beta-BHC	U	1.05	2.6		µg/Kg-dry	1	10/2/2013 2:43:00 PM
delta-BHC	U	1.05	2.6		µg/Kg-dry	1	10/2/2013 2:43:00 PM
Dieldrin	3.8	1.05	2.6		µg/Kg-dry	1	10/2/2013 2:43:00 PM
Endosulfan I	U	1.05	2.6		µg/Kg-dry	1	10/2/2013 2:43:00 PM
Endosulfan II	U	1.05	2.6		µg/Kg-dry	1	10/2/2013 2:43:00 PM
Endosulfan sulfate	U	1.05	2.6		µg/Kg-dry	1	10/2/2013 2:43:00 PM
Chlordane	120	10.5	21		µg/Kg-dry	1	10/2/2013 2:43:00 PM
Endrin	U	1.05	2.6		µg/Kg-dry	1	10/2/2013 2:43:00 PM
gamma-BHC	U	1.05	2.6		µg/Kg-dry	1	10/2/2013 2:43:00 PM

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American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-1-Comp-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:00:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-26A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PESTICIDES SW-846 METHOD 8081			**SW8081B**		**SW3546**		Analyst: **SB**
Heptachlor	U	1.05	2.6		µg/Kg-dry	1	10/2/2013 2:43:00 PM
Surr: DCB	115	0	16-148		%REC	1	10/2/2013 2:43:00 PM
Surr: TCX	95.2	0	19-145		%REC	1	10/2/2013 2:43:00 PM
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	7.34	0	0	N	wt%	1	10/2/2013
TOTAL METALS			**SW6010C**		**SW3050B**		Analyst: **JP**
Arsenic	2.85	0.21	0.525		mg/Kg-dry	1	10/2/2013 10:10:37 AM
Barium	21.2	0.21	0.420		mg/Kg-dry	1	10/2/2013 10:10:37 AM
Beryllium	U	0.10	0.420		mg/Kg-dry	1	10/2/2013 10:10:37 AM
Cadmium	U	0.10	0.420		mg/Kg-dry	1	10/2/2013 10:10:37 AM
Chromium	7.04	0.10	0.420		mg/Kg-dry	1	10/2/2013 10:10:37 AM
Copper	8.40	0.10	0.420		mg/Kg-dry	1	10/2/2013 10:10:37 AM
Lead	26.5	0.21	0.420		mg/Kg-dry	1	10/2/2013 10:10:37 AM
Manganese	100	0.10	0.420		mg/Kg-dry	1	10/2/2013 10:10:37 AM
Nickel	5.01	0.10	0.420		mg/Kg-dry	1	10/2/2013 10:10:37 AM
Selenium	U	0.21	0.525		mg/Kg-dry	1	10/2/2013 10:10:37 AM
Silver	U	0.10	0.420		mg/Kg-dry	1	10/2/2013 10:10:37 AM
Zinc	30.6	0.10	0.420		mg/Kg-dry	1	10/2/2013 10:10:37 AM
SEMIVOLATILE SW-846 8270			**SW8270D**		**SW3546**		Analyst: **MH**
2-Methylphenol	U	26	260		µg/Kg-dry	1	10/2/2013 10:20:00 AM
3+4-Methylphenol	U	26	260		µg/Kg-dry	1	10/2/2013 10:20:00 AM
Acenaphthene	U	26	260		µg/Kg-dry	1	10/2/2013 10:20:00 AM
Acenaphthylene	U	26	260		µg/Kg-dry	1	10/2/2013 10:20:00 AM
Anthracene	U	26	260		µg/Kg-dry	1	10/2/2013 10:20:00 AM
Benzo(a)anthracene	110	26	260	J	µg/Kg-dry	1	10/2/2013 10:20:00 AM
Benzo(a)pyrene	100	26	260	J	µg/Kg-dry	1	10/2/2013 10:20:00 AM
Benzo(b)fluoranthene	110	26	260	J	µg/Kg-dry	1	10/2/2013 10:20:00 AM
Benzo(g,h,i)perylene	67	26	260	J	µg/Kg-dry	1	10/2/2013 10:20:00 AM
Benzo(k)fluoranthene	77	26	260	J	µg/Kg-dry	1	10/2/2013 10:20:00 AM
Chrysene	130	26	260	J	µg/Kg-dry	1	10/2/2013 10:20:00 AM
Dibenzo(a,h)anthracene	U	26	260		µg/Kg-dry	1	10/2/2013 10:20:00 AM

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American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-1-Comp-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:00:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-26A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
SEMIVOLATILE SW-846 8270			**SW8270D**		**SW3546**		Analyst: **MH**
Dibenzofuran	U	26	260		µg/Kg-dry	1	10/2/2013 10:20:00 AM
Fluoranthene	200	26	260	J	µg/Kg-dry	1	10/2/2013 10:20:00 AM
Fluorene	U	26	260		µg/Kg-dry	1	10/2/2013 10:20:00 AM
Hexachlorobenzene	U	26	260		µg/Kg-dry	1	10/2/2013 10:20:00 AM
Indeno(1,2,3-c,d)pyrene	80	26	260	J	µg/Kg-dry	1	10/2/2013 10:20:00 AM
Naphthalene	U	26	260		µg/Kg-dry	1	10/2/2013 10:20:00 AM
Pentachlorophenol	U	53	530	C	µg/Kg-dry	1	10/2/2013 10:20:00 AM
Phenanthrene	87	26	260	J	µg/Kg-dry	1	10/2/2013 10:20:00 AM
Phenol	U	26	260		µg/Kg-dry	1	10/2/2013 10:20:00 AM
Pyrene	180	26	260	J	µg/Kg-dry	1	10/2/2013 10:20:00 AM
Surr: 2,4,6-Tribromophenol	51.5	0	10-137		%REC	1	10/2/2013 10:20:00 AM
Surr: 2-Fluorobiphenyl	66.4	0	22-146		%REC	1	10/2/2013 10:20:00 AM
Surr: 2-Fluorophenol	61.2	0	10-125		%REC	1	10/2/2013 10:20:00 AM
Surr: 4-Terphenyl-d14	62.3	0	14-149		%REC	1	10/2/2013 10:20:00 AM
Surr: Nitrobenzene-d5	67.4	0	14-148		%REC	1	10/2/2013 10:20:00 AM
Surr: Phenol-d6	59.7	0	10-126		%REC	1	10/2/2013 10:20:00 AM
CYANIDE, TOTAL			**SW9012B**		**SW9012B**		Analyst: **STP**
Cyanide, Total & Amenable: Auto Colorimetric	1.46	0.05	0.108		mg/Kg-dry	1	10/2/2013 9:17:43 AM
HEXAVALENT CHROMIUM			**SW7196A**		**SW3060A**		Analyst: **PAV**
Chromium, Hexavalent	U	0.43	0.863		mg/Kg-dry	1	10/2/2013 11:00:00 AM

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J	Analyte detected below quantitation limits	LOD	Limit of Detection
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U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-1-Comp-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:00:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-26B		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
TRIVALENT CHROMIUM			**SW6010C**				Analyst: **JP**
Chromium, Trivalent	7.04	0.10	0.420		mg/Kg-dry	1	10/2/2013

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LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
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U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-1-Comp-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:10:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-27A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
MERCURY			**SW7471B**		**SW7471B**		Analyst: **JP**
Mercury	0.0453	0.005	0.0109		mg/Kg-dry	1	10/2/2013 9:06:38 AM
HERBICIDES SW-846 8151			**SW8151A**		**SW8151**		Analyst: **SB**
2,4,5-TP	U	1.09	3.3		µg/Kg-dry	1	10/2/2013 11:49:00 AM
Surr: 2,4-DCAA	34.5	0	12-156		%REC	1	10/2/2013 11:49:00 AM
PCB'S AS AROCLORS SW-846 METHOD 8082			**SW8082A**		**SW3546**		Analyst: **SB**
Aroclor 1016	U	10.7	21		µg/Kg-dry	1	10/3/2013 3:10:00 AM
Aroclor 1221	U	10.7	21		µg/Kg-dry	1	10/3/2013 3:10:00 AM
Aroclor 1232	U	10.7	21		µg/Kg-dry	1	10/3/2013 3:10:00 AM
Aroclor 1242	U	10.7	21		µg/Kg-dry	1	10/3/2013 3:10:00 AM
Aroclor 1248	U	10.7	21		µg/Kg-dry	1	10/3/2013 3:10:00 AM
Aroclor 1254	U	10.7	21		µg/Kg-dry	1	10/3/2013 3:10:00 AM
Aroclor 1260	U	10.7	21		µg/Kg-dry	1	10/3/2013 3:10:00 AM
Aroclor 1262	U	10.7	21		µg/Kg-dry	1	10/3/2013 3:10:00 AM
Aroclor 1268	U	10.7	21		µg/Kg-dry	1	10/3/2013 3:10:00 AM
Surr: TCX	77.1	0	13-145		%REC	1	10/3/2013 3:10:00 AM
Surr: DCB	60.3	0	12-144		%REC	1	10/3/2013 3:10:00 AM
PESTICIDES SW-846 METHOD 8081			**SW8081B**		**SW3546**		Analyst: **SB**
4,4´-DDD	18	1.07	2.7		µg/Kg-dry	1	10/2/2013 2:58:00 PM
4,4´-DDE	18	1.07	2.7		µg/Kg-dry	1	10/2/2013 2:58:00 PM
4,4´-DDT	26	1.07	2.7		µg/Kg-dry	1	10/2/2013 2:58:00 PM
Aldrin	U	1.07	2.7		µg/Kg-dry	1	10/2/2013 2:58:00 PM
alpha-BHC	U	1.07	2.7		µg/Kg-dry	1	10/2/2013 2:58:00 PM
beta-BHC	U	1.07	2.7		µg/Kg-dry	1	10/2/2013 2:58:00 PM
delta-BHC	U	1.07	2.7		µg/Kg-dry	1	10/2/2013 2:58:00 PM
Dieldrin	3.2	1.07	2.7		µg/Kg-dry	1	10/2/2013 2:58:00 PM
Endosulfan I	U	1.07	2.7		µg/Kg-dry	1	10/2/2013 2:58:00 PM
Endosulfan II	U	1.07	2.7		µg/Kg-dry	1	10/2/2013 2:58:00 PM
Endosulfan sulfate	U	1.07	2.7		µg/Kg-dry	1	10/2/2013 2:58:00 PM
Chlordane	140	10.7	21		µg/Kg-dry	1	10/2/2013 2:58:00 PM
Endrin	U	1.07	2.7		µg/Kg-dry	1	10/2/2013 2:58:00 PM
gamma-BHC	U	1.07	2.7		µg/Kg-dry	1	10/2/2013 2:58:00 PM

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American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-1-Comp-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:10:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-27A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PESTICIDES SW-846 METHOD 8081			**SW8081B**		**SW3546**		Analyst: **SB**
Heptachlor	1.5	1.07	2.7	J	µg/Kg-dry	1	10/2/2013 2:58:00 PM
Surr: DCB	133	0	16-148		%REC	1	10/2/2013 2:58:00 PM
Surr: TCX	109	0	19-145		%REC	1	10/2/2013 2:58:00 PM
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	8.40	0	0	N	wt%	1	10/2/2013
TOTAL METALS			**SW6010C**		**SW3050B**		Analyst: **JP**
Arsenic	2.78	0.22	0.542		mg/Kg-dry	1	10/2/2013 10:12:38 AM
Barium	19.4	0.22	0.433		mg/Kg-dry	1	10/2/2013 10:12:38 AM
Beryllium	U	0.11	0.433		mg/Kg-dry	1	10/2/2013 10:12:38 AM
Cadmium	U	0.11	0.433		mg/Kg-dry	1	10/2/2013 10:12:38 AM
Chromium	6.61	0.11	0.433		mg/Kg-dry	1	10/2/2013 10:12:38 AM
Copper	11.4	0.11	0.433		mg/Kg-dry	1	10/2/2013 10:12:38 AM
Lead	29.1	0.22	0.433		mg/Kg-dry	1	10/2/2013 10:12:38 AM
Manganese	86.0	0.11	0.433		mg/Kg-dry	1	10/2/2013 10:12:38 AM
Nickel	4.81	0.11	0.433		mg/Kg-dry	1	10/2/2013 10:12:38 AM
Selenium	U	0.22	0.542		mg/Kg-dry	1	10/2/2013 10:12:38 AM
Silver	U	0.11	0.433		mg/Kg-dry	1	10/2/2013 10:12:38 AM
Zinc	32.5	0.11	0.433		mg/Kg-dry	1	10/2/2013 10:12:38 AM
SEMIVOLATILE SW-846 8270			**SW8270D**		**SW3546**		Analyst: **MH**
2-Methylphenol	U	27	270		µg/Kg-dry	1	10/2/2013 10:46:00 AM
3+4-Methylphenol	U	27	270		µg/Kg-dry	1	10/2/2013 10:46:00 AM
Acenaphthene	U	27	270		µg/Kg-dry	1	10/2/2013 10:46:00 AM
Acenaphthylene	U	27	270		µg/Kg-dry	1	10/2/2013 10:46:00 AM
Anthracene	77	27	270	J	µg/Kg-dry	1	10/2/2013 10:46:00 AM
Benzo(a)anthracene	230	27	270	J	µg/Kg-dry	1	10/2/2013 10:46:00 AM
Benzo(a)pyrene	160	27	270	J	µg/Kg-dry	1	10/2/2013 10:46:00 AM
Benzo(b)fluoranthene	150	27	270	J	µg/Kg-dry	1	10/2/2013 10:46:00 AM
Benzo(g,h,i)perylene	110	27	270	J	µg/Kg-dry	1	10/2/2013 10:46:00 AM
Benzo(k)fluoranthene	140	27	270	J	µg/Kg-dry	1	10/2/2013 10:46:00 AM
Chrysene	240	27	270	J	µg/Kg-dry	1	10/2/2013 10:46:00 AM
Dibenzo(a,h)anthracene	37	27	270	J	µg/Kg-dry	1	10/2/2013 10:46:00 AM

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Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-1-Comp-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:10:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-27A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
SEMIVOLATILE SW-846 8270			**SW8270D**		**SW3546**		Analyst: **MH**
Dibenzofuran	U	27	270		µg/Kg-dry	1	10/2/2013 10:46:00 AM
Fluoranthene	510	27	270		µg/Kg-dry	1	10/2/2013 10:46:00 AM
Fluorene	U	27	270		µg/Kg-dry	1	10/2/2013 10:46:00 AM
Hexachlorobenzene	U	27	270		µg/Kg-dry	1	10/2/2013 10:46:00 AM
Indeno(1,2,3-c,d)pyrene	120	27	270	J	µg/Kg-dry	1	10/2/2013 10:46:00 AM
Naphthalene	40	27	270	J	µg/Kg-dry	1	10/2/2013 10:46:00 AM
Pentachlorophenol	U	53	530	C	µg/Kg-dry	1	10/2/2013 10:46:00 AM
Phenanthrene	370	27	270		µg/Kg-dry	1	10/2/2013 10:46:00 AM
Phenol	U	27	270		µg/Kg-dry	1	10/2/2013 10:46:00 AM
Pyrene	370	27	270		µg/Kg-dry	1	10/2/2013 10:46:00 AM
Surr: 2,4,6-Tribromophenol	43.3	0	10-137		%REC	1	10/2/2013 10:46:00 AM
Surr: 2-Fluorobiphenyl	56.4	0	22-146		%REC	1	10/2/2013 10:46:00 AM
Surr: 2-Fluorophenol	51.0	0	10-125		%REC	1	10/2/2013 10:46:00 AM
Surr: 4-Terphenyl-d14	54.8	0	14-149		%REC	1	10/2/2013 10:46:00 AM
Surr: Nitrobenzene-d5	56.5	0	14-148		%REC	1	10/2/2013 10:46:00 AM
Surr: Phenol-d6	53.5	0	10-126		%REC	1	10/2/2013 10:46:00 AM
CYANIDE, TOTAL			**SW9012B**		**SW9012B**		Analyst: **STP**
Cyanide, Total & Amenable: Auto Colorimetric	0.386	0.05	0.109		mg/Kg-dry	1	10/2/2013 9:18:36 AM
HEXAVALENT CHROMIUM			**SW7196A**		**SW3060A**		Analyst: **PAV**
Chromium, Hexavalent	U	0.44	0.873		mg/Kg-dry	1	10/2/2013 11:00:00 AM

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Qualifiers:

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-1-Comp-2
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:10:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-27B		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
TRIVALENT CHROMIUM			**SW6010C**				Analyst: **JP**
Chromium, Trivalent	6.61	0.11	0.433		mg/Kg-dry	1	10/2/2013

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-2-Comp-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:20:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-28A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
MERCURY			**SW7471B**		**SW7471B**		Analyst: **JP**
Mercury	0.0497	0.005	0.00975		mg/Kg-dry	1	10/2/2013 9:08:46 AM
HERBICIDES SW-846 8151			**SW8151A**		**SW8151**		Analyst: **SB**
2,4,5-TP	U	1.07	3.2		µg/Kg-dry	1	10/2/2013 12:04:00 PM
Surr: 2,4-DCAA	46.2	0	12-156		%REC	1	10/2/2013 12:04:00 PM
PCB'S AS AROCLORS SW-846 METHOD 8082			**SW8082A**		**SW3546**		Analyst: **SB**
Aroclor 1016	U	10.7	21		µg/Kg-dry	1	10/3/2013 3:35:00 AM
Aroclor 1221	U	10.7	21		µg/Kg-dry	1	10/3/2013 3:35:00 AM
Aroclor 1232	U	10.7	21		µg/Kg-dry	1	10/3/2013 3:35:00 AM
Aroclor 1242	U	10.7	21		µg/Kg-dry	1	10/3/2013 3:35:00 AM
Aroclor 1248	U	10.7	21		µg/Kg-dry	1	10/3/2013 3:35:00 AM
Aroclor 1254	U	10.7	21		µg/Kg-dry	1	10/3/2013 3:35:00 AM
Aroclor 1260	U	10.7	21		µg/Kg-dry	1	10/3/2013 3:35:00 AM
Aroclor 1262	U	10.7	21		µg/Kg-dry	1	10/3/2013 3:35:00 AM
Aroclor 1268	U	10.7	21		µg/Kg-dry	1	10/3/2013 3:35:00 AM
Surr: TCX	72.3	0	13-145		%REC	1	10/3/2013 3:35:00 AM
Surr: DCB	46.3	0	12-144		%REC	1	10/3/2013 3:35:00 AM
PESTICIDES SW-846 METHOD 8081			**SW8081B**		**SW3546**		Analyst: **SB**
4,4'-DDD	17	1.07	2.7		µg/Kg-dry	1	10/2/2013 3:12:00 PM
4,4'-DDE	24	1.07	2.7		µg/Kg-dry	1	10/2/2013 3:12:00 PM
4,4'-DDT	56	1.07	2.7		µg/Kg-dry	1	10/2/2013 3:12:00 PM
Aldrin	U	1.07	2.7		µg/Kg-dry	1	10/2/2013 3:12:00 PM
alpha-BHC	U	1.07	2.7		µg/Kg-dry	1	10/2/2013 3:12:00 PM
beta-BHC	U	1.07	2.7		µg/Kg-dry	1	10/2/2013 3:12:00 PM
delta-BHC	U	1.07	2.7		µg/Kg-dry	1	10/2/2013 3:12:00 PM
Dieldrin	9.2	1.07	2.7		µg/Kg-dry	1	10/2/2013 3:12:00 PM
Endosulfan I	U	1.07	2.7		µg/Kg-dry	1	10/2/2013 3:12:00 PM
Endosulfan II	U	1.07	2.7		µg/Kg-dry	1	10/2/2013 3:12:00 PM
Endosulfan sulfate	U	1.07	2.7		µg/Kg-dry	1	10/2/2013 3:12:00 PM
Chlordane	160	10.7	21		µg/Kg-dry	1	10/2/2013 3:12:00 PM
Endrin	U	1.07	2.7		µg/Kg-dry	1	10/2/2013 3:12:00 PM
gamma-BHC	U	1.07	2.7		µg/Kg-dry	1	10/2/2013 3:12:00 PM

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-2-Comp-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:20:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-28A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PESTICIDES SW-846 METHOD 8081			**SW8081B**		**SW3546**		Analyst: **SB**
Heptachlor	3.3	1.07	2.7		µg/Kg-dry	1	10/2/2013 3:12:00 PM
Surr: DCB	122	0	16-148		%REC	1	10/2/2013 3:12:00 PM
Surr: TCX	103	0	19-145		%REC	1	10/2/2013 3:12:00 PM
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	6.76	0	0	N	wt%	1	10/2/2013
TOTAL METALS			**SW6010C**		**SW3050B**		Analyst: **JP**
Arsenic	4.16	0.21	0.522		mg/Kg-dry	1	10/2/2013 10:14:40 AM
Barium	26.2	0.21	0.417		mg/Kg-dry	1	10/2/2013 10:14:40 AM
Beryllium	U	0.10	0.417		mg/Kg-dry	1	10/2/2013 10:14:40 AM
Cadmium	0.123	0.10	0.417	J	mg/Kg-dry	1	10/2/2013 10:14:40 AM
Chromium	8.84	0.10	0.417		mg/Kg-dry	1	10/2/2013 10:14:40 AM
Copper	16.3	0.10	0.417		mg/Kg-dry	1	10/2/2013 10:14:40 AM
Lead	38.6	0.21	0.417		mg/Kg-dry	1	10/2/2013 10:14:40 AM
Manganese	140	0.10	0.417		mg/Kg-dry	1	10/2/2013 10:14:40 AM
Nickel	6.44	0.10	0.417		mg/Kg-dry	1	10/2/2013 10:14:40 AM
Selenium	U	0.21	0.522		mg/Kg-dry	1	10/2/2013 10:14:40 AM
Silver	0.375	0.10	0.417	J	mg/Kg-dry	1	10/2/2013 10:14:40 AM
Zinc	40.7	0.10	0.417		mg/Kg-dry	1	10/2/2013 10:14:40 AM
SEMIVOLATILE SW-846 8270			**SW8270D**		**SW3546**		Analyst: **MH**
2-Methylphenol	U	26	260		µg/Kg-dry	1	10/2/2013 11:12:00 AM
3+4-Methylphenol	U	26	260		µg/Kg-dry	1	10/2/2013 11:12:00 AM
Acenaphthene	U	26	260		µg/Kg-dry	1	10/2/2013 11:12:00 AM
Acenaphthylene	U	26	260		µg/Kg-dry	1	10/2/2013 11:12:00 AM
Anthracene	65	26	260	J	µg/Kg-dry	1	10/2/2013 11:12:00 AM
Benzo(a)anthracene	270	26	260		µg/Kg-dry	1	10/2/2013 11:12:00 AM
Benzo(a)pyrene	240	26	260	J	µg/Kg-dry	1	10/2/2013 11:12:00 AM
Benzo(b)fluoranthene	210	26	260	J	µg/Kg-dry	1	10/2/2013 11:12:00 AM
Benzo(g,h,i)perylene	160	26	260	J	µg/Kg-dry	1	10/2/2013 11:12:00 AM
Benzo(k)fluoranthene	260	26	260		µg/Kg-dry	1	10/2/2013 11:12:00 AM
Chrysene	300	26	260		µg/Kg-dry	1	10/2/2013 11:12:00 AM
Dibenzo(a,h)anthracene	59	26	260	J	µg/Kg-dry	1	10/2/2013 11:12:00 AM

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Qualifiers:

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C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range
H	Holding time was exceeded
J	Analyte detected below quantitation limits
LOD	Limit of Detection
LOQ	Limit of Quantitation
N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns
S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-2-Comp-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:20:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-28A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
SEMIVOLATILE SW-846 8270			**SW8270D**		**SW3546**		Analyst: **MH**
Dibenzofuran	U	26	260		µg/Kg-dry	1	10/2/2013 11:12:00 AM
Fluoranthene	530	26	260		µg/Kg-dry	1	10/2/2013 11:12:00 AM
Fluorene	U	26	260		µg/Kg-dry	1	10/2/2013 11:12:00 AM
Hexachlorobenzene	U	26	260		µg/Kg-dry	1	10/2/2013 11:12:00 AM
Indeno(1,2,3-c,d)pyrene	190	26	260	J	µg/Kg-dry	1	10/2/2013 11:12:00 AM
Naphthalene	U	26	260		µg/Kg-dry	1	10/2/2013 11:12:00 AM
Pentachlorophenol	U	52	520	C	µg/Kg-dry	1	10/2/2013 11:12:00 AM
Phenanthrene	240	26	260	J	µg/Kg-dry	1	10/2/2013 11:12:00 AM
Phenol	U	26	260		µg/Kg-dry	1	10/2/2013 11:12:00 AM
Pyrene	380	26	260		µg/Kg-dry	1	10/2/2013 11:12:00 AM
Surr: 2,4,6-Tribromophenol	59.0	0	10-137		%REC	1	10/2/2013 11:12:00 AM
Surr: 2-Fluorobiphenyl	67.4	0	22-146		%REC	1	10/2/2013 11:12:00 AM
Surr: 2-Fluorophenol	63.1	0	10-125		%REC	1	10/2/2013 11:12:00 AM
Surr: 4-Terphenyl-d14	59.2	0	14-149		%REC	1	10/2/2013 11:12:00 AM
Surr: Nitrobenzene-d5	67.4	0	14-148		%REC	1	10/2/2013 11:12:00 AM
Surr: Phenol-d6	61.7	0	10-126		%REC	1	10/2/2013 11:12:00 AM
CYANIDE, TOTAL			**SW9012B**		**SW9012B**		Analyst: **STP**
Cyanide, Total & Amenable: Auto Colorimetric	0.161	0.05	0.107		mg/Kg-dry	1	10/2/2013 9:19:28 AM
HEXAVALENT CHROMIUM			**SW7196A**		**SW3060A**		Analyst: **PAV**
Chromium, Hexavalent	U	0.43	0.858		mg/Kg-dry	1	10/2/2013 11:00:00 AM

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Qualifiers:

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-2-Comp-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:20:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-28B		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
TRIVALENT CHROMIUM			**SW6010C**				Analyst: **JP**
Chromium, Trivalent	8.84	0.10	0.417		mg/Kg-dry	1	10/2/2013

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-3-Comp-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:30:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-29A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
MERCURY			**SW7471B**		**SW7471B**		Analyst: **JP**
Mercury	0.0488	0.005	0.00995		mg/Kg-dry	1	10/2/2013 9:10:54 AM
HERBICIDES SW-846 8151			**SW8151A**		**SW8151**		Analyst: **SB**
2,4,5-TP	U	1.06	3.2		µg/Kg-dry	1	10/2/2013 12:18:00 PM
Surr: 2,4-DCAA	73.9	0	12-156		%REC	1	10/2/2013 12:18:00 PM
PCB'S AS AROCLORS SW-846 METHOD 8082			**SW8082A**		**SW3546**		Analyst: **SB**
Aroclor 1016	U	10.2	20		µg/Kg-dry	1	10/3/2013 3:59:00 AM
Aroclor 1221	U	10.2	20		µg/Kg-dry	1	10/3/2013 3:59:00 AM
Aroclor 1232	U	10.2	20		µg/Kg-dry	1	10/3/2013 3:59:00 AM
Aroclor 1242	U	10.2	20		µg/Kg-dry	1	10/3/2013 3:59:00 AM
Aroclor 1248	U	10.2	20		µg/Kg-dry	1	10/3/2013 3:59:00 AM
Aroclor 1254	U	10.2	20		µg/Kg-dry	1	10/3/2013 3:59:00 AM
Aroclor 1260	U	10.2	20		µg/Kg-dry	1	10/3/2013 3:59:00 AM
Aroclor 1262	U	10.2	20		µg/Kg-dry	1	10/3/2013 3:59:00 AM
Aroclor 1268	U	10.2	20		µg/Kg-dry	1	10/3/2013 3:59:00 AM
Surr: TCX	74.0	0	13-145		%REC	1	10/3/2013 3:59:00 AM
Surr: DCB	45.8	0	12-144		%REC	1	10/3/2013 3:59:00 AM
PESTICIDES SW-846 METHOD 8081			**SW8081B**		**SW3546**		Analyst: **SB**
4,4'-DDD	21	1.02	2.6		µg/Kg-dry	1	10/2/2013 6:03:00 PM
4,4'-DDE	30	1.02	2.6		µg/Kg-dry	1	10/2/2013 6:03:00 PM
4,4'-DDT	47	1.02	2.6		µg/Kg-dry	1	10/2/2013 6:03:00 PM
Aldrin	U	1.02	2.6		µg/Kg-dry	1	10/2/2013 6:03:00 PM
alpha-BHC	U	1.02	2.6		µg/Kg-dry	1	10/2/2013 6:03:00 PM
beta-BHC	U	1.02	2.6		µg/Kg-dry	1	10/2/2013 6:03:00 PM
delta-BHC	U	1.02	2.6		µg/Kg-dry	1	10/2/2013 6:03:00 PM
Dieldrin	8.3	1.02	2.6		µg/Kg-dry	1	10/2/2013 6:03:00 PM
Endosulfan I	U	1.02	2.6		µg/Kg-dry	1	10/2/2013 6:03:00 PM
Endosulfan II	U	1.02	2.6		µg/Kg-dry	1	10/2/2013 6:03:00 PM
Endosulfan sulfate	U	1.02	2.6		µg/Kg-dry	1	10/2/2013 6:03:00 PM
Chlordane	150	10.2	20		µg/Kg-dry	1	10/2/2013 6:03:00 PM
Endrin	U	1.02	2.6		µg/Kg-dry	1	10/2/2013 6:03:00 PM
gamma-BHC	U	1.02	2.6		µg/Kg-dry	1	10/2/2013 6:03:00 PM

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Qualifiers:

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-3-Comp-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:30:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-29A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PESTICIDES SW-846 METHOD 8081			**SW8081B**		**SW3546**		Analyst: **SB**
Heptachlor	2.8	1.02	2.6		µg/Kg-dry	1	10/2/2013 6:03:00 PM
Surr: DCB	127	0	16-148		%REC	1	10/2/2013 6:03:00 PM
Surr: TCX	107	0	19-145		%REC	1	10/2/2013 6:03:00 PM
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	6.10	0	0	N	wt%	1	10/2/2013
TOTAL METALS			**SW6010C**		**SW3050B**		Analyst: **JP**
Arsenic	3.78	0.21	0.532		mg/Kg-dry	1	10/2/2013 10:16:42 AM
Barium	25.9	0.21	0.426		mg/Kg-dry	1	10/2/2013 10:16:42 AM
Beryllium	U	0.11	0.426		mg/Kg-dry	1	10/2/2013 10:16:42 AM
Cadmium	0.113	0.11	0.426	J	mg/Kg-dry	1	10/2/2013 10:16:42 AM
Chromium	9.38	0.11	0.426		mg/Kg-dry	1	10/2/2013 10:16:42 AM
Copper	13.4	0.11	0.426		mg/Kg-dry	1	10/2/2013 10:16:42 AM
Lead	33.9	0.21	0.426		mg/Kg-dry	1	10/2/2013 10:16:42 AM
Manganese	122	0.11	0.426		mg/Kg-dry	1	10/2/2013 10:16:42 AM
Nickel	6.63	0.11	0.426		mg/Kg-dry	1	10/2/2013 10:16:42 AM
Selenium	U	0.21	0.532		mg/Kg-dry	1	10/2/2013 10:16:42 AM
Silver	U	0.11	0.426		mg/Kg-dry	1	10/2/2013 10:16:42 AM
Zinc	38.4	0.11	0.426		mg/Kg-dry	1	10/2/2013 10:16:42 AM
SEMIVOLATILE SW-846 8270			**SW8270D**		**SW3546**		Analyst: **MH**
2-Methylphenol	U	26	260		µg/Kg-dry	1	10/2/2013 11:38:00 AM
3+4-Methylphenol	U	26	260		µg/Kg-dry	1	10/2/2013 11:38:00 AM
Acenaphthene	U	26	260		µg/Kg-dry	1	10/2/2013 11:38:00 AM
Acenaphthylene	U	26	260		µg/Kg-dry	1	10/2/2013 11:38:00 AM
Anthracene	U	26	260		µg/Kg-dry	1	10/2/2013 11:38:00 AM
Benzo(a)anthracene	130	26	260	J	µg/Kg-dry	1	10/2/2013 11:38:00 AM
Benzo(a)pyrene	150	26	260	J	µg/Kg-dry	1	10/2/2013 11:38:00 AM
Benzo(b)fluoranthene	160	26	260	J	µg/Kg-dry	1	10/2/2013 11:38:00 AM
Benzo(g,h,i)perylene	88	26	260	J	µg/Kg-dry	1	10/2/2013 11:38:00 AM
Benzo(k)fluoranthene	130	26	260	J	µg/Kg-dry	1	10/2/2013 11:38:00 AM
Chrysene	170	26	260	J	µg/Kg-dry	1	10/2/2013 11:38:00 AM
Dibenzo(a,h)anthracene	28	26	260	J	µg/Kg-dry	1	10/2/2013 11:38:00 AM

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Qualifiers:

B	Analyte detected in the associated Method Blank
C	Calibration acceptability criteria exceeded for this analyte
E	Value above quantitation range
H	Holding time was exceeded
J	Analyte detected below quantitation limits
LOD	Limit of Detection
LOQ	Limit of Quantitation
N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns
S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-3-Comp-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:30:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-29A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
SEMIVOLATILE SW-846 8270			**SW8270D**		**SW3546**		Analyst: **MH**
Dibenzofuran	U	26	260		µg/Kg-dry	1	10/2/2013 11:38:00 AM
Fluoranthene	310	26	260		µg/Kg-dry	1	10/2/2013 11:38:00 AM
Fluorene	U	26	260		µg/Kg-dry	1	10/2/2013 11:38:00 AM
Hexachlorobenzene	U	26	260		µg/Kg-dry	1	10/2/2013 11:38:00 AM
Indeno(1,2,3-c,d)pyrene	110	26	260	J	µg/Kg-dry	1	10/2/2013 11:38:00 AM
Naphthalene	U	26	260		µg/Kg-dry	1	10/2/2013 11:38:00 AM
Pentachlorophenol	U	52	520	C	µg/Kg-dry	1	10/2/2013 11:38:00 AM
Phenanthrene	150	26	260	J	µg/Kg-dry	1	10/2/2013 11:38:00 AM
Phenol	U	26	260		µg/Kg-dry	1	10/2/2013 11:38:00 AM
Pyrene	200	26	260	J	µg/Kg-dry	1	10/2/2013 11:38:00 AM
Surr: 2,4,6-Tribromophenol	46.8	0	10-137		%REC	1	10/2/2013 11:38:00 AM
Surr: 2-Fluorobiphenyl	63.7	0	22-146		%REC	1	10/2/2013 11:38:00 AM
Surr: 2-Fluorophenol	57.9	0	10-125		%REC	1	10/2/2013 11:38:00 AM
Surr: 4-Terphenyl-d14	45.2	0	14-149		%REC	1	10/2/2013 11:38:00 AM
Surr: Nitrobenzene-d5	63.2	0	14-148		%REC	1	10/2/2013 11:38:00 AM
Surr: Phenol-d6	55.0	0	10-126		%REC	1	10/2/2013 11:38:00 AM
CYANIDE, TOTAL			**SW9012B**		**SW9012B**		Analyst: **STP**
Cyanide, Total & Amenable: Auto Colorimetric	0.771	0.05	0.106		mg/Kg-dry	1	10/2/2013 9:20:36 AM
HEXAVALENT CHROMIUM			**SW7196A**		**SW3060A**		Analyst: **PAV**
Chromium, Hexavalent	U	0.43	0.852		mg/Kg-dry	1	10/2/2013 11:00:00 AM

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-3-Comp-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:30:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-29B		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
TRIVALENT CHROMIUM			**SW6010C**				Analyst: **JP**
Chromium, Trivalent	9.38	0.11	0.426		mg/Kg-dry	1	10/2/2013

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-4-Comp-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:40:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-30A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
MERCURY			**SW7471B**		**SW7471B**		Analyst: **JP**
Mercury	0.0471	0.005	0.00914		mg/Kg-dry	1	10/2/2013 9:13:03 AM
HERBICIDES SW-846 8151			**SW8151A**		**SW8151**		Analyst: **SB**
2,4,5-TP	U	1.05	3.2		µg/Kg-dry	1	10/2/2013 12:33:00 PM
Surr: 2,4-DCAA	94.6	0	12-156		%REC	1	10/2/2013 12:33:00 PM
PCB'S AS AROCLORS SW-846 METHOD 8082			**SW8082A**		**SW3546**		Analyst: **SB**
Aroclor 1016	U	10.3	21		µg/Kg-dry	1	10/3/2013 4:24:00 AM
Aroclor 1221	U	10.3	21		µg/Kg-dry	1	10/3/2013 4:24:00 AM
Aroclor 1232	U	10.3	21		µg/Kg-dry	1	10/3/2013 4:24:00 AM
Aroclor 1242	U	10.3	21		µg/Kg-dry	1	10/3/2013 4:24:00 AM
Aroclor 1248	U	10.3	21		µg/Kg-dry	1	10/3/2013 4:24:00 AM
Aroclor 1254	U	10.3	21		µg/Kg-dry	1	10/3/2013 4:24:00 AM
Aroclor 1260	U	10.3	21		µg/Kg-dry	1	10/3/2013 4:24:00 AM
Aroclor 1262	U	10.3	21		µg/Kg-dry	1	10/3/2013 4:24:00 AM
Aroclor 1268	U	10.3	21		µg/Kg-dry	1	10/3/2013 4:24:00 AM
Surr: TCX	76.6	0	13-145		%REC	1	10/3/2013 4:24:00 AM
Surr: DCB	57.1	0	12-144		%REC	1	10/3/2013 4:24:00 AM
PESTICIDES SW-846 METHOD 8081			**SW8081B**		**SW3546**		Analyst: **SB**
4,4´-DDD	7.7	1.03	2.6		µg/Kg-dry	1	10/2/2013 6:18:00 PM
4,4´-DDE	18	1.03	2.6		µg/Kg-dry	1	10/2/2013 6:18:00 PM
4,4´-DDT	120	1.03	2.6		µg/Kg-dry	1	10/2/2013 6:18:00 PM
Aldrin	U	1.03	2.6		µg/Kg-dry	1	10/2/2013 6:18:00 PM
alpha-BHC	U	1.03	2.6		µg/Kg-dry	1	10/2/2013 6:18:00 PM
beta-BHC	U	1.03	2.6		µg/Kg-dry	1	10/2/2013 6:18:00 PM
delta-BHC	U	1.03	2.6		µg/Kg-dry	1	10/2/2013 6:18:00 PM
Dieldrin	10	1.03	2.6		µg/Kg-dry	1	10/2/2013 6:18:00 PM
Endosulfan I	U	1.03	2.6		µg/Kg-dry	1	10/2/2013 6:18:00 PM
Endosulfan II	U	1.03	2.6		µg/Kg-dry	1	10/2/2013 6:18:00 PM
Endosulfan sulfate	U	1.03	2.6		µg/Kg-dry	1	10/2/2013 6:18:00 PM
Chlordane	170	10.3	21		µg/Kg-dry	1	10/2/2013 6:18:00 PM
Endrin	U	1.03	2.6		µg/Kg-dry	1	10/2/2013 6:18:00 PM
gamma-BHC	U	1.03	2.6		µg/Kg-dry	1	10/2/2013 6:18:00 PM

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Qualifiers:

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
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American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-4-Comp-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:40:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-30A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PESTICIDES SW-846 METHOD 8081			**SW8081B**		**SW3546**		Analyst: **SB**
Heptachlor	6.8	1.03	2.6		µg/Kg-dry	1	10/2/2013 6:18:00 PM
Surr: DCB	128	0	16-148		%REC	1	10/2/2013 6:18:00 PM
Surr: TCX	108	0	19-145		%REC	1	10/2/2013 6:18:00 PM
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	4.91	0	0	N	wt%	1	10/2/2013
TOTAL METALS			**SW6010C**		**SW3050B**		Analyst: **JP**
Arsenic	4.05	0.21	0.516		mg/Kg-dry	1	10/2/2013 10:18:42 AM
Barium	24.9	0.21	0.412		mg/Kg-dry	1	10/2/2013 10:18:42 AM
Beryllium	U	0.10	0.412		mg/Kg-dry	1	10/2/2013 10:18:42 AM
Cadmium	0.115	0.10	0.412	J	mg/Kg-dry	1	10/2/2013 10:18:42 AM
Chromium	8.76	0.10	0.412		mg/Kg-dry	1	10/2/2013 10:18:42 AM
Copper	13.9	0.10	0.412		mg/Kg-dry	1	10/2/2013 10:18:42 AM
Lead	37.5	0.21	0.412		mg/Kg-dry	1	10/2/2013 10:18:42 AM
Manganese	115	0.10	0.412		mg/Kg-dry	1	10/2/2013 10:18:42 AM
Nickel	6.18	0.10	0.412		mg/Kg-dry	1	10/2/2013 10:18:42 AM
Selenium	U	0.21	0.516		mg/Kg-dry	1	10/2/2013 10:18:42 AM
Silver	U	0.10	0.412		mg/Kg-dry	1	10/2/2013 10:18:42 AM
Zinc	38.1	0.10	0.412		mg/Kg-dry	1	10/2/2013 10:18:42 AM
SEMIVOLATILE SW-846 8270			**SW8270D**		**SW3546**		Analyst: **MH**
2-Methylphenol	U	26	260		µg/Kg-dry	1	10/2/2013 12:05:00 PM
3+4-Methylphenol	U	26	260		µg/Kg-dry	1	10/2/2013 12:05:00 PM
Acenaphthene	U	26	260		µg/Kg-dry	1	10/2/2013 12:05:00 PM
Acenaphthylene	U	26	260		µg/Kg-dry	1	10/2/2013 12:05:00 PM
Anthracene	29	26	260	J	µg/Kg-dry	1	10/2/2013 12:05:00 PM
Benzo(a)anthracene	180	26	260	J	µg/Kg-dry	1	10/2/2013 12:05:00 PM
Benzo(a)pyrene	200	26	260	J	µg/Kg-dry	1	10/2/2013 12:05:00 PM
Benzo(b)fluoranthene	190	26	260	J	µg/Kg-dry	1	10/2/2013 12:05:00 PM
Benzo(g,h,i)perylene	150	26	260	J	µg/Kg-dry	1	10/2/2013 12:05:00 PM
Benzo(k)fluoranthene	190	26	260	J	µg/Kg-dry	1	10/2/2013 12:05:00 PM
Chrysene	240	26	260	J	µg/Kg-dry	1	10/2/2013 12:05:00 PM
Dibenzo(a,h)anthracene	U	26	260		µg/Kg-dry	1	10/2/2013 12:05:00 PM

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-4-Comp-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:40:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-30A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
SEMIVOLATILE SW-846 8270			**SW8270D**		**SW3546**		Analyst: **MH**
Dibenzofuran	U	26	260		µg/Kg-dry	1	10/2/2013 12:05:00 PM
Fluoranthene	330	26	260		µg/Kg-dry	1	10/2/2013 12:05:00 PM
Fluorene	U	26	260		µg/Kg-dry	1	10/2/2013 12:05:00 PM
Hexachlorobenzene	U	26	260		µg/Kg-dry	1	10/2/2013 12:05:00 PM
Indeno(1,2,3-c,d)pyrene	150	26	260	J	µg/Kg-dry	1	10/2/2013 12:05:00 PM
Naphthalene	49	26	260	J	µg/Kg-dry	1	10/2/2013 12:05:00 PM
Pentachlorophenol	U	51	510	C	µg/Kg-dry	1	10/2/2013 12:05:00 PM
Phenanthrene	110	26	260	J	µg/Kg-dry	1	10/2/2013 12:05:00 PM
Phenol	U	26	260		µg/Kg-dry	1	10/2/2013 12:05:00 PM
Pyrene	220	26	260	J	µg/Kg-dry	1	10/2/2013 12:05:00 PM
Surr: 2,4,6-Tribromophenol	62.5	0	10-137		%REC	1	10/2/2013 12:05:00 PM
Surr: 2-Fluorobiphenyl	88.4	0	22-146		%REC	1	10/2/2013 12:05:00 PM
Surr: 2-Fluorophenol	69.9	0	10-125		%REC	1	10/2/2013 12:05:00 PM
Surr: 4-Terphenyl-d14	60.4	0	14-149		%REC	1	10/2/2013 12:05:00 PM
Surr: Nitrobenzene-d5	72.7	0	14-148		%REC	1	10/2/2013 12:05:00 PM
Surr: Phenol-d6	67.4	0	10-126		%REC	1	10/2/2013 12:05:00 PM
CYANIDE, TOTAL			**SW9012B**		**SW9012B**		Analyst: **STP**
Cyanide, Total & Amenable: Auto Colorimetric	1.62	0.05	0.105		mg/Kg-dry	1	10/2/2013 9:21:42 AM
HEXAVALENT CHROMIUM			**SW7196A**		**SW3060A**		Analyst: **PAV**
Chromium, Hexavalent	U	0.42	0.841		mg/Kg-dry	1	10/2/2013 11:00:00 AM

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-4-Comp-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:40:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-30B		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
TRIVALENT CHROMIUM			**SW6010C**				Analyst: **JP**
Chromium, Trivalent	8.76	0.10	0.412		mg/Kg-dry	1	10/2/2013

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-5-Comp-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:50:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-31A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
MERCURY			**SW7471B**		**SW7471B**		Analyst: **JP**
Mercury	0.0481	0.005	0.00971		mg/Kg-dry	1	10/2/2013 9:15:12 AM
HERBICIDES SW-846 8151			**SW8151A**		**SW8151**		Analyst: **SB**
2,4,5-TP	U	1.09	3.3		µg/Kg-dry	1	10/2/2013 12:47:00 PM
Surr: 2,4-DCAA	66.3	0	12-156		%REC	1	10/2/2013 12:47:00 PM
PCB'S AS AROCLORS SW-846 METHOD 8082			**SW8082A**		**SW3546**		Analyst: **SB**
Aroclor 1016	U	10.6	21		µg/Kg-dry	1	10/3/2013 4:48:00 AM
Aroclor 1221	U	10.6	21		µg/Kg-dry	1	10/3/2013 4:48:00 AM
Aroclor 1232	U	10.6	21		µg/Kg-dry	1	10/3/2013 4:48:00 AM
Aroclor 1242	U	10.6	21		µg/Kg-dry	1	10/3/2013 4:48:00 AM
Aroclor 1248	U	10.6	21		µg/Kg-dry	1	10/3/2013 4:48:00 AM
Aroclor 1254	U	10.6	21		µg/Kg-dry	1	10/3/2013 4:48:00 AM
Aroclor 1260	U	10.6	21		µg/Kg-dry	1	10/3/2013 4:48:00 AM
Aroclor 1262	U	10.6	21		µg/Kg-dry	1	10/3/2013 4:48:00 AM
Aroclor 1268	U	10.6	21		µg/Kg-dry	1	10/3/2013 4:48:00 AM
Surr: TCX	67.5	0	13-145		%REC	1	10/3/2013 4:48:00 AM
Surr: DCB	65.7	0	12-144		%REC	1	10/3/2013 4:48:00 AM
PESTICIDES SW-846 METHOD 8081			**SW8081B**		**SW3546**		Analyst: **SB**
4,4´-DDD	8.3	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:32:00 PM
4,4´-DDE	23	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:32:00 PM
4,4´-DDT	26	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:32:00 PM
Aldrin	U	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:32:00 PM
alpha-BHC	U	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:32:00 PM
beta-BHC	U	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:32:00 PM
delta-BHC	U	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:32:00 PM
Dieldrin	3.2	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:32:00 PM
Endosulfan I	U	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:32:00 PM
Endosulfan II	U	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:32:00 PM
Endosulfan sulfate	U	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:32:00 PM
Chlordane	85	10.6	21		µg/Kg-dry	1	10/2/2013 6:32:00 PM
Endrin	U	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:32:00 PM
gamma-BHC	U	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:32:00 PM

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Qualifiers:

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E	Value above quantitation range	H	Holding time was exceeded
J	Analyte detected below quantitation limits	LOD	Limit of Detection
LOQ	Limit of Quantitation	N	Parameter not offered by NY ELAP
P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-5-Comp-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:50:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-31A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PESTICIDES SW-846 METHOD 8081			**SW8081B**		**SW3546**		Analyst: **SB**
Heptachlor	1.1	1.06	2.6	J	µg/Kg-dry	1	10/2/2013 6:32:00 PM
Surr: DCB	76.9	0	16-148		%REC	1	10/2/2013 6:32:00 PM
Surr: TCX	74.5	0	19-145		%REC	1	10/2/2013 6:32:00 PM
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	8.02	0	0	N	wt%	1	10/2/2013
TOTAL METALS			**SW6010C**		**SW3050B**		Analyst: **JP**
Arsenic	4.01	0.21	0.531		mg/Kg-dry	1	10/2/2013 10:20:44 AM
Barium	24.8	0.21	0.425		mg/Kg-dry	1	10/2/2013 10:20:44 AM
Beryllium	U	0.11	0.425		mg/Kg-dry	1	10/2/2013 10:20:44 AM
Cadmium	0.131	0.11	0.425	J	mg/Kg-dry	1	10/2/2013 10:20:44 AM
Chromium	8.70	0.11	0.425		mg/Kg-dry	1	10/2/2013 10:20:44 AM
Copper	17.6	0.11	0.425		mg/Kg-dry	1	10/2/2013 10:20:44 AM
Lead	41.9	0.21	0.425		mg/Kg-dry	1	10/2/2013 10:20:44 AM
Manganese	115	0.11	0.425		mg/Kg-dry	1	10/2/2013 10:20:44 AM
Nickel	6.11	0.11	0.425		mg/Kg-dry	1	10/2/2013 10:20:44 AM
Selenium	U	0.21	0.531		mg/Kg-dry	1	10/2/2013 10:20:44 AM
Silver	U	0.11	0.425		mg/Kg-dry	1	10/2/2013 10:20:44 AM
Zinc	43.0	0.11	0.425		mg/Kg-dry	1	10/2/2013 10:20:44 AM
SEMIVOLATILE SW-846 8270			**SW8270D**		**SW3546**		Analyst: **MH**
2-Methylphenol	U	26	260		µg/Kg-dry	1	10/2/2013 12:32:00 PM
3+4-Methylphenol	U	26	260		µg/Kg-dry	1	10/2/2013 12:32:00 PM
Acenaphthene	U	26	260		µg/Kg-dry	1	10/2/2013 12:32:00 PM
Acenaphthylene	U	26	260		µg/Kg-dry	1	10/2/2013 12:32:00 PM
Anthracene	U	26	260		µg/Kg-dry	1	10/2/2013 12:32:00 PM
Benzo(a)anthracene	160	26	260	J	µg/Kg-dry	1	10/2/2013 12:32:00 PM
Benzo(a)pyrene	150	26	260	J	µg/Kg-dry	1	10/2/2013 12:32:00 PM
Benzo(b)fluoranthene	150	26	260	J	µg/Kg-dry	1	10/2/2013 12:32:00 PM
Benzo(g,h,i)perylene	120	26	260	J	µg/Kg-dry	1	10/2/2013 12:32:00 PM
Benzo(k)fluoranthene	140	26	260	J	µg/Kg-dry	1	10/2/2013 12:32:00 PM
Chrysene	190	26	260	J	µg/Kg-dry	1	10/2/2013 12:32:00 PM
Dibenzo(a,h)anthracene	U	26	260		µg/Kg-dry	1	10/2/2013 12:32:00 PM

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American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-5-Comp-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:50:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-31A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
SEMIVOLATILE SW-846 8270			**SW8270D**		**SW3546**		Analyst: **MH**
Dibenzofuran	U	26	260		µg/Kg-dry	1	10/2/2013 12:32:00 PM
Fluoranthene	320	26	260		µg/Kg-dry	1	10/2/2013 12:32:00 PM
Fluorene	U	26	260		µg/Kg-dry	1	10/2/2013 12:32:00 PM
Hexachlorobenzene	U	26	260		µg/Kg-dry	1	10/2/2013 12:32:00 PM
Indeno(1,2,3-c,d)pyrene	120	26	260	J	µg/Kg-dry	1	10/2/2013 12:32:00 PM
Naphthalene	U	26	260		µg/Kg-dry	1	10/2/2013 12:32:00 PM
Pentachlorophenol	U	52	520	C	µg/Kg-dry	1	10/2/2013 12:32:00 PM
Phenanthrene	120	26	260	J	µg/Kg-dry	1	10/2/2013 12:32:00 PM
Phenol	U	26	260		µg/Kg-dry	1	10/2/2013 12:32:00 PM
Pyrene	240	26	260	J	µg/Kg-dry	1	10/2/2013 12:32:00 PM
Surr: 2,4,6-Tribromophenol	58.4	0	10-137		%REC	1	10/2/2013 12:32:00 PM
Surr: 2-Fluorobiphenyl	69.1	0	22-146		%REC	1	10/2/2013 12:32:00 PM
Surr: 2-Fluorophenol	66.3	0	10-125		%REC	1	10/2/2013 12:32:00 PM
Surr: 4-Terphenyl-d14	59.7	0	14-149		%REC	1	10/2/2013 12:32:00 PM
Surr: Nitrobenzene-d5	65.3	0	14-148		%REC	1	10/2/2013 12:32:00 PM
Surr: Phenol-d6	66.1	0	10-126		%REC	1	10/2/2013 12:32:00 PM
CYANIDE, TOTAL			**SW9012B**		**SW9012B**		Analyst: **STP**
Cyanide, Total & Amenable: Auto Colorimetric	0.295	0.05	0.109		mg/Kg-dry	1	10/2/2013 9:23:11 AM
HEXAVALENT CHROMIUM			**SW7196A**		**SW3060A**		Analyst: **PAV**
Chromium, Hexavalent	U	0.44	0.870		mg/Kg-dry	1	10/2/2013 11:00:00 AM

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P	>40% diff for detected conc between the two GC columns	S	Spike Recovery outside accepted recovery limits
U	Compound was analyzed but not detected.		

American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-5-Comp-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 9:50:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-31B		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
TRIVALENT CHROMIUM			**SW6010C**				Analyst: **JP**
Chromium, Trivalent	8.70	0.11	0.425		mg/Kg-dry	1	10/2/2013

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J	Analyte detected below quantitation limits	LOD	Limit of Detection
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American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-6-Comp-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 10:00:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-32A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
MERCURY			**SW7471B**		**SW7471B**		Analyst: **JP**
Mercury	0.0533	0.005	0.00987		mg/Kg-dry	1	10/2/2013 9:17:20 AM
HERBICIDES SW-846 8151			**SW8151A**		**SW8151**		Analyst: **SB**
2,4,5-TP	U	1.10	3.3		µg/Kg-dry	1	10/2/2013 1:02:00 PM
Surr: 2,4-DCAA	83.7	0	12-156		%REC	1	10/2/2013 1:02:00 PM
PCB'S AS AROCLORS SW-846 METHOD 8082			**SW8082A**		**SW3546**		Analyst: **SB**
Aroclor 1016	U	10.6	21		µg/Kg-dry	1	10/3/2013 5:13:00 AM
Aroclor 1221	U	10.6	21		µg/Kg-dry	1	10/3/2013 5:13:00 AM
Aroclor 1232	U	10.6	21		µg/Kg-dry	1	10/3/2013 5:13:00 AM
Aroclor 1242	U	10.6	21		µg/Kg-dry	1	10/3/2013 5:13:00 AM
Aroclor 1248	U	10.6	21		µg/Kg-dry	1	10/3/2013 5:13:00 AM
Aroclor 1254	U	10.6	21		µg/Kg-dry	1	10/3/2013 5:13:00 AM
Aroclor 1260	U	10.6	21		µg/Kg-dry	1	10/3/2013 5:13:00 AM
Aroclor 1262	U	10.6	21		µg/Kg-dry	1	10/3/2013 5:13:00 AM
Aroclor 1268	U	10.6	21		µg/Kg-dry	1	10/3/2013 5:13:00 AM
Surr: TCX	68.9	0	13-145		%REC	1	10/3/2013 5:13:00 AM
Surr: DCB	68.2	0	12-144		%REC	1	10/3/2013 5:13:00 AM
PESTICIDES SW-846 METHOD 8081			**SW8081B**		**SW3546**		Analyst: **SB**
4,4´-DDD	12	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:47:00 PM
4,4´-DDE	16	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:47:00 PM
4,4´-DDT	78	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:47:00 PM
Aldrin	U	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:47:00 PM
alpha-BHC	U	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:47:00 PM
beta-BHC	U	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:47:00 PM
delta-BHC	U	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:47:00 PM
Dieldrin	6.2	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:47:00 PM
Endosulfan I	U	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:47:00 PM
Endosulfan II	U	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:47:00 PM
Endosulfan sulfate	U	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:47:00 PM
Chlordane	140	10.6	21		µg/Kg-dry	1	10/2/2013 6:47:00 PM
Endrin	U	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:47:00 PM
gamma-BHC	U	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:47:00 PM

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American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-6-Comp-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 10:00:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-32A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PESTICIDES SW-846 METHOD 8081			**SW8081B**		**SW3546**		Analyst: **SB**
Heptachlor	4.5	1.06	2.6		µg/Kg-dry	1	10/2/2013 6:47:00 PM
Surr: DCB	89.3	0	16-148		%REC	1	10/2/2013 6:47:00 PM
Surr: TCX	83.7	0	19-145		%REC	1	10/2/2013 6:47:00 PM
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	9.50	0	0	N	wt%	1	10/2/2013
TOTAL METALS			**SW6010C**		**SW3050B**		Analyst: **JP**
Arsenic	3.56	0.22	0.552		mg/Kg-dry	1	10/2/2013 10:22:46 AM
Barium	23.3	0.22	0.442		mg/Kg-dry	1	10/2/2013 10:22:46 AM
Beryllium	U	0.11	0.442		mg/Kg-dry	1	10/2/2013 10:22:46 AM
Cadmium	U	0.11	0.442		mg/Kg-dry	1	10/2/2013 10:22:46 AM
Chromium	8.21	0.11	0.442		mg/Kg-dry	1	10/2/2013 10:22:46 AM
Copper	11.5	0.11	0.442		mg/Kg-dry	1	10/2/2013 10:22:46 AM
Lead	31.6	0.22	0.442		mg/Kg-dry	1	10/2/2013 10:22:46 AM
Manganese	111	0.11	0.442		mg/Kg-dry	1	10/2/2013 10:22:46 AM
Nickel	5.86	0.11	0.442		mg/Kg-dry	1	10/2/2013 10:22:46 AM
Selenium	U	0.22	0.552		mg/Kg-dry	1	10/2/2013 10:22:46 AM
Silver	U	0.11	0.442		mg/Kg-dry	1	10/2/2013 10:22:46 AM
Zinc	36.6	0.11	0.442		mg/Kg-dry	1	10/2/2013 10:22:46 AM
SEMIVOLATILE SW-846 8270			**SW8270D**		**SW3546**		Analyst: **MH**
2-Methylphenol	U	26.8	270		µg/Kg-dry	1	10/2/2013 1:00:00 PM
3+4-Methylphenol	27	26.8	270	J	µg/Kg-dry	1	10/2/2013 1:00:00 PM
Acenaphthene	U	26.8	270		µg/Kg-dry	1	10/2/2013 1:00:00 PM
Acenaphthylene	U	26.8	270		µg/Kg-dry	1	10/2/2013 1:00:00 PM
Anthracene	U	26.8	270		µg/Kg-dry	1	10/2/2013 1:00:00 PM
Benzo(a)anthracene	81	26.8	270	J	µg/Kg-dry	1	10/2/2013 1:00:00 PM
Benzo(a)pyrene	83	26.8	270	J	µg/Kg-dry	1	10/2/2013 1:00:00 PM
Benzo(b)fluoranthene	98	26.8	270	J	µg/Kg-dry	1	10/2/2013 1:00:00 PM
Benzo(g,h,i)perylene	68	26.8	270	J	µg/Kg-dry	1	10/2/2013 1:00:00 PM
Benzo(k)fluoranthene	63	26.8	270	J	µg/Kg-dry	1	10/2/2013 1:00:00 PM
Chrysene	100	26.8	270	J	µg/Kg-dry	1	10/2/2013 1:00:00 PM
Dibenzo(a,h)anthracene	U	26.8	270		µg/Kg-dry	1	10/2/2013 1:00:00 PM

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American Analytical Laboratories, LLC.

Date: *03-Oct-13*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Topsoil-6-Comp-1
Lab Order:	1310009	**Collection Date:**	10/1/2013 10:00:00 AM
Project:	Island Park- Topsoil	**Matrix:**	SOIL
Lab ID:	1310009-32A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
SEMIVOLATILE SW-846 8270			**SW8270D**		**SW3546**		Analyst: **MH**
Dibenzofuran	U	26.8	270		µg/Kg-dry	1	10/2/2013 1:00:00 PM
Fluoranthene	120	26.8	270	J	µg/Kg-dry	1	10/2/2013 1:00:00 PM
Fluorene	U	26.8	270		µg/Kg-dry	1	10/2/2013 1:00:00 PM
Hexachlorobenzene	U	26.8	270		µg/Kg-dry	1	10/2/2013 1:00:00 PM
Indeno(1,2,3-c,d)pyrene	66	26.8	270	J	µg/Kg-dry	1	10/2/2013 1:00:00 PM
Naphthalene	U	26.8	270		µg/Kg-dry	1	10/2/2013 1:00:00 PM
Pentachlorophenol	U	53.6	540		µg/Kg-dry	1	10/2/2013 1:00:00 PM
Phenanthrene	69	26.8	270	J	µg/Kg-dry	1	10/2/2013 1:00:00 PM
Phenol	U	26.8	270		µg/Kg-dry	1	10/2/2013 1:00:00 PM
Pyrene	150	26.8	270	J	µg/Kg-dry	1	10/2/2013 1:00:00 PM
Surr: 2,4,6-Tribromophenol	23.9	0	10-137		%REC	1	10/2/2013 1:00:00 PM
Surr: 2-Fluorobiphenyl	64.9	0	22-146		%REC	1	10/2/2013 1:00:00 PM
Surr: 2-Fluorophenol	55.9	0	10-125		%REC	1	10/2/2013 1:00:00 PM
Surr: 4-Terphenyl-d14	70.2	0	14-149		%REC	1	10/2/2013 1:00:00 PM
Surr: Nitrobenzene-d5	57.9	0	14-148		%REC	1	10/2/2013 1:00:00 PM
Surr: Phenol-d6	55.4	0	10-126		%REC	1	10/2/2013 1:00:00 PM
CYANIDE, TOTAL			**SW9012B**		**SW9012B**		Analyst: **STP**
Cyanide, Total & Amenable: Auto Colorimetric	1.58	0.06	0.110		mg/Kg-dry	1	10/2/2013 9:24:23 AM
HEXAVALENT CHROMIUM			**SW7196A**		**SW3060A**		Analyst: **PAV**
Chromium, Hexavalent	U	0.44	0.884		mg/Kg-dry	1	10/2/2013 11:00:00 AM

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Website: www.American-Analytical.com

May 27, 2014

Mike Casazza
American Environmental Assessment Corp.
188 Long Island Avenue
Wyandanch, NY 11798
TEL: (631) 586-2000
FAX (631) 586-9605

RE: Hastings on Hudson, 75-25th St., Brooklyn Order No.: 1405131

Dear Mike Casazza:

American Analytical Laboratories, LLC. received 2 sample(s) on 5/22/2014 for the analyses presented in the following report.

Samples were analyzed in accordance with the test procedures documented on the chain of custody and detailed throughout the text of this report. The results reported herein relate only to the items tested or to the samples as received by the laboratory. This report may not be reproduced, except in full, without the approval of American Analytical Laboratories, LLC and is not considered complete without a cover page and chain of custody documentation. The limits (LOQ) provided in the data package are analytical reporting limits and not Federal or Local mandated values to which the sample results should be compared.

There were no problems with the analyses and all data for associated QC met laboratory specifications. If there are any exceptions a Case Narrative is provided in the report or the data is qualified either on the sample results or in the QC section of the report. This package has been reviewed by American Analytical Laboratories' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal.

If you have any questions regarding these tests results, please do not hesitate to call (631) 454-6100 or email me directly at lbeyer@american-analytical.com.

Sincerely,

Karen Kelly
QA/QC Manager
American Analytical Laboratories, LLC.

American Analytical Laboratories, LLC.
56 Toledo Street
Farmingdale, New York 11735
TEL: (631) 454-6100 FAX: (631) 454-8027
Website: www.American-Analytical.com

Workorder Sample Summary

WO#: **1405131**

27-May-14

CLIENT: American Environmental Assessment Corp.
Project: Hastings on Hudson, 75-25th St., Brooklyn

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1405131-001A	Screenings Stockpile Grab		5/22/2014 9:00:00 AM	5/22/2014 10:15:00 AM	Soil
1405131-002A	Screening Stockpile Comp.		5/22/2014 9:05:00 AM	5/22/2014 10:15:00 AM	Soil

CHAIN OF CUSTODY

AMERICAN ANALYTICAL LABORATORIES

56 Toledo Street, Farmingdale NY 11735
(T) 631-454-6100 (F) 631-454-8027
www.american-analytical.com

CERTIFICATIONS
NY ELAP - 11418 PA DEP - 68-00573
NJ DEP - NY050 CT DOH - PH-0205

Client Information

Company Name: AEAL
Address:
City: State: Zip:
Project Contact: Mike Cassara
Phone #:
E-mail:

Project Information

Project Name: Hastings-on-Hudson
Street: 75-25 B Street
City: Brooklyn, NY State: Zip:
Project #:
Sampler's Name / Company: Mike Cassara / AEAL
Sampler's Signature: Mike Cassara

Analytical Information

NYSDEC DER-10

LAB SAMPLE # (LAB USE ONLY)	Client Sample ID	Sample Type	Matrix Code	Date	Time	Glass / Plastic	Total # of bottles	Sample Containers: Number of Each Preserved Bottle: NONE	HCl	NaOH	HNO_3	H_2SO_4	$NaHSO_4$	MeOH	OTHER	NYSDEC DER-10
1405131	Screening Stockpile	G	S	5-22-14	900	G	3									X
	Screening Stockpile	C	S	5-22-14	905	G	1									X
	Screening Stockpile	C	S	5-22-14	910	P	1									X

Turnaround Time (Business Days)

Standard
- [ ] 7-10 Business Days
- [ ] 5 Day *RUSH*
- [ ] 4 Day *RUSH*
- [ ] 3 Day *RUSH*
- [ ] 2 Day *RUSH*
- [x] 1 Day *RUSH*

SAMPLE TYPE

G = Grab
C = Composite
B = Blank

MATRIX CODES

L = Liquid PC = Paint Chip
S = Soil SL = Sludge
O = Oil SD = Solid
W = Wipe M = Miscellaneous

Comments / Remarks

Cooler Temp: _____

Sample custody must be documented below, each time samples change possession, with a signature, date, and time.

RELINQUISHED BY (SIGNATURE)	DATE / TIME	PRINTED NAME	RECEIVED BY LAB (SIGNATURE)	DATE / TIME	PRINTED NAME
Mike Cassara	DATE 5-22-14 TIME 1015	Mike Cassara		DATE 5/22/14 TIME 1015	Cate Ferrara
	DATE TIME			DATE TIME	

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Sample Log-In Check List

Client Name: **AEAC** Work Order Number: **1405131** RcptNo: **1**

Logged by:	**Cate Ferrara**	**5/22/2014 10:15:00 AM**	C Ferrara
Completed By:	**Cate Ferrara**	**5/22/2014**	C Ferrara
Reviewed By:	**Lori Beyer**	**5/22/2014 3:23:32 PM**	Lori Beyer

Chain of Custody

1.	Is Chain of Custody complete?	Yes	☑	No ☐	Not Present	☐
2.	How was the sample delivered?	AAL Lab Courier				

Log In

3.	Coolers are present?	Yes	☑	No ☐	NA	☐
4.	Shipping container/cooler in good condition?	Yes	☑	No ☐		
	Custody seals intact on shipping container/cooler?	Yes	☐	No ☐	Not Present	☑
	No. Seal Date: Signed By:					
5.	Was an attempt made to cool the samples?	Yes	☑	No ☐	NA	☐
6.	Were all samples received at a temperature of >0° C to 6.0°C	Yes	☑	No ☐	NA	☐
7.	Sample(s) in proper container(s)?	Yes	☑	No ☐		
8.	Sufficient sample volume for indicated test(s)?	Yes	☑	No ☐		
9.	Are samples (except VOA and ONG) properly preserved?	Yes	☑	No ☐		
10.	Was preservative added to bottles?	Yes	☐	No ☑	NA	☐
11.	Is the headspace in the VOA vials less than 1/4 inch or 6 mm?	Yes	☐	No ☐	No VOA Vials	☑
12.	Were any sample containers received broken?	Yes	☐	No ☑		
13.	Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes	☑	No ☐		
14.	Are matrices correctly identified on Chain of Custody?	Yes	☑	No ☐		
15.	Is it clear what analyses were requested?	Yes	☑	No ☐		
16.	Were all holding times able to be met? (If no, notify customer for authorization.)	Yes	☑	No ☐		

Special Handling (if applicable)

17.	Was client notified of all discrepancies with this order?	Yes	☐	No ☐	NA	☑

Person Notified: Date

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

18. Additional remarks:

Cooler Information

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By

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Case Narrative

WO#: **1405131**
Date: **5/27/2014**

CLIENT: American Environmental Assessment Corp.
Project: Hastings on Hudson, 75-25th St., Brooklyn

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846 and additional methods as detailed throughout the text of the report. All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives with exceptions notated in this Narrative discussion and/or in the QC Summary Section of the lab report with appropriate qualifiers. Additional quality control information such as surrogate recovery values for organic testing is provided as part of the analytical results.

Volatile LCS are analyzed with preservatives - HCL/NaHSO4/Methanol depending on level of analysis (high/low) similar to sample analysis. Outliers can be attributed to the presence of chemical preservatives. 2-Chloroethyl vinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Pesticide/PCB/Herbicide analysis are analyzed on two distinct columns. Once a target compound is qualitatively confirmed by detection on both columns and quantitation is determined to be >40% between the two columns, AAL's policy is to report the lower of the values as suggested by SW846 Method 8000C in cases where no interference exists. If in the professional judgment of the laboratory, the higher value must be utilized this is explained in the lab report.

The following parameters (if included in this report) are not offered by NY ELAP: VOA 8260 Soil; 1,2,4,5-Tetramethylbenzene, Chlorodifluoromethane, Diisopropyl ether, Ethanol, Freon-114, p-Diethylbenzene, p-Ethyltoluene, Isopropyl Acetate, n-Amyl Acetate, n-Butyl Acetate, n-Propyl Acetate. VOA 8260 Liquid; 1,2,4,5-Tetramethylbenzene, Chlorodifluoromethane, Freon-114, p-Diethylbenzene, p-Ethyltoluene, Isopropyl Acetate, n-Amyl acetate, n-Butyl Acetate, n-Propyl Acetate. Pesticides 8081 Soil; DBCP. Herbicides 8151 Soil; 3,5-Dichlorobenzoic Acid, 4-Nitrophenol, Acifluorfen, Bentazon, Chloramben, DCPA, Picloram .Lachat 10-107-6-1B Ammonia in Soil, SM 2540G Total Volatile Solids, Soil TKN, Soil Organic Nitrogen, Percent Moisture, SM 4500-SO3 B Sulfite in Liquid, Total Sulfur in Soil, Acid Soluble Chloride by ASTMC1152, Water Soluble Chloride by ASTMC1218, Chlorine Demand by SM 2350 B, Total Residual Chlorine in Liquid

The test results meet the requirements of the NYSDOH and NELAC standards, except where noted. The information contained in this analytical report is the sole property of American Analytical Laboratories, LLC. or the client for which this report was issued. The results contained in this report are only representative of the samples received. The sample receipt checklist is included as part of this lab

report. Conditions can vary at different times and at different sampling conditions. American Analytical is not responsible for the use or interpretation of the data included herein.

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Definition Only

WO#: **1405131**
Date: **5/27/2014**

Definitions:

Sample Result and QC Summary Qualifiers - Level I and Level II Reports
ND - Not detected at the reporting limit/Limit of Quantitation

B - The analyte was detected in the associated method blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consier anything <10x the blank value as artifact.

E - The value is above the quantitation range

D - Analyte concentration was obtained from diluted analysis or from analysis using reduced sample volume.

J - The analyte was detected below the limit of quantitation but greater than the established Limit of Detection (LOD). There is greater uncertainty associated with these results and data should be considered as estimated.

U - The compound was analyzed for but not detected.

H - Holding time for preparation or analysis has been exceeded.

S - Spike recovery is outside accepted recovery limits.

R - RPD is outside accepted recovery range.

P - Secondary column exceeds 40% difference for GC test.

* - Calibration exceeds method requirement. Due to the large number of analytes for organic testing, the method allows 10% of analytes to have %RSD and/or %D to be >20%.

LOD - Limit of Detection; the lowest level the analyte can be determined to be statistically different from a blank.

LOQ - Limit of Quantitation; the lowest amount of analyte in a sample that can be quantitatively determined with suitable precision and accurary.
m - Analyte was manually integrated for GC/MS.
+ - Concentration exceeds regulatory level for TCLP

American Analytical Laboratories, LLC.

Date: *27-May-14*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Screenings Stockpile Grab
Lab Order:	1405131	**Collection Date:**	5/22/2014 9:00:00 AM
Project:	Hastings on Hudson, 75-25th St., Brooklyn	**Matrix:**	SOIL
Lab ID:	1405131-001A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	7.1	1	1.0		wt%	1	5/23/2014
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
1,1,1,2-Tetrachloroethane	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
1,1,1-Trichloroethane	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
1,1,2,2-Tetrachloroethane	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
1,1,2-Trichloro-1,2,2-trifluoroethan	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
1,1,2-Trichloroethane	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
1,1-Dichloroethane	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
1,1-Dichloroethene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
1,1-Dichloropropene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
1,2,3-Trichlorobenzene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
1,2,3-Trichloropropane	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
1,2,4,5-Tetramethylbenzene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
1,2,4-Trichlorobenzene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
1,2,4-Trimethylbenzene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
1,2-Dibromo-3-chloropropane	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
1,2-Dibromoethane	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
1,2-Dichlorobenzene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
1,2-Dichloroethane	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
1,2-Dichloropropane	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
1,3,5-Trimethylbenzene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
1,3-Dichlorobenzene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
1,3-dichloropropane	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
1,4-Dichlorobenzene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
1,4-Dioxane	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
2,2-Dichloropropane	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
2-Butanone	ND	4.6	9.1	U*	µg/Kg-dry	1	5/22/2014 7:53:00 PM
2-Chloroethyl vinyl ether	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
2-Chlorotoluene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
2-Hexanone	ND	4.6	9.1	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
2-Propanol	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
4-Chlorotoluene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM

American Analytical Laboratories, LLC.

Date: *27-May-14*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Screenings Stockpile Grab
Lab Order:	1405131	**Collection Date:**	5/22/2014 9:00:00 AM
Project:	Hastings on Hudson, 75-25th St., Brooklyn	**Matrix:**	SOIL
Lab ID:	1405131-001A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
4-Isopropyltoluene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
4-Methyl-2-pentanone	ND	4.6	9.1	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Acetone	1.6	1.1	9.1	BJ*	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Benzene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Bromobenzene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Bromochloromethane	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Bromodichloromethane	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Bromoform	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Bromomethane	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Carbon disulfide	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Carbon tetrachloride	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Chlorobenzene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Chlorodifluoromethane	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Chloroethane	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Chloroform	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Chloromethane	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
cis-1,2-Dichloroethene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
cis-1,3-Dichloropropene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Cyclohexane	ND	1.8	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Dibromochloromethane	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Dibromomethane	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Dichlorodifluoromethane	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Diisopropyl ether	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Ethanol	ND	9.1	18	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Ethylbenzene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Freon-114	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Hexachlorobutadiene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Isopropylbenzene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
m,p-Xylene	ND	1.8	9.1	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Methyl Acetate	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Methyl tert-butyl ether	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Methylene chloride	5.1	0.91	4.6	B*	µg/Kg-dry	1	5/22/2014 7:53:00 PM
n-Butylbenzene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Screenings Stockpile Grab
Lab Order:	1405131	**Collection Date:**	5/22/2014 9:00:00 AM
Project:	Hastings on Hudson, 75-25th St., Brooklyn	**Matrix:**	SOIL
Lab ID:	1405131-001A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260			**SW8260C**		**SW5035A**		Analyst: **LA**
n-Propylbenzene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Naphthalene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
o-Xylene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
p-Diethylbenzene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
p-Ethyltoluene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
sec-Butylbenzene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Styrene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
t-Butyl alcohol	ND	2.3	4.6	U*	µg/Kg-dry	1	5/22/2014 7:53:00 PM
tert-Butylbenzene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Tetrachloroethene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Toluene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
trans-1,2-Dichloroethene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
trans-1,3-Dichloropropene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Trichloroethene	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Trichlorofluoromethane	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Vinyl acetate	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Vinyl chloride	ND	0.91	4.6	U	µg/Kg-dry	1	5/22/2014 7:53:00 PM
Surr: 4-Bromofluorobenzene	100	0	56-133		%REC	1	5/22/2014 7:53:00 PM
Surr: Dibromofluoromethane	102	0	60-132		%REC	1	5/22/2014 7:53:00 PM
Surr: Toluene-d8	98.0	0	69-125		%REC	1	5/22/2014 7:53:00 PM

American Analytical Laboratories, LLC.

Date: *27-May-14*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Screening Stockpile Comp.
Lab Order:	1405131	**Collection Date:**	5/22/2014 9:05:00 AM
Project:	Hastings on Hudson, 75-25th St., Brooklyn	**Matrix:**	SOIL
Lab ID:	1405131-002A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
MERCURY			**SW7471B**		**SW7471B**		Analyst: **JP**
Mercury	ND	0.008	0.0127	U	mg/Kg-dry	1	5/23/2014 11:54:16 AM
HERBICIDES SW-846 8151			**SW8151A**		**SW8151A**		Analyst: **SB**
2,4,5-T	ND	1.1	3.2	U	µg/Kg-dry	1	5/23/2014 3:39:00 PM
2,4,5-TP	ND	1.1	3.2	U	µg/Kg-dry	1	5/23/2014 3:39:00 PM
2,4-D	ND	1.1	3.2	U	µg/Kg-dry	1	5/23/2014 3:39:00 PM
Dicamba	ND	1.1	3.2	U	µg/Kg-dry	1	5/23/2014 3:39:00 PM
Surr: 2,4-DCAA	184	0	12-156	S	%REC	1	5/23/2014 3:39:00 PM
PCB'S AS AROCLORS SW-846 METHOD 8082			**SW8082A**		**SW3546**		Analyst: **SB**
Aroclor 1016	ND	10	21	U	µg/Kg-dry	1	5/23/2014 1:27:00 PM
Aroclor 1221	ND	10	21	U	µg/Kg-dry	1	5/23/2014 1:27:00 PM
Aroclor 1232	ND	10	21	U	µg/Kg-dry	1	5/23/2014 1:27:00 PM
Aroclor 1242	ND	10	21	U	µg/Kg-dry	1	5/23/2014 1:27:00 PM
Aroclor 1248	ND	10	21	U	µg/Kg-dry	1	5/23/2014 1:27:00 PM
Aroclor 1254	ND	10	21	U	µg/Kg-dry	1	5/23/2014 1:27:00 PM
Aroclor 1260	ND	10	21	U	µg/Kg-dry	1	5/23/2014 1:27:00 PM
Aroclor 1262	ND	10	21	U	µg/Kg-dry	1	5/23/2014 1:27:00 PM
Aroclor 1268	ND	10	21	U	µg/Kg-dry	1	5/23/2014 1:27:00 PM
Surr: DCB	108	0	12-144		%REC	1	5/23/2014 1:27:00 PM
Surr: TCX	109	0	13-145		%REC	1	5/23/2014 1:27:00 PM
PESTICIDES SW-846 METHOD 8081			**SW8081B**		**SW3546**		Analyst: **SB**
4,4´-DDD	ND	1	2.6	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM
4,4´-DDE	ND	1	2.6	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM
4,4´-DDT	ND	1	2.6	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM
Aldrin	ND	1	2.6	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM
alpha-BHC	ND	1	2.6	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM
alpha-Chlordane	ND	3.1	10	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM
beta-BHC	ND	1	2.6	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM
Chlorobenzilate	ND	1	2.6	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM
DBCP	ND	1	2.6	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM
delta-BHC	ND	1	2.6	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM
Dieldrin	ND	1	2.6	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM

American Analytical Laboratories, LLC.

Date: *27-May-14*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Screening Stockpile Comp.
Lab Order:	1405131	**Collection Date:**	5/22/2014 9:05:00 AM
Project:	Hastings on Hudson, 75-25th St., Brooklyn	**Matrix:**	SOIL
Lab ID:	1405131-002A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PESTICIDES SW-846 METHOD 8081			**SW8081B**		**SW3546**		Analyst: **SB**
Endosulfan I	ND	1	2.6	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM
Endosulfan II	ND	1	2.6	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM
Endosulfan sulfate	ND	1	2.6	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM
Endrin	ND	1	2.6	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM
Endrin aldehyde	ND	1	2.6	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM
Endrin ketone	ND	1	2.6	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM
gamma-BHC	ND	1	2.6	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM
gamma-Chlordane	ND	3.1	10	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM
Heptachlor	ND	1	2.6	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM
Heptachlor epoxide	ND	1	2.6	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM
Hexachlorobenzene	ND	1	2.6	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM
Hexachlorocyclopentadiene	1.4	1	2.6	J	µg/Kg-dry	1	5/23/2014 2:45:00 PM
Methoxychlor	ND	1	2.6	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM
Toxaphene	ND	13	26	U	µg/Kg-dry	1	5/23/2014 2:45:00 PM
Surr: TCX	163	0	19-145	S	%REC	1	5/23/2014 2:45:00 PM
Surr: DCB	169	0	16-148	S	%REC	1	5/23/2014 2:45:00 PM
PERCENT MOISTURE			**D2216**				Analyst: **CF**
Percent Moisture	6.6	1	1.0		wt%	1	5/23/2014
TOTAL METALS			**SW6010C**		**SW3050B**		Analyst: **JP**
Aluminum	6560	1.04	4.15	D	mg/Kg-dry	10	5/23/2014 2:30:49 PM
Antimony	ND	0.21	0.519	U	mg/Kg-dry	1	5/23/2014 2:26:46 PM
Arsenic	2.70	0.21	0.519		mg/Kg-dry	1	5/23/2014 2:26:46 PM
Barium	4.34	0.21	0.415		mg/Kg-dry	1	5/23/2014 2:26:46 PM
Beryllium	0.911	0.10	0.415		mg/Kg-dry	1	5/23/2014 2:26:46 PM
Cadmium	ND	0.10	0.415	U	mg/Kg-dry	1	5/23/2014 2:26:46 PM
Calcium	5100	0.21	0.519		mg/Kg-dry	1	5/23/2014 2:26:46 PM
Chromium	5.83	0.10	0.415		mg/Kg-dry	1	5/23/2014 2:26:46 PM
Cobalt	ND	0.10	0.415	U	mg/Kg-dry	1	5/23/2014 2:26:46 PM
Copper	3.97	0.10	0.415		mg/Kg-dry	1	5/23/2014 2:26:46 PM
Iron	17000	2.08	4.15	D	mg/Kg-dry	10	5/23/2014 2:30:49 PM
Lead	3.19	0.21	0.415		mg/Kg-dry	1	5/23/2014 2:26:46 PM
Magnesium	3310	0.10	0.415		mg/Kg-dry	1	5/23/2014 2:26:46 PM

American Analytical Laboratories, LLC.

Date: *27-May-14*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Screening Stockpile Comp.
Lab Order:	1405131	**Collection Date:**	5/22/2014 9:05:00 AM
Project:	Hastings on Hudson, 75-25th St., Brooklyn	**Matrix:**	SOIL
Lab ID:	1405131-002A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
TOTAL METALS			**SW6010C**		**SW3050B**		Analyst: **JP**
Manganese	403	0.10	0.415		mg/Kg-dry	1	5/23/2014 2:26:46 PM
Nickel	7.28	0.10	0.415		mg/Kg-dry	1	5/23/2014 2:26:46 PM
Potassium	357	0.21	0.519		mg/Kg-dry	1	5/23/2014 2:26:46 PM
Selenium	ND	0.21	0.519	U	mg/Kg-dry	1	5/23/2014 2:26:46 PM
Silver	ND	0.10	0.415	U	mg/Kg-dry	1	5/23/2014 2:26:46 PM
Sodium	71.6	0.21	0.519		mg/Kg-dry	1	5/23/2014 2:26:46 PM
Thallium	3.39	0.31	0.519		mg/Kg-dry	1	5/23/2014 2:26:46 PM
Vanadium	16.1	0.10	0.415		mg/Kg-dry	1	5/23/2014 2:26:46 PM
Zinc	38.3	0.10	0.415		mg/Kg-dry	1	5/23/2014 2:26:46 PM
SEMIVOLATILE SW-846 METHOD 8270			**SW8270D**		**SW3546**		Analyst: **MH**
Biphenyl	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
1,2,4-Trichlorobenzene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
1,2-Dichlorobenzene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
1,3-Dichlorobenzene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
1,4-Dichlorobenzene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
2,4,5-Trichlorophenol	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
2,4,6-Trichlorophenol	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
2,4-Dichlorophenol	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
2,4-Dimethylphenol	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
2,4-Dinitrophenol	ND	51.5	510	U*	µg/Kg-dry	1	5/23/2014 11:05:00 AM
2,4-Dinitrotoluene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
2,6-Dinitrotoluene	ND	51.5	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
2-Chloronaphthalene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
2-Chlorophenol	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
2-Methylnaphthalene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
2-Methylphenol	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
2-Nitroaniline	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
2-Nitrophenol	ND	51.5	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
3+4-Methylphenol	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
3,3´-Dichlorobenzidine	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
3-Nitroaniline	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
4,6-Dinitro-2-methylphenol	ND	51.5	510	U*	µg/Kg-dry	1	5/23/2014 11:05:00 AM

American Analytical Laboratories, LLC.

Date: *27-May-14*

ELAP ID : 11418

CLIENT: American Environmental Assessment Corp.
Client Sample ID: Screening Stockpile Comp.
Lab Order: 1405131
Collection Date: 5/22/2014 9:05:00 AM
Project: Hastings on Hudson, 75-25th St., Brooklyn
Matrix: SOIL
Lab ID: 1405131-002A

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
SEMIVOLATILE SW-846 METHOD 8270			**SW8270D**		**SW3546**		Analyst: **MH**
4-Bromophenyl phenyl ether	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
4-Chloro-3-methylphenol	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
4-Chloroaniline	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
4-Chlorophenyl phenyl ether	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
4-Nitroaniline	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
4-Nitrophenol	ND	51.5	510	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Acenaphthene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Acenaphthylene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Acetophenone	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Aniline	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Anthracene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Atrazine	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Azobenzene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Benzaldehyde	ND	51.5	510	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Benzidine	ND	51.5	510	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Benzo(a)anthracene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Benzo(a)pyrene	ND	25.7	150	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Benzo(b)fluoranthene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Benzo(g,h,i)perylene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Benzo(k)fluoranthene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Benzoic acid	ND	51.5	510	U*	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Benzyl alcohol	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Bis(2-chloroethoxy)methane	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Bis(2-chloroethyl)ether	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Bis(2-chloroisopropyl)ether	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Bis(2-ethylhexyl)phthalate	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Butyl benzyl phthalate	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Caprolactam	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Carbazole	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Chrysene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Di-n-butyl phthalate	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Di-n-octyl phthalate	ND	51.5	510	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Dibenzo(a,h)anthracene	ND	25.7	150	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM

American Analytical Laboratories, LLC.

Date: *27-May-14*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Screening Stockpile Comp.
Lab Order:	1405131	**Collection Date:**	5/22/2014 9:05:00 AM
Project:	Hastings on Hudson, 75-25th St., Brooklyn	**Matrix:**	SOIL
Lab ID:	1405131-002A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
SEMIVOLATILE SW-846 METHOD 8270			**SW8270D**		**SW3546**		Analyst: **MH**
Dibenzofuran	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Diethyl phthalate	2000	25.7	260	B	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Dimethyl phthalate	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Fluoranthene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Fluorene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Hexachlorobenzene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Hexachlorobutadiene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Hexachlorocyclopentadiene	ND	51.5	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Hexachloroethane	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Indeno(1,2,3-c,d)pyrene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Isophorone	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
N-Nitrosodi-n-propylamine	ND	25.7	150	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
N-Nitrosodimethylamine	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
N-Nitrosodiphenylamine	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Naphthalene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Nitrobenzene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Parathion	ND	51.5	510	U*	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Pentachlorophenol	ND	51.5	510	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Phenanthrene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Phenol	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Pyrene	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Pyridine	ND	25.7	260	U	µg/Kg-dry	1	5/23/2014 11:05:00 AM
Surr: 2,4,6-Tribromophenol	40.3	0	11-135		%REC	1	5/23/2014 11:05:00 AM
Surr: 2-Fluorobiphenyl	72.5	0	21-143		%REC	1	5/23/2014 11:05:00 AM
Surr: 2-Fluorophenol	73.1	0	14-122		%REC	1	5/23/2014 11:05:00 AM
Surr: 4-Terphenyl-d14	88.0	0	15-137		%REC	1	5/23/2014 11:05:00 AM
Surr: Nitrobenzene-d5	70.4	0	17-136		%REC	1	5/23/2014 11:05:00 AM
Surr: Phenol-d6	80.6	0	10-116		%REC	1	5/23/2014 11:05:00 AM
CYANIDE, TOTAL			**SW9012B**		**SW9012B**		Analyst: **STP**
Cyanide, Total & Amenable: Auto Colorimetric	0.0878	0.05	0.107	J	mg/Kg-dry	1	5/22/2014 2:40:54 PM
TRIVALENT CHROMIUM			**SW6010C**				Analyst: **PAV**

American Analytical Laboratories, LLC.

Date: *27-May-14*

ELAP ID : 11418

CLIENT:	American Environmental Assessment Corp.	**Client Sample ID:**	Screening Stockpile Comp.
Lab Order:	1405131	**Collection Date:**	5/22/2014 9:05:00 AM
Project:	Hastings on Hudson, 75-25th St., Brooklyn	**Matrix:**	SOIL
Lab ID:	1405131-002A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
TRIVALENT CHROMIUM			**SW6010C**				Analyst: **PAV**
Chromium, Trivalent	5.83	0.1	0.400		mg/Kg-dry	1	5/27/2014 8:44:54 AM
HEXAVALENT CHROMIUM			**SW7196A**		**SW3060A**		Analyst: **PAV**
Chromium, Hexavalent	ND	0.21	0.535	U	mg/Kg-dry	1	5/23/2014 3:30:01 PM

American Analytical Laboratories, LLC.
56 Toledo Street
Farmingdale, New York 11735
TEL: (631) 454-6100 FAX: (631) 454-8027
Website: www.American-Analytical.com

QC SUMMARY REPORT

WO#: **1405131**

27-May-14

Client: American Environmental Assessment Corp.
Project: Hastings on Hudson, 75-25th St., Brooklyn **BatchID:** **1251**

Sample ID **MB-1251** SampType: **MBLK** TestCode: **8082_S** Units: **µg/Kg** Prep Date: **5/22/2014** RunNo: **2091**
Client ID: **PBS** Batch ID: **1251** TestNo: **SW8082A** **SW3546** Analysis Date: **5/23/2014** SeqNo: **37000**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	20									U
Aroclor 1221	ND	20									U
Aroclor 1232	ND	20									U
Aroclor 1242	ND	20									U
Aroclor 1248	ND	20									U
Aroclor 1254	ND	20									U
Aroclor 1260	ND	20									U
Aroclor 1262	ND	20									U
Aroclor 1268	ND	20									U
Surr: DCB	32		25.00		129	12	144				
Surr: TCX	28		25.00		113	13	145				

Sample ID **LCS-1251** SampType: **LCS** TestCode: **8082_S** Units: **µg/Kg** Prep Date: **5/22/2014** RunNo: **2091**
Client ID: **LCSS** Batch ID: **1251** TestNo: **SW8082A** **SW3546** Analysis Date: **5/23/2014** SeqNo: **37001**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1254	230	20	250.0	0	92.4	35	135				
Surr: DCB	23		25.00		93.7	12	144				
Surr: TCX	24		25.00		96.9	13	145				

Qualifiers: R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

American Analytical Laboratories, LLC.
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Website: www.American-Analytical.com

QC SUMMARY REPORT

WO#: **1405131**

27-May-14

Client: American Environmental Assessment Corp.

Project: Hastings on Hudson, 75-25th St., Brooklyn **BatchID:** **1252**

Sample ID **MB-1252**	SampType: **MBLK**	TestCode: **8081_S**	Units: **µg/Kg**	Prep Date: **5/22/2014**	RunNo: **2090**
Client ID: **PBS**	Batch ID: **1252**	TestNo: **SW8081B**	**SW3546**	Analysis Date: **5/23/2014**	SeqNo: **36994**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDD	ND	2.5									U
4,4´-DDE	ND	2.5									U
4,4´-DDT	ND	2.5									U
Aldrin	ND	2.5									U
alpha-BHC	ND	2.5									U
alpha-Chlordane	ND	10									U
beta-BHC	ND	2.5									U
Chlorobenzilate	ND	2.5									U
DBCP	ND	2.5									U
delta-BHC	ND	2.5									U
Dieldrin	ND	2.5									U
Endosulfan I	ND	2.5									U
Endosulfan II	ND	2.5									U
Endosulfan sulfate	ND	2.5									U
Endrin	ND	2.5									U
Endrin aldehyde	ND	2.5									U
Endrin ketone	ND	2.5									U
gamma-BHC	ND	2.5									U
gamma-Chlordane	ND	10									U
Heptachlor	ND	2.5									U
Heptachlor epoxide	ND	2.5									U
Hexachlorobenzene	ND	2.5									U
Hexachlorocyclopentadiene	ND	2.5									U
Methoxychlor	ND	2.5									U
Toxaphene	ND	25									U
Surr: TCX	32		25.00		129	19	145				

Qualifiers: R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

Original

American Analytical Laboratories, LLC.
56 Toledo Street
Farmingdale, New York 11735
TEL: (631) 454-6100 FAX: (631) 454-8027
Website: www.American-Analytical.com

QC SUMMARY REPORT

WO#: **1405131**

27-May-14

Client: American Environmental Assessment Corp.

Project: Hastings on Hudson, 75-25th St., Brooklyn **BatchID:** **1252**

Sample ID **MB-1252**	SampType: **MBLK**	TestCode: **8081_S**	Units: **µg/Kg**	Prep Date: **5/22/2014**	RunNo: **2090**
Client ID: **PBS**	Batch ID: **1252**	TestNo: **SW8081B**	**SW3546**	Analysis Date: **5/23/2014**	SeqNo: **36994**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: DCB	36		25.00		144	16	148				

Qualifiers: R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

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Website: www.American-Analytical.com

QC SUMMARY REPORT

WO#: **1405131**

27-May-14

Client: American Environmental Assessment Corp.

Project: Hastings on Hudson, 75-25th St., Brooklyn **BatchID:** **1253**

Sample ID **MB-1253**	SampType: **MBLK**	TestCode: **8270_S**	Units: **µg/Kg**	Prep Date: **5/22/2014**	RunNo: **2097**
Client ID: **PBS**	Batch ID: **1253**	TestNo: **SW8270D**	**SW3546**	Analysis Date: **5/23/2014**	SeqNo: **37101**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
3,3´-Dichlorobenzidine	ND	250									U
Atrazine	ND	250									U
Benzaldehyde	ND	500									U
Benzidine	ND	500									U
Caprolactam	ND	250									U

Qualifiers: R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **1405131**

27-May-14

Client: American Environmental Assessment Corp.

Project: Hastings on Hudson, 75-25th St., Brooklyn **BatchID:** **1253**

Sample ID **MB-1253**	SampType: **MBLK**	TestCode: **8270_S**	Units: **µg/Kg**	Prep Date: **5/22/2014**	RunNo: **2096**
Client ID: **PBS**	Batch ID: **1253**	TestNo: **SW8270D**	**SW3546**	Analysis Date: **5/23/2014**	SeqNo: **37094**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Biphenyl	ND	250									U
1,2,4-Trichlorobenzene	ND	250									U
1,2-Dichlorobenzene	ND	250									U
1,3-Dichlorobenzene	ND	250									U
1,4-Dichlorobenzene	ND	250									U
2,4,5-Trichlorophenol	ND	250									U
2,4,6-Trichlorophenol	ND	250									U
2,4-Dichlorophenol	ND	250									U
2,4-Dimethylphenol	ND	250									U
2,4-Dinitrophenol	ND	500									U*
2,4-Dinitrotoluene	ND	250									U
2,6-Dinitrotoluene	ND	250									U
2-Chloronaphthalene	ND	250									U
2-Chlorophenol	ND	250									U
2-Methylnaphthalene	ND	250									U
2-Methylphenol	ND	250									U
2-Nitroaniline	ND	250									U
2-Nitrophenol	ND	250									U
3+4-Methylphenol	ND	250									U
3-Nitroaniline	ND	250									U
4,6-Dinitro-2-methylphenol	ND	500									U*
4-Bromophenyl phenyl ether	ND	250									U
4-Chloro-3-methylphenol	ND	250									U
4-Chloroaniline	ND	250									U
4-Chlorophenyl phenyl ether	ND	250									U
4-Nitroaniline	ND	250									U

Qualifiers: R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **1405131**

27-May-14

Client: American Environmental Assessment Corp.

Project: Hastings on Hudson, 75-25th St., Brooklyn **BatchID:** **1253**

Sample ID **MB-1253**	SampType: **MBLK**	TestCode: **8270_S**	Units: **µg/Kg**	Prep Date: **5/22/2014**	RunNo: **2096**
Client ID: **PBS**	Batch ID: **1253**	TestNo: **SW8270D**	**SW3546**	Analysis Date: **5/23/2014**	SeqNo: **37094**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Nitrophenol	ND	500									U
Acenaphthene	ND	250									U
Acenaphthylene	ND	250									U
Acetophenone	ND	250									U
Aniline	ND	250									U
Anthracene	ND	250									U
Azobenzene	ND	250									U
Benzo(a)anthracene	ND	250									U
Benzo(a)pyrene	ND	150									U
Benzo(b)fluoranthene	ND	250									U
Benzo(g,h,i)perylene	ND	250									U
Benzo(k)fluoranthene	ND	250									U
Benzoic acid	ND	500									U*
Benzyl alcohol	ND	250									U
Bis(2-chloroethoxy)methane	ND	250									U
Bis(2-chloroethyl)ether	ND	250									U
Bis(2-chloroisopropyl)ether	ND	250									U
Bis(2-ethylhexyl)phthalate	ND	250									U
Butyl benzyl phthalate	ND	250									U
Carbazole	ND	250									U
Chrysene	ND	250									U
Di-n-butyl phthalate	ND	250									U
Di-n-octyl phthalate	ND	500									U
Dibenzo(a,h)anthracene	ND	150									U
Dibenzofuran	ND	250									U
Diethyl phthalate	1900	250									

Qualifiers: R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **1405131**

27-May-14

Client: American Environmental Assessment Corp.

Project: Hastings on Hudson, 75-25th St., Brooklyn **BatchID:** **1253**

Sample ID **MB-1253**	SampType: **MBLK**	TestCode: **8270_S**	Units: **µg/Kg**	Prep Date: **5/22/2014**	RunNo: **2096**
Client ID: **PBS**	Batch ID: **1253**	TestNo: **SW8270D**	**SW3546**	Analysis Date: **5/23/2014**	SeqNo: **37094**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dimethyl phthalate	ND	250									U
Fluoranthene	ND	250									U
Fluorene	ND	250									U
Hexachlorobenzene	ND	250									U
Hexachlorobutadiene	ND	250									U
Hexachlorocyclopentadiene	ND	250									U
Hexachloroethane	ND	250									U
Indeno(1,2,3-c,d)pyrene	ND	250									U
Isophorone	ND	250									U
N-Nitrosodi-n-propylamine	ND	150									U
N-Nitrosodimethylamine	ND	250									U
N-Nitrosodiphenylamine	ND	250									U
Naphthalene	ND	250									U
Nitrobenzene	ND	250									U
Parathion	ND	500									U*
Pentachlorophenol	ND	500									U
Phenanthrene	ND	250									U
Phenol	ND	250									U
Pyrene	ND	250									U
Pyridine	ND	250									U
Surr: 2,4,6-Tribromophenol	1200		2000		59.2	11	135				
Surr: 2-Fluorobiphenyl	870		1000		86.7	21	143				
Surr: 2-Fluorophenol	2100		2000		106	14	122				
Surr: 4-Terphenyl-d14	960		1000		96.3	15	137				
Surr: Nitrobenzene-d5	840		1000		84.4	17	136				
Surr: Phenol-d6	2100		2000		105	10	116				

Qualifiers: R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **1405131**

27-May-14

Client: American Environmental Assessment Corp.

Project: Hastings on Hudson, 75-25th St., Brooklyn **BatchID:** **1253**

Sample ID **MB-1253** SampType: **MBLK** TestCode: **8270_S** Units: **µg/Kg** Prep Date: **5/22/2014** RunNo: **2096**

Client ID: **PBS** Batch ID: **1253** TestNo: **SW8270D** **SW3546** Analysis Date: **5/23/2014** SeqNo: **37094**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID **LCS-1253** SampType: **LCS** TestCode: **8270_S** Units: **µg/Kg** Prep Date: **5/22/2014** RunNo: **2096**

Client ID: **LCSS** Batch ID: **1253** TestNo: **SW8270D** **SW3546** Analysis Date: **5/23/2014** SeqNo: **37095**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Biphenyl	930	250	2000	0	46.4	30	130				
1,2,4-Trichlorobenzene	890	250	2000	0	44.5	30	125				
1,2-Dichlorobenzene	970	250	2000	0	48.3	24	122				
1,3-Dichlorobenzene	930	250	2000	0	46.4	25	125				
1,4-Dichlorobenzene	930	250	2000	0	46.5	23	121				
2,4,5-Trichlorophenol	ND	250		0	0	21	131				U
2,4,6-Trichlorophenol	800	250	2000	0	39.8	25	130				
2,4-Dichlorophenol	830	250	2000	0	41.6	31	125				
2,4-Dimethylphenol	540	250	2000	0	26.8	17	132				
2,4-Dinitrophenol	770	500	2000	0	38.4	1	115				*
2,4-Dinitrotoluene	730	250	2000	0	36.3	30	134				
2,6-Dinitrotoluene	640	250	2000	0	32.0	24	130				
2-Chloronaphthalene	920	250	2000	0	46.1	30	130				
2-Chlorophenol	950	250	2000	0	47.4	32	134				
2-Methylnaphthalene	ND	250		0	0	22	128				U
2-Methylphenol	ND	250		0	0	21	127				U
2-Nitroaniline	ND	250		0	0	25	125				U
2-Nitrophenol	720	250	2000	0	35.9	16	146				
3+4-Methylphenol	ND	250		0	0	22	134				U
3-Nitroaniline	ND	250		0	0	20	120				U

Qualifiers: R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

Original

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QC SUMMARY REPORT

WO#: **1405131**

27-May-14

Client: American Environmental Assessment Corp.

Project: Hastings on Hudson, 75-25th St., Brooklyn **BatchID:** **1253**

Sample ID **LCS-1253** SampType: **LCS** TestCode: **8270_S** Units: **µg/Kg** Prep Date: **5/22/2014** RunNo: **2096**

Client ID: **LCSS** Batch ID: **1253** TestNo: **SW8270D** **SW3546** Analysis Date: **5/23/2014** SeqNo: **37095**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,6-Dinitro-2-methylphenol	860	500	2000	0	42.8	11	141				*
4-Bromophenyl phenyl ether	910	250	2000	0	45.6	35	135				
4-Chloro-3-methylphenol	810	250	2000	0	40.7	19	139				
4-Chloroaniline	ND	250		0	0	11	121				U
4-Chlorophenyl phenyl ether	930	250	2000	0	46.4	30	128				
4-Nitroaniline	ND	250		0	0	20	120				U
4-Nitrophenol	830	500	2000	0	41.5	17	140				
Acenaphthene	910	250	2000	0	45.7	25	137				
Acenaphthylene	870	250	2000	0	43.5	23	136				
Acetophenone	790	250	2000	0	39.4	30	125				
Aniline	ND	250		0	0	1	105				U
Anthracene	900	250	2000	0	45.1	23	150				
Azobenzene	ND	250		0	0	20	130				U
Benzo(a)anthracene	870	250	2000	0	43.5	31	140				
Benzo(a)pyrene	860	150	2000	0	42.9	36	136				
Benzo(b)fluoranthene	840	250	2000	0	42.2	30	140				
Benzo(g,h,i)perylene	900	250	2000	0	44.8	21	143				
Benzo(k)fluoranthene	990	250	2000	0	49.6	30	140				
Benzoic acid	ND	500		0	0	5	105				U*
Benzyl alcohol	ND	250		0	0	20	125				U
Bis(2-chloroethoxy)methane	910	250	2000	0	45.7	18	110				
Bis(2-chloroethyl)ether	1000	250	2000	0	50.3	30	131				
Bis(2-chloroisopropyl)ether	980	250	2000	0	49.1	34	124				
Bis(2-ethylhexyl)phthalate	780	250	2000	0	39.1	35	137				
Butyl benzyl phthalate	840	250	2000	0	42.2	34	140				
Carbazole	ND	250		0	0	20	130				U

Qualifiers: R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **1405131**

27-May-14

Client: American Environmental Assessment Corp.

Project: Hastings on Hudson, 75-25th St., Brooklyn **BatchID:** **1253**

Sample ID **LCS-1253** SampType: **LCS** TestCode: **8270_S** Units: **µg/Kg** Prep Date: **5/22/2014** RunNo: **2096**

Client ID: **LCSS** Batch ID: **1253** TestNo: **SW8270D** **SW3546** Analysis Date: **5/23/2014** SeqNo: **37095**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chrysene	930	250	2000	0	46.5	31	133				
Di-n-butyl phthalate	860	250	2000	0	42.9	35	131				
Di-n-octyl phthalate	760	500	2000	0	37.8	37	143				
Dibenzo(a,h)anthracene	860	150	2000	0	43.1	24	145				
Dibenzofuran	ND	250		0	0	23	130				U
Diethyl phthalate	3000	250	2000	0	151	35	130				BS
Dimethyl phthalate	870	250	2000	0	43.7	32	130				
Fluoranthene	920	250	2000	0	45.9	21	139				
Fluorene	940	250	2000	0	47.0	30	130				
Hexachlorobenzene	930	250	2000	0	46.5	30	130				
Hexachlorobutadiene	880	250	2000	0	43.8	30	125				
Hexachlorocyclopentadiene	700	250	2000	0	34.8	12	126				
Hexachloroethane	940	250	2000	0	46.8	30	125				
Indeno(1,2,3-c,d)pyrene	780	250	2000	0	39.1	28	141				
Isophorone	870	250	2000	0	43.3	30	125				
N-Nitrosodi-n-propylamine	990	150	2000	0	49.6	39	125				
N-Nitrosodimethylamine	860	250	2000	0	43.1	10	123				
N-Nitrosodiphenylamine	970	250	2000	0	48.6	15	110				
Naphthalene	900	250	2000	0	45.1	27	131				
Nitrobenzene	890	250	2000	0	44.3	35	125				
Parathion	940	500	2000	0	47.1	30	140				*
Pentachlorophenol	950	500	2000	0	47.7	10	132				
Phenanthrene	940	250	2000	0	46.8	35	130				
Phenol	990	250	2000	0	49.5	20	135				
Pyrene	910	250	2000	0	45.5	30	152				
Pyridine	ND	250		0	0	1	101				U

Qualifiers: R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

Original

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QC SUMMARY REPORT

WO#: **1405131**

27-May-14

Client: American Environmental Assessment Corp.

Project: Hastings on Hudson, 75-25th St., Brooklyn **BatchID:** **1253**

Sample ID	**LCS-1253**	SampType:	**LCS**	TestCode:	**8270_S**	Units:	**µg/Kg**	Prep Date:	**5/22/2014**	RunNo:	**2096**
Client ID:	**LCSS**	Batch ID:	**1253**	TestNo:	**SW8270D**	**SW3546**		Analysis Date:	**5/23/2014**	SeqNo:	**37095**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	1400		2000		70.0	11	135				
Surr: 2-Fluorobiphenyl	790		1000		79.4	21	143				
Surr: 2-Fluorophenol	1600		2000		81.6	14	122				
Surr: 4-Terphenyl-d14	810		1000		81.4	15	137				
Surr: Nitrobenzene-d5	770		1000		77.2	17	136				
Surr: Phenol-d6	1700		2000		85.6	10	116				

Qualifiers: R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **1405131**

27-May-14

Client: American Environmental Assessment Corp.

Project: Hastings on Hudson, 75-25th St., Brooklyn **BatchID:** **1255**

Sample ID **LCS-1255**	SampType: **LCS**	TestCode: **8260_S**	Units: **µg/Kg**	Prep Date: **5/22/2014**	RunNo: **2070**
Client ID: **LCSS**	Batch ID: **1255**	TestNo: **SW8260C**	**SW5035A**	Analysis Date: **5/22/2014**	SeqNo: **36471**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	50	5.0	50.00	0	100	40	125				
1,1,2,2-Tetrachloroethane	56	5.0	50.00	0	111	35	139				
1,1,2-Trichloroethane	53	5.0	50.00	0	106	40	124				
1,1-Dichloroethane	49	5.0	50.00	0	98.2	33	134				
1,1-Dichloroethene	52	5.0	50.00	0	103	30	141				
1,2-Dichlorobenzene	45	5.0	50.00	0	90.1	33	126				
1,2-Dichloroethane	53	5.0	50.00	0	106	36	131				
1,2-Dichloropropane	49	5.0	50.00	0	97.9	38	131				
1,3-Dichlorobenzene	44	5.0	50.00	0	87.6	31	130				
1,4-Dichlorobenzene	43	5.0	50.00	0	85.5	33	121				
2-Chloroethyl vinyl ether	ND	5.0	50.00	0	0	36	138				SU
Benzene	49	5.0	50.00	0	98.9	36	126				
Bromodichloromethane	50	5.0	50.00	0	99.6	38	125				
Bromoform	56	5.0	50.00	0	112	36	131				
Bromomethane	39	5.0	50.00	0	77.3	23	135				
Carbon tetrachloride	51	5.0	50.00	0	103	37	130				
Chlorobenzene	46	5.0	50.00	0	92.7	41	123				
Chloroethane	48	5.0	50.00	0	96.3	20	128				
Chloroform	50	5.0	50.00	0	100	39	125				
Chloromethane	53	5.0	50.00	0	106	33	143				
cis-1,3-Dichloropropene	51	5.0	50.00	0	101	34	125				
Dibromochloromethane	54	5.0	50.00	0	107	36	125				
Ethylbenzene	48	5.0	50.00	0	96.5	42	124				
Methylene chloride	17	5.0	50.00	0	34.2	33	135				B*
Tetrachloroethene	40	5.0	50.00	0	80.8	30	121				
Toluene	49	5.0	50.00	0	98.7	43	121				

Qualifiers: R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

Original

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QC SUMMARY REPORT

WO#: **1405131**

27-May-14

Client: American Environmental Assessment Corp.

Project: Hastings on Hudson, 75-25th St., Brooklyn **BatchID:** **1255**

Sample ID **LCS-1255** SampType: **LCS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: **5/22/2014** RunNo: **2070**

Client ID: **LCSS** Batch ID: **1255** TestNo: **SW8260C** **SW5035A** Analysis Date: **5/22/2014** SeqNo: **36471**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	49	5.0	50.00	0	97.5	32	124				
trans-1,3-Dichloropropene	51	5.0	50.00	0	101	33	120				
Trichloroethene	47	5.0	50.00	0	93.2	40	124				
Trichlorofluoromethane	50	5.0	50.00	0	101	35	140				
Vinyl chloride	56	5.0	50.00	0	112	40	146				
Surr: 4-Bromofluorobenzene	51		50.00		101	56	133				
Surr: Dibromofluoromethane	53		50.00		106	60	132				
Surr: Toluene-d8	50		50.00		100	69	125				

Sample ID **MB-1255** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: **5/22/2014** RunNo: **2070**

Client ID: **PBS** Batch ID: **1255** TestNo: **SW8260C** **SW5035A** Analysis Date: **5/22/2014** SeqNo: **36472**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	5.0									U
1,1,1-Trichloroethane	ND	5.0									U
1,1,2,2-Tetrachloroethane	ND	5.0									U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0									U
1,1,2-Trichloroethane	ND	5.0									U
1,1-Dichloroethane	ND	5.0									U
1,1-Dichloroethene	ND	5.0									U
1,1-Dichloropropene	ND	5.0									U
1,2,3-Trichlorobenzene	ND	5.0									U
1,2,3-Trichloropropane	ND	5.0									U
1,2,4,5-Tetramethylbenzene	ND	5.0									U
1,2,4-Trichlorobenzene	ND	5.0									U

Qualifiers: R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

Original

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QC SUMMARY REPORT

WO#: **1405131**

27-May-14

Client: American Environmental Assessment Corp.

Project: Hastings on Hudson, 75-25th St., Brooklyn **BatchID:** **1255**

Sample ID **MB-1255**	SampType: **MBLK**	TestCode: **8260_S**	Units: **µg/Kg**	Prep Date: **5/22/2014**	RunNo: **2070**
Client ID: **PBS**	Batch ID: **1255**	TestNo: **SW8260C**	**SW5035A**	Analysis Date: **5/22/2014**	SeqNo: **36472**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	5.0									U
1,2-Dibromo-3-chloropropane	ND	5.0									U
1,2-Dibromoethane	ND	5.0									U
1,2-Dichlorobenzene	ND	5.0									U
1,2-Dichloroethane	ND	5.0									U
1,2-Dichloropropane	ND	5.0									U
1,3,5-Trimethylbenzene	ND	5.0									U
1,3-Dichlorobenzene	ND	5.0									U
1,3-dichloropropane	ND	5.0									U
1,4-Dichlorobenzene	ND	5.0									U
1,4-Dioxane	ND	5.0									U
2,2-Dichloropropane	ND	5.0									U
2-Butanone	ND	10									U*
2-Chloroethyl vinyl ether	ND	5.0									U
2-Chlorotoluene	ND	5.0									U
2-Hexanone	ND	10									U
2-Propanol	ND	5.0									U
4-Chlorotoluene	ND	5.0									U
4-Isopropyltoluene	ND	5.0									U
4-Methyl-2-pentanone	ND	10									U
Acetone	2.0	10									J*
Benzene	ND	5.0									U
Bromobenzene	ND	5.0									U
Bromochloromethane	ND	5.0									U
Bromodichloromethane	ND	5.0									U
Bromoform	ND	5.0									U

Qualifiers: R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **1405131**

27-May-14

Client: American Environmental Assessment Corp.

Project: Hastings on Hudson, 75-25th St., Brooklyn **BatchID:** **1255**

Sample ID **MB-1255**	SampType: **MBLK**	TestCode: **8260_S**	Units: **µg/Kg**	Prep Date: **5/22/2014**	RunNo: **2070**
Client ID: **PBS**	Batch ID: **1255**	TestNo: **SW8260C**	**SW5035A**	Analysis Date: **5/22/2014**	SeqNo: **36472**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromomethane	ND	5.0									U
Carbon disulfide	ND	5.0									U
Carbon tetrachloride	ND	5.0									U
Chlorobenzene	ND	5.0									U
Chlorodifluoromethane	ND	5.0									U
Chloroethane	ND	5.0									U
Chloroform	ND	5.0									U
Chloromethane	ND	5.0									U
cis-1,2-Dichloroethene	ND	5.0									U
cis-1,3-Dichloropropene	ND	5.0									U
Cyclohexane	ND	5.0									U
Dibromochloromethane	ND	5.0									U
Dibromomethane	ND	5.0									U
Dichlorodifluoromethane	ND	5.0									U
Diisopropyl ether	ND	5.0									U
Ethanol	ND	20									U
Ethylbenzene	ND	5.0									U
Freon-114	ND	5.0									U
Hexachlorobutadiene	ND	5.0									U
Isopropylbenzene	ND	5.0									U
m,p-Xylene	ND	10									U
Methyl Acetate	ND	5.0									U
Methyl tert-butyl ether	ND	5.0									U
Methylene chloride	6.0	5.0									*
n-Butylbenzene	ND	5.0									U
n-Propylbenzene	ND	5.0									U

Qualifiers: R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **1405131**

27-May-14

Client: American Environmental Assessment Corp.

Project: Hastings on Hudson, 75-25th St., Brooklyn **BatchID:** **1255**

Sample ID **MB-1255**	SampType: **MBLK**	TestCode: **8260_S**	Units: **µg/Kg**	Prep Date: **5/22/2014**	RunNo: **2070**
Client ID: **PBS**	Batch ID: **1255**	TestNo: **SW8260C**	**SW5035A**	Analysis Date: **5/22/2014**	SeqNo: **36472**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	5.0									U
o-Xylene	ND	5.0									U
p-Diethylbenzene	ND	5.0									U
p-Ethyltoluene	ND	5.0									U
sec-Butylbenzene	ND	5.0									U
Styrene	ND	5.0									U
t-Butyl alcohol	ND	5.0									U*
tert-Butylbenzene	ND	5.0									U
Tetrachloroethene	ND	5.0									U
Toluene	ND	5.0									U
trans-1,2-Dichloroethene	ND	5.0									U
trans-1,3-Dichloropropene	ND	5.0									U
Trichloroethene	ND	5.0									U
Trichlorofluoromethane	ND	5.0									U
Vinyl acetate	ND	5.0									U
Vinyl chloride	ND	5.0									U
Surr: 4-Bromofluorobenzene	51		50.00		103	56	133				
Surr: Dibromofluoromethane	53		50.00		105	60	132				
Surr: Toluene-d8	50		50.00		100	69	125				

Qualifiers: R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **1405131**

27-May-14

Client: American Environmental Assessment Corp.

Project: Hastings on Hudson, 75-25th St., Brooklyn **BatchID:** **1258**

Sample ID **1405126-006BMS** SampType: **MS** TestCode: **ICPSCAN_S** Units: **mg/Kg** Prep Date: **5/22/2014** RunNo: **2093**

Client ID: **BatchQC** Batch ID: **1258** TestNo: **SW6010C** **SW3050B** Analysis Date: **5/23/2014** SeqNo: **37050**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	232	0.400	20.00	220.2	58.0	75	125				S
Antimony	20.1	0.500	20.00	0	101	75	125				
Arsenic	21.5	0.500	20.00	0.6696	104	75	125				
Barium	21.9	0.400	20.00	2.441	97.5	75	125				
Beryllium	19.3	0.400	20.00	0	96.5	75	125				
Cadmium	19.8	0.400	20.00	0	99.2	75	125				
Calcium	217	0.500	20.00	199.2	86.6	75	125				
Chromium	23.2	0.400	20.00	2.548	103	75	125				
Cobalt	17.8	0.400	20.00	0	89.1	75	125				
Copper	154	0.400	20.00	141.0	65.7	75	125				S
Iron	1540	0.400	20.00	1495	217	75	125				S
Lead	23.6	0.400	20.00	3.950	98.4	75	125				
Magnesium	65.1	0.400	20.00	49.15	79.6	75	125				
Manganese	28.1	0.400	20.00	8.724	96.8	75	125				
Nickel	21.4	0.400	20.00	1.162	101	75	125				
Potassium	220	0.500	200.0	33.39	93.4	75	125				
Selenium	22.0	0.500	20.00	0.4049	108	75	125				
Silver	22.7	0.400	20.00	3.508	96.1	75	125				
Sodium	37.1	0.500	20.00	15.37	109	75	125				
Thallium	19.1	0.500	20.00	0	95.3	75	125				
Vanadium	21.8	0.400	20.00	1.734	100	75	125				
Zinc	38.2	0.400	20.00	19.18	95.2	75	125				

Qualifiers: R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **1405131**

27-May-14

Client: American Environmental Assessment Corp.

Project: Hastings on Hudson, 75-25th St., Brooklyn **BatchID:** **1258**

Sample ID **1405126-006BMSD** SampType: **MSD** TestCode: **ICPSCAN_S** Units: **mg/Kg** Prep Date: **5/22/2014** RunNo: **2093**

Client ID: **BatchQC** Batch ID: **1258** TestNo: **SW6010C** **SW3050B** Analysis Date: **5/23/2014** SeqNo: **37051**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	233	0.400	20.00	220.2	63.7	75	125	231.8	0.496	20	S
Antimony	20.2	0.500	20.00	0	101	75	125	20.10	0.593	20	
Arsenic	21.6	0.500	20.00	0.6696	105	75	125	21.54	0.409	20	
Barium	22.0	0.400	20.00	2.441	97.8	75	125	21.94	0.243	20	
Beryllium	19.3	0.400	20.00	0	96.7	75	125	19.31	0.154	20	
Cadmium	19.9	0.400	20.00	0	99.5	75	125	19.84	0.261	20	
Calcium	215	0.500	20.00	199.2	81.1	75	125	216.5	0.506	20	
Chromium	23.3	0.400	20.00	2.548	104	75	125	23.20	0.202	20	
Cobalt	17.9	0.400	20.00	0	89.6	75	125	17.83	0.502	20	
Copper	155	0.400	20.00	141.0	70.8	75	125	154.1	0.657	20	S
Iron	1540	0.400	20.00	1495	208	75	125	1538	0.109	20	S
Lead	23.6	0.400	20.00	3.950	98.5	75	125	23.63	0.0685	20	
Magnesium	65.0	0.400	20.00	49.15	79.1	75	125	65.08	0.171	20	
Manganese	28.2	0.400	20.00	8.724	97.3	75	125	28.08	0.341	20	
Nickel	21.4	0.400	20.00	1.162	101	75	125	21.38	0.0654	20	
Potassium	220	0.500	200.0	33.39	93.2	75	125	220.3	0.183	20	
Selenium	22.2	0.500	20.00	0.4049	109	75	125	22.01	0.816	20	
Silver	22.8	0.400	20.00	3.508	96.6	75	125	22.73	0.456	20	
Sodium	37.3	0.500	20.00	15.37	110	75	125	37.12	0.523	20	
Thallium	19.1	0.500	20.00	0	95.6	75	125	19.06	0.325	20	
Vanadium	21.9	0.400	20.00	1.734	101	75	125	21.82	0.258	20	
Zinc	38.0	0.400	20.00	19.18	94.2	75	125	38.23	0.548	20	

Qualifiers: R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **1405131**

27-May-14

Client: American Environmental Assessment Corp.
Project: Hastings on Hudson, 75-25th St., Brooklyn **BatchID:** **1260**

Sample ID **BL** SampType: **MBLK** TestCode: **CN_S** Units: **mg/Kg** Prep Date: **5/22/2014** RunNo: **2069**
Client ID: **PBS** Batch ID: **1260** TestNo: **SW9012B** **SW9012B** Analysis Date: **5/22/2014** SeqNo: **36358**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, Total & Amenable: Auto Colorimetric	ND	0.100									U

Sample ID **LCS** SampType: **LCS** TestCode: **CN_S** Units: **mg/Kg** Prep Date: **5/22/2014** RunNo: **2069**
Client ID: **LCSS** Batch ID: **1260** TestNo: **SW9012B** **SW9012B** Analysis Date: **5/22/2014** SeqNo: **36359**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, Total & Amenable: Auto Colorimetric	2.22	0.100	2.000	0	111	80	120				

Sample ID **1405102-001BMS** SampType: **MS** TestCode: **CN_S** Units: **mg/Kg-dry** Prep Date: **5/22/2014** RunNo: **2069**
Client ID: **BatchQC** Batch ID: **1260** TestNo: **SW9012B** **SW9012B** Analysis Date: **5/22/2014** SeqNo: **36370**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, Total & Amenable: Auto Colorimetric	1.96	0.105	2.100	0.06331	90.5	63	123				

Sample ID **1405102-001BMSD** SampType: **MSD** TestCode: **CN_S** Units: **mg/Kg-dry** Prep Date: **5/22/2014** RunNo: **2069**
Client ID: **BatchQC** Batch ID: **1260** TestNo: **SW9012B** **SW9012B** Analysis Date: **5/22/2014** SeqNo: **36371**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, Total & Amenable: Auto Colorimetric	2.10	0.105	2.100	0.06331	97.0	63	123	1.963	6.72	20	

Qualifiers: R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **1405131**

27-May-14

Client: American Environmental Assessment Corp.

Project: Hastings on Hudson, 75-25th St., Brooklyn **BatchID:** **1260**

Sample ID **1405102-001BMSD**	SampType: **MSD**	TestCode: **CN_S**	Units: **mg/Kg-dry**	Prep Date: **5/22/2014**	RunNo: **2069**
Client ID: **BatchQC**	Batch ID: **1260**	TestNo: **SW9012B**	**SW9012B**	Analysis Date: **5/22/2014**	SeqNo: **36371**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID **1405132-001BMS**	SampType: **MS**	TestCode: **CN_S**	Units: **mg/Kg-dry**	Prep Date: **5/22/2014**	RunNo: **2069**
Client ID: **BatchQC**	Batch ID: **1260**	TestNo: **SW9012B**	**SW9012B**	Analysis Date: **5/22/2014**	SeqNo: **36382**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, Total & Amenable: Auto Colorimetric	1.82	0.100	2.000	0	91.0	63	123				

Sample ID **1405132-001BMSD**	SampType: **MSD**	TestCode: **CN_S**	Units: **mg/Kg-dry**	Prep Date: **5/22/2014**	RunNo: **2069**
Client ID: **BatchQC**	Batch ID: **1260**	TestNo: **SW9012B**	**SW9012B**	Analysis Date: **5/22/2014**	SeqNo: **36383**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, Total & Amenable: Auto Colorimetric	1.84	0.100	2.000	0	92.0	63	123	1.820	1.09	20	

Qualifiers: R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **1405131**

27-May-14

Client: American Environmental Assessment Corp.
Project: Hastings on Hudson, 75-25th St., Brooklyn **BatchID:** **1262**

Sample ID	**MBS052214B**	SampType:	**MBLK**	TestCode:	**HG_S**	Units:	**mg/Kg**	Prep Date:	**5/22/2014**	RunNo:	**2079**
Client ID:	**PBS**	Batch ID:	**1262**	TestNo:	**SW7471B**	**SW7471B**		Analysis Date:	**5/23/2014**	SeqNo:	**36787**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.0120									U

Sample ID	**LCSS052214B**	SampType:	**LCS**	TestCode:	**HG_S**	Units:	**mg/Kg**	Prep Date:	**5/22/2014**	RunNo:	**2079**
Client ID:	**LCSS**	Batch ID:	**1262**	TestNo:	**SW7471B**	**SW7471B**		Analysis Date:	**5/23/2014**	SeqNo:	**36788**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.190	0.0120	0.2000	0	95.0	80	120				

Sample ID	**1405126-006BMS**	SampType:	**MS**	TestCode:	**HG_S**	Units:	**mg/Kg**	Prep Date:	**5/22/2014**	RunNo:	**2079**
Client ID:	**BatchQC**	Batch ID:	**1262**	TestNo:	**SW7471B**	**SW7471B**		Analysis Date:	**5/23/2014**	SeqNo:	**36809**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.413	0.0119	0.1980	0.3574	28.0	80	120				S

Sample ID	**1405126-006BMSD**	SampType:	**MSD**	TestCode:	**HG_S**	Units:	**mg/Kg**	Prep Date:	**5/22/2014**	RunNo:	**2079**
Client ID:	**BatchQC**	Batch ID:	**1262**	TestNo:	**SW7471B**	**SW7471B**		Analysis Date:	**5/23/2014**	SeqNo:	**36810**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.425	0.0120	0.2000	0.3574	33.6	80	120	0.4129	2.78	20	S

Qualifiers: R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **1405131**

27-May-14

Client: American Environmental Assessment Corp.
Project: Hastings on Hudson, 75-25th St., Brooklyn **BatchID:** **1273**

Sample ID **MBS052314A** SampType: **MBLK** TestCode: **Cr6_S** Units: **mg/Kg** Prep Date: **5/23/2014** RunNo: **2089**
Client ID: **PBS** Batch ID: **1273** TestNo: **SW7196A** **SW3060A** Analysis Date: **5/23/2014** SeqNo: **36976**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.500									U

Sample ID **LCSS052314A** SampType: **LCS** TestCode: **Cr6_S** Units: **mg/Kg** Prep Date: **5/23/2014** RunNo: **2089**
Client ID: **LCSS** Batch ID: **1273** TestNo: **SW7196A** **SW3060A** Analysis Date: **5/23/2014** SeqNo: **36977**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	9.72	0.500	10.00	0	97.2	80	120				

Sample ID **1405132-001BMS** SampType: **MS** TestCode: **Cr6_S** Units: **mg/Kg-dry** Prep Date: **5/23/2014** RunNo: **2089**
Client ID: **BatchQC** Batch ID: **1273** TestNo: **SW7196A** **SW3060A** Analysis Date: **5/23/2014** SeqNo: **36987**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	9.84	0.500	10.00	0	98.4	75	125				

Sample ID **1405132-001BMSD** SampType: **MSD** TestCode: **Cr6_S** Units: **mg/Kg-dry** Prep Date: **5/23/2014** RunNo: **2089**
Client ID: **BatchQC** Batch ID: **1273** TestNo: **SW7196A** **SW3060A** Analysis Date: **5/23/2014** SeqNo: **36988**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	9.56	0.500	10.00	0	95.6	75	125	9.840	2.89	0	

Qualifiers: R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **1405131**

27-May-14

Client: American Environmental Assessment Corp.

Project: Hastings on Hudson, 75-25th St., Brooklyn **BatchID:** **R2095**

Sample ID **MB-R2095**	SampType: **MBLK**	TestCode: **CR3_S**	Units: **mg/Kg**	Prep Date:				RunNo: **2095**			
Client ID: **PBS**	Batch ID: **R2095**	TestNo: **SW6010C**		Analysis Date: **5/27/2014**				SeqNo: **37091**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Trivalent	ND	0.400									U

Qualifiers: R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

APPENDIX J: ENVIRONMENTAL EASEMENT

The Office of the Westchester County Clerk: This page is part of the instrument; the County Clerk will rely on the information provided on this page for purposes of indexing this instrument. To the best of submitter's knowledge, the information contained on this Recording and Endorsement Cover Page is consistent with the information contained in the attached document.

560413480EAS002V

Westchester County Recording & Endorsement Page

Submitter Information

Name:	TRIBOROUGH LAND SERVICES	Phone:	631 385 8844
Address 1:	1121 OLD WALT WHITMAN ROAD SUITE 200	Fax:	631 3858298
Address 2:	*******PICK UP CY RECORDINGS****	Email:	STEPHANIE@TRIBOROUGHLS.COM
City/State/Zip:	MELVILLE NY 11747	Reference for Submitter:	CTSY-917139W

Document Details

Control Number: **560413480** Document Type: **Easement (EAS)**

Package ID: 2016021000244001001 Document Page Count: **9** Total Page Count: **10**

Parties

☐ Additional Parties on Continuation page

1st PARTY		2nd PARTY	
1: EXXONMOBIL OIL CORP	- Other	1: NEW YORK STATE OF	- Other
2:		2:	

Property

☐ Additional Properties on Continuation page

Street Address: 0 SOUTHSIDE AVE Tax Designation: 4.100-93-18

City/Town: GREENBURGH Village: HASTINGS-ON-HUDSON

Cross- References

☐ Additional Cross-Refs on Continuation page

1: 2: 3: 4:

Supporting Documents

1: TP-584

Recording Fees

Statutory Recording Fee:	$40.00
Page Fee:	$50.00
Cross-Reference Fee:	$0.00
Mortgage Affidavit Filing Fee:	$0.00
RP-5217 Filing Fee:	$0.00
TP-584 Filing Fee:	$5.00
Total Recording Fees Paid:	**$95.00**

Transfer Taxes

Consideration:	$0.00
Transfer Tax:	$0.00
Mansion Tax:	$0.00
Transfer Tax Number:	8975

Mortgage Taxes

Document Date:

Mortgage Amount:

Basic:	$0.00
Westchester:	$0.00
Additional:	$0.00
MTA:	$0.00
Special:	$0.00
Yonkers:	$0.00
Total Mortgage Tax:	**$0.00**

Dwelling Type: Exempt: ☐

Serial #:

RECORDED IN THE OFFICE OF THE WESTCHESTER COUNTY CLERK

Recorded: 02/12/2016 at 02:24 PM

Control Number: **560413480**

Witness my hand and official seal

Timothy C.Idoni
Westchester County Clerk

Record and Return To

☐ Pick-up at County Clerk's office

MCCUSTER ANSELMI ROSEN
210 PARK AVENUE SUITE 301

FLORHAM PARK , NJ 07932
Attn: TALI MOUSSERIE, ESQ

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this 3RD day of FEBRUARY, 2016, between Owner(s) ExxonMobil Oil Corporation, having an office at 3225 Gallows Road, Fairfax, Virginia 22037, County of Fairfax, State of Virginia (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor, is the owner of real property located at the address of #0 Southside Avenue in the Village of Hastings-on-Hudson, Town of Greenburgh, County of Westchester and State of New York, known and designated on the tax map of the County Clerk of Westchester as tax map parcel numbers: Section 4.100 Block 93 Lot 18, being the same as that property conveyed to Grantor by deed dated December 9, 1974 and recorded in the Westchester County Clerk's Office in Liber and Page 7238/623. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 8.088 +/- acres, and is hereinafter more fully described in the Land Title Survey dated October 7, 2015 and last revised December 16, 2015 prepared by James F. Cook, NYSPLS of C.T. Male Associates, which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation

established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Order on Consent Index Number: A3-0612-1208, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement").

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii), Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Westchester County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation

Law.

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and

(7) the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against

the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:

Site Number: 360015A
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of

this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

ExxonMobil Oil Corporation:

By: _____

Print Name: Robert A. Baker

Title: GCM Date: 11.13.15

Grantor's Acknowledgment

STATE OF ~~NEW YORK~~ Texas)
) ss:
COUNTY OF Harris)

On the 13 day of November, in the year 20 15, before me, the undersigned, personally appeared R.A. Parker Agent/Attorney in fact, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Donetta E Williams
Notary Public - State of ~~New York~~ Texas

DONETTA E. WILLIAMS
Notary Public, State of Texas
My Commission Expires
March 31, 2018

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By: _____

Robert W. Schick, Director
Division of Environmental Remediation

Grantee's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF ALBANY)

On the 3rd day of February, in the year 2016, before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2018

SCHEDULE "A" PROPERTY DESCRIPTION

ALL THAT CERTAIN LOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING IN THE VILLAGE OF HASTINGS-ON-HUDSON, TOWN OF GREENBURGH, COUNTY OF WESTCHESTER AND STATE OF NEW YORK, BEING BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE DIVISION LINE BETWEEN LAND NOW OR FORMERLY BELONGING TO ANACONDA WIRE AND CABLE CO., FORMERLY NATIONAL CONDUIT AND CABLE CO. AND CHAS. T. CROMWELL, ON THE NORTH AND TAPPAN TANKER TERMINAL INC., ON THE SOUTH WHICH SAID POINT IS DISTANT, AS MEASURED ALONG SAID DIVISION LINE, NORTH 87° 24' 00" WEST 126.00 FEET, FROM A POINT ON THE WESTERLY RIGHT OF WAY LINE OF THE PENN CENTRAL RAILROAD, FORMERLY NEW YORK CENTRAL RAILROAD, WHICH SAID LAST MENTIONED POINT IS DISTANT SOUTH 65° 05' 30" WEST 36.48 FEET FROM THE STONE MONUMENT MARKING THE POINT OF CURVE OF CURVE NO. 34 OF THE ORIGINAL CENTER LINE OF SAID RAILROAD;

RUNNING THENCE FROM SAID POINT OF BEGINNING THROUGH LANDS OF THE TAPPAN TANKER TERMINAL INC. THE FOLLOWING COURSES AND DISTANCES:

SOUTH 2° 15' 46" WEST 379.40 FEET,
NORTH 87° 44' 14" WEST 123.01 FEET AND
SOUTH 2° 57' 36" WEST 646.16 FEET TO THE NORTHERLY SIDE OF A TWO STORY BRICK AND FRAME BUILDING;

THENCE ALONG THE NORTHERLY, WESTERLY AND SOUTHERLY FACE OF SAID TWO STORY BRICK AND FRAME BUILDING:

NORTH 87° 31' 13" WEST 16.41 FEET,
SOUTH 2° 28' 47" WEST 121.70 FEET AND
SOUTH 87° 31' 13" EAST 15.39 FEET;

THENCE SOUTH 2° 57' 36" WEST 53.01 FEET TO A POINT OF CURVE;

THENCE ON A CURVE TO THE LEFT HAVING A RADIUS OF 82.97 FEET, A DISTANCE OF 116.71 FEET AND SOUTH 12° 31' 45" WEST 20.00 FEET TO A POINT IN THE SOUTHERLY BOUNDARY LINE OF LAND BELONGING TO TAPPAN TANKER TERMINAL INC., DISTANT AS MEASURED ALONG THE SAME NORTH 77° 28' 15" WEST 147.24 FEET FROM THE WESTERLY RIGHT OF WAY LINE OF SAID RAILROAD;

THENCE INTO THE WATERS OF THE HUDSON RIVER, NORTH 77° 28' 15" WEST 318.00 FEET AND NORTH 3° 24' 00" EAST 1248.43 FEET TO THE DIVISION LINE FIRST HEREINABOVE REFERRED TO;

THENCE ALONG THE SAID DIVISION LINE, SOUTH 87° 24' 00" EAST 356.33 FEET TO THE POINT AND PLACE OF BEGINNING.

SAID PROPERTY CONTAINING APPROXIMATELY 8.088 ACRES MORE OR LESS.