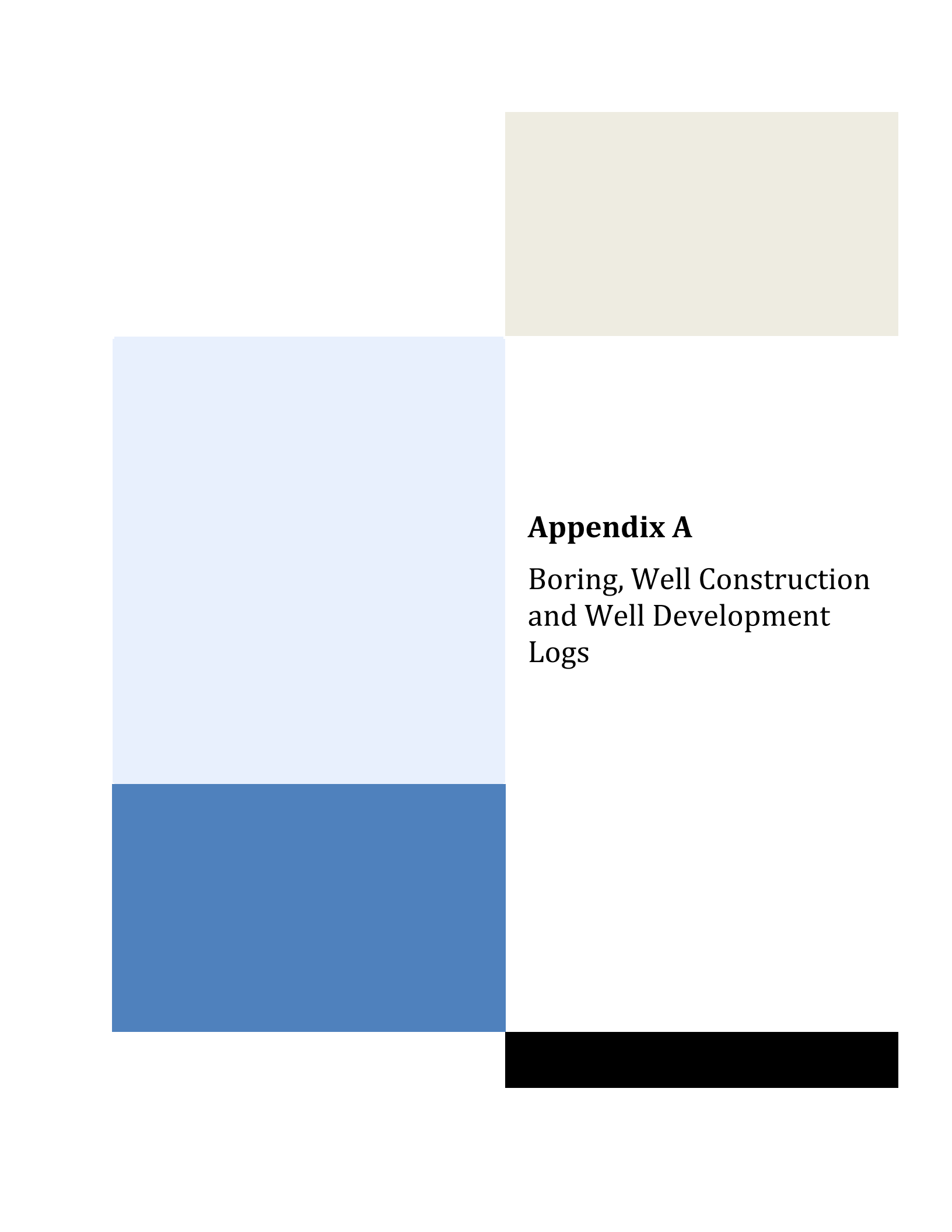




Appendix A

Boring, Well Construction
and Well Development
Logs



Bedrock Boring Log

Project Name: NYSDEC Apple Valley Shopping Plaza RD

Client: NYSDEC

Driller: AES

Drilling Method: Wire line - NX

Boring Location: LaGrange, NY

Coordinates:

Logged By: E. Brandt

Monitoring Instrument(s): Multi-RAT

Boring No.: MW-8

Sheet 1 of

Project No.:

Date: Start 18 DEC 2014

Finish

Total Depth:

Depth To Water:

Surf. Elevation:

Hole Diameter:

Depth (ft)	Run Length (ft)	Min./Ft.	Recovery (ft)	% Recovery	MCR	RQD%	Classification Of Material	Remarks
							f - fine m - medium c - coarse and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	
12.5								12.5-22.5 med grey slate Angled fractures Angular Boulders
13.5								
14.5		3:41						
15.5		3:23						
16.5		3:27						
17.5		3:13						
18.5		6:04						
19.5		8:40						
20.5								
21.5		35.0						
22.5	10.0	3:11	8.1	81%		56.2		END RUN #1
23.5		3:08						same as above
24.5		3:08						
25.5		3:45						
26.5		2:58						
27.5		3:28						
28.5		2:57						
29.5		5:56						
30.5		3:10						
31.5		3:15						
32.5		3:51						
33.5		4:40						END RUN #2
34.5								
35.0	12.5		11.0	88%		90%		
36								
37		3:50						
38		3:24						
39		3:59						
40	5	3:40	5	100%		100%		END RUN #3
41		4:03						Same as above Fracture zone ~6" at 47' ~~47'~~
42		2:58						
43		3:44						
44		3:51						
45		4:10						
46		3:57						
47		-						
48		4:07						
49		3:59						
50	10	3:44	9.4	94%		94%		END RUN #4

135



Bedrock Boring Log

Boring No.: MW-8

Sheet 2 of

Project Name: NYSDEC Apple Valley Shopping Plaza RD

Project No.:

Client: NYSDEC

Date: Start 18 Dec 2014

Driller: AES

Finish

Drilling Method: Wire Line NX

Total Depth:

Boring Location:

Depth To Water:

Coordinates:

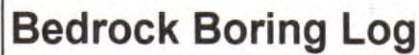
Surf. Elevation:

Logged By: E. Brandt

Hole Diameter:

Monitoring Instrument(s): mult. & AC

Depth (ft)	Run Length (ft)	Min/Ft	Recovery (ft)	% Recovery	MCR	RQD%	Classification Of Material	Remarks
							f - fine m - medium c - coarse and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	
50								
51		3.43						same Rock as above
52		3.55						Few fractures
53		4.05						bedding still on 45°
54		4.04						
55	5	4.40	5	100%		79%	END RUN #5	
56		3.24						same as above
57		4.05						Fractures at 460.5'
58		3.52						
59		4.04						
60		4.15						
61		4.44						
62	7	-	6	85%		82%	END RUN #6	
63		3.42						
64		4.21						
65	3	3.13	2.5	83%		90%	END RUN #7	
66		-						
67		-						
68	3	6.08	2.9	90%		94%	END RUN #8	
69		5.36						
70		5.11						
71		3.40						Fracture zone @ ~72'
72		4.54						
73		4.45						
74		5.32						
75	7	6.09					END RUN #9	
76		4.37						same Rock as above.
77		4.49						Fracture around 80.5 - 81.2
78		4.47						Fracture ~ 76.6 - 77.2
79		4.45						
80		4.20						80.5 - 81.2
81		4.55						83' -
82		6.09						
83		10.51						
84	8.15	4.04	8.15	39%		80.4%	END RUN #10	
85								



Sheet 3 of 7

Project No.:

Date: Start 18 Dec 2014

Finish 23 Dec 2014

Total Depth:	101
--------------	-----

Depth To Water:

Surf. Elevation:

Hole Diameter:	
----------------	--

Monitoring Instrument(s): mult: - RAG

Depth (ft)	Run Length (ft)	Min./Ft.	Recovery (ft)	% Recovery	MCR	RQD%	Classification Of Material		Remarks
							f - fine m - medium c - coarse	and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	
84.5		—							Same Rock as above
85		—							
86		4:53							
87		5:50							
88		5:18							
89		5:40							
90		5:30							
91	16.5	4:59	60	92.3		83%	END RUN #11		
92		5:15							
93		4:58							
94		4:50							Fractures @ ~95
95		5:32							
96		5:40							
97		4:39							
98		5:07							
99		4:40							
100		5:36							
101	10	6:01	9-	90%		78.75	END RUN #12		
							<u>EOB</u>		



Bedrock Boring Log

Boring No.: *mw-9*

Sheet 1 of 3

Project Name: NYSDEC Apple Valley Shopping Plaza RD

Project No.:

Client: NYSDEC

Date: Start *5 Jan 2015*

Driller: AES

Finish *8 Jan 2015*

Drilling Method: *HX wireline rock coring*

Total Depth: *100'*

Boring Location: *LaGrange, NY*

Depth To Water:

Coordinates:

Surf. Elevation:

Logged By: E. Brandt

Hole Diameter: *4"*

Monitoring Instrument(s): *multi-life*

Depth (ft)	Run Length (ft)	Min./Ft.	Recovery (ft)	% Recovery	MCR	RQD%	Classification Of Material	Remarks
							f - fine m - medium c - coarse and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	
0								
12								<i>over Burden</i>
13		<i>5:01</i>						
14		<i>5:42</i>						<i>wx, fractures, some rock type.</i>
15		<i>5:47</i>						
16	<i>4.5</i>	<i>6:41</i>	<i>3.8</i>	<i>84.4%</i>		<i>22%</i>		<i>END RUN #1 16.5'</i>
17		<i>8:31</i>						
18		<i>9:30</i>						<i>Fractures throughout. pebbled at End of Run.</i>
19		<i>4:30</i>						
20		<i>5:19</i>						
21		<i>4:47</i>						
22	<i>5.5</i>	<i>4:15</i>	<i>4.4</i>	<i>80%</i>		<i>65%</i>		<i>END RUN #2 22.0'</i>
23								
24	<i>7.30</i>	~~<i>3:46</i>~~						<i>Same as above type 2 rock fractures @ 22.5, 27.</i>
25		<i>3:46</i>						
26		<i>4:06</i>						
27		<i>3:50</i>						
28		<i>4:20</i>						
29		<i>4:12</i>						
30		<i>5:09</i>						
31	<i>8.5</i>	<i>8:13</i>	<i>8.0</i>	<i>94%</i>		<i>68.6</i>		<i>END RUN #3 30.5'</i>
32		<i>5:46</i>						
33		<i>4:28</i>						<i>Fractures @ 31.5', 32', 33.5', 35, 35.5, 39.</i>
34		<i>4:48</i>						
35		<i>5:43</i>						
36		<i>5:31</i>						
37		<i>5:07</i>						
38		<i>5:49</i>						
39		<i>5:38</i>						
40		<i>5:26</i>						
41	<i>10</i>	<i>6:32</i>	<i>9.6</i>	<i>96%</i>		<i>89%</i>		<i>END RUN #4 40.5'</i>
42		<i>4:53</i>						<i>weak zones of Fractures @ 43-48'.</i>
43								
44								
45								
46								
47								
48								<i>END</i>



Bedrock Boring Log

Boring No.: MW-9

Sheet 2 of

Project Name: NYSDEC Apple Valley Shopping Plaza RD

Project No.:

Client: NYSDEC

Date: Start 5 June 2015

Driller: AES

Finish 8 Jan 2015

Drilling Method:

Total Depth: 100'

Boring Location:

Depth To Water:

Coordinates:

Surf. Elevation:

Logged By: E. Brandt

Hole Diameter: 4"

Monitoring Instrument(s):

Depth (ft)	Run Length (ft)	Min./Ft.	Recovery (ft)	% Recovery	MCR	RQD%	Classification Of Material	Remarks
							f - fine m - medium c - coarse and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	
49	7'10"		6.9'	87%		63%		END RUN #5 48'10"
50		7:38						Fractures throughout - very weak
51		7:42						
52		9:56						
53		8:50						
54	5'2"	21:11	4.5	77.4%		67%		END RUN #6 54'
55		6:05						
56		5:45						
57		5:44						
58		5:10						
59		5:16						
60		5:00						
61	7	5:46	6.65'	95%		81%		END RUN #7 61'
62		4:20						Fractures → Few mostly mechanical. slight fracturing c ~ 69-70'
63		5:03						
64		5:00						
65		4:47						
66		4:53						
67		6:10						
68		6:08						
69		6:36						END RUN #8 70' 8"
70	9'8"	5:17	9.1	94%		84.4%		
71		-						
72		4:05						
73		4:14						weak bedding @ ~ 75.8'
74		4:09						
75		4:12						
76	5'9"	4:18	5.3'	92%		81.1%		END RUN #9 ~ 76'
77		-						Fractures @ 81-83' comp. fault.
78		-						
79		-						
80		4:55						
81		4:40						END RUN #10 86' 85.5'
82		4:35						
83		5:15						
84		5:17						
85		4:53						END RUN #10 86' 85.5'
86	9'7"	4:15	9.1	95%		80%		

2'8"



Sheet 3 of 5

Project No.:

Date: Start 5 Jan 2015

Finish 8 Jan 2013

Total Depth: 100'

Depth To Water:

Surf. Elevation:

Hole Diameter: 4"

Depth (ft)	Run Length (ft)	Min./Ft.	Recovery (ft)	% Recovery	MCR	RQD%	Classification Of Material	Remarks
							f - fine m - medium c - coarse and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	

[illegible]

395



Bedrock Boring Log

Boring No.: MW-10

Sheet 1 of

Project Name: NYSDEC Apple Valley Shopping Plaza RD

Project No.:

Client: NYSDEC

Date: Start 9 Jan 2014

Driller: AES

Finish

Drilling Method: AX Wire Line Core

Total Depth:

Boring Location: LaGrange, NY - Corner 7 Lot

Depth To Water:

Coordinates:

Surf. Elevation:

Logged By: E. Brandt

Hole Diameter: 4

Monitoring Instrument(s): Multi-RAE

Depth (ft)	Run Length (ft)	Min./Ft.	Recovery (ft)	% Recovery	MCR	RQD%	Classification Of Material		Remarks
							f - fine m - medium c - coarse	and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	
18.5									OVER BOURDER.
19		3:02							Same Rock type
20		3:31							Fractures throughout weak bedding.
21		3:57							
22		5:11							
23	5	3:54	4.25	85%		43%			END RUN #1 ~23.6'
24		3:12							
25		3:27							Same Rock Type
26		3:38							weak bedding
27		3:23							Fracture w/ gyp. cementation
28		4:16							@ ~27' and ~31.5'
29		6:08							
30		7:32							
31	8	7:36	7.3	91.25%		69.8%			END RUN #2 ~31.5'
32		3:57							
33		5:14							Fracture @ 33.5, 36, 38'
34		4:42							
35		5:24							
36		5:10							
37		3:54							
38		4:17							
39		4:19							
40		4:33							
41	10	5:40	9.9	99%		82.5%			END RUN #3 ~41.5'
42		-							
43		-							
44		-							Fracture @ 42'
45		-							
46		5:58							competent.
47		4:05							
48		4:55							
49		4:51							
50		4:53							
51	10	4:56	9.9	99%		90%			END RUN #4 ~51.5'
52		4:55							
53		4:50							
54		4:33							

20'

60'

80'

9



Bedrock Boring Log

Boring No.: MW-10

Sheet 2 of

Project Name: NYSDEC Apple Valley Shopping Plaza RD

Project No.:

Client: NYSDEC

Date: Start 9 Jan 2015

Driller: AES

Finish

Drilling Method: Hx Wire line Core

Total Depth:

Boring Location: Lehigh, NY

Depth To Water:

Coordinates:

Surf. Elevation:

Logged By: E. Brandt

Hole Diameter: 4"

Monitoring Instrument(s):

Depth (ft)	Run Length (ft)	Min./Ft.	Recovery (ft)	% Recovery	MCR	RQD%	Classification Of Material	Remarks
							f - fine m - medium c - coarse and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	
55		4:03						Comp. Int. Rock Fractures @ 52.5 53', ~56, ~60, ~60.5'
56		4:56						
57		4:17						
58		—						
59		5:20						
60		5:11						
61	9.5'	3:32	9.15	96%		84%	END RUN 5 ~61'	END 1/12
62		4:39						
63		—						
64		—						
65		4:46						
66	5	5:05	4.9	98%		97%	END RUN #6 ~66'	
67		5:21						
68		5:06						Fractures @ 71 and 75'
69		5:23						
70		4:48						
71		6:01						
72		5:36						
73		5:49						
74		6:23						
75	10	5:59	9.4	94%		88%	END RUN #7 76'	
76		5:56						No Fractures. 2 mechanical
77		5:13						
78		5:14						
79		4:58						
80	8	4:50	5.3	100%		100%	END RUN #8 ~80'	
81	8	—	5.3	100%		100%		
82		5:32						Fractures @ 88' and 86-91'
83		5:36						
84		5:33						
85		5:33						
86		5:39						
87		5:32						
88		6:08						
89		5:54						
90		7:07						
91	10	7:34	9.7	97%		86%	END RUN #9 ~91'	
92		7:38						

96"

8'10"

8'8"



Sheet 13 of 5

Project No.:

Date: Start

Finish 14 Jan 2015

Total Depth: 101

Depth To Water:

Surf. Elevation:

Hole Diameter: 4"

Monitoring Instrument(s):

Monitoring Instrument(s)							Classification Of Material		Remarks
Depth (ft)	Run Length (ft)	Min./Ft.	Recovery (ft)	% Recovery	MCR	RQD%	f - fine m - medium c - coarse	and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	
93		6:46							Fractures e ~95-96'
94		7:41							
95		6:04							
96		7:00							
97		5:47							
98		7:40							
99		8:38							
100		7:38							
101	10	8:32	9.1	91%		22.5%			
									END RUN # 10 101'
									END of Boring.
									well set 80-100' bss.
									20' 0.010 5/16" PVC (40) Screen
									80' 2" PVC (40) Riser
									* Sand to 77'
									TR Sect to 74'
									Grout from 74' to Surface.
									(mw10)
									3 bags of #1 Sand
									1/4 Bucket of Bentonite

	Bedrock Boring Log	Boring No.: <u>MW-11D</u>
		Sheet <u>1</u> of <u>2</u>
Project Name: <u>NYSDEC Apple Valley Shopping Plaza RD</u>		Project No.:
Client: <u>NYSDEC</u>		Date: Start <u>24 March 2015</u>
Driller: <u>AES</u>		Finish <u>24 March 2015</u>
Drilling Method: <u>HX Wireline Rock Core</u>		Total Depth: <u>107</u>
Boring Location: <u>Lafayette, NY</u>		Depth To Water:
Coordinates:		Surf. Elevation:
Logged By: <u>E. Brandt</u>		Hole Diameter: <u>4"</u>
Monitoring Instrument(s): <u>Multi-RAE</u>		

Depth (ft)	Run Length (ft)	Min./Ft.	Recovery (ft)	% Recovery	MCR	RQD%	Classification Of Material	Remarks
							f - fine m - medium c - coarse and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	
29								OVER RUNNED to 29' Section 31
31								Rock Socket to 31' removed by air hammer.
32		6:24						fracture @ ~31'
33		8:24						c ~ 32'
34		7:18						c ~ 35.5'
35		—						competent
36		6:31						
37		5:27						
38		6:25						
39	7.5	5:27	7.5	100%		96.7%		END RUN #1
40	8.5	—	7.5					r = fracture
41		5:52						comp. int / weak bedding
42		—						
43		6:06						
44	5.1	6:13	5.1	98%		98.3%		END RUN #2 44.5
45		—						Fracture @ 45.8' - 46.6'
46		6:04						a 48.4
47		5:19						c 49
48		5:52						
49		6:06						
50	5.5	9:52	5.5	100		94%		END RUN #3 50'
51		5:06						Fracture @ 53.3'
52		4:20						Fracture zone @ 54.6 - 56'
53		5:09						(competent)
54		5:10						
55		5:20						
56	6	5:57	6	100		86%		END RUN #4 56'
57		5:16						zone @ 56 - 57.5'
58		6:08						c 60.2 - 62.5
59		8:53						
60		6:35						
61		7:41						competent
62		6:04						
63	7	7:35	6.8	97%		88%		END RUN #5 63'
64		9:50						Fracture 63 - 64'
65		6:03						weak bedding.
66		—						
67	4.5	—	4	88		100%		END RUN #6 67.5'

7.3

5.2

5.2

3.24

6.2

MW-11A
 (45-65) zone



Sheet 2 of 2

Project No.:

Date: Start 24 March 2018

Finish 26 March 2018

Total Depth: 102

Depth To Water:

Surf. Elevation:

Hole Diameter: 4"

Monitoring Instrument(s): *mult.-RAE*

Depth (ft)	Run Length (ft)	Min./Ft.	Recovery (ft)	% Recovery	MCR	RQD%	Classification Of Material		Remarks
							f - fine m - medium c - coarse	and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	
68		5:25					Sm. Fractures @ 68-6'		formation is not taking much water
69		5:34					@ 69.5'		
70		5:55					@ 70'		
71		7:12					@ 72.5'		
72		5:12					@ 73'		
73		6:10					weak bedding ~ 45°		
74		7:12					END RUN #7 76'		
75	9.5	6:32					Fracture @ 77'		Note boring - taking water
76		5:37					zone @ 80-81'		
78		5:26					fracture @ 81.8'		
79		5:30					(weak bedding Lots of weak fracture)		
80		4:47					END RUN #8 85'		
81		5:02					Fracture @ 87'		
82		4:18					Very weak bedding.		Rec from prev. core?
83		5:03					END RUN #9 90.5'		
84		5:07					comp. bed. Rock. no fractures.		FOR Well Set. 67'-87'
85	9	5:17	8.9	99%		88%	END RUN #10 96 98.5'		
86		7:40					comp. bed. Rock no fractures.		67-87
87		6:42					END RUN #11 100.5' 101'		
88		9:03							
89		8:29							
90	5.5	10:10	4.2	76%		43%			
91									
92		5:28							
93		6:23							
94		6:56							
95		7:30							
96	5.0	8:02	5.7	100%		100%			
97		6:14							
98		7:53							
99		9:40							
100		8:34							
101	5.0	10:00	5.0	100%		100%			

20' Swam.

RENAME MW-11M

HR	Bedrock Boring Log	Boring No.: MW-11M
		Sheet 1 of 1
Project Name: NYSDEC Apple Valley Shopping Plaza RD		Project No.:
Client: NYSDEC		Date: Start 6 Apr 1 2015
Driller: AES		Finish 6 April 2015
Drilling Method: AX wireline (HQ)		Total Depth: 63
Boring Location: LaGrange, NY		Depth To Water:
Coordinates:		Surf. Elevation:
Logged By: E. Brandt		Hole Diameter: 4"
Monitoring Instrument(s): multi-RAE		

Depth (ft)	Run Length (ft)	Min./Ft.	Recovery (ft)	% Recovery	MCR	RQD%	Classification Of Material	Remarks
							f - fine m - medium c - coarse and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	
0							over Bdr to 27'	
30							socket to 30'	
31		4:20					Fracture @ 31.2'	45° Bed angle.
32	2	9:12	2	100%		75%	END RUN #1 32'	
33		11:20					Fracture @ 35'	
34		6:45					36.8	
35	3	5:29	3	100%		97%	END RUN #2 35'	
36		7:23/6:53						
37		6:43						
38		6:29						
39		6:51					zone 35.8-37.2	Steel bedding.
40	5.3	11:29	5	95		84%	END RUN #3 40'	fracture not taking water.
41		7:38						
42		5:28					Fract @ 43.7'	
43		5:02						
44		5:16					mostly competent.	
45		4:43						
46	6	-	5.7	93%		93%	END RUN #4 46'	
47		5:31						
48		6:00					Fracture zone 47.5-48.2	
49		6:47					51-54.6	
50		7:24					Fract @ 54'	
51								
52								
53							competent.	
54								
55	9.5		4.25	97%		94%	END RUN #5 55.5'	
56		7:31						
57		9:57					Fract @ 56.5	
58		7:16					zone 58.7-59.2'	
59	3.7	9:34	3.5	94%		81%	END RUN #6 59.2'	
60		8:02/15:15/5:28						
61	13.2						END RUN #7 59.6' [mostly Fracture]	100% RQD
62		13:29	2.9					
63	3.4		2.9	85%		64%	END #8 Fract - 61.3	
64							62.1	
65							END 13	
66								

MW-11M
Screen 63-43
seal to 42'
Seal 38'



Bedrock Boring Log

Boring No.: MW-12

Sheet 1 of

Project Name: NYSDEC Apple Valley Shopping Plaza RD

Project No.:

Client: NYSDEC

Date: Start 28 Jan 2015

Driller: AES

Finish

Drilling Method: HX Wireline

Total Depth:

Boring Location: Lagrange, NY.

Depth To Water:

Coordinates:

Surf. Elevation:

Logged By: E. Brandt

Hole Diameter: 4"

Monitoring Instrument(s): Multi-RAE

Depth (ft)	Run Length (ft)	Min./Ft.	Recovery (ft)	% Recovery	MCR	RQD%	Classification Of Material		Remarks
							f - fine m - medium c - coarse	and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	
14		—					0-11' Overburden material Very fractured, not very competent Dip angle @ ~80'. Fractures appear to start @ ~16' and RUN #1 END ~22' continue		Rock Socket set to 14' below grade.
15		3:43							
16		4:13							
17		—							
18		—							
19		—							
20		—							
21	7.3"	—	2.7	38%		0%	Fracturing throughout core, more broken @ 23' and 25'		Formation taking water slows penetration.
22		2:49							
23		3:51							
24		6:53							
25		8:25							
26		8:10							
27	6	15:16	3.5	38%		8%			
28	2	6:10					Fractures @ 28' + 30' mostly competent.		
29		—							
30		—							
31		—							
32		8:25							
33		6:51							
34		13:05							
35	7.9"	8:35	6.3	82%		66%	END RUN #3 ~35'	Fractures at 37', 39', 40.5',	
36		5:00							
37		6:45							
38		7:10							
39		7:18							
40		7:22							
41	7.3"	7:35	6.5'	89.6%		80%	END RUN #4 ~41'		
42		7:11					Fracture @ 45', 46', 47', 48' Competent rock most of core.		
43		6:24							
44		6:25							
45		5:58							
46		8:48							
47		8:42							
48		7:09							
49		7:32					END RUN #5 ~51'		
50		5:22							
51	10	9:20	9.7'	97%		86.7%			

87.6

5.5"
129

62"

70"

104"



Bedrock Boring Log

Boring No.: MW-12

Sheet 2 of

Project Name: NYSDEC Apple Valley Shopping Plaza RD

Project No.:

Client: NYSDEC

Date: Start 28 Jan 2015

Driller: AES

Finish

Drilling Method: HX Wireline

Total Depth:

Boring Location: LaGrange, NY

Depth To Water:

Coordinates:

Surf. Elevation:

Logged By: E. Brandt

Hole Diameter: 4"

Monitoring Instrument(s): Multi-RAE

Depth (ft)	Run Length (ft)	Min./Ft.	Recovery (ft)	% Recovery	MCR	RQD%	Classification Of Material	Remarks
							f - fine m - medium c - coarse and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	
52								
53								
54								
55								
56	5		4.8	96%		70%		Fracture zone @ 52-53.5'
57								constant remainder.
58								END RUN #6 56'
59		6:03						Fracture @ 56.5-57'
60		5:05						Water fract 61-63'
61		4:58						zone
62		4:47						
63		7:06						
64		9:09						
65	9	7:43	8.9	98%		76%		END RUN #7 65'
66								6' 10" 82"
67								
68								
69								
70								
71								
72								
73								
74								
75								
76	9.5		9.3	97%		82%		Fracture zone @ 65-66.5'
77								@ 71.2-71.4'
78		6:20						@ 72.8-73.1'
79		6:09						@ 73.8-74.4'
80		6:20						
81	4.25	5:31	4'	94%		94%		END RUN #8 76'
82								665'-76
83								
84		6:08						
85		6:18						
86	4	5:40	3.8	95%		77%		Fracture zone @ 76.5-77'
87		7:20						END RUN #9 80.25'
88		6:21						80.25'
89		6:15						Fracture zone @ 80.25-81.25'
								81.25-86'



Boring No.: *MU-12*

Sheet 3 of 3

Project Name: NYSDEC Apple Valley Shopping Plaza RD

Project No.:

Client: NYSDEC

Date: Start

Driller: AES

Finish 18 March 2018

Drilling Method: HX wire line

Total Depth: 101

Boring Location: Labarge, NY

Depth To Water:

Coordinates:

Surf. Elevation:

Logged By: E. Brandt

Hole Diameter: 4"

Monitoring Instrument(s):

Depth (ft)	Run Length (ft)	Min./Ft.	Recovery (ft)	% Recovery	MCR	RQD%	Classification Of Material		Remarks	
							f - fine m - medium c - coarse	and - 35-50% some - 20-35% little - 10-20% trace - 0-10%		
90		6:08							@ 86.5 - 87.7' mostly compact & full	
91		6:21								
92		4:42								
93		5:19								
94		5:11								
95		4:58								
96	10'	4:32	9.8'	98%		72.9%			END RUN #11	86-86'
97		5:40								
98										
99										
100										
101	5		5	100%		100%			END RUN #12	96-101'
									EOB	
									no significant fractures below 90'	
									Screen 90-70'	
									TR Bentonite 101-91	
									Sand 91'-67'	
									TR Bentonite 67'-	



Bedrock Boring Log

Boring No.: MW-13

Sheet 1 of

Project Name: NYSDEC Apple Valley Shopping Plaza RD

Project No.:

Client: NYSDEC

Date: Start 15 Jan 2015

Driller: AES

Finish

Drilling Method: HX Wireline Coring

Total Depth:

Boring Location: LaGrange, NY

Depth To Water:

Coordinates:

Surf. Elevation:

Logged By: E. Brandt

Hole Diameter: 4"

Monitoring Instrument(s): Mult. RAE

Depth (ft)	Run Length (ft)	Min./Ft.	Recovery (ft)	% Recovery	MCR	RQD%	Classification Of Material		Remarks
							f - fine m - medium c - coarse	and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	
23		—							very weathered Rock.
24		5:58							
25		6:10							
26		7:06							
27	4	6:20	~3.0	75%		27%			END RUN #1 ~27'
28		—							Same as above.
29		3:55							
30		6:09							
31	4	6:28	~3.0	75%		17%			
32		3:21							END RUN #2 ~31'
33		—							
34		4:35							
35		4:00							
36		4:31							END RUN #3 ~37.5'
37	6.5	13:19	~5.0	76%		17%			
38		3:12							
39		4:51							
40		4:36							1st 3.5' Very Broken up. —————> Core cutter was compromised up to 41'. New bit - less fractures. mostly mechanical. Chaged bit. 42-46' w/new bit.
41		5:29							
42		—	5:34						
43		5:39	4:58						
44		4:58	5:13						END RUN #4 ~46'
45		5:13	4:42						
46	2.5'	4:42	4:52	6.7	89%	45%			
47	~~2.5'~~	4:52	3:31						
48		4:52							54'-56' fracture zone.
49		5:01							
50		4:45							
51		4:55							
52		—							END RUN #5 ~56'
53		6:31							
54		5:23							
55		5:40							
56	10	12:01	9.5	95%		73%			
57		4:56							
58		5:46							
59		10:15							
60		4:47							

~13"

29"

END 1/8"

13.5"

1/16"

7/4"



Bedrock Boring Log

Boring No.: MW-13

Sheet 2 of 2

Project Name: NYSDEC Apple Valley Shopping Plaza RD

Project No.:

Client: NYSDEC

Date: Start 15 Jan 2015

Driller: AES

Finish 20 Jan 2015

Drilling Method: Hx wireline

Total Depth: 91.5'

Boring Location: LaGrange, NY

Depth To Water:

Coordinates:

Surf. Elevation:

Logged By: E. Brandt

Hole Diameter: 4"

Monitoring Instrument(s): MultiRAE

Depth (ft)	Run Length (ft)	Min./Ft.	Recovery (ft)	% Recovery	MCR	ROD%	Classification Of Material	Remarks
							f - fine m - medium c - coarse and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	
61		5:46						56' - 62' → Rock is weak - many fractures due to corr. could also be a fracture zone. Bedding @ ~45-60° angle - very weak. END RUN #6 ~66'
62		8:55						
63		9:03						
64		6:24						
65		6:23						
66	10	13:08	29.5'	~95%		13%		Run contains many small pieces of rock - very weak bedding. No Rock is appearing to be sliced.
67		6:23						
68		8:33						
69		—						
70		13:08						
71		—						END RUN #7 ~72'
72	6	14:36	26	~100		0%		
73		4:55						
74		16:56						
75		9:50						
76		6:30						Mechanical fractures - bedding seams more compact. Fracture zones @ 74-75' 78-79' (well @ 60-80?)
77		7:10						
78		7:44						
79	7	13:48	5.2	74%		5%		
80		9:25						
81		7:20						weak bedding. few fractures. END RUN #8 ~79'
82		14:58						
83		8:54						
84		8:07						
85		8:28						
86	7	7:58	5.6'	80%		38%		END RUN #9 ~86'
87		6:02						
88		5:33						
89		6:22						
90		7:21						
91	5.5'	11:01	5.1	92.2%		52%		END RUN #10 ~91.5'
92								
93								
94								
95								
96								well set 60'-80' 76-56' 20' of 0.010 slot PVC screen 2" ~36' of 2" PVC (40) River Bentonite from 91.5' → ~76.5' (pos. blow void) Sand pack - 76.5 - 53' #1 sand. Seal 53-50
97								
98								
99								
100								
101								



Bedrock Boring Log

Boring No.: MW-14

Sheet 1 of

Project Name: NYSDEC Apple Valley Shopping Plaza RD

Project No.:

Client: NYSDEC

Date: Start 3 March 2015

Driller: AES

Finish

Drilling Method: ~~HX~~ HX Wireline (HQ?)

Total Depth:

Boring Location: Liberty, NY

Depth To Water:

Coordinates:

Surf. Elevation:

Logged By: E. Brandt

Hole Diameter: 4"

Monitoring Instrument(s): mult. - RFE

Depth (ft)	Run Length (ft)	Min./Ft.	Recovery (ft)	% Recovery	MCR	RQD%	Classification Of Material	Remarks
							f - fine m - medium c - coarse and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	
0								Overbore to 19' bgs. Rock socket to 24'
24								Amended to Bedrock -
25	9.2	9.24						
26		6.34						competent - no fractures weak bedrock
27	23.5	6.52	23	97%		100%		END RUN #1 27.5'
28		7.30						
29		5.03						
30		5.29						fract. @ ~30.9'
31	4.25	4.22	19.9	100%		82%		competent - weak. END RUN #2 31.75'
32		4.00						
33		4.09						
34		7.25						very weak No fractures. taking very little water.
35	4	4.44	4	100%		100%		END RUN #3 35'
36		4.57						
37		5.20						weak bedrock competent No fractures
38		5.42						
39	4.5	5.29	4.5	100%		63%		END RUN #4 39.5'
40		5.51						
41		4.02	5.5'					Very weak bedrock no fractures.
42		4.38	7.2					
43	4	4.38	3	75%		50%		END RUN #5 43.5'
44								
45		5.5						weak no fractures.
46								shear barrel by mechanical fractures
47		5.55						
48		5.05						
49	5.5	5.03	3.5	64%		40%		END RUN #6 49.5'
50	8	12.50						
51		12.50	9.8					no fractures weak
52		9.18	4.3					
53	4.5	4.54	3.5	85%		50%		END #7 53.5'
54	4.5	4.54	3.8	85%		50%		
55		4.49						
56		4.14						formation could be tuff with - or 6.7.5
57		7.27						
58	4.3	4.3	3.0	100%		100%		END #8 57.5'
59		6.33						fracture @ 58-59'

Boring open to 56.5'



Well #: MW-8

Date Started: ~~5 April 2015~~

Date Finished:

14 April 2015
15 April 2015

Start SWL:

Finish SWL:

Developed By: E. Brandt

Method: Watera Pump
CK value

Meters

pH: Myron 6P

Conductivity: Myron 6P

Temp: Myron 6P

Turb.: LeMotte 2020WE

 $4/15$

+Disk No.: C:\CHUCK\Logs.xls Development 1/21/99 13:28:24+



Well #: MW-9

Start SWL: 35.79'
Finish SWL: 22.00

Method: WATER RA

Turb.: LeMotte 2020WE

[illegible]

+Disk No.: C:\CHUCK\Logs.xls Development 1/21/99 13:28:24+


$$DTB = 99.82$$

Well #: MW-10

Date Started: 20 April 2015
Date Finished: 14 April 2015

Start SWL: 44.39'
Finish SWL: 45.78'

Developed By: E. Brandt

Method: Watermark

Meters

pH: Myron 6P

Conductivity: Myron 6P

Temp: Myron 6P

Turb.: LeMotte 2020WE

4/14

Note:

Temperature is measured in Celsius

Turbidity is measured in NTU

Volume is measured in gallons

celsius $\rightarrow AU = \overline{XNTU}$.


$$DTB = 86.90$$

Method: waterwa Pump w/ chit Satm

Turb.: LeMotte 2020WE

+Disk No.: C:\CHUCK\Logs.xls Development 1/21/99 13:28:24+



Well #: MW-11M

Start SWL: 57.40

Finish SWL: ~~62/10~~

Method: water / w/ h/ value

Turb.: LeMotte 2020WE

4/10

$$AU = \bar{x} N T u.$$



Well #: MW-12

Start SWL: 33.23
Finish SWL: 34.28

Developed By: E. Brandt
Method: Watterson Pmf

pH: Myron 6P **Conductivity:** Myron 6P
Temp: Myron 6P **Turb.:** LeMotte 2020WE

[illegible]

Note:
Temperature is measured in Celsius
Turbidity is measured in NTU
Volume is measured in gallons



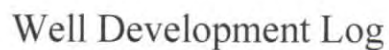
Well #: m-1 3

Start SWL: 40.65

Finish SWL:

Method: *Watterra*

Turb.: LeMotte 2020WE



Well #: MW 14

Start SWL: 30.29'

Finish SWL:

Method: Waterman

pH: Myron 6P

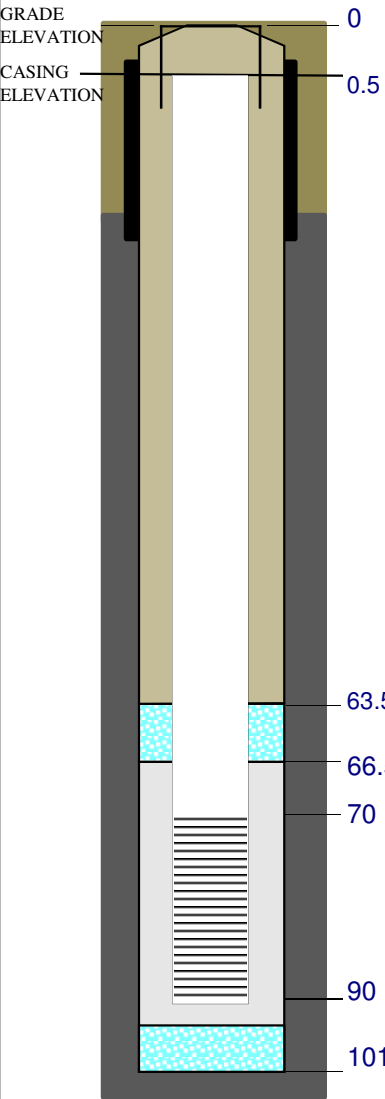
Conductivity: Myron 6P

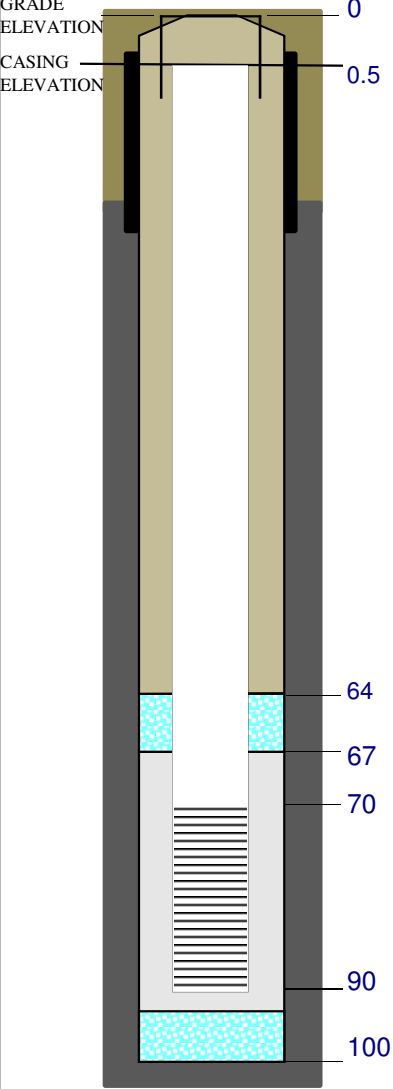
Temp: Myron 6P

Turb.: LeMotte 2020WE

[illegible]

+Disk No.: C:\CHUCK\Logs.xls Development 1/21/99 13:28.24+

MONITORING WELL COMPLETION LOG PROJECT NUMBER: 147-229548																													
PROJECT NAME: NYSDEC Apple Valley Shopping Plaza	WELL No.: MW-8																												
CLIENT: NYSDEC																													
LOCATION: LaGrange, NY																													
DATE DRILLED: 23-Dec-14	DATE DEVELOPED: CONSTRUCTION COMPLETED:																												
DEVELOPING METHOD:																													
 NOT TO SCALE	INSPECTOR: E. Brandt DRILLING CONTRACTOR: Associated Bedrock TYPE OF WELL: STATIC WATER LEVEL: DATE: MEASURING POINT: Top of PVC - North Side TOTAL DEPTH OF WELL: 90 TOTAL DEPTH OF BORING: 101 <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%; padding: 5px;">DRILLING METHOD</td> <td style="padding: 5px;">TYPE: HX Wire-line</td> </tr> <tr> <td style="padding: 5px;">DIAMETER: 4"</td> <td style="padding: 5px;">CASING:</td> </tr> <tr> <td style="padding: 5px;">SAMPLING METHOD</td> <td style="padding: 5px;">TYPE:</td> </tr> <tr> <td style="padding: 5px;">DIAMETER:</td> <td style="padding: 5px;">WEIGHT:</td> </tr> <tr> <td style="padding: 5px;">FALL:</td> <td style="padding: 5px;">INTERVAL:</td> </tr> <tr> <td style="padding: 5px;">RISER PIPE LEFT IN PLACE</td> <td style="padding: 5px;">MATERIAL: PVC</td> </tr> <tr> <td style="padding: 5px;">DIAMETER: 2 inch LENGTH: 70</td> <td style="padding: 5px;">JOINT TYPE: Flush Thread</td> </tr> <tr> <td style="padding: 5px;">SCREEN</td> <td style="padding: 5px;">MATERIAL: PVC</td> </tr> <tr> <td style="padding: 5px;">INTERVAL: 70 - 90</td> <td style="padding: 5px;">DIAMETER: 2 inch</td> </tr> <tr> <td style="padding: 5px;">STRATIGRAPHIC UNITS SCREENED:</td> <td style="padding: 5px;">SLOT SIZE: 0.010</td> </tr> <tr> <td style="padding: 5px;">FILTER PACK</td> <td style="padding: 5px;">GRADE:</td> </tr> <tr> <td style="padding: 5px;">SAND: #1 GRAVEL:</td> <td style="padding: 5px;">NATURAL:</td> </tr> <tr> <td style="padding: 5px;">AMOUNT:</td> <td style="padding: 5px;">INTERVAL: 66.5 - 101</td> </tr> <tr> <td colspan="2" style="padding: 5px;">SEAL(s)</td> </tr> </table>	DRILLING METHOD	TYPE: HX Wire-line	DIAMETER: 4"	CASING:	SAMPLING METHOD	TYPE:	DIAMETER:	WEIGHT:	FALL:	INTERVAL:	RISER PIPE LEFT IN PLACE	MATERIAL: PVC	DIAMETER: 2 inch LENGTH: 70	JOINT TYPE: Flush Thread	SCREEN	MATERIAL: PVC	INTERVAL: 70 - 90	DIAMETER: 2 inch	STRATIGRAPHIC UNITS SCREENED:	SLOT SIZE: 0.010	FILTER PACK	GRADE:	SAND: #1 GRAVEL:	NATURAL:	AMOUNT:	INTERVAL: 66.5 - 101	SEAL(s)	
DRILLING METHOD	TYPE: HX Wire-line																												
DIAMETER: 4"	CASING:																												
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FILTER PACK	GRADE:																												
SAND: #1 GRAVEL:	NATURAL:																												
AMOUNT:	INTERVAL: 66.5 - 101																												
SEAL(s)																													
NOTES:	<table style="width: 100%;"> <tr> <td style="width: 40%;">Portland Cement</td> <td style="width: 30%;">INTERVAL:</td> <td style="width: 30%;">AMOUNT:</td> </tr> <tr> <td>Bentonite Slurry</td> <td>INTERVAL:</td> <td>AMOUNT:</td> </tr> <tr> <td>Bentonite Pellets</td> <td>INTERVAL: 63.5 - 66.5</td> <td>AMOUNT:</td> </tr> <tr> <td>Other: Grout</td> <td>INTERVAL: 1' - 63.5'</td> <td>AMOUNT:</td> </tr> </table> LOCKING CASING: ☐ YES ☒ NO KEY NO:	Portland Cement	INTERVAL:	AMOUNT:	Bentonite Slurry	INTERVAL:	AMOUNT:	Bentonite Pellets	INTERVAL: 63.5 - 66.5	AMOUNT:	Other: Grout	INTERVAL: 1' - 63.5'	AMOUNT:																
Portland Cement	INTERVAL:	AMOUNT:																											
Bentonite Slurry	INTERVAL:	AMOUNT:																											
Bentonite Pellets	INTERVAL: 63.5 - 66.5	AMOUNT:																											
Other: Grout	INTERVAL: 1' - 63.5'	AMOUNT:																											

MONITORING WELL COMPLETION LOG			PROJECT NUMBER: 147-229548													
PROJECT NAME: NYSDEC Apple Valley Shopping Plaza		WELL No.: MW-9														
CLIENT: NYSDEC																
LOCATION: LaGrange, NY																
DATE DRILLED: 5-Jan-15		DATE DEVELOPED:		CONSTRUCTION COMPLETED: 8-Jan-15												
DEVELOPING METHOD:																
 NOT TO SCALE		INSPECTOR: E. Brandt DRILLING CONTRACTOR: Associated Bedrock TYPE OF WELL: DATE: STATIC WATER LEVEL: MEASURING POINT: Top of PVC - North Side TOTAL DEPTH OF WELL: 90 TOTAL DEPTH OF BORING: 100														
		DRILLING METHOD TYPE: HX Wire-line														
		DIAMETER: 4" CASING:														
		SAMPLING METHOD TYPE:														
		DIAMETER: WEIGHT:														
		FALL: INTERVAL:														
		RISER PIPE LEFT IN PLACE MATERIAL: PVC														
		DIAMETER: 2 inch LENGTH: 70														
		SCREEN MATERIAL: PVC														
		INTERVAL: 70 - 90 DIAMETER: 2 inch														
		STRATIGRAPHIC UNITS SCREENED: SLOT SIZE: 0.010														
		FILTER PACK GRADE:														
		SAND: #1 GRAVEL: NATURAL:														
		AMOUNT: INTERVAL: 67 - 100														
		SEAL(s)														
NOTES:		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">Portland Cement</td> <td style="width: 30%;">INTERVAL:</td> <td style="width: 30%;">AMOUNT:</td> </tr> <tr> <td>Bentonite Slurry</td> <td>INTERVAL:</td> <td>AMOUNT:</td> </tr> <tr> <td>Bentonite Pellets</td> <td>INTERVAL: 64 - 67</td> <td>AMOUNT:</td> </tr> <tr> <td>Other: Grout</td> <td>INTERVAL: 1 - 64</td> <td>AMOUNT:</td> </tr> </table>			Portland Cement	INTERVAL:	AMOUNT:	Bentonite Slurry	INTERVAL:	AMOUNT:	Bentonite Pellets	INTERVAL: 64 - 67	AMOUNT:	Other: Grout	INTERVAL: 1 - 64	AMOUNT:
Portland Cement	INTERVAL:	AMOUNT:														
Bentonite Slurry	INTERVAL:	AMOUNT:														
Bentonite Pellets	INTERVAL: 64 - 67	AMOUNT:														
Other: Grout	INTERVAL: 1 - 64	AMOUNT:														
		LOCKING CASING: ☐ YES ☒ NO KEY NO:														

MONITORING WELL COMPLETION LOG			PROJECT NUMBER: 147-229548	
PROJECT NAME: NYSDEC Apple Valley Shopping Plaza		WELL No.: MW-10		
CLIENT: NYSDEC				
LOCATION: LaGrange, NY				
DATE DRILLED: 9-Jan-15		DATE DEVELOPED:		CONSTRUCTION COMPLETED: 14-Jan-15
DEVELOPING METHOD:				
GRADE ELEVATION 0 CASING ELEVATION 0.5 74 77 80 100 101 NOT TO SCALE		INSPECTOR: E. Brandt DRILLING CONTRACTOR: Associated Bedrock TYPE OF WELL: DATE: STATIC WATER LEVEL: Top of PVC - North Side MEASURING POINT: 101 TOTAL DEPTH OF WELL: 100 TOTAL DEPTH OF BORING: 101		
		DRILLING METHOD TYPE: HX Wire-line		
		DIAMETER: 4" CASING:		
		SAMPLING METHOD TYPE:		
		DIAMETER: WEIGHT:		
		FALL: INTERVAL:		
		RISER PIPE LEFT IN PLACE MATERIAL: PVC		
		DIAMETER: 2 inch LENGTH: 80 JOINT TYPE: Flush Thread		
		SCREEN MATERIAL: PVC		
		INTERVAL: 80 - 100 DIAMETER: 2 inch		
STRATIGRAPHIC UNITS SCREENED: SLOT SIZE: 0.010				
FILTER PACK GRADE:				
SAND: #1 GRAVEL: NATURAL:				
AMOUNT: INTERVAL: 77 - 101				
SEAL(s)				
NOTES:				
Portland Cement INTERVAL: AMOUNT:				
Bentonite Slurry INTERVAL: AMOUNT:				
Bentonite Pellets INTERVAL: 74 - 77 AMOUNT:				
Other: Grout INTERVAL: 1 - 74 AMOUNT:				
LOCKING CASING: ☐ YES ☒ NO KEY NO:				

MONITORING WELL COMPLETION LOG		PROJECT NUMBER: 147-229548	
PROJECT NAME: NYSDEC Apple Valley Shopping Plaza		WELL No.: MW-11D	
CLIENT: NYSDEC			
LOCATION: LaGrange, NY			
DATE DRILLED: 24-Mar-15		DATE DEVELOPED: 9-Apr-15	
		CONSTRUCTION COMPLETED: 26-Mar-15	
DEVELOPING METHOD:			
GRADE ELEVATION CASING ELEVATION NOT TO SCALE		INSPECTOR: E. Brandt	
		DRILLING CONTRACTOR: Associated Bedrock	
		TYPE OF WELL: DATE:	
		STATIC WATER LEVEL: MEASURING POINT: Top of PVC - North Side	
		TOTAL DEPTH OF WELL: 87 TOTAL DEPTH OF BORING: 101	
		DRILLING METHOD	
		TYPE: HX Wire-line	
		DIAMETER: 4" CASING:	
		SAMPLING METHOD	
		TYPE:	
DIAMETER: WEIGHT:			
FALL: INTERVAL:			
RISER PIPE LEFT IN PLACE			
MATERIAL: PVC			
DIAMETER: LENGTH: 67 JOINT TYPE: Flush Thread			
SCREEN			
MATERIAL: PVC			
INTERVAL: 67 - 87 DIAMETER: 2 inch			
STRATIGRAPHIC UNITS SCREENED: SLOT SIZE: 0.010			
FILTER PACK			
GRADE:			
SAND: GRAVEL: NATURAL:			
AMOUNT: INTERVAL: 88 - 65			
SEAL(s)			
NOTES:			
Portland Cement INTERVAL: AMOUNT:			
Bentonite Slurry INTERVAL: AMOUNT:			
Bentonite Pellets INTERVAL: 101 - 88 AMOUNT:			
65 - 62			
Other: Grout INTERVAL: 0 - 62 AMOUNT:			
LOCKING CASING: ☐ YES ☒ NO KEY NO:			



MONITORING WELL COMPLETION LOG			PROJECT NUMBER: 147-229548		
PROJECT NAME: NYSDEC Apple Valley Shopping Plaza		WELL No.: MW-11M			
CLIENT: NYSDEC					
LOCATION: LaGrange, NY					
DATE DRILLED: 6-Apr-15		DATE DEVELOPED: 10-Apr-15		CONSTRUCTION COMPLETED: 26-Mar-15	
DEVELOPING METHOD:					
GRADE ELEVATION CASING ELEVATION NOT TO SCALE		INSPECTOR: E. Brandt			
		DRILLING CONTRACTOR: Associated Bedrock			
		TYPE OF WELL: DATE:			
		STATIC WATER LEVEL: MEASURING POINT: Top of PVC - North Side			
		TOTAL DEPTH OF WELL: 63 TOTAL DEPTH OF BORING: 63			
		DRILLING METHOD		TYPE: HX Wire-line	
		DIAMETER: 4"		CASING:	
		SAMPLING METHOD		TYPE:	
		DIAMETER:		WEIGHT:	
		FALL:		INTERVAL:	
RISER PIPE LEFT IN PLACE		MATERIAL: PVC			
DIAMETER: 2 inch		LENGTH: 43	JOINT TYPE: Flush Thread		
SCREEN		MATERIAL: PVC			
INTERVAL: 43 - 63		DIAMETER: 2 inch			
STRATIGRAPHIC UNITS SCREENED:		SLOT SIZE: 0.010			
FILTER PACK		GRADE:			
SAND: #1		GRAVEL:	NATURAL:		
AMOUNT:		INTERVAL: 42 - 63			
SEAL(s)					
NOTES:		Portland Cement			
		Bentonite Slurry			
		Bentonite Pellets			
		Other: Grout			
		LOCKING CASING: ☐ YES ☒ NO			

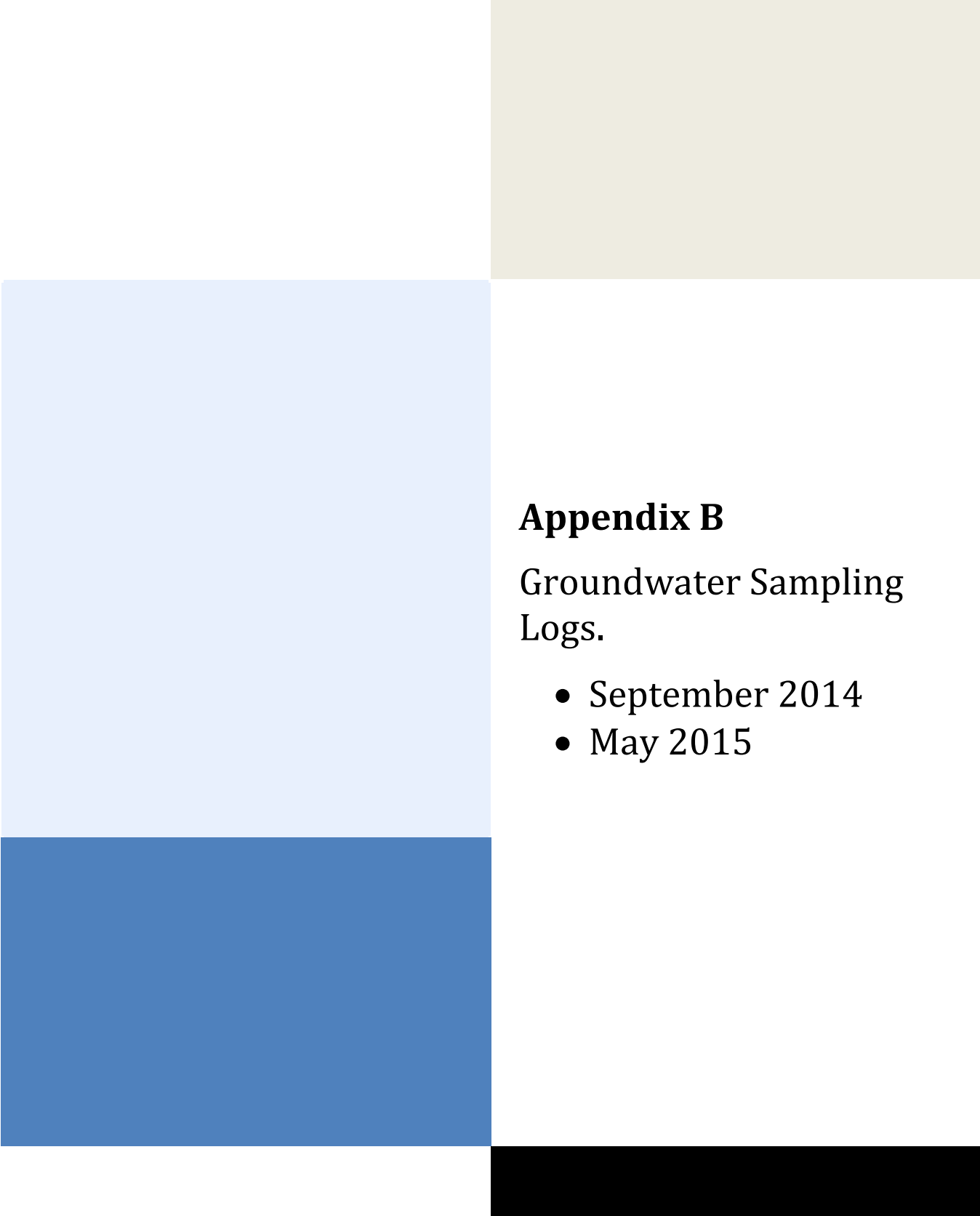


MONITORING WELL COMPLETION LOG			PROJECT NUMBER: 147-229548	
PROJECT NAME: NYSDEC Apple Valley Shopping Plaza		WELL No.: MW-12		
CLIENT: NYSDEC				
LOCATION: LaGrange, NY				
DATE DRILLED: 18-Mar-15		DATE DEVELOPED: 10-Apr-15		CONSTRUCTION COMPLETED: 18-Mar-15
DEVELOPING METHOD:				
GRADE ELEVATION 0 CASING ELEVATION 0.5 64 67 70 90 91 101 NOT TO SCALE		INSPECTOR: E. Brandt DRILLING CONTRACTOR: Associated Bedrock TYPE OF WELL: DATE: STATIC WATER LEVEL: Top of PVC - North Side MEASURING POINT: 90 TOTAL DEPTH OF BORING: 101 TOTAL DEPTH OF WELL:		
		DRILLING METHOD TYPE: HX Wire-line		
		DIAMETER: 4" CASING:		
		SAMPLING METHOD TYPE:		
		DIAMETER: WEIGHT:		
		FALL: INTERVAL:		
		RISER PIPE LEFT IN PLACE MATERIAL: PVC DIAMETER: LENGTH: 70 JOINT TYPE: Flush Thread		
		SCREEN MATERIAL: PVC INTERVAL: 70 - 90 DIAMETER: 2 inch STRATIGRAPHIC UNITS SCREENED: SLOT SIZE: 0.010		
		FILTER PACK GRADE: SAND: GRAVEL: NATURAL: #1 AMOUNT: INTERVAL: 91 - 67		
		SEAL(s)		
NOTES:		Portland Cement INTERVAL: AMOUNT:		
		Bentonite Slurry INTERVAL: AMOUNT:		
		Bentonite Pellets INTERVAL: 101 - 91 AMOUNT: 67 - 64		
		Other: Grout INTERVAL: 64 - 0 AMOUNT:		
		LOCKING CASING: ☐ YES ☒ NO KEY NO:		

MONITORING WELL COMPLETION LOG		PROJECT NUMBER: 147-229548	
PROJECT NAME: NYSDEC Apple Valley Shopping Plaza		WELL No.: MW-13	
CLIENT: NYSDEC			
LOCATION: LaGrange, NY			
DATE DRILLED:		DATE DEVELOPED:	
		CONSTRUCTION COMPLETED: 22-Jan-15	
DEVELOPING METHOD:			
GRADE ELEVATION CASING ELEVATION Surface Casing NOT TO SCALE		INSPECTOR: E. Brandt DRILLING CONTRACTOR: Associated Bedrock TYPE OF WELL: STATIC WATER LEVEL: DATE: MEASURING POINT: Top of PVC - North Side TOTAL DEPTH OF WELL: 76 TOTAL DEPTH OF BORING: 91.5 DRILLING METHOD TYPE: HX Wire-line DIAMETER: 4" CASING: SAMPLING METHOD TYPE: DIAMETER: WEIGHT: FALL: INTERVAL: RISER PIPE LEFT IN PLACE MATERIAL: PVC DIAMETER: 2 inch LENGTH: 80 JOINT TYPE: Flush Thread SCREEN MATERIAL: PVC INTERVAL: 56 - 76 DIAMETER: 2 inch STRATIGRAPHIC UNITS SCREENED: SLOT SIZE: 0.010 FILTER PACK GRADE: SAND: #1 GRAVEL: NATURAL: AMOUNT: INTERVAL: 76.5 - 53 SEAL(s) Portland Cement INTERVAL: AMOUNT: Bentonite Slurry INTERVAL: AMOUNT: Bentonite Pellets INTERVAL: 76.5 - 91.5 AMOUNT: Other: Grout INTERVAL: 50 - 53 AMOUNT: Other: Grout INTERVAL: 1 - 50 AMOUNT: LOCKING CASING: ☐ YES ☒ NO KEY NO:	



MONITORING WELL COMPLETION LOG		PROJECT NUMBER: 147-229548	
PROJECT NAME: NYSDEC Apple Valley Shopping Plaza		WELL No.: MW-14	
CLIENT: NYSDEC			
LOCATION: LaGrange, NY			
DATE DRILLED: 31-Mar-15		DATE DEVELOPED:	
		CONSTRUCTION COMPLETED: 31-Mar-15	
DEVELOPING METHOD:			
GRADE ELEVATION 0 CASING ELEVATION 0.5 66 69 69.5 79.5 NOT TO SCALE		INSPECTOR: E. Brandt DRILLING CONTRACTOR: Associated Bedrock TYPE OF WELL: STATIC WATER LEVEL: DATE: MEASURING POINT: Top of PVC - North Side TOTAL DEPTH OF WELL: 79.5 TOTAL DEPTH OF BORING: 79.5	
		DRILLING METHOD TYPE: HX Wire-line	
		DIAMETER: 4" CASING:	
		SAMPLING METHOD TYPE:	
		DIAMETER: WEIGHT:	
		FALL: INTERVAL:	
		RISER PIPE LEFT IN PLACE MATERIAL: PVC DIAMETER: 2 inch LENGTH: 69.5 JOINT TYPE: Flush Thread	
		SCREEN MATERIAL: PVC INTERVAL: 69.5 - 79.5 DIAMETER: 2 inch STRATIGRAPHIC UNITS SCREENED: SLOT SIZE: 0.010	
		FILTER PACK GRADE:	
		SAND: #1 GRAVEL: NATURAL:	
AMOUNT: INTERVAL: 79.5 - 69			
SEAL(s)			
NOTES:		Portland Cement INTERVAL: AMOUNT: Bentonite Slurry INTERVAL: AMOUNT: Bentonite Pellets INTERVAL: 69 - 66 AMOUNT: Other: Grout INTERVAL: 66 - 0 AMOUNT:	
LOCKING CASING: ☐ YES ☒ NO KEY NO:			



Appendix B

Groundwater Sampling Logs.

- September 2014
- May 2015



Well Sampling Log

Well ID No. MW-RC1-2015-05-18

Well Casing Type	Steel 6"	Start SWL	35.77	Project	Apple Valley RD
Well Depth	50.57	Water Column Ht.	14.8	Date	5/18/2015
Screened Interval	10'	Well Volume (gallons)	22.2	Crew	YEC Staff (Bob C. & John R.)
Well Elevation	N/A	SWL During Sampling	37.21	Purge Method	Low-flow QED 1.75" bladder pump
Ground Elevation	N/A	Sample Time	1545	Meters Used	Horiba U-52, PID, Water Level Meter
Well Condition	good	Sample Method	Low-Flow	PID Headspace	0.0 ppm
Weather Conditions	overcast, 70F	Sample Analysis	524.2 VOCs		

[illegible]



Well Casing Type	PVC
Well Depth	100
Screened Interval	10'
Well Elevation	N/A
Ground Elevation	N/A
Well Condition	good
Weather Conditions	cloudy 60F

Start SWL	5.70
Water Column Ht.	94.3
Well Volume (gallons)	15.088
SWL During Sampling	9.9
Sample Time	1235
Sample Method	Low-Flow
Sample Analysis	524.2 VOCs

Project	Apple Valley RD
Date	5/19/2015
Crew	YEC Staff (Bob C. & John R.)
Purge Method	Low-flow QED 1.75" bladder pump
Meters Used	Horiba U-52, PID, Water Level Meter
PID Headspace	0.0 ppm

[illegible]



Well Sampling Log

Well ID No. MW-2-20150520

Well Casing Type	2" PVC
Well Depth	86.94
Screened Interval	open borehole
Well Elevation	N/A
Ground Elevation	N/A
Well Condition	good
Weather Conditions	sunny/cloudy, 70°F

Start SWL	40.80
Water Column Ht.	46.14
Well Volume (gallons)	7.3824
SWL During Sampling	41.22
Sample Time	1335
Sample Method	Low-Flow
Sample Analysis	524.2 VOCs

Project	Apple Valley RD
Date	5/20/2015
Crew	YEC Staff (Bob C. & John R.)
Purge Method	Low-flow QED 1.75" bladder pump
Meters Used	Horiba U-52, PID, Water Level Meter
PID Headspace	0.0 ppm

[illegible]



Well Sampling Log

Well ID No. MW-3-20150519

Well Casing Type	2" PVC	Start SWL	36.09	Project	Apple Valley RD
Well Depth	117.4	Water Column Ht.	81.31	Date	5/19/2015
Screened Interval	10'	Well Volume (gallons)	13.01	Crew	YEC Staff (Bob C. & John R.)
Well Elevation	N/A	SWL During Sampling	38.67	Purge Method	Low-flow QED 1.75" bladder pump
Ground Elevation	N/A	Sample Time	1320	Meters Used	Horiba U-52, PID, Water Level Meter
Well Condition	good	Sample Method	Low-Flow	PID Headspace	0.0 ppm
Weather Conditions	cloudy 60F	Sample Analysis	524.2 VOCs		

[illegible]



Well Sampling Log

Well ID No. MW-4A-201505##

Well Casing Type	PVC
Well Depth	42.4
Screened Interval	10
Well Elevation	N/A
Ground Elevation	N/A
Well Condition	good
Weather Conditions	overcast, 70F

Start SWL	n/a
Water Column Ht.	0
Well Volume (gallons)	0
SWL During Sampling	n/a
Sample Time	n/a
Sample Method	n/a
Sample Analysis	n/a

Project	Apple Valley RD
Date	5/18/2015
Crew	YEC Staff (Bob C. & John R.)
Purge Method	n/a
Meters Used	PID, Water Level Meter
PID Headspace	0.0 ppm

[illegible]



Well Sampling Log

Well ID No. MW-4B-20150518

Well Casing Type	2" PVC
Well Depth	95.92
Screened Interval	10'
Well Elevation	N/A
Ground Elevation	N/A
Well Condition	good
Weather Conditions	overcast 65F

Start SWL	43.1
Water Column Ht.	52.82
Well Volume (gallons)	8.4512
SWL During Sampling	40.38
Sample Time	1445
Sample Method	Low-Flow
Sample Analysis	524.2 VOCs

Project	Apple Valley RD
Date	5/18/2015
Crew	YEC Staff (Bob C. & John R.)
Purge Method	Low-flow QED 1.75" bladder pump
Meters Used	Horiba U-52, PID, Water Level Meter
PID Headspace	0.0 ppm

[illegible]



Well Casing Type	4" Steel/PVC	Start SWL	26.47
Well Depth	198.06	Water Column Ht.	171.59
Screened Interval	open borehole	Well Volume (gallons)	113.25
Well Elevation	N/A	SWL During Sampling	26.75
Ground Elevation	N/A	Sample Time	1305
Well Condition	casing repaired with PVC	Sample Method	Low-Flow
Weather Conditions	cloudy 53F	Sample Analysis	524.2 VOCs

Project	Apple Valley RD
Date	5/21/2015
Crew	YEC Staff (Bob C. & John R.)
Purge Method	Low-flow QED 1.75" bladder pump
Meters Used	Horiba U-52, PID, Water Level Meter
PID Headspace	0.0 ppm

[illegible]



Well Sampling Log

Well ID No. MW-6-20150519

Well Casing Type	4" Steel	Start SWL	12.50
Well Depth	160.1	Water Column Ht.	147.6
Screened Interval	open borehole	Well Volume (gallons)	97.416
Well Elevation	N/A	SWL During Sampling	13.92
Ground Elevation	N/A	Sample Time	1430
Well Condition	good	Sample Method	Low-Flow
Weather Conditions	cloudy 60F	Sample Analysis	524.2 VOCs

Project	Apple Valley RD
Date	5/19/2015
Crew	YEC Staff (Bob C. & John R.)
Purge Method	Low-flow QED 1.75" bladder pump
Meters Used	Horiba U-52, PID, Water Level Meter
PID Headspace	0.0 ppm

[illegible]



Well Casing Type	4" Steel
Well Depth	165
Screened Interval	open borehole
Well Elevation	N/A
Ground Elevation	N/A
Well Condition	good
Weather Conditions	cloudy 60F

Start SWL	35.7
Water Column Ht.	129.3
Well Volume (gallons)	85.338
SWL During Sampling	35.73
Sample Time	1825
Sample Method	Low-Flow
Sample Analysis	524.2 VOCs

Project	Apple Valley RD
Date	5/19/2015
Crew	YEC Staff (Bob C. & John R.)
Purge Method	Low-flow QED 1.75" bladder pump
Meters Used	Horiba U-52, PID, Water Level Meter
PID Headspace	0.0 ppm

[illegible]



Well Casing Type	2" PVC
Well Depth	89.98
Screened Interval	20' (70-90')
Well Elevation	N/A
Ground Elevation	N/A
Well Condition	good
Weather Conditions	cloudy 53F

Start SWL	21.18
Water Column Ht.	68.8
Well Volume (gallons)	11.008
SWL During Sampling	23.16
Sample Time	0940
Sample Method	Low-Flow
Sample Analysis	524.2 VOCs

Project	Apple Valley RD
Date	5/21/2015
Crew	YEC Staff (Bob C. & John R.)
Purge Method	Low-flow QED 1.75" bladder pump
Meters Used	Horiba U-52, PID, Water Level Meter
PID Headspace	0.0 ppm

[illegible]



Well Sampling Log

Well ID No. MW-9-20150521

Well Casing Type	2" PVC	Start SWL	31.09	Project	Apple Valley RD
Well Depth	89.92	Water Column Ht.	58.83	Date	5/21/2015
Screened Interval	20' (70-90')	Well Volume (gallons)	9.4128	Crew	YEC Staff (Bob C. & John R.)
Well Elevation	N/A	SWL During Sampling	36.98	Purge Method	Low-flow QED 1.75" bladder pump
Ground Elevation	N/A	Sample Time	0955	Meters Used	Horiba U-52, PID, Water Level Meter
Well Condition	good	Sample Method	Low-Flow	PID Headspace	0.0 ppm
Weather Conditions	cloudy 53F	Sample Analysis	524.2 VOCs		

[illegible]



Well Sampling Log

Well ID No. MW-10-20150520

Well Casing Type	2" PVC	Start SWL	36.30
Well Depth	99.85	Water Column Ht.	63.55
Screened Interval	20' (80-100')	Well Volume (gallons)	10.168
Well Elevation	N/A	SWL During Sampling	36.60
Ground Elevation	N/A	Sample Time	1405
Well Condition	good	Sample Method	Low-Flow
Weather Conditions	sunny, cool	Sample Analysis	524.2 VOCs

Project	Apple Valley RD
Date	5/20/2015
Crew	YEC Staff (Bob C. & John R.)
Purge Method	Low-flow QED 1.75" bladder pump
Meters Used	Horiba U-52, PID, Water Level Meter
PID Headspace	0.0 ppm

[illegible]

Well Sampling Log

Well ID No. MW-11M-20150520

Well Casing Type	2" PVC	Start SWL	30.36
Well Depth	62.22	Water Column Ht.	31.86
Screened Interval	20' (43-63')	Well Volume (gallons)	5.0976
Well Elevation	N/A	SWL During Sampling	36.02
Ground Elevation	N/A	Sample Time	1010
Well Condition	good	Sample Method	Low-Flow
Weather Conditions	partly cloudy, 61F, windy	Sample Analysis	524.2 VOCs

Project	Apple Valley RD
Date	5/20/2015
Crew	YEC Staff (Bob C. & John R.)
Purge Method	Low-flow QED 1.75" bladder pump
Meters Used	Horiba U-52, PID, Water Level Meter
PID Headspace	2.5 ppm

[illegible]



Well Casing Type	2" PVC
Well Depth	90.0
Screened Interval	20' (70-90')
Well Elevation	N/A
Ground Elevation	N/A
Well Condition	good
Weather Conditions	partly cloudy

Start SWL	26.36
Water Column Ht.	63.64
Well Volume (gallons)	10.182
SWL During Sampling	26.38
Sample Time	1725
Sample Method	Low-Flow
Sample Analysis	524.2 VOCs

Project	Apple Valley RD
Date	5/19/2015
Crew	YEC Staff (Bob C. & John R.)
Purge Method	Low-flow QED 1.75" bladder pump
Meters Used	Horiba U-52, PID, Water Level Meter
PID Headspace	2.5 ppm

[illegible]

Project Apple Valley RD

Start SWL	36.12
Water Column Ht.	39.68
Well Volume (gallons)	6.3488
SWL During Sampling	43.50
Sample Time	1005
Sample Method	Low-Flow
Sample Analysis	524.2 VOCs

Date	5/19/2015
Crew	YEC Staff (Bob C. & John R.)
Purge Method	Low-flow QED 1.75" bladder pump
Meters Used	Horiba U-52, PID, Water Level Meter
PID Headspace	13.0 ppm

[illegible]



Well Sampling Log

Well ID No. MW-14-20150519

Well Casing Type	2" PVC	Start SWL	27.91
Well Depth	78.95	Water Column Ht.	51.04
Screened Interval	10' (70-80')	Well Volume (gallons)	8.1664
Well Elevation	N/A	SWL During Sampling	39.45
Ground Elevation	N/A	Sample Time	0950
Well Condition	good	Sample Method	Low-Flow
Weather Conditions	partly cloudy	Sample Analysis	524.2 VOCs

Project	Apple Valley RD
Date	5/19/2015
Crew	YEC Staff (Bob C. & John R.)
Purge Method	Low-flow QED 1.75" bladder pump
Meters Used	Horiba U-52, PID, Water Level Meter
PID Headspace	2.5 ppm

[illegible]



Well Sampling Log

Well ID No. MW-5-20140811

Well Casing Type	metal
Well Depth	197.82
Screened Interval	open borehole
Well Elevation	N/A
Ground Elevation	N/A
Well Condition	casing tilted
Weather Conditions	overcast 75F

Start SWL	29.35
Water Column Ht.	168.47
Well Volume (gallons)	111.19
SWL During Sampling	29.34
Sample Time	1440
Sample Method	Low-Flow
Sample Analysis	524.2 VOCs

Project	Apple Valley RD
Date	9/11/2014
Crew	YEC Staff (Peter L. & John R.)
Purge Method	Low-flow QED 1.75" bladder pump
Meters Used	Horiba U-52, PID, Interface Probe
PID Headspace	0.0 ppm

[illegible]



Well Sampling Log

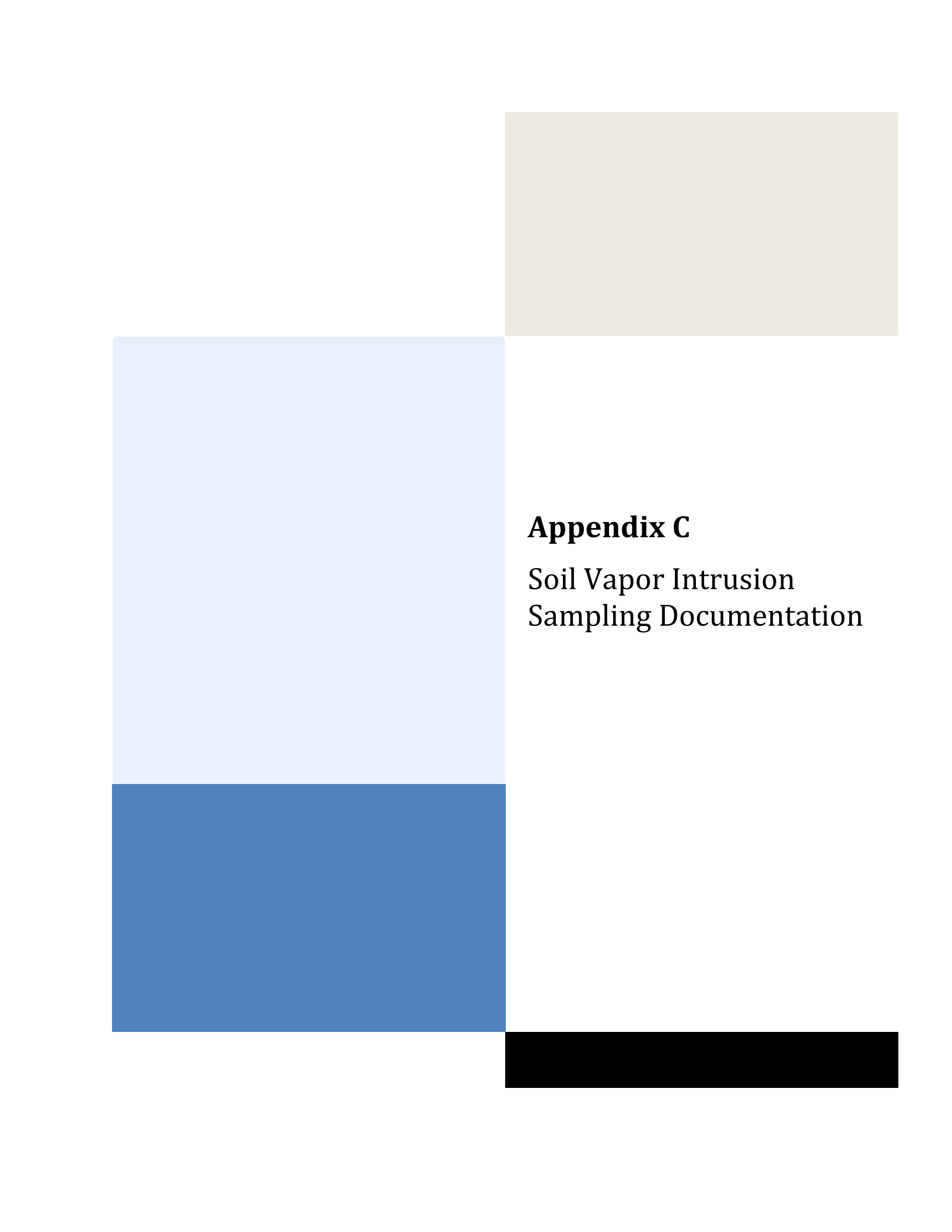
Well ID No. MW-RC1-20140812

Well Casing Type	metal
Well Depth	50.57
Screened Interval	10'
Well Elevation	N/A
Ground Elevation	N/A
Well Condition	good
Weather Conditions	sunny, 75F

Start SWL	32.83
Water Column Ht.	17.74
Well Volume (gallons)	26.61
SWL During Sampling	36.84
Sample Time	1245
Sample Method	Low-Flow
Sample Analysis	524.2 VOCs

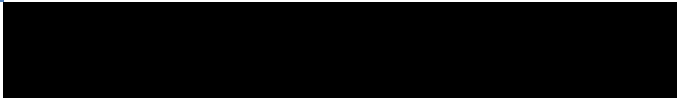
Project	Apple Valley RD
Date	9/12/2014
Crew	YEC Staff (Peter L. & John R.)
Purge Method	Low-flow QED 1.75" bladder pump
Meters Used	Horiba U-52, PID, Interface Probe
PID Headspace	0.0 ppm

[illegible]



Appendix C

Soil Vapor Intrusion Sampling Documentation



17 Feb 2015 18th CG

0800 Prep Equipment.

0910 Met DEC and JB

0914 Arrive @ 3 coast CT.

0950 Test PAB Pump.
 SKC Model 222-3
 SN: 11-336-07
 30s - Defender 510
 EQ ID = FA00618
 Spills $\bar{x}$ = 47.24 mL/min

1010 Ambient PPB PAE
 ~ 750-900 ppb

1015 Fill bucket w/ He⁺

1020 Pys P₂A
 PASS - NO He⁺ detected.

1021 Start IA
 ~ 30" Hg.

1025 Equipment Moved out of house.
 Note crack in floor on opposite side of room.

1038 Start SS point.
 ~ 31" Hg.

1042 Set IA point - Set in living room @ Start @
 ~ 1" Hg.
 per Wayne's Request.

1043 NYSDEC and HDR Personal out of Residence - Door locked.

1050 Start Ambient - next to bench
 ~ 31" Hg.

1052 Return to collect samples @ 0830 2/18.
 Temp, Ed to arrive.

1110 Pys office - stopped in to ask resident if they would like the Soil gas sampling. No one home.

18 Feb 2015

N/SRC AVSP

157-Clan.

0830

HBR met @ 3 Chestnut Court.

0835

Stop Sub-Slab sample
- 3" H₂ONote - Sample ID's indicate
"R1"

0855

He⁻ test

27% in bucket

1 min purge @ 50ml/min

ZERO He⁻ detected

Point Sealed.

0856

begin Restoration of floor.

0910

Floor Restoration complete.

0920

Load Equipment out of Residence.

0940

WM of DEC cables - 4th have called
to sampling.

0945

HBR offsite.

23 Feb 2015

AVSP

Sub Slab sampling

157-Clan.

0915 Meet @ Plaza.

0923

Arr. @ 8 Chestnut R. dge Rd

0955 Set point below closet.
Slab @ 7" thick.

1000

CK PAS pump glow.

X/S pulls = 235ml/min

1015

He⁻ test. Page.> 75% He⁻ in bucket

50s purge 0% on motor

- PAS. -

1027

Start Sample @ 55 = -31" H₂O.

8 Chestnut R. dge

55 Sample ID = AVSP-RZ-SS-20150223

77 Sample ID = AVSP-RZ-AI-20150223

1035 Mob to Plaza
 Note - Sample AT start @
 1020 @ -31" Hg.

1130 Homeowner @ 16 Locust not home
 treat for lunch

1400 Arrive @ 5 Locust Grove

1410 begin Set up of Equipment.

1412 Slab is @ 4" thick.

1425 He test passed, Residence #
 SD sec. purge. He 78% in bucket.
 0% on meter.

1437 Start R3 SS
 ID = AVSP-R3-SS-20150223
 -30" Hg.
 CAN: 0675
 Reg = 036

1444 Start R3 A1.
 -30 Hg Can: 5568
 10 = AVSP-R3-A1-20150223
 Reg: 2811



1450 Mob from 16 Locust St
 Wait in cold-draw for next
 home owner to arrive.
 Note - Final house added for listed
 tomorrow, 2/24, @ 1000.

1610 Point Set
 Slab ~4" thick
 Point set
 He Test PASS 80% in
 bucket 0% under.

1615 Start SS: AVSP-~~R4~~-S-20150223
 -28" Hg.
 Can 670
 Reg # 2877

1625 AD
 AVSP AD-20150223 -25.

1630 HDR/DEC/DON site.

24 Feb 2015

AVSPB/S

0830 Met J Butler at 7.1st Res. Line.

0838 Stop R2 Samples
 AIC -9
 SSC -8

0845 He test @ SS point.
 He 0% in bucket = 80%
 455 purge
 0% detected
 -PASS-

0855 Hole patched - filled w/ concrete.

0900 Leave Home #R2

0950 Call Wayne to find out when he
 will be onsite - he is sick, and
 will not be on site today.

0952 Ten cases fill homeowner
 OK to come by to install.

0955 arrive @ RS

1014 Begin install of point @ RS
 B-05 PAS Pump
 X of Spills = 59.5

1020 Point installed in crawl space.
 Slag is 2" thick

1026 Purge Point
 80% in bucket. Stop
 87% in bucket Stop
 455cc Purge
 0% or below
 -PASS-

1030 Sub Slag can ID
 AVSP-R5-SS-20140224
 can # 648
 Reg # 2991
 Vac @ start = -31" Hg

1033 Start SS
 Vac @ -31" Hg

1232 Arrive @ R3

1240 stop samples

Loth @ -9" H₂1248 He⁻ test @ SS

Bucket % = 84%

Percent during test @

Meter = 0%

PASS

45 sec prep.

1255 floor patched Demob begin

1310 Demob from R3 to plaza

1420

1445 stop AI - 4" H₂1500 stop SS - 19" H₂
OK w/ Lab to stop early1515 Note - Mistakenly drilled out sample
point before conducting He⁻ test.
No Post Sample He⁻ test
conducted @ R41519 stop AD sample
- 1" H₂1530 Demob from R4.
H₂ off site.

25 Feb 2015

NYSDEC AVSP

0835 Acetate RS

0843 Stop AI @ -6" H₂O0844 Stop SS @ -6.5" H₂O

0850 He-Test

Bucket = 7.8%

45 sec purge
0% He-

- PASS -

0920 Repair Made

H₂O off site.1000 Note - Empty can on CO₂ - Dupe
note collected - Not by BF, ML.

1130 Spectrum P/U of all 13 samples.

70°F (inside)

11 March 2015

NYSDEC AVSP

DTW, KD-DL

1330 mob to site.

1335 Arrive Site.

1338 Begin DL of KD @ AW-4B
DTW = 46.51"

1344 Begin DL of KD @ MW-2.

1350 DTW @ MW-2
50.12'1352 H₂O off site.

55°F @

H2R

SOIL VAPOR SAMPLING LOG

Apple Valley Shopping Plaza

NYSDEC

Project Name:

NYSDEC

Client:

NYSDEC

Drilling/Boring Method:

NYSDEC

Purging Method:

NYSDEC

Boring Location:

NYSDEC

Monitoring Instrument:

NYSDEC

Sample ID	Start Time (24 hr)	End Time (24 hr)	Total Time (increments) / (tot. min.)	Start Pressure (in Hg)	End Pressure (in Hg)	Sample Rate (LPM)	Sample Depth (ft above/below g.s.)	Cannister ID No.	Regulator ID No.	Remarks and Observations
-----------	--------------------	------------------	---------------------------------------	------------------------	----------------------	-------------------	------------------------------------	------------------	------------------	--------------------------

AUSP-R1-A1-20150217 1021 0836

-30(+)-7 24hr

5569

2868

Indoor Air
Living Room

AUSP-R1-SS-20150217 1038 0835

-31 -3

-1

1399

957

Basement

AUSP-R1-AA-20150217 1050 0848

-31 -3.5

1681

41

Outside near bank

General Notes:

PID @ 21 mg - 122 ppb.

Crew:	FB, JA, Dec 11th
Sheet:	1 of 1
Project No.:	147-229548-001
Date:	2/17/15
Pump ID #:	N/A
DTW:	(varies)
Surf. Elev.:	1/2
Hole Dia.:	1/2
Start Time	
Finish Time	

H2R

SOIL VAPOR SAMPLING LOG

Project Name:
Client:
Drilling/Boring Method:
Purging Method:
Boring Location:
Monitoring Instrument:

Apple Valley Shopping Plaza
NYSDEC

Hammer Drill
SKC Pump
Basement Residence #2
PID, the detector

Crew: 28, JS
Sheet: 1 of 1
Project No.: 147-229548-001
Date: 2/23/15 Start Time 1020
Finish Time
Pump ID #: N/A
DTW: (varies)
Surf. Elev.: 5/8
Hole Dia.: 1

Sample ID	Start Time (24 hr)	End Time (24 hr)	Total Time (hr:min.) / (tot. min.)	Start Pressure (in Hg)	End Pressure (in Hg)	Sample Rate (LPM)	Sample Depth (ft above/ below g.s.)	Cannister ID No.	Regulator ID No.	Remarks and Observations
ANSR-R2- ~~SS~~ -20150223			1021/0838		-31/-8	24hr	~2"	16013	0056	
ANSR-R2-A1-20150223			1020/0838		-31/-9		3.5'	0280	1315	O.L. Heats 3' on table near water heater.
ANSR-R3-SS-20150223			1437/1240	-30	-9		~4"	0675	036	
ANSR-R3-A1-20150223			1444/1240	-30	-9		~4"	5368	2841	ON Table Near water heater.
ANSR-R4-SS-20150223			1415/1500	-28	-19		~5"	670	2879	
ANSR-R4- ~~SS~~ -20150223			1418/1445	-19	-4		3.5'	263	2887	
ANSR-AD-20150223			1423/1518	-15	-1		0A	7635	2990	
ANSR-R5-SS-20150224			1033/0844	-31	-6		~3"	648	2991	

General Notes: R2-R10 fluctuate 1SD-2SD. Kicks on when water heater turned on.

R3-R10 zero during Installation.

R4-R10 fluctuated from 240-322.

R5-R10 zero.

H2R

SOIL VAPOR SAMPLING LOG

Project Name: Apple Valley Shopping Plaza
Client: NYSDEC
Drilling/Boring Method: *hammer drill*
Purging Method: *5Xs P&D Purg*
Boring Location: *very good w/ 10B4E*
Monitoring Instrument:

Crew:	<i>CB, JB</i>
Sheet:	<i>1</i> of <i>1</i>
Project No.:	147-229548-001
Date:	<i>2/24/15</i>
Pump ID #:	
DTW:	N/A
Surf. Elev.:	(varies)
Hole Dia.:	<i>3/4"</i>
Pump ID #:	
DTW:	
Surf. Elev.:	
Hole Dia.:	

Sample ID	Start Time (24 hr)	End Time (24 hr)	Total Time (hr:min) / (tot. min.)	Start Pressure (in Hg)	End Pressure (in Hg)	Sample Rate (LPM)	Sample Depth (ft above/ below g.s.)	Cannister ID No.	Regulator ID No.	Remarks and Observations
<i>AKR-45-A5-10150B24</i>			<i>1043/0843</i>	<i>-30</i>	<i>-6</i>	<i>24L</i>	<i>3.5'</i>	<i>7C41</i>	<i>2927,</i>	

General Notes:



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Chain of Custody Record/Field Test Data Sheets for Air Analyses

Page 1 of 1

Special Handling:
☐ Standard TAT - 7 to 10 business days
☐ Rush TAT - Date Needed: _____

All TATs subject to laboratory approval.
Min. 24-hour notification needed for rushes.

Report To: <u>Barbara Firebaugh</u>		Invoice To: <u>Same</u>		Project No.: <u>220548</u>		Analysis		Matrix									
HDR				Site Name: <u>NYSDC AVSD</u>													
16 Corp Woods Blvd				Location: <u>1690-8, NY</u>		State: <u>NY</u>											
Albany, NY 12211				Sampler(s): <u>4B, 5B</u>													
Tel #: <u>518-933-9509</u>		Attn: _____		RQN: _____													
Project Manager: <u>Mike Lehtinen</u>		P.O. No.: _____															
Can ID	Can Size (L)	Outgoing Canister Pressure ("Hg) (Lab)	Incoming Canister Pressure ("Hg) (Lab)	Flow Controller Readout (ml/min)	Lab Id.	Sample Id.	Sample Date(s)	Time Start (24 hr clock)	Time Stop (24 hr clock)	Canister Pressure in Field ("Hg) (Start)	Canister Pressure in Field ("Hg) (Stop)	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Indoor /Ambient Air	Soil Gas	Check box if canister is returned unused	
1359	6	-30		957	3.13	MSR-R1-SS-20	150217	02-17-2015	1038	0835	-31	-3	70	70			
1681	6	-30		41	3.19	MSR-R1-AA-20150217			1038	0835	-31	-3.5					
5569	6	-30		2868	3.41	MSR-R1-AA-20150217			1021	0836	-30	-7					
Date of Request: <u>2/11/15</u> Total # Canisters: <u>3</u>																	
Requested by: <u>Barbara Firebaugh</u> # LL Canisters: <u>---</u>																	
Company: <u>HDR</u> # Flow Controllers: <u>3</u>																	
Location: <u>Rushkease, NY</u> Flow Rate/Setting: <u>25/15</u>																	
Date Needed: <u>2/11/15</u> Order #: <u>34502</u> Prepared by: <u>BPF KIL</u>																	
I attest that all media relinquished from Spectrum Analytical, Inc. have been received in good working condition, based on visual observation, and agree to the terms and conditions as listed on the back of this document.																	
Signed: _____ Date: <u>2/19/15</u>																	
Printed: <u>Edward Brand</u> Received by: _____																	
Relinquished by: <u>Ten</u> Date: <u>2-25-15</u> Time: <u>1125</u>																	
Please contact SA's Air Department immediately at (800) 789-9115 if you experience any technical difficulties or suspect any QC issue(s) with air media.																	
Special Instructions/QC Requirements & Comments: <u>MSD is used.</u> <u>MSR-R1-AA-20150217 MSD/SP0848</u> <u>Please call Barbara Firebaugh if any questions.</u>																	
QA/QC Reporting Level: <u>MSD is used.</u>																	
☐ Standard ☐ NY ASP A* ☐ TIER II* ☐ MA DEP CAM																	
☐ NO QC ☐ NY ASP B* ☐ TIER IV* ☐ CT DPH RCP																	
☐ DQA* * additional charges may apply contact SA's QA Department for further info.																	
Client Use Start Stop Ambient Temperature (Fahrenheit) Ambient Pressure (inches of Hg)																	



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Featuring
HANIBAL TECHNOLOGY

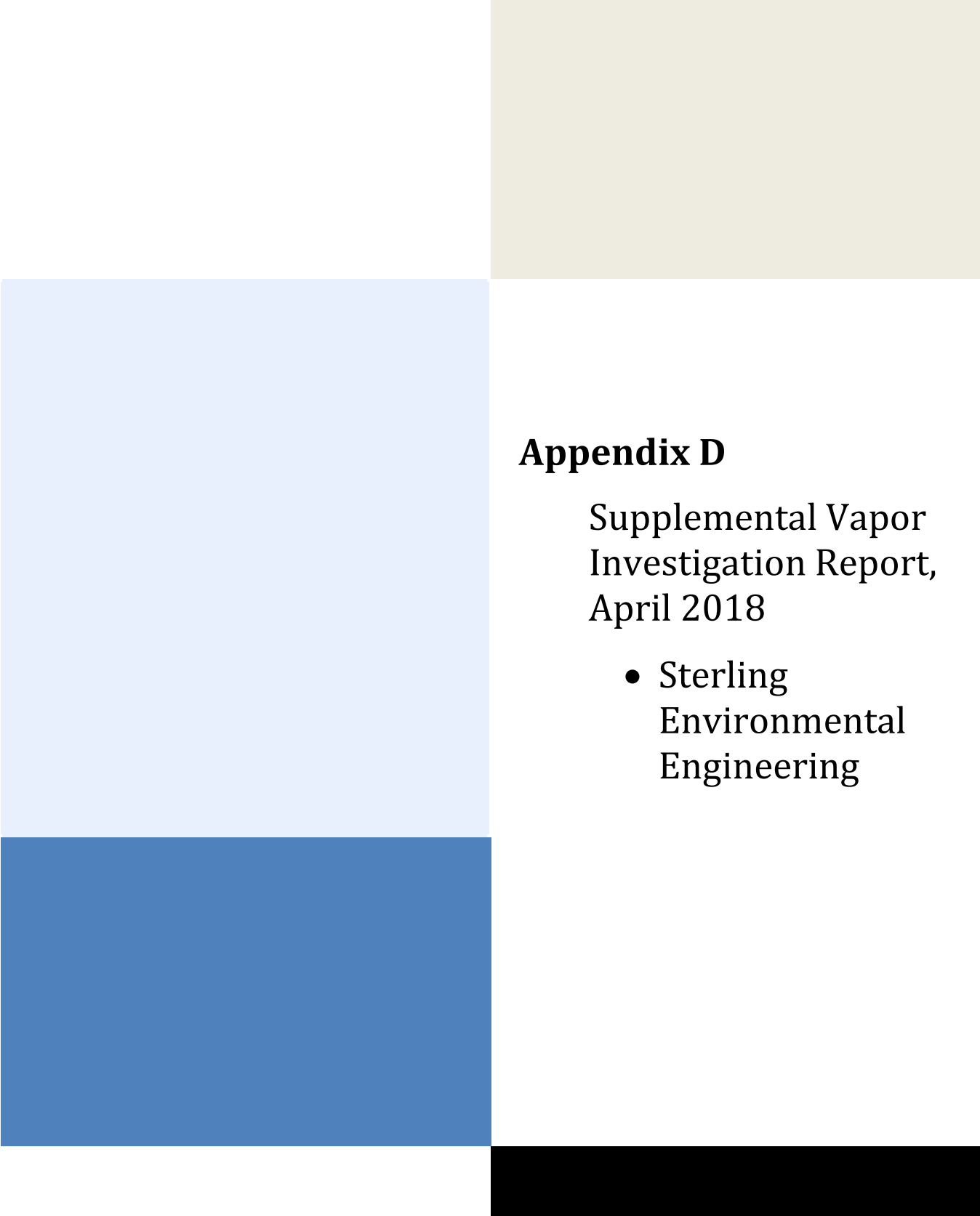
Chain of Custody Record/Field Test Data Sheets for Air Analyses

Special Handling:
☒ Standard TAT - 7 to 10 business days
☐ Rush TAT - Date Needed: _____

All TATs subject to laboratory approval.
Min. 24-hour notification needed for rushes.

Page 1 of 1

Report To: Barbara Firebaugh		Invoice To: SAME		Project No.: 229548		Analysis		Matrix							
HOB				Site Name: NYSDOC-AUSP											
16 Corp Woods Blvd				Location: Lagrange, NY		State: NY									
Albany, NY 12211				Sampler(s): EB, AB											
Tel #: 518-937-9529		Attn:													
Project Manager: Mike Lehman		P.O. No.:													
RQN:															
Can ID	Outgoing Canister Pressure ("Hg) (Lab)	Incoming Canister Pressure ("Hg) (Lab)	Flow Controller Readout (ml/min)	Lab Id.	Sample Id.	Sample Date(s)	Time Start (24 hr clock)	Time Stop (24 hr clock)	Canister Pressure in Field ("Hg) (Start)	Canister Pressure in Field ("Hg) (Stop)	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Indoor / Ambient Air	Soil Gas	Check box if canister is returned unused
14-11683	6	-30	00563.11		ANSP-R2-SS-20150223	2/23/15	1027	0828	-31	-8	70	70	X		
14-0280	6	-30	1315.319		ANSP-R2-A1-20150223	2/23/15	1020	0828	-31	-9	70	70	X		
14-0675	6	-30	0036.314		ANSP-R3-SS-20150223	2/23/15	1437	1240	-30	-9	70	70	X		
14-5348	6	-30	0241.311		ANSP-R3-A1-20150223	2/23/15	1444	1240	-30	-9	70	70	X		
14-0670	6	-30	0287.315		ANSP-R4-SS-20150223	2/23/15	1615	1500	-28	-19	65	65	X		
14-0263	6	-30	0288.316		ANSP-R4-A1-20150223	2/23/15	1618	1445	-29	-4	65	65	X		
14-7635	6	-30	0290.318		ANSP-A0-20150223	2/23/15	1625	1519	-25	-1	70	70	X		
14-0648	6	-30	0291.314		ANSP-R5-SS-20150224	2/24/15	1053	0844	-31	-6.5	70	70	X		
14-7641	6	-30	0297.314		ANSP-R5-A1-20150224	2/24/15	1053	0843	-30	-6	70	70	X		
14-4637	6	-30	0057.315												
Date of Request: 2/11/15		Total # Canisters: 10		QA/QC Reporting Level:											
Requested by: ED Brandt		# LL Canisters: 10		☐ Standard		☐ NY ASP A*		☐ TIER II*		☐ MA DEP CAM		Client Use		Ambient Temperature (Fahrenheit)	
Company: ASR Env. Tech/Env Flow Controllers		10		☐ NO QC		☐ GNV ASP B*		☐ TIER IV*		☐ CT DPH RCP		Start		Ambient Pressure (inches of Hg)	
Location: Poughkeepsie, NY		Flow Rate/Setting: 34hrs		☐ DQA*		*additional charges may apply contact SA's QA Department for further info.						Stop			
Date Needed: 2/15/15		Order #: 3490		Prepared by: [Signature]											
I attest that all media relinquished from Spectrum Analytical, Inc. have been received in good working condition, based on visual observation, and agree to the terms and conditions as listed on the back of this document.															
Signed: [Signature]		Date: 26 Feb 2015													
Printed: E. Brandt		Received by: [Signature]		Date: 2-25-15		Time: 1125		Please contact SA's Air Department immediately at (800) 789-9115 if you experience any technical difficulties or suspect any QC issue(s) with air media.							
Relinquished by: [Signature]		Received by: [Signature]		Date: 2-25-15		Time: 1125		P-E-mail Results to: barbara.firebaugh@chlinc.com							



Appendix D

Supplemental Vapor
Investigation Report,
April 2018

- Sterling
Environmental
Engineering



Sterling Environmental Engineering, P.C.

April 25, 2018

Mr. Wayne D. Mizerak
NYS Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau C
625 Broadway, 11th Floor
Albany, New York 12233-7015

Subject: Apple Valley Shopping Center, LaGrange, New York
Site No. 314084
STERLING File #23008

Dear Mr. Mizerak,

A supplemental vapor investigation, consisting of samples collected from the two (2) operating sub-slab depressurization systems (SSDSs) and one (1) outdoor ambient air location, was conducted at the Apple Valley Shopping Center on January 19, 2018 as discussed during our conference call on January 11, 2018 and letter dated January 19, 2018. The flow regulator for the 'SSDS-W' sample location malfunctioned during the January 19, 2018 sampling event and the sample data for this location was deemed unusable by the laboratory. As such, a subsequent sampling event was conducted on March 6, 2018. A Sample Location Map is provided as Figure 1.

During each sampling event, samples were withdrawn from sampling ports prior to the in-line exhaust fans (see attached photograph log) and one (1) ambient outdoor air sample was obtained at the sample time to determine the background condition. SSDS and ambient outdoor air sample collection was conducted utilizing laboratory-prepared Summa canisters equipped with 8-hour laboratory-calibrated regulators. Air samples were analyzed for Volatile Organic Compounds (VOCs) via USEPA Method TO-15.

Results:

Analytical results for the January 19, 2018 and March 6, 2018 sampling events are attached. A summary of the analytical data for the January 19, 2018 sampling event is as follows:

Location Sample Date			OA-13 01-19-2018	SSDS-E 01-19-2018
Analyte	Min. Guidance Value	Unit	Result	Result
1,1,1-Trichloroethane	<100	ug/m ³	ND< 0.9	ND< 0.73
1,1-Dichloroethene	<6	ug/m ³	ND< 0.16	ND< 0.13
Carbon Tetrachloride	<6	ug/m ³	0.42	0.42
Cis-1,2-Dichloroethylene	<6	ug/m ³	ND< 0.16	ND< 0.13
Methylene Chloride	<100	ug/m ³	ND< 1.1	ND< 0.93
Tetrachloroethylene (PCE)	<100	ug/m ³	ND< 0.28	1.2
Trichloroethylene (TCE)	<6	ug/m ³	ND< 0.22	0.43
Vinyl Chloride	<6	ug/m ³	ND< 0.11	ND< 0.086

"Serving our clients and the environment since 1993"

A summary of the analytical data for the March 6, 2018 sampling event is as follows:

Location Sample Date			OA-13 03/06/2018	SSDS-E 03/06/2018	SSDS-W 03/06/2018
Analyte	Min. Guidance Value	Unit	Result	Result	Result
1,1,1-Trichloroethane	<100	ug/m ³	ND< 0.82	ND< 0.82	ND< 0.82
1,1-Dichloroethene	<6	ug/m ³	ND< 0.59	ND< 0.59	ND< 0.59
Carbon Tetrachloride	<6	ug/m ³	0.82 J	0.82 J	ND< 0.94
Cis-1,2-Dichloroethylene	<6	ug/m ³	ND< 0.59	ND< 0.59	ND< 0.59
Methylene Chloride	<100	ug/m ³	0.97	1.7	1.4
Tetrachloroethylene (PCE)	<100	ug/m ³	ND< 1.0	24	6.3
Trichloroethylene (TCE)	<6	ug/m ³	ND< 0.81	1.2	ND< 0.81
Vinyl Chloride	<6	ug/m ³	ND< 0.38	ND< 0.38	ND< 0.38

Notes:

- Standards are for respective NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York - 2017 Revised Decision Matrices A, B & C;
- ND = Not detected at shown MDL for sample.
- J = Analyte detected below quantitation limit.

Ambient outdoor air (i.e. sample OA-13) analytical data indicate low background concentrations of carbon tetrachloride and/or methylene chloride were present during sample collection events. SSDS analytical data were consistent between sample locations and sample collection events.

Conclusions and Recommendations:

Analytical results from the SSDS exhaust and ambient outdoor air samples were compared to minimum guidance values established for sub-slab vapor concentrations by the May 2017 update to the Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Detected parameters in the SSDS exhaust samples obtained during the January 19, 2018 and March 6, 2018 sampling events were below minimum established guidance criteria for sub-slab vapor concentrations.

Tetrachloroethylene (PCE) was detected at a concentration of 24 ug/m³ at sample location SSDS-E on March 6, 2018. Sample location SSDS-E is associated with the Walgreens building which is equipped with a vapor guard that reduces or eliminates sub-slab vapor exposure to building occupants.

On this basis, it appears the vapor migration pathway is no longer a concern. At this time, we recommend that the previously implemented Interim Remedial Measures (IRM) be accepted as the permanent remedy and that the previously proposed enhancements to the groundwater pumping system be implemented.

We further recommend that the operation of the SSDS be terminated at this time.

Please let me know if you have any questions or require additional information.

Very truly yours,

STERLING ENVIRONMENTAL ENGINEERING, P.C.

A handwritten signature in black ink, appearing to read 'MPM', is positioned above the printed name.

Mark P. Millspaugh, P.E.

President

mark.millspaugh@sterlingenvironmental.com

MPM/bc

Email/First Class Mail

Attachments

cc: David Engel

S:\Sterling\Projects\2003 Projects\Apple Valley - 23008\Correspondence\2018\2018-04-25_NYSDEC-SSDS Sampling Results.docx



MAP REFERENCE: USGS POUGHKEEPSIE-NEWBURGH, NEW YORK, APRIL 2013

LEGEND:

- APPROXIMATE OUTDOOR AIR SAMPLE LOCATION
- APPROXIMATE SUB-SLAB DEPRESSURIZATION SYSTEM SAMPLE LOCATION

STERLING

Sterling Environmental Engineering, P.C.

24 Wade Road ♦ Latham, New York 12110

SAMPLE LOCATION MAP
APPLE VALLEY SHOPPING CENTER
 702 N.Y.S. ROUTE 55

LAGRANGE

DUTCHESS CO., N.Y.

PROJ. No.: 23008	DATE: 4/16/2018	SCALE: 1" = 100'	DWG. NO. 23008011	FIGURE 1
------------------	-----------------	------------------	-------------------	----------



Photograph 1: Sample location SSDS-W.



Photograph 2: Close-up of sample SSDS-W.



Photograph 3: Sample SSDS-W sample port with shut-off valve. Shut-off valve shown in “off” position and turned on prior to sampling.



Photograph 4: Sample location SSDS-E.



Photograph 5: Sample SSDS-E sample port with shut-off valve. Shut-off valve shown in “off” position and turned on prior to sampling.



Photograph 6: Close-up of sample OA-13 placed at western portion of site.



Technical Report

prepared for:

PVE, LLC.
48 Springside Avenue
Poughkeepsie NY, 12603
Attention: Conor Tarbell

Report Date: 01/30/2018
Client Project ID: 560537
York Project (SDG) No.: 18A0686

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE
www.YORKLAB.com

STRATFORD, CT 06615
(203) 325-1371

132-02 89th AVENUE
FAX (203) 357-0166

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 01/30/2018
Client Project ID: 560537
York Project (SDG) No.: 18A0686

PVE, LLC.
48 Springside Avenue
Poughkeepsie NY, 12603
Attention: Conor Tarbell

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on January 23, 2018 and listed below. The project was identified as your project: **560537**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
18A0686-01	SSDS-W 20180119	Vapor Extraction	01/19/2018	01/23/2018
18A0686-02	SSDS-E 20180119	Vapor Extraction	01/19/2018	01/23/2018
18A0686-03	OA-13 20180119	Outdoor Ambient Ai	01/19/2018	01/23/2018

General Notes for York Project (SDG) No.: 18A0686

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By:



Benjamin Gulizia
Laboratory Director

Date: 01/30/2018





Sample Information

Client Sample ID: SSDS-W 20180119

York Sample ID: 18A0686-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18A0686

560537

Vapor Extraction

January 19, 2018 3:00 pm

01/23/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m ³	2.4	3.555	EPA TO-15 Certifications:	01/30/2018 01:37	01/30/2018 01:37	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	1.9	3.555	EPA TO-15 Certifications:	01/30/2018 01:37	01/30/2018 01:37	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	2.4	3.555	EPA TO-15 Certifications:	01/30/2018 01:37	01/30/2018 01:37	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	2.7	3.555	EPA TO-15 Certifications:	01/30/2018 01:37	01/30/2018 01:37	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	1.9	3.555	EPA TO-15 Certifications:	01/30/2018 01:37	01/30/2018 01:37	LDS
75-34-3	1,1-Dichloroethane	ND		ug/m ³	1.4	3.555	EPA TO-15 Certifications:	01/30/2018 01:37	01/30/2018 01:37	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.35	3.555	EPA TO-15 Certifications:	01/30/2018 01:37	01/30/2018 01:37	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	2.6	3.555	EPA TO-15 Certifications:	01/30/2018 01:37	01/30/2018 01:37	LDS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m ³	1.7	3.555	EPA TO-15 Certifications:	01/30/2018 01:37	01/30/2018 01:37	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m ³	2.7	3.555	EPA TO-15 Certifications:	01/30/2018 01:37	01/30/2018 01:37	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	2.1	3.555	EPA TO-15 Certifications:	01/30/2018 01:37	01/30/2018 01:37	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m ³	1.4	3.555	EPA TO-15 Certifications:	01/30/2018 01:37	01/30/2018 01:37	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m ³	1.6	3.555	EPA TO-15 Certifications:	01/30/2018 01:37	01/30/2018 01:37	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	2.5	3.555	EPA TO-15 Certifications:	01/30/2018 01:37	01/30/2018 01:37	LDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	1.7	3.555	EPA TO-15 Certifications:	01/30/2018 01:37	01/30/2018 01:37	LDS
106-99-0	1,3-Butadiene	ND		ug/m ³	2.4	3.555	EPA TO-15 Certifications:	01/30/2018 01:37	01/30/2018 01:37	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	2.1	3.555	EPA TO-15 Certifications:	01/30/2018 01:37	01/30/2018 01:37	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	1.6	3.555	EPA TO-15 Certifications:	01/30/2018 01:37	01/30/2018 01:37	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	2.1	3.555	EPA TO-15 Certifications:	01/30/2018 01:37	01/30/2018 01:37	LDS
123-91-1	1,4-Dioxane	ND		ug/m ³	2.6	3.555	EPA TO-15 Certifications:	01/30/2018 01:37	01/30/2018 01:37	LDS



Sample Information

Client Sample ID: SSDS-W 20180119

York Sample ID: 18A0686-01

York Project (SDG) No.

18A0686

Client Project ID

560537

Matrix

Vapor Extraction

Collection Date/Time

January 19, 2018 3:00 pm

Date Received

01/23/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
78-93-3	2-Butanone	ND		ug/m ³	1.0	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
591-78-6	* 2-Hexanone	ND		ug/m ³	2.9	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
107-05-1	3-Chloropropene	ND		ug/m ³	5.6	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	1.5	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
67-64-1	Acetone	43		ug/m ³	1.7	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
107-13-1	Acrylonitrile	ND		ug/m ³	0.77	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
71-43-2	Benzene	ND		ug/m ³	1.1	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
100-44-7	Benzyl chloride	ND		ug/m ³	1.8	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
75-27-4	Bromodichloromethane	ND		ug/m ³	2.4	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
75-25-2	Bromoform	ND		ug/m ³	3.7	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
74-83-9	Bromomethane	ND		ug/m ³	1.4	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
75-15-0	Carbon disulfide	ND		ug/m ³	1.1	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
56-23-5	Carbon tetrachloride	ND		ug/m ³	0.56	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
108-90-7	Chlorobenzene	ND		ug/m ³	1.6	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
75-00-3	Chloroethane	ND		ug/m ³	0.94	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
67-66-3	Chloroform	ND		ug/m ³	1.7	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
74-87-3	Chloromethane	ND		ug/m ³	0.73	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.35	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	1.6	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
110-82-7	Cyclohexane	ND		ug/m ³	1.2	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
124-48-1	Dibromochloromethane	ND		ug/m ³	3.0	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS



Sample Information

Client Sample ID: SSDS-W 20180119

York Sample ID: 18A0686-01

York Project (SDG) No.

18A0686

Client Project ID

560537

Matrix

Vapor Extraction

Collection Date/Time

January 19, 2018 3:00 pm

Date Received

01/23/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/m ³	1.8	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
141-78-6	* Ethyl acetate	ND		ug/m ³	2.6	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
100-41-4	Ethyl Benzene	ND		ug/m ³	1.5	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
87-68-3	Hexachlorobutadiene	ND		ug/m ³	3.8	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
67-63-0	Isopropanol	ND		ug/m ³	1.7	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
80-62-6	Methyl Methacrylate	ND		ug/m ³	1.5	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	1.3	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
75-09-2	Methylene chloride	ND		ug/m ³	2.5	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
142-82-5	n-Heptane	ND		ug/m ³	1.5	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
110-54-3	n-Hexane	ND		ug/m ³	1.3	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
95-47-6	o-Xylene	ND		ug/m ³	1.5	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
179601-23-1	p- & m- Xylenes	ND		ug/m ³	3.1	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
622-96-8	* p-Ethyltoluene	ND		ug/m ³	1.7	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
115-07-1	* Propylene	0.73		ug/m ³	0.61	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
100-42-5	Styrene	ND		ug/m ³	1.5	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
127-18-4	Tetrachloroethylene	ND		ug/m ³	0.60	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
109-99-9	* Tetrahydrofuran	ND		ug/m ³	2.1	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
108-88-3	Toluene	1.6		ug/m ³	1.3	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	1.4	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	1.6	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
79-01-6	Trichloroethylene	ND		ug/m ³	0.48	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m ³	2.0	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS



Sample Information

Client Sample ID: SSDS-W 20180119

York Sample ID: 18A0686-01

York Project (SDG) No.

18A0686

Client Project ID

560537

Matrix

Vapor Extraction

Collection Date/Time

January 19, 2018 3:00 pm

Date Received

01/23/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-05-4	Vinyl acetate	ND		ug/m ³	1.3	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
593-60-2	Vinyl bromide	ND		ug/m ³	1.6	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
75-01-4	Vinyl Chloride	ND		ug/m ³	0.23	3.555	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 01:37	01/30/2018 01:37	LDS
Surrogate Recoveries		Result		Acceptance Range						
460-00-4	Surrogate: p-Bromofluorobenzene	92.0 %		70-130						

Sample Information

Client Sample ID: SSDS-E 20180119

York Sample ID: 18A0686-02

York Project (SDG) No.

18A0686

Client Project ID

560537

Matrix

Vapor Extraction

Collection Date/Time

January 19, 2018 3:00 pm

Date Received

01/23/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m ³	0.92	1.34	EPA TO-15 Certifications:	01/30/2018 02:32	01/30/2018 02:32	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.73	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.92	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	1.0	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.73	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.54	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.13	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.99	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
95-63-6	1,2,4-Trimethylbenzene	1.5		ug/m ³	0.66	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m ³	1.0	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.81	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS



Sample Information

Client Sample ID: SSDS-E 20180119

York Sample ID: 18A0686-02

York Project (SDG) No.

18A0686

Client Project ID

560537

Matrix

Vapor Extraction

Collection Date/Time

January 19, 2018 3:00 pm

Date Received

01/23/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.54	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.62	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.94	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.66	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
106-99-0	1,3-Butadiene	ND		ug/m ³	0.89	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.81	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.62	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.81	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
123-91-1	1,4-Dioxane	ND		ug/m ³	0.97	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
78-93-3	2-Butanone	4.5		ug/m ³	0.40	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
591-78-6	* 2-Hexanone	ND		ug/m ³	1.1	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
107-05-1	3-Chloropropene	ND		ug/m ³	2.1	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.55	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
67-64-1	Acetone	26		ug/m ³	0.64	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
107-13-1	Acrylonitrile	ND		ug/m ³	0.29	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
71-43-2	Benzene	1.6		ug/m ³	0.43	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
100-44-7	Benzyl chloride	ND		ug/m ³	0.69	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
75-27-4	Bromodichloromethane	ND		ug/m ³	0.90	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
75-25-2	Bromoform	ND		ug/m ³	1.4	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
74-83-9	Bromomethane	ND		ug/m ³	0.52	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
75-15-0	Carbon disulfide	ND		ug/m ³	0.42	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
56-23-5	Carbon tetrachloride	0.42		ug/m ³	0.21	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS



Sample Information

Client Sample ID: SSDS-E 20180119

York Sample ID: 18A0686-02

York Project (SDG) No.

18A0686

Client Project ID

560537

Matrix

Vapor Extraction

Collection Date/Time

January 19, 2018 3:00 pm

Date Received

01/23/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-90-7	Chlorobenzene	ND		ug/m ³	0.62	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
75-00-3	Chloroethane	ND		ug/m ³	0.35	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
67-66-3	Chloroform	ND		ug/m ³	0.65	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
74-87-3	Chloromethane	0.69		ug/m ³	0.28	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.13	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.61	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
110-82-7	Cyclohexane	0.74		ug/m ³	0.46	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
124-48-1	Dibromochloromethane	ND		ug/m ³	1.1	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
75-71-8	Dichlorodifluoromethane	3.0		ug/m ³	0.66	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
141-78-6	* Ethyl acetate	ND		ug/m ³	0.97	1.34	EPA TO-15 Certifications:	01/30/2018 02:32	01/30/2018 02:32	LDS
100-41-4	Ethyl Benzene	1.7		ug/m ³	0.58	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
87-68-3	Hexachlorobutadiene	ND		ug/m ³	1.4	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
67-63-0	Isopropanol	1.4		ug/m ³	0.66	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.55	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.48	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
75-09-2	Methylene chloride	ND		ug/m ³	0.93	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
142-82-5	n-Heptane	1.4		ug/m ³	0.55	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
110-54-3	n-Hexane	1.4		ug/m ³	0.47	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
95-47-6	o-Xylene	2.0		ug/m ³	0.58	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
179601-23-1	p- & m- Xylenes	5.4		ug/m ³	1.2	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
622-96-8	* p-Ethyltoluene	1.6		ug/m ³	0.66	1.34	EPA TO-15 Certifications:	01/30/2018 02:32	01/30/2018 02:32	LDS
115-07-1	* Propylene	1.7		ug/m ³	0.23	1.34	EPA TO-15 Certifications:	01/30/2018 02:32	01/30/2018 02:32	LDS



Sample Information

Client Sample ID: SSDS-E 20180119

York Sample ID: 18A0686-02

York Project (SDG) No.

18A0686

Client Project ID

560537

Matrix

Vapor Extraction

Collection Date/Time

January 19, 2018 3:00 pm

Date Received

01/23/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-42-5	Styrene	ND		ug/m ³	0.57	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
127-18-4	Tetrachloroethylene	1.2		ug/m ³	0.23	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
109-99-9	* Tetrahydrofuran	7.9		ug/m ³	0.79	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
108-88-3	Toluene	7.5		ug/m ³	0.50	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.53	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.61	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
79-01-6	Trichloroethylene	0.43		ug/m ³	0.18	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
75-69-4	Trichlorofluoromethane (Freon 11)	1.4		ug/m ³	0.75	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
108-05-4	Vinyl acetate	ND		ug/m ³	0.47	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
593-60-2	Vinyl bromide	ND		ug/m ³	0.59	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
75-01-4	Vinyl Chloride	ND		ug/m ³	0.086	1.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 02:32	01/30/2018 02:32	LDS
Surrogate Recoveries		Result	Acceptance Range							
460-00-4	Surrogate: p-Bromofluorobenzene	97.4 %	70-130							

Sample Information

Client Sample ID: OA-13 20180119

York Sample ID: 18A0686-03

York Project (SDG) No.

18A0686

Client Project ID

560537

Matrix

Outdoor Ambient Air

Collection Date/Time

January 19, 2018 3:00 pm

Date Received

01/23/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m ³	1.1	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.90	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.1	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS



Sample Information

Client Sample ID: OA-13 20180119

York Sample ID: 18A0686-03

York Project (SDG) No.

18A0686

Client Project ID

560537

Matrix

Outdoor Ambient Air

Collection Date/Time

January 19, 2018 3:00 pm

Date Received

01/23/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	1.3	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.90	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.67	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.16	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	1.2	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m ³	0.81	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m ³	1.3	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.99	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.67	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.76	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	1.2	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.81	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
106-99-0	1,3-Butadiene	ND		ug/m ³	1.1	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.99	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.76	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.99	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
123-91-1	1,4-Dioxane	ND		ug/m ³	1.2	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
78-93-3	2-Butanone	1.1		ug/m ³	0.49	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
591-78-6	* 2-Hexanone	ND		ug/m ³	1.4	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
107-05-1	3-Chloropropene	ND		ug/m ³	2.6	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.68	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
67-64-1	Acetone	5.5		ug/m ³	0.79	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS



Sample Information

Client Sample ID: OA-13 20180119

York Sample ID: 18A0686-03

York Project (SDG) No.

18A0686

Client Project ID

560537

Matrix

Outdoor Ambient Air

Collection Date/Time

January 19, 2018 3:00 pm

Date Received

01/23/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-13-1	Acrylonitrile	ND		ug/m ³	0.36	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
71-43-2	Benzene	1.0		ug/m ³	0.53	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
100-44-7	Benzyl chloride	ND		ug/m ³	0.86	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
75-27-4	Bromodichloromethane	ND		ug/m ³	1.1	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
75-25-2	Bromoform	ND		ug/m ³	1.7	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
74-83-9	Bromomethane	ND		ug/m ³	0.64	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
75-15-0	Carbon disulfide	ND		ug/m ³	0.52	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
56-23-5	Carbon tetrachloride	0.42		ug/m ³	0.26	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
108-90-7	Chlorobenzene	ND		ug/m ³	0.76	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
75-00-3	Chloroethane	ND		ug/m ³	0.44	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
67-66-3	Chloroform	ND		ug/m ³	0.81	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
74-87-3	Chloromethane	0.72		ug/m ³	0.34	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.16	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.75	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
110-82-7	Cyclohexane	ND		ug/m ³	0.57	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
124-48-1	Dibromochloromethane	ND		ug/m ³	1.4	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
75-71-8	Dichlorodifluoromethane	2.9		ug/m ³	0.82	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
141-78-6	* Ethyl acetate	ND		ug/m ³	1.2	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
100-41-4	Ethyl Benzene	ND		ug/m ³	0.72	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
87-68-3	Hexachlorobutadiene	ND		ug/m ³	1.8	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
67-63-0	Isopropanol	ND		ug/m ³	0.81	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.68	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS



Sample Information

Client Sample ID: OA-13 20180119

York Sample ID: 18A0686-03

York Project (SDG) No.

18A0686

Client Project ID

560537

Matrix

Outdoor Ambient Air

Collection Date/Time

January 19, 2018 3:00 pm

Date Received

01/23/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.60	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
75-09-2	Methylene chloride	ND		ug/m ³	1.1	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
142-82-5	n-Heptane	ND		ug/m ³	0.68	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
110-54-3	n-Hexane	ND		ug/m ³	0.58	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
95-47-6	o-Xylene	ND		ug/m ³	0.72	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
179601-23-1	p- & m- Xylenes	ND		ug/m ³	1.4	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
622-96-8	* p-Ethyltoluene	ND		ug/m ³	0.81	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
115-07-1	* Propylene	2.5		ug/m ³	0.28	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
100-42-5	Styrene	ND		ug/m ³	0.70	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
127-18-4	Tetrachloroethylene	ND		ug/m ³	0.28	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
109-99-9	* Tetrahydrofuran	ND		ug/m ³	0.98	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
108-88-3	Toluene	0.81		ug/m ³	0.62	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.66	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.75	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
79-01-6	Trichloroethylene	ND		ug/m ³	0.22	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
75-69-4	Trichlorofluoromethane (Freon 11)	1.5		ug/m ³	0.93	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
108-05-4	Vinyl acetate	ND		ug/m ³	0.58	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
593-60-2	Vinyl bromide	ND		ug/m ³	0.72	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
75-01-4	Vinyl Chloride	ND		ug/m ³	0.11	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/30/2018 03:26	01/30/2018 03:26	LDS
Surrogate Recoveries		Result	Acceptance Range							
460-00-4	Surrogate: p-Bromofluorobenzene	95.6 %	70-130							





Sample and Data Qualifiers Relating to This Work Order

QL-03 This LCS analyte recovered outside of acceptance limits. The LCS contains approximately 70 compounds, a limited number of which may be outside acceptance windows.

CCV-A The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>30% Difference for average Rf). This applies to detected analytes only.

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.



For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.



YORK
ANALYTICAL CONSULTING INC.

Field Chain-of-Custody Record - AIR

Page 1 of 1

NOTE: York's Std. Terms & Conditions are listed on the back side of this document. This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions unless superseded by written contract.

York Project No. 18A0686

YOUR INFORMATION Company: <u>PVE, LLC</u> Address: <u>48 Springdale Avenue</u> <u>Poughkeepsie, NY 12603</u> Phone No. <u>845-454-2544</u> Contact Person: <u>Cesar Tarbell</u> E-Mail Address: <u>ctarbell@pve-llc.com</u>		Report To: Company: _____ Address: _____ Phone No. _____ Attention: _____ E-Mail Address: _____		Invoice To: Company: _____ Address: _____ Phone No. _____ Attention: <u>Tara Alvarado</u> E-Mail Address: <u>talvarado@pve-llc.com</u>		YOUR PROJECT ID <u>560537</u> Purchase Order No. _____ Samples from: CT _____ NY <u>X</u> NJ _____		Turn-Around Time RUSH - Same Day ☐ RUSH - Next Day ☐ RUSH - Two Day ☐ RUSH - Three Day ☐ RUSH - Four Day ☐ Standard (5-7 Days) ☒		Report Type/Deliverables Summary Report ☒ Summary w/ QA Summary ☐ CT RCP Package ☐ NY ASP A Package ☐ NY ASP B/CLP Pkg ☐ NJDEP Reduced ☐ Electronic Deliverables: <u>NYSPEC</u> EDD (Specify Type) <u>EQ&IS</u> Standard Excel ☐ Regulatory Comparison Excel ☐	
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Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.

Air Matrix Codes

AI -	INDOOR Ambient Air
AO -	OUTDOOR Amb. Air
AE -	Vapor Extraction Well/
AS -	Process Gas/Effluent
	SOIL Vapor/Sub-Slab

Samples Collected/Authorized By (Signature)
Benjamin Wolf
 Name (printed)
Benjamin Wolf

Additional Notes:

Detection Limits Required ☒

≤ 1 ug/m³ _____

NYSDC VI Limits (VI = vapor intrusion) _____

NJDEP low level _____

Routine Survey _____

Other _____

Please enter the following Field Data

Canister Vacuum Before Sampling (in. Hg)	Canister Vacuum After Sampling (in. Hg)	Canister ID	Flow Cont. ID
20	19	Y50	Y34
25	4	Y48	Y9
30	9	Y66	Y7

Sample Identification	Date Sampled	AIR Matrix	Canister Vacuum Before Sampling (in. Hg)	Canister Vacuum After Sampling (in. Hg)	Canister ID	Flow Cont. ID	ANALYSES REQUESTED	Sampling Media
SSDS-W 20180119	01/19/18	AE	20	19	Y50	Y34	TO-15	6 Liter canister Tedlar Bag ☒
SSDS-E 20180119	↓	AE	25	4	Y48	Y9	↓	6 Liter canister Tedlar Bag ☒
OA-13 20180119	↓	AO	30	9	Y66	Y7	↓	6 Liter canister Tedlar Bag ☒
								6 Liter canister Tedlar Bag ☐
								6 Liter canister Tedlar Bag ☐
								6 Liter canister Tedlar Bag ☐
								6 Liter canister Tedlar Bag ☐
								6 Liter canister Tedlar Bag ☐
								6 Liter canister Tedlar Bag ☐
								6 Liter canister Tedlar Bag ☐
								6 Liter canister Tedlar Bag ☐

Comments

Benjamin Wolf 1/22/18/1229
 Samples Relinquished By _____ Date/Time _____
Benjamin Wolf 1/23/18 84044
 Samples Relinquished By _____ Date/Time _____

Quilc 1-22-18 12:30
 Samples Received By _____ Date/Time _____
Benjamin Wolf 1-23-18 84044
 Samples Received in LAB by _____ Date/Time _____

Centek Laboratories, LLC

Date: 16-Mar-18

CLIENT:	PVE, LLC	Client Sample ID:	SSDS-W 20180306
Lab Order:	C1803029	Tag Number:	1905.01567
Project:	Apple Valley Shopping Center	Collection Date:	3/6/2018
Lab ID:	C1803029-001A	Matrix:	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	3/13/2018 1:58:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	3/13/2018 1:58:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	3/13/2018 1:58:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	3/13/2018 1:58:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	3/13/2018 1:58:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	3/13/2018 1:58:00 AM
1,2,4-Trimethylbenzene	28	29	J	ug/m3	40	3/13/2018 4:31:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	3/13/2018 1:58:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	3/13/2018 1:58:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	3/13/2018 1:58:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	3/13/2018 1:58:00 AM
1,3,5-Trimethylbenzene	5.6	0.74		ug/m3	1	3/13/2018 1:58:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	3/13/2018 1:58:00 AM
1,3-Dichlorobenzene	4.8	0.90		ug/m3	1	3/13/2018 1:58:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	3/13/2018 1:58:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	3/13/2018 1:58:00 AM
2,2,4-trimethylpentane	24	28	J	ug/m3	40	3/13/2018 4:31:00 AM
4-ethyltoluene	5.3	0.74		ug/m3	1	3/13/2018 1:58:00 AM
Acetone	5000	570		ug/m3	810	3/13/2018 8:19:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	3/13/2018 1:58:00 AM
Benzene	5.9	0.48		ug/m3	1	3/13/2018 1:58:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	3/13/2018 1:58:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	3/13/2018 1:58:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	3/13/2018 1:58:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	3/13/2018 1:58:00 AM
Carbon disulfide	0.40	0.47	J	ug/m3	1	3/13/2018 1:58:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	3/13/2018 1:58:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	3/13/2018 1:58:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	3/13/2018 1:58:00 AM
Chloroform	0.54	0.73	J	ug/m3	1	3/13/2018 1:58:00 AM
Chloromethane	1.3	0.31		ug/m3	1	3/13/2018 1:58:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/13/2018 1:58:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	3/13/2018 1:58:00 AM
Cyclohexane	6.8	0.52		ug/m3	1	3/13/2018 1:58:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	3/13/2018 1:58:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	3/13/2018 1:58:00 AM
Ethylbenzene	21	26	J	ug/m3	40	3/13/2018 4:31:00 AM
Freon 11	1.4	0.84		ug/m3	1	3/13/2018 1:58:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	3/13/2018 1:58:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	3/13/2018 1:58:00 AM

Qualifiers:	**	Quantitation Limit	.	Results reported are not blank corrected
	B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC**Date:** 16-Mar-18

CLIENT: PVE, LLC
Lab Order: C1803029
Project: Apple Valley Shopping Center
Lab ID: C1803029-001A

Client Sample ID: SSDS-W 20180306
Tag Number: 1905.01567
Collection Date: 3/6/2018
Matrix: AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	2.2	0.74		ug/m3	1	3/13/2018 1:58:00 AM
Heptane	26	25		ug/m3	40	3/13/2018 4:31:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	3/13/2018 1:58:00 AM
Hexane	24	21		ug/m3	40	3/13/2018 4:31:00 AM
Isopropyl alcohol	53	15		ug/m3	40	3/13/2018 4:31:00 AM
m&p-Xylene	52	52		ug/m3	40	3/13/2018 4:31:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	3/13/2018 1:58:00 AM
Methyl Ethyl Ketone	35	35		ug/m3	40	3/13/2018 4:31:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	3/13/2018 1:58:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	3/13/2018 1:58:00 AM
Methylene chloride	1.4	0.52		ug/m3	1	3/13/2018 1:58:00 AM
o-Xylene	23	26	J	ug/m3	40	3/13/2018 4:31:00 AM
Propylene	< 0.26	0.26		ug/m3	1	3/13/2018 1:58:00 AM
Styrene	< 0.64	0.64		ug/m3	1	3/13/2018 1:58:00 AM
Tetrachloroethylene	6.3	1.0		ug/m3	1	3/13/2018 1:58:00 AM
Tetrahydrofuran	71	18		ug/m3	40	3/13/2018 4:31:00 AM
Toluene	89	23		ug/m3	40	3/13/2018 4:31:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/13/2018 1:58:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	3/13/2018 1:58:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	3/13/2018 1:58:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	3/13/2018 1:58:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	3/13/2018 1:58:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	3/13/2018 1:58:00 AM

Qualifiers:	**	Quantitation Limit	.	Results reported are not blank corrected
	B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: 16-Mar-18

CLIENT:	PVE, LLC	Client Sample ID:	SSDS-E 20180306
Lab Order:	C1803029	Tag Number:	1912.01564
Project:	Apple Valley Shopping Center	Collection Date:	3/6/2018
Lab ID:	C1803029-002A	Matrix:	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	3/13/2018 2:39:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	3/13/2018 2:39:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	3/13/2018 2:39:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	3/13/2018 2:39:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	3/13/2018 2:39:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	3/13/2018 2:39:00 AM
1,2,4-Trimethylbenzene	18	15		ug/m3	20	3/13/2018 5:08:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	3/13/2018 2:39:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	3/13/2018 2:39:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	3/13/2018 2:39:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	3/13/2018 2:39:00 AM
1,3,5-Trimethylbenzene	7.0	0.74		ug/m3	1	3/13/2018 2:39:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	3/13/2018 2:39:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	3/13/2018 2:39:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	3/13/2018 2:39:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	3/13/2018 2:39:00 AM
2,2,4-trimethylpentane	7.6	0.70		ug/m3	1	3/13/2018 2:39:00 AM
4-ethyltoluene	7.9	0.74		ug/m3	1	3/13/2018 2:39:00 AM
Acetone	1200	190		ug/m3	270	3/13/2018 8:55:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	3/13/2018 2:39:00 AM
Benzene	4.0	0.48		ug/m3	1	3/13/2018 2:39:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	3/13/2018 2:39:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	3/13/2018 2:39:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	3/13/2018 2:39:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	3/13/2018 2:39:00 AM
Carbon disulfide	< 0.47	0.47		ug/m3	1	3/13/2018 2:39:00 AM
Carbon tetrachloride	0.82	0.94	J	ug/m3	1	3/13/2018 2:39:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	3/13/2018 2:39:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	3/13/2018 2:39:00 AM
Chloroform	0.59	0.73	J	ug/m3	1	3/13/2018 2:39:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	3/13/2018 2:39:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/13/2018 2:39:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	3/13/2018 2:39:00 AM
Cyclohexane	3.3	0.52		ug/m3	1	3/13/2018 2:39:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	3/13/2018 2:39:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	3/13/2018 2:39:00 AM
Ethylbenzene	11	13	J	ug/m3	20	3/13/2018 5:08:00 AM
Freon 11	1.6	0.84		ug/m3	1	3/13/2018 2:39:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	3/13/2018 2:39:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	3/13/2018 2:39:00 AM

Qualifiers:	**	Quantitation Limit	.	Results reported are not blank corrected
	B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: 16-Mar-18

CLIENT:	PVE, LLC	Client Sample ID:	SSDS-E 20180306
Lab Order:	C1803029	Tag Number:	1912.01564
Project:	Apple Valley Shopping Center	Collection Date:	3/6/2018
Lab ID:	C1803029-002A	Matrix:	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15			TO-15		Analyst: RJP	
Freon 12	3.3	0.74		ug/m3	1	3/13/2018 2:39:00 AM
Heptane	12	12		ug/m3	20	3/13/2018 5:08:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	3/13/2018 2:39:00 AM
Hexane	6.2	0.53		ug/m3	1	3/13/2018 2:39:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	3/13/2018 2:39:00 AM
m&p-Xylene	33	26		ug/m3	20	3/13/2018 5:08:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	3/13/2018 2:39:00 AM
Methyl Ethyl Ketone	30	18		ug/m3	20	3/13/2018 5:08:00 AM
Methyl Isobutyl Ketone	2.3	1.2		ug/m3	1	3/13/2018 2:39:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	3/13/2018 2:39:00 AM
Methylene chloride	1.7	0.52		ug/m3	1	3/13/2018 2:39:00 AM
o-Xylene	14	13		ug/m3	20	3/13/2018 5:08:00 AM
Propylene	< 0.26	0.26		ug/m3	1	3/13/2018 2:39:00 AM
Styrene	< 0.64	0.64		ug/m3	1	3/13/2018 2:39:00 AM
Tetrachloroethylene	24	20		ug/m3	20	3/13/2018 5:08:00 AM
Tetrahydrofuran	50	8.8		ug/m3	20	3/13/2018 5:08:00 AM
Toluene	32	11		ug/m3	20	3/13/2018 5:08:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/13/2018 2:39:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	3/13/2018 2:39:00 AM
Trichloroethene	1.2	0.81		ug/m3	1	3/13/2018 2:39:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	3/13/2018 2:39:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	3/13/2018 2:39:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	3/13/2018 2:39:00 AM

Qualifiers:	**	Quantitation Limit	.	Results reported are not blank corrected
	B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: 16-Mar-18

CLIENT:	PVE, LLC	Client Sample ID:	OA-13 20180306
Lab Order:	C1803029	Tag Number:	1903.02195
Project:	Apple Valley Shopping Center	Collection Date:	3/6/2018
Lab ID:	C1803029-003A	Matrix:	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	3/13/2018 1:15:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	3/13/2018 1:15:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	3/13/2018 1:15:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	3/13/2018 1:15:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	3/13/2018 1:15:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	3/13/2018 1:15:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	3/13/2018 1:15:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	3/13/2018 1:15:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	3/13/2018 1:15:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	3/13/2018 1:15:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	3/13/2018 1:15:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	3/13/2018 1:15:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	3/13/2018 1:15:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	3/13/2018 1:15:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	3/13/2018 1:15:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	3/13/2018 1:15:00 AM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	3/13/2018 1:15:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	3/13/2018 1:15:00 AM
Acetone	10	0.71		ug/m3	1	3/13/2018 1:15:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	3/13/2018 1:15:00 AM
Benzene	0.77	0.48		ug/m3	1	3/13/2018 1:15:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	3/13/2018 1:15:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	3/13/2018 1:15:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	3/13/2018 1:15:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	3/13/2018 1:15:00 AM
Carbon disulfide	< 0.47	0.47		ug/m3	1	3/13/2018 1:15:00 AM
Carbon tetrachloride	0.82	0.94	J	ug/m3	1	3/13/2018 1:15:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	3/13/2018 1:15:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	3/13/2018 1:15:00 AM
Chloroform	< 0.73	0.73		ug/m3	1	3/13/2018 1:15:00 AM
Chloromethane	1.2	0.31		ug/m3	1	3/13/2018 1:15:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/13/2018 1:15:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	3/13/2018 1:15:00 AM
Cyclohexane	< 0.52	0.52		ug/m3	1	3/13/2018 1:15:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	3/13/2018 1:15:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	3/13/2018 1:15:00 AM
Ethylbenzene	< 0.65	0.65		ug/m3	1	3/13/2018 1:15:00 AM
Freon 11	1.8	0.84		ug/m3	1	3/13/2018 1:15:00 AM
Freon 113	0.92	1.1	J	ug/m3	1	3/13/2018 1:15:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	3/13/2018 1:15:00 AM

Qualifiers:	**	Quantitation Limit	.	Results reported are not blank corrected
	B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

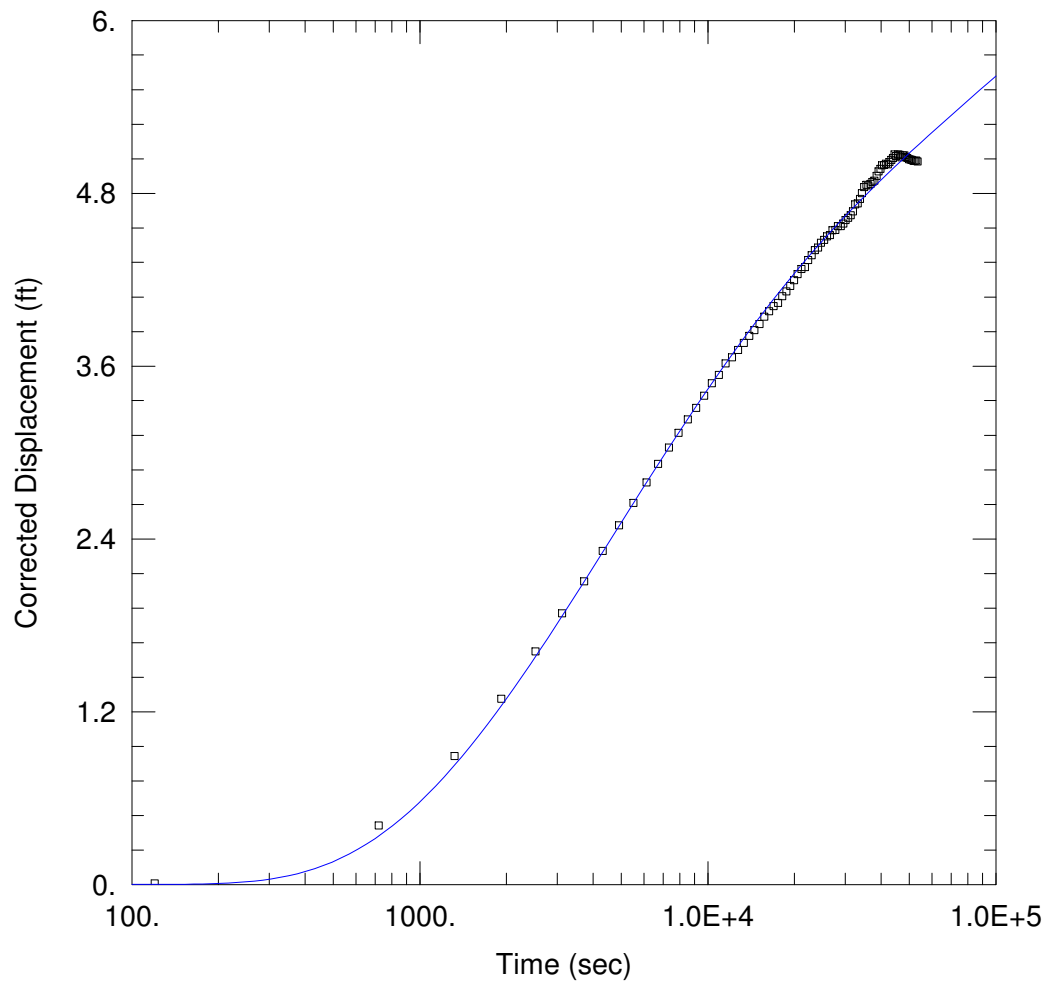
Date: 16-Mar-18

CLIENT:	PVE, LLC	Client Sample ID:	OA-13 20180306
Lab Order:	C1803029	Tag Number:	1903.02195
Project:	Apple Valley Shopping Center	Collection Date:	3/6/2018
Lab ID:	C1803029-003A	Matrix:	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP		
Freon 12	3.4	0.74		ug/m3	1	3/13/2018 1:15:00 AM
Heptane	0.45	0.61	J	ug/m3	1	3/13/2018 1:15:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	3/13/2018 1:15:00 AM
Hexane	0.49	0.53	J	ug/m3	1	3/13/2018 1:15:00 AM
Isopropyl alcohol	0.59	0.37		ug/m3	1	3/13/2018 1:15:00 AM
m&p-Xylene	< 1.3	1.3		ug/m3	1	3/13/2018 1:15:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	3/13/2018 1:15:00 AM
Methyl Ethyl Ketone	0.71	0.88	J	ug/m3	1	3/13/2018 1:15:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	3/13/2018 1:15:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	3/13/2018 1:15:00 AM
Methylene chloride	0.97	0.52		ug/m3	1	3/13/2018 1:15:00 AM
o-Xylene	< 0.65	0.65		ug/m3	1	3/13/2018 1:15:00 AM
Propylene	< 0.26	0.26		ug/m3	1	3/13/2018 1:15:00 AM
Styrene	< 0.64	0.64		ug/m3	1	3/13/2018 1:15:00 AM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	3/13/2018 1:15:00 AM
Tetrahydrofuran	0.74	0.44		ug/m3	1	3/13/2018 1:15:00 AM
Toluene	0.87	0.57		ug/m3	1	3/13/2018 1:15:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/13/2018 1:15:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	3/13/2018 1:15:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	3/13/2018 1:15:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	3/13/2018 1:15:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	3/13/2018 1:15:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	3/13/2018 1:15:00 AM

Qualifiers:	**	Quantitation Limit	.	Results reported are not blank corrected
	B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits		

Appendix E
Aquifer Testing Data



WELL TEST ANALYSIS

Data Set: C:\Users\senglert\Desktop\AVSP AQTESOLV\AVSP MW-2 theis.aqt

Date: 08/24/16

Time: 11:56:44

PROJECT INFORMATION

Company: HDR

Test Well: AV-2

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
AV-2	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
□ MW-2	70	0

SOLUTION

Aquifer Model: Unconfined

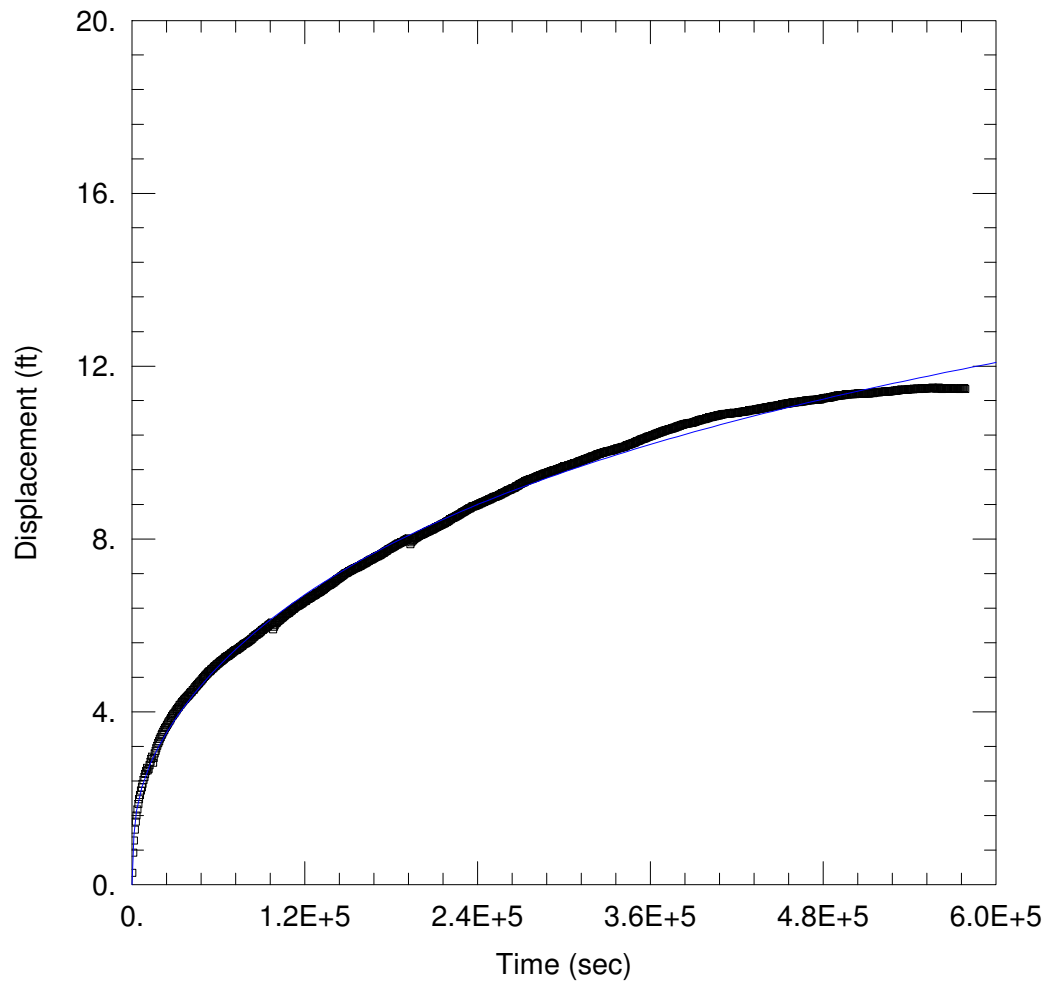
Solution Method: Theis

T = 160.5 ft²/day

S = 0.001219

Kz/Kr = 1.

b = 500. ft



WELL TEST ANALYSIS

Data Set: C:\...\AVSP MW-4B with RW-1 pumping T-N linear axes.aqt
 Date: 08/24/16 Time: 11:52:03

PROJECT INFORMATION

Company: HDR
 Test Well: RW-1

AQUIFER DATA

Saturated Thickness: 500. ft Anisotropy Ratio (Kz/Kr): 478.6

WELL DATA

Pumping Wells			Observation Wells		
Well Name	X (ft)	Y (ft)	Well Name	X (ft)	Y (ft)
RW-1	0	0	□ MW-4B	12	0

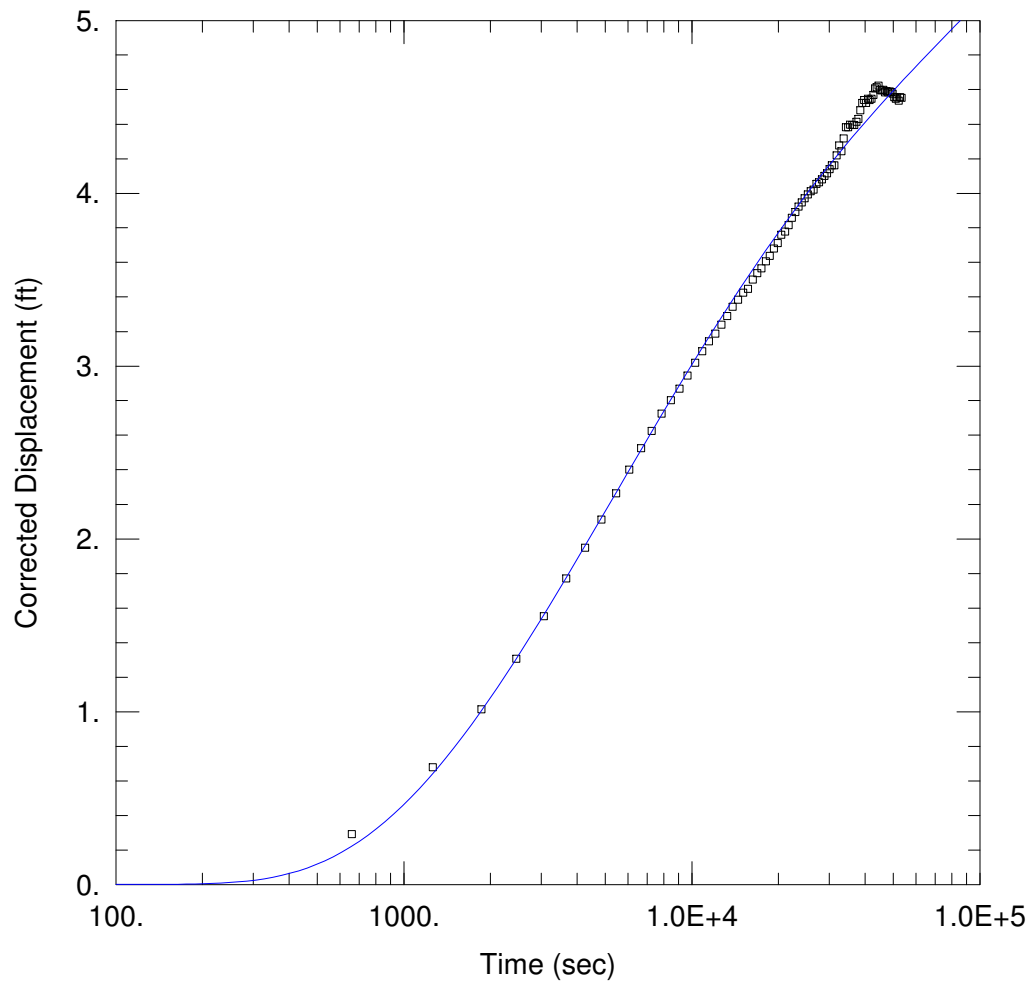
SOLUTION

Aquifer Model: Unconfined

Solution Method: Tartakovsky-Neuman

T = 5.605 ft²/day
 Sy = 0.07293
 kD = 3.674

S = 0.001401
 Kz/Kr = 478.6



WELL TEST ANALYSIS

Data Set: C:\Users\senglert\Desktop\AVSP AQTESOLV\AVSP MW-7 theis.aqt

Date: 08/24/16

Time: 11:57:40

PROJECT INFORMATION

Company: HDR

Test Well: AV-2

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
AV-2	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
□ MW-7	68	0

SOLUTION

Aquifer Model: Unconfined

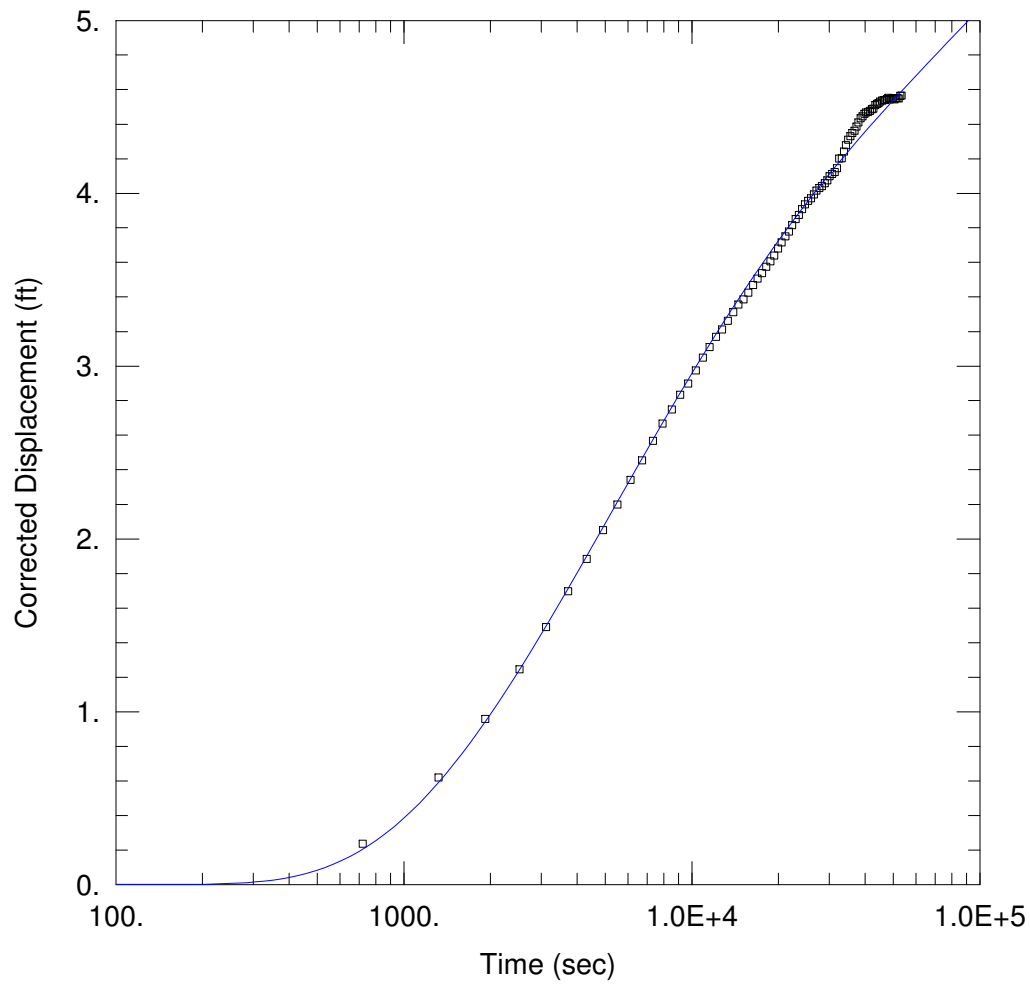
Solution Method: Theis

T = 167. ft²/day

S = 0.001489

Kz/Kr = 1.

b = 500. ft



WELL TEST ANALYSIS

Data Set: C:\Users\senglert\Desktop\AVSP AQTESOLV\AVSP MW-10 theis.aqt
 Date: 08/24/16 Time: 11:57:05

PROJECT INFORMATION

Company: HDR
 Test Well: AV-2

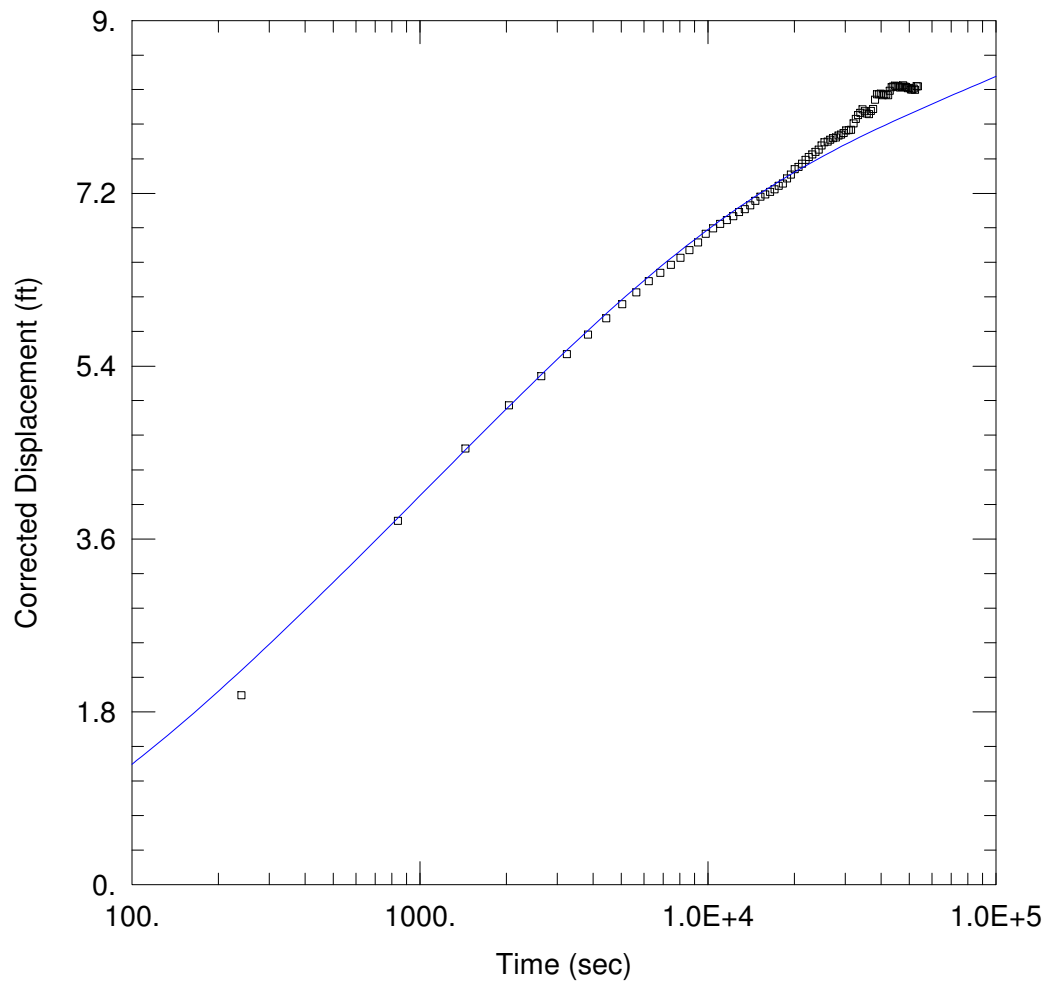
WELL DATA

Pumping Wells			Observation Wells		
Well Name	X (ft)	Y (ft)	Well Name	X (ft)	Y (ft)
AV-2	0	0	□ MW-10	81	0

SOLUTION

Aquifer Model: Unconfined
 $T = 160.5 \text{ ft}^2/\text{day}$
 $Kz/Kr = 1.$

Solution Method: Theis
 $S = 0.001172$
 $b = 500. \text{ ft}$



WELL TEST ANALYSIS

Data Set: C:\Users\senglert\Desktop\AVSP AQTESOLV\AVSP MW-11D theis anisotropic.aqt

Date: 08/24/16

Time: 11:54:51

PROJECT INFORMATION

Company: HDR

Test Well: AV-2

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
AV-2	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
□ MW-11D	63	0

SOLUTION

Aquifer Model: Unconfined

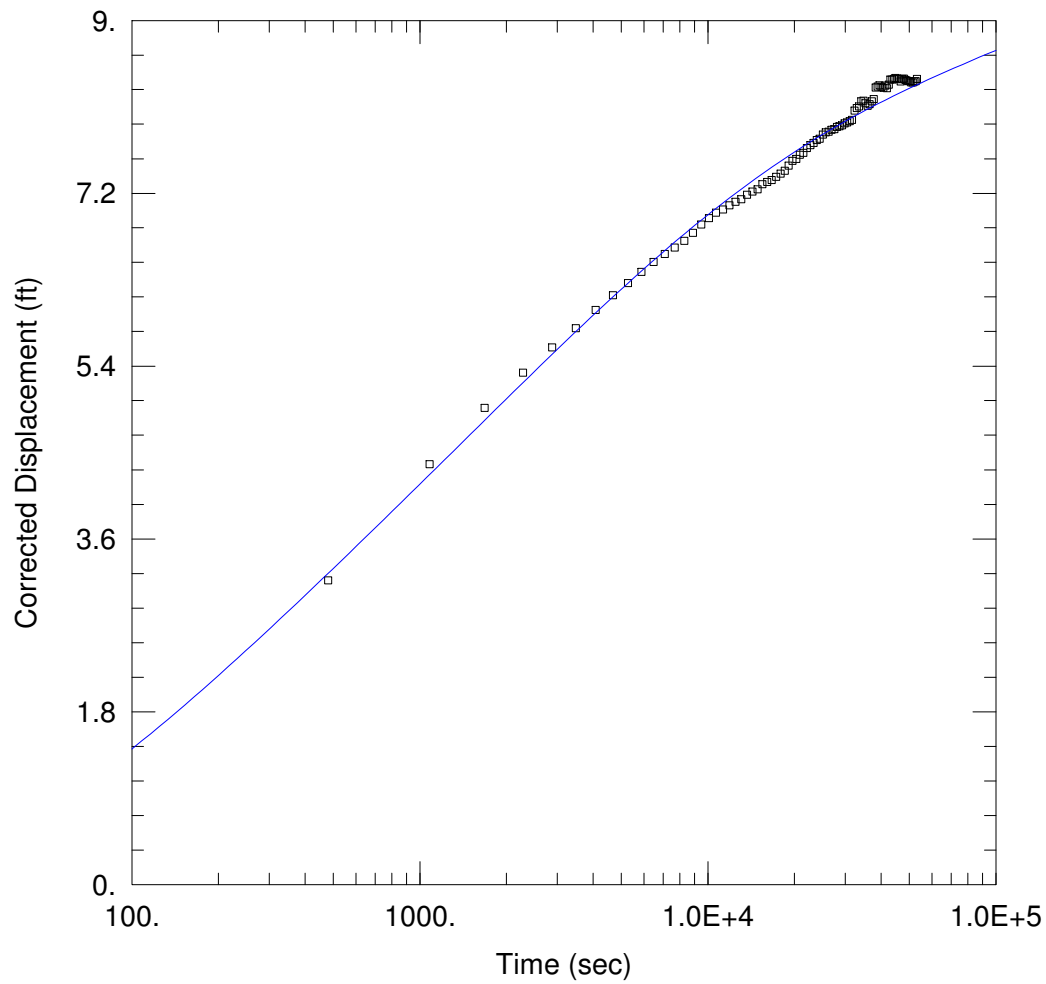
Solution Method: Theis

T = 219.8 ft²/day

S = 7.533E-5

Kz/Kr = 0.05

b = 500. ft



WELL TEST ANALYSIS

Data Set: C:\Users\senglert\Desktop\AVSP AQTESOLV\AVSP MW-12 theis.aqt
 Date: 08/24/16 Time: 16:16:51

PROJECT INFORMATION

Company: HDR
 Test Well: AV-2

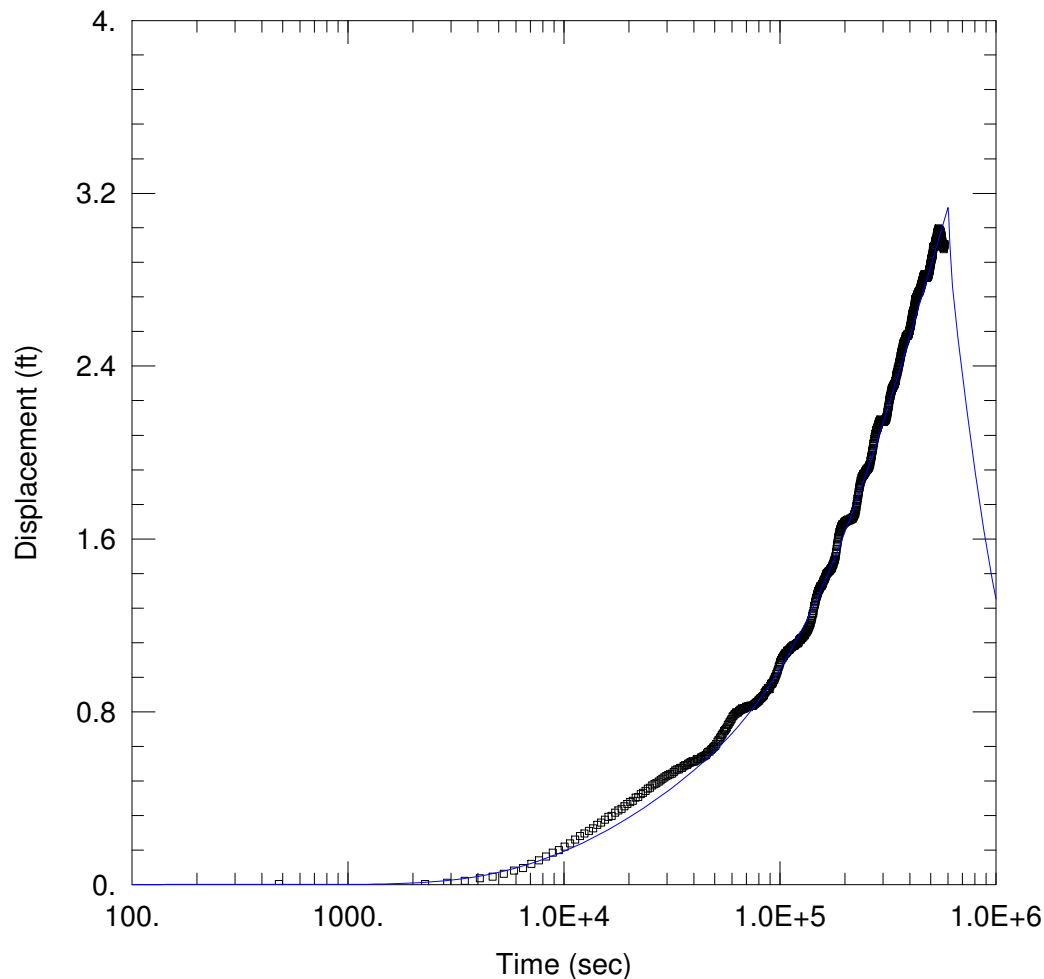
WELL DATA

Pumping Wells			Observation Wells		
Well Name	X (ft)	Y (ft)	Well Name	X (ft)	Y (ft)
AV-2	0	0	□ MW-12	47	0

SOLUTION

Aquifer Model: Unconfined
 $T = 227.6 \text{ ft}^2/\text{day}$
 $Kz/Kr = 0.05$

Solution Method: Theis
 $S = 0.0001145$
 $b = 500. \text{ ft}$



WELL TEST ANALYSIS

Data Set: C:\Users\senglert\Desktop\AVSP AQTESOLV\AVSP MW-13 with RW-1 pumping Moench.aqt
 Date: 08/25/16 Time: 11:34:48

PROJECT INFORMATION

Company: HDR
 Test Well: RW-1

AQUIFER DATA

Saturated Thickness: 500. ft Slab Block Thickness: 1. ft

WELL DATA

Pumping Wells			Observation Wells		
Well Name	X (ft)	Y (ft)	Well Name	X (ft)	Y (ft)
RW-1	0	0	□ MW-13	72	0

SOLUTION

Aquifer Model: Fractured

Solution Method: Moench w/slab blocks

K = 0.08152 ft/day
 K' = 8.923E-6 ft/day
 Sw = 0.
 r(w) = 0.25 ft

Ss = 8.173E-9 ft⁻¹
 Ss' = 6.28E-5 ft⁻¹
 Sf = 0.
 r(c) = 0.25 ft

Apple Valley Wells

Manual DTW Measurements: 11/11/2015

Wells	Casing Elevation	Date	Time	DTW	Groundwater Elev	Easting	Northing	Lat	Long	Comment
MW-11M	353.84	11/11/15	1253	26.19	327.65	672269.92	1033686.14	41.669241	-73.840754	
MW-11D	354.27	11/11/15	1309	28.54	325.73	672271.49	1033689.68	41.669255	-73.840720	
MW-12	347.88	11/11/15	1313	22.25	325.63	672203.46	1033656.29	41.669116	-73.840921	
MW-10	355.12	11/11/15	1327	26.83	328.29	672319.58	1033617.56	41.668961	-73.840461	
MW-09	355.92	11/11/15	1324	26.38	329.54	672318.78	1033544.28	41.668804	-73.840466	
MW-08	356.85	11/11/15	1329*	22.63	334.22	672348.27	1033513.61	41.668690	-73.840317	* not within time
MW-14	356.88	11/11/15	1256	27.13	329.75	672376.97	1033598.15	41.668974	-73.840183	
MW-13	357.17	11/11/15	1250	28.79	328.38	672382.4	1033617.67	41.669006	-73.840169	
MW-6	348.74	11/11/15	1241	11.63	337.11	672150.23	1033706.91	41.669227	-73.841040	
MW-2	357.39	11/11/15	1317	29.32	328.07	672298.2	1033683.3	41.669116	-73.840484	
AV-2	351.98	11/11/15	1420	29.72	322.26	672240.25	1033641.61	41.669046	-73.840713	11/11/15 DTW meter stuck in well
MW-7	356.72	11/11/15	1246	28.18	328.54	672263.32	1033576.59	41.668867	-73.840630	
MW-5	356.60	11/11/15	1337	25.42	331.18	672083.73	1033422.33	41.668447	-73.841292	
MW-3	369.87	11/11/15	1302	36.77	333.10	672386.95	1033453.55	41.668526	-73.840181	
MW-4A	357.68	11/11/15	1404	31.40	326.28	672438.38	1033613.19	41.668963	-73.839988	5/18/15 well dry
MW-4B	357.77	11/11/15	1327	31.49	326.28	672443.12	1033611.61	41.668959	-73.839971	
RW-1	357.62	11/11/15	1415	38.00	319.62	672445.36	1033591.76	41.668905	-73.839963	
RW-2	356	11/11/15	1358	30.79	325.21	672426.69	1033562.7	41.668825	-73.840032	
MW-1	357.72	11/11/15	1344	5.42	352.30	672661.13	1033719.45	41.669250	-73.839170	

: Not Surveyed

Apple Valley Wells

Manual DTW Measurements: 12/7/2015

Wells	Casing Elevation	Date	Time	DTW	Groundwater Elev	Easting	Northing	Lat	Long	Comment
MW-11M	353.84	12/7/15	1307	18.97	334.87	672269.92	1033686.14	41.669241	-73.840754	
MW-11D	354.27	12/7/15	1305	19.78	334.49	672271.49	1033689.68	41.669255	-73.840720	
MW-12	347.88	12/7/15	1255	13.49	334.39	672203.46	1033656.29	41.669116	-73.840921	
MW-10	355.12	12/7/15	1410	18.75	336.37	672319.58	1033617.56	41.668961	-73.840461	
MW-09	355.92	12/7/15	1335	19.62	336.30	672318.78	1033544.28	41.668804	-73.840466	
MW-08	356.85	12/7/15	1333	17.32	339.53	672348.27	1033513.61	41.668690	-73.840317	* not within time
MW-14	356.88	12/7/15	1356	18.83	338.05	672376.97	1033598.15	41.668974	-73.840183	
MW-13	357.17	12/7/15	1400	19.16	338.01	672382.4	1033617.67	41.669006	-73.840169	
MW-6	348.74	12/7/15	1414	19.93	328.81	672150.23	1033706.91	41.669227	-73.841040	
MW-2	357.39	12/7/15	1310	21.25	336.14	672298.2	1033683.3	41.669116	-73.840484	
AV-2	351.98	12/7/15	1426	16.98	335.00	672240.25	1033641.61	41.669046	-73.840713	11/11/15 DTW meter stuck in well
MW-7	356.72	12/7/15	1314	21.06	335.66	672263.32	1033576.59	41.668867	-73.840630	
MW-5	356.60	12/7/15	1342	22.79	333.81	672083.73	1033422.33	41.668447	-73.841292	
MW-3	369.87	12/7/15	1318	30.41	339.46	672386.95	1033453.55	41.668526	-73.840181	
MW-4B	357.77	12/7/15	1406	12.74	345.03	672443.12	1033611.61	41.668959	-73.839971	
RW-1	357.62	12/7/15	1423	12.62	345.00	672445.36	1033591.76	41.668905	-73.839963	
RW-2	356	12/7/15	1420	11.99	344.01	672426.69	1033562.7	41.668825	-73.840032	
MW-1	357.72	12/7/15	1328	2.82	354.90	672661.13	1033719.45	41.669250	-73.839170	

: Not Surveyed

Apple Valley Wells

Manual DTW Measurements: 12/22/2015

Wells	Casing Elevation	Date	Time	DTW	Groundwater Elev	Easting	Northing	Lat	Long	Comment
MW-11M	353.84	12/22/15	1148	24.47	329.37	672269.92	1033686.14	41.669241	-73.840754	
MW-11D	354.27	12/22/15	1146	26.74	327.53	672271.49	1033689.68	41.669255	-73.840720	
MW-12	347.88	12/22/15	1142	20.50	327.38	672203.46	1033656.29	41.669116	-73.840921	
MW-10	355.12	12/22/15	1201	23.58	331.54	672319.58	1033617.56	41.668961	-73.840461	
MW-09	355.92	12/22/15	1205	23.70	332.22	672318.78	1033544.28	41.668804	-73.840466	
MW-08	356.85	12/22/15	1207	18.35	338.50	672348.27	1033513.61	41.668690	-73.840317	
MW-14	356.88	12/22/15	1210	22.58	334.30	672376.97	1033598.15	41.668974	-73.840183	
MW-13	357.17	12/22/15	1213	25.21	331.96	672382.4	1033617.67	41.669006	-73.840169	
MW-6	348.74	12/22/15	1140	12.40	336.34	672150.23	1033706.91	41.669227	-73.841040	
MW-2	357.39	12/22/15	1152	26.05	331.34	672298.2	1033683.3	41.669116	-73.840484	
AV-2	351.98	12/22/15	1153	30.94	321.04	672240.25	1033641.61	41.669046	-73.840713	Not measured 12/22/15
MW-7	356.72	12/22/15	1155	25.34	331.38	672263.32	1033576.59	41.668867	-73.840630	
MW-5	356.60	12/22/15	1110	23.28	333.32	672083.73	1033422.33	41.668447	-73.841292	
MW-3	369.87	12/22/15	1135	31.75	338.12	672386.95	1033453.55	41.668526	-73.840181	
MW-4B	357.77	12/22/15	1217	24.56	333.21	672443.12	1033611.61	41.668959	-73.839971	
RW-1	357.62	12/22/15	1224	30.51	327.11	672445.36	1033591.76	41.668905	-73.839963	
RW-2	356	12/22/15	1220	23.80	332.20	672426.69	1033562.7	41.668825	-73.840032	
MW-1	357.72	12/22/15	1130	3.40	354.32	672661.13	1033719.45	41.669250	-73.839170	

: Not Surveyed



Appendix F

Groundwater Data
Usability Summary Reports

**DATA USABILITY SUMMARY REPORT
APPLE VALLEY RD., LA GRANGE, NEW YORK**

Client: HDR, Inc., Albany, New York
SDG: HDR011
Laboratory: Pace Analytical, Melville, New York
Site: Apple Valley Rd, New York
Date: December 4, 2014

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	AV-2-20140910	1409895-001	Water
2	RW-1-20140910	1409895-002	Water
2DL	RW-1-20140910DL	1409895-002DL	Water
3	RW-2-20140910	1409895-003	Water
3DL	RW-2-20140910DL	1409895-003DL	Water
4	RW-3-20140910	1409895-004	Water
4DL	RW-3-20140910DL	1409895-004DL	Water
5	TB-1	1409895-005	Water
6	FB-1	1409969-001	Water
7	MW-1-20140911	1409969-002	Water
7MS	MW-1-20140911MS	1409969-002MS	Water
7MSD	MW-1-20140911MSD	1409969-002MSD	Water
8	MW-4A-20140911	1409969-003	Water
8DL	MW-4A-20140911DL	1409969-003DL	Water
9	MW-4B-20140911	1409969-004	Water
10	MW-5-20140911	1409969-005	Water
11	MW-54A-20140911	1409969-006	Water
11DL	MW-54A-20140911DL	1409969-006DL	Water
12	TB-2	1409969-007	Water
13	MW-RCI-20140912	1409A41-001	Water
13DL	MW-RCI-20140912DL	1409A41-001DL	Water
14	MW-2-20140912	1409A41-002	Water
14DL	MW-2-20140912DL	1409A41-002DL	Water
15	MW-3-20140912	1409A41-003	Water
16	MW-6-20140912	1409A41-004	Water
17	MW-7-20140912	1409A41-005	Water
18	TB-3	1409A41-006	Water
19	TB-4	1409A41-007	Water

A Data Usability Summary Review was performed on the analytical data for fourteen water samples, one aqueous field blank sample and four aqueous trip blank samples collected on September 5-13, 2014 by HDR, Inc. at the Apple Valley Rd. site in La Grange, New York. The samples were analyzed under Environmental Protection Agency (USEPA) *'Measurement of Purgeable Organic Compounds in Water by Capillary Column Gas Chromatography/Mass Spectrometry'*.

Specific method references are as follows:

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods and the USEPA Region II Data Review Standard Operating Procedures (SOPs) as follows:

- SOP Number HW-34, Revision 3, February 2013: Trace Volatile Data Validation;
- and the reviewer's professional judgment.

The following items/criteria were reviewed:

Organics

- Data Completeness
- Holding times and sample preservation
- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample (LCS) recoveries
- Method blank and field blank contamination
- Gas Chromatography (GC)/Mass Spectroscopy (MS) tuning
- Initial and continuing calibration summaries
- Compound Quantitation
- Internal standard area and retention time summary forms
- Field Duplicate sample precision
- TICs

Overall Usability Issues:

There were minor rejections of data. This data cannot be used in the decision-making process for this project.

- 1,2,3-Trichloropropane and hexachlorobutadiene were rejected in all samples due to low initial calibration RRF values.

Overall the remaining data is acceptable for the intended purposes as qualified for the deficiencies detailed in this report.

- All compounds were qualified as estimated in one sample and three dilution samples due to missed holding times.
- Two compounds were qualified as estimated in one sample due to low MS/MSD recoveries.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedences of QC criteria.

Data Completeness

- The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

Volatile Organic Compounds (VOCs)

Holding Times

- All samples were prepared and analyzed within 7 days for unpreserved water samples and 14 day for preserved water samples with the exception of those listed in the table below.
- All samples were received at an acceptable temperature of $<4\pm 2^{\circ}\text{C}$.

Sample	Date Collected	Date Analyzed	# of Days	Qualifier
2DL	09/10/14	09/18/14	8	J/UJ - Unless (R) due to ICAL
3DL	09/10/14	09/18/14	8	J/UJ - Unless (R) due to ICAL
4DL	09/10/14	09/18/14	8	J/UJ - Unless (R) due to ICAL
15	09/12/14	09/21/14	9	J/UJ - Unless (R) due to ICAL

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate %R values.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The following table presents MS/MSD samples that exhibited percent recoveries (%R) outside the QC limits and/or relative percent differences (RPD) above QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J). Results are valid and usable, however possibly biased.

MS/MSD Sample ID	Compound	MS %R/MSD %R/ RPD	Qualifier
7	Dichlorodifluoromethane	OK/66%/OK	J/UJ
	Trichlorofluoromethane	139%/133%/OK	None - All ND
	Carbon tetrachloride	141%/136%/OK	
	sec-Butyl benzene	133%/OK/OK	
	Hexachlorobutadiene	131%/132%/OK	
	Tetrachloroethene	OK/65%/OK	J/UJ

Laboratory Control Samples

- The following table presents LCS percent recoveries (%R) outside the QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J). Results are valid and usable, however possibly biased.

LCS ID	Compound	%R	Qualifier	Affected Samples
LFB091714	Trichlorofluoromethane	135%	None	All Associated ND
LFB091914	Trichlorofluoromethane	131%	None	All Associated ND
	Methyl tert butyl ether	132%	None	

Method Blank

- The method blanks were free of contamination.

Field Blank

- Field QC samples are summarized below.

Blank ID	Compound	Conc. ug/L	Action Level ug/L	Qualifier	Affected Samples
TB-1	None - ND	-	-	-	-
FB-1	None - ND	-	-	-	-
TB-2	None - ND	-	-	-	-
TB-3	None - ND	-	-	-	-
TB-4	None - ND	-	-	-	-

GC/MS Tuning

- All criteria were met.

Initial Calibration

- The initial calibration exhibited acceptable %RSD and mean RRF values.

ICAL Date	Compound	%RSD/RRF	Qualifier	Affected Samples
08/14/14	1,2,3-Trichloropropane	0.033 RRF	J/R	All Samples
	Hexachlorobutadiene	0.035 RRF	J/R	

Continuing Calibration

- The following table presents compounds that exceeded 30/40 percent deviation (%D) and/or RRF values <0.05/0.01 in the continuing calibration (CCAL). A low RRF indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %D may indicate a potential high or low bias. All results for these compounds in affected samples are considered estimated and qualified (J/UJ).

CCAL Date	Compound	%D/RRF	Qualifier	Affected Samples
09/19/14	Hexachlorobutadiene	58.5%	None	See ICAL

Compound Quantitation

- Several samples exhibited high concentrations of target compounds over the linear range of the instrument and were flagged (E) by the laboratory. These samples were diluted and reanalyzed and the dilution results for these compounds should be used for reporting purposes.

Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

Field Duplicate Sample Precision

- Field duplicate results are summarized below.

Compound	VOC			
	MW-4A-20140911 ug/L	MW-54A-20140911 ug/L	RPD	Qualifier
Vinyl Chloride	0.6	0.6	0%	None
cis-1,2-Dichloroethene	25	23	8%	None
Trichloroethene	27	25	8%	None
Tetrachloroethene	350	350	0%	None

Tentatively Identified Compounds (TICs)

- All “known” TICs were qualified (NJ) and all “unknown” TICs were qualified (J).

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed:

Nancy Weaver

Nancy Weaver
Senior Chemist

Dated: 12/4/14

Data Qualifiers

- J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ = The analyte was not detected above the sample reporting limit; and the reporting limit is approximate.
- U = The analyte was analyzed for, but was not detected above the sample reporting limit.
- R = The sample results is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified.

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AV-2-20140910

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID: 1409895-001A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: S50373.D

Level: (low/med)

LOW

Date Received: 09/11/14

% Moisture: not dec.

Date Analyzed: 09/17/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	1	
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	1	
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	7	
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

MW 12/3/14

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AV-2-20140910

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID: 1409895-001A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: S50373.D

Level: (low/med)

LOW

Date Received: 09/11/14

% Moisture: not dec.

Date Analyzed: 09/17/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	✓ R
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	✓ R
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.8	
	Total Trihalomethanes	0.5	U

MW 12/3/14

2

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW-1-20140910

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478Case No.: HDR-ALBA SAS No.: _____SDG No.: HDR011

Matrix: (soil/water)

WATERLab Sample ID: 1409895-002ASample wt/vol: 5(g/mL) mLLab File ID: S50374.D

Level: (low/med)

LOWDate Received: 09/11/14

% Moisture: not dec.

Date Analyzed: 09/17/14GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: _____

(µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>µg/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	3	
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	7	
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	<u>140</u> ~~150~~	~~U~~ J
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

NW 12/3/14

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW-1-20140910

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409895-002A

Sample wt/vol:

5

(g/mL) mL

Lab File ID:

S50374.D

Level: (low/med)

LOW

Date Received:

09/11/14

% Moisture: not dec.

Date Analyzed:

09/17/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor:

1.00

Soil Extract Volume:

(μ L)

Soil Aliquot Volume

(μ L)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μ g/L or μ g/Kg) μ g/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	~~U~~ R
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	~~U~~ R
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

MW 12/31/14

2DL

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW-1-20140910DL

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409895-002ADL

Sample wt/vol:

5

(g/mL) mL

Lab File ID:

S50408.D

Level: (low/med)

LOW

Date Received:

09/11/14

% Moisture: not dec.

Date Analyzed:

09/18/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor:

2.00

Soil Extract Volume:

(μ L)

Soil Aliquot Volume

(μ L)

Use original results

		CONCENTRATION UNITS:		
CAS NO.	COMPOUND	(μ g/L or μ g/Kg) μ g/L	μ g/L	Q
75-71-8	Dichlorodifluoromethane	1	U	UJ
74-87-3	Chloromethane	1	U	U
75-01-4	Vinyl chloride	1	U	U
74-83-9	Bromomethane	1	U	U
75-00-3	Chloroethane	1	U	U
75-69-4	Trichlorofluoromethane	1	U	U
75-35-4	1,1-Dichloroethene	1	U	U
75-09-2	Methylene chloride	1	D	J
156-60-5	trans-1,2-Dichloroethene	1	U	UJ
75-34-3	1,1-Dichloroethane	1	U	U
594-20-7	2,2-Dichloropropane	1	U	U
156-59-2	cis-1,2-Dichloroethene	3	D	J
74-97-5	Bromochloromethane	1	U	UJ
67-66-3	Chloroform	1	U	U
71-55-6	1,1,1-Trichloroethane	1	U	U
56-23-5	Carbon tetrachloride	1	U	U
563-58-6	1,1-Dichloropropene	1	U	U
107-06-2	1,2-Dichloroethane	1	U	U
71-43-2	Benzene	1	U	U
79-01-6	Trichloroethene	7	D	J
78-87-5	1,2-Dichloropropane	1	U	UJ
74-95-3	Dibromomethane	1	U	U
75-27-4	Bromodichloromethane	1	U	U
10061-01-5	cis-1,3-Dichloropropene	1	U	U
108-88-3	Toluene	1	U	U
10061-02-6	trans-1,3-Dichloropropene	1	U	U
79-00-5	1,1,2-Trichloroethane	1	U	U
127-18-4	Tetrachloroethene	140	D	J
142-28-9	1,3-Dichloropropane	1	U	UJ
124-48-1	Dibromochloromethane	1	U	U
108-90-7	Chlorobenzene	1	U	U
630-20-6	1,1,1,2-Tetrachloroethane	1	U	U
100-41-4	Ethylbenzene	1	U	U
179601-23-1	m,p-Xylene	1	U	U
95-47-6	o-Xylene	1	U	U

W1213114

2DL

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW-1-20140910DL

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478Case No.: HDR-ALBA SAS No.: _____SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409895-002ADLSample wt/vol: 5(g/mL) mL

Lab File ID:

S50408.D

Level: (low/med)

LOW

Date Received:

09/11/14

% Moisture: not dec.

Date Analyzed:

09/18/14GC Column: Rtx-624ID: .18 (mm)

Dilution Factor:

2.00

Soil Extract Volume:

(μL)

Soil Aliquot Volume

(μL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μg/L or μg/Kg) μg/L	Q
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
108-86-1	Bromobenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
96-18-4	1,2,3-Trichloropropane	1	U
103-65-1	n-Propylbenzene	1	U
	2/4-Chlorotoluene	1	U
108-67-8	1,3,5-Trimethylbenzene	1	U
98-06-6	tert-Butylbenzene	1	U
95-63-6	1,2,4-Trimethylbenzene	1	U
135-98-8	sec-Butylbenzene	1	U
104-51-8	n-Butylbenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
99-87-6	4-Isopropyltoluene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
87-68-3	Hexachlorobutadiene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U
1634-04-4	Methyl tert-butyl ether	1	U
	Total Trihalomethanes	1	U

UJ
↓
R
UJ
↓
R
UJ
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Use original results

RW 12/31/14

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW-2-20140910

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409895-003A

Sample wt/vol:

5

(g/mL) mL

Lab File ID:

S50375.D

Level: (low/med)

LOW

Date Received:

09/11/14

% Moisture: not dec.

Date Analyzed:

09/17/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor:

1.00

Soil Extract Volume:

(μ L)

Soil Aliquot Volume

(μ L)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μ g/L or μ g/Kg) μ g/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	1	
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	38	
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	45	
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	2200 ~~1900~~	~~U~~ J
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

W12/3/14

3

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW-2-20140910

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409895-003A

Sample wt/vol:

5

(g/mL) mL

Lab File ID:

S50375.D

Level: (low/med)

LOW

Date Received:

09/11/14

% Moisture: not dec.

Date Analyzed:

09/17/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor:

1.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	✓ R
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	✗ R
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

W12/3/14

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

RW-2-20140910DL

Lab Name: PACE ANALYTICAL

Contract:

Lab Code: 10478

Case No.: HDR-ALBA SAS No.:

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID: 1409895-003ADL

Sample wt/vol: 5

(g/mL) mL

Lab File ID: S50409.D

Level: (low/med) LOW

Date Received: 09/11/14

% Moisture: not dec.

Date Analyzed: 09/18/14

GC Column: Rtx-624

ID: .18 (MMU)

Dilution Factor: 50.00

Soil Extract Volume: (µL)

Soil Aliquot Volume	(μ L)
100	100
50	50
25	25
12.5	12.5
6.25	6.25
3.125	3.125
1.5625	1.5625
0.78125	0.78125
0.390625	0.390625
0.1953125	0.1953125
0.09765625	0.09765625
0.048828125	0.048828125
0.0244140625	0.0244140625
0.01220703125	0.01220703125
0.006103515625	0.006103515625
0.0030517578125	0.0030517578125
0.00152587890625	0.00152587890625
0.000762939453125	0.000762939453125
0.0003814697265625	0.0003814697265625
0.00019073486328125	0.00019073486328125
0.000095367431640625	0.000095367431640625
0.0000476837158203125	0.0000476837158203125
0.00002384185791015625	0.00002384185791015625
0.000011920928955078125	0.000011920928955078125
0.0000059604644775390625	0.0000059604644775390625
0.00000298023223876953125	0.00000298023223876953125
0.000001490116119384765625	0.000001490116119384765625
0.0000007450580596923828125	0.0000007450580596923828125
0.00000037252902984619140625	0.00000037252902984619140625
0.000000186264514923095703125	0.000000186264514923095703125
0.0000000931322574615478515625	0.0000000931322574615478515625
0.00000004656612873077392578125	0.00000004656612873077392578125
0.000000023283064365386962890625	0.000000023283064365386962890625
0.0000000116415321826934814453125	0.0000000116415321826934814453125
0.00000000582076609134674072265625	0.00000000582076609134674072265625
0.000000002910383045673370361328125	0.000000002910383045673370361328125
0.0000000014551915228366851806640625	0.0000000014551915228366851806640625
0.00000000072759576141834259033203125	0.00000000072759576141834259033203125
0.000000000363797880709171295166015625	0.000000000363797880709171295166015625
0.0000000001818989403545856475830078125	0.0000000001818989403545856475830078125
0.00000000009094947017729282379150390625	0.00000000009094947017729282379150390625
0.000000000045474735088646411895751953125	0.000000000045474735088646411895751953125
0.0000000000227373675443232059478759765625	0.0000000000227373675443232059478759765625
0.00000000001136868377216160297393798828125	0.00000000001136868377216160297393798828125
0.000000000005684341886080801486968994140625	0.000000000005684341886080801486968994140625
0.0000000000028421709430404007434844970703125	0.0000000000028421709430404007434844970703125
0.00000000000142108547152020037174224853515625	0.00000000000142108547152020037174224853515625
0.000000000000710542735760100185871124267578125	0.000000000000710542735760100185871124267578125
0.0000000000003552713678800500929355621337890625	0.0000000000003552713678800500929355621337890625
0.00000000000017763568394002504646778106689453125	0.00000000000017763568394002504646778106689453125
0.000000000000088817841970012523233890533447265625	0.000000000000088817841970012523233890533447265625
0.0000000000000444089209850062616169452667236328125	0.0000000000000444089209850062616169452667236328125
0.00000000000002220446049250313080847263336181640625	0.00000000000002220446049250313080847263336181640625
0.000000000000011102230246251565404236316680908203125	0.000000000000011102230246251565404236316680908203125
0.0000000000000055511151231257827021181583340541015625	0.0000000000000055511151231257827021181583340541015625
0.00000000000000277	

CONCENTRATION UNITS:

($\mu\text{g/L}$ or $\mu\text{g/Kg}$) $\mu\text{g/L}$

75-71-8	Dichlorodifluoromethane	25	U
74-87-3	Chloromethane	25	U
75-01-4	Vinyl chloride	25	U
74-83-9	Bromomethane	25	U
75-00-3	Chloroethane	25	U
75-69-4	Trichlorofluoromethane	25	U
75-35-4	1,1-Dichloroethene	25	U
75-09-2	Methylene chloride	47	D
156-60-5	trans-1,2-Dichloroethene	25	U
75-34-3	1,1-Dichloroethane	25	U
594-20-7	2,2-Dichloropropane	25	U
156-59-2	cis-1,2-Dichloroethene	35	D
74-97-5	Bromochloromethane	25	U
67-66-3	Chloroform	25	U
71-55-6	1,1,1-Trichloroethane	25	U
56-23-5	Carbon tetrachloride	25	U
563-58-6	1,1-Dichloropropene	25	U
107-06-2	1,2-Dichloroethane	25	U
71-43-2	Benzene	25	U
79-01-6	Trichloroethene	36	D
75-87-5	1,2-Dichloropropane	25	U
74-95-3	Dibromomethane	25	U
75-27-4	Bromodichloromethane	25	U
10061-01-5	cis-1,3-Dichloropropene	25	U
108-88-3	Toluene	25	U
10061-02-6	trans-1,3-Dichloropropene	25	U
79-00-5	1,1,2-Trichloroethane	25	U
127-18-4	Tetrachloroethene	2200	D
142-28-9	1,3-Dichloropropane	25	U
124-48-1	Dibromochloromethane	25	U
108-90-7	Chlorobenzene	25	U
630-20-6	1,1,1,2-Tetrachloroethane	25	U
100-41-4	Ethylbenzene	25	U
179601-23-1	m,p-Xylene	25	U
95-47-6	o-Xylene	25	U

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3DL

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW-2-20140910DL

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409895-003ADL

Sample wt/vol: 5

(g/mL) mL

Lab File ID:

S50409.D

Level: (low/med)

LOW

Date Received:

09/11/14

% Moisture: not dec.

Date Analyzed:

09/18/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor:

50.00

Soil Extract Volume: _____

(µL)

Soil Aliquot Volume _____

(µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	25	U
75-25-2	Bromoform	25	U
98-82-8	Isopropylbenzene	25	U
108-86-1	Bromobenzene	25	U
79-34-5	1,1,2,2-Tetrachloroethane	25	U
96-18-4	1,2,3-Trichloropropane	25	U
103-65-1	n-Propylbenzene	25	U
	2/4-Chlorotoluene	25	U
108-67-8	1,3,5-Trimethylbenzene	25	U
98-06-6	tert-Butylbenzene	25	U
95-63-6	1,2,4-Trimethylbenzene	25	U
135-98-8	sec-Butylbenzene	25	U
104-51-8	n-Butylbenzene	25	U
541-73-1	1,3-Dichlorobenzene	25	U
106-46-7	1,4-Dichlorobenzene	25	U
99-87-6	4-Isopropyltoluene	25	U
95-50-1	1,2-Dichlorobenzene	25	U
120-82-1	1,2,4-Trichlorobenzene	25	U
87-68-3	Hexachlorobutadiene	25	U
87-61-6	1,2,3-Trichlorobenzene	25	U
1634-04-4	Methyl tert-butyl ether	25	U
	Total Trihalomethanes	25	U

Use original results

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12/3/14

4

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW-3-20140910

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID: 1409895-004A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: S50376.D

Level: (low/med)

LOW

Date Received: 09/11/14

% Moisture: not dec.

Date Analyzed: 09/17/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>µg/L</u>	<u>Q</u>
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	1	
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	1	
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	60	
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	62	
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	610 ~~690~~	~~U~~
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

MW 12/3/14

4

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW-3-20140910

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478Case No.: HDR-ALBA SAS No.: _____SDG No.: HDR011

Matrix: (soil/water)

WATERLab Sample ID: 1409895-004ASample wt/vol: 5(g/mL) mLLab File ID: S50376.D

Level: (low/med)

LOWDate Received: 09/11/14

% Moisture: not dec.

Date Analyzed: 09/17/14GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	✓ R
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	✓ R
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

NW 12/31/14

EPA SAMPLE NO.

RW-3-20140910DL

Contract:

SDG No.: HDR011

Lab Sample ID: 1409895-004ADL

Lab File ID: S50410.D

Date Received: 09/11/14

Date Analyzed: 09/18/14

Dilution Factor: 20.00

Soil Aliquot Volume (μL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	$\mu\text{g/L}$ or $\mu\text{g/Kg}$ $\mu\text{g/L}$	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	14	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
594-20-7	2,2-Dichloropropane	10	U
156-59-2	cis-1,2-Dichloroethene	45	U
74-97-5	Bromochloromethane	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
563-58-6	1,1-Dichloropropene	10	U
107-06-2	1,2-Dichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	44	U
78-87-5	1,2-Dichloropropane	10	U
74-85-3	Dibromomethane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	610	U
142-28-9	1,3-Dichloropropane	10	U
124-48-1	Dibromochloromethane	10	U
108-90-7	Chlorobenzene	10	U
630-20-6	1,1,1,2-Tetrachloroethane	10	U
100-41-4	Ethylbenzene	10	U
179601-23-1	m,p-Xylene	10	U
95-47-6	o-Xylene	10	U

use original results

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NW 12/3/14

4DL

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW-3-20140910DL

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409895-004ADL

Sample wt/vol: 5

(g/mL) mL

Lab File ID:

S50410.D

Level: (low/med)

LOW

Date Received:

09/11/14

% Moisture: not dec.

Date Analyzed:

09/18/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor:

20.00

Soil Extract Volume:

(μ L)

Soil Aliquot Volume

(μ L)

Use original results

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(μ g/L or μ g/Kg)	μ g/L	
100-42-5	Styrene	10	U	UJ
75-25-2	Bromoform	10	U	
98-82-8	Isopropylbenzene	10	U	R UJ
108-86-1	Bromobenzene	10	U	
79-34-5	1,1,2,2-Tetrachloroethane	10	U	R UJ
96-18-4	1,2,3-Trichloropropane	10	U	
103-65-1	n-Propylbenzene	10	U	R UJ
	2/4-Chlorotoluene	10	U	
108-67-8	1,3,5-Trimethylbenzene	10	U	R UJ
98-06-6	tert-Butylbenzene	10	U	
95-63-6	1,2,4-Trimethylbenzene	10	U	R UJ
135-98-8	sec-Butylbenzene	10	U	
104-51-8	n-Butylbenzene	10	U	R UJ
541-73-1	1,3-Dichlorobenzene	10	U	
106-46-7	1,4-Dichlorobenzene	10	U	R UJ
99-87-6	4-Isopropyltoluene	10	U	
95-50-1	1,2-Dichlorobenzene	10	U	R UJ
120-82-1	1,2,4-Trichlorobenzene	10	U	
87-68-3	Hexachlorobutadiene	10	U	R UJ
87-61-6	1,2,3-Trichlorobenzene	10	U	
1634-04-4	Methyl tert-butyl ether	10	U	R UJ
	Total Trihalomethanes	10	U	

11/21/314

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-1

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478Case No.: HDR-ALBA SAS No.: _____SDG No.: HDR011

Matrix: (soil/water)

WATERLab Sample ID: 1409895-005ASample wt/vol: 5(g/mL) mLLab File ID: S50372.D

Level: (low/med)

LOWDate Received: 09/11/14

% Moisture: not dec.

Date Analyzed: 09/17/14GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	0.5	U
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

MW 12/31/14

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1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-1

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409895-005A

Sample wt/vol:

5

(g/mL) mL

Lab File ID:

S50372.D

Level: (low/med)

LOW

Date Received:

09/11/14

% Moisture: not dec.

Date Analyzed:

09/17/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor:

1.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

R

R

W 12/3/14

5

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB-1

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBAN SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID: 1409895-005A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: S50372.D

Level: (low/med) LOW

Date Received: 09/11/14

% Moisture: not dec.

Date Analyzed: 09/17/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume:

(μ L)

Soil Aliquot Volume: 0 (μ L)

CONCENTRATION UNITS:

Number TICs found:

1

(μ g/L or μ g/Kg)

μ g/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 67-64-1	Acetone	2.11	2	~~JK~~

NJ

AW: 12/31/14

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB-1

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409969-001A

Sample wt/vol: 5

(g/mL) mL

Lab File ID:

S50389.D

Level: (low/med)

LOW

Date Received:

09/12/14

% Moisture: not dec.

Date Analyzed:

09/17/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor:

1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	0.5	U
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

HW 12/31/14

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB-1

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID: 1409969-001A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: S50389.D

Level: (low/med)

LOW

Date Received: 09/12/14

% Moisture: not dec.

Date Analyzed: 09/17/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (pL)

Soil Aliquot Volume _____ (pL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	✓ R
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	✓ R
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

W12/3/14

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1-20140911

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409969-002A

Sample wt/vol:

5

(g/mL) mL

Lab File ID:

S50377.D

Level: (low/med)

LOW

Date Received:

09/12/14

% Moisture: not dec.

Date Analyzed:

09/17/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor:

1.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>µg/L</u>	<u>Q</u>
75-71-8	Dichlorodifluoromethane	0.5	<u>✓</u>
74-87-3	Chloromethane	0.5	<u>U</u>
75-01-4	Vinyl chloride	0.5	<u>U</u>
74-83-9	Bromomethane	0.5	<u>U</u>
75-00-3	Chloroethane	0.5	<u>U</u>
75-69-4	Trichlorofluoromethane	0.5	<u>U</u>
75-35-4	1,1-Dichloroethene	0.5	<u>U</u>
75-09-2	Methylene chloride	0.5	<u>U</u>
156-60-5	trans-1,2-Dichloroethene	0.5	<u>U</u>
75-34-3	1,1-Dichloroethane	0.5	<u>U</u>
594-20-7	2,2-Dichloropropane	0.5	<u>U</u>
156-59-2	cis-1,2-Dichloroethene	0.5	<u>U</u>
74-97-5	Bromochloromethane	0.5	<u>U</u>
67-66-3	Chloroform	0.5	<u>U</u>
71-55-6	1,1,1-Trichloroethane	0.5	<u>U</u>
56-23-5	Carbon tetrachloride	0.5	<u>U</u>
563-58-6	1,1-Dichloropropene	0.5	<u>U</u>
107-06-2	1,2-Dichloroethane	0.5	<u>U</u>
71-43-2	Benzene	0.5	<u>U</u>
79-01-6	Trichloroethene	0.5	<u>U</u>
78-87-5	1,2-Dichloropropane	0.5	<u>U</u>
74-95-3	Dibromomethane	0.5	<u>U</u>
75-27-4	Bromodichloromethane	0.5	<u>U</u>
10061-01-5	cis-1,3-Dichloropropene	0.5	<u>U</u>
108-88-3	Toluene	0.5	<u>U</u>
10061-02-6	trans-1,3-Dichloropropene	0.5	<u>U</u>
79-00-5	1,1,2-Trichloroethane	0.5	<u>U</u>
127-18-4	Tetrachloroethene	7	<u>J</u>
142-28-9	1,3-Dichloropropane	0.5	<u>U</u>
124-48-1	Dibromochloromethane	0.5	<u>U</u>
108-90-7	Chlorobenzene	0.5	<u>U</u>
630-20-6	1,1,1,2-Tetrachloroethane	0.5	<u>U</u>
100-41-4	Ethylbenzene	0.5	<u>U</u>
179601-23-1	m,p-Xylene	0.5	<u>U</u>
95-47-6	o-Xylene	0.5	<u>U</u>

MW121314

7

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1-20140911

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478Case No.: HDR-ALBA SAS No.: _____SDG No.: HDR011

Matrix: (soil/water)

WATERLab Sample ID: 1409969-002ASample wt/vol: 5(g/mL) mLLab File ID: S50377.D

Level: (low/med)

LOWDate Received: 09/12/14

% Moisture: not dec.

Date Analyzed: 09/17/14GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: _____

(μL)

Soil Aliquot Volume _____ (μL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μg/L or μg/Kg) <u>μg/L</u>	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	✓ R
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	✓ R
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

MW 12/31/14

8

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4A-20140911

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409969-003A

Sample wt/vol:

5

(g/mL) mL

Lab File ID:

S50380.D

Level: (low/med)

LOW

Date Received:

09/12/14

% Moisture: not dec.

Date Analyzed:

09/17/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor:

1.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>µg/L</u>	<u>Q</u>
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.6	
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	25	
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	27	
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	~~350~~ 380	~~U~~
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

MW 12/31/14

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4A-20140911

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409969-003A

Sample wt/vol:

5

(g/mL) mL

Lab File ID:

S50380.D

Level: (low/med)

LOW

Date Received:

09/12/14

% Moisture: not dec.

Date Analyzed:

09/17/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor:

1.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>µg/L</u>	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	✓ R
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	✓ R
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

MW 12/31/14

8DL

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4A-140911DL

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409969-003ADL

Sample wt/vol:

5

(g/mL) mL

Lab File ID:

S50411.D

Level: (low/med)

LOW

Date Received:

09/12/14

% Moisture: not dec.

Date Analyzed:

09/18/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor:

10.00

Soil Extract Volume:

(μ L)

Soil Aliquot Volume

(μ L)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μ g/L or μ g/Kg) μ g/L	Q
75-71-8	Dichlorodifluoromethane	5	U
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-09-2	Methylene chloride	7	~~U~~
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
594-20-7	2,2-Dichloropropane	5	U
156-59-2	cis-1,2-Dichloroethene	20	~~U~~
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
563-58-6	1,1-Dichloropropene	5	U
107-06-2	1,2-Dichloroethane	5	U
71-43-2	Benzene	5	U
79-01-6	Trichloroethene	23	~~U~~
78-87-5	1,2-Dichloropropane	5	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
127-18-4	Tetrachloroethene	350	~~U~~
142-28-9	1,3-Dichloropropane	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
100-41-4	Ethylbenzene	5	U
179601-23-1	m,p-Xylene	5	U
95-47-6	o-Xylene	5	U

Use original results

MW 12/3/14

8DL

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4A-140911DL

Lab Name: FACE ANALYTICAL

Contract: _____

Lab Code: 10478Case No.: HDR-ALBA SAS No.: _____SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409969-003ADL

Sample wt/vol:

5(g/mL) mL

Lab File ID:

S50411.D

Level: (low/med)

LOW

Date Received:

09/12/14

% Moisture: not dec.

Date Analyzed:

09/18/14GC Column: Rtx-624ID: .18 (mm)

Dilution Factor:

10.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

Use
original
results

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(µg/L or µg/Kg)	µg/L	
100-42-5	Styrene	5		U
75-25-2	Bromoform	5		U
98-82-8	Isopropylbenzene	5		U
108-86-1	Bromobenzene	5		U
79-34-5	1,1,2,2-Tetrachloroethane	5		U
96-18-4	1,2,3-Trichloropropane	5		U
103-65-1	n-Propylbenzene	5		U
	2/4-Chlorotoluene	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
104-51-8	n-Butylbenzene	5		U
541-73-1	1,3-Dichlorobenzene	5		U
106-46-7	1,4-Dichlorobenzene	5		U
99-87-6	4-Isopropyltoluene	5		U
95-50-1	1,2-Dichlorobenzene	5		U
120-82-1	1,2,4-Trichlorobenzene	5		U
87-68-3	Hexachlorobutadiene	5		U
87-61-6	1,2,3-Trichlorobenzene	5		U
1634-04-4	Methyl tert-butyl ether	5		U
	Total Trihalomethanes	5		U

R

R

MW 12/31/14

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4B-20140911

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID: 1409969-004A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: S50381.D

Level: (low/med)

LOW

Date Received: 09/12/14

% Moisture: not dec.

Date Analyzed: 09/17/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.9	
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	2	
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	7	
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

MW 12/3/14

9

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4B-20140911

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID: 1409969-004A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: S50381.D

Level: (low/med) LOW

Date Received: 09/12/14

% Moisture: not dec.

Date Analyzed: 09/17/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

R

R

MW 2/31/14

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5-20140911

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478Case No.: HDR-ALBA SAS No.: _____SDG No.: HDR011

Matrix: (soil/water)

WATERLab Sample ID: 1409969-005ASample wt/vol: 5(g/mL) mLLab File ID: S50382.D

Level: (low/med)

LOWDate Received: 09/12/14

% Moisture: not dec.

Date Analyzed: 09/17/14GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	3	
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

MW12/31/14

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5-20140911

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID: 1409969-005A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: S50382.D

Level: (low/med)

LOW

Date Received: 09/12/14

% Moisture: not dec.

Date Analyzed: 09/17/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	✓ R
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	✓ R
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-54A-20140911

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409969-006A

Sample wt/vol:

5

(g/mL) mL

Lab File ID:

S50383.D

Level: (low/med)

LOW

Date Received:

09/12/14

% Moisture: not dec.

Date Analyzed:

09/17/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor:

1.00

Soil Extract Volume:

_____ (µL)

Soil Aliquot Volume

_____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>µg/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.6	
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	23	
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	25	
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	~~350~~ ~~340~~	~~U~~
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-54A-20140911

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID: 1409969-006A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: S50383.D

Level: (low/med)

LOW

Date Received: 09/12/14

% Moisture: not dec.

Date Analyzed: 09/17/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

11DL

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-54A-140911DL

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478Case No.: HDR-ALBA SAS No.: _____SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409969-006ADL

Sample wt/vol:

5(g/mL) mL

Lab File ID:

S50412.D

Level: (low/med)

LOW

Date Received:

09/12/14

% Moisture: not dec.

Date Analyzed:

09/18/14GC Column: Rtx-624ID: .18 (mm)

Dilution Factor:

10.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

Use
original
results

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(µg/L or µg/Kg)	µg/L	
75-71-8	Dichlorodifluoromethane	5		U
74-87-3	Chloromethane	5		U
75-01-4	Vinyl chloride	5		U
74-83-9	Bromomethane	5		U
75-00-3	Chloroethane	5		U
75-69-4	Trichlorofluoromethane	5		U
75-35-4	1,1-Dichloroethene	5		U
75-09-2	Methylene chloride	8		~~U~~
156-60-5	trans-1,2-Dichloroethene	5		U
75-34-3	1,1-Dichloroethane	5		U
594-20-7	2,2-Dichloropropane	5		U
156-59-2	cis-1,2-Dichloroethene	20		~~U~~
74-97-5	Bromochloromethane	5		U
67-66-3	Chloroform	5		U
71-55-6	1,1,1-Trichloroethane	5		U
56-23-5	Carbon tetrachloride	5		U
563-58-6	1,1-Dichloropropene	5		U
107-06-2	1,2-Dichloroethane	5		U
71-43-2	Benzene	5		U
79-01-6	Trichloroethene	23		~~U~~
78-87-5	1,2-Dichloropropane	5		U
74-95-3	Dibromomethane	5		U
75-27-4	Bromodichloromethane	5		U
10061-01-5	cis-1,3-Dichloropropene	5		U
108-88-3	Toluene	5		U
10061-02-6	trans-1,3-Dichloropropene	5		U
79-00-5	1,1,2-Trichloroethane	5		U
127-18-4	Tetrachloroethene	(350)		~~U~~
142-28-9	1,3-Dichloropropane	5		U
124-48-1	Dibromochloromethane	5		U
108-90-7	Chlorobenzene	5		U
630-20-6	1,1,1,2-Tetrachloroethane	5		U
100-41-4	Ethylbenzene	5		U
179601-23-1	m,p-Xylene	5		U
95-47-6	o-Xylene	5		U

MW 12/31/14

11DL

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-54A-140911DL

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409969-006ADL

Sample wt/vol:

5

(g/mL) mL

Lab File ID:

S50412.D

Level: (low/med)

LOW

Date Received:

09/12/14

% Moisture: not dec.

Date Analyzed:

09/18/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor:

10.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

Use original results

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(µg/L or µg/Kg)	µg/L	
100-42-5	Styrene	5	U	
75-25-2	Bromoform	5	U	
98-82-8	Isopropylbenzene	5	U	
108-86-1	Bromobenzene	5	U	
79-34-5	1,1,2,2-Tetrachloroethane	5	U	
96-18-4	1,2,3-Trichloropropane	5	✓	
103-65-1	n-Propylbenzene	5	U	
	2/4-Chlorotoluene	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	
104-51-8	n-Butylbenzene	5	U	
541-73-1	1,3-Dichlorobenzene	5	U	
106-46-7	1,4-Dichlorobenzene	5	U	
99-87-6	4-Isopropyltoluene	5	U	
95-50-1	1,2-Dichlorobenzene	5	U	
120-82-1	1,2,4-Trichlorobenzene	5	U	
87-68-3	Hexachlorobutadiene	5	✓	
87-61-6	1,2,3-Trichlorobenzene	5	U	
1634-04-4	Methyl tert-butyl ether	5	U	
	Total Trihalomethanes	5	U	

MW12/3/14

12

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-2

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID: 1409969-007A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: S50390.D

Level: (low/med) LOW

Date Received: 09/12/14

% Moisture: not dec.

Date Analyzed: 09/17/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	0.5	U
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

W12/3/14

12

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-2

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID: 1409969-007A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: S50390.D

Level: (low/med) LOW

Date Received: 09/12/14

% Moisture: not dec.

Date Analyzed: 09/17/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	✓ R
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	✓ R
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

MW 12/31/14

12

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB-2

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBAN SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID: 1409969-007A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: S50390.D

Level: (low/med) LOW

Date Received: 09/12/14

% Moisture: not dec.

Date Analyzed: 09/17/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (μL)

Soil Aliquot Volume: 0 (μL)

CONCENTRATION UNITS:

Number TICs found: 1

(μg/L or μg/Kg)

μg/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 67-64-1	Acetone	2.12	1	<u>JW</u>

NJ

WV 12/3/14

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-RCI-20140912

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID: 1409A41-001A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: S50414.D

Level: (low/med)

LOW

Date Received: 09/13/14

% Moisture: not dec.

Date Analyzed: 09/18/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>µg/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	69	
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.9	
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	68	
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	610 ~~610~~	~~U~~
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

MW 12/31/14

13

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-RCI-20140912

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID: 1409A41-001A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: S50414.D

Level: (low/med)

LOW

Date Received: 09/13/14

% Moisture: not dec.

Date Analyzed: 09/18/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (pL)

Soil Aliquot Volume _____ (pL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	✓ R
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	✓ R
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.9	

MW12/3/14

13DL

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-RCI-140912DL

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478Case No.: HDR-ALBA SAS No.: _____SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409A41-001ADL

Sample wt/vol:

5(g/mL) mL

Lab File ID:

S50431.D

Level: (low/med)

LOW

Date Received:

09/13/14

% Moisture: not dec.

Date Analyzed:

09/19/14GC Column: Rtx-624ID: .18 (mm)

Dilution Factor:

20.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(µg/L or µg/Kg) µg/L

Q

75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
594-20-7	2,2-Dichloropropane	10	U
156-59-2	cis-1,2-Dichloroethene	76	U
74-97-5	Bromochloromethane	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
563-58-6	1,1-Dichloropropene	10	U
107-06-2	1,2-Dichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	70	U
78-87-5	1,2-Dichloropropane	10	U
74-95-3	Dibromomethane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	610	U
142-28-9	1,3-Dichloropropane	10	U
124-48-1	Dibromochloromethane	10	U
108-90-7	Chlorobenzene	10	U
630-20-6	1,1,1,2-Tetrachloroethane	10	U
100-41-4	Ethylbenzene	10	U
179601-23-1	m,p-Xylene	10	U
95-47-6	o-Xylene	10	U

Use
original
results

rev 12/3/14

13DL

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-RCI-140912DL

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409A41-001ADL

Sample wt/vol:

5

(g/mL) mL

Lab File ID:

S50431.D

Level: (low/med)

LOW

Date Received:

09/13/14

% Moisture: not dec.

Date Analyzed:

09/19/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor:

20.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

Use original results

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(µg/L or µg/Kg)	µg/L	
100-42-5	Styrene	10	U	
75-25-2	Bromoform	10	U	
98-82-8	Isopropylbenzene	10	U	
108-86-1	Bromobenzene	10	U	
79-34-5	1,1,2,2-Tetrachloroethane	10	U	
96-18-4	1,2,3-Trichloropropane	10	U	
103-65-1	n-Propylbenzene	10	U	
	2/4-Chlorotoluene	10	U	
108-67-8	1,3,5-Trimethylbenzene	10	U	
98-06-6	tert-Butylbenzene	10	U	
95-63-6	1,2,4-Trimethylbenzene	10	U	
135-98-8	sec-Butylbenzene	10	U	
104-51-8	n-Butylbenzene	10	U	
541-73-1	1,3-Dichlorobenzene	10	U	
106-46-7	1,4-Dichlorobenzene	10	U	
99-87-6	4-Isopropyltoluene	10	U	
95-50-1	1,2-Dichlorobenzene	10	U	
120-82-1	1,2,4-Trichlorobenzene	10	U	
87-68-3	Hexachlorobutadiene	10	U	
87-61-6	1,2,3-Trichlorobenzene	10	U	
1634-04-4	Methyl tert-butyl ether	10	U	
	Total Trihalomethanes	10	U	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2-20140912

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478Case No.: HDR-ALBA SAS No.: _____SDG No.: HDR011

Matrix: (soil/water)

WATERLab Sample ID: 1409A41-002ASample wt/vol: 5(g/mL) mLLab File ID: S50415.D

Level: (low/med)

LOWDate Received: 09/13/14

% Moisture: not dec.

Date Analyzed: 09/18/14GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>µg/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	3	
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	1	
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	8	
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	290 ~~380~~	~~E~~
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	190 ~~270~~	~~E~~
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	1500 ~~1700~~	~~E~~
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

14

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2-20140912

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409A41-002A

Sample wt/vol:

5

(g/mL) mL

Lab File ID:

S50415.D

Level: (low/med)

LOW

Date Received:

09/13/14

% Moisture: not dec.

Date Analyzed:

09/18/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor:

1.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>µg/L</u>	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	✓ R
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	✓ R
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

MW1213114

14DL

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2-20140912DL

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478Case No.: HDR-ALBA SAS No.: _____SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409A41-002ADL

Sample wt/vol:

5(g/mL) mL

Lab File ID:

S50432.D

Level: (low/med)

LOW

Date Received:

09/13/14

% Moisture: not dec.

Date Analyzed:

09/19/14GC Column: Rtx-624ID: .18 (mm)

Dilution Factor:

40.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

Use original results

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	20	U
74-87-3	Chloromethane	20	U
75-01-4	Vinyl chloride	20	U
74-83-9	Bromomethane	20	U
75-00-3	Chloroethane	20	U
75-69-4	Trichlorofluoromethane	20	U
75-35-4	1,1-Dichloroethene	20	U
75-09-2	Methylene chloride	20	U
156-60-5	trans-1,2-Dichloroethene	20	U
75-34-3	1,1-Dichloroethane	20	U
594-20-7	2,2-Dichloropropane	20	U
156-59-2	cis-1,2-Dichloroethene	290	✓
74-97-5	Bromochloromethane	20	U
67-66-3	Chloroform	20	U
71-55-6	1,1,1-Trichloroethane	20	U
56-23-5	Carbon tetrachloride	20	U
563-58-6	1,1-Dichloropropene	20	U
107-06-2	1,2-Dichloroethane	20	U
71-43-2	Benzene	20	U
79-01-6	Trichloroethene	190	✓
78-87-5	1,2-Dichloropropane	20	U
74-95-3	Dibromomethane	20	U
75-27-4	Bromodichloromethane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
108-88-3	Toluene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
79-00-5	1,1,2-Trichloroethane	20	U
127-18-4	Tetrachloroethene	1500	✓
142-28-9	1,3-Dichloropropane	20	U
124-48-1	Dibromochloromethane	20	U
108-90-7	Chlorobenzene	20	U
630-20-6	1,1,1,2-Tetrachloroethane	20	U
100-41-4	Ethylbenzene	20	U
179601-23-1	m,p-Xylene	20	U
95-47-6	o-Xylene	20	U

M12/3/14

140L

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2-20140912DL

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478Case No.: HDR-ALBA SAS No.: _____SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409A41-002ADL

Sample wt/vol:

5(g/mL) mL

Lab File ID:

S50432.D

Level: (low/med)

LOW

Date Received:

09/13/14

% Moisture: not dec.

Date Analyzed:

09/19/14GC Column: Rtx-624ID: .18 (mm)

Dilution Factor:

40.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

Use original results

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(µg/L or µg/Kg)	µg/L	
100-42-5	Styrene	20	U	
75-25-2	Bromoform	20	U	
98-82-8	Isopropylbenzene	20	U	
108-86-1	Bromobenzene	20	U	
79-34-5	1,1,2,2-Tetrachloroethane	20	U	
96-18-4	1,2,3-Trichloropropane	20	U	
103-65-1	n-Propylbenzene	20	U	
	2/4-Chlorotoluene	20	U	
108-67-8	1,3,5-Trimethylbenzene	20	U	
98-06-6	tert-Butylbenzene	20	U	
95-63-6	1,2,4-Trimethylbenzene	20	U	
135-98-8	sec-Butylbenzene	20	U	
104-51-8	n-Butylbenzene	20	U	
541-73-1	1,3-Dichlorobenzene	20	U	
106-46-7	1,4-Dichlorobenzene	20	U	
99-87-6	4-Isopropyltoluene	20	U	
95-50-1	1,2-Dichlorobenzene	20	U	
120-82-1	1,2,4-Trichlorobenzene	20	U	
87-68-3	Hexachlorobutadiene	20	U	
87-61-6	1,2,3-Trichlorobenzene	20	U	
1634-04-4	Methyl tert-butyl ether	20	U	
	Total Trihalomethanes	20	U	

R

R

MW 12/31/14

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3-20140912

Lab Name: FACE ANALYTICAL

Contract: _____

Lab Code: 10478Case No.: HDR-ALBA SAS No.: _____SDG No.: HDR011

Matrix: (soil/water)

WATERLab Sample ID: 1409A41-003ASample wt/vol: 5(g/mL) mLLab File ID: S50477.D

Level: (low/med)

LOWDate Received: 09/13/14

% Moisture: not dec.

Date Analyzed: 09/21/14GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: _____

(µL)

Soil Aliquot Volume _____

(µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	0.5	U
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

MW 12/3/14

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1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3-20140912

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID: 1409A41-003A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: S50477.D

Level: (low/med)

LOW

Date Received: 09/13/14

% Moisture: not dec.

Date Analyzed: 09/21/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

UJ
↓
R
UJ
↓
R
UJ
↓

MW1213/14

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-6-20140912

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID: 1409A41-004A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: S50429.D

Level: (low/med)

LOW

Date Received: 09/13/14

% Moisture: not dec.

Date Analyzed: 09/19/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	0.5	U
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

MW12/3/14

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-6-20140912

Lab Name: FACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409A41-004A

Sample wt/vol:

5

(g/mL) mL

Lab File ID:

S50429.D

Level: (low/med)

LOW

Date Received:

09/13/14

% Moisture: not dec.

Date Analyzed:

09/19/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor:

1.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>µg/L</u>	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	✓ R
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	✓ R
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

MW12/3/14

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-7-20140912

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID: 1409A41-005A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: S50430.D

Level: (low/med)

LOW

Date Received: 09/13/14

% Moisture: not dec.

Date Analyzed: 09/19/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	2	
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	2	
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	13	
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

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1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-7-20140912

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478Case No.: HDR-ALBA SAS No.: _____SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409A41-005A

Sample wt/vol:

5(g/mL) mL

Lab File ID:

S50430.D

Level: (low/med)

LOW

Date Received:

09/13/14

% Moisture: not dec.

Date Analyzed:

09/19/14GC Column: Rtx-624ID: .18 (mm)

Dilution Factor:

1.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	✓ R
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	✓ R
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

MW 12/3/14

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-3

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478Case No.: HDR-ALBA SAS No.: _____SDG No.: HDR011

Matrix: (soil/water)

WATERLab Sample ID: 1409A41-006ASample wt/vol: 5(g/mL) mLLab File ID: S50398.D

Level: (low/med)

LOWDate Received: 09/13/14

% Moisture: not dec.

Date Analyzed: 09/18/14GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	0.5	U
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

MW121314

18

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-3

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478Case No.: HDR-ALBA SAS No.: _____SDG No.: HDR011

Matrix: (soil/water)

WATERLab Sample ID: 1409A41-006ASample wt/vol: 5(g/mL) mLLab File ID: S50398.D

Level: (low/med)

LOWDate Received: 09/13/14

% Moisture: not dec.

Date Analyzed: 09/18/14GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	✓ R
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	✓ R
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

Mw 21 3/14

18

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB-3

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBAN SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID: 1409A41-006A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: S50398.D

Level: (low/med) LOW

Date Received: 09/13/14

% Moisture: not dec.

Date Analyzed: 09/18/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume:

(μ L)

Soil Aliquot Volume: 0 (μ L)

CONCENTRATION UNITS:

Number TICs found:

1

(μ g/L or μ g/Kg)

μ g/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 67-64-1	Acetone	2.11	2	~~JK~~

NJ

NW12/3/14

19

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-4

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478Case No.: HDR-ALBA SAS No.: _____SDG No.: HDR011

Matrix: (soil/water)

WATERLab Sample ID: 1409A41-007ASample wt/vol: 5(g/mL) mLLab File ID: S50399.D

Level: (low/med)

LOWDate Received: 09/13/14

% Moisture: not dec.

Date Analyzed: 09/18/14GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: _____

(µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	0.5	U
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

W12/3/14

19

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-4

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR011

Matrix: (soil/water)

WATER

Lab Sample ID:

1409A41-007A

Sample wt/vol:

5

(g/mL) mL

Lab File ID:

S50399.D

Level: (low/med)

LOW

Date Received:

09/13/14

% Moisture: not dec.

Date Analyzed:

09/18/14

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor:

1.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>µg/L</u>	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	✓ R
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	✓ R
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

W 12/31/14

**DATA USABILITY SUMMARY REPORT
APPLE VALLEY RD., LA GRANGE, NEW YORK**

Client: HDR, Inc., Albany, New York
SDG: HDR012
Laboratory: Pace Analytical, Melville, New York
Site: Apple Valley Rd, New York
Date: August 5, 2015

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	AV2-2015-05-18	1505F17-001	Water
2	MWRC1-2015-05-18	1505F17-002	Water
2DL	MWRC1-2015-05-18DL	1505F17-002DL	Water
3	MW1-2015-05-19	1505F17-003	Water
4	MW3-2015-05-19	1505F17-004	Water
5	MW4B-2015-05-18	1505F17-005	Water
6	MW6-2015-05-19	1505F17-006	Water
7	MW7-2015-05-19	1505F17-007	Water
8	MW12-2015-05-19	1505F17-008	Water
9	MW13-2015-05-19	1505F17-009	Water
10	MW14-2015-05-19	1505F17-010	Water
10MS	MW14-2015-05-19MS	1505F17-010MS	Water
10MSD	MW14-2015-05-19MSD	1505F17-010MSD	Water
11	MW64-2015-05-19	1505F17-011	Water
12	RW1-2015-05-18	1505F17-012	Water
12DL	RW1-2015-05-18DL	1505F17-012DL	Water
13	RW2-2015-05-18	1505F17-013	Water
13DL	RW2-2015-05-18DL	1505F17-013DL	Water
14	RW3-2015-05-18	1505F17-014	Water
14DL	RW3-2015-05-18DL	1505F17-014DL	Water
15	TB-1	1505F17-015	Water
16	STORAGE BLANK	1505F17-016	Water

Note: The Sample IDs are abbreviated on the Form Is

A Data Usability Summary Review was performed on the analytical data for fourteen water samples, one aqueous storage blank sample and one aqueous trip blank sample collected on May 18-20, 2015 by HDR, Inc. at the Apple Valley Rd. site in La Grange, New York. The samples were analyzed under Environmental Protection Agency (USEPA) "Measurement of Purgeable Organic Compounds in Water by Capillary Column Gas Chromatography/Mass Spectrometry".

Specific method references are as follows:

Analysis
VOC

Method References
EPA Method 524.2

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods and the USEPA Region II Data Review Standard Operating Procedures (SOPs) as follows:

- SOP Number HW-34, Revision 3, February 2013: Trace Volatile Data Validation;
- and the reviewer's professional judgment.

The following items/criteria were reviewed:

Organics

- Data Completeness
- Holding times and sample preservation
- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample (LCS) recoveries
- Method blank and field blank contamination
- Gas Chromatography (GC)/Mass Spectroscopy (MS) tuning
- Initial and continuing calibration summaries
- Compound Quantitation
- Internal standard area and retention time summary forms
- Field Duplicate sample precision
- TICs

Overall Usability Issues:

There were no rejections of data.

Overall the data is acceptable for the intended purposes as qualified for the following deficiencies.

- All positive results were qualified as estimated in one sample and one dilution sample due to high surrogate recoveries.
- Several compounds were qualified as estimated in all samples due to low LCS recoveries.
- Bromomethane was qualified as estimated in all samples due to a high continuing calibration %D value.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedences of QC criteria.

Data Completeness

- The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

Volatile Organic Compounds (VOCs)

Holding Times

- All samples were analyzed within 14 day for preserved water samples.

Surrogate Spike Recoveries

- The following table presents surrogate percent recoveries (%R) outside the QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J).

Sample ID	Surrogate	%R	Qualifier
13	4-Bromofluoromethane	177%	J - Positive Results
13DL	4-Bromofluoromethane	237%	J - Positive Results

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The following table presents MS/MSD samples that exhibited percent recoveries (%R) outside the QC limits and/or relative percent differences (RPD) above QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J). Results are valid and usable, however possibly biased.

MS/MSD Sample ID	Compound	MS %R/MSD %R/ RPD	Qualifier
10	Dichlorodifluoromethane	63%/67%/OK	None - See LCS
	Chloromethane	69%/OK/OK	
	Bromomethane	48%/63%/OK	
	1,1,2,2-Tetrachloroethane	68%/OK/OK	
	1,2,4-Trichlorobenzene	OK/138%/OK	None - Sample ND
	Hexachlorobutadiene	158%/156%/OK	
	1,2,3-Trichlorobenzene	OK/132%/OK	

Laboratory Control Samples

- The following table presents LCS percent recoveries (%R) outside the QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J). Results are valid and usable, however possibly biased.

LCS ID	Compound	%R	Qualifier	Affected Samples
LFB060115	Chloroethane	132%	None	All Associated ND
	Methylene chloride	67%	J/UJ	1-7, 12-14
LFB060115A	Dichlorodifluoromethane	61%	J/UJ	2DL, 8-11, 12DL, 13DL, 14DL, 15-16
	Chloromethane	66%	J/UJ	
	Vinyl chloride	64%	J/UJ	
	Bromomethane	56%	J/UJ	
	Chloroethane	65%	J/UJ	
	1,1-Dichloroethene	69%	J/UJ	
	Methylene chloride	69%	J/UJ	
	1,1,2,2-Tetrachloroethane	68%	J/UJ	
	Hexachlorobutadiene	131%	None	All Associated ND

Method Blank

- The method blanks were free of contamination.

Field Blank

- Field QC samples are summarized below.

Blank ID	Compound	Conc. ug/L	Action Level ug/L	Qualifier	Affected Samples
TB-1	None - ND	-	-	-	-
STORAGE BLANK	None - ND	-	-	-	-

GC/MS Tuning

- All criteria were met.

Initial Calibration

- The initial calibration exhibited acceptable %RSD and mean RRF values.

Continuing Calibration

- The following table presents compounds that exceeded 30/40 percent deviation (%D) and/or RRF values <0.05/0.01 in the continuing calibration (CCAL). A low RRF indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %D may indicate a potential high or low bias. All results for these compounds in affected samples are considered estimated and qualified (J/UJ).

CCAL Date	Compound	%D/RRF	Qualifier	Affected Samples
06/01/15 (0922)	Bromomethane	33.2%	J/UJ	1-7, 12-14
06/01/15 (1623)	Bromomethane	52.2%	None	See LCS

Compound Quantitation

- Several samples exhibited high concentrations of target compounds over the linear range of the instrument and were flagged (E) by the laboratory. These samples were diluted and reanalyzed and the dilution results for these compounds should be used for reporting purposes.

Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

Field Duplicate Sample Precision

- Field duplicate results are summarized below.

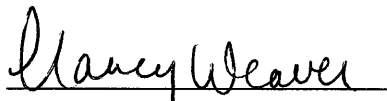
VOC				
Compound	MW14-2015-05-19 ug/L	MW64-2015-05-19 ug/L	RPD	Qualifier
None	ND	ND	-	-

Tentatively Identified Compounds (TICs)

- All "known" TICs were qualified (NJ) and all "unknown" TICs were qualified (J).

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed:


Nancy Weaver
Senior Chemist

Dated:

8/6/15

Data Qualifiers

- J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ = The analyte was not detected above the sample reporting limit; and the reporting limit is approximate.
- U = The analyte was analyzed for, but was not detected above the sample reporting limit.
- R = The sample results is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AV2

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-001A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1050.D

Level: (low/med)

LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____

(µL)

Soil Aliquot Volume _____

(µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	7	U
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

UJ

UJ

NW 8/5/15

VOLATILE ORGANICS ANALYSIS DATA SHEET

AV2

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478Case No.: HDR-ALBA SAS No.: _____SDG No.: HDR012

Matrix: (soil/water)

WATERLab Sample ID: 1505F17-001ASample wt/vol: 5(g/mL) MLLab File ID: P1050.D

Level: (low/med)

LOWDate Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15GC Column: R-624 0.18ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(pg/L or pg/Kg) <u>UG/L</u>	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

mw 8/5/15

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 2

MWRC1

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-002A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1056.D

Level: (low/med)

LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	15	
74-83-9	Bromomethane	0.5	Y UJ
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	Y UJ
156-60-5	trans-1,2-Dichloroethene	0.5	
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	580 ~~510~~	~~U~~
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	16	
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	92	
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

mw 8/5/15

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 2

MWRC1

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-002A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1056.D

Level: (low/med)

LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	<u>Q</u>
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

2DL

MWRC1DL

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID:

1505F17-002ADL

Sample wt/vol: 5

(g/mL) ML

Lab File ID:

P1076.D

Level: (low/med)

LOW

Date Received:

05/20/15

% Moisture: not dec.

Date Analyzed:

06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor:

20.00

Soil Extract Volume:

(μ L)

Soil Aliquot Volume

(μ L)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μ g/L or μ g/Kg) <u>UG/L</u>	<u>Q</u>
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	15	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
594-20-7	2,2-Dichloropropane	10	U
156-59-2	cis-1,2-Dichloroethene	580	U
74-97-5	Bromochloromethane	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
563-58-6	1,1-Dichloropropene	10	U
107-06-2	1,2-Dichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	17	U
78-87-5	1,2-Dichloropropane	10	U
74-95-3	Dibromomethane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	100	U
142-28-9	1,3-Dichloropropane	10	U
124-48-1	Dibromochloromethane	10	U
108-90-7	Chlorobenzene	10	U
630-20-6	1,1,1,2-Tetrachloroethane	10	U
100-41-4	Ethylbenzene	10	U
179601-23-1	m,p-Xylene	10	U
95-47-6	o-Xylene	10	U

use original results

UJ
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1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWRC1DL

2DL

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID:

1505F17-002ADL

Sample wt/vol: 5

(g/mL) ML

Lab File ID:

P1076.D

Level: (low/med)

LOW

Date Received:

05/20/15

% Moisture: not dec.

Date Analyzed:

06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor:

20.00

Soil Extract Volume: _____

(μ L)

Soil Aliquot Volume _____

(μ L)

CONCENTRATION UNITS:

(μ g/L or μ g/Kg) UG/L

Q

CAS NO.	COMPOUND	(μ g/L or μ g/Kg) <u>UG/L</u>	Q
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
108-86-1	Bromobenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
96-18-4	1,2,3-Trichloropropane	10	U
103-65-1	n-Propylbenzene	10	U
	2/4-Chlorotoluene	10	U
108-67-8	1,3,5-Trimethylbenzene	10	U
98-06-6	tert-Butylbenzene	10	U
95-63-6	1,2,4-Trimethylbenzene	10	U
135-98-8	sec-Butylbenzene	10	U
104-51-8	n-Butylbenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
99-87-6	4-Isopropyltoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
87-61-6	1,2,3-Trichlorobenzene	10	U
1634-04-4	Methyl tert-butyl ether	10	U
	Total Trihalomethanes	10	U

Use original results

UJ

ms 8/5/15

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 3

MW1

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-003A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1051.D

Level: (low/med) LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(pg/L or pg/Kg) <u>UG/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	0.5	U
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

MW 8/5/15

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW1

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-003A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1051.D

Level: (low/med) LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(pg/L or pg/Kg) <u>UG/L</u>	<u>Q</u>
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

mw 8/5/15

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW3

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-004A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1052.D

Level: (low/med)

LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	0.5	U
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

UJ

UJ

aw 8/5/15

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW3

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID:

1505F17-004A

Sample wt/vol:

5

(g/mL) ML

Lab File ID:

P1052.D

Level: (low/med)

LOW

Date Received:

05/20/15

% Moisture: not dec.

Date Analyzed:

06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor:

1.00

Soil Extract Volume:

(μ L)

Soil Aliquot Volume

(μ L)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μ g/L or μ g/Kg) <u>UG/L</u>	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

mw 8/5/15

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW4B

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-005A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1053.D

Level: (low/med)

LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	<u>Q</u>
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	2	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	13	U
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

W 8/5/15

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW4B

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-005A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1053.D

Level: (low/med)

LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

MW 8/5/15

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW6

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-006A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1054.D

Level: (low/med)

LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (pL)

Soil Aliquot Volume _____ (pL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(pg/L or pg/Kg) <u>UG/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	0.5	U
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW6

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR012

Matrix: (soil/water) WATER Lab Sample ID: 1505F17-006A

Sample wt/vol: 5 (g/mL) ML Lab File ID: P1054.D

Level: (low/med) LOW Date Received: 05/20/15

% Moisture: not dec. Date Analyzed: 06/01/15

GC Column: R-624 0.18 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	<u>Q</u>
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

W8/5hs

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 7

MW7

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-007A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1055.D

Level: (low/med)

LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____

(µL)

Soil Aliquot Volume _____

(µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.8	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	0.9	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	9	U
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

W 8/5/15

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW7

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID:

1505F17-007A

Sample wt/vol: 5

(g/mL) ML

Lab File ID:

P1055.D

Level: (low/med)

LOW

Date Received:

05/20/15

% Moisture: not dec.

Date Analyzed:

06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor:

1.00

Soil Extract Volume: _____

(µL)

Soil Aliquot Volume _____

(µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	<u>Q</u>
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

MW 8/5/15

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW12

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID:

1505F17-008A

Sample wt/vol:

5

(g/mL) ML

Lab File ID:

P1072.D

Level: (low/med)

LOW

Date Received:

05/20/15

% Moisture: not dec.

Date Analyzed:

06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor:

1.00

Soil Extract Volume:

(μ L)

Soil Aliquot Volume

(μ L)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μ g/L or μ g/Kg) <u>UG/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	2	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	4	U
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

W 8/5/15

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW12

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-008A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1072.D

Level: (low/med)

LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____

(μ L)

Soil Aliquot Volume _____

(μ L)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μ g/L or μ g/Kg) <u>UG/L</u>	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

MW 8/5/15

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW13

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-009A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1073.D

Level: (low/med)

LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	0.5	U
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW13

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR012

Matrix: (soil/water) WATER Lab Sample ID: 1505F17-009A

Sample wt/vol: 5 (g/mL) ML Lab File ID: P1073.D

Level: (low/med) LOW Date Received: 05/20/15

% Moisture: not dec. Date Analyzed: 06/01/15

GC Column: R-624 0.18 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (μL) Soil Aliquot Volume _____ (μL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(pg/L or pg/Kg) <u>UG/L</u>	<u>Q</u>
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U, uJ
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

uJ 8/5/15

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW14

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-010A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1074.D

Level: (low/med)

LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (pL)

Soil Aliquot Volume _____ (pL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(pg/L or pg/Kg) <u>UG/L</u>	<u>Q</u>
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	0.5	U
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

W 8/5/15

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW14

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-010A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1074.D

Level: (low/med)

LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

mw 8/5/15

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW64

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-011A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1075.D

Level: (low/med)

LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____

(µL)

Soil Aliquot Volume _____

(µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	<u>Q</u>
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	0.5	U
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

MW8/5/15

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW64

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-011A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1075.D

Level: (low/med) LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	<u>Q</u>
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

W 8/5/15

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW1

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-012A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1057.D

Level: (low/med)

LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____

(μ L)

Soil Aliquot Volume _____

(μ L)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μ g/L or μ g/Kg) <u>UG/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	8	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	6	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	170 ~~160~~	U
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

W 8/5/15

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW1

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-012A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1057.D

Level: (low/med)

LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

mw 8/5/15

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RWIDL

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID:

1505F17-012ADL

Sample wt/vol: 5

(g/mL) ML

Lab File ID:

P1077.D

Level: (low/med)

LOW

Date Received:

05/20/15

% Moisture: not dec.

Date Analyzed:

06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor:

5.00

Soil Extract Volume:

(μ L)

Soil Aliquot Volume

(μ L)

CONCENTRATION UNITS:

(μ g/L or μ g/Kg) UG/L

CAS NO.	COMPOUND	(μ g/L or μ g/Kg) <u>UG/L</u>	Q
75-71-8	Dichlorodifluoromethane	3	U
74-87-3	Chloromethane	3	U
75-01-4	Vinyl chloride	3	U
74-83-9	Bromomethane	3	U
75-00-3	Chloroethane	3	U
75-69-4	Trichlorofluoromethane	3	U
75-35-4	1,1-Dichloroethene	3	U
75-09-2	Methylene chloride	3	U
156-60-5	trans-1,2-Dichloroethene	3	U
75-34-3	1,1-Dichloroethane	3	U
594-20-7	2,2-Dichloropropane	3	U
156-59-2	cis-1,2-Dichloroethene	3	U
74-97-5	Bromochloromethane	3	U
67-66-3	Chloroform	3	U
71-55-6	1,1,1-Trichloroethane	3	U
56-23-5	Carbon tetrachloride	3	U
563-58-6	1,1-Dichloropropene	3	U
107-06-2	1,2-Dichloroethane	3	U
71-43-2	Benzene	3	U
79-01-6	Trichloroethene	6	U
78-87-5	1,2-Dichloropropane	3	U
74-95-3	Dibromomethane	3	U
75-27-4	Bromodichloromethane	3	U
10061-01-5	cis-1,3-Dichloropropene	3	U
108-88-3	Toluene	3	U
10061-02-6	trans-1,3-Dichloropropene	3	U
79-00-5	1,1,2-Trichloroethane	3	U
127-18-4	Tetrachloroethene	170	U
142-28-9	1,3-Dichloropropane	3	U
124-48-1	Dibromochloromethane	3	U
108-90-7	Chlorobenzene	3	U
630-20-6	1,1,1,2-Tetrachloroethane	3	U
100-41-4	Ethylbenzene	3	U
179601-23-1	m,p-Xylene	3	U
95-47-6	o-Xylene	3	U

Use original results

UJ
↓
UJ
UJ

MW 8/5/15

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW1DL

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID:

1505F17-012ADL

Sample wt/vol: 5

(g/mL) ML

Lab File ID:

P1077.D

Level: (low/med)

LOW

Date Received:

05/20/15

% Moisture: not dec.

Date Analyzed:

06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor:

5.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

CONCENTRATION UNITS:
(µg/L or µg/Kg) UG/L

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) <u>UG/L</u>	Q
100-42-5	Styrene	3	U
75-25-2	Bromoform	3	U
98-82-8	Isopropylbenzene	3	U
108-86-1	Bromobenzene	3	U
79-34-5	1,1,2,2-Tetrachloroethane	3	U
96-18-4	1,2,3-Trichloropropane	3	U
103-65-1	n-Propylbenzene	3	U
	2/4-Chlorotoluene	3	U
108-67-8	1,3,5-Trimethylbenzene	3	U
98-06-6	tert-Butylbenzene	3	U
95-63-6	1,2,4-Trimethylbenzene	3	U
135-98-8	sec-Butylbenzene	3	U
104-51-8	n-Butylbenzene	3	U
541-73-1	1,3-Dichlorobenzene	3	U
106-46-7	1,4-Dichlorobenzene	3	U
99-87-6	4-Isopropyltoluene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
120-82-1	1,2,4-Trichlorobenzene	3	U
87-68-3	Hexachlorobutadiene	3	U
87-61-6	1,2,3-Trichlorobenzene	3	U
1634-04-4	Methyl tert-butyl ether	3	U
	Total Trihalomethanes	3	U

Use original results

UJ

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW2

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-013A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1058.D

Level: (low/med) LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	13	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	19	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	1700 ~~1100~~	U
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

mw 8/5/15

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW2

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS NO.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-013A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1058.D

Level: (low/med)

LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(pg/L or pg/Kg) <u>UG/L</u>	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

mw 8/5/15

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13DL

RW2DL

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID:

1505F17-013ADL

Sample wt/vol: 5

(g/mL) ML

Lab File ID:

P1078.D

Level: (low/med)

LOW

Date Received:

05/20/15

% Moisture: not dec.

Date Analyzed:

06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor:

50.00

Soil Extract Volume:

(μ L)

Soil Aliquot Volume

(μ L)

Use original results

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(μ g/L or μ g/Kg)	UG/L	
75-71-8	Dichlorodifluoromethane	25	U	UJ
74-87-3	Chloromethane	25	U	
75-01-4	Vinyl chloride	25	U	
74-83-9	Bromomethane	25	U	
75-00-3	Chloroethane	25	U	
75-69-4	Trichlorofluoromethane	25	U	
75-35-4	1,1-Dichloroethene	25	U	UJ
75-09-2	Methylene chloride	25	U	UJ
156-60-5	trans-1,2-Dichloroethene	25	U	
75-34-3	1,1-Dichloroethane	25	U	
594-20-7	2,2-Dichloropropane	25	U	
156-59-2	cis-1,2-Dichloroethene	25	U	
74-97-5	Bromochloromethane	25	U	
67-66-3	Chloroform	25	U	
71-55-6	1,1,1-Trichloroethane	25	U	
56-23-5	Carbon tetrachloride	25	U	
563-58-6	1,1-Dichloropropene	25	U	
107-06-2	1,2-Dichloroethane	25	U	
71-43-2	Benzene	25	U	
79-01-6	Trichloroethene	26	U	
78-87-5	1,2-Dichloropropane	25	U	
74-95-3	Dibromomethane	25	U	
75-27-4	Bromodichloromethane	25	U	
10061-01-5	cis-1,3-Dichloropropene	25	U	
108-88-3	Toluene	25	U	
10061-02-6	trans-1,3-Dichloropropene	25	U	
79-00-5	1,1,2-Trichloroethane	25	U	
127-18-4	Tetrachloroethene	1700	U	J
142-28-9	1,3-Dichloropropane	25	U	
124-48-1	Dibromochloromethane	25	U	
108-90-7	Chlorobenzene	25	U	
630-20-6	1,1,1,2-Tetrachloroethane	25	U	
100-41-4	Ethylbenzene	25	U	
179601-23-1	m,p-Xylene	25	U	
95-47-6	o-Xylene	25	U	

W 8/5/15

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

137L

RW2DL

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID:

1505F17-013ADL

Sample wt/vol: 5

(g/mL) ML

Lab File ID:

P1078.D

Level: (low/med)

LOW

Date Received:

05/20/15

% Moisture: not dec.

Date Analyzed:

06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor:

50.00

Soil Extract Volume:

_____ (μL)

Soil Aliquot Volume

_____ (μL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μg/L or μg/Kg) <u>UG/L</u>	Q
100-42-5	Styrene	25	U
75-25-2	Bromoform	25	U
98-82-8	Isopropylbenzene	25	U
108-86-1	Bromobenzene	25	U
79-34-5	1,1,2,2-Tetrachloroethane	25	U
96-18-4	1,2,3-Trichloropropane	25	U
103-65-1	n-Propylbenzene	25	U
	2/4-Chlorotoluene	25	U
108-67-8	1,3,5-Trimethylbenzene	25	U
98-06-6	tert-Butylbenzene	25	U
95-63-6	1,2,4-Trimethylbenzene	25	U
135-98-8	sec-Butylbenzene	25	U
104-51-8	n-Butylbenzene	25	U
541-73-1	1,3-Dichlorobenzene	25	U
106-46-7	1,4-Dichlorobenzene	25	U
99-87-6	4-Isopropyltoluene	25	U
95-50-1	1,2-Dichlorobenzene	25	U
120-82-1	1,2,4-Trichlorobenzene	25	U
87-68-3	Hexachlorobutadiene	25	U
87-61-6	1,2,3-Trichlorobenzene	25	U
1634-04-4	Methyl tert-butyl ether	25	U
	Total Trihalomethanes	25	U

Use original results

WJ

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. 13DL

RW2-DL

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478Case No.: HDR-ALBAN SAS No.: _____SDG No.: HDR012

Matrix: (soil/water)

WATERLab Sample ID: 1505F17-013ADLSample wt/vol: 5(g/mL) mLLab File ID: P1078.DLevel: (low/med) LOWDate Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15GC Column: R-624 0.18ID: .18 (mm)Dilution Factor: 50.00

Soil Extract Volume:

(μL)

Soil Aliquot Volume: 0 (μL)

CONCENTRATION UNITS:

Number TICs found:

1

(μg/L or μg/Kg)

μg/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	4.03	170	<u>JD</u>

Use original results

rw 8/5/15

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW3

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-014A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1059.D

Level: (low/med)

LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.7	
74-83-9	Bromomethane	0.5	✓ UJ
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	✓ UJ
156-60-5	trans-1,2-Dichloroethene	0.8	
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	54	
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	53	
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	810 ~~500~~	✓
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW3

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID:

1505F17-014A

Sample wt/vol: 5

(g/mL) ML

Lab File ID:

P1059.D

Level: (low/med)

LOW

Date Received:

05/20/15

% Moisture: not dec.

Date Analyzed:

06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor:

1.00

Soil Extract Volume: _____

(μL)

Soil Aliquot Volume _____

(μL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(pg/L or pg/Kg) <u>UG/L</u>	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

MS 8/5/15

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW3DL

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID:

1505F17-014ADL

Sample wt/vol: 5

(g/mL) ML

Lab File ID:

P1079.D

Level: (low/med)

LOW

Date Received:

05/20/15

% Moisture: not dec.

Date Analyzed:

06/02/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor:

20.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(µg/L or µg/Kg) UG/L

Q

75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
594-20-7	2,2-Dichloropropane	10	U
156-59-2	cis-1,2-Dichloroethene	59	U
74-97-5	Bromochloromethane	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
563-58-6	1,1-Dichloropropene	10	U
107-06-2	1,2-Dichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	63	U
78-87-5	1,2-Dichloropropane	10	U
74-95-3	Dibromomethane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	810	U
142-28-9	1,3-Dichloropropane	10	U
124-48-1	Dibromochloromethane	10	U
108-90-7	Chlorobenzene	10	U
630-20-6	1,1,1,2-Tetrachloroethane	10	U
100-41-4	Ethylbenzene	10	U
179601-23-1	m,p-Xylene	10	U
95-47-6	o-Xylene	10	U

Use original results

UJ
UJ
UJ

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

14DL

RW3DL

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID:

1505F17-014ADL

Sample wt/vol:

5

(g/mL) ML

Lab File ID:

PL079.D

Level: (low/med)

LOW

Date Received:

05/20/15

% Moisture: not dec.

Date Analyzed:

06/02/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor:

20.00

Soil Extract Volume:

(μ L)

Soil Aliquot Volume

(μ L)

Use original results

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μ g/L or μ g/Kg) <u>UG/L</u>	Q
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
108-86-1	Bromobenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
96-18-4	1,2,3-Trichloropropane	10	U
103-65-1	n-Propylbenzene	10	U
	2/4-Chlorotoluene	10	U
108-67-8	1,3,5-Trimethylbenzene	10	U
98-06-6	tert-Butylbenzene	10	U
95-63-6	1,2,4-Trimethylbenzene	10	U
135-98-8	sec-Butylbenzene	10	U
104-51-8	n-Butylbenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
99-87-6	4-Isopropyltoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
87-61-6	1,2,3-Trichlorobenzene	10	U
1634-04-4	Methyl tert-butyl ether	10	U
	Total Trihalomethanes	10	U

UJ

W 8/5/15

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-1

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-015A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1070.D

Level: (low/med) LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	<u>Q</u>
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	0.5	U
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

W 8/5/15

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-1

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-015A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1070.D

Level: (low/med)

LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

W 8/5/15

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 16

STORAGE BLANK

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-016A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1071.D

Level: (low/med) LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	0.5	U
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 16

STORAGE BLANK

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR012

Matrix: (soil/water)

WATER

Lab Sample ID: 1505F17-016A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: P1071.D

Level: (low/med)

LOW

Date Received: 05/20/15

% Moisture: not dec.

Date Analyzed: 06/01/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	<u>Q</u>
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

W815115

**DATA USABILITY SUMMARY REPORT
APPLE VALLEY RD., LA GRANGE, NEW YORK**

Client: HDR, Inc., Albany, New York
SDG: HDR013
Laboratory: Pace Analytical, Melville, New York
Site: Apple Valley Rd, New York
Date: August 5, 2015

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	MW2-2015-05-20	1505G38-001	Water
1DL	MW2-2015-05-20DL	1505G38-001DL	Water
2	MW5-2015-05-20	1505G38-002	Water
3	MW8-2015-05-20	1505G38-003	Water
4	MW9-2015-05-20	1505G38-004	Water
5	MW10-2015-05-20	1505G38-005	Water
6	MW11D-2015-05-20	1505G38-006	Water
7	MW11M-2015-05-20	1505G38-007	Water
7DL	MW11M-2015-05-20DL	1505G38-007DL	Water

Note: The Sample IDs are abbreviated on the Form Is

A Data Usability Summary Review was performed on the analytical data for seven water samples collected on May 20-21, 2015 by HDR, Inc. at the Apple Valley Rd. site in La Grange, New York. The samples were analyzed under Environmental Protection Agency (USEPA) "Measurement of Purgeable Organic Compounds in Water by Capillary Column Gas Chromatography/Mass Spectrometry".

Specific method references are as follows:

Analysis
VOC

Method References
EPA Method 524.2

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods and the USEPA Region II Data Review Standard Operating Procedures (SOPs) as follows:

- SOP Number HW-34, Revision 3, February 2013: Trace Volatile Data Validation;
- and the reviewer's professional judgment.

The following items/criteria were reviewed:

Organics

- Data Completeness
- Holding times and sample preservation

- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample (LCS) recoveries
- Method blank and field blank contamination
- Gas Chromatography (GC)/Mass Spectroscopy (MS) tuning
- Initial and continuing calibration summaries
- Compound Quantitation
- Internal standard area and retention time summary forms
- Field Duplicate sample precision
- TICs

Overall Usability Issues:

There were no rejections of data.

Overall the data is acceptable for the intended purposes as qualified for the following deficiencies.

- One or two compounds were qualified as estimated in all samples due to low LCS recoveries.
- Two compounds were qualified as estimated in four samples and two dilution samples due to high continuing calibration %D values.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedences of QC criteria.

Data Completeness

- The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

Volatile Organic Compounds (VOCs)

Holding Times

- All samples were analyzed within 14 day for preserved water samples.

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate %R values.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- A MS/MSD sample was not collected.

Laboratory Control Samples

- The following table presents LCS percent recoveries (%R) outside the QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J). Results are valid and usable, however possibly biased.

LCS ID	Compound	%R	Qualifier	Affected Samples
LFB060215	Bromomethane	52%	J/UJ	1, 6, 7
	Methylene chloride	68%	J/UJ	
LFB060315	Dichlorodifluoromethane	145%	None	All Associated ND
	Chloromethane	156%	None	
	Bromomethane	137%	None	
	Bromoform	67%	J/UJ	1DL, 2-5, 7DL

Method Blank

- The method blanks were free of contamination.

Field Blank

- Field QC samples were not collected.

GC/MS Tuning

- All criteria were met.

Initial Calibration

- The initial calibration exhibited acceptable %RSD and mean RRF values.

Continuing Calibration

- The following table presents compounds that exceeded 30/40 percent deviation (%D) and/or RRF values <0.05/0.01 in the continuing calibration (CCAL). A low RRF indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %D may indicate a potential high or low bias. All results for these compounds in affected samples are considered estimated and qualified (J/UJ).

CCAL Date	Compound	%D/RRF	Qualifier	Affected Samples
06/02/15	Bromomethane	38.6%	None	See LCS
06/03/15	Bromomethane	34.1%	J/UJ	1DL, 2-5, 7DL
	Bromochloromethane	51.2%	J/UJ	

Compound Quantitation

- Several samples exhibited high concentrations of target compounds over the linear range of the instrument and were flagged (E) by the laboratory. These samples were diluted and reanalyzed and the dilution results for these compounds should be used for reporting purposes.

Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

Field Duplicate Sample Precision

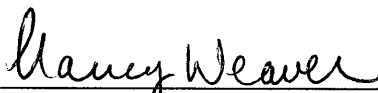
- Field duplicate samples were not collected.

Tentatively Identified Compounds (TICs)

- All "known" TICs were qualified (NJ) and all "unknown" TICs were qualified (J).

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed:



Nancy Weaver
Senior Chemist

Dated: 8/6/15

Data Qualifiers

- J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ = The analyte was not detected above the sample reporting limit; and the reporting limit is approximate.
- U = The analyte was analyzed for, but was not detected above the sample reporting limit.
- R = The sample results is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW2

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR013

Matrix: (soil/water)

WATER

Lab Sample ID: 1505G38-001A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: P1096.D

Level: (low/med)

LOW

Date Received: 05/22/15

% Moisture: not dec.

Date Analyzed: 06/02/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	8	
74-83-9	Bromomethane	0.5	✓ UJ
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	✓ UJ
156-60-5	trans-1,2-Dichloroethene	7	
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	380 350	E
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	320 290	E
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	2900 2500	E
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW2

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR013

Matrix: (soil/water)

WATER

Lab Sample ID: 1505G38-001A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: P1096.D

Level: (low/med)

LOW

Date Received: 05/22/15

% Moisture: not dec.

Date Analyzed: 06/02/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____

(μ L)

Soil Aliquot Volume _____

(μ L)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μ g/L or pg/Kg) μ g/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

mw 8/5/15

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW2 DL

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR013

Matrix: (soil/water)

WATER

Lab Sample ID: 1505G38-001A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: 315\G32998

Level: (low/med)

LOW

Date Received: 05/22/15

% Moisture: not dec.

Date Analyzed: 06/03/15

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 100.00

Soil Extract Volume: _____

(μ L)

Soil Aliquot Volume _____

(μ L)

CONCENTRATION UNITS:

(μ g/L or μ g/Kg) μ g/L

Q

CAS NO.	COMPOUND	(μ g/L or μ g/Kg) <u>μg/L</u>	Q
75-71-8	Dichlorodifluoromethane	50	U
74-87-3	Chloromethane	50	U
75-01-4	Vinyl chloride	50	U
74-83-9	Bromomethane	50	U
75-00-3	Chloroethane	50	U
75-69-4	Trichlorofluoromethane	50	U
75-35-4	1,1-Dichloroethene	50	U
75-09-2	Methylene chloride	50	U
156-60-5	trans-1,2-Dichloroethene	50	U
75-34-3	1,1-Dichloroethane	50	U
594-20-7	2,2-Dichloropropane	50	U
156-59-2	cis-1,2-Dichloroethene	380	U
74-97-5	Bromochloromethane	50	U
67-66-3	Chloroform	50	U
71-55-6	1,1,1-Trichloroethane	50	U
56-23-5	Carbon tetrachloride	50	U
563-58-6	1,1-Dichloropropene	50	U
107-06-2	1,2-Dichloroethane	50	U
71-43-2	Benzene	50	U
79-01-6	Trichloroethene	320	U
78-87-5	1,2-Dichloropropane	50	U
74-95-3	Dibromomethane	50	U
75-27-4	Bromodichloromethane	50	U
10061-01-5	cis-1,3-Dichloropropene	50	U
108-88-3	Toluene	50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
79-00-5	1,1,2-Trichloroethane	50	U
127-18-4	Tetrachloroethene	2900	U
142-28-9	1,3-Dichloropropane	50	U
124-48-1	Dibromochloromethane	50	U
108-90-7	Chlorobenzene	50	U
630-20-6	1,1,1,2-Tetrachloroethane	50	U
100-41-4	Ethylbenzene	50	U
179601-23-1	m,p-Xylene	50	U
95-47-6	o-Xylene	50	U

Use original results

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 1DL

MW2 DL

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR013

Matrix: (soil/water)

WATER

Lab Sample ID: 1505G38-001A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: 315\G32998

Level: (low/med)

LOW

Date Received: 05/22/15

% Moisture: not dec.

Date Analyzed: 06/03/15

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 100.00

Soil Extract Volume: _____ (pL)

Soil Aliquot Volume _____ (pL)

CONCENTRATION UNITS:

(pg/L or pg/Kg) pg/L

Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (pg/L or pg/Kg) <u>pg/L</u>	Q
100-42-5	Styrene	50	U
75-25-2	Bromoform	50	U
98-82-8	Isopropylbenzene	50	U
108-86-1	Bromobenzene	50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	U
96-18-4	1,2,3-Trichloropropane	50	U
103-65-1	n-Propylbenzene	50	U
	2/4-Chlorotoluene	50	U
108-67-8	1,3,5-Trimethylbenzene	50	U
98-06-6	tert-Butylbenzene	50	U
95-63-6	1,2,4-Trimethylbenzene	50	U
135-98-8	sec-Butylbenzene	50	U
104-51-8	n-Butylbenzene	50	U
541-73-1	1,3-Dichlorobenzene	50	U
106-46-7	1,4-Dichlorobenzene	50	U
99-87-6	4-Isopropyltoluene	50	U
95-50-1	1,2-Dichlorobenzene	50	U
120-82-1	1,2,4-Trichlorobenzene	50	U
87-68-3	Hexachlorobutadiene	50	U
87-61-6	1,2,3-Trichlorobenzene	50	U
1634-04-4	Methyl tert-butyl ether	50	U
	Total Trihalomethanes	50	U

UJ

Use original results

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 2

MW5

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR013

Matrix: (soil/water)

WATER

Lab Sample ID: 1505G38-002A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: 315\G33000

Level: (low/med)

LOW

Date Received: 05/22/15

% Moisture: not dec.

Date Analyzed: 06/03/15

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.9	
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	1	
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW5

2

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR013

Matrix: (soil/water)

WATER

Lab Sample ID: 1505G38-002A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: 315\G33000

Level: (low/med)

LOW

Date Received: 05/22/15

% Moisture: not dec.

Date Analyzed: 06/03/15

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>µg/L</u>	<u>Q</u>
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.9	

uJ

W 8/5/15

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW8

3

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR013

Matrix: (soil/water)

WATER

Lab Sample ID: 1505G38-003A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: 315\G33001

Level: (low/med)

LOW

Date Received: 05/22/15

% Moisture: not dec.

Date Analyzed: 06/03/15

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	1	
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	1	
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	3	
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

mw 8/5/15

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW8

3

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR013

Matrix: (soil/water)

WATER

Lab Sample ID: 1505G38-003A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: 315\G33001

Level: (low/med) LOW

Date Received: 05/22/15

% Moisture: not dec.

Date Analyzed: 06/03/15

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

UJ

mw 8/5/15

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW9

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR013

Matrix: (soil/water)

WATER

Lab Sample ID:

1505G38-004A

Sample wt/vol: 5

(g/mL) mL

Lab File ID:

315\G33002

Level: (low/med)

LOW

Date Received:

05/22/15

% Moisture: not dec.

Date Analyzed:

06/03/15

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor:

1.00

Soil Extract Volume: _____

(μ L)

Soil Aliquot Volume _____

(μ L)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μ g/L or μ g/Kg) μ g/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.6	
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	2	
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW9

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR013

Matrix: (soil/water)

WATER

Lab Sample ID: 1505G38-004A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: 315\G33002

Level: (low/med)

LOW

Date Received: 05/22/15

% Moisture: not dec.

Date Analyzed: 06/03/15

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW10

5

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR013

Matrix: (soil/water)

WATER

Lab Sample ID: 1505G38-005A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: 315\G32997

Level: (low/med) LOW

Date Received: 05/22/15

% Moisture: not dec.

Date Analyzed: 06/03/15

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>µg/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	2	
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	2	
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	21	
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

MW815115

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW10

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR013

Matrix: (soil/water)

WATER

Lab Sample ID: 1505G38-005A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: 315\G32997

Level: (low/med)

LOW

Date Received: 05/22/15

% Moisture: not dec.

Date Analyzed: 06/03/15

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	✓
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

MW 8/5/15

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW11D

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478Case No.: HDR-ALBA SAS No.: _____SDG No.: HDR013

Matrix: (soil/water)

WATERLab Sample ID: 1505G38-006ASample wt/vol: 5(g/mL) mLLab File ID: P1103.D

Level: (low/med)

LOWDate Received: 05/22/15

% Moisture: not dec.

Date Analyzed: 06/02/15GC Column: R-624 0.18ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: _____ (μL)

Soil Aliquot Volume _____ (μL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μg/L or μg/Kg) <u>μg/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	4	
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	2	
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	10	
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

FORM I VOA - 1

OLM04.2

mw 8/5/15

HDR013 V75

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW11D

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR013

Matrix: (soil/water)

WATER

Lab Sample ID: 1505G38-006A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: P1103.D

Level: (low/med)

LOW

Date Received: 05/22/15

% Moisture: not dec.

Date Analyzed: 06/02/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (μL)

Soil Aliquot Volume _____ (μL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μg/L or μg/Kg) <u>μg/L</u>	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

W 4/5/15

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW11M

Lab Name: FACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR013

Matrix: (soil/water)

WATER

Lab Sample ID:

1505G38-007A

Sample wt/vol:

5

(g/mL) mL

Lab File ID:

P1102.D

Level: (low/med)

LOW

Date Received:

05/22/15

% Moisture: not dec.

Date Analyzed:

06/02/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor:

1.00

Soil Extract Volume:

(pL)

Soil Aliquot Volume

(pL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>µg/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	3	
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	2	
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	96	
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	58	
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	170 ~~220~~	~~U~~
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

MW 8/5/15

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW11M

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR013

Matrix: (soil/water)

WATER

Lab Sample ID: 1505G38-007A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: P1102.D

Level: (low/med)

LOW

Date Received: 05/22/15

% Moisture: not dec.

Date Analyzed: 06/02/15

GC Column: R-624 0.18

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (μL)

Soil Aliquot Volume _____ (μL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μg/L or μg/Kg) μg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

MW 8/5/13

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW11M DL

70L

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR013

Matrix: (soil/water)

WATER

Lab Sample ID:

1505G38-007A

Sample wt/vol: 5

(g/mL) mL

Lab File ID:

315\G32999

Level: (low/med)

LOW

Date Received:

05/22/15

% Moisture: not dec.

Date Analyzed:

06/03/15

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor:

10.00

Soil Extract Volume: _____

(μ L)

Soil Aliquot Volume _____

(μ L)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μ g/L or μ g/Kg) μ g/L	Q
75-71-8	Dichlorodifluoromethane	5	U
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-09-2	Methylene chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
594-20-7	2,2-Dichloropropane	5	U
156-59-2	cis-1,2-Dichloroethene	100	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
563-58-6	1,1-Dichloropropene	5	U
107-06-2	1,2-Dichloroethane	5	U
71-43-2	Benzene	5	U
79-01-6	Trichloroethene	58	U
78-87-5	1,2-Dichloropropane	5	U
74-98-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
127-18-4	Tetrachloroethene	170	U
142-28-9	1,3-Dichloropropane	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
100-41-4	Ethylbenzene	5	U
179601-23-1	m,p-Xylene	5	U
95-47-6	o-Xylene	5	U

Use original results

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW11M DL

7DL

Lab Name: PACE ANALYTICAL

Contract: _____

Lab Code: 10478

Case No.: HDR-ALBA SAS No.: _____

SDG No.: HDR013

Matrix: (soil/water)

WATER

Lab Sample ID: 1505G38-007A

Sample wt/vol: 5

(g/mL) mL

Lab File ID: 315/G32999

Level: (low/med)

LOW

Date Received: 05/22/15

% Moisture: not dec.

Date Analyzed: 06/03/15

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 10.00

Soil Extract Volume: _____ (μL)

Soil Aliquot Volume _____ (μL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μg/L or μg/Kg) μg/L	Q
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
98-82-8	Isopropylbenzene	5	U
108-86-1	Bromobenzene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
103-65-1	n-Propylbenzene	5	U
	2/4-Chlorotoluene	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
104-51-8	n-Butylbenzene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
99-87-6	4-Isopropyltoluene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
87-68-3	Hexachlorobutadiene	5	U
87-61-6	1,2,3-Trichlorobenzene	5	U
1634-04-4	Methyl tert-butyl ether	5	U
	Total Trihalomethanes	5	U

Use original results

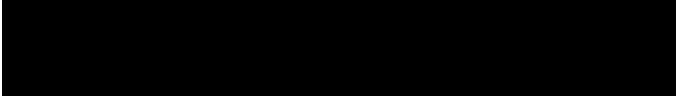
UJ

W 8/5/15



Appendix G

SVI Data Usability Summary Package



**DATA USABILITY SUMMARY REPORT
APPLE VALLEY RD., LA GRANGE, NEW YORK**

Client: HDR, Inc., Albany, New York
SDG: 03733
Laboratory: Spectrum Analytical, Inc., Agawam, Massachusetts
Site: Apple Valley Rd, La Grange, New York
Date: April 15, 2015

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1*	AVSP-R2-SS-20150223	P0233-01	Air
1DL*	AVSP-R2-SS-20150223DL	P0233-01DL	Air
2*	AVSP-R2-AI-20150223	P0233-02	Air
2DL*	AVSP-R2-AI-20150223DL	P0233-02DL	Air
3*	AVSP-R3-SS-20150223	P0233-03	Air
3DL*	AVSP-R3-SS-20150223DL	P0233-03DL	Air
4*	AVSP-R3-AI-20150223	P0233-04	Air
4DL*	AVSP-R3-AI-20150223DL	P0233-04DL	Air
5*	AVSP-R4-SS-20150223	P0233-05	Air
6*	AVSP-R4-AI-20150223	P0233-06	Air
6DL*	AVSP-R4-AI-20150223DL	P0233-06DL	Air
7*	AVSP-AO-20150223	P0233-07	Air
8*	AVSP-R5-SS-20150224	P0233-08	Air
9*	AVSP-R5-AI-20150224	P0233-09	Air
9DL*	AVSP-R5-AI-20150224DL	P0233-09DL	Air
10	AVSP-R1-SS-20150217	P0233-10	Air
11	AVSP-R1-AA-20150217	P0233-11	Air
12	AVSP-R1-AI-20150217	P0233-12	Air

* - Low Level

A Data Usability Summary Review was performed on the analytical data for twelve air samples collected on February 17-24, 2015 by HDR, Inc. at the Apple Valley Rd. site in La Grange, New York. The samples were analyzed under "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition January 1999, EPA/625/R-96/010B", Compendium Method TO-15, "Determination Of Volatile Organic Compounds (VOCs) In Air Collected In Specially-Prepared Canisters And Analyzed By Gas Chromatography/Mass Spectrometry (GC/MS)".

The data have been evaluated according to the protocols and quality control (QC) requirements of the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-31, Revision 4, October 2006: Validating Volatile Organics of Ambient Air on Canisters by Method TO-15, and the reviewer's professional judgment.

Organics

The following items/criteria were reviewed for this report:

- Data Completeness
- Cover letter, Narrative, and Data Reporting Forms
- Canister Certification Blanks
- Canister Certification Pressures Differences
- Chains-of-Custody and Traffic Reports
- Holding Times and sample preservation
- Laboratory Control Sample (LCS) recoveries
- Surrogate Compound Recoveries
- GC/MS Tuning
- Method Blank Contamination
- Initial and Continuing Calibration Summaries
- Compound Quantitation
- Internal Standard (IS) Area Performance
- Field Duplicate Sample Precision

The items listed above were technically and contractually in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

Overall Evaluation of Data and Potential Usability Issues

There were no rejections of data.

Overall the data is acceptable for the intended purposes as qualified for the following deficiencies.

- Isopropyl alcohol, benzene and/or naphthalene were qualified as nondetected in several samples due to method blank contamination.
- Ethanol or propene were qualified as estimated in four samples due to high continuing calibration %D values.

Data Completeness

- The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

Cover letter, Narrative, and Data Reporting Forms

- All criteria were met

Canister Certification Blanks

- The batch blank checks were non-detect or < RL.

Canister Certification Pressures Differences

- All criteria were met.

Chains-of-Custody and Traffic Reports

- All criteria were met

Holding Times

- All samples were analyzed within 30 days for air samples.

Laboratory Control Samples

- The following table presents LCS percent recoveries (%R) outside the QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J). Results are valid and usable, however possibly biased.

LCS ID	Compound	%R	Qualifier	Affected Samples
1504218-BS1	1,2,4-Trichlorobenzene	138%	None	All Associated ND

Surrogate Compound Recoveries

- All samples exhibited acceptable surrogate recoveries.

GC/MS Tuning

- All criteria were met.

Method Blank

- The following table lists method blanks with contamination and the samples associated with the blanks that had results qualified as a consequence of the blank contamination. For detected compound concentrations <RL, the results are negated and qualified (U). For detected sample concentrations >RL of methylene chloride, 2-butanone or acetone

(common laboratory contaminants) less than ten times (10x) the highest associated blank (after taking sample dilution levels, percent moisture and sample volume into account) are negated and qualified with a (U). For all other compounds >RL, an action level of five times (5x) the highest associated blank concentration is used.

Blank ID	Compound	Conc. ppbv	Action Level ppbv	Qualifier	Affected Samples
1504093-BLK2	Ethanol	0.240	1.20	None	All >5X
	Isopropyl alcohol	0.250	1.25	U	7
	Benzene	0.0600	0.30	U	5, 8
	Naphthalene	0.130	0.65	U	1, 2, 3, 4, 5, 6, 8

Field Blank

- Field QC samples were not collected.

Initial Calibration

- The initial calibrations exhibited acceptable %RSD and mean RRF values.

Continuing Calibration

- The following table presents compounds that exceeded 30 percent deviation (%D) and/or RRF values <0.05 in the continuing calibration (CCAL). A low RRF indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %D may indicate a potential high or low bias. All results for these compounds in affected samples are considered estimated and qualified (J/UJ).

CCAL Date	Compound	%D/RRF	Qualifier	Affected Samples
03/04/15 (1930)	Ethanol	134%	J/UJ	5, 7, 8
03/06/15 (0800)	Propene	47.5%	J/UJ	1

Compound Quantitation

- Several samples have elevated detection limits due to the dilution required by the high concentrations of target compounds in the samples.
- Several samples exhibited high concentrations of target compounds over the linear range of the instrument and were flagged (E) by the laboratory. The samples were diluted and reanalyzed and the dilution results for these compounds should be used for reporting purposes.
- EDS Sample ID #6 exhibited a high concentration of propene over the linear range of the instrument and was flagged (E) by the laboratory. The sample was diluted and reanalyzed, however, propene was not reported in the reanalysis. The original result has been qualified as estimated (J).

Internal Standard (IS) Area Performance

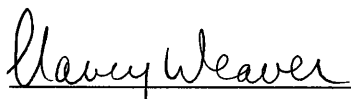
- Internal standards were not provided.

Field Duplicate Sample Precision

- Field duplicate samples were not collected.

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed:


Nancy Weaver
Senior Chemist

Dated:

4/16/15

Data Qualifiers

- J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ = The analyte was not detected above the sample reporting limit; and the reporting limit is approximate.
- U = The analyte was analyzed for, but was not detected above the sample reporting limit.
- R = The sample results is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified.

FORM I - AIR ANALYSIS DATA SHEET

EPA TO-15L

AVSP-R2-SS-20150223

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
 Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
 Project Number: P0233 Received: 02/25/15 14:00
 Matrix: Soil Gas Laboratory ID: SC03733-01 File ID: 0373301.D
 Sampled: 02/24/15 08:28 Analyzed: 03/06/15 17:19
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
 Batch: 1504197 Sequence: S501984 Calibration: 1502030 Instrument: Air3
 Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
115-07-1	Propene	0.100	0.1721	☒
75-71-8	Dichlorodifluoromethane (Freon12)	1.31	6.4777	
74-87-3	Chloromethane	0.100	0.2065	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.100	0.6990	U
75-01-4	Vinyl chloride	0.100	0.2556	U
106-99-0	1,3-Butadiene	0.100	0.2209	U
74-83-9	Bromomethane	0.100	0.3881	U
75-00-3	Chloroethane	0.100	0.2638	U
67-64-1	Acetone	31.9	57.2683	75.8033 E
75-69-4	Trichlorofluoromethane (Freon 11)	70.4	63.8	358.5325 395 6221 E
64-17-5	Ethanol	12.4	23.3800	
107-13-1	Acrylonitrile	0.100	0.2168	U
75-35-4	1,1-Dichloroethene	0.100	0.3967	U
75-09-2	Methylene chloride	2.31	8.0212	
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.0900	0.6898	J
75-15-0	Carbon disulfide	4.99	15.5312	
156-60-5	trans-1,2-Dichloroethene	0.100	0.3965	U
75-34-3	1,1-Dichloroethane	0.100	0.4049	U
1634-04-4	Methyl tert-butyl ether	0.100	0.3607	U
67-63-0	Isopropyl alcohol	6.19	15.1902	
78-93-3	2-Butanone (MEK)	4.94	14.5674	
156-59-2	cis-1,2-Dichloroethene	0.100	0.3965	U
110-54-3	Hexane	0.530	1.8685	
141-78-6	Ethyl acetate	0.100	0.3603	U
67-66-3	Chloroform	0.100	0.4867	U
109-99-9	Tetrahydrofuran	0.610	1.7988	
107-06-2	1,2-Dichloroethane	0.100	0.4049	U
71-55-6	1,1,1-Trichloroethane	0.100	0.5456	U
71-43-2	Benzene	0.510	1.6270	
56-23-5	Carbon tetrachloride	0.0600	0.3774	J
110-82-7	Cyclohexane	0.100	0.3442	U
78-87-5	1,2-Dichloropropane	0.100	0.4622	U
75-27-4	Bromodichloromethane	0.100	0.6699	U
79-01-6	Trichloroethene	0.100	0.5374	U
123-91-1	1,4-Dioxane	0.500	1.7996	U
142-82-5	n-Heptane	0.260	1.0655	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.800	3.2785	
10061-01-5	cis-1,3-Dichloropropene	0.100	0.4540	U

FORM I - AIR ANALYSIS DATA SHEET
EPA TO-15L

AVSP-R2-SS-20150223

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
 Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
 Project Number: P0233 Received: 02/25/15 14:00
 Matrix: Soil Gas Laboratory ID: SC03733-01 File ID: 0373301.D
 Sampled: 02/24/15 08:28 Analyzed: 03/06/15 17:19
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
 Batch: 1504197 Sequence: S501984 Calibration: 1502030 Instrument: Air3
 Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
10061-02-6	trans-1,3-Dichloropropene	0.100	0.4540	U
79-00-5	1,1,2-Trichloroethane	0.100	0.5456	U
108-88-3	Toluene	3.02	11.3636	
591-78-6	2-Hexanone (MBK)	0.600	2.4589	
124-48-1	Dibromochloromethane	0.100	0.8519	U
106-93-4	1,2-Dibromoethane (EDB)	0.100	0.7685	U
127-18-4	Tetrachloroethene	0.260	1.7631	
108-90-7	Chlorobenzene	0.100	0.4605	U
630-20-6	1,1,1,2-Tetrachloroethane	0.100	0.6871	U
100-41-4	Ethylbenzene	0.310	1.3440	
179601-23-1	m,p-Xylene	1.33	5.7661	
75-25-2	Bromoform	0.100	1.0335	U
100-42-5	Styrene	0.190	0.8082	
95-47-6	o-Xylene	0.480	2.0810	
79-34-5	1,1,2,2-Tetrachloroethane	0.100	0.6867	U
98-82-8	Isopropylbenzene	0.0500	0.2458	J
108-67-8	1,3,5-Trimethylbenzene	0.240	1.1799	
622-96-8	4-Ethyltoluene	0.260	1.2782	
95-63-6	1,2,4-Trimethylbenzene	0.610	2.9989	
91-20-3	Naphthalene	0.160	0.8376	✓
541-73-1	1,3-Dichlorobenzene	0.0900	0.5411	J
100-44-7	Benzyl chloride	0.100	0.5153	U
106-46-7	1,4-Dichlorobenzene	0.160	0.9620	
135-98-8	sec-Butylbenzene	0.100	0.5489	U
99-87-6	4-Isopropyltoluene	0.420	2.2537	
95-50-1	1,2-Dichlorobenzene	0.100	0.6012	U
104-51-8	n-Butylbenzene	0.200	1.0978	
120-82-1	1,2,4-Trichlorobenzene	0.100	0.7423	U
87-68-3	Hexachlorobutadiene	0.100	1.0663	U

FORM I - AIR ANALYSIS DATA SHEET
EPA TO-15L

1DL
AVSP-R2-SS-20150223

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
Project Number: P0233 Received: 02/25/15 14:00
Matrix: Soil Gas Laboratory ID: SC03733-01RE1 File ID: 0373301RE1.D
Sampled: 02/24/15 08:28 Analyzed: 03/06/15 18:07
Dilution Factor: 10 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
Batch: 1504197 Sequence: S501984 Calibration: 1502030 Instrument: Air3
Reported to: MRL

Use
original
results

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
67-64-1	Acetone	31.9	75.8033	~~Q~~
75-69-4	Trichlorofluoromethane (Freon 11)	70.4	395.6221	~~Q~~

FORM I - AIR ANALYSIS DATA SHEET

EPA TO-15L

AVSP-R2-AI-20150223

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
 Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
 Project Number: P0233 Received: 02/25/15 14:00
 Matrix: Indoor/Ambient Air Laboratory ID: SC03733-02 File ID: 0373302.D
 Sampled: 02/24/15 08:28 Analyzed: 03/04/15 17:16
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
 Batch: 1504093 Sequence: S501911 Calibration: 1502030 Instrument: Air3
 Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
115-07-1	Propene	0.100	0.1721	U
75-71-8	Dichlorodifluoromethane (Freon12)	5.76	54.3926	28.4820
74-87-3	Chloromethane	0.100	0.2065	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.100	0.6990	U
75-01-4	Vinyl chloride	0.100	0.2556	U
106-99-0	1,3-Butadiene	0.100	0.2209	U
74-83-9	Bromomethane	0.0700	0.2717	J
75-00-3	Chloroethane	0.100	0.2638	U
67-64-1	Acetone	6.66	15.8260	
75-69-4	Trichlorofluoromethane (Freon 11)	1.04	5.8444	
64-17-5	Ethanol	17.0	32.0532	
107-13-1	Acrylonitrile	0.100	0.2168	U
75-35-4	1,1-Dichloroethene	0.100	0.3967	U
75-09-2	Methylene chloride	6.59	22.8831	
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.140	1.0730	
75-15-0	Carbon disulfide	0.500	1.5562	U
156-60-5	trans-1,2-Dichloroethene	0.100	0.3965	U
75-34-3	1,1-Dichloroethane	0.100	0.4049	U
1634-04-4	Methyl tert-butyl ether	0.100	0.3607	U
67-63-0	Isopropyl alcohol	1.38	3.3865	
78-93-3	2-Butanone (MEK)	0.790	2.3296	
156-59-2	cis-1,2-Dichloroethene	0.100	0.3965	U
110-54-3	Hexane	1.10	3.8781	
141-78-6	Ethyl acetate	0.820	2.9547	
67-66-3	Chloroform	0.150	0.7301	
109-99-9	Tetrahydrofuran	0.150	0.4423	
107-06-2	1,2-Dichloroethane	0.100	0.4049	U
71-55-6	1,1,1-Trichloroethane	0.300	1.6368	
71-43-2	Benzene	0.630	2.0098	
56-23-5	Carbon tetrachloride	0.140	0.8807	
110-82-7	Cyclohexane	0.210	0.7228	
78-87-5	1,2-Dichloropropane	0.100	0.4622	U
75-27-4	Bromodichloromethane	0.100	0.6699	U
79-01-6	Trichloroethene	0.100	0.5374	U
123-91-1	1,4-Dioxane	0.500	1.7996	U
142-82-5	n-Heptane	0.370	1.5163	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.110	0.4508	
10061-01-5	cis-1,3-Dichloropropene	0.100	0.4540	U

FORM I - AIR ANALYSIS DATA SHEET

EPA TO-15L

AVSP-R2-AI-20150223

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
 Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
 Project Number: P0233 Received: 02/25/15 14:00
 Matrix: Indoor/Ambient Air Laboratory ID: SC03733-02 File ID: 0373302.D
 Sampled: 02/24/15 08:28 Analyzed: 03/04/15 17:16
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
 Batch: 1504093 Sequence: S501911 Calibration: 1502030 Instrument: Air3
 Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
10061-02-6	trans-1,3-Dichloropropene	0.100	0.4540	U
79-00-5	1,1,2-Trichloroethane	0.100	0.5456	U
108-88-3	Toluene	3.59	13.5084	
591-78-6	2-Hexanone (MBK)	0.100	0.4098	U
124-48-1	Dibromochloromethane	0.100	0.8519	U
106-93-4	1,2-Dibromoethane (EDB)	0.100	0.7685	U
127-18-4	Tetrachloroethene	0.180	1.2206	
108-90-7	Chlorobenzene	0.100	0.4605	U
630-20-6	1,1,1,2-Tetrachloroethane	0.100	0.6871	U
100-41-4	Ethylbenzene	0.0900	0.3902	J
179601-23-1	m,p-Xylene	0.200	0.8671	U
75-25-2	Bromoform	0.100	1.0335	U
100-42-5	Styrene	0.130	0.5530	
95-47-6	o-Xylene	0.100	0.4335	U
79-34-5	1,1,2,2-Tetrachloroethane	0.100	0.6867	U
98-82-8	Isopropylbenzene	0.100	0.4916	U
108-67-8	1,3,5-Trimethylbenzene	0.100	0.4916	
622-96-8	4-Ethyltoluene	0.120	0.5899	
95-63-6	1,2,4-Trimethylbenzene	0.150	0.7374	
91-20-3	Naphthalene	0.210	1.0994	u
541-73-1	1,3-Dichlorobenzene	0.130	0.7816	
100-44-7	Benzyl chloride	0.100	0.5153	U
106-46-7	1,4-Dichlorobenzene	0.140	0.8417	
135-98-8	sec-Butylbenzene	0.100	0.5489	
99-87-6	4-Isopropyltoluene	0.110	0.5903	
95-50-1	1,2-Dichlorobenzene	0.120	0.7215	
104-51-8	n-Butylbenzene	0.130	0.7135	
120-82-1	1,2,4-Trichlorobenzene	0.200	1.4847	
87-68-3	Hexachlorobutadiene	0.100	1.0663	U

FORM I - AIR ANALYSIS DATA SHEET
EPA TO-15L

20L
AVSP-R2-AI-20150223

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
Project Number: P0233 Received: 02/25/15 14:00
Matrix: Indoor/Ambient Air Laboratory ID: SC03733-02RE1 File ID: 0373302RE1.D
Sampled: 02/24/15 08:28 Analyzed: 03/05/15 17:47
Dilution Factor: 2 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
Batch: 1504137 Sequence: S501941 Calibration: 1502030 Instrument: Air3
Reported to: MRL

Use
original
results

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
75-71-8	Dichlorodifluoromethane (Freon12)	5.76	28.4820	☒

FORM I - AIR ANALYSIS DATA SHEET

EPA TO-15L

AVSP-R3-SS-20150223

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
 Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
 Project Number: P0233 Received: 02/25/15 14:00
 Matrix: Soil Gas Laboratory ID: SC03733-03 File ID: 0373303.D
 Sampled: 02/24/15 12:40 Analyzed: 03/04/15 17:50
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
 Batch: 1504093 Sequence: S501911 Calibration: 1502030 Instrument: Air3
 Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
115-07-1	Propene	0.100	0.1721	U
75-71-8	Dichlorodifluoromethane (Freon12)	0.470	2.3240	
74-87-3	Chloromethane	0.100	0.2065	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.100	0.6990	U
75-01-4	Vinyl chloride	0.100	0.2556	U
106-99-0	1,3-Butadiene	0.830	1.8331	
74-83-9	Bromomethane	0.0900	0.3493	J
75-00-3	Chloroethane	0.100	0.2638	U
67-64-1	Acetone	7.58	18.0122	
75-69-4	Trichlorofluoromethane (Freon 11)	0.260	1.4611	
64-17-5	Ethanol	33.5	~~85.4~~ 161.020063.1636 E	
107-13-1	Acrylonitrile	0.100	0.2168	U
75-35-4	1,1-Dichloroethene	0.100	0.3967	U
75-09-2	Methylene chloride	0.110	0.3820	
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.100	0.7665	U
75-15-0	Carbon disulfide	0.560	1.7430	
156-60-5	trans-1,2-Dichloroethene	0.100	0.3965	U
75-34-3	1,1-Dichloroethane	0.100	0.4049	U
1634-04-4	Methyl tert-butyl ether	0.100	0.3607	U
67-63-0	Isopropyl alcohol	6.38	15.6564	
78-93-3	2-Butanone (MEK)	0.680	2.0052	
156-59-2	cis-1,2-Dichloroethene	0.100	0.3965	U
110-54-3	Hexane	6.32	22.2816	
141-78-6	Ethyl acetate	5.40	19.4577	
67-66-3	Chloroform	0.190	0.9247	
109-99-9	Tetrahydrofuran	0.110	0.3244	
107-06-2	1,2-Dichloroethane	0.100	0.4049	U
71-55-6	1,1,1-Trichloroethane	0.100	0.5456	U
71-43-2	Benzene	0.350	1.1166	
56-23-5	Carbon tetrachloride	0.100	0.6290	
110-82-7	Cyclohexane	0.210	0.7228	
78-87-5	1,2-Dichloropropane	0.100	0.4622	U
75-27-4	Bromodichloromethane	0.100	0.6699	U
79-01-6	Trichloroethene	0.100	0.5374	U
123-91-1	1,4-Dioxane	0.500	1.7996	U
142-82-5	n-Heptane	0.120	0.4918	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.100	0.4098	U
10061-01-5	cis-1,3-Dichloropropene	0.100	0.4540	U

FORM I - AIR ANALYSIS DATA SHEET **EPA TO-15L**

AVSP-R3-SS-20150223

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
 Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
 Project Number: P0233 Received: 02/25/15 14:00
 Matrix: Soil Gas Laboratory ID: SC03733-03 File ID: 0373303.D
 Sampled: 02/24/15 12:40 Analyzed: 03/04/15 17:50
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
 Batch: 1504093 Sequence: S501911 Calibration: 1502030 Instrument: Air3
 Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
10061-02-6	trans-1,3-Dichloropropene	0.100	0.4540	U
79-00-5	1,1,2-Trichloroethane	0.100	0.5456	U
108-88-3	Toluene	0.600	2.2577	
591-78-6	2-Hexanone (MBK)	0.100	0.4098	U
124-48-1	Dibromochloromethane	0.100	0.8519	U
106-93-4	1,2-Dibromoethane (EDB)	0.100	0.7685	U
127-18-4	Tetrachloroethene	4.67	31.6681	
108-90-7	Chlorobenzene	0.100	0.4605	U
630-20-6	1,1,1,2-Tetrachloroethane	0.100	0.6871	U
100-41-4	Ethylbenzene	0.100	0.4335	U
179601-23-1	m,p-Xylene	0.210	0.9104	
75-25-2	Bromoform	0.100	1.0335	U
100-42-5	Styrene	0.130	0.5530	
95-47-6	o-Xylene	0.100	0.4335	
79-34-5	1,1,2,2-Tetrachloroethane	0.100	0.6867	U
98-82-8	Isopropylbenzene	0.100	0.4916	U
108-67-8	1,3,5-Trimethylbenzene	0.100	0.4916	
622-96-8	4-Ethyltoluene	0.110	0.5408	
95-63-6	1,2,4-Trimethylbenzene	0.170	0.8357	
91-20-3	Naphthalene	0.180	0.9423	u
541-73-1	1,3-Dichlorobenzene	0.100	0.6012	U
100-44-7	Benzyl chloride	0.100	0.5153	U
106-46-7	1,4-Dichlorobenzene	0.100	0.6012	
135-98-8	sec-Butylbenzene	0.100	0.5489	U
99-87-6	4-Isopropyltoluene	0.120	0.6439	
95-50-1	1,2-Dichlorobenzene	0.0900	0.5411	J
104-51-8	n-Butylbenzene	0.100	0.5489	U
120-82-1	1,2,4-Trichlorobenzene	0.100	0.7423	U
87-68-3	Hexachlorobutadiene	0.100	1.0663	U

3DL

FORM I - AIR ANALYSIS DATA SHEET
EPA TO-15L

AVSP-R3-SS-20150223

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
Project Number: P0233 Received: 02/25/15 14:00
Matrix: Soil Gas Laboratory ID: SC03733-03RE1 File ID: 0373303RE1.D
Sampled: 02/24/15 12:40 Analyzed: 03/05/15 18:31
Dilution Factor: 10 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
Batch: 1504137 Sequence: S501941 Calibration: 1502030 Instrument: Air3
Reported to: MRL

*Use
original
results*

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
64-17-5	Ethanol	33.5	63.1636	<i>✓</i>

MW 4/14/15

FORM I - AIR ANALYSIS DATA SHEET

EPA TO-15L

AVSP-R3-AI-20150223

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
 Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
 Project Number: P0233 Received: 02/25/15 14:00
 Matrix: Indoor/Ambient Air Laboratory ID: SC03733-04 File ID: 0373304.D
 Sampled: 02/24/15 12:40 Analyzed: 03/04/15 18:56
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
 Batch: 1504093 Sequence: S501911 Calibration: 1502030 Instrument: Air3
 Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
115-07-1	Propene	0.100	0.1721	U
75-71-8	Dichlorodifluoromethane (Freon12)	0.610	3.0163	
74-87-3	Chloromethane	0.100	0.2065	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.100	0.6990	U
75-01-4	Vinyl chloride	0.100	0.2556	U
106-99-0	1,3-Butadiene	0.100	0.2209	U
74-83-9	Bromomethane	0.100	0.3881	U
75-00-3	Chloroethane	0.100	0.2638	U
67-64-1	Acetone	3.48	8.2694	
75-69-4	Trichlorofluoromethane (Freon 11)	0.290	1.6297	
64-17-5	Ethanol	139 ~~104~~	196.0900 ~~262.0818~~ E	
107-13-1	Acrylonitrile	0.100	0.2168	U
75-35-4	1,1-Dichloroethene	0.100	0.3967	U
75-09-2	Methylene chloride	0.110	0.3820	
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.110	0.8431	
75-15-0	Carbon disulfide	0.500	1.5562	U
156-60-5	trans-1,2-Dichloroethene	0.100	0.3965	U
75-34-3	1,1-Dichloroethane	0.100	0.4049	U
1634-04-4	Methyl tert-butyl ether	0.100	0.3607	U
67-63-0	Isopropyl alcohol	1.27	3.1166	
78-93-3	2-Butanone (MEK)	0.370	1.0911	
156-59-2	cis-1,2-Dichloroethene	0.100	0.3965	U
110-54-3	Hexane	1.23	4.3364	
141-78-6	Ethyl acetate	0.630	2.2701	
67-66-3	Chloroform	0.100	0.4867	U
109-99-9	Tetrahydrofuran	0.0900	0.2654	J
107-06-2	1,2-Dichloroethane	0.100	0.4049	U
71-55-6	1,1,1-Trichloroethane	0.100	0.5456	U
71-43-2	Benzene	0.750	2.3926	
56-23-5	Carbon tetrachloride	0.0900	0.5661	J
110-82-7	Cyclohexane	0.430	1.4801	
78-87-5	1,2-Dichloropropane	0.100	0.4622	U
75-27-4	Bromodichloromethane	0.100	0.6699	U
79-01-6	Trichloroethene	0.100	0.5374	U
123-91-1	1,4-Dioxane	0.500	1.7996	U
142-82-5	n-Heptane	0.600	2.4589	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.100	0.4098	U
10061-01-5	cis-1,3-Dichloropropene	0.100	0.4540	U

FORM I - AIR ANALYSIS DATA SHEET
EPA TO-15L

AVSP-R3-AI-20150223

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
 Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
 Project Number: P0233 Received: 02/25/15 14:00
 Matrix: Indoor/Ambient Air Laboratory ID: SC03733-04 File ID: 0373304.D
 Sampled: 02/24/15 12:40 Analyzed: 03/04/15 18:56
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
 Batch: 1504093 Sequence: S501911 Calibration: 1502030 Instrument: Air3
 Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
10061-02-6	trans-1,3-Dichloropropene	0.100	0.4540	U
79-00-5	1,1,2-Trichloroethane	0.100	0.5456	U
108-88-3	Toluene	2.64	9.9337	
591-78-6	2-Hexanone (MBK)	0.100	0.4098	U
124-48-1	Dibromochloromethane	0.100	0.8519	U
106-93-4	1,2-Dibromoethane (EDB)	0.100	0.7685	U
127-18-4	Tetrachloroethene	0.180	1.2206	
108-90-7	Chlorobenzene	0.100	0.4605	U
630-20-6	1,1,1,2-Tetrachloroethane	0.100	0.6871	U
100-41-4	Ethylbenzene	0.380	1.6474	
179601-23-1	m,p-Xylene	1.42	6.1562	
75-25-2	Bromoform	0.100	1.0335	U
100-42-5	Styrene	0.100	0.4254	
95-47-6	o-Xylene	0.530	2.2978	
79-34-5	1,1,2,2-Tetrachloroethane	0.100	0.6867	U
98-82-8	Isopropylbenzene	0.100	0.4916	U
108-67-8	1,3,5-Trimethylbenzene	0.200	0.9832	
622-96-8	4-Ethyltoluene	0.170	0.8357	
95-63-6	1,2,4-Trimethylbenzene	0.450	2.2123	
91-20-3	Naphthalene	0.140	0.7329	✓
541-73-1	1,3-Dichlorobenzene	0.100	0.6012	U
100-44-7	Benzyl chloride	0.100	0.5153	U
106-46-7	1,4-Dichlorobenzene	0.100	0.6012	U
135-98-8	sec-Butylbenzene	0.100	0.5489	U
99-87-6	4-Isopropyltoluene	0.170	0.9122	
95-50-1	1,2-Dichlorobenzene	0.100	0.6012	U
104-51-8	n-Butylbenzene	0.130	0.7135	
120-82-1	1,2,4-Trichlorobenzene	0.100	0.7423	U
87-68-3	Hexachlorobutadiene	0.100	1.0663	U

4DL

FORM I - AIR ANALYSIS DATA SHEET
EPA TO-15L

AVSP-R3-AI-20150223

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
Project Number: P0233 Received: 02/25/15 14:00
Matrix: Indoor/Ambient Air Laboratory ID: SC03733-04RE1 File ID: 0373304RE1.D
Sampled: 02/24/15 12:40 Analyzed: 02/05/15 23:16
Dilution Factor: 10 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
Batch: 1504137 Sequence: S501941 Calibration: 1502030 Instrument: Air3
Reported to: MRL

Use original results

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
64-17-5	Ethanol	139	262.0818	☒

NW 4/14/15

FORM I - AIR ANALYSIS DATA SHEET

EPA TO-15L

AVSP-R4-SS-20150223

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
 Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
 Project Number: P0233 Received: 02/25/15 14:00
 Matrix: Soil Gas Laboratory ID: SC03733-05 File ID: 0373305.D
 Sampled: 02/24/15 15:00 Analyzed: 03/04/15 23:43
 Dilution Factor: 6.33 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
 Batch: 1504093 Sequence: S501911 Calibration: 1502030 Instrument: Air3
 Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
115-07-1	Propene	0.633	1.0894	U
75-71-8	Dichlorodifluoromethane (Freon12)	1.65	8.1589	
74-87-3	Chloromethane	0.633	1.3074	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.633	4.4245	U
75-01-4	Vinyl chloride	0.633	1.6181	U
106-99-0	1,3-Butadiene	0.633	1.3980	U
74-83-9	Bromomethane	0.633	2.4569	U
75-00-3	Chloroethane	0.633	1.6699	U
67-64-1	Acetone	53.8	127.8438	
75-69-4	Trichlorofluoromethane (Freon 11)	0.633	3.5572	
64-17-5	Ethanol	35.3	66.5575	
107-13-1	Acrylonitrile	0.633	1.3721	U
75-35-4	1,1-Dichloroethene	0.633	2.5113	U
75-09-2	Methylene chloride	0.633	2.1980	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.633	4.8517	U
75-15-0	Carbon disulfide	4.11	12.7923	
156-60-5	trans-1,2-Dichloroethene	0.633	2.5100	U
75-34-3	1,1-Dichloroethane	0.633	2.5631	U
1634-04-4	Methyl tert-butyl ether	0.633	2.2835	U
67-63-0	Isopropyl alcohol	12.7	31.1656	
78-93-3	2-Butanone (MEK)	16.4	48.3616	
156-59-2	cis-1,2-Dichloroethene	0.633	2.5100	U
110-54-3	Hexane	4.05	14.2785	
141-78-6	Ethyl acetate	2.53	9.1163	
67-66-3	Chloroform	0.633	3.0809	U
109-99-9	Tetrahydrofuran	5.25	15.4816	
107-06-2	1,2-Dichloroethane	0.633	2.5631	U
71-55-6	1,1,1-Trichloroethane	0.633	3.4537	U
71-43-2	Benzene	1.14	3.6368	
56-23-5	Carbon tetrachloride	0.633	3.9818	U
110-82-7	Cyclohexane	0.633	2.1789	U
78-87-5	1,2-Dichloropropane	0.633	2.9255	U
75-27-4	Bromodichloromethane	0.633	4.2407	U
79-01-6	Trichloroethene	0.633	3.4019	U
123-91-1	1,4-Dioxane	3.16	11.3734	U
142-82-5	n-Heptane	0.633	2.5941	U
108-10-1	4-Methyl-2-pentanone (MIBK)	0.633	2.5941	U
10061-01-5	cis-1,3-Dichloropropene	0.633	2.8737	U

FORM I - AIR ANALYSIS DATA SHEET
EPA TO-15L

AVSP-R4-SS-20150223

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
 Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
 Project Number: P0233 Received: 02/25/15 14:00
 Matrix: Soil Gas Laboratory ID: SC03733-05 File ID: 0373305.D
 Sampled: 02/24/15 15:00 Analyzed: 03/04/15 23:43
 Dilution Factor: 6.33 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
 Batch: 1504093 Sequence: S501911 Calibration: 1502030 Instrument: Air3
 Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
10061-02-6	trans-1,3-Dichloropropene	0.633	2.8737	U
79-00-5	1,1,2-Trichloroethane	0.633	3.4537	U
108-88-3	Toluene	2.47	9.2941	
591-78-6	2-Hexanone (MBK)	0.633	2.5941	U
124-48-1	Dibromochloromethane	0.633	5.3928	U
106-93-4	1,2-Dibromoethane (EDB)	0.633	4.8647	U
127-18-4	Tetrachloroethene	0.633	4.2925	U
108-90-7	Chlorobenzene	0.633	2.9152	U
630-20-6	1,1,1,2-Tetrachloroethane	0.633	4.3494	U
100-41-4	Ethylbenzene	0.633	2.7443	U
179601-23-1	m,p-Xylene	1.27	5.5059	U
75-25-2	Bromoform	0.633	6.5423	U
100-42-5	Styrene	0.633	2.6925	U
95-47-6	o-Xylene	0.633	2.7443	U
79-34-5	1,1,2,2-Tetrachloroethane	0.633	4.3469	U
98-82-8	Isopropylbenzene	0.253	1.2438	J
108-67-8	1,3,5-Trimethylbenzene	0.570	2.8022	J
622-96-8	4-Ethyltoluene	0.570	2.8022	J
95-63-6	1,2,4-Trimethylbenzene	0.823	4.0460	
91-20-3	Naphthalene	0.886	4.6384	✓
541-73-1	1,3-Dichlorobenzene	0.633	3.8058	U
100-44-7	Benzyl chloride	0.633	3.2621	U
106-46-7	1,4-Dichlorobenzene	0.633	3.8058	U
135-98-8	sec-Butylbenzene	0.633	3.4744	
99-87-6	4-Isopropyltoluene	0.760	4.0782	
95-50-1	1,2-Dichlorobenzene	0.633	3.8058	U
104-51-8	n-Butylbenzene	0.760	4.1715	
120-82-1	1,2,4-Trichlorobenzene	0.633	4.6990	U
87-68-3	Hexachlorobutadiene	0.633	6.7494	U

FORM I - AIR ANALYSIS DATA SHEET
EPA TO-15L

AVSP-R4-AI-20150223

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
Project Number: P0233 Received: 02/25/15 14:00
Matrix: Indoor/Ambient Air Laboratory ID: SC03733-06 File ID: 0373306.D
Sampled: 02/24/15 14:45 Analyzed: 03/05/15 00:45
Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
Batch: 1504093 Sequence: S501911 Calibration: 1502030 Instrument: Air3
Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
115-07-1	Propene	76.9 ~~5~~	132.3498 ~~5~~	~~U~~
75-71-8	Dichlorodifluoromethane (Freon12)	0.850	4.2031	
74-87-3	Chloromethane	0.100	0.2065	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.100	0.6990	U
75-01-4	Vinyl chloride	0.100	0.2556	U
106-99-0	1,3-Butadiene	0.100	0.2209	U
74-83-9	Bromomethane	0.100	0.3881	U
75-00-3	Chloroethane	0.100	0.2638	U
67-64-1	Acetone	~~99.0 74.5~~	~~177.0327 211.4817~~	~~U~~
75-69-4	Trichlorofluoromethane (Freon 11)	0.300	1.6859	
64-17-5	Ethanol	~~45.1 38.6~~	~~72.7795 85.0352~~	~~U~~
107-13-1	Acrylonitrile	0.100	0.2168	U
75-35-4	1,1-Dichloroethene	0.100	0.3967	U
75-09-2	Methylene chloride	0.280	0.9723	
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.100	0.7665	U
75-15-0	Carbon disulfide	0.500	1.5562	U
156-60-5	trans-1,2-Dichloroethene	0.100	0.3965	U
75-34-3	1,1-Dichloroethane	0.100	0.4049	U
1634-04-4	Methyl tert-butyl ether	0.100	0.3607	U
67-63-0	Isopropyl alcohol	6.30	15.4601	
78-93-3	2-Butanone (MEK)	~~83.4 80.1~~	~~265.6937 245.9362~~	~~U~~
156-59-2	cis-1,2-Dichloroethene	0.100	0.3965	U
110-54-3	Hexane	3.63	12.7978	
141-78-6	Ethyl acetate	0.860	3.0988	
67-66-3	Chloroform	0.100	0.4867	U
109-99-9	Tetrahydrofuran	~~42.3 45.6~~	~~134.4687 124.7374~~	~~U~~
107-06-2	1,2-Dichloroethane	0.120	0.4859	
71-55-6	1,1,1-Trichloroethane	0.100	0.5456	U
71-43-2	Benzene	1.98	6.3166	
56-23-5	Carbon tetrachloride	0.120	0.7548	
110-82-7	Cyclohexane	0.830	2.8570	
78-87-5	1,2-Dichloropropane	0.100	0.4622	U
75-27-4	Bromodichloromethane	0.100	0.6699	U
79-01-6	Trichloroethene	0.100	0.5374	U
123-91-1	1,4-Dioxane	0.500	1.7996	U
142-82-5	n-Heptane	1.80	7.3767	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.100	0.4098	U
10061-01-5	cis-1,3-Dichloropropene	0.100	0.4540	U

FORM I - AIR ANALYSIS DATA SHEET
EPA TO-15L

AVSP-R4-AI-20150223

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
 Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
 Project Number: P0233 Received: 02/25/15 14:00
 Matrix: Indoor/Ambient Air Laboratory ID: SC03733-06 File ID: 0373306.D
 Sampled: 02/24/15 14:45 Analyzed: 03/05/15 00:45
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
 Batch: 1504093 Sequence: S501911 Calibration: 1502030 Instrument: Air3
 Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
10061-02-6	trans-1,3-Dichloropropene	0.100	0.4540	U
79-00-5	1,1,2-Trichloroethane	0.100	0.5456	U
108-88-3	Toluene	7.23	27.2049	
591-78-6	2-Hexanone (MBK)	0.100	0.4098	U
124-48-1	Dibromochloromethane	0.100	0.8519	U
106-93-4	1,2-Dibromoethane (EDB)	0.100	0.7685	U
127-18-4	Tetrachloroethene	0.100	0.6781	U
108-90-7	Chlorobenzene	0.100	0.4605	U
630-20-6	1,1,1,2-Tetrachloroethane	0.100	0.6871	U
100-41-4	Ethylbenzene	1.14	4.9423	
179601-23-1	m,p-Xylene	2.98	12.9194	
75-25-2	Bromoform	0.100	1.0335	U
100-42-5	Styrene	0.100	0.4254	U
95-47-6	o-Xylene	0.890	3.8585	
79-34-5	1,1,2,2-Tetrachloroethane	0.100	0.6867	U
98-82-8	Isopropylbenzene	0.0400	0.1966	J
108-67-8	1,3,5-Trimethylbenzene	0.140	0.6883	
622-96-8	4-Ethyltoluene	0.170	0.8357	
95-63-6	1,2,4-Trimethylbenzene	0.190	0.9341	
91-20-3	Naphthalene	0.140	0.7329	
541-73-1	1,3-Dichlorobenzene	0.100	0.6012	U
100-44-7	Benzyl chloride	0.100	0.5153	U
106-46-7	1,4-Dichlorobenzene	0.100	0.6012	U
135-98-8	sec-Butylbenzene	0.0900	0.4940	J
99-87-6	4-Isopropyltoluene	0.130	0.6976	
95-50-1	1,2-Dichlorobenzene	0.100	0.6012	U
104-51-8	n-Butylbenzene	0.100	0.5489	U
120-82-1	1,2,4-Trichlorobenzene	0.100	0.7423	U
87-68-3	Hexachlorobutadiene	0.100	1.0663	U

6DL

FORM I - AIR ANALYSIS DATA SHEET
EPA TO-15L

AVSP-R4-AI-20150223

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
Project Number: P0233 Received: 02/25/15 14:00
Matrix: Indoor/Ambient Air Laboratory ID: SC03733-06RE1 File ID: 0373306RE1.D
Sampled: 02/24/15 14:45 Analyzed: 03/06/15 00:00
Dilution Factor: 10 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
Batch: 1504137 Sequence: S501941 Calibration: 1502030 Instrument: Air3
Reported to: MRL

*Use
original
results*

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
67-64-1	Acetone	89.0	211.4887	D
64-17-5	Ethanol	45.1	85.0352	D
78-93-3	2-Butanone (MEK)	83.4	245.9362	D
109-99-9	Tetrahydrofuran	42.3	124.7374	D

FORM I - AIR ANALYSIS DATA SHEET
EPA TO-15L

AVSP-AO-20150223

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
 Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
 Project Number: P0233 Received: 02/25/15 14:00
 Matrix: Indoor/Ambient Air Laboratory ID: SC03733-07 File ID: 0373307.D
 Sampled: 02/24/15 15:19 Analyzed: 03/05/15 01:19
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
 Batch: 1504093 Sequence: S501911 Calibration: 1502030 Instrument: Air3
 Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
115-07-1	Propene	0.100	0.1721	U
75-71-8	Dichlorodifluoromethane (Freon12)	0.670	3.3130	
74-87-3	Chloromethane	0.100	0.2065	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.100	0.6990	U
75-01-4	Vinyl chloride	0.100	0.2556	U
106-99-0	1,3-Butadiene	0.100	0.2209	U
74-83-9	Bromomethane	0.100	0.3881	U
75-00-3	Chloroethane	0.100	0.2638	U
67-64-1	Acetone	4.13	9.8140	
75-69-4	Trichlorofluoromethane (Freon 11)	0.270	1.5173	
64-17-5	Ethanol	18.4	34.6928	
107-13-1	Acrylonitrile	0.100	0.2168	U
75-35-4	1,1-Dichloroethene	0.100	0.3967	U
75-09-2	Methylene chloride	0.100	0.3472	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.100	0.7665	U
75-15-0	Carbon disulfide	0.500	1.5562	U
156-60-5	trans-1,2-Dichloroethene	0.100	0.3965	U
75-34-3	1,1-Dichloroethane	0.100	0.4049	U
1634-04-4	Methyl tert-butyl ether	0.100	0.3607	U
67-63-0	Isopropyl alcohol	0.920	2.2577	
78-93-3	2-Butanone (MEK)	0.500	1.4744	
156-59-2	cis-1,2-Dichloroethene	0.100	0.3965	U
110-54-3	Hexane	1.05	3.7018	
141-78-6	Ethyl acetate	0.600	2.1620	
67-66-3	Chloroform	0.100	0.4867	U
109-99-9	Tetrahydrofuran	0.210	0.6193	
107-06-2	1,2-Dichloroethane	0.100	0.4049	U
71-55-6	1,1,1-Trichloroethane	0.100	0.5456	U
71-43-2	Benzene	0.810	2.5840	
56-23-5	Carbon tetrachloride	0.100	0.6290	
110-82-7	Cyclohexane	0.260	0.8950	
78-87-5	1,2-Dichloropropane	0.100	0.4622	U
75-27-4	Bromodichloromethane	0.100	0.6699	U
79-01-6	Trichloroethene	0.100	0.5374	U
123-91-1	1,4-Dioxane	0.500	1.7996	U
142-82-5	n-Heptane	0.380	1.5573	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.100	0.4098	U
10061-01-5	cis-1,3-Dichloropropene	0.100	0.4540	U

FORM I - AIR ANALYSIS DATA SHEET
EPA TO-15L

AVSP-AO-20150223

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
 Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
 Project Number: P0233 Received: 02/25/15 14:00
 Matrix: Indoor/Ambient Air Laboratory ID: SC03733-07 File ID: 0373307.D
 Sampled: 02/24/15 15:19 Analyzed: 03/05/15 01:19
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
 Batch: 1504093 Sequence: S501911 Calibration: 1502030 Instrument: Air3
 Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
10061-02-6	trans-1,3-Dichloropropene	0.100	0.4540	U
79-00-5	1,1,2-Trichloroethane	0.100	0.5456	U
108-88-3	Toluene	2.80	10.5358	
591-78-6	2-Hexanone (MBK)	0.100	0.4098	U
124-48-1	Dibromochloromethane	0.100	0.8519	U
106-93-4	1,2-Dibromoethane (EDB)	0.100	0.7685	U
127-18-4	Tetrachloroethene	0.100	0.6781	U
108-90-7	Chlorobenzene	0.100	0.4605	U
630-20-6	1,1,1,2-Tetrachloroethane	0.100	0.6871	U
100-41-4	Ethylbenzene	0.340	1.4740	
179601-23-1	m,p-Xylene	1.15	4.9857	
75-25-2	Bromoform	0.100	1.0335	U
100-42-5	Styrene	0.100	0.4254	U
95-47-6	o-Xylene	0.400	1.7342	
79-34-5	1,1,2,2-Tetrachloroethane	0.100	0.6867	U
98-82-8	Isopropylbenzene	0.100	0.4916	U
108-67-8	1,3,5-Trimethylbenzene	0.120	0.5899	
622-96-8	4-Ethyltoluene	0.130	0.6391	
95-63-6	1,2,4-Trimethylbenzene	0.160	0.7866	
91-20-3	Naphthalene	0.500	2.6176	U
541-73-1	1,3-Dichlorobenzene	0.100	0.6012	U
100-44-7	Benzyl chloride	0.100	0.5153	U
106-46-7	1,4-Dichlorobenzene	0.100	0.6012	U
135-98-8	sec-Butylbenzene	0.100	0.5489	U
99-87-6	4-Isopropyltoluene	0.100	0.5366	U
95-50-1	1,2-Dichlorobenzene	0.100	0.6012	U
104-51-8	n-Butylbenzene	0.100	0.5489	U
120-82-1	1,2,4-Trichlorobenzene	0.100	0.7423	U
87-68-3	Hexachlorobutadiene	0.100	1.0663	U

MW 4/14/15

FORM I - AIR ANALYSIS DATA SHEET
EPA TO-15L

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AVSP-R5-SS-20150224

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
 Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
 Project Number: P0233 Received: 02/25/15 14:00
 Matrix: Sol Gas Laboratory ID: SC03733-08 File ID: 0373308.D
 Sampled: 02/25/15 08:44 Analyzed: 03/05/15 02:22
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
 Batch: 1504093 Sequence: S501911 Calibration: 1502030 Instrument: Air3
 Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
115-07-1	Propene	0.100	0.1721	U
75-71-8	Dichlorodifluoromethane (Freon12)	0.630	3.1152	
74-87-3	Chloromethane	0.100	0.2065	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.100	0.6990	U
75-01-4	Vinyl chloride	0.100	0.2556	U
106-99-0	1,3-Butadiene	0.100	0.2209	U
74-83-9	Bromomethane	0.100	0.3881	U
75-00-3	Chloroethane	0.100	0.2638	U
67-64-1	Acetone	16.0	38.0204	
75-69-4	Trichlorofluoromethane (Freon 11)	0.260	1.4611	
64-17-5	Ethanol	11.1	20.9288	
107-13-1	Acrylonitrile	0.100	0.2168	U
75-35-4	1,1-Dichloroethene	0.100	0.3967	U
75-09-2	Methylene chloride	0.100	0.3472	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.100	0.7665	U
75-15-0	Carbon disulfide	0.570	1.7741	
156-60-5	trans-1,2-Dichloroethene	0.100	0.3965	U
75-34-3	1,1-Dichloroethane	0.100	0.4049	U
1634-04-4	Methyl tert-butyl ether	0.100	0.3607	U
67-63-0	Isopropyl alcohol	13.6	33.3742	
78-93-3	2-Butanone (MEK)	3.85	11.3532	
156-59-2	cis-1,2-Dichloroethene	0.100	0.3965	U
110-54-3	Hexane	0.270	0.9519	J
141-78-6	Ethyl acetate	0.670	2.4142	
67-66-3	Chloroform	0.100	0.4867	U
109-99-9	Tetrahydrofuran	1.46	4.3054	
107-06-2	1,2-Dichloroethane	0.100	0.4049	U
71-55-6	1,1,1-Trichloroethane	0.100	0.5456	U
71-43-2	Benzene	0.150	0.4785	
56-23-5	Carbon tetrachloride	0.100	0.6290	
110-82-7	Cyclohexane	0.100	0.3442	U
78-87-5	1,2-Dichloropropane	0.100	0.4622	U
75-27-4	Bromodichloromethane	0.100	0.6699	U
79-01-6	Trichloroethene	0.100	0.5374	U
123-91-1	1,4-Dioxane	0.500	1.7996	U
142-82-5	n-Heptane	0.100	0.4098	U
108-10-1	4-Methyl-2-pentanone (MIBK)	0.800	3.2785	
10061-01-5	cis-1,3-Dichloropropene	0.100	0.4540	U

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FORM I - AIR ANALYSIS DATA SHEET
EPA TO-15L

AVSP-R5-SS-20150224

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
 Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
 Project Number: P0233 Received: 02/25/15 14:00
 Matrix: Sol Gas Laboratory ID: SC03733-08 File ID: 0373308.D
 Sampled: 02/25/15 08:44 Analyzed: 03/05/15 02:22
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
 Batch: 1504093 Sequence: S501911 Calibration: 1502030 Instrument: Air3
 Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
10061-02-6	trans-1,3-Dichloropropene	0.100	0.4540	U
79-00-5	1,1,2-Trichloroethane	0.100	0.5456	U
108-88-3	Toluene	1.17	4.4025	
591-78-6	2-Hexanone (MBK)	0.720	2.9507	
124-48-1	Dibromochloromethane	0.100	0.8519	U
106-93-4	1,2-Dibromoethane (EDB)	0.100	0.7685	U
127-18-4	Tetrachloroethene	0.100	0.6781	U
108-90-7	Chlorobenzene	0.100	0.4605	U
630-20-6	1,1,1,2-Tetrachloroethane	0.100	0.6871	U
100-41-4	Ethylbenzene	0.290	1.2573	
179601-23-1	m,p-Xylene	1.20	5.2025	
75-25-2	Bromoform	0.100	1.0335	U
100-42-5	Styrene	0.110	0.4679	
95-47-6	o-Xylene	0.400	1.7342	
79-34-5	1,1,2,2-Tetrachloroethane	0.100	0.6867	U
98-82-8	Isopropylbenzene	0.100	0.4916	U
108-67-8	1,3,5-Trimethylbenzene	0.250	1.2290	
622-96-8	4-Ethyltoluene	0.250	1.2290	
95-63-6	1,2,4-Trimethylbenzene	0.700	3.4413	
91-20-3	Naphthalene	0.170	0.8900	✓
541-73-1	1,3-Dichlorobenzene	0.100	0.6012	U
100-44-7	Benzyl chloride	0.100	0.5153	U
106-46-7	1,4-Dichlorobenzene	0.140	0.8417	
135-98-8	sec-Butylbenzene	0.100	0.5489	U
99-87-6	4-Isopropyltoluene	0.370	1.9854	
95-50-1	1,2-Dichlorobenzene	0.100	0.6012	U
104-51-8	n-Butylbenzene	0.220	1.2075	
120-82-1	1,2,4-Trichlorobenzene	0.100	0.7423	U
87-68-3	Hexachlorobutadiene	0.100	1.0663	U

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FORM I - AIR ANALYSIS DATA SHEET
EPA TO-15L

9
AVSP-R5-AI-20150224

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
Project Number: P0233 Received: 02/25/15 14:00
Matrix: Indoor/Ambient Air Laboratory ID: SC03733-09 File ID: 0373309.D
Sampled: 02/25/15 08:43 Analyzed: 03/05/15 02:57
Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
Batch: 1504093 Sequence: S501911 Calibration: 1502030 Instrument: Air3
Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
115-07-1	Propene	0.100	0.1721	U
75-71-8	Dichlorodifluoromethane (Freon12)	0.530	2.6207	
74-87-3	Chloromethane	0.100	0.2065	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.100	0.6990	U
75-01-4	Vinyl chloride	0.100	0.2556	U
106-99-0	1,3-Butadiene	0.100	0.2209	U
74-83-9	Bromomethane	0.100	0.3881	U
75-00-3	Chloroethane	0.100	0.2638	U
67-64-1	Acetone	5.60	13.3072	
75-69-4	Trichlorofluoromethane (Freon 11)	0.270	1.5173	
64-17-5	Ethanol	~~56.2~~ 59.7	~~112.5632~~ 105.9640	F
107-13-1	Acrylonitrile	0.100	0.2168	U
75-35-4	1,1-Dichloroethene	0.100	0.3967	U
75-09-2	Methylene chloride	0.250	0.8681	
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.100	0.7665	U
75-15-0	Carbon disulfide	0.500	1.5562	U
156-60-5	trans-1,2-Dichloroethene	0.100	0.3965	U
75-34-3	1,1-Dichloroethane	0.100	0.4049	U
1634-04-4	Methyl tert-butyl ether	0.100	0.3607	U
67-63-0	Isopropyl alcohol	2.11	5.1779	
78-93-3	2-Butanone (MEK)	0.650	1.9168	
156-59-2	cis-1,2-Dichloroethene	0.100	0.3965	U
110-54-3	Hexane	2.05	7.2274	
141-78-6	Ethyl acetate	0.920	3.3150	
67-66-3	Chloroform	0.100	0.4867	U
109-99-9	Tetrahydrofuran	0.220	0.6488	
107-06-2	1,2-Dichloroethane	0.100	0.4049	U
71-55-6	1,1,1-Trichloroethane	0.100	0.5456	U
71-43-2	Benzene	0.700	2.2331	
56-23-5	Carbon tetrachloride	0.100	0.6290	U
110-82-7	Cyclohexane	0.470	1.6178	
78-87-5	1,2-Dichloropropane	0.100	0.4622	U
75-27-4	Bromodichloromethane	0.100	0.6699	U
79-01-6	Trichloroethene	0.100	0.5374	U
123-91-1	1,4-Dioxane	0.500	1.7996	U
142-82-5	n-Heptane	0.490	2.0081	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.100	0.4098	U
10061-01-5	cis-1,3-Dichloropropene	0.100	0.4540	U

FORM I - AIR ANALYSIS DATA SHEET
EPA TO-15L

AVSP-R5-AI-20150224

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
 Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
 Project Number: P0233 Received: 02/25/15 14:00
 Matrix: Indoor/Ambient Air Laboratory ID: SC03733-09 File ID: 0373309.D
 Sampled: 02/25/15 08:43 Analyzed: 03/05/15 02:57
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
 Batch: 1504093 Sequence: S501911 Calibration: 1502030 Instrument: Air3
 Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
10061-02-6	trans-1,3-Dichloropropene	0.100	0.4540	U
79-00-5	1,1,2-Trichloroethane	0.100	0.5456	U
108-88-3	Toluene	1.18	4.4401	
591-78-6	2-Hexanone (MBK)	0.100	0.4098	U
124-48-1	Dibromochloromethane	0.100	0.8519	U
106-93-4	1,2-Dibromoethane (EDB)	0.100	0.7685	U
127-18-4	Tetrachloroethene	0.100	0.6781	U
108-90-7	Chlorobenzene	0.100	0.4605	U
630-20-6	1,1,1,2-Tetrachloroethane	0.100	0.6871	U
100-41-4	Ethylbenzene	0.100	0.4335	U
179601-23-1	m,p-Xylene	0.200	0.8671	U
75-25-2	Bromoform	0.100	1.0335	U
100-42-5	Styrene	0.100	0.4254	U
95-47-6	o-Xylene	0.100	0.4335	U
79-34-5	1,1,2,2-Tetrachloroethane	0.100	0.6867	U
98-82-8	Isopropylbenzene	0.100	0.4916	U
108-67-8	1,3,5-Trimethylbenzene	0.100	0.4916	U
622-96-8	4-Ethyltoluene	0.100	0.4916	U
95-63-6	1,2,4-Trimethylbenzene	0.100	0.4916	U
91-20-3	Naphthalene	0.500	2.6176	U
541-73-1	1,3-Dichlorobenzene	0.100	0.6012	U
100-44-7	Benzyl chloride	0.100	0.5153	U
106-46-7	1,4-Dichlorobenzene	0.100	0.6012	U
135-98-8	sec-Butylbenzene	0.100	0.5489	U
99-87-6	4-Isopropyltoluene	0.100	0.5366	U
95-50-1	1,2-Dichlorobenzene	0.100	0.6012	U
104-51-8	n-Butylbenzene	0.100	0.5489	U
120-82-1	1,2,4-Trichlorobenzene	0.100	0.7423	U
87-68-3	Hexachlorobutadiene	0.100	1.0663	U

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FORM I - AIR ANALYSIS DATA SHEET
EPA TO-15L

9DL
AVSP-R5-AI-20150224

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
Project Number: P0233 Received: 02/25/15 14:00
Matrix: Indoor/Ambient Air Laboratory ID: SC03733-09RE1 File ID: 0373309RE1.D
Sampled: 02/25/15 08:43 Analyzed: 03/06/15 00:35
Dilution Factor: 5 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
Batch: 1504137 Sequence: S501941 Calibration: 1502030 Instrument: Air3
Reported to: MRL

Use original results

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
64-17-5	Ethanol	56.2	105.9640	☒

12/4/15

FORM I - AIR ANALYSIS DATA SHEET

EPA TO-15

AVSP-R1-SS-20150217

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
 Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
 Project Number: P0233 Received: 02/25/15 14:00
 Matrix: Soil Gas Laboratory ID: SC03733-10 File ID: 0373310.D
 Sampled: 02/18/15 08:35 Analyzed: 03/06/15 17:39
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
 Batch: 1504218 Sequence: S501976 Calibration: 1503017 Instrument: Air4
 Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
115-07-1	Propene	0.500	0.8605	U
75-71-8	Dichlorodifluoromethane (Freon12)	0.490	2.4229	J
74-87-3	Chloromethane	0.380	0.7849	J
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.500	3.4949	U
75-01-4	Vinyl chloride	0.500	1.2781	U
106-99-0	1,3-Butadiene	0.500	1.1043	U
74-83-9	Bromomethane	0.500	1.9407	U
75-00-3	Chloroethane	0.500	1.3190	U
67-64-1	Acetone	8.72	20.7211	
75-69-4	Trichlorofluoromethane (Freon 11)	0.500	2.8098	U
64-17-5	Ethanol	51.3	96.7252	
107-13-1	Acrylonitrile	0.500	1.0838	U
75-35-4	1,1-Dichloroethene	0.500	1.9836	U
75-09-2	Methylene chloride	0.500	1.7362	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.500	3.8323	U
75-15-0	Carbon disulfide	0.500	1.5562	U
156-60-5	trans-1,2-Dichloroethene	0.500	1.9826	U
75-34-3	1,1-Dichloroethane	0.500	2.0245	U
1634-04-4	Methyl tert-butyl ether	0.500	1.8037	U
67-63-0	Isopropyl alcohol	28.5	69.9387	
78-93-3	2-Butanone (MEK)	0.480	1.4155	J
156-59-2	cis-1,2-Dichloroethene	0.500	1.9826	U
110-54-3	Hexane	0.500	1.7628	U
141-78-6	Ethyl acetate	2.99	10.7738	
67-66-3	Chloroform	0.500	2.4335	U
109-99-9	Tetrahydrofuran	0.500	1.4744	U
107-06-2	1,2-Dichloroethane	0.500	2.0245	U
71-55-6	1,1,1-Trichloroethane	0.500	2.7280	U
71-43-2	Benzene	0.500	1.5951	U
56-23-5	Carbon tetrachloride	0.500	3.1452	U
110-82-7	Cyclohexane	0.500	1.7211	U
78-87-5	1,2-Dichloropropane	0.500	2.3108	U
75-27-4	Bromodichloromethane	0.500	3.3497	U
79-01-6	Trichloroethene	0.500	2.6871	U
123-91-1	1,4-Dioxane	0.500	1.7996	U
142-82-5	n-Heptane	0.500	2.0491	U
108-10-1	4-Methyl-2-pentanone (MIBK)	0.500	2.0491	U
10061-01-5	cis-1,3-Dichloropropene	0.500	2.2699	U

FORM I - AIR ANALYSIS DATA SHEET

EPA TO-15

AVSP-R1-SS-20150217

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
 Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
 Project Number: P0233 Received: 02/25/15 14:00
 Matrix: Soil Gas Laboratory ID: SC03733-10 File ID: 0373310.D
 Sampled: 02/18/15 08:35 Analyzed: 03/06/15 17:39
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
 Batch: 1504218 Sequence: S501976 Calibration: 1503017 Instrument: Air4
 Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
10061-02-6	trans-1,3-Dichloropropene	0.500	2.2699	U
79-00-5	1,1,2-Trichloroethane	0.500	2.7280	U
108-88-3	Toluene	0.500	1.8814	U
591-78-6	2-Hexanone (MBK)	0.500	2.0491	U
124-48-1	Dibromochloromethane	0.500	4.2597	U
106-93-4	1,2-Dibromoethane (EDB)	0.500	3.8425	U
127-18-4	Tetrachloroethene	0.500	3.3906	U
108-90-7	Chlorobenzene	0.500	2.3027	U
630-20-6	1,1,1,2-Tetrachloroethane	0.500	3.4356	U
100-41-4	Ethylbenzene	0.500	2.1677	U
179601-23-1	m,p-Xylene	1.00	4.3354	U
75-25-2	Bromoform	0.500	5.1677	U
100-42-5	Styrene	0.500	2.1268	U
95-47-6	o-Xylene	0.500	2.1677	U
79-34-5	1,1,2,2-Tetrachloroethane	0.500	3.4335	U
98-82-8	Isopropylbenzene	0.500	2.4581	U
108-67-8	1,3,5-Trimethylbenzene	0.500	2.4581	U
622-96-8	4-Ethyltoluene	0.330	1.6223	J
95-63-6	1,2,4-Trimethylbenzene	0.390	1.9173	J
91-20-3	Naphthalene	0.500	2.6176	U
541-73-1	1,3-Dichlorobenzene	0.500	3.0061	U
100-44-7	Benzyl chloride	0.500	2.5767	U
106-46-7	1,4-Dichlorobenzene	0.500	3.0061	U
135-98-8	sec-Butylbenzene	0.500	2.7444	U
99-87-6	4-Isopropyltoluene	0.500	2.6830	U
95-50-1	1,2-Dichlorobenzene	0.500	3.0061	U
104-51-8	n-Butylbenzene	0.500	2.7444	U
120-82-1	1,2,4-Trichlorobenzene	0.500	3.7117	U
87-68-3	Hexachlorobutadiene	0.500	5.3313	U

FORM I - AIR ANALYSIS DATA SHEET

EPA TO-15

AVSP-R1-AA-20150217

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
 Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
 Project Number: P0233 Received: 02/25/15 14:00
 Matrix: Indoor/Ambient Air Laboratory ID: SC03733-11 File ID: 0373311.D
 Sampled: 02/18/15 08:48 Analyzed: 03/06/15 18:23
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
 Batch: 1504218 Sequence: S501976 Calibration: 1503017 Instrument: Air4
 Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
115-07-1	Propene	0.500	0.8605	U
75-71-8	Dichlorodifluoromethane (Freon12)	0.470	2.3240	J
74-87-3	Chloromethane	0.380	0.7849	J
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.500	3.4949	U
75-01-4	Vinyl chloride	0.500	1.2781	U
106-99-0	1,3-Butadiene	0.500	1.1043	U
74-83-9	Bromomethane	0.500	1.9407	U
75-00-3	Chloroethane	0.500	1.3190	U
67-64-1	Acetone	2.19	5.2040	
75-69-4	Trichlorofluoromethane (Freon 11)	0.500	2.8098	U
64-17-5	Ethanol	3.68	6.9386	
107-13-1	Acrylonitrile	0.500	1.0838	U
75-35-4	1,1-Dichloroethene	0.500	1.9836	U
75-09-2	Methylene chloride	0.500	1.7362	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.500	3.8323	U
75-15-0	Carbon disulfide	0.500	1.5562	U
156-60-5	trans-1,2-Dichloroethene	0.500	1.9826	U
75-34-3	1,1-Dichloroethane	0.500	2.0245	U
1634-04-4	Methyl tert-butyl ether	0.500	1.8037	U
67-63-0	Isopropyl alcohol	0.500	1.2270	U
78-93-3	2-Butanone (MEK)	0.500	1.4744	U
156-59-2	cis-1,2-Dichloroethene	0.500	1.9826	U
110-54-3	Hexane	0.500	1.7628	U
141-78-6	Ethyl acetate	0.530	1.9097	
67-66-3	Chloroform	0.500	2.4335	U
109-99-9	Tetrahydrofuran	0.500	1.4744	U
107-06-2	1,2-Dichloroethane	0.500	2.0245	U
71-55-6	1,1,1-Trichloroethane	0.500	2.7280	U
71-43-2	Benzene	0.500	1.5951	U
56-23-5	Carbon tetrachloride	0.500	3.1452	U
110-82-7	Cyclohexane	0.500	1.7211	U
78-87-5	1,2-Dichloropropane	0.500	2.3108	U
75-27-4	Bromodichloromethane	0.500	3.3497	U
79-01-6	Trichloroethene	0.500	2.6871	U
123-91-1	1,4-Dioxane	0.500	1.7996	U
142-82-5	n-Heptane	0.500	2.0491	U
108-10-1	4-Methyl-2-pentanone (MIBK)	0.500	2.0491	U
10061-01-5	cis-1,3-Dichloropropene	0.500	2.2699	U

FORM I - AIR ANALYSIS DATA SHEET
EPA TO-15

AVSP-R1-AA-20150217

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
 Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
 Project Number: P0233 Received: 02/25/15 14:00
 Matrix: Indoor/Ambient Air Laboratory ID: SC03733-11 File ID: 0373311.D
 Sampled: 02/18/15 08:48 Analyzed: 03/06/15 18:23
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
 Batch: 1504218 Sequence: S501976 Calibration: 1503017 Instrument: Air4
 Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
10061-02-6	trans-1,3-Dichloropropene	0.500	2.2699	U
79-00-5	1,1,2-Trichloroethane	0.500	2.7280	U
108-88-3	Toluene	0.500	1.8814	U
591-78-6	2-Hexanone (MBK)	0.500	2.0491	U
124-48-1	Dibromochloromethane	0.500	4.2597	U
106-93-4	1,2-Dibromoethane (EDB)	0.500	3.8425	U
127-18-4	Tetrachloroethene	0.500	3.3906	U
108-90-7	Chlorobenzene	0.500	2.3027	U
630-20-6	1,1,1,2-Tetrachloroethane	0.500	3.4356	U
100-41-4	Ethylbenzene	0.500	2.1677	U
179601-23-1	m,p-Xylene	1.00	4.3354	U
75-25-2	Bromoform	0.500	5.1677	U
100-42-5	Styrene	0.500	2.1268	U
95-47-6	o-Xylene	0.500	2.1677	U
79-34-5	1,1,2,2-Tetrachloroethane	0.500	3.4335	U
98-82-8	Isopropylbenzene	0.500	2.4581	U
108-67-8	1,3,5-Trimethylbenzene	0.500	2.4581	U
622-96-8	4-Ethyltoluene	0.500	2.4581	U
95-63-6	1,2,4-Trimethylbenzene	0.500	2.4581	U
91-20-3	Naphthalene	0.500	2.6176	U
541-73-1	1,3-Dichlorobenzene	0.500	3.0061	U
100-44-7	Benzyl chloride	0.500	2.5767	U
106-46-7	1,4-Dichlorobenzene	0.500	3.0061	U
135-98-8	sec-Butylbenzene	0.500	2.7444	U
99-87-6	4-Isopropyltoluene	0.500	2.6830	U
95-50-1	1,2-Dichlorobenzene	0.500	3.0061	U
104-51-8	n-Butylbenzene	0.500	2.7444	U
120-82-1	1,2,4-Trichlorobenzene	0.500	3.7117	U
87-68-3	Hexachlorobutadiene	0.500	5.3313	U

mw 4/14/15

FORM I - AIR ANALYSIS DATA SHEET **EPA TO-15**

AVSP-R1-AI-20150217

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
 Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
 Project Number: P0233 Received: 02/25/15 14:00
 Matrix: Indoor/Ambient Air Laboratory ID: SC03733-12 File ID: 0373312.D
 Sampled: 02/18/15 08:36 Analyzed: 03/06/15 16:11
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
 Batch: 1504218 Sequence: S501976 Calibration: 1503017 Instrument: Air4
 Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
115-07-1	Propene	0.500	0.8605	U
75-71-8	Dichlorodifluoromethane (Freon12)	0.500	2.4724	
74-87-3	Chloromethane	0.370	0.7642	J
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.500	3.4949	U
75-01-4	Vinyl chloride	0.500	1.2781	U
106-99-0	1,3-Butadiene	0.500	1.1043	U
74-83-9	Bromomethane	0.500	1.9407	U
75-00-3	Chloroethane	0.500	1.3190	U
67-64-1	Acetone	3.62	8.6021	
75-69-4	Trichlorofluoromethane (Freon 11)	0.500	2.8098	U
64-17-5	Ethanol	63.4	119.5395	
107-13-1	Acrylonitrile	0.500	1.0838	U
75-35-4	1,1-Dichloroethene	0.500	1.9836	U
75-09-2	Methylene chloride	0.500	1.7362	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.500	3.8323	U
75-15-0	Carbon disulfide	0.500	1.5562	U
156-60-5	trans-1,2-Dichloroethene	0.500	1.9826	U
75-34-3	1,1-Dichloroethane	0.500	2.0245	U
1634-04-4	Methyl tert-butyl ether	0.500	1.8037	U
67-63-0	Isopropyl alcohol	10.6	26.0123	
78-93-3	2-Butanone (MEK)	0.500	1.4744	U
156-59-2	cis-1,2-Dichloroethene	0.500	1.9826	U
110-54-3	Hexane	0.500	1.7628	U
141-78-6	Ethyl acetate	5.02	18.0884	
67-66-3	Chloroform	0.500	2.4335	U
109-99-9	Tetrahydrofuran	0.500	1.4744	U
107-06-2	1,2-Dichloroethane	0.500	2.0245	U
71-55-6	1,1,1-Trichloroethane	0.500	2.7280	U
71-43-2	Benzene	0.500	1.5951	U
56-23-5	Carbon tetrachloride	0.500	3.1452	U
110-82-7	Cyclohexane	0.500	1.7211	U
78-87-5	1,2-Dichloropropane	0.500	2.3108	U
75-27-4	Bromodichloromethane	0.500	3.3497	U
79-01-6	Trichloroethene	2.60	13.9730	
123-91-1	1,4-Dioxane	0.500	1.7996	U
142-82-5	n-Heptane	0.500	2.0491	U
108-10-1	4-Methyl-2-pentanone (MIBK)	0.500	2.0491	U
10061-01-5	cis-1,3-Dichloropropene	0.500	2.2699	U

12/4/15

FORM I - AIR ANALYSIS DATA SHEET
EPA TO-15

12

AVSP-R1-AI-20150217

Laboratory: Spectrum Analytical, Inc. - Agawam, MA SDG: 03733
 Client: Spectrum Analytical, Inc. - North Kingstown, RI Project: Apple Valley SVI
 Project Number: P0233 Received: 02/25/15 14:00
 Matrix: Indoor/Ambient Air Laboratory ID: SC03733-12 File ID: 0373312.D
 Sampled: 02/18/15 08:36 Analyzed: 03/06/15 16:11
 Dilution Factor: 1 Preparation: General Air Prep Initial/Final: 200 ml / 200 ml
 Batch: 1504218 Sequence: S501976 Calibration: 1503017 Instrument: Air4
 Reported to: MRL

CAS NO.	COMPOUND	CONC. (ppbv)	CONC. (ug/m3)	Q
10061-02-6	trans-1,3-Dichloropropene	0.500	2.2699	U
79-00-5	1,1,2-Trichloroethane	0.500	2.7280	U
108-88-3	Toluene	0.380	1.4299	J
591-78-6	2-Hexanone (MBK)	0.500	2.0491	U
124-48-1	Dibromochloromethane	0.500	4.2597	U
106-93-4	1,2-Dibromoethane (EDB)	0.500	3.8425	U
127-18-4	Tetrachloroethene	0.500	3.3906	U
108-90-7	Chlorobenzene	0.500	2.3027	U
630-20-6	1,1,1,2-Tetrachloroethane	0.500	3.4356	U
100-41-4	Ethylbenzene	0.500	2.1677	U
179601-23-1	m,p-Xylene	1.00	4.3354	U
75-25-2	Bromoform	0.500	5.1677	U
100-42-5	Styrene	0.500	2.1268	U
95-47-6	o-Xylene	0.500	2.1677	U
79-34-5	1,1,2,2-Tetrachloroethane	0.500	3.4335	U
98-82-8	Isopropylbenzene	0.500	2.4581	U
108-67-8	1,3,5-Trimethylbenzene	0.500	2.4581	U
622-96-8	4-Ethyltoluene	0.500	2.4581	U
95-63-6	1,2,4-Trimethylbenzene	0.500	2.4581	U
91-20-3	Naphthalene	0.500	2.6176	U
541-73-1	1,3-Dichlorobenzene	0.500	3.0061	U
100-44-7	Benzyl chloride	0.500	2.5767	U
106-46-7	1,4-Dichlorobenzene	0.500	3.0061	U
135-98-8	sec-Butylbenzene	0.500	2.7444	U
99-87-6	4-Isopropyltoluene	0.500	2.6830	U
95-50-1	1,2-Dichlorobenzene	0.500	3.0061	U
104-51-8	n-Butylbenzene	0.500	2.7444	U
120-82-1	1,2,4-Trichlorobenzene	0.500	3.7117	U
87-68-3	Hexachlorobutadiene	0.500	5.3313	U

NW 4/24/15