

TABLE 1

SUMMARY OF SURFACE AND NEAR-SURFACE SOIL/FILL ANALITICAL DATA
REMEDIAL INVESTIGATION REPORT
OREGON ROAD SITE
OLEAN, NEW YORK

Parameter ¹	Unrestricted SCOs ² (mg/kg)	Commercial SCOs ² (mg/kg)	SAMPLE LOCATION																				
			Oregon Road Site																				
			SS-1	NS-1 (2"-1')	NS-1 (1'-2')	NS-1 (2'-3')	NS-1 (3'-4')	SS-2	NS-2 (2"-1')	NS-2 (1'-2')	NS-2 (2'-3')	NS-2 (3'-4')	SS-3	NS-3 (2"-1')	NS-3 (1'-2')	NS-3 (2'-3')	NS-3 (3'-4')	SS-4	SS-5	NS-5 (2"-1')	NS-5 (1'-2')	NS-5 (2'-3')	NS-5 (3'-4')
1/11/17	7/2/18	7/2/18	7/2/18	7/2/18	1/11/17	7/2/18	7/2/18	7/2/18	7/2/18	1/11/17	7/2/18	7/2/18	7/2/18	1/11/17	1/11/17	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18		
Volatile Organic Compounds (VOCs) - mg/kg ³																							
Chloroform	0.37	350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene chloride	0.05	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	0.47	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tentatively Identified Compounds (TICs)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TCL Semi-Volatile Organic Compounds (SVOCs) - mg/kg ³																							
Acenaphthylene	100	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	100	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	1	5.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.157 J	ND	ND	ND	ND	ND
Benzo(a)pyrene	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.108 J	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	1	5.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.14 J	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	100	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.8	56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	1	56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.147 J	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	0.33	0.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	7	350	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.387 J	ND	ND	ND	ND	ND
Fluorene	30	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.5	5.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.344 J	ND	ND	ND	ND	ND
Pyrene	100	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.264 J	ND	ND	ND	ND	ND
SVOC TICs ³																							
Tentatively Identified Compounds	--	--	2.1	0.35	0.38	0.36	0.36	1.4	0.3	0.35	0.34	0.33	ND	0.4	0.41	0.32	0.32	0.27	0.21	1.16	0.34	0.33	0.34
TAL Metals - mg/kg																							
Aluminum	--	--	7880	14100	13600	12300	12300	11200 J	13900	14400	13600	13600	9660	13800	15400	15900	15500	10000	10700	16200	15200	17300	15000
Antimony	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	13	16	9.05	14.0 B	11.0 B	11.3 B	14.9 B	14.1	14.5 B	73.3 B	12.9 B	16.5 B	10.8	11.6 B	13.4 B	15.6 B	14.0 B	10.1	16.3	13.7 B	13.6 B	13.9 B	12.2 B
Barium	350	400	102	150	113	124	120	71.2	219	147	197	211	115	128	153 F1	192	172	125	78	140	132	230	153
Beryllium	7.2	590	ND	0.79	0.90	0.66	0.67	ND	0.83	0.82	0.79	0.84	ND	0.77	0.90	0.95	0.90	ND	ND	0.94	0.85	1.0	0.88
Cadmium	2.5	9.3	ND	0.048 J	0.10 J	0.10 J	0.10 J	ND	0.044 J	0.087 J	0.056 J	0.058 J	ND	0.059 J	0.051 J	0.068 J	0.053 J	ND	ND	0.060 J	0.062 J	0.043 J	0.067 J
Calcium	--	--	2140	2090 B	1860 B	1930 B	1890 B	1830	4540 B	7140 B	3490 B	3650 B	3360	1860 B	4080 B F1	3680 B	2940 B	1430	2370	3860 B	7320 B	3620 B	4010 B
Chromium	30	1500	9.91	17.5	17.7	15.9	15.7	13.6	17.2	16.5	16.8	16.5	12.3	16.5	19.1	19.3	19.3	11.7	13.3	19.6	18.0	20.4	17.8
Cobalt	--	--	9.17	15.0	14.2	13.8	13.2	13	14.1	14.8	13.6	15.1	11.1	13.6	15.5	19.6	14	10.4	13.4	15.8	15.2	16.2	14.7
Copper	50	270	11.6	17.8	20.8	18.9	18.5	11.7	18.7	21.3	21.1	18.7	11.8	16.9	18.0	18.5	17.6	11.9	10.2	18.9	18.0	20.5	16.8
Iron	--	--	16100	29300	26800	26000	27100	26800 J	30000	31400	28200	29700	21100	26700	30300	32200	30300	17000	29300	30800	29300	33900	29600
Lead	63	1,000	15.4	17.9	16.5	14.8	18.5	22.3	17.3	35.8	17.7	27.6	17	15.8	17.8	19.0	16.7	26.4	25.5	20.7	16.1	19.1	15.9
Magnesium	--	--	2830	4020	4180	3510	3500	4290	4840	4490	4700	4320	3840	4020	4710	4780	4660	2460	4390	5240	5390	4670	4680
Manganese	1,600	10,000	552	639 B	1530 B	672 B	548 B	655 J	532 B	497 B	488 B	716 B	532	487 B	596 B	1160 B	768 B	991	957	632 B	437 B	536 B	546 B
Nickel	30	310	20.8	30.0	33.0	27.3	27.0	29	30.0	29.0	29.3	29.3	25.5	28.4	31.9	36.9	31.0	18.6	29.6	33.4	30.7	34.4	31.2
Potassium	--	--	949	2420	2630	2070	2060	1610	2450	2660	2490	2550	1150	2520	3010 F1	3060	3060	1040	1580	3330	3120	3760	3180
Selenium	3.9	1500	ND	ND	ND	ND	ND	4.23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.65	ND	ND	ND	ND
Sodium	--	--	ND	56.6 J	59.9 J	58.0 J	57.2 J	ND	66.9 J	68.0 J	64.8 J	76.2 J	ND	57.9 J	73.7 J	76.2 J	70.2 J	ND	ND	82.0 J	83.5 J	88.4 J	89.6 J
Vanadium	--	--	ND	19.1 J	19.0	19.6	18.7	14.5	18.0	20.2	18	17.8	ND	18.5	20.4	20.9	20.5	15.8	ND	21.7 J	20.9	23.6	20.3
Zinc	109	10,000	52.7	63.6	59.6	59.3	59.6	93.5 J	63.6	63.5	61.9	61.9	68	59.1	65.7	68.5 F1	65.2	61	73.2	69.3	65.7	72.9	66.0
Mercury	0.18	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Organochlorine Pesticides (mg/kg)																							
gamma-BHC (Lindane)	0	9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA
4,4'-DDD	0.0033	92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA
Dieldrin	0.005	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA
Endosulfan II	2.4	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA
Endrin	0.014	89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA
Herbicides (mg/kg)																							
Herbicides were not detected at concentrations above laboratory detection limits																							
Polychlorinated Biphenyls (PCBs) (mg/kg)																							
Total PCBs	0.1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.

2. Values per NYSDEC Part 375 Soil Cleanup Objectives (SCOs).

Definitions:

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

ND = Parameter not detected above laboratory detection limit.

NA = Sample not analyzed for parameter.

-- = No SCO available.

J = Estimated value; result is less than the sample quantitation limit but greater than zero.

= Result exceeds Unrestricted SCOs.

= Result exceeds Commercial SCOs.

= Indicates sample was taken from the Homer Street Extension parcel

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REMEDIAL INVESTIGATION REPORT
OREGON ROAD SITE
OLEAN, NEW YORK

Parameter ¹	Unrestricted SCOs ² (mg/kg)	Commercial SCOs ² (mg/kg)	SAMPLE LOCATION																Homer Street Extension					
			Oregon Road Site																SS-21	NS-21 (2"-1')	SS-22	NS-22 (2"-1')	SS-23	NS-23 (2"-1')
			SS-6	SS-7	SS-8	SS-9	SS-10	SS-11	SS-12	SS-13	SS-14	SS-15	SS-16	SS-17	SS-18	SS-19	SS-20							
			1/11/17	1/11/17	1/11/17	1/11/17	1/11/17	1/13/17	1/13/17	1/13/17	1/13/17	1/13/17	1/16/17	1/16/17	1/16/17	1/16/17	1/16/17	6/29/18	6/29/18	6/29/18	6/29/18	6/29/18	6/29/18	
Volatile Organic Compounds (VOCs) - mg/kg ³																								
Chloroform	0.37	350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00048 J	NA	ND	NA	0.00072 J	
Methylene chloride	0.05	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0037 J	NA	ND	NA	ND	
Trichloroethene	0.47	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	0.0024 J	NA	0.0013 J	
Tentatively Identified Compounds (TICs)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00069	NA	ND	NA	0.0062	
TCL Semi-Volatile Organic Compounds (SVOCs) - mg/kg ³																								
Acenaphthylene	100	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.027 J	ND	ND	0.21 J	ND	
Anthracene	100	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.08 J	ND	ND	ND	ND	
Benzo(a)anthracene	1	5.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.261 J	ND	0.103 J	ND	ND	0.24 J	ND	0.09 J	0.66 J	0.47 J	
Benzo(a)pyrene	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.237 J	ND	0.102 J	ND	ND	0.21 J	ND	0.091 J	0.71 J	0.5 J	
Benzo(b)fluoranthene	1	5.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.343 J	0.11 J	0.138 J	ND	ND	0.27 J	ND	0.12 J	0.97 J	0.7 J	
Benzo(g,h,i)perylene	100	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.154 J	ND	ND	ND	ND	0.15 J	ND	0.076 J	0.53 J	0.33 J	
Benzo(k)fluoranthene	0.8	56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.12 J	ND	0.039 J	0.39 J	0.2 J	
Carbazole	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.04 J	ND	ND	ND	ND	
Chrysene	1	56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.234 J	0.0758 J	0.0972 J	ND	ND	0.25 J	ND	0.091 J	0.69 J	0.47 J	
Dibenz(a,h)anthracene	0.33	0.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.048 J	ND	ND	ND	ND	
Dibenzofuran	7	350	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.029 J	ND	ND	ND	ND	
Fluoranthene	100	500	ND	ND	0.0848 J	ND	ND	ND	ND	ND	ND	ND	ND	0.597 J	0.155 J	0.157 J	ND	0.16 J	0.47 J	ND	0.17 J	1.6 J	1.1 J	
Fluorene	30	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.033 J	ND	ND	ND	ND	
Indeno(1,2,3-cd)pyrene	0.5	5.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.137 J	ND	ND	ND	ND	0.12 J	ND	0.058 J	0.43 J	0.29 J	
4-Methylphenol	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Phenanthrene	100	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.364 J	ND	0.0869 J	ND	ND	0.41 J	ND	0.1 J	1 J	0.61 J	
Pyrene	100	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.457 J	0.116 J	0.124 J	ND	0.14 J	0.52 J	ND	0.17 J	1.3 J	0.86 J	
SVOC TICs ³																								
Tentatively Identified Compounds	--	--	0.79	1.8	5.1	0.19	2.7	ND	0.19	ND	0.21	0.17	0.24	4.1	5.6	1.2	0.8	3.60 JN	1.31	12.1	3.45	2.3	5.2	
TAL Metals - mg/kg																								
Aluminum	--	--	10400	15100	9870	10200	10200 J	7630	8190	6810	10500	11100	11100	11000	4510	9640	11900	14500	16500	16600 F1	17100	14700	17200	
Antimony	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Arsenic	13	16	9.88	17.4	10.4	10.7	11.7	6.44 J	9.93 J	5.79 J	11.20 J	13.70 J	9.76	10.5	7.25	12.8	11.2	10.2	12.0	11.6	17.9	10.9	14.6	
Barium	350	400	136	170	131	126	122	57.4	116	59.1	66.4	131	112	153	77.8	124	175	135	176	130 F1 F2	98.3	161	192	
Beryllium	7.2	590	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.65	0.89	0.72	0.097	0.68	0.87	
Cadmium	2.5	9.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.17 J	0.17 J	0.12 J	ND	0.23 J	0.14 J	
Calcium	--	--	1900	1860	1920	2020	1730	2230	2330	2840	2760	2360	2480	2150	1460	995	2480	1350 B	1670 B	1810 B F1	1760 B	2440 B	2270 B	
Chromium	30	1500	13.3	18	12.9	12.6	13.2	8.81	11	8.42	13.3	19.1	15.2	15.1	5.69	13.5	15.2	15.6	18.7	18.7	19.8	17.2	20.7	
Cobalt	--	--	11	7.32	10.2	10.5	12.4	5.62	10.5	5.16	12	11.8	12.5	11.3	ND	10.2	9.13	12.2	16.4	12.0	18.1	11.7	17.2	
Copper	50	270	12.9	15	16.6	12.9	14.6	17.8	11.2	19.3	15.4	20.5	16.4	16.1	27.5	15.3	18.6	15.3	18.2	14.6	21.1	15.9	21	
Iron	--	--	23800	38900	22200	21700	26800 J	12700	18700	11800	26100	27600	22400	18900	5950	20500	18000	24200 B	26300 B	24800 B F2	34800 B	21600 B	28700 B	
Lead	63	1,000	20.3	31	57.9	49.4	23.3 J	14.1	26.3	14.7	20.5	60.8	19.7	27.3	26.6	47.9	22.5	26.6	33.2	31.5	19.5	25.3	62.3	
Magnesium	--	--	3250	2880	2550	2760	3290	2040	2560	1960	4390	4020	3770	2960	746	2150	3270	3060	3490	3540 F1	5270	3320	4260	
Manganese	1,600	10,000	562	380	1000	835	654 J	632	704	494	583	780	677	872	231	953	547	750 B	1290 B	550 B	692 B	713 B	886 B	
Nickel	30	310	22.2	18.5	19.5	18.1	22.3	13.7	17.6	13.8	28	27.2	26.8	20.9	6.23	18	23.3	19.8	24.7	20.8	34.2	20.0	28.3	
Potassium	--	--	1190	1470	796	534	809	440	495	342	1110	891	1830	1270	511	698	1170	1740	2320	2310 F1	3040	2790	2380	
Selenium	3.9	1500	5.19	8	4.46	3.41	4.65	ND	3.45	ND	3.52	4.68	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Sodium	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	41.6 J	51.0 J	45.8 J	70.1 J	44.2 J	49.2 J	
Vanadium	--	--	16.1	24.3	14.8	16.9	16.6	ND	ND	ND	14.1	15.6	ND	16.9	ND	14.8	ND	22.2	25.3	25.8	22.5	22.9	26.0	
Zinc	109	10,000	60.3	61.3	82.9	54.9	72.1 J	58.3	53.8	64.1	69.4	79.4	65.9	63.4	37	61.6	80.6	60.2	63.5	61 F1	72.3	62.1	66.6	
Mercury	0.18	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.191	ND	ND	0.047	0.043	0.045	0.020 J	0.044	0.021 J	
Organochlorine Pesticides (mg/kg)																								
gamma-BHC (Lindane)	0	9	ND	NA	NA	ND	NA	NA	NA	NA	ND	NA	ND	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	
4,4'-DDD	0.0033	92	ND	NA	NA	ND	NA	NA	NA	NA	ND	NA	ND	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	
Dieldrin	0.005	1.4	ND	NA	NA	ND	NA	NA	NA	NA	ND	NA	ND	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	
Endosulfan II	2.4	200	ND	NA	NA	ND	NA	NA	NA	NA	ND	NA	ND	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	
Endrin	0.014	89	ND	NA	NA	ND	NA	NA	NA	NA	ND	NA	ND	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	
Herbicides (mg/kg)																								
Herbicides were not detected at concentrations above laboratory detection																								
Polychlorinated Biphenyls (PCBs) (mg/kg)																								
Total PCBs	0.1	1	ND	NA	NA	ND	NA	NA	NA	NA	ND	NA	ND	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.

2. Values per NYSDEC Part 375 Soil Cleanup Objectives (SCOs).

Definitions:

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

ND = Parameter not detected above laboratory detection limit.

NA = Sample not analyzed for parameter.

- = No SCO available

TABLE 1

SUMMARY OF SURFACE AND NEAR-SURFACE SOIL/FILL ANALITICAL DATA
REMEDIAL INVESTIGATION REPORT
OREGON ROAD SITE
OLEAN, NEW YORK

Parameter ¹	Unrestricted SCOs ² (mg/kg)	Commercial SCOs ² (mg/kg)	SAMPLE LOCATION																		
			Homer Street Extension Site														Oregon Road Site				
			SS-24	NS-24 (2"-1')	SS-25	NS-25 (2"-1')	SS-26	NS-26 (2"-1')	SS-27	NS-27 (2"-1')	SS-28	NS-28 (2"-1')	SS-29	NS-29 (2"-1')	SS-30	SS-31	SS-32	SS-34	SS-35	NS-35 (2"-1')	
			6/29/18	6/29/18	6/29/18	6/29/18	6/29/18	6/29/18	6/29/18	6/29/18	6/29/18	6/29/18	6/29/18	6/29/18	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	
Volatile Organic Compounds (VOCs) - mg/kg ³																					
Chloroform	0.37	350	NA	ND	NA	0.00037 J	NA	ND	NA	ND	NA	0.00041 J	NA	ND	NA	NA	NA	NA	NA	NA	
Methylene chloride	0.05	500	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	NA	NA	NA	NA	NA	
Trichloroethene	0.47	200	NA	ND	NA	0.0014 J	NA	ND	NA	ND	NA	ND	NA	ND	NA	NA	NA	NA	NA	NA	
Tentatively Identified Compounds (TICs)	--	--	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	NA	NA	NA	NA	NA	
TCL Semi-Volatile Organic Compounds (SVOCs) - mg/kg ³																					
Acenaphthylene	100	500	ND	0.11 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Anthracene	100	500	ND	0.13 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzo(a)anthracene	1	5.6	0.13 J	0.48 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.17 J	ND	ND	ND	ND	ND	ND	
Benzo(a)pyrene	1	1	ND	0.44 J	ND	ND	ND	ND	ND	ND	ND	ND	0.082 J	0.15 J	ND	ND	ND	ND	ND	ND	
Benzo(b)fluoranthene	1	5.6	0.23 J	0.57 J	ND	ND	0.039 J	ND	ND	ND	ND	0.095 J	0.21 J	ND	ND	ND	ND	ND	ND	ND	
Benzo(g,h,i)perylene	100	500	ND	0.31 J	ND	ND	ND	ND	ND	ND	ND	0.084 J	0.13 J	ND	ND	ND	ND	ND	ND	ND	
Benzo(k)fluoranthene	0.8	56	ND	0.22 J	ND	ND	ND	ND	ND	ND	ND	ND	0.098 J	0.13 J	ND	ND	ND	ND	ND	ND	
Carbazole	--	--	ND	0.03 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chrysene	1	56	ND	0.45 J	ND	ND	ND	ND	ND	ND	ND	ND	0.18 J	0.18 J	ND	ND	ND	ND	ND	ND	
Dibenz(a,h)anthracene	0.33	0.56	ND	0.084 J	ND	ND	ND	ND	ND	ND	ND	ND	0.045 J	0.045 J	ND	ND	ND	ND	ND	ND	
Dibenzofuran	7	350	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Fluoranthene	100	500	0.22 J	0.84 J	0.021 J	0.027 J	0.045 J	ND	ND	ND	ND	ND	0.17 J	0.35 J	ND	ND	ND	ND	ND	ND	
Fluorene	30	500	ND	0.031 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Indeno(1,2,3-cd)pyrene	0.5	5.6	ND	0.26 J	ND	ND	ND	ND	ND	ND	ND	ND	0.11 J	0.11 J	ND	ND	ND	ND	ND	ND	
4-Methylphenol	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.13 J	ND	ND	
Phenanthrene	100	500	ND	0.43 J	ND	ND	0.033 J	ND	ND	ND	ND	ND	ND	0.17 J	ND	ND	ND	ND	ND	ND	
Pyrene	100	500	0.18 J	0.82 J	ND	ND	0.048 J	ND	ND	ND	ND	ND	0.14 J	0.37 J	ND	ND	ND	ND	ND	ND	
SVOC TICs ³																					
Tentatively Identified Compounds	--	--	9.05	4.45	3.62	1.27	6.59	2.0	5.0	1.65	8.04	1.92	20.6	10.59	1.96	0.74	1.77	10.78	4.02	2.11	
TAL Metals - mg/kg																					
Aluminum	--	--	17900	16600	13500	16700	11400	9690	14500	14700	16800	15900	22400	21600	19600	16000	20700	20400	17300	16700	
Antimony	--	--	ND	ND	ND	0.72 J	ND	ND	0.54 J	0.69 J	0.81 J	0.80 J	0.75 J	0.82 J	ND	ND	ND	ND	ND	ND	
Arsenic	13	16	14.6	14.5	12.5	16.4	11.5	8.6	9.5	18.0	16.2	16.9	20.0	14.0	23.3 B	48.6 B	30.9 B	10.0 B	12.0 B	19.0 B	
Barium	350	400	180	140	78.7	120 B	126	187	81.4 B	150 B	110 B	158 B	180 B	176 B	74	103	100	102	98.8	111	
Beryllium	7.2	590	0.85	0.78	0.77	0.92	0.56	0.46	0.86	0.87	0.91	0.92	1.1	0.97	1.3	1.0	1.1	1.2	1.0	1.1	
Cadmium	2.5	9.3	0.13 J	0.076 J	ND	ND	0.072 J	0.041 J	ND	ND	ND	ND	ND	ND	0.10 J	0.086 J	0.085 J	0.11 J	0.061 J	0.064 J	
Calcium	--	--	1510 B	830 B	1890 B	1810 B	1760 B	498 B	1880 B	3410 B	2970 B	2140 B	1310 B	1120 B	1820 B	2090 B	1880 B	2300 B	1380 B	1770 B	
Chromium	30	1500	20.1	18.5	16.2	19.1	13.3	11.7	17.0	17.8	20.1	18.6	25.3	24.1	23.0	18.6	22.6	23.3	19.9	18.9	
Cobalt	--	--	16.6	16.0	16.2	18.8	12.7	10.7	14.4	15.5	16.4	17.6	13.9	13.1	17.6	16.6	17.1	17.5	16.3	16.4	
Copper	50	270	20.0	17.4	16.3	16.1	15.6	14.6	17.7	21.1	24.2	19.6	17.7	17.4	20.2	17.4	18.8	19.0	21.1	24.8	
Iron	--	--	31200 B	29700 B	25500 B	32700	22400 B	18600 B	29500	31000	36500	33700	39400	34600	36600	32100	41500	37200	33400	38800	
Lead	63	1,000	25.9	23.1	13.2	19.4	22.7	12.9	13.0	16.8	15.8	17.1	33.2	30.0	67.5	25.3	18.8	12.2	18.7	17.8	
Magnesium	--	--	3910	3370	4220	4100	2870	2640	4770	5030	5510	5170	3410	3720	5870	4680	5900	5870	4790	4960	
Manganese	1,600	10,000	1070 B	833 B	571 B	734	694 B	426 B	545	583 B	709	795	563	554	293 B	800 B	419 B	755 B	534 B	594 B	
Nickel	30	310	25.9	23.0	27.6	31.1	22.3	20.2	30.3	32.2	34.8	33.9	20.9	23.6	39.3	33.2	36.7	38.4	35.1	35.1	
Potassium	--	--	2480	2090	2570	2670	1450	1400	3220	2910	3770	3270	2750	2810	4710	3640	3870	4300	3840	3680	
Selenium	3.9	1500	ND	ND	ND	0.50 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Sodium	--	--	52.9 J	45.0 J	50.8 J	61.8 J	40.5 J	30.9 J	76.3 J	74.0 J	82.9 J	83.3 J	56.2 J	60.1 J	104 J	84.2 J	87.7 J	104 J	80.3 J	89.0 J	
Vanadium	--	--	26.6	25.5	18.2	24.5	17.1	14.4	19.3	19.5	22.9	21.7	43.4	39.4	27.8	22.9	28.1	29.3	23.1	21.9	
Zinc	109	10,000	72.1	58.7	60.1	68.1	50.0	42.2	65.3	66.1	80.5	72.1	78.9	72.2	97.5	69.1	80.6	82.1	70.7	73.7	
Mercury	0.18	2.8	0.041	0.029	0.0098 J	0.026	0.018 J	ND	ND	ND	0.012 J	ND	0.039	0.050	0.022 J	0.011 J	0.018 J	ND	ND	ND	
Organochlorine Pesticides (mg/kg)																					
gamma-BHC (Lindane)	0	9	ND	ND	0.00047	ND	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	
4,4'-DDD	0.0033	92	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	0.021	ND	NA	NA	NA	NA	NA	NA	
Dieldrin	0.005	1.4	ND	ND	0.00052	ND	NA	NA	NA	NA	NA	NA	0.02	0.016	NA	NA	NA	NA	NA	NA	
Endosulfan II	2.4	200	0.011	ND	0.00059	ND	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	
Endrin	0.014	89	ND	ND	0.00081	ND	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	
Herbicides (mg/kg)																					
Herbicides were not detected at concentrations above laboratory detection limit.																					
Polychlorinated Biphenyls (PCBs) (mg/kg)																					
Total PCBs	0.1	1	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	

Notes:
1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detected.
2. Values per NYSDEC Part 375 Soil Cleanup Objectives (SCOs).

Definitions:
mg/kg = milligrams per kilogram
ug/kg = micrograms per kilogram
ND = Parameter not detected above laboratory detection limit.
NA = Sample not analyzed for parameter.
-,- = No SCO available.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.

= Result exceeds Unrestricted SCOs.
 = Result exceeds Commercial SCOs.

= Indicates sample was taken from the Homer Street Extension parcel

TABLE 1

SUMMARY OF SURFACE AND NEAR-SURFACE SOIL/FILL ANALITICAL DATA
REMEDIAL INVESTIGATION REPORT
OREGON ROAD SITE
OLEAN, NEW YORK

Parameter ¹	Unrestricted SCOs ² (mg/kg)	Commercial SCOs ² (mg/kg)	SAMPLE LOCATION														
			Oregon Road Site														
			SS-36	NS-36 (2'-1')	NS-36 (1'-2')	NS-36 (2'-3')	NS-36 (3'-4')	SS-37	NS-37 (2'-1')	NS-37 (1'-2')	NS-37 (2'-3')	NS-37 (3'-4')	SS-38	NS-38 (2'-1')	NS-38 (1'-2')	NS-38 (2'-3')	NS-38 (3'-4')
			7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18
Volatile Organic Compounds (VOCs) - mg/kg ³																	
Chloroform	0.37	350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene chloride	0.05	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	0.47	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tentatively Identified Compounds (TICs)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TCL Semi-Volatile Organic Compounds (SVOCs) - mg/kg ³																	
Acenaphthylene	100	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	100	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	1	5.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	1	5.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	100	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.8	56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	1	56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	0.33	0.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	7	350	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	30	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.5	5.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	100	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOC TICs ³																	
Tentatively Identified Compounds	--	--	5.56	2.36	1.78	2.2	2.03	4.12	3.13	2.04	1.37	2.54	5.40	1.71	2.35	1.36	1.88
TAL Metals - mg/kg																	
Aluminum	--	--	16200	15400	15300	16600	15500	16200	16400	16200	15300	19700	14100	13500	14500	15900	16200
Antimony	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	13	16	13.9	13.0	13.1	16.6	14.1	13.6	14.4	20.2	16.5	10.0	11.9	11.7	14.6	13.1	13.2
Barium	350	400	114 F1	142	156	160	161	180	187	160	136	247	131	195	151 F1	170	203
Beryllium	7.2	590	0.98	0.85	0.89	1.0	0.9	0.92	0.9	0.9	0.8	1.1	0.78	0.7	1.0	0.90	0.89
Cadmium	2.5	9.3	0.086 J	0.054 J	0.059 J	0.050 J	ND	0.045 J	0.046 J	0.041 J	0.038 J	ND	0.084 J	0.060 J	0.049 J	0.067 J	0.035 J
Calcium	--	--	3470 B	3920 B	2980 B	2270 B	3450 B	1900 B	1790 B	2040 B	2300 B	2080 B	3220 B	1960 B	2700 B	2350 B	4950 B
Chromium	30	1500	18.6	18.0	18.6	20.1	18.5	19.1	18.9	20.4	18.8	19.7	17.1	15.9	17.5	19.0	19.4
Cobalt	--	--	15.7	15.6	15.6	15.9	13.7	15.2	17.0	16.4	16.0	19.2	13.1	15.1	14.8	14.3	15.5
Copper	50	270	20.3	19.1	20.6	27.0	17.6	18.3	16.8	22.3	18.6	27.2	17.7	17.0	20.9	18.8	18.5
Iron	--	--	35000 F2	28700	31600	33800	28700	30000	30400	32500	30500	37600	27100	26000	38000 B	30000	30000
Lead	63	1,000	20.3 B	18.9 B	29.7 B	19.0 B	15.7 B	17.7 B	19.5 B	29.3 B	16.9 B	14.8 B	19.2 B	13.9 B	18.1	16.1 B	15.8 B
Magnesium	--	--	4580 F1	4700	4760	4560	4560	4590	4200	5000	4990	3820	4020	3700	4370 B	4530	5360
Manganese	1,600	10,000	703 B F2	651 B	703 B	595 B	417 B	418 B	752 B	384 B	340 B	999 B	514 B	1050 B	482 B	823 B	611 B
Nickel	30	310	31.1	31.8	32.6	34.3	29.7	32.0	31.1	34.1	32.1	39.8	28.8	30.0	30.1	31.1	32.1
Potassium	--	--	3600 F1	2960	2540	3030	3190	3250	3330	3010	2810	4070	2840	2550	2430 F1	3150	3340
Selenium	3.9	1500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	--	--	81.4 J B	73.2 J B	70.7 J B	73.4 J B	78.7 J B	65.4 J B	64.9 J B	70.4 J B	72.5 J B	83.3 J B	57.7 J B	55.3 J B	63.4 J B	76.6 J B	86.2 J B
Vanadium	--	--	22.4 F1	20.4	19.7	21.6	20.4	20.5	20.7	20.3	19.4	23.8	18.4	18.2	18.5	20.8	21.4
Zinc	109	10,000	72.6	63.9	68.9	71.9	63.7	64.1	64.4	68.4	67.6	79.0	62.8	56.9	68.4	64.7	65.0
Mercury	0.18	2.8	0.013 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.015 J	ND	ND	ND	ND
Organochlorine Pesticides (mg/kg)																	
gamma-BHC (Lindane)	0	9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDD	0.0033	92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dieldrin	0.005	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan II	2.4	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin	0.014	89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Herbicides (mg/kg)																	
Herbicides were not detected at concentrations above laboratory detection																	
Polychlorinated Biphenyls (PCBs) (mg/kg)																	
Total PCBs	0.1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.

2. Values per NYSDEC Part 375 Soil Cleanup Objectives (SCOs).

Definitions:

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

ND = Parameter not detected above laboratory detection limit.

NA = Sample not analyzed for parameter.

-- = No SCO available.

J = Estimated value; result is less than the sample quantitation limit but greater than zero.

Bold	= Result exceeds Unrestricted SCOs.
Bold	= Result exceeds Commercial SCOs.
	= Indicates sample was taken from the Homer Street Extension parcel

SUMMARY OF SURFACE AND NEAR-SURFACE SOIL/FILL ANALITICAL DATA
REMEDIAL INVESTIGATION REPORT
OREGON ROAD SITE
OLEAN, NEW YORK

Parameter ¹	Unrestricted SCOs ² (mg/kg)	Commercial SCOs ² (mg/kg)	SAMPLE LOCATION																Homer Street Extension	
			Oregon Road Site																	
			SS-39	NS-39 (2'-1')	NS-39 (1'-2')	NS-39 (2'-3')	NS-39 (3'-4')	SS-40	NS-40 (2'-1')	NS-40 (1'-2')	NS-40 (2'-3')	NS-40 (3'-4')	SS-41	NS-41 (2'-1')	NS-41 (1'-2')	NS-41 (2'-3')	NS-41 (3'-4')	SS-42	NS-42 (2"-1')	
			7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	7/2/18	6/29/18	6/29/18	
Volatile Organic Compounds (VOCs) - mg/kg ³																				
Chloroform	0.37	350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	
Methylene chloride	0.05	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	
Trichloroethene	0.47	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	
Tentatively Identified Compounds (TICs)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	
TCL Semi-Volatile Organic Compounds (SVOCs) - mg/kg ³																				
Acenaphthylene	100	500	ND	ND	ND	ND	ND	0.25 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Anthracene	100	500	ND	ND	ND	ND	ND	0.36 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzo(a)anthracene	1	5.6	ND	ND	ND	ND	ND	1.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzo(a)pyrene	1	1	ND	ND	ND	ND	ND	2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzo(b)fluoranthene	1	5.6	ND	ND	ND	ND	ND	2.7 J	ND	ND	ND	ND	0.048 J	ND	ND	ND	ND	ND	ND	
Benzo(g,h,i)perylene	100	500	ND	ND	ND	ND	ND	1.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzo(k)fluoranthene	0.8	56	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Carbazole	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chrysene	1	56	ND	ND	ND	ND	ND	2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Dibenz(a,h)anthracene	0.33	0.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Dibenzofuran	7	350	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Fluoranthene	100	500	ND	ND	ND	ND	ND	3.6 J	ND	ND	ND	ND	0.063 J	ND	ND	ND	ND	ND	ND	
Fluorene	30	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Indeno(1,2,3-cd)pyrene	0.5	5.6	ND	ND	ND	ND	ND	1.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-Methylphenol	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Phenanthrene	100	500	ND	ND	ND	ND	ND	1.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Pyrene	100	500	ND	ND	ND	ND	ND	3.1 J	ND	ND	ND	ND	0.061 J	ND	ND	ND	ND	ND	ND	
SVOC TICs ³																				
Tentatively Identified Compounds	--	--	5.92	4.8	3.05	1.74	1.54	14.2	5.29	5.91	4.89	6.68	15.4	6.06	5.98	4.1	8.66 JN	6.84	2.21	
TAL Metals - mg/kg																				
Aluminum	--	--	11800	15100	13400	15500	14800	19700	15700	15900	15400	14100	15000	13000	13900	12400	15200	12300	14600	
Antimony	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 J	3.6 J	0.72 J	.83 J F1	
Arsenic	13	16	9.2	13.2	9.2	17.8	13.0	14.4	12.6	12.3	10.4	9.1	11.8	11.7	17.4	11.0	12.4	16.7	18.8	
Barium	350	400	83.7	142	104	159	157	111	77.2	95.0	164	173	124	144	181	110	123	117 B	146 B F1	
Beryllium	7.2	590	0.61	0.85	0.71	0.89	0.86	0.82	0.74	0.79	0.75	0.66	0.72	0.71	0.72	0.63	0.82	0.71	0.82	
Cadmium	2.5	9.3	0.093 J	0.055 J	0.078 J	0.015 J	0.061 J	0.100 J	0.091 J	0.10 J	0.088 J	0.22 J	0.120 J	0.046 J	0.058 J	0.048 J	0.042 J	ND	ND	
Calcium	--	--	3090 B	5940 B	16200 B	5400 B	4340 B	646 B	272 B	243 B	1750 B	1170 B	2010 B	1260 B	1350 B	1350 B	1630 B	1940 B	1370 B	
Chromium	30	1500	14.1	18.4	16.3	19.0	18.3	22.9	17.4	19.5	19.7	17.3	17.7	15.7	16.9	15.3	18.9	15.6	18.0	
Cobalt	--	--	11.5	15.6	13.3	16.4	15.6	13.4	14.2	14.2	10.7	17.3	11.4	13.1	13.5	10.8	14.4	10.9	15.5	
Copper	50	270	15.1	18.5	19.3	19.3	18.7	20.4	16.2	16.6	17.1	16.5	18.1	18.1	17.4	16.6	17.6	15.8	18.5	
Iron	--	--	23500 B	29600 B	25700 B	31100 B	30600 B	33100 B	27100 B	27100 B	27000 B	26400 B	25200 B	26000 B	28300 B	23700	27800	28700	32900	
Lead	63	1,000	17.7	16.7	13.9	19.6	16.9	21.8 B	17.7	17.1	15.4	14.8	23.8 B	14.8	37.0	18.5	14.9	13.6	17.6	
Magnesium	--	--	3700 B	5390 B	8550 B	5250 B	5090 B	4300 B	2920 B	3230 B	3770 B	3400 B	3510 B	3450 B	3550 B	3190	3980 B	3450	4000	
Manganese	1,600	10,000	383 B	605 B	573 B	447 B	723 B	512 B	419 B	396 B	530 B	1930 B	598 B	498 B	524 B	497 B	599 B	339	787	
Nickel	30	310	24.0	31.3	28.0	32.3	31.7	28.7	19.9	23.5	29.7	31.7	24.4	28.1	27.4	24.2	29.9	26.6	31.9	
Potassium	--	--	2160	2810	2480	2880	2690	2480	1550	1800	2210	1790	2100	1990	1750	2240	2920	2450	2810 F1	
Selenium	3.9	1500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.62 J	ND	ND	ND	0.85 J	ND	ND	
Sodium	--	--	57.7 J B	77.8 J B	86.9 J B	79.2 J B	77.4 J B	57.7 J B	40.1 J B	43.0 J B	53.8 J B	41.0 J B	53.2 J B	49.7 J B	49.3 J B	56.4 J	68.1 J	49.3 J	67.1 J F1	
Vanadium	--	--	16.4	19.9	19.7	18.8	29.7	24.5	23.0	25.5	20.1	23.0	17.8	19.6	18.0	20.9	16.8	20.5		
Zinc	109	10,000	59.3	65.8	59.8	68.1	66.1	80.2	60.2	61.8	66.0	63.3	65.3	59.7	63.2	54.6	64.2	58.7	65.0	
Mercury	0.18	2.8	ND	ND	ND	ND	ND	0.042	0.031	0.036	ND	0.011 J	0.030	ND	ND	ND	ND	ND	ND	
Organochlorine Pesticides (mg/kg)																				
gamma-BHC (Lindane)	0	9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
4,4'-DDD	0.0033	92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dieldrin	0.005	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Endosulfan II	2.4	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Endrin	0.014	89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Herbicides (mg/kg)																				
Herbicides were not detected at concentrations above laboratory detection																				
Polychlorinated Biphenyls (PCBs) (mg/kg)																				
Total PCBs	0.1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Notes:
1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per NYSDEC Part 375 Soil Cleanup Objectives (SCOs).

Definitions:
mg/kg = milligrams per kilogram
ug/kg = micrograms per kilogram
ND = Parameter not detected above laboratory detection limit.
NA = Sample not analyzed for parameter.
"--" = No SCO available.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.

Bold = Result exceeds Unrestricted SCOs.
Bold = Result exceeds Commercial SCOs.

= Indicates sample was taken from the Homer Street Extension parcel

TABLE 2
SUMMARY OF RI SUBSURFACE SOIL/FILL ANALYTICAL DATA
REMEDIAL INVESTIGATION REPORT
OREGON ROAD SITE
OLEAN, NEW YORK

Parameter ¹	Unrestricted SCOs ² (mg/kg)	Commercial SCOs ² (mg/kg)	Test Pit Sample Locations												Soil Boring Sample Locations							Monitoring Well Sample Locations																		Homer Street Extension Site	
			Oregon Road Site					Homer Street Extension Site							Oregon Road Site							Oregon Road Site																			
			TP-8 (8-10')	TP-9 (10.5-12')	TP-10 (12.5-15')	TP-10 (15-18')	TP-16 (18-24')	TP-41 (25-30')	TP-42 (30-36')	TP-43 (36-42')	TP-44 (42-48')	TP-45 (48-54')	TP-46 (54-60')	TP-47 (60-66')	SB-1 (10-12')	SB-2 (12-14')	SB-2 (14-16')	SB-3 (16-18')	SB-4 (18-20')	SB-4 (20-22')	SB-4 (22-24')	SB-7 (24-26')	MW-4 (2-4')	MW-4 (4-6')	MW-5 (6-8')	MW-5 (8-10')	MW-6 (10-12')	MW-6 (12-14')	MW-7 (14-16')	MW-8 (16-18')	MW-9 (18-20')	MW-9 (20-22')	MW-10 (22-24')	MW-11 (24-26')	MW-11 (26-28')	MW-12 (28-30')	MW-13 (30-32')	MW-15 (32-34')			
			1/5/17	1/5/17	1/5/17	1/5/17	1/5/17	6/26/18	6/26/18	6/26/18	6/26/18	6/26/18	6/26/18	6/26/18	1/27/17	1/24/17	1/24/17	1/24/17	1/20/17	1/20/17	1/31/17	1/30/17	1/30/17	2/1/17	1/31/17	1/20/17	1/20/17	1/20/17	1/20/17	1/30/17	1/31/17	1/31/17	1/31/17	1/31/17	1/31/17	1/31/17	1/31/17	1/31/17	1/31/17	1/31/17	
TCL Volatile Organic Compounds (VOCs) - mg/kg																																									
1,2,4-Trimethylbenzene	3.6	190	ND	ND	NA	ND	0.291	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Butanone (MEK)	0.12	500	ND	ND	NA	ND	ND	ND	0.0071 J	ND	ND	ND	0.0032 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Acetone	0.05	500	ND	ND	NA	0.104 J	0.086 J	0.01 J	0.036	ND	ND	ND	0.025 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzene	0.06	44	ND	ND	NA	ND	0.0023 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Cyclohexane	--	--	ND	ND	NA	ND	2.97 J	ND	ND	ND	ND	ND	0.035	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Isopropylbenzene (Cumene)	--	--	ND	ND	NA	ND	ND	ND	ND	ND	0.28 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Methylcyclohexane	--	--	ND	ND	NA	ND	5.46 J	ND	ND	ND	ND	1.3	0.075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23.0		
n-Butylbenzene	12	500	ND	ND	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0059	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Trichloroethene	0.47	200	ND	ND	NA	ND	ND	ND	0.0015 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Xylenes, Total	0.26	500	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	0.0026 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
VOC TICs	--	--	2.0	ND	NA	9032	258	ND	0.0073	8.9	0.12	108	0.0627	ND	ND	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	ND	16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	172	
Total VOCs	--	--	2.0	ND	NA	9032	266	0.01	0.05	8.9	0.1	109	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	ND	16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	195	
TCL Semi-Volatile Organic Compounds (SVOCs) - mg/kg																																									
Di-n-octyl phthalate	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.03 J	ND	
Fluoranthene	100	500	ND	ND	0.115	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Phenanthrene	100	500	ND	ND	ND	ND	0.17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Pyrene	100	500	ND	ND	0.0927	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
SVOC TICs	--	--	0.62	0.55	5.3	22	30	2.7	1095	12	2.01	114	2.5	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26	ND	ND	ND	0.94	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	2.5	172	
TOTAL SVOCs	--	500	0.62	0.55	5.5	22	30.1	2.7	1095	12	2.01	114	2.5	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26	ND	ND	ND	0.94	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	2.6	172	
TAL Metals - mg/kg																																									
Aluminum	--	--	10800 F2	9030	2740	12000	12800	9750	13600	11300	16900	15000	15400	14800	13100	NA	10400	11800	NA	11400	NA	NA	9520	5540	12300	NA	8350	13900	17300 J	2130	NA	8430 J	11500	NA	11500	17200	13600				
Antimony	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	NA	NA	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Arsenic	13	16	4.86	6.24	25.9	13	12.2	10.6	10.2	9.6	15.9	15	14.4	13.6	15.9	NA	10.8	7.65	NA	13.1	NA	NA	9.57	38.9	15.1	NA	7.78	9.2	15.9	28.2	NA	11	11.8	NA	17.1	17.7	18.7				
Barium	350	400	121	86.1	162	108	140	97.2	154	91.1	157	162	141	168	159	NA	151	143	NA	114	NA	NA	162	116	117	NA	108	177	205 J	20.3	NA	105	151	NA	64.3	211	141				
Beryllium	7.2	590	ND	ND	ND	ND	ND	0.46	0.9	0.61	1.0	0.74	0.9	0.81	ND	NA	ND	ND	NA	ND	NA	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA	ND	ND	NA	ND	1.1	0.87				
Cadmium	2.5	9.3	ND	ND	ND	ND	ND	0.066 J	0.34	0.080 J	ND	0.12 J	0.055 J	0.040 J	ND	NA	ND	ND	NA	ND	NA	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA	ND	ND	NA	ND	ND	0.17 J				
Calcium	--	--	603	716	247	500	989	990 B	722 B	538 B	3230 B	607 B	2000 B	4830 B	1610	NA	23000	1570	NA	4360	NA	NA	712	38200	1080	NA	1770	834	763	1070	NA	1090	1390	NA	1560	3020 B	1100 B				
Chromium	30	1,500	15.1	11	16	16.3	16.3	11.1	16.3	13.9	20.4	17.1	18.5	17.4	16.5	NA	15.4	16.5	NA	15.9	NA	NA	12.2	6.12	15.2	NA	10.7	15.7	23.2	8.23	NA	11.7	16.2	NA	16.3	23.4	15.7				
Cobalt	--	--	7.52	5.88	2.67	12.8	14.1	8.7	8.6	12.7	18.1	14.8	18.6	15.8	14.9	NA	10	10.6	NA	12.1	NA	NA	8.63	5.29	10.7	NA	8.09	11.5	15.9	3.61	NA	9	10.6	NA	13.7	17	11.3				
Copper	50	270	5.75	13	21.1	10.6	10	19.1	15.5	21.4	19.7	15.2	21.0	19.2	16.8	NA	16.6	6.77	NA	15.7	NA	NA	16.4	85.0	20.7	NA	13.2	15.5	14.6	9.33	NA	12.8	12.9	NA	16	15.2	17.1				
Iron	--	--	19400	24800	33100	24900	24300	21400	18600	24800	35800	26500	30900	28000	32400	NA	26800	23800	NA	29800	NA	NA	23600	15000	20800	NA	24000	28300	28600	14500	NA	21700 J	27800	NA	20800	34600	28300				
Lead ^a	63	1,000	20.7	17.5	35.5	21.1	22.9	13.2	24.5	16.6	20.3	22.0	22.3	20.0	19.2	NA	14.6	18.9	NA	14.8	NA	NA	14.6	81.2	23.0	NA	10.3	18.6	33	11.1	NA	15.7 J	30.5	NA	16.1	17.7	27.5				
Magnesium	--	--	2430	2400	289	3130	3230	2400	2340	2880	5450	3380	4260	4600	3560	NA	4800	3710	NA	4530	NA	NA	2720	4170	3040	NA	2300	3660	4120	ND	NA	2860 J	2980	NA	4330	5660	2330				
Manganese	1,600	10,000	590	231	56.9	303	367	576 B	183 B	530 B	716 B	502 B	649 B	698 B	562	NA	1250	531	NA	472	NA	NA	822	350	308	NA	433	456	793	47.6	NA	622 J	716	NA	169	423 B	864 B				
Nickel	30	310	20.1	20.3	11.5	28	29.6	20.3	16.3	23.5	34.7	26.0	32.3	28.8	30.8	NA	22.9	24.8	NA	27.2	NA	NA	23.7	12.6	26.2	NA	18	31.2	36.8	10.4	NA	19.8 J	21.1	NA	27.9	38.8	15.5				
Potassium	--	--	885	635	372	810	1120	1450	1730	1550	3380	2520	3150	2880	1390	NA	1250	895	NA	1090	NA	NA	701	500	1080	NA	701	1230	1640	ND	NA	678	755	NA	1210	2710	1760				
Selenium	3.																																								



TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL DATA
REMEDIAL INVESTIGATION REPORT
OREGON ROAD SITE
OLEAN, NEW YORK

Parameter ¹	NYSDEC Class GA GWQS ²	SAMPLE LOCATIONS														Homer Street Extension	
		Oregon Road Site														MW-13 7/25/18	MW-15 7/25/18
		MW-1 11/24/15	MW-2 11/24/15	MW-2R 7/25/18	MW-3 11/24/15	MW-4 2/8/17	MW-5 2/8/17	MW-6 2/7/17	MW-7 2/9/17	MW-8 2/9/17	MW-9 2/9/17	MW-10 2/7/17	MW-11 2/7/17	MW-12 2/7/17			
TCL Volatile Organic Compounds (VOCs) - ug/L																	
Acetone	50	7.0	13.0 D	5.2 J	2.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.5 J	6.1 J
Carbon disulfide	60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Cyclohexane	--	ND	1.0 JD	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.0
Methylcyclohexane	--	ND	68.0 D	0.49 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3
Methylene Chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1
VOC-TICs ³	--	NA	NA	41	NA	NA	2.7	0.36	334	6.0	50	53	0.38	0.36	ND	ND	ND
Total VOCs	--	7.0	82	47	2.4	ND	2.7	0.36	334	6.0	50.4	53	0.38	0.36	7.6	16	16
TCL Semi-Volatile Organic Compounds (SVOCs) - ug/L																	
2-Methylnaphthalene	--	ND	3.5 D	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	50	ND	1.2 D	ND	0.05 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.002	ND	ND	ND	0.43	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND	ND	0.26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002	ND	ND	ND	0.39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	--	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Caprolactam	--	ND	ND	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11 J	59
Chrysene	0.002	ND	ND	ND	0.45	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	--	ND	ND	ND	0.09 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8 J	ND
Fluoranthene	50	ND	ND	ND	0.24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J
Ideno(1,2,3-cd)pyrene	0.002	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	50	ND	3.7 D	ND	0.12 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	50	ND	ND	ND	0.20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOC-TICs ³	--	NA	NA	659	NA	ND	ND	ND	8.4	7.9	ND	ND	ND	ND	3946	729	729
Total SVOCs	--	ND	8.4	678.6	2.5	ND	ND	ND	8.4	7.9	ND	ND	ND	ND	3959	788	788
TAL Metals - ug/L (Total)																	
Aluminum	--	NA	NA	38,600	NA	423	1250	2940	18200	7900	641 F1	2820	388	11700	56200 F2	97900	97900
Arsenic	25	NA	NA	56.0	NA	ND	44.8	50.2	10.5	16.1	ND	ND	36.7	42.2	38.0	330	330
Barium	1,000	NA	NA	1,100	NA	147	368	312	228	724	237	497	322	627	670.0 F1	1900	1900
Beryllium	3	NA	NA	1.9 J	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.0	4.5	4.5
Cadmium	5	NA	NA	2,3000	NA	ND	2.1	2.4	3.2	ND	ND	ND	2.2	3.6	0.060 J	2.3	2.3
Calcium	--	NA	NA	47,100	NA	35200	31200	42500	12800	70400	29700	1170	29600	102000	83700	45300	45300
Chromium	50	NA	NA	41.0	NA	ND	ND	5.5	18.1	13.8	ND	ND	ND	12.7	67	130	130
Cobalt	--	NA	NA	28.0	NA	ND	ND	ND	14	ND	ND	ND	ND	ND	45.0 F1	100	100
Copper	200	NA	NA	88.0	NA	ND	ND	ND	16	13.8	ND	ND	ND	21.5	60	230	230
Iron	300	NA	NA	64,400	NA	13700	28200	32700	8750	34000	6830	2770	48400	19100 F1	87000 F2	283000 F1	283000 F1
Lead	25	NA	NA	64.0	NA	5.4	11.8	16.7	10.9	15.4	ND	ND	16	147	65	210	210
Magnesium	35000	NA	NA	22,000.0	NA	6320	12100	9350	5840	18100	7030	3650	7380	1890	36700 F1	34200	34200
Manganese	300	NA	NA	25900 B	NA	2330	8410	8410	1980	11800	7280	522	8210	8270	3300 B	17900 B	17900 B
Nickel	100	NA	NA	48.0	NA	ND	ND	ND	27	16.7	ND	ND	ND	11.9	87 F1	170	170
Potassium	--	NA	NA	10,400	NA	1250	1740	3060	6730	5370	1690	1440	1240	4750	17400.0 F2 F1	18800	18800
Sodium	20,000	NA	NA	11,400	NA	24500	1620	2620	11100	5340	44700	2420	2400	3480	11300	2500	2500
Thallium	--	NA	NA	ND	NA	ND	119	ND	ND	13.8	ND	ND	ND	10.4	ND	ND	ND
Vanadium	--	NA	NA	59.0	NA	ND	ND	ND	24.3	ND	ND	ND	ND	ND	80.0 F1	140	140
Zinc	2000	NA	NA	140.0 B	NA	ND	ND	ND	56	61.1	ND	ND	ND	ND	210.0 B F1	430 B	430 B
Dissolved Metals - ug/L																	
Barium	1,000	NA	NA	NA	NA	NA	NA	191	36.1	569	NA	27.3	NA	500	NA	NA	NA
Calcium	--	NA	NA	NA	NA	NA	NA	39700	10900	69100	NA	12000	NA	110000	NA	NA	NA
Iron	300	NA	NA	NA	NA	NA	NA	110	ND	6810	NA	ND	NA	3520 F1 F2	NA	NA	NA
Magnesium	35000	NA	NA	NA	NA	NA	NA	8650	2550	16200	NA	3450	NA	15300	NA	NA	NA
Manganese	300	NA	NA	NA	NA	NA	NA	7990	1490	11400	NA	434	NA	8040	NA	NA	NA
Potassium	--	NA	NA	NA	NA	NA	NA	2260	1180	3650	NA	ND	NA	ND	NA	NA	NA
Sodium	20000	NA	NA	NA	NA	NA	NA	2510	10700	5340	NA	2440	NA	3340	NA	NA	NA
Thallium	--	NA	NA	NA	NA	NA	NA	ND	ND	14	NA	ND	NA	ND	NA	NA	NA
Organochlorine Pesticides ug/L																	
4,4'-DDE	0.20	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	ND	0.028	ND	ND
Dieldrin	0.004	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	ND	0.014	ND	ND
Endrin aldehyde	5	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	ND	0.035	ND	ND
Polychlorinated Biphenyls- ug/L																	
Total PCBs	--	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND
Organochlorine Pesticides - ug/L																	
	--	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND
Herbicides - ug/L																	
	--	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND
Semi-Volatile Organic Compounds 8270 (SIM) ⁴ (ug/L):																	
1,4 - Dioxane	--	NA	NA	36	NA	2.5	NA	NA	NA	NA	NA	NA	NA	2.5	0.17 J	2.5	2.5
Perfluorinated Alkyl Acids ng/L																	
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	--	NA	NA	2.9 J	NA	ND	NA	NA	NA	NA	NA	NA	NA	ND	ND	3.3 J	3.3 J
Perfluorobutanesulfonic Acid (PFBS)	--	NA	NA	ND	NA	1.3 J	NA	NA	NA	NA	NA	NA	NA	61	670	3.0 J	3.0 J
Perfluorobutanoic acid (PFBA)	--	NA	NA	8.9	NA	19	NA	NA	NA	NA	NA	NA	NA	37	200	120	120
Perfluoroheptanesulfonic Acid (PFHpS)	--	NA	NA	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA	18	4.4 J	ND	ND
Perfluoroheptanoic acid (PFHpA)	--	NA	NA	ND	NA	3.8	NA	NA	NA	NA	NA	NA	NA	17	180	1.8 J	1.8 J
Perfluorohexanesulfonic Acid (PFHxS)	--	NA	NA	0.31 JB	NA	0.40 JB	NA	NA	NA	NA	NA	NA	NA	520 B	1100 B	2.4 JB	2.4 JB
Perfluorohexanoic acid (PFHxA)	--	NA	NA	ND	NA	3.5	NA	NA	NA	NA	NA	NA	NA	96	1900	ND	ND
Perfluorononanoic acid (PFNA)	--	NA	NA	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA	0.47 J	ND	ND	ND
Perfluorooctane Sulfonamide (PFOSA)	--	NA	NA	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND
Perfluorooctanesulfonic Acid (PFOS)	--	NA	NA	ND	NA	1.4 J	NA	NA	NA	NA	NA	NA	NA	510	3.5 J	1.6 J	1.6 J
Perfluorooctanoic acid (PFOA)	--	NA	NA	0.68 JB	NA	5.5 B	NA	NA	NA	NA	NA	NA	NA	25 B	100 B	2.0 JB	2.0 JB
Perfluoropentanoic acid (PFPeA)	--	NA	NA	ND	NA	6.2	NA	NA	NA	NA	NA	NA	NA	15	250	ND	ND
Perfluoroundecanoic Acid (PFUnA)	--	NA	NA	0.22 J	NA	ND	NA	NA	NA	NA	NA	NA	NA	0.25 J	ND	0.48 J	0.48 J

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.

2. Values per NYSDEC TOGS 1.1.1 Class GA Groundwater Quality Standards (GWQS).

3. Tentatively Identified Compounds (TICs).

4. Extraction methodology of Selective Ion Monitoring (SIM) was used for 1,4 -Dioxane.

Definitions:

NA = Parameter not tested.

ND = Parameter not detected above laboratory detection limit.

-- = No GWQS available.

J = Estimated value; result is less than the sample quantitation limit but greater than zero.

B = Analytical was detected in the associated blank as well as in the sample.

D = Dilution

F1 = MS and/or MSD Recovery is outside acceptance limits.

F2 = MS/MSD RPD exceeds control limits.

Result exceeds Class GA GWQS

= Indicates sample was taken from the Homer Street Extension parcel



TABLE 4

SUMMARY OF SEDIMENT ANALYTICAL DATA
REMEDIAL INVESTIGATION REPORT
OREGON ROAD SITE
OLEAN, NEW YORK

Parameter ¹	Class A ² (Low Risk)	Class B ²	Class C ² (High Risk)	Two Mile Creek			
				Oregon Road Site			Homer Street Extension
				SED-1	SED-2	SED-3	SED-4
				Upstream	Midstream	Downstream	Downstream
				1/18/2017	1/18/2017	1/16/2017	7/5/2018
TCL Volatile Organic Compounds (VOCs) - mg/kg							
Acetone	--	--	--	0.26	0.391	0.106	0.036 F1
2-Butanone (MEK)	--	--	--	ND	ND	ND	0.0057 J F1
Methylcyclohexane	--	--	--	ND	ND	ND	ND
Methyl acetate	--	--	--	ND	0.0369 J	ND	ND
Methylene chloride	--	--	--	ND	ND	ND	ND
Methyl tert butyl ether (MTBE)	--	--	--	ND	ND	ND	ND
Toluene	--	--	--	ND	ND	ND	ND
Total Xylene	--	--	--	ND	ND	ND	ND
Tentatively Identified Compounds (TICs)	--	--	--	1.2	0.28	ND	ND
TCL Semi-Volatile Organic Compounds (SVOCs) - mg/kg							
Anthracene	--	--	--	ND	ND	ND	0.084 J
Benzo(a)anthracene	--	--	--	ND	ND	ND	0.3
Benzo(b)fluoranthene	--	--	--	ND	ND	ND	0.28
Benzo(k)fluoranthene	--	--	--	ND	ND	ND	0.38
Benzo(g,h,i)perylene	--	--	--	ND	ND	ND	0.21 J
Benzo(a)pyrene	--	--	--	ND	ND	ND	0.15 J
Chrysene	--	--	--	ND	ND	ND	0.29
Fluoranthene	--	--	--	ND	ND	ND	0.58
Indeno(1,2,3-cd)pyrene	--	--	--	ND	ND	ND	0.19 J
Phenanthrene	--	--	--	ND	ND	ND	0.27
Pyrene	--	--	--	ND	ND	ND	0.5
Tentatively Identified Compounds (TICs)	--	--	--	2.5	1.2	0.57	4.8
TAL Metals - mg/kg							
Aluminum	--	--	--	6100	10800	7640	20000
Antimony	--	--	--	ND	ND	ND	ND
Arsenic	< 10	10-33	> 33	6.23	14.9	20.3	6.3 B
Barium	--	--	--	107	175	97.3	147
Beryllium	--	--	--	ND	ND	ND	0.82
Cadmium	< 1	1-5	> 5	ND	ND	ND	0.17 J
Calcium	--	--	--	836	1660	1330	1400 B
Chromium	< 43	43-110	> 110	10.2	13.3	11.2	22.2
Cobalt	--	--	--	7.90	12.8	11.0	11.0
Copper	< 32	32-150	> 150	7.26	14.1	10.9	17.0
Iron	--	--	--	14500	23700 J	35200	23700
Lead	< 36	36-130	> 130	19.7	32.8	26.3	26.6
Magnesium	--	--	--	1560	2550 J	2110	3800
Manganese	--	--	--	675	1620	868	280 B
Nickel	< 23	23-49	> 49	15.3	22.7	19.7	25.0
Potassium	--	--	--	454	1000	562	2380
Sodium	--	--	--	ND	ND	ND	213
Vanadium	--	--	--	ND	ND	ND	28.1
Zinc	< 120	120-460	> 460	48.4	115 J	57	87.4
Mercury	< 0.2	.02-1	> 1	ND	ND	ND	0.064
Organochlorine Pesticides mg/kg							
4,4'-DDD	--	--	--	--	--	--	0.005
alpha-BHC	--	--	--	--	--	--	0.0011 J
Endrin ketone	--	--	--	--	--	--	0.0049
gamma-BHC (Lindane)	--	--	--	--	--	--	0.0027 J B
Herbicides mg/kg							
Herbicides were not detected at concentrations above laboratory detection limits							
Polychlorinated Biphenyls (PCBs) mg/kg							
PCBs were not detected at concentrations above laboratory detection limits							

Notes:

- Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
- Values from Table 5. Freshwater Sediment Guidance Values. NYSDEC June 24, 2014 Guidance.

Definitions:

mg/kg = milligrams per kilogram

"--" = No value available.

ND = Parameter not detected above laboratory detection limit.

F1= MS and/or MSD Recovery is outside acceptance limits.

F2= MS/MSD RPD exceeds control limits.

Insufficient data to evaluate risk to aquatic life, further testing and/or evaluation is needed

= Indicates sample was taken from the Homer Street Extension parcel



TABLE 5
SUMMARY OF SURFACE WATER ANALYTICAL DATA
REMEDIAL INVESTIGATION REPORT
OREGON ROAD SITE
OLEAN, NEW YORK

Parameter ¹	NYSDEC Class C SWQS ^{2,3}	Two Mile Creek			Homer Street	
		Oregon Road Site				
		SW-1	SW-2	SW-3		SW-4
		Upstream	Midstream	Downstream		Downstream
		1/18/2017	1/18/2017	1/16/2017		7/5/2018
TCL Volatile Organic Compounds (VOCs) - ug/L						
Acetone	--	ND	ND	ND	3.6 J	
Tentatively Identified Compounds (TICs)	--	89	13	0.94	ND	
TCL Semi-Volatile Organic Compounds (SVOCs) - ug/L						
Tentatively Identified Compounds (TICs)	--	ND	ND	ND	209	
TAL Metals - ug/L ⁵						
Aluminum	--	585	654 F1	225	ND	
Barium	--	54.8	54.3	39.9	280	
Calcium	--	10400	10800	10700	63600	
Iron	300	518	523	201	270	
Magnesium	--	2560	2680	2630	14200	
Manganese	--	67	57	40.7	760	
Potassium	--	ND	ND	ND	2200	
Sodium	--	19200	19800	12200	145000	
Organochlorine Pesticides ug/L						
Pesticides were not detected at concentrations above laboratory detection limits						
Herbicides ug/L						
Herbicides were not detected at concentrations above laboratory detection limits						
Polychlorinated Biphenyls (PCBs) - ug/L						
PCBs were not detected at concentrations above laboratory detection limits						

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per NYSDEC TOGS 1.1.1 Class C Surface Water Quality Standards (SWQS).
3. Two Mile Creek is listed as a Class C water body according to NYSDEC Environmental Resource Mapper.
4. SWQS calculated based upon an assumed hardness of 4.0 on the Mohs Hardness Scale.

Definitions:

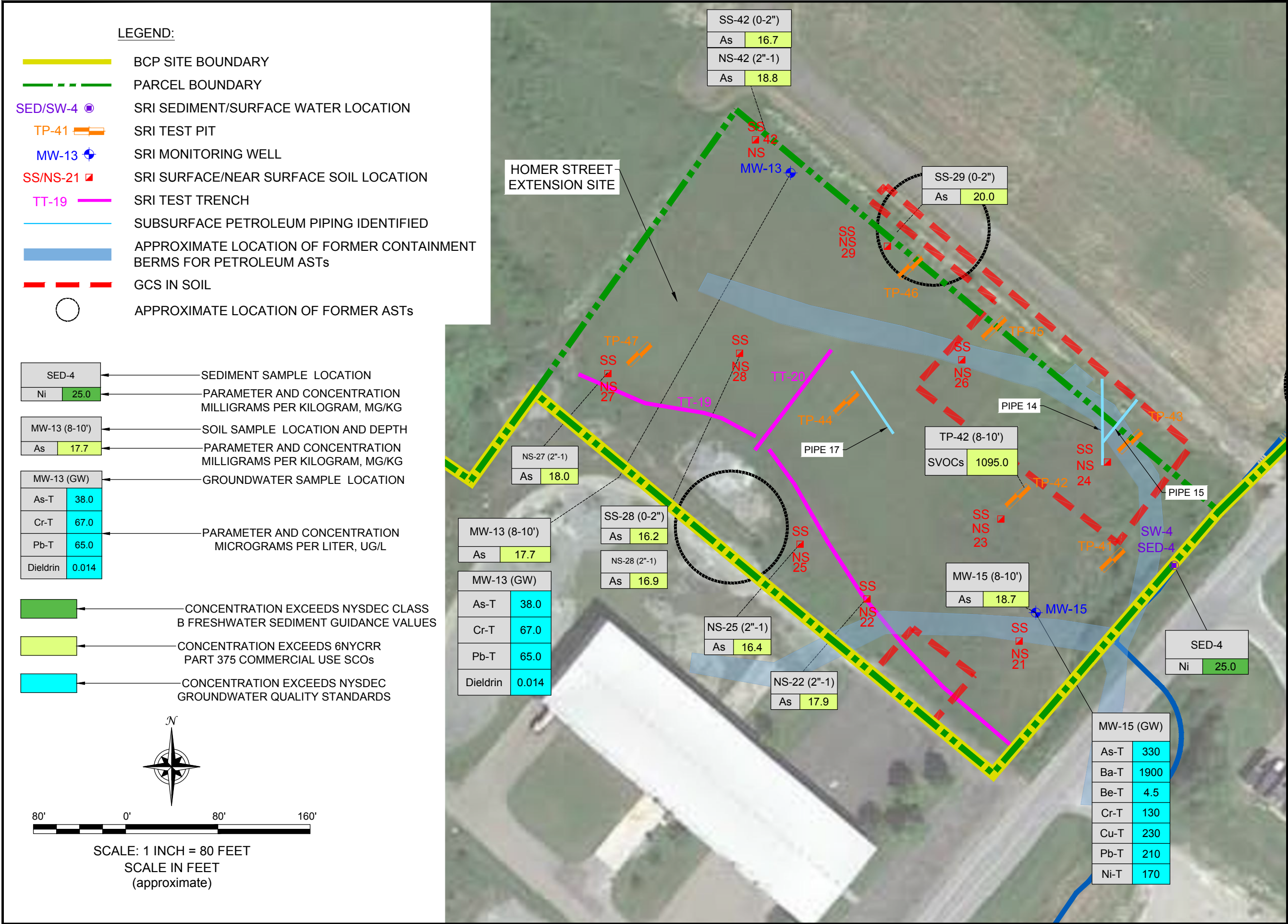
- ND = Parameter not detected above laboratory detection limit.
 "--" = No SWQS available.
 J = Estimated value; result is less than the sample quantitation limit but greater than zero.
 F1= MS and/or MSD Recovery is outside acceptable limits.

Sample result exceeds NYSDEC Surface Water Quality Standards

 = Indicates sample was taken from the Homer Street Extension parcel

F:\CAD\Turnkey\Homer Street Extension\Figure 6: Investigation Locations & Areas of Concern.dwg, 10/3/2018 10:26:41 AM, DWG to PDF.pc3

DATE: OCTOBER 2018
DRAFTED BY: CCB



INVESTIGATION LOCATIONS & AREAS OF CONCERN

BROWNFIELD CLEANUP PROGRAM APPLICATION
OREGON ROAD SITE
OLEAN, NEW YORK
PREPARED FOR
HOMER STREET PROPERTIES, LLC

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0835



JOB NO.: 0323-017-001

FIGURE 6

DISCLAIMER: PROPERTY OF TURNKEY ENVIRONMENTAL RESTORATION, LLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF TURNKEY ENVIRONMENTAL RESTORATION, LLC.

**OREGON ROAD
HOMER STREET EXTENSION
TEST PIT LOGS**

TEST PIT EXCAVATION LOG

Project No: T0323-017-001

Test Pit I.D.: TP-41

Project: Oregon Road Site Remedial Investigation

Logged By: NAS

Client: Homer Street Properties, LLC

Checked By: MAL

Site Location: Olean, NY



TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE				PID VOCs	Lab Sample	Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol			
0.0	0.0	Ground Surface		0 100 300 500 ppm		
	0.0	Topsoil Brown, dry, mostly low plasticity fines, little fine sand, trace organic matter(rootlets), soft		0.0		
		Silty sand with gravel Dark brown, moist, mostly fine sand, some medium plasticity fines, little well sorted gravel, no odors		0.0		
	-3.0			0.0		
	3.0	Sandy Lean Clay with Gravel Blueish grey, moist, mostly medium plasticity fines, some fine sand, little well sorted gravel, no odors		0.0		
5.0				0.0		
	-7.5			0.0		
	7.5	Well sorted gravel Blueish grey, wet, mostly well sorted gravel, some fine to medium sands, slight petroleum-like odors		1.0		
10.0				0.0		
	-12.0			0.0		
	12.0	End of Test Pit				
15.0						

First Water at 8 fbgs

Excavated By: Benson Construction
Excavator Type: Komatsu 138 PC LC
Excavation Date(s): 6/26/2018
Comments:

Length: 15'
Width: 4'
Depth: 12'

Depth to Water: 8'
Visual Impacts: N/A
Olfactory Observations: Slight petroleum-like odors

Sheet: 1 of 1

TEST PIT EXCAVATION LOG



TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

Project No: T0323-017-001

Test Pit I.D.: TP-42

Project: Oregon Road Site Remedial Investigation

Logged By: NAS

Client: Homer Street Properties, LLC

Checked By: MAL

Site Location: Olean, NY

SUBSURFACE PROFILE				PID VOCs	Lab Sample	Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol			
0.0	0.0	Ground Surface				
	0.0	Topsoil Brown, dry, mostly low plasticity fines, little fine sand, trace organic matter(rootlets), soft				
	-0.5	Silty sand with organic fill Dark brown, moist, mostly fine sand, some organic fill (wood), little well sorted gravel, no odors				
	0.5					
5.0						
	-6.0	Sandy Lean Clay with Gravel Blueish grey, moist, mostly medium plasticity fines, some fine sand, little well sorted gravel, slight petroleum-like odors				
	6.0					
10.0	-10.0	Well sorted gravel Blueish grey, wet, mostly well sorted gravel, some fine to medium sands, slight petroleum-like odors				
	10.0					
	-11.0	End of Test Pit				
	11.0					
15.0						

First Water at 10 fbgs

Excavated By: Benson Construction
Excavator Type: Komatsu 138 PC LC
Excavation Date(s): 6/26/2018
Comments:

Length: 15'
Width: 4'
Depth: 11'

Depth to Water: 10'
Visual Impacts: N/A
Olfactory Observations: Slight petroleum-like odors

Sheet: 1 of 1

TEST PIT EXCAVATION LOG

Project No: T0323-017-001

Test Pit I.D.: TP-43

Project: Oregon Road Site Remedial Investigation

Logged By: NAS

Client: Homer Street Properties, LLC

Checked By: MAL

Site Location: Olean, NY



TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE				PID VOCs	Lab Sample	Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol			
0.0	0.0	Ground Surface		0 100 300 500 ppm		
	0.0	Topsoil Brown, dry, mostly low plasticity fines, little fine sand, trace organic matter(rootlets), soft		0.0		
	-2.0	Silty Sand Brown, moist, mostly silty sand, some organic fill (wood), some well sorted gravel, slight odors		0.0		
	-2.5	Peat/ prganics Dark brown, moist, mostly peat/ organics,some medium plasticity fines, slight petroleum-like odors		0.0		
	2.5	Sandy Lean Clay with Gravel Grey, moist, mostly medium plasticity fines, some fine sand, little sub rounded gravel, slight petroleum-like odors		8.0		
5.0				6.0		
	-7.0	Well Sorted Gravel Grey, wet (8'), mostly well sorted gravel, some fine to medium sands, product on soil and water, petroleum-like odors		7.0		
	7.0			5.0		
10.0				5.0		
	-12.0			0.0		
	12.0	End of Test Pit		0.0		
15.0				0.0		

First Water at 8fbgs

Excavated By: Benson Construction

Length: 12'

Depth to Water: 8

Excavator Type: Komatsu 138 PC LC

Width: 4'

Visual Impacts: Product on soil and water

Excavation Date(s): 6/26/2018

Depth: 12'

Olfactory Observations: Petroleum like odor

Comments: Pipe encountered at 1 FBGS

Sheet: 1 of 1

TEST PIT EXCAVATION LOG

Project No: T0323-017-001

Test Pit I.D.: TP-44

Project: Oregon Road Site Remedial Investigation

Logged By: NAS

Client: Homer Street Properties, LLC

Checked By: MAL

Site Location: Olean, NY



TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE				PID VOCs	Lab Sample	Remarks
Depth (ft/gs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol			
0.0	0.0 0.0	Ground Surface		0 100 300 500		
		Topsoil Dark brown, dry, mostly low plasticity fines, little fine sand, trace organic matter(rootlets), soft		0.0		
		Well Sorted Gravel Brown, moist, mostly well sorted gravel, some medium plasticity fines, little silty sand, no odors		0.0		
		Well sorted gravel with cobbles Greyish brown, moist, mostly well sorted gravel with large cobbles,little fine to coarse sand, no odors		0.0		
5.0				0.0		
				0.0		
				0.0		
				0.0		
				0.0		
				0.0		
				0.0		
10.0	-10.0 10.0	End of Test Pit		0.0		
15.0						

Excavated By: Benson Construction

Length: 15'

Depth to Water:

Excavator Type: Komatsu 138 PC LC

Width: 4'

Visual Impacts: N/A

Excavation Date(s): 6/26/2018

Depth: 10'

Olfactory Observations: N/A

Comments: Encountered 4" pipe at 2 FBGS, traced pipe cut off at both ends.

TEST PIT EXCAVATION LOG

Project No: T0323-017-001

Test Pit I.D.: TP-45

Project: Oregon Road Site Remedial Investigation

Logged By: NAS

Client: Homer Street Properties, LLC

Checked By: MAL

Site Location: Olean, NY



TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE				PID VOCs	Lab Sample	Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol			
0.0	0.0	Ground Surface		0 ppm		
	0.0	Topsoil Brown, dry, mostly low plasticity fines, little fine sand, trace organic matter(rootlets), soft	[Symbol]	0.0		
		Silty sand with gravel Brown, moist, mostly silty sand, some medium plasticity fines, little well sorted gravel, no odors	[Symbol]	0.0		
-4.0	4.0	Well sorted Gravel Grey, moist, mostly well sorted gravel, some fine to medium sands, free product on soil, Petroleum-like odors	[Symbol]	370.0		
-6.5	6.5	Silty sand with gravel Tannish brown, moist to wet (8.5'), mostly fine sand, some well sorted gravel, little silt,free product on water, slight Petroleum-like odors	[Symbol]	500.0		
-9.0	9.0	End of Test Pit	[Symbol]	735.0		
				20.0		
				10.0		
				0.0		
10.0						
15.0						

First Water at 8.5 fbgs

Excavated By: Benson Construction

Excavator Type: Komatsu 138 PC LC

Excavation Date(s): 6/26/2018

Comments:

Length: 15'

Width: 4'

Depth: 9'

Depth to Water: 8.5'

Visual Impacts: Product on soil and water

Olfactory Observations: Strong petroleum-like odors

Sheet: 1 of 1

TEST PIT EXCAVATION LOG

Project No: T0323-017-001

Test Pit I.D.: TP-46

Project: Oregon Road Site Remedial Investigation

Logged By: NAS

Client: Homer Street Properties, LLC

Checked By: MAL

Site Location: Olean, NY



TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE				PID VOCs	Lab Sample	Remarks
Depth (ftgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol			
0.0	0.0 0.0	Ground Surface		0 100 300 500		
		Topsoil Brown, dry, mostly low plasticity fines, little fine sand, trace organic matter(rootlets), soft Silty sand with gravel Dark brown, moist, mostly fine sand, some medium plasticity fines, little well sorted gravel, no odors		0.0 0.0 0.0 50.0		
	-3.0 3.0	Sandy Lean Clay with Gravel Blueish grey, moist to damp (4'), mostly medium plasticity fines, some fine sand, little well sorted gravel, petroleum-like odors		45.0 15.0 7.0 5.0 5.0 4.0		
	-9.5 9.5 -10.0 10.0	Fine sand with Gravel Blueish grey, wet, mostly fine to medium sands, some well sorted gravel, slight petroleum-like odors End of Test Pit		0.0		
15.0						

Excavated By: Benson Construction

Length: 15'

Depth to Water: 4'

Excavator Type: Komatsu 138 PC LC

Width: 4'

Visual Impacts: N/A

Excavation Date(s): 6/26/2018

Depth: 10'

Olfactory Observations: Petroleum-like odors

Comments:

Sheet: 1 of 1

TEST PIT EXCAVATION LOG

Project No: T0323-017-001

Test Pit I.D.: TP-47

Project: Oregon Road Site Remedial Investigation

Logged By: NAS

Client: Homer Street Properties, LLC

Checked By: MAL

Site Location: Olean, NY

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635



SUBSURFACE PROFILE				PID VOCs	Lab Sample	Remarks
Depth (ft/gs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol			
0.0	0.0	Ground Surface		0		
	0.0	Topsoil Brown, dry, mostly low plasticity fines, little fine sand, trace organic matter(rootlets), soft		0.0		
	-0.5	Well sorted gravel Brown, moist, mostly well sorted gravel, some medium plasticity fines, till like, no odors		0.0		
				0.0		
				0.0		
	-4.0	End of Test Pit				
5.0	4.0					
10.0						
15.0						
20.0						

Excavated By: Benson Construction
Excavator Type: Komatsu 138 PC LC
Excavation Date(s): 6/26/2018
Comments: Bedrock at 4'

Length: 15'
Width: 4'
Depth: 4'

Depth to Water: N/A
Visual Impacts: N/A
Olfactory Observations: N/A

**OREGON ROAD
HOMER STREET EXTENSION
TEST TRENCH LOGS**

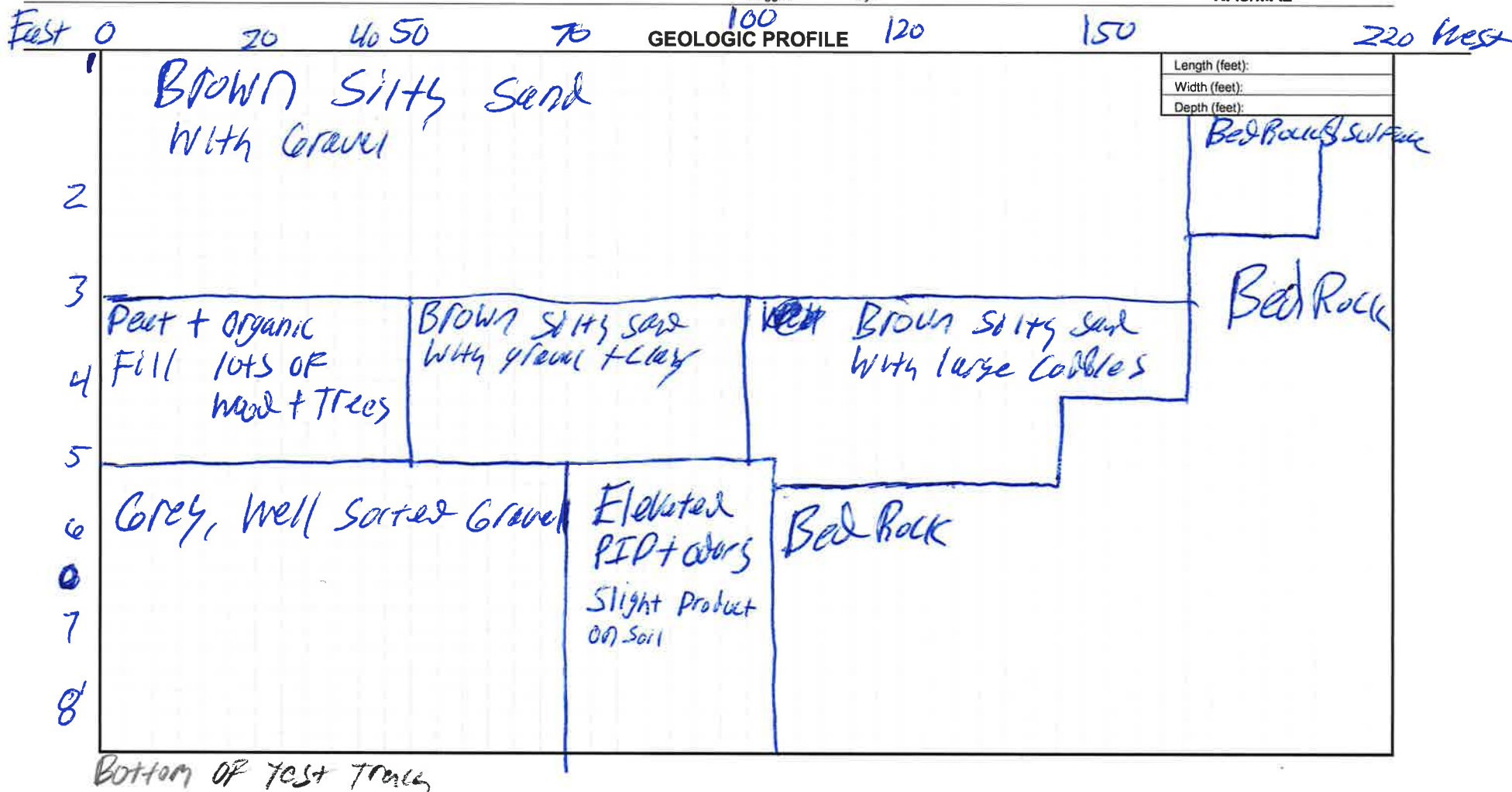


DAILY LOG	DATE	6	27	13
	NO.			
	SHEET		OF	

Project: Oregon Road Site
Project No.: 0323-017-001
Client: Homer Street Properties
Location: Olean, NY
Start Time: End Time:

Test Trench I.D.: TT-14
Excavation Date: 6/27/13
Excavation Method: Komatsu 138 PC LC
Logged / Checked By: NAS/MAL
Logged / Checked By: NAS/MAL

TEST TRENCH EXCAVATION LOG





DAILY LOG	DATE	6/27/18	
	NO.		
	SHEET	OF	

Project: Oregon Road Site Test Trench I.D.: TT-19 TEST TRENCH EXCAVATION LOG

GEOLOGIC DESCRIPTION

Depth (fbs)	USCS Symbol & Soil Description	PID Scan (ppm)	Photos Y/N	Samples Collected (fbs)
0-3'	Brown, moist, mostly silty sand, some mid-peas, fines, some well sorted gravel	0	Y	
3'-5'	Black, moist, mostly peat, some organic full wood (trees)	0	Y	
5-8'	Grey, moist, mostly well sorted gravel, some fine to mid-sizes wet slight rubber on soil	50 (70-100)	Y	
3-5'	Brown, moist, mostly silty sand, some large cobbles (bedrock)	0	Y	

COMMENTS:

GROUNDWATER ENCOUNTERED:	☒ YES ☐ NO	If yes, depth to GW: 6'
VISUAL IMPACTS:	☒ YES ☒ NO	Describe: slight rubber on soil
OLFACTORY OBSERVATIONS:	☒ YES ☐ NO	Describe: Petroleum like odors, etc.
NON-NATIVE FILL ENCOUNTERED:	☒ YES ☐ NO	Describe: trees + organics
OTHER OBSERVATIONS:	☐ YES ☒ NO	Describe:
SAMPLES COLLECTED:	Sample I.D.:	
	Sample I.D.:	
	Sample I.D.:	



DAILY LOG	DATE	6	27	18
	NO.			
	SHEET	OF		

Project: Oregon Road Site
Project No.: 0323-017-001
Client: Homer Street Properties
Location: Olean, NY
Start Time: End Time:

Test Trench I.D.: **TT-20**
Excavation Date: **6/27/18**
Excavation Method: **Komatsu 138 PC LC**
Logged / Checked By: **NAS/MAL**
Logged / Checked By: **NAS/MAL**

TEST TRENCH EXCAVATION LOG

S O

GEOLOGIC PROFILE

100 N

Brown silty sand with gravel

Length (feet):	100
Width (feet):	4
Depth (feet):	7

3

Brown sandy gravel with cobbles

7'

Bottom of Test Trench



DAILY LOG	DATE	6	27	18
	NO.			
	SHEET		OF	

Project: Oregon Road Site Test Trench I.D.: **TT-20** TEST TRENCH EXCAVATION LOG

GEOLOGIC DESCRIPTION

Depth (fbgs)	USCS Symbol & Soil Description	PID Scan (ppm)	Photos Y/N	Samples Collected (fbgs)
0-3'	Brown, moist, mostly silty sand, some medium plus to very fines Some well sorted gravel too coarse	0	Y	
3'-7'	Brown, moist, mostly well sorted gravel Some fine to med silts too coarse above	0	Y	

COMMENTS:

GROUNDWATER ENCOUNTERED:	☐ YES ☒ NO	If yes, depth to GW:
VISUAL IMPACTS:	☐ YES ☒ NO	Describe:
OLFACTORY OBSERVATIONS:	☐ YES ☒ NO	Describe:
NON-NATIVE FILL ENCOUNTERED:	☐ YES ☒ NO	Describe:
OTHER OBSERVATIONS:	☐ YES ☒ NO	Describe:
SAMPLES COLLECTED:	Sample I.D.:	
	Sample I.D.:	
	Sample I.D.:	

**OREGON ROAD
HOMER STREET EXTENSION
MONITORING WELL
CONSTRUCTION LOGS**

Project No: T0323-017-001

Borehole Number: MW-13

Project: Oregon Road Site Remedial Investigation

A.K.A.:

Client: Homer Street Properties, LLC

Logged By: NAS

Site Location: Olean, NY

Checked By: MAL



TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE				PID VOCs	Lab Sample	Well Completion Details or Remarks
Depth (ftbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
-3.0							0 ppm 50 100		
	1442.8 0.0	Ground Surface							
		Topsoil Brown, moist, mostly low plasticity fines, little fine sand, trace fine gravel, trace organic matter (rootlets), medium dense	S1	18	2		0.0		
2.0		Silty Sand with Gravel Tan, moist, mostly low plasticity fines, some coarse gravel, little fine sand, trace organic matter, medium dense, loose when disturbed, no odors	S2	27	2		0.0		
	1438.8 4.0	Sandy Lean Clay with gravel Tannish grey, moist to wet (8.5'), mostly medium plasticity fines, little fine sand, some well sorted gravel, thinly bedded, medium toughness, firm, no odors	S3	19	2		0.0		
7.0			S4	27	1		0.0		
			S5	18	1		0.0		
12.0			S6	15	1.5		0.0	Sample Collected	
			S7	17	2		0.0		
			S8	15	2		0.0		
17.0	1425.8 17.0	End of Borehole							

Drilled By: Nature's Way Drilling
Drill Rig Type: Diedrich D50 Track Mounted Drill Rig
Drill Method: 4.25-inch HSA w/ Continuous 2" Split Spoon
Comments:
Drill Date(s): 6/22/18

Hole Size: 8.5-inch
Stick-up: 3'
Datum: NAVD 88

Sheet: 1 of 1

Project No: T0323-017-001

Borehole Number: MW-15

Project: Oregon Road Site Remedial Investigation

A.K.A.:

Client: Homer Street Properties, LLC

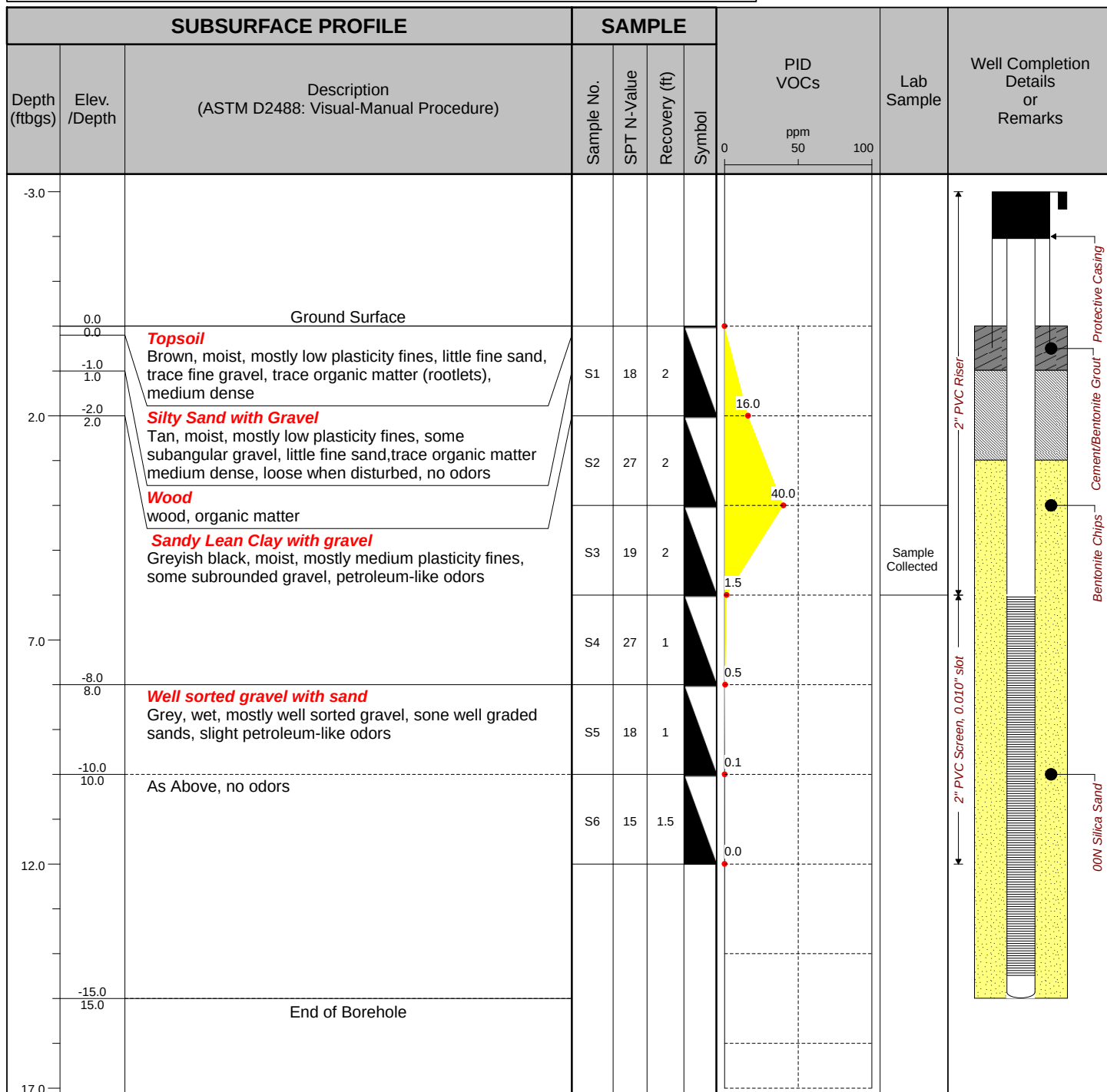
Logged By: NAS

Site Location: Olean, NY

Checked By: MAL



TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635



Drilled By: Nature's Way Drilling
Drill Rig Type: Diedrich D50 Track Mounted Drill Rig
Drill Method: 4.25-inch HSA w/ Continuous 2" Split Spoon
Comments:
Drill Date(s): 6/22/18

Hole Size: 8.5-inch
Stick-up: 3'
Datum: NAVD 88
Sheet: 1 of 1

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-138156-1

Client Project/Site: Oregon Road Site - Olean, NY

For:

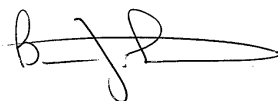
Benchmark Env. Eng. & Science, PLLC

2558 Hamburg Turnpike

Suite 300

Lackawanna, New York 14218

Attn: Mr. Michael Lesakowski



Authorized for release by:

7/11/2018 2:31:35 PM

Brian Fischer, Manager of Project Management

(716)504-9835

brian.fischer@testamericainc.com

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

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

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Definitions/Glossary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
vs	Reported analyte concentrations are below 200 ug/kg and may be biased low due to the sample not being collected according to 5035A-L low-level specifications.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
T	Result is a tentatively identified compound (TIC) and an estimated value.
N	Presumptive evidence of material.

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)

Definitions/Glossary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Job ID: 480-138156-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-138156-1

Comments

No additional comments.

Receipt

The samples were received on 6/27/2018 3:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.2° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-422735 recovered outside acceptance criteria, low biased, for Vinyl Chloride. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples are impacted: TP-41 (7.5-9') (480-138156-1), TP-44 (2-3") (480-138156-4), TP-46 (4-6') (480-138156-6), TP-47 (2-4") (480-138156-7) and MW-13 (8-10') (480-138156-9).

Method(s) 8260C: The laboratory control sample (LCS) for preparation batch 480-422692 and analytical batch 480-422735 recovered outside control limits for the following analyte(s): Chloroethane. Chloroethane has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. The following samples are impacted: TP-41 (7.5-9') (480-138156-1), TP-44 (2-3") (480-138156-4), TP-46 (4-6') (480-138156-6), TP-47 (2-4") (480-138156-7) and MW-13 (8-10') (480-138156-9).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-422725 recovered above the upper control limit for 2-Hexanone, 2-Butanone (MEK), Acetone, 4-Methyl-2-pentanone (MIBK) and Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: TP-43 (7-9") (480-138156-3), TP-45 (4-6") (480-138156-5) and MW-15 (4-6') (480-138156-8).

Method(s) 8260C: The laboratory control sample (LCS) for preparation batch 480-422642 and analytical batch 480-422725 recovered outside control limits for the following analytes: 2-Hexanone, Acetone and Methyl acetate. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: TP-43 (7-9") (480-138156-3), TP-45 (4-6") (480-138156-5) and MW-15 (4-6') (480-138156-8).

Method(s) 8260C: The following samples were analyzed using medium level soil analysis and diluted due to the nature of the sample matrix: TP-45 (4-6") (480-138156-5), MW-15 (4-6') (480-138156-8), (480-138156-A-8-B MS) and (480-138156-A-8-C MSD). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample was analyzed using medium level soil analysis due to the nature of the sample matrix: TP-43 (7-9") (480-138156-3). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The matrix spike and matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-422642 and analytical batch 480-422725 were outside control limits.

Method(s) 8260C: Due to the high concentration of Methylcyclohexane, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 480-422642 and analytical batch 480-422725 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

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

GC/MS Semi VOA

Method(s) 8270D: The following samples were diluted due to the nature of the sample matrix: TP-42 (8-10') (480-138156-2), TP-45 (4-6") (480-138156-5) and MW-15 (4-6') (480-138156-8). Elevated reporting limits (RLs) are provided.

Method(s) 8270D: Due to an increase in the spiking concentration required for other analytes of interest, the following compounds have been elevated to a level above the upper range of the initial calibration: Benzaldehyde. The laboratory control sample (LCS) associated

Case Narrative

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Job ID: 480-138156-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

with preparation batch 480-422353 and analytical batch 480-422501 recovered within acceptable limits for these analytes and have been qualified with an "E" flag.

Method(s) 8270D: The following samples required a dilution due to the nature of the sample matrix: TP-42 (8-10') (480-138156-2), TP-45 (4-6") (480-138156-5) and MW-15 (4-6') (480-138156-8). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8270D: The following samples were diluted due to the nature of the sample matrix: TP-42 (8-10') (480-138156-2), TP-45 (4-6") (480-138156-5) and MW-15 (4-6') (480-138156-8). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

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

GC Semi VOA

Method(s) 8081B: All primary data for analytical batch 422621 is reported from the RTX-CLPI column.

Method(s) 8082A: All primary data for analytical batch 422628 is reported from the ZB-35 column.

Method(s) 8082A: The percent difference in a multi-component continuing calibration verification is assessed on the basis of the total amount, individual peak calculations are only listed for completeness.

Method(s) 8151A: All primary data for analytical batch 423305 is reported from the RTX-CLPII column.

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

Metals

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

Organic Prep

Method(s) 3550C: Due to the matrix, the following sample could not be concentrated to the final method required volume: TP-42 (8-10') (480-138156-2). The reporting limits (RLs) are elevated proportionately.

Method(s) 3550C: The following sample required a Florisil clean-up, via 3620C, to reduce matrix interferences: TP-45 (4-6") (480-138156-5).

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

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-41 (7.5-9')

Lab Sample ID: 480-138156-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	10	J vs	28	4.8	ug/Kg	1		✱	8260C	Total/NA
Aluminum	9750		11.6	5.1	mg/Kg	1		✱	6010C	Total/NA
Arsenic	10.6		2.3	0.46	mg/Kg	1		✱	6010C	Total/NA
Barium	97.2		0.58	0.13	mg/Kg	1		✱	6010C	Total/NA
Beryllium	0.46		0.23	0.032	mg/Kg	1		✱	6010C	Total/NA
Cadmium	0.066	J	0.23	0.035	mg/Kg	1		✱	6010C	Total/NA
Calcium	990	B	57.8	3.8	mg/Kg	1		✱	6010C	Total/NA
Chromium	11.1		0.58	0.23	mg/Kg	1		✱	6010C	Total/NA
Cobalt	8.7		0.58	0.058	mg/Kg	1		✱	6010C	Total/NA
Copper	19.1		1.2	0.24	mg/Kg	1		✱	6010C	Total/NA
Iron	21400		11.6	4.0	mg/Kg	1		✱	6010C	Total/NA
Lead	13.2		1.2	0.28	mg/Kg	1		✱	6010C	Total/NA
Magnesium	2400		23.1	1.1	mg/Kg	1		✱	6010C	Total/NA
Manganese	576	B	0.23	0.037	mg/Kg	1		✱	6010C	Total/NA
Nickel	20.3		5.8	0.27	mg/Kg	1		✱	6010C	Total/NA
Potassium	1450		34.7	23.1	mg/Kg	1		✱	6010C	Total/NA
Sodium	34.2	J	162	15.0	mg/Kg	1		✱	6010C	Total/NA
Vanadium	15.0		0.58	0.13	mg/Kg	1		✱	6010C	Total/NA
Zinc	48.9		2.3	0.74	mg/Kg	1		✱	6010C	Total/NA

Client Sample ID: TP-42 (8-10')

Lab Sample ID: 480-138156-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
2-Butanone (MEK)	7.1	J vs	30	2.2	ug/Kg	1		✱	8260C	Total/NA
Acetone	36	vs	30	5.0	ug/Kg	1		✱	8260C	Total/NA
Trichloroethene	1.5	J vs	6.0	1.3	ug/Kg	1		✱	8260C	Total/NA
Aluminum	13600		12.1	5.3	mg/Kg	1		✱	6010C	Total/NA
Arsenic	10.2		2.4	0.48	mg/Kg	1		✱	6010C	Total/NA
Barium	154		0.61	0.13	mg/Kg	1		✱	6010C	Total/NA
Beryllium	0.90		0.24	0.034	mg/Kg	1		✱	6010C	Total/NA
Cadmium	0.34		0.24	0.036	mg/Kg	1		✱	6010C	Total/NA
Calcium	722	B	60.5	4.0	mg/Kg	1		✱	6010C	Total/NA
Chromium	16.3		0.61	0.24	mg/Kg	1		✱	6010C	Total/NA
Cobalt	8.6		0.61	0.061	mg/Kg	1		✱	6010C	Total/NA
Copper	15.5		1.2	0.25	mg/Kg	1		✱	6010C	Total/NA
Iron	18600		12.1	4.2	mg/Kg	1		✱	6010C	Total/NA
Lead	24.5		1.2	0.29	mg/Kg	1		✱	6010C	Total/NA
Magnesium	2340		24.2	1.1	mg/Kg	1		✱	6010C	Total/NA
Manganese	183	B	0.24	0.039	mg/Kg	1		✱	6010C	Total/NA
Nickel	16.3		6.1	0.28	mg/Kg	1		✱	6010C	Total/NA
Potassium	1730		36.3	24.2	mg/Kg	1		✱	6010C	Total/NA
Sodium	37.0	J	169	15.7	mg/Kg	1		✱	6010C	Total/NA
Vanadium	26.3		0.61	0.13	mg/Kg	1		✱	6010C	Total/NA
Zinc	56.1		2.4	0.77	mg/Kg	1		✱	6010C	Total/NA
Mercury	0.033		0.024	0.0096	mg/Kg	1		✱	7471B	Total/NA

Client Sample ID: TP-43 (7-9")

Lab Sample ID: 480-138156-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Aluminum	11300		11.3	5.0	mg/Kg	1		✱	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-43 (7-9") (Continued)

Lab Sample ID: 480-138156-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	9.6		2.3	0.45	mg/Kg	1	☼	6010C	Total/NA
Barium	91.1		0.57	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.61		0.23	0.032	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.080	J	0.23	0.034	mg/Kg	1	☼	6010C	Total/NA
Calcium	538	B	56.5	3.7	mg/Kg	1	☼	6010C	Total/NA
Chromium	13.9		0.57	0.23	mg/Kg	1	☼	6010C	Total/NA
Cobalt	12.7		0.57	0.057	mg/Kg	1	☼	6010C	Total/NA
Copper	21.4		1.1	0.24	mg/Kg	1	☼	6010C	Total/NA
Iron	24800		11.3	4.0	mg/Kg	1	☼	6010C	Total/NA
Lead	16.6		1.1	0.27	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2880		22.6	1.0	mg/Kg	1	☼	6010C	Total/NA
Manganese	530	B	0.23	0.036	mg/Kg	1	☼	6010C	Total/NA
Nickel	23.5		5.7	0.26	mg/Kg	1	☼	6010C	Total/NA
Potassium	1550		33.9	22.6	mg/Kg	1	☼	6010C	Total/NA
Sodium	35.7	J	158	14.7	mg/Kg	1	☼	6010C	Total/NA
Vanadium	16.2		0.57	0.12	mg/Kg	1	☼	6010C	Total/NA
Zinc	57.2		2.3	0.72	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.010	J	0.021	0.0086	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: TP-44 (2-3")

Lab Sample ID: 480-138156-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	16900		10.8	4.8	mg/Kg	1	☼	6010C	Total/NA
Arsenic	15.9		2.2	0.43	mg/Kg	1	☼	6010C	Total/NA
Barium	157		0.54	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	1.0		0.22	0.030	mg/Kg	1	☼	6010C	Total/NA
Calcium	3230	B	54.2	3.6	mg/Kg	1	☼	6010C	Total/NA
Chromium	20.4		0.54	0.22	mg/Kg	1	☼	6010C	Total/NA
Cobalt	18.1		0.54	0.054	mg/Kg	1	☼	6010C	Total/NA
Copper	19.7		1.1	0.23	mg/Kg	1	☼	6010C	Total/NA
Iron	35800		10.8	3.8	mg/Kg	1	☼	6010C	Total/NA
Lead	20.3		1.1	0.26	mg/Kg	1	☼	6010C	Total/NA
Magnesium	5450		21.7	1.0	mg/Kg	1	☼	6010C	Total/NA
Manganese	716	B	0.22	0.035	mg/Kg	1	☼	6010C	Total/NA
Nickel	34.7		5.4	0.25	mg/Kg	1	☼	6010C	Total/NA
Potassium	3380		32.5	21.7	mg/Kg	1	☼	6010C	Total/NA
Sodium	79.7	J	152	14.1	mg/Kg	1	☼	6010C	Total/NA
Vanadium	22.8		0.54	0.12	mg/Kg	1	☼	6010C	Total/NA
Zinc	69.3		2.2	0.69	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: TP-45 (4-6")

Lab Sample ID: 480-138156-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Isopropylbenzene	280	J	1000	150	ug/Kg	8	☼	8260C	Total/NA
Methylcyclohexane	1300		1000	470	ug/Kg	8	☼	8260C	Total/NA
gamma-BHC (Lindane)	0.46	J B	1.9	0.35	ug/Kg	1	☼	8081B	Total/NA
Aluminum	15000		11.7	5.2	mg/Kg	1	☼	6010C	Total/NA
Arsenic	15.0		2.3	0.47	mg/Kg	1	☼	6010C	Total/NA
Barium	162		0.59	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.74		0.23	0.033	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-45 (4-6") (Continued)

Lab Sample ID: 480-138156-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Cadmium	0.12	J	0.23	0.035	mg/Kg	1		✱	6010C	Total/NA
Calcium	607	B	58.5	3.9	mg/Kg	1		✱	6010C	Total/NA
Chromium	17.1		0.59	0.23	mg/Kg	1		✱	6010C	Total/NA
Cobalt	14.8		0.59	0.059	mg/Kg	1		✱	6010C	Total/NA
Copper	15.2		1.2	0.25	mg/Kg	1		✱	6010C	Total/NA
Iron	26500		11.7	4.1	mg/Kg	1		✱	6010C	Total/NA
Lead	22.0		1.2	0.28	mg/Kg	1		✱	6010C	Total/NA
Magnesium	3380		23.4	1.1	mg/Kg	1		✱	6010C	Total/NA
Manganese	502	B	0.23	0.037	mg/Kg	1		✱	6010C	Total/NA
Nickel	26.0		5.9	0.27	mg/Kg	1		✱	6010C	Total/NA
Potassium	2520		35.1	23.4	mg/Kg	1		✱	6010C	Total/NA
Sodium	46.1	J	164	15.2	mg/Kg	1		✱	6010C	Total/NA
Vanadium	22.7		0.59	0.13	mg/Kg	1		✱	6010C	Total/NA
Zinc	60.6		2.3	0.75	mg/Kg	1		✱	6010C	Total/NA

Client Sample ID: TP-46 (4-6")

Lab Sample ID: 480-138156-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
2-Butanone (MEK)	3.2	J vs	30	2.2	ug/Kg	1		✱	8260C	Total/NA
Acetone	25	J vs	30	5.0	ug/Kg	1		✱	8260C	Total/NA
Cyclohexane	35	vs	6.0	0.84	ug/Kg	1		✱	8260C	Total/NA
Methylcyclohexane	75	vs	6.0	0.91	ug/Kg	1		✱	8260C	Total/NA
Xylenes, Total	2.6	J vs	12	1.0	ug/Kg	1		✱	8260C	Total/NA
delta-BHC	0.66	J B	2.0	0.37	ug/Kg	1		✱	8081B	Total/NA
Endosulfan II	0.50	J	2.0	0.36	ug/Kg	1		✱	8081B	Total/NA
gamma-BHC (Lindane)	0.48	J B	2.0	0.37	ug/Kg	1		✱	8081B	Total/NA
Aluminum	15400		12.3	5.4	mg/Kg	1		✱	6010C	Total/NA
Arsenic	14.4		2.5	0.49	mg/Kg	1		✱	6010C	Total/NA
Barium	141		0.61	0.14	mg/Kg	1		✱	6010C	Total/NA
Beryllium	0.90		0.25	0.034	mg/Kg	1		✱	6010C	Total/NA
Cadmium	0.055	J	0.25	0.037	mg/Kg	1		✱	6010C	Total/NA
Calcium	2000	B	61.4	4.1	mg/Kg	1		✱	6010C	Total/NA
Chromium	18.5		0.61	0.25	mg/Kg	1		✱	6010C	Total/NA
Cobalt	18.6		0.61	0.061	mg/Kg	1		✱	6010C	Total/NA
Copper	21.0		1.2	0.26	mg/Kg	1		✱	6010C	Total/NA
Iron	30900		12.3	4.3	mg/Kg	1		✱	6010C	Total/NA
Lead	22.3		1.2	0.29	mg/Kg	1		✱	6010C	Total/NA
Magnesium	4260		24.6	1.1	mg/Kg	1		✱	6010C	Total/NA
Manganese	649	B	0.25	0.039	mg/Kg	1		✱	6010C	Total/NA
Nickel	32.3		6.1	0.28	mg/Kg	1		✱	6010C	Total/NA
Potassium	3150		36.8	24.6	mg/Kg	1		✱	6010C	Total/NA
Sodium	68.8	J	172	16.0	mg/Kg	1		✱	6010C	Total/NA
Vanadium	23.3		0.61	0.14	mg/Kg	1		✱	6010C	Total/NA
Zinc	65.4		2.5	0.79	mg/Kg	1		✱	6010C	Total/NA

Client Sample ID: TP-47 (2-4")

Lab Sample ID: 480-138156-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Aluminum	14800		11.1	4.9	mg/Kg	1		✱	6010C	Total/NA
Arsenic	13.6		2.2	0.45	mg/Kg	1		✱	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-47 (2-4") (Continued)

Lab Sample ID: 480-138156-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Barium	168		0.56	0.12	mg/Kg	1		✱	6010C	Total/NA
Beryllium	0.81		0.22	0.031	mg/Kg	1		✱	6010C	Total/NA
Cadmium	0.040	J	0.22	0.033	mg/Kg	1		✱	6010C	Total/NA
Calcium	4830	B	55.7	3.7	mg/Kg	1		✱	6010C	Total/NA
Chromium	17.4		0.56	0.22	mg/Kg	1		✱	6010C	Total/NA
Cobalt	15.8		0.56	0.056	mg/Kg	1		✱	6010C	Total/NA
Copper	19.2		1.1	0.23	mg/Kg	1		✱	6010C	Total/NA
Iron	28000		11.1	3.9	mg/Kg	1		✱	6010C	Total/NA
Lead	20.0		1.1	0.27	mg/Kg	1		✱	6010C	Total/NA
Magnesium	4600		22.3	1.0	mg/Kg	1		✱	6010C	Total/NA
Manganese	695	B	0.22	0.036	mg/Kg	1		✱	6010C	Total/NA
Nickel	28.8		5.6	0.26	mg/Kg	1		✱	6010C	Total/NA
Potassium	2880		33.4	22.3	mg/Kg	1		✱	6010C	Total/NA
Sodium	79.5	J	156	14.5	mg/Kg	1		✱	6010C	Total/NA
Vanadium	20.5		0.56	0.12	mg/Kg	1		✱	6010C	Total/NA
Zinc	58.6		2.2	0.71	mg/Kg	1		✱	6010C	Total/NA

Client Sample ID: MW-15 (4-6")

Lab Sample ID: 480-138156-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Methylcyclohexane	23000		1200	570	ug/Kg	8		✱	8260C	Total/NA
Aluminum	13600		13.0	5.7	mg/Kg	1		✱	6010C	Total/NA
Arsenic	18.7		2.6	0.52	mg/Kg	1		✱	6010C	Total/NA
Barium	141		0.65	0.14	mg/Kg	1		✱	6010C	Total/NA
Beryllium	0.87		0.26	0.036	mg/Kg	1		✱	6010C	Total/NA
Cadmium	0.17	J	0.26	0.039	mg/Kg	1		✱	6010C	Total/NA
Calcium	1100	B	64.9	4.3	mg/Kg	1		✱	6010C	Total/NA
Chromium	15.7		0.65	0.26	mg/Kg	1		✱	6010C	Total/NA
Cobalt	11.3		0.65	0.065	mg/Kg	1		✱	6010C	Total/NA
Copper	17.1		1.3	0.27	mg/Kg	1		✱	6010C	Total/NA
Iron	28300		13.0	4.5	mg/Kg	1		✱	6010C	Total/NA
Lead	27.5		1.3	0.31	mg/Kg	1		✱	6010C	Total/NA
Magnesium	2330		26.0	1.2	mg/Kg	1		✱	6010C	Total/NA
Manganese	864	B	0.26	0.042	mg/Kg	1		✱	6010C	Total/NA
Nickel	15.5		6.5	0.30	mg/Kg	1		✱	6010C	Total/NA
Potassium	1760		39.0	26.0	mg/Kg	1		✱	6010C	Total/NA
Sodium	46.8	J	182	16.9	mg/Kg	1		✱	6010C	Total/NA
Vanadium	26.7		0.65	0.14	mg/Kg	1		✱	6010C	Total/NA
Zinc	49.6		2.6	0.83	mg/Kg	1		✱	6010C	Total/NA
Mercury	0.037		0.027	0.011	mg/Kg	1		✱	7471B	Total/NA

Client Sample ID: MW-13 (8-10')

Lab Sample ID: 480-138156-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Di-n-octyl phthalate	30	J	200	24	ug/Kg	1		✱	8270D	Total/NA
Aluminum	17200		11.4	5.0	mg/Kg	1		✱	6010C	Total/NA
Arsenic	17.7		2.3	0.46	mg/Kg	1		✱	6010C	Total/NA
Barium	211		0.57	0.13	mg/Kg	1		✱	6010C	Total/NA
Beryllium	1.1		0.23	0.032	mg/Kg	1		✱	6010C	Total/NA
Calcium	3020	B	57.0	3.8	mg/Kg	1		✱	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: MW-13 (8-10") (Continued)

Lab Sample ID: 480-138156-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	23.4		0.57	0.23	mg/Kg	1	✱	6010C	Total/NA
Cobalt	17.0		0.57	0.057	mg/Kg	1	✱	6010C	Total/NA
Copper	15.2		1.1	0.24	mg/Kg	1	✱	6010C	Total/NA
Iron	34600		11.4	4.0	mg/Kg	1	✱	6010C	Total/NA
Lead	17.7		1.1	0.27	mg/Kg	1	✱	6010C	Total/NA
Magnesium	5660		22.8	1.1	mg/Kg	1	✱	6010C	Total/NA
Manganese	423	B	0.23	0.036	mg/Kg	1	✱	6010C	Total/NA
Nickel	38.8		5.7	0.26	mg/Kg	1	✱	6010C	Total/NA
Potassium	2710		34.2	22.8	mg/Kg	1	✱	6010C	Total/NA
Sodium	73.0	J	160	14.8	mg/Kg	1	✱	6010C	Total/NA
Vanadium	18.0		0.57	0.13	mg/Kg	1	✱	6010C	Total/NA
Zinc	78.5		2.3	0.73	mg/Kg	1	✱	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-41 (7.5-9')

Lab Sample ID: 480-138156-1

Date Collected: 06/26/18 11:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 86.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	5.7	0.41	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
1,1,2,2-Tetrachloroethane	ND	vs	5.7	0.92	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	5.7	1.3	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
1,1,2-Trichloroethane	ND	vs	5.7	0.74	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
1,1-Dichloroethane	ND	vs	5.7	0.69	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
1,1-Dichloroethene	ND	vs	5.7	0.70	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
1,2,4-Trichlorobenzene	ND	vs	5.7	0.35	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
1,2-Dibromo-3-Chloropropane	ND	vs	5.7	2.8	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
1,2-Dichlorobenzene	ND	vs	5.7	0.44	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
1,2-Dichloroethane	ND	vs	5.7	0.29	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
1,2-Dichloropropane	ND	vs	5.7	2.8	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
1,3-Dichlorobenzene	ND	vs	5.7	0.29	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
1,4-Dichlorobenzene	ND	vs	5.7	0.80	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
2-Butanone (MEK)	ND	vs	28	2.1	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
2-Hexanone	ND	vs	28	2.8	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
4-Methyl-2-pentanone (MIBK)	ND	vs	28	1.9	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Acetone	10	J vs	28	4.8	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Benzene	ND	vs	5.7	0.28	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Bromoform	ND	vs	5.7	2.8	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Bromomethane	ND	vs	5.7	0.51	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Carbon disulfide	ND	vs	5.7	2.8	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Carbon tetrachloride	ND	vs	5.7	0.55	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Chlorobenzene	ND	vs	5.7	0.75	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Dibromochloromethane	ND	vs	5.7	0.73	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Chloroethane	ND	* vs	5.7	1.3	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Chloroform	ND	vs	5.7	0.35	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Chloromethane	ND	vs	5.7	0.34	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
cis-1,2-Dichloroethene	ND	vs	5.7	0.73	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Cyclohexane	ND	vs	5.7	0.80	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Bromodichloromethane	ND	vs	5.7	0.76	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Dichlorodifluoromethane	ND	vs	5.7	0.47	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Ethylbenzene	ND	vs	5.7	0.39	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
1,2-Dibromoethane	ND	vs	5.7	0.73	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Isopropylbenzene	ND	vs	5.7	0.86	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Methyl acetate	ND	vs	28	3.4	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Methyl tert-butyl ether	ND	vs	5.7	0.56	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Methylcyclohexane	ND	vs	5.7	0.86	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Methylene Chloride	ND	vs	5.7	2.6	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Tetrachloroethene	ND	vs	5.7	0.76	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Toluene	ND	vs	5.7	0.43	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
trans-1,2-Dichloroethene	ND	vs	5.7	0.59	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
trans-1,3-Dichloropropene	ND	vs	5.7	2.5	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Trichloroethene	ND	vs	5.7	1.3	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Trichlorofluoromethane	ND	vs	5.7	0.54	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Vinyl chloride	ND	vs	5.7	0.69	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Xylenes, Total	ND	vs	11	0.95	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
cis-1,3-Dichloropropene	ND	vs	5.7	0.82	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1
Styrene	ND	vs	5.7	0.28	ug/Kg	☼	07/02/18 15:10	07/03/18 03:36	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-41 (7.5-9')

Lab Sample ID: 480-138156-1

Date Collected: 06/26/18 11:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 86.9

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		<i>ug/Kg</i>	<i>☼</i>			<i>07/02/18 15:10</i>	<i>07/03/18 03:36</i>	<i>1</i>
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>1,2-Dichloroethane-d4 (Surr)</i>	<i>100</i>		<i>64 - 126</i>				<i>07/02/18 15:10</i>	<i>07/03/18 03:36</i>	<i>1</i>
<i>4-Bromofluorobenzene (Surr)</i>	<i>97</i>		<i>72 - 126</i>				<i>07/02/18 15:10</i>	<i>07/03/18 03:36</i>	<i>1</i>
<i>Toluene-d8 (Surr)</i>	<i>102</i>		<i>71 - 125</i>				<i>07/02/18 15:10</i>	<i>07/03/18 03:36</i>	<i>1</i>
<i>Dibromofluoromethane (Surr)</i>	<i>100</i>		<i>60 - 140</i>				<i>07/02/18 15:10</i>	<i>07/03/18 03:36</i>	<i>1</i>

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		190	52	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
2,4,6-Trichlorophenol	ND		190	38	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
2,4-Dichlorophenol	ND		190	20	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
2,4-Dimethylphenol	ND		190	46	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
2,4-Dinitrophenol	ND		1900	880	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
2,4-Dinitrotoluene	ND		190	39	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
2,6-Dinitrotoluene	ND		190	23	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
2-Chloronaphthalene	ND		190	32	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
2-Chlorophenol	ND		190	35	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
2-Methylnaphthalene	ND		190	38	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
2-Methylphenol	ND		190	23	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
2-Nitroaniline	ND		370	28	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
2-Nitrophenol	ND		190	54	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
3,3'-Dichlorobenzidine	ND		370	230	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
3-Nitroaniline	ND		370	53	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
4,6-Dinitro-2-methylphenol	ND		370	190	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
4-Bromophenyl phenyl ether	ND		190	27	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
4-Chloro-3-methylphenol	ND		190	47	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
4-Chloroaniline	ND		190	47	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
4-Chlorophenyl phenyl ether	ND		190	24	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
4-Methylphenol	ND		370	23	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
4-Nitroaniline	ND		370	100	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
4-Nitrophenol	ND		370	130	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Acenaphthene	ND		190	28	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Acenaphthylene	ND		190	25	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Acetophenone	ND		190	26	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Anthracene	ND		190	47	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Atrazine	ND		190	66	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Benzaldehyde	ND		190	150	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Benzo[a]anthracene	ND		190	19	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Benzo[a]pyrene	ND		190	28	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Benzo[b]fluoranthene	ND		190	30	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Benzo[g,h,i]perylene	ND		190	20	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Benzo[k]fluoranthene	ND		190	25	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Biphenyl	ND		190	28	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
bis (2-chloroisopropyl) ether	ND		190	38	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Bis(2-chloroethoxy)methane	ND		190	41	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Bis(2-chloroethyl)ether	ND		190	25	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Bis(2-ethylhexyl) phthalate	ND		190	65	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Butyl benzyl phthalate	ND		190	32	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-41 (7.5-9')

Lab Sample ID: 480-138156-1

Date Collected: 06/26/18 11:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 86.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	ND		190	57	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Carbazole	ND		190	23	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Chrysene	ND		190	43	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Dibenz(a,h)anthracene	ND		190	34	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Dibenzofuran	ND		190	23	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Diethyl phthalate	ND		190	25	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Dimethyl phthalate	ND		190	23	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Di-n-butyl phthalate	ND		190	33	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Di-n-octyl phthalate	ND		190	23	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Fluoranthene	ND		190	20	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Fluorene	ND		190	23	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Hexachlorobenzene	ND		190	26	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Hexachlorobutadiene	ND		190	28	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Hexachlorocyclopentadiene	ND		190	26	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Hexachloroethane	ND		190	25	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Indeno[1,2,3-cd]pyrene	ND		190	24	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Isophorone	ND		190	41	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Naphthalene	ND		190	25	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Nitrobenzene	ND		190	21	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
N-Nitrosodi-n-propylamine	ND		190	33	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
N-Nitrosodiphenylamine	ND		190	160	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Pentachlorophenol	ND		370	190	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Phenanthrene	ND		190	28	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Phenol	ND		190	29	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1
Pyrene	ND		190	23	ug/Kg	☼	06/29/18 14:25	06/30/18 21:50	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	1800	T J	ug/Kg	☼	1.72		06/29/18 14:25	06/30/18 21:50	1
Unknown	640	T J	ug/Kg	☼	2.96		06/29/18 14:25	06/30/18 21:50	1
Benzene, 1,3-dimethyl-	210	T J N	ug/Kg	☼	3.49	108-38-3	06/29/18 14:25	06/30/18 21:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	92		54 - 120	06/29/18 14:25	06/30/18 21:50	1
2-Fluorobiphenyl	93		60 - 120	06/29/18 14:25	06/30/18 21:50	1
2-Fluorophenol	86		52 - 120	06/29/18 14:25	06/30/18 21:50	1
Nitrobenzene-d5	92		53 - 120	06/29/18 14:25	06/30/18 21:50	1
Phenol-d5	89		54 - 120	06/29/18 14:25	06/30/18 21:50	1
p-Terphenyl-d14	111		65 - 121	06/29/18 14:25	06/30/18 21:50	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9750		11.6	5.1	mg/Kg	☼	07/05/18 10:12	07/06/18 04:30	1
Antimony	ND		17.3	0.46	mg/Kg	☼	07/05/18 10:12	07/06/18 04:30	1
Arsenic	10.6		2.3	0.46	mg/Kg	☼	07/05/18 10:12	07/06/18 04:30	1
Barium	97.2		0.58	0.13	mg/Kg	☼	07/05/18 10:12	07/06/18 04:30	1
Beryllium	0.46		0.23	0.032	mg/Kg	☼	07/05/18 10:12	07/06/18 04:30	1
Cadmium	0.066 J		0.23	0.035	mg/Kg	☼	07/05/18 10:12	07/06/18 04:30	1
Calcium	990 B		57.8	3.8	mg/Kg	☼	07/05/18 10:12	07/06/18 04:30	1
Chromium	11.1		0.58	0.23	mg/Kg	☼	07/05/18 10:12	07/06/18 04:30	1
Cobalt	8.7		0.58	0.058	mg/Kg	☼	07/05/18 10:12	07/06/18 04:30	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-41 (7.5-9')

Lab Sample ID: 480-138156-1

Date Collected: 06/26/18 11:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 86.9

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	19.1		1.2	0.24	mg/Kg	☼	07/05/18 10:12	07/06/18 04:30	1
Iron	21400		11.6	4.0	mg/Kg	☼	07/05/18 10:12	07/06/18 04:30	1
Lead	13.2		1.2	0.28	mg/Kg	☼	07/05/18 10:12	07/06/18 04:30	1
Magnesium	2400		23.1	1.1	mg/Kg	☼	07/05/18 10:12	07/06/18 04:30	1
Manganese	576	B	0.23	0.037	mg/Kg	☼	07/05/18 10:12	07/06/18 04:30	1
Nickel	20.3		5.8	0.27	mg/Kg	☼	07/05/18 10:12	07/06/18 04:30	1
Potassium	1450		34.7	23.1	mg/Kg	☼	07/05/18 10:12	07/06/18 04:30	1
Selenium	ND		4.6	0.46	mg/Kg	☼	07/05/18 10:12	07/06/18 04:30	1
Silver	ND		0.69	0.23	mg/Kg	☼	07/05/18 10:12	07/06/18 04:30	1
Sodium	34.2	J	162	15.0	mg/Kg	☼	07/05/18 10:12	07/06/18 04:30	1
Thallium	ND		6.9	0.35	mg/Kg	☼	07/05/18 10:12	07/06/18 04:30	1
Vanadium	15.0		0.58	0.13	mg/Kg	☼	07/05/18 10:12	07/06/18 04:30	1
Zinc	48.9		2.3	0.74	mg/Kg	☼	07/05/18 10:12	07/06/18 04:30	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.022	0.0091	mg/Kg	☼	07/05/18 13:20	07/05/18 14:44	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-42 (8-10')

Lab Sample ID: 480-138156-2

Date Collected: 06/26/18 11:30

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 83.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	6.0	0.43	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
1,1,2,2-Tetrachloroethane	ND	vs	6.0	0.97	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	6.0	1.4	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
1,1,2-Trichloroethane	ND	vs	6.0	0.78	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
1,1-Dichloroethane	ND	vs	6.0	0.73	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
1,1-Dichloroethene	ND	vs	6.0	0.73	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
1,2,4-Trichlorobenzene	ND	vs	6.0	0.36	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
1,2-Dibromo-3-Chloropropane	ND	vs	6.0	3.0	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
1,2-Dichlorobenzene	ND	vs	6.0	0.47	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
1,2-Dichloroethane	ND	vs	6.0	0.30	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
1,2-Dichloropropane	ND	vs	6.0	3.0	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
1,3-Dichlorobenzene	ND	vs	6.0	0.31	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
1,4-Dichlorobenzene	ND	vs	6.0	0.84	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
2-Butanone (MEK)	7.1	J vs	30	2.2	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
2-Hexanone	ND	vs	30	3.0	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
4-Methyl-2-pentanone (MIBK)	ND	vs	30	2.0	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Acetone	36	vs	30	5.0	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Benzene	ND	vs	6.0	0.29	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Bromoform	ND	vs	6.0	3.0	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Bromomethane	ND	vs	6.0	0.54	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Carbon disulfide	ND	vs	6.0	3.0	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Carbon tetrachloride	ND	vs	6.0	0.58	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Chlorobenzene	ND	vs	6.0	0.79	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Dibromochloromethane	ND	vs	6.0	0.76	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Chloroethane	ND	vs	6.0	1.3	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Chloroform	ND	vs	6.0	0.37	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Chloromethane	ND	vs	6.0	0.36	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
cis-1,2-Dichloroethene	ND	vs	6.0	0.76	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Cyclohexane	ND	vs	6.0	0.84	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Bromodichloromethane	ND	vs	6.0	0.80	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Dichlorodifluoromethane	ND	vs	6.0	0.49	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Ethylbenzene	ND	vs	6.0	0.41	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
1,2-Dibromoethane	ND	vs	6.0	0.77	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Isopropylbenzene	ND	vs	6.0	0.90	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Methyl acetate	ND	vs	30	3.6	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Methyl tert-butyl ether	ND	vs	6.0	0.59	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Methylcyclohexane	ND	vs	6.0	0.91	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Methylene Chloride	ND	vs	6.0	2.7	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Tetrachloroethene	ND	vs	6.0	0.80	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Toluene	ND	vs	6.0	0.45	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
trans-1,2-Dichloroethene	ND	vs	6.0	0.62	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
trans-1,3-Dichloropropene	ND	vs	6.0	2.6	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Trichloroethene	1.5	J vs	6.0	1.3	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Trichlorofluoromethane	ND	vs	6.0	0.56	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Vinyl chloride	ND	vs	6.0	0.73	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Xylenes, Total	ND	vs	12	1.0	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
cis-1,3-Dichloropropene	ND	vs	6.0	0.86	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1
Styrene	ND	vs	6.0	0.30	ug/Kg	☼	07/06/18 09:13	07/06/18 15:20	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-42 (8-10')

Lab Sample ID: 480-138156-2

Date Collected: 06/26/18 11:30

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 83.5

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Unknown	7.3	T J	ug/Kg	☼	13.81		07/06/18 09:13	07/06/18 15:20	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	99		64 - 126				07/06/18 09:13	07/06/18 15:20	1
4-Bromofluorobenzene (Surr)	100		72 - 126				07/06/18 09:13	07/06/18 15:20	1
Toluene-d8 (Surr)	102		71 - 125				07/06/18 09:13	07/06/18 15:20	1
Dibromofluoromethane (Surr)	99		60 - 140				07/06/18 09:13	07/06/18 15:20	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		9900	2700	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
2,4,6-Trichlorophenol	ND		9900	2000	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
2,4-Dichlorophenol	ND		9900	1000	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
2,4-Dimethylphenol	ND		9900	2400	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
2,4-Dinitrophenol	ND		97000	46000	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
2,4-Dinitrotoluene	ND		9900	2000	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
2,6-Dinitrotoluene	ND		9900	1200	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
2-Chloronaphthalene	ND		9900	1600	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
2-Chlorophenol	ND		9900	1800	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
2-Methylnaphthalene	ND		9900	2000	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
2-Methylphenol	ND		9900	1200	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
2-Nitroaniline	ND		19000	1500	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
2-Nitrophenol	ND		9900	2800	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
3,3'-Dichlorobenzidine	ND		19000	12000	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
3-Nitroaniline	ND		19000	2700	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
4,6-Dinitro-2-methylphenol	ND		19000	9900	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
4-Bromophenyl phenyl ether	ND		9900	1400	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
4-Chloro-3-methylphenol	ND		9900	2400	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
4-Chloroaniline	ND		9900	2400	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
4-Chlorophenyl phenyl ether	ND		9900	1200	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
4-Methylphenol	ND		19000	1200	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
4-Nitroaniline	ND		19000	5200	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
4-Nitrophenol	ND		19000	6900	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Acenaphthene	ND		9900	1500	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Acenaphthylene	ND		9900	1300	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Acetophenone	ND		9900	1300	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Anthracene	ND		9900	2400	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Atrazine	ND		9900	3400	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Benzaldehyde	ND		9900	7900	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Benzo[a]anthracene	ND		9900	990	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Benzo[a]pyrene	ND		9900	1500	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Benzo[b]fluoranthene	ND		9900	1600	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Benzo[g,h,i]perylene	ND		9900	1000	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Benzo[k]fluoranthene	ND		9900	1300	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Biphenyl	ND		9900	1500	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
bis (2-chloroisopropyl) ether	ND		9900	2000	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Bis(2-chloroethoxy)methane	ND		9900	2100	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Bis(2-chloroethyl)ether	ND		9900	1300	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Bis(2-ethylhexyl) phthalate	ND		9900	3400	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Butyl benzyl phthalate	ND		9900	1600	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-42 (8-10')

Lab Sample ID: 480-138156-2

Date Collected: 06/26/18 11:30

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 83.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	ND		9900	3000	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Carbazole	ND		9900	1200	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Chrysene	ND		9900	2200	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Dibenz(a,h)anthracene	ND		9900	1700	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Dibenzofuran	ND		9900	1200	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Diethyl phthalate	ND		9900	1300	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Dimethyl phthalate	ND		9900	1200	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Di-n-butyl phthalate	ND		9900	1700	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Di-n-octyl phthalate	ND		9900	1200	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Fluoranthene	ND		9900	1000	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Fluorene	ND		9900	1200	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Hexachlorobenzene	ND		9900	1300	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Hexachlorobutadiene	ND		9900	1500	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Hexachlorocyclopentadiene	ND		9900	1300	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Hexachloroethane	ND		9900	1300	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Indeno[1,2,3-cd]pyrene	ND		9900	1200	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Isophorone	ND		9900	2100	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Naphthalene	ND		9900	1300	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Nitrobenzene	ND		9900	1100	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
N-Nitrosodi-n-propylamine	ND		9900	1700	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
N-Nitrosodiphenylamine	ND		9900	8000	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Pentachlorophenol	ND		19000	9900	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Phenanthrene	ND		9900	1500	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Phenol	ND		9900	1500	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10
Pyrene	ND		9900	1200	ug/Kg	☼	06/29/18 14:25	06/30/18 22:15	10

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Decane, 2-methyl-	15000	T J N	ug/Kg	☼	8.70	6975-98-0	06/29/18 14:25	06/30/18 22:15	10
Pentadecane, 2,6,10-trimethyl-	27000	T J N	ug/Kg	☼	9.79	3892-00-0	06/29/18 14:25	06/30/18 22:15	10
Pentadecane, 2,6,10,14-tetramethyl-	46000	T J N	ug/Kg	☼	10.08	1921-70-6	06/29/18 14:25	06/30/18 22:15	10
Tetradecane, 2-methyl-	14000	T J N	ug/Kg	☼	10.92	1560-95-8	06/29/18 14:25	06/30/18 22:15	10
1-Heptadecene	11000	T J N	ug/Kg	☼	11.40	6765-39-5	06/29/18 14:25	06/30/18 22:15	10
Unknown	9500	T J	ug/Kg	☼	11.49		06/29/18 14:25	06/30/18 22:15	10
Unknown	11000	T J	ug/Kg	☼	12.91		06/29/18 14:25	06/30/18 22:15	10
Heptadecane, 2,6,10,15-tetramethyl-	19000	T J N	ug/Kg	☼	13.18	54833-48-6	06/29/18 14:25	06/30/18 22:15	10
Eicosane	33000	T J N	ug/Kg	☼	13.43	112-95-8	06/29/18 14:25	06/30/18 22:15	10
Octacosane	50000	T J N	ug/Kg	☼	13.68	630-02-4	06/29/18 14:25	06/30/18 22:15	10
Nonacosane	75000	T J N	ug/Kg	☼	13.93	630-03-5	06/29/18 14:25	06/30/18 22:15	10
Octadecane	95000	T J N	ug/Kg	☼	14.17	593-45-3	06/29/18 14:25	06/30/18 22:15	10
Hentriacontane	120000	T J N	ug/Kg	☼	14.41	630-04-6	06/29/18 14:25	06/30/18 22:15	10
Hexadecane, 2,6,10,14-tetramethyl-	130000	T J N	ug/Kg	☼	14.67	638-36-8	06/29/18 14:25	06/30/18 22:15	10
Tetratetracontane	120000	T J N	ug/Kg	☼	14.95	7098-22-8	06/29/18 14:25	06/30/18 22:15	10
Hexacosane	100000	T J N	ug/Kg	☼	15.26	630-01-3	06/29/18 14:25	06/30/18 22:15	10
Pentadecane, 8-heptyl-	82000	T J	ug/Kg	☼	15.61		06/29/18 14:25	06/30/18 22:15	10
Pentatriacontane	60000	T J	ug/Kg	☼	16.01		06/29/18 14:25	06/30/18 22:15	10
Hexatriacontane	44000	T J N	ug/Kg	☼	16.48	630-06-8	06/29/18 14:25	06/30/18 22:15	10
Docosane	33000	T J N	ug/Kg	☼	17.02	629-97-0	06/29/18 14:25	06/30/18 22:15	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	0	X	54 - 120	06/29/18 14:25	06/30/18 22:15	10

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-42 (8-10')

Lab Sample ID: 480-138156-2

Date Collected: 06/26/18 11:30

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 83.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	87		60 - 120	06/29/18 14:25	06/30/18 22:15	10
2-Fluorophenol	0	X	52 - 120	06/29/18 14:25	06/30/18 22:15	10
Nitrobenzene-d5	0	X	53 - 120	06/29/18 14:25	06/30/18 22:15	10
Phenol-d5	0	X	54 - 120	06/29/18 14:25	06/30/18 22:15	10
p-Terphenyl-d14	106		65 - 121	06/29/18 14:25	06/30/18 22:15	10

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	13600		12.1	5.3	mg/Kg	☼	07/05/18 10:12	07/06/18 04:34	1
Antimony	ND		18.2	0.48	mg/Kg	☼	07/05/18 10:12	07/06/18 04:34	1
Arsenic	10.2		2.4	0.48	mg/Kg	☼	07/05/18 10:12	07/06/18 04:34	1
Barium	154		0.61	0.13	mg/Kg	☼	07/05/18 10:12	07/06/18 04:34	1
Beryllium	0.90		0.24	0.034	mg/Kg	☼	07/05/18 10:12	07/06/18 04:34	1
Cadmium	0.34		0.24	0.036	mg/Kg	☼	07/05/18 10:12	07/06/18 04:34	1
Calcium	722	B	60.5	4.0	mg/Kg	☼	07/05/18 10:12	07/06/18 04:34	1
Chromium	16.3		0.61	0.24	mg/Kg	☼	07/05/18 10:12	07/06/18 04:34	1
Cobalt	8.6		0.61	0.061	mg/Kg	☼	07/05/18 10:12	07/06/18 04:34	1
Copper	15.5		1.2	0.25	mg/Kg	☼	07/05/18 10:12	07/06/18 04:34	1
Iron	18600		12.1	4.2	mg/Kg	☼	07/05/18 10:12	07/06/18 04:34	1
Lead	24.5		1.2	0.29	mg/Kg	☼	07/05/18 10:12	07/06/18 04:34	1
Magnesium	2340		24.2	1.1	mg/Kg	☼	07/05/18 10:12	07/06/18 04:34	1
Manganese	183	B	0.24	0.039	mg/Kg	☼	07/05/18 10:12	07/06/18 04:34	1
Nickel	16.3		6.1	0.28	mg/Kg	☼	07/05/18 10:12	07/06/18 04:34	1
Potassium	1730		36.3	24.2	mg/Kg	☼	07/05/18 10:12	07/06/18 04:34	1
Selenium	ND		4.8	0.48	mg/Kg	☼	07/05/18 10:12	07/06/18 04:34	1
Silver	ND		0.73	0.24	mg/Kg	☼	07/05/18 10:12	07/06/18 04:34	1
Sodium	37.0	J	169	15.7	mg/Kg	☼	07/05/18 10:12	07/06/18 04:34	1
Thallium	ND		7.3	0.36	mg/Kg	☼	07/05/18 10:12	07/06/18 04:34	1
Vanadium	26.3		0.61	0.13	mg/Kg	☼	07/05/18 10:12	07/06/18 04:34	1
Zinc	56.1		2.4	0.77	mg/Kg	☼	07/05/18 10:12	07/06/18 04:34	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033		0.024	0.0096	mg/Kg	☼	07/05/18 13:20	07/05/18 14:45	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-43 (7-9")

Lab Sample ID: 480-138156-3

Date Collected: 06/26/18 10:30

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 89.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		120	32	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
1,1,2,2-Tetrachloroethane	ND		120	19	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		120	58	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
1,1,2-Trichloroethane	ND		120	24	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
1,1-Dichloroethane	ND		120	36	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
1,1-Dichloroethene	ND		120	40	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
1,2,4-Trichlorobenzene	ND		120	44	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
1,2-Dibromo-3-Chloropropane	ND		120	58	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
1,2-Dichlorobenzene	ND		120	29	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
1,2-Dichloroethane	ND		120	47	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
1,2-Dichloropropane	ND		120	19	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
1,3-Dichlorobenzene	ND		120	31	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
1,4-Dichlorobenzene	ND		120	16	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
2-Butanone (MEK)	ND		580	340	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
2-Hexanone	ND	*	580	240	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
4-Methyl-2-pentanone (MIBK)	ND		580	37	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Acetone	ND	*	580	470	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Benzene	ND		120	22	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Bromoform	ND		120	58	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Bromomethane	ND		120	25	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Carbon disulfide	ND		120	53	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Carbon tetrachloride	ND		120	29	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Chlorobenzene	ND		120	15	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Dibromochloromethane	ND		120	56	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Chloroethane	ND		120	24	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Chloroform	ND		120	79	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Chloromethane	ND		120	27	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
cis-1,2-Dichloroethene	ND		120	32	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Cyclohexane	ND		120	26	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Bromodichloromethane	ND		120	23	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Dichlorodifluoromethane	ND		120	50	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Ethylbenzene	ND		120	34	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
1,2-Dibromoethane	ND		120	20	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Isopropylbenzene	ND		120	17	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Methyl acetate	ND	*	580	55	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Methyl tert-butyl ether	ND		120	44	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Methylcyclohexane	ND		120	54	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Methylene Chloride	ND		120	23	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Tetrachloroethene	ND		120	16	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Toluene	ND		120	31	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
trans-1,2-Dichloroethene	ND		120	27	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
trans-1,3-Dichloropropene	ND		120	11	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Trichloroethene	ND		120	32	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Trichlorofluoromethane	ND		120	54	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Vinyl chloride	ND		120	39	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Xylenes, Total	ND		230	64	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
cis-1,3-Dichloropropene	ND		120	28	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1
Styrene	ND		120	28	ug/Kg	☼	07/02/18 11:36	07/03/18 01:47	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-43 (7-9")

Lab Sample ID: 480-138156-3

Date Collected: 06/26/18 10:30

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 89.8

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Unknown	940	T J	ug/Kg	☼	9.44		07/02/18 11:36	07/03/18 01:47	1
Unknown	640	T J	ug/Kg	☼	9.70		07/02/18 11:36	07/03/18 01:47	1
Cyclohexane, 1-methyl-2-propyl-	820	T J N	ug/Kg	☼	9.96	4291-79-6	07/02/18 11:36	07/03/18 01:47	1
Decane, 4-methyl-	1100	T J N	ug/Kg	☼	10.30	2847-72-5	07/02/18 11:36	07/03/18 01:47	1
Unknown	1000	T J	ug/Kg	☼	10.51		07/02/18 11:36	07/03/18 01:47	1
Unknown	800	T J	ug/Kg	☼	10.62		07/02/18 11:36	07/03/18 01:47	1
Unknown	870	T J	ug/Kg	☼	11.16		07/02/18 11:36	07/03/18 01:47	1
Unknown	830	T J	ug/Kg	☼	11.33		07/02/18 11:36	07/03/18 01:47	1
Unknown	890	T J	ug/Kg	☼	12.15		07/02/18 11:36	07/03/18 01:47	1
Unknown	1000	T J	ug/Kg	☼	12.29		07/02/18 11:36	07/03/18 01:47	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	112		53 - 146				07/02/18 11:36	07/03/18 01:47	1
4-Bromofluorobenzene (Surr)	109		49 - 148				07/02/18 11:36	07/03/18 01:47	1
Toluene-d8 (Surr)	97		50 - 149				07/02/18 11:36	07/03/18 01:47	1
Dibromofluoromethane (Surr)	90		60 - 140				07/02/18 11:36	07/03/18 01:47	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
2,4,5-Trichlorophenol	ND		180	50	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
2,4,6-Trichlorophenol	ND		180	37	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
2,4-Dichlorophenol	ND		180	19	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
2,4-Dimethylphenol	ND		180	44	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
2,4-Dinitrophenol	ND		1800	850	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
2,4-Dinitrotoluene	ND		180	38	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
2,6-Dinitrotoluene	ND		180	22	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
2-Chloronaphthalene	ND		180	30	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
2-Chlorophenol	ND		180	34	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
2-Methylnaphthalene	ND		180	37	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
2-Methylphenol	ND		180	22	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
2-Nitroaniline	ND		360	27	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
2-Nitrophenol	ND		180	52	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
3,3'-Dichlorobenzidine	ND		360	220	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
3-Nitroaniline	ND		360	51	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
4,6-Dinitro-2-methylphenol	ND		360	180	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
4-Bromophenyl phenyl ether	ND		180	26	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
4-Chloro-3-methylphenol	ND		180	45	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
4-Chloroaniline	ND		180	45	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
4-Chlorophenyl phenyl ether	ND		180	23	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
4-Methylphenol	ND		360	22	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
4-Nitroaniline	ND		360	96	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
4-Nitrophenol	ND		360	130	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Acenaphthene	ND		180	27	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Acenaphthylene	ND		180	24	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Acetophenone	ND		180	25	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Anthracene	ND		180	45	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Atrazine	ND		180	64	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Benzaldehyde	ND		180	150	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Benzo[a]anthracene	ND		180	18	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Benzo[a]pyrene	ND		180	27	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-43 (7-9")

Lab Sample ID: 480-138156-3

Date Collected: 06/26/18 10:30

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 89.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		180	29	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Benzo[g,h,i]perylene	ND		180	19	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Benzo[k]fluoranthene	ND		180	24	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Biphenyl	ND		180	27	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
bis (2-chloroisopropyl) ether	ND		180	37	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Bis(2-chloroethoxy)methane	ND		180	39	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Bis(2-chloroethyl)ether	ND		180	24	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Bis(2-ethylhexyl) phthalate	ND		180	63	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Butyl benzyl phthalate	ND		180	30	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Caprolactam	ND		180	55	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Carbazole	ND		180	22	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Chrysene	ND		180	41	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Dibenz(a,h)anthracene	ND		180	32	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Dibenzofuran	ND		180	22	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Diethyl phthalate	ND		180	24	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Dimethyl phthalate	ND		180	22	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Di-n-butyl phthalate	ND		180	31	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Di-n-octyl phthalate	ND		180	22	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Fluoranthene	ND		180	19	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Fluorene	ND		180	22	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Hexachlorobenzene	ND		180	25	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Hexachlorobutadiene	ND		180	27	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Hexachlorocyclopentadiene	ND		180	25	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Hexachloroethane	ND		180	24	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Indeno[1,2,3-cd]pyrene	ND		180	23	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Isophorone	ND		180	39	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Naphthalene	ND		180	24	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Nitrobenzene	ND		180	21	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
N-Nitrosodi-n-propylamine	ND		180	31	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
N-Nitrosodiphenylamine	ND		180	150	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Pentachlorophenol	ND		360	180	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Phenanthrene	ND		180	27	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Phenol	ND		180	28	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1
Pyrene	ND		180	22	ug/Kg	☼	06/29/18 14:25	06/30/18 22:40	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	1200	T J	ug/Kg	☼	1.72		06/29/18 14:25	06/30/18 22:40	1
Unknown	510	T J	ug/Kg	☼	2.97		06/29/18 14:25	06/30/18 22:40	1
Undecane, 3,6-dimethyl-	360	T J N	ug/Kg	☼	7.02	17301-28-9	06/29/18 14:25	06/30/18 22:40	1
Unknown	350	T J	ug/Kg	☼	7.08		06/29/18 14:25	06/30/18 22:40	1
Unknown	510	T J	ug/Kg	☼	7.45		06/29/18 14:25	06/30/18 22:40	1
Unknown	560	T J	ug/Kg	☼	7.62		06/29/18 14:25	06/30/18 22:40	1
Unknown	430	T J	ug/Kg	☼	7.77		06/29/18 14:25	06/30/18 22:40	1
Unknown	590	T J	ug/Kg	☼	8.27		06/29/18 14:25	06/30/18 22:40	1
Unknown	770	T J	ug/Kg	☼	8.33		06/29/18 14:25	06/30/18 22:40	1
Unknown	870	T J	ug/Kg	☼	8.37		06/29/18 14:25	06/30/18 22:40	1
Pentadecane, 7-methyl-	920	T J N	ug/Kg	☼	8.70	6165-40-8	06/29/18 14:25	06/30/18 22:40	1
Unknown	450	T J	ug/Kg	☼	8.82		06/29/18 14:25	06/30/18 22:40	1
Unknown	350	T J	ug/Kg	☼	8.96		06/29/18 14:25	06/30/18 22:40	1
Unknown	350	T J	ug/Kg	☼	9.20		06/29/18 14:25	06/30/18 22:40	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-43 (7-9")

Lab Sample ID: 480-138156-3

Date Collected: 06/26/18 10:30

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 89.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	570	T J	ug/Kg	☼	9.32		06/29/18 14:25	06/30/18 22:40	1
Unknown	440	T J	ug/Kg	☼	9.57		06/29/18 14:25	06/30/18 22:40	1
Unknown	520	T J	ug/Kg	☼	9.64		06/29/18 14:25	06/30/18 22:40	1
Pentadecane, 2,6,10-trimethyl-	710	T J N	ug/Kg	☼	9.78	3892-00-0	06/29/18 14:25	06/30/18 22:40	1
Pentadecane, 2,6,10,14-tetramethyl-	990	T J N	ug/Kg	☼	10.08	1921-70-6	06/29/18 14:25	06/30/18 22:40	1
Docosane	470	T J N	ug/Kg	☼	12.38	629-97-0	06/29/18 14:25	06/30/18 22:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	112		54 - 120	06/29/18 14:25	06/30/18 22:40	1
2-Fluorobiphenyl	100		60 - 120	06/29/18 14:25	06/30/18 22:40	1
2-Fluorophenol	85		52 - 120	06/29/18 14:25	06/30/18 22:40	1
Nitrobenzene-d5	97		53 - 120	06/29/18 14:25	06/30/18 22:40	1
Phenol-d5	93		54 - 120	06/29/18 14:25	06/30/18 22:40	1
p-Terphenyl-d14	114		65 - 121	06/29/18 14:25	06/30/18 22:40	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11300		11.3	5.0	mg/Kg	☼	07/05/18 10:12	07/06/18 04:38	1
Antimony	ND		17.0	0.45	mg/Kg	☼	07/05/18 10:12	07/06/18 04:38	1
Arsenic	9.6		2.3	0.45	mg/Kg	☼	07/05/18 10:12	07/06/18 04:38	1
Barium	91.1		0.57	0.12	mg/Kg	☼	07/05/18 10:12	07/06/18 04:38	1
Beryllium	0.61		0.23	0.032	mg/Kg	☼	07/05/18 10:12	07/06/18 04:38	1
Cadmium	0.080	J	0.23	0.034	mg/Kg	☼	07/05/18 10:12	07/06/18 04:38	1
Calcium	538	B	56.5	3.7	mg/Kg	☼	07/05/18 10:12	07/06/18 04:38	1
Chromium	13.9		0.57	0.23	mg/Kg	☼	07/05/18 10:12	07/06/18 04:38	1
Cobalt	12.7		0.57	0.057	mg/Kg	☼	07/05/18 10:12	07/06/18 04:38	1
Copper	21.4		1.1	0.24	mg/Kg	☼	07/05/18 10:12	07/06/18 04:38	1
Iron	24800		11.3	4.0	mg/Kg	☼	07/05/18 10:12	07/06/18 04:38	1
Lead	16.6		1.1	0.27	mg/Kg	☼	07/05/18 10:12	07/06/18 04:38	1
Magnesium	2880		22.6	1.0	mg/Kg	☼	07/05/18 10:12	07/06/18 04:38	1
Manganese	530	B	0.23	0.036	mg/Kg	☼	07/05/18 10:12	07/06/18 04:38	1
Nickel	23.5		5.7	0.26	mg/Kg	☼	07/05/18 10:12	07/06/18 04:38	1
Potassium	1550		33.9	22.6	mg/Kg	☼	07/05/18 10:12	07/06/18 04:38	1
Selenium	ND		4.5	0.45	mg/Kg	☼	07/05/18 10:12	07/06/18 04:38	1
Silver	ND		0.68	0.23	mg/Kg	☼	07/05/18 10:12	07/06/18 04:38	1
Sodium	35.7	J	158	14.7	mg/Kg	☼	07/05/18 10:12	07/06/18 04:38	1
Thallium	ND		6.8	0.34	mg/Kg	☼	07/05/18 10:12	07/06/18 04:38	1
Vanadium	16.2		0.57	0.12	mg/Kg	☼	07/05/18 10:12	07/06/18 04:38	1
Zinc	57.2		2.3	0.72	mg/Kg	☼	07/05/18 10:12	07/06/18 04:38	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.010	J	0.021	0.0086	mg/Kg	☼	07/05/18 13:20	07/05/18 14:47	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-44 (2-3")

Lab Sample ID: 480-138156-4

Date Collected: 06/26/18 08:30

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 85.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	5.7	0.41	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
1,1,2,2-Tetrachloroethane	ND	vs	5.7	0.92	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	5.7	1.3	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
1,1,2-Trichloroethane	ND	vs	5.7	0.74	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
1,1-Dichloroethane	ND	vs	5.7	0.69	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
1,1-Dichloroethene	ND	vs	5.7	0.70	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
1,2,4-Trichlorobenzene	ND	vs	5.7	0.35	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
1,2-Dibromo-3-Chloropropane	ND	vs	5.7	2.8	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
1,2-Dichlorobenzene	ND	vs	5.7	0.44	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
1,2-Dichloroethane	ND	vs	5.7	0.29	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
1,2-Dichloropropane	ND	vs	5.7	2.8	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
1,3-Dichlorobenzene	ND	vs	5.7	0.29	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
1,4-Dichlorobenzene	ND	vs	5.7	0.80	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
2-Butanone (MEK)	ND	vs	28	2.1	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
2-Hexanone	ND	vs	28	2.8	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
4-Methyl-2-pentanone (MIBK)	ND	vs	28	1.9	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Acetone	ND	vs	28	4.8	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Benzene	ND	vs	5.7	0.28	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Bromoform	ND	vs	5.7	2.8	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Bromomethane	ND	vs	5.7	0.51	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Carbon disulfide	ND	vs	5.7	2.8	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Carbon tetrachloride	ND	vs	5.7	0.55	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Chlorobenzene	ND	vs	5.7	0.75	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Dibromochloromethane	ND	vs	5.7	0.73	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Chloroethane	ND	* vs	5.7	1.3	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Chloroform	ND	vs	5.7	0.35	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Chloromethane	ND	vs	5.7	0.34	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
cis-1,2-Dichloroethene	ND	vs	5.7	0.73	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Cyclohexane	ND	vs	5.7	0.80	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Bromodichloromethane	ND	vs	5.7	0.76	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Dichlorodifluoromethane	ND	vs	5.7	0.47	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Ethylbenzene	ND	vs	5.7	0.39	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
1,2-Dibromoethane	ND	vs	5.7	0.73	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Isopropylbenzene	ND	vs	5.7	0.86	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Methyl acetate	ND	vs	28	3.4	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Methyl tert-butyl ether	ND	vs	5.7	0.56	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Methylcyclohexane	ND	vs	5.7	0.86	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Methylene Chloride	ND	vs	5.7	2.6	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Tetrachloroethene	ND	vs	5.7	0.76	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Toluene	ND	vs	5.7	0.43	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
trans-1,2-Dichloroethene	ND	vs	5.7	0.59	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
trans-1,3-Dichloropropene	ND	vs	5.7	2.5	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Trichloroethene	ND	vs	5.7	1.2	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Trichlorofluoromethane	ND	vs	5.7	0.54	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Vinyl chloride	ND	vs	5.7	0.69	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Xylenes, Total	ND	vs	11	0.95	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
cis-1,3-Dichloropropene	ND	vs	5.7	0.82	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1
Styrene	ND	vs	5.7	0.28	ug/Kg	☼	07/02/18 15:10	07/03/18 04:01	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-44 (2-3")

Lab Sample ID: 480-138156-4

Date Collected: 06/26/18 08:30

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 85.8

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Unknown	8.9	T J	ug/Kg	☼	8.49		07/02/18 15:10	07/03/18 04:01	1
Decane, 4-methyl-	12	T J N	ug/Kg	☼	9.82	2847-72-5	07/02/18 15:10	07/03/18 04:01	1
Unknown	8.3	T J	ug/Kg	☼	10.65		07/02/18 15:10	07/03/18 04:01	1
Naphthalene, decahydro-2-methyl-	12	T J N	ug/Kg	☼	11.19	2958-76-1	07/02/18 15:10	07/03/18 04:01	1
Undecane, 2,6-dimethyl-	19	T J N	ug/Kg	☼	11.69	17301-23-4	07/02/18 15:10	07/03/18 04:01	1
Unknown	14	T J	ug/Kg	☼	11.77		07/02/18 15:10	07/03/18 04:01	1
Unknown	12	T J	ug/Kg	☼	12.15		07/02/18 15:10	07/03/18 04:01	1
Unknown	9.2	T J	ug/Kg	☼	12.47		07/02/18 15:10	07/03/18 04:01	1
Hexadecane, 2,6,10,14-tetramethyl-	11	T J N	ug/Kg	☼	13.02	638-36-8	07/02/18 15:10	07/03/18 04:01	1
Dodecane, 2,6,10-trimethyl-	16	T J N	ug/Kg	☼	13.81	3891-98-3	07/02/18 15:10	07/03/18 04:01	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	101		64 - 126				07/02/18 15:10	07/03/18 04:01	1
4-Bromofluorobenzene (Surr)	98		72 - 126				07/02/18 15:10	07/03/18 04:01	1
Toluene-d8 (Surr)	101		71 - 125				07/02/18 15:10	07/03/18 04:01	1
Dibromofluoromethane (Surr)	101		60 - 140				07/02/18 15:10	07/03/18 04:01	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
2,4,5-Trichlorophenol	ND		190	53	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
2,4,6-Trichlorophenol	ND		190	39	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
2,4-Dichlorophenol	ND		190	21	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
2,4-Dimethylphenol	ND		190	47	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
2,4-Dinitrophenol	ND		1900	900	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
2,4-Dinitrotoluene	ND		190	40	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
2,6-Dinitrotoluene	ND		190	23	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
2-Chloronaphthalene	ND		190	32	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
2-Chlorophenol	ND		190	35	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
2-Methylnaphthalene	ND		190	39	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
2-Methylphenol	ND		190	23	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
2-Nitroaniline	ND		380	29	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
2-Nitrophenol	ND		190	55	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
3,3'-Dichlorobenzidine	ND		380	230	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
3-Nitroaniline	ND		380	54	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
4,6-Dinitro-2-methylphenol	ND		380	190	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
4-Bromophenyl phenyl ether	ND		190	27	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
4-Chloro-3-methylphenol	ND		190	48	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
4-Chloroaniline	ND		190	48	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
4-Chlorophenyl phenyl ether	ND		190	24	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
4-Methylphenol	ND		380	23	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
4-Nitroaniline	ND		380	100	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
4-Nitrophenol	ND		380	140	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Acenaphthene	ND		190	29	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Acenaphthylene	ND		190	25	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Acetophenone	ND		190	26	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Anthracene	ND		190	48	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Atrazine	ND		190	67	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Benzaldehyde	ND		190	150	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Benzo[a]anthracene	ND		190	19	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Benzo[a]pyrene	ND		190	29	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-44 (2-3")

Lab Sample ID: 480-138156-4

Date Collected: 06/26/18 08:30

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 85.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		190	31	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Benzo[g,h,i]perylene	ND		190	21	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Benzo[k]fluoranthene	ND		190	25	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Biphenyl	ND		190	29	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
bis (2-chloroisopropyl) ether	ND		190	39	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Bis(2-chloroethoxy)methane	ND		190	41	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Bis(2-chloroethyl)ether	ND		190	25	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Bis(2-ethylhexyl) phthalate	ND		190	66	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Butyl benzyl phthalate	ND		190	32	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Caprolactam	ND		190	58	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Carbazole	ND		190	23	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Chrysene	ND		190	43	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Dibenz(a,h)anthracene	ND		190	34	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Dibenzofuran	ND		190	23	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Diethyl phthalate	ND		190	25	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Dimethyl phthalate	ND		190	23	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Di-n-butyl phthalate	ND		190	33	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Di-n-octyl phthalate	ND		190	23	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Fluoranthene	ND		190	21	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Fluorene	ND		190	23	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Hexachlorobenzene	ND		190	26	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Hexachlorobutadiene	ND		190	29	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Hexachlorocyclopentadiene	ND		190	26	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Hexachloroethane	ND		190	25	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Indeno[1,2,3-cd]pyrene	ND		190	24	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Isophorone	ND		190	41	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Naphthalene	ND		190	25	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Nitrobenzene	ND		190	22	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
N-Nitrosodi-n-propylamine	ND		190	33	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
N-Nitrosodiphenylamine	ND		190	160	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Pentachlorophenol	ND		380	190	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Phenanthrene	ND		190	29	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Phenol	ND		190	30	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1
Pyrene	ND		190	23	ug/Kg	☼	06/29/18 14:25	06/30/18 23:05	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	1100	T J	ug/Kg	☼	1.73		06/29/18 14:25	06/30/18 23:05	1
Unknown	540	T J	ug/Kg	☼	2.97		06/29/18 14:25	06/30/18 23:05	1
Benzene, 1,3-dimethyl-	210	T J N	ug/Kg	☼	3.49	108-38-3	06/29/18 14:25	06/30/18 23:05	1
Unknown	160	T J	ug/Kg	☼	9.19		06/29/18 14:25	06/30/18 23:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	97		54 - 120	06/29/18 14:25	06/30/18 23:05	1
2-Fluorobiphenyl	90		60 - 120	06/29/18 14:25	06/30/18 23:05	1
2-Fluorophenol	80		52 - 120	06/29/18 14:25	06/30/18 23:05	1
Nitrobenzene-d5	89		53 - 120	06/29/18 14:25	06/30/18 23:05	1
Phenol-d5	88		54 - 120	06/29/18 14:25	06/30/18 23:05	1
p-Terphenyl-d14	104		65 - 121	06/29/18 14:25	06/30/18 23:05	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-44 (2-3")

Lab Sample ID: 480-138156-4

Date Collected: 06/26/18 08:30

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 85.8

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	16900		10.8	4.8	mg/Kg	☼	07/05/18 10:12	07/06/18 04:42	1
Antimony	ND		16.2	0.43	mg/Kg	☼	07/05/18 10:12	07/06/18 04:42	1
Arsenic	15.9		2.2	0.43	mg/Kg	☼	07/05/18 10:12	07/06/18 04:42	1
Barium	157		0.54	0.12	mg/Kg	☼	07/05/18 10:12	07/06/18 04:42	1
Beryllium	1.0		0.22	0.030	mg/Kg	☼	07/05/18 10:12	07/06/18 04:42	1
Cadmium	ND		0.22	0.032	mg/Kg	☼	07/05/18 10:12	07/06/18 04:42	1
Calcium	3230	B	54.2	3.6	mg/Kg	☼	07/05/18 10:12	07/06/18 04:42	1
Chromium	20.4		0.54	0.22	mg/Kg	☼	07/05/18 10:12	07/06/18 04:42	1
Cobalt	18.1		0.54	0.054	mg/Kg	☼	07/05/18 10:12	07/06/18 04:42	1
Copper	19.7		1.1	0.23	mg/Kg	☼	07/05/18 10:12	07/06/18 04:42	1
Iron	35800		10.8	3.8	mg/Kg	☼	07/05/18 10:12	07/06/18 04:42	1
Lead	20.3		1.1	0.26	mg/Kg	☼	07/05/18 10:12	07/06/18 04:42	1
Magnesium	5450		21.7	1.0	mg/Kg	☼	07/05/18 10:12	07/06/18 04:42	1
Manganese	716	B	0.22	0.035	mg/Kg	☼	07/05/18 10:12	07/06/18 04:42	1
Nickel	34.7		5.4	0.25	mg/Kg	☼	07/05/18 10:12	07/06/18 04:42	1
Potassium	3380		32.5	21.7	mg/Kg	☼	07/05/18 10:12	07/06/18 04:42	1
Selenium	ND		4.3	0.43	mg/Kg	☼	07/05/18 10:12	07/06/18 04:42	1
Silver	ND		0.65	0.22	mg/Kg	☼	07/05/18 10:12	07/06/18 04:42	1
Sodium	79.7	J	152	14.1	mg/Kg	☼	07/05/18 10:12	07/06/18 04:42	1
Thallium	ND		6.5	0.32	mg/Kg	☼	07/05/18 10:12	07/06/18 04:42	1
Vanadium	22.8		0.54	0.12	mg/Kg	☼	07/05/18 10:12	07/06/18 04:42	1
Zinc	69.3		2.2	0.69	mg/Kg	☼	07/05/18 10:12	07/06/18 04:42	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.023	0.0095	mg/Kg	☼	07/05/18 13:20	07/05/18 14:48	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-45 (4-6")

Lab Sample ID: 480-138156-5

Date Collected: 06/26/18 10:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 85.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1000	280	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
1,1,2,2-Tetrachloroethane	ND		1000	160	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1000	500	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
1,1,2-Trichloroethane	ND		1000	210	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
1,1-Dichloroethane	ND		1000	310	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
1,1-Dichloroethene	ND		1000	350	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
1,2,4-Trichlorobenzene	ND		1000	380	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
1,2-Dibromo-3-Chloropropane	ND		1000	500	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
1,2-Dichlorobenzene	ND		1000	260	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
1,2-Dichloroethane	ND		1000	410	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
1,2-Dichloropropane	ND		1000	160	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
1,3-Dichlorobenzene	ND		1000	270	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
1,4-Dichlorobenzene	ND		1000	140	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
2-Butanone (MEK)	ND		5000	3000	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
2-Hexanone	ND	*	5000	2100	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
4-Methyl-2-pentanone (MIBK)	ND		5000	320	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Acetone	ND	*	5000	4100	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Benzene	ND		1000	190	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Bromoform	ND		1000	500	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Bromomethane	ND		1000	220	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Carbon disulfide	ND		1000	460	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Carbon tetrachloride	ND		1000	260	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Chlorobenzene	ND		1000	130	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Dibromochloromethane	ND		1000	480	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Chloroethane	ND		1000	210	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Chloroform	ND		1000	690	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Chloromethane	ND		1000	240	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
cis-1,2-Dichloroethene	ND		1000	280	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Cyclohexane	ND		1000	220	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Bromodichloromethane	ND		1000	200	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Dichlorodifluoromethane	ND		1000	440	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Ethylbenzene	ND		1000	290	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
1,2-Dibromoethane	ND		1000	180	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Isopropylbenzene	280	J	1000	150	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Methyl acetate	ND	*	5000	480	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Methyl tert-butyl ether	ND		1000	380	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Methylcyclohexane	1300		1000	470	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Methylene Chloride	ND		1000	200	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Tetrachloroethene	ND		1000	130	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Toluene	ND		1000	270	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
trans-1,2-Dichloroethene	ND		1000	240	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
trans-1,3-Dichloropropene	ND		1000	98	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Trichloroethene	ND		1000	280	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Trichlorofluoromethane	ND		1000	470	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Vinyl chloride	ND		1000	340	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Xylenes, Total	ND		2000	550	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
cis-1,3-Dichloropropene	ND		1000	240	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8
Styrene	ND		1000	240	ug/Kg	☼	07/02/18 11:36	07/03/18 02:14	8

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-45 (4-6")

Lab Sample ID: 480-138156-5

Date Collected: 06/26/18 10:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 85.5

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Cyclohexane, 1,1,3-trimethyl-	10000	T J N	ug/Kg	☼	7.79	3073-66-3	07/02/18 11:36	07/03/18 02:14	8
Unknown	14000	T J	ug/Kg	☼	8.02		07/02/18 11:36	07/03/18 02:14	8
Cyclohexane, 1-ethyl-2-methyl-	10000	T J N	ug/Kg	☼	8.58	3728-54-9	07/02/18 11:36	07/03/18 02:14	8
Octane, 2,6-dimethyl-	11000	T J N	ug/Kg	☼	9.12	2051-30-1	07/02/18 11:36	07/03/18 02:14	8
Unknown	16000	T J	ug/Kg	☼	9.26		07/02/18 11:36	07/03/18 02:14	8
Cyclohexane, butyl-	7400	T J N	ug/Kg	☼	10.59	1678-93-9	07/02/18 11:36	07/03/18 02:14	8
Unknown	12000	T J	ug/Kg	☼	11.16		07/02/18 11:36	07/03/18 02:14	8
Unknown	8100	T J	ug/Kg	☼	11.70		07/02/18 11:36	07/03/18 02:14	8
Unknown	11000	T J	ug/Kg	☼	12.16		07/02/18 11:36	07/03/18 02:14	8
Unknown	8200	T J	ug/Kg	☼	12.29		07/02/18 11:36	07/03/18 02:14	8
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	112		53 - 146				07/02/18 11:36	07/03/18 02:14	8
4-Bromofluorobenzene (Surr)	102		49 - 148				07/02/18 11:36	07/03/18 02:14	8
Toluene-d8 (Surr)	90		50 - 149				07/02/18 11:36	07/03/18 02:14	8
Dibromofluoromethane (Surr)	93		60 - 140				07/02/18 11:36	07/03/18 02:14	8

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
2,4,5-Trichlorophenol	ND		3900	1100	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
2,4,6-Trichlorophenol	ND		3900	780	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
2,4-Dichlorophenol	ND		3900	410	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
2,4-Dimethylphenol	ND		3900	940	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
2,4-Dinitrophenol	ND		38000	18000	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
2,4-Dinitrotoluene	ND		3900	800	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
2,6-Dinitrotoluene	ND		3900	460	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
2-Chloronaphthalene	ND		3900	640	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
2-Chlorophenol	ND		3900	710	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
2-Methylnaphthalene	ND		3900	780	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
2-Methylphenol	ND		3900	460	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
2-Nitroaniline	ND		7600	570	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
2-Nitrophenol	ND		3900	1100	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
3,3'-Dichlorobenzidine	ND		7600	4600	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
3-Nitroaniline	ND		7600	1100	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
4,6-Dinitro-2-methylphenol	ND		7600	3900	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
4-Bromophenyl phenyl ether	ND		3900	550	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
4-Chloro-3-methylphenol	ND		3900	970	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
4-Chloroaniline	ND		3900	970	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
4-Chlorophenyl phenyl ether	ND		3900	480	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
4-Methylphenol	ND		7600	460	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
4-Nitroaniline	ND		7600	2000	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
4-Nitrophenol	ND		7600	2700	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Acenaphthene	ND		3900	570	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Acenaphthylene	ND		3900	510	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Acetophenone	ND		3900	530	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Anthracene	ND		3900	970	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Atrazine	ND		3900	1400	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Benzaldehyde	ND		3900	3100	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Benzo[a]anthracene	ND		3900	390	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Benzo[a]pyrene	ND		3900	570	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-45 (4-6")

Lab Sample ID: 480-138156-5

Date Collected: 06/26/18 10:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 85.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		3900	620	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Benzo[g,h,i]perylene	ND		3900	410	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Benzo[k]fluoranthene	ND		3900	510	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Biphenyl	ND		3900	570	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
bis (2-chloroisopropyl) ether	ND		3900	780	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Bis(2-chloroethoxy)methane	ND		3900	830	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Bis(2-chloroethyl)ether	ND		3900	510	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Bis(2-ethylhexyl) phthalate	ND		3900	1300	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Butyl benzyl phthalate	ND		3900	640	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Caprolactam	ND		3900	1200	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Carbazole	ND		3900	460	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Chrysene	ND		3900	870	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Dibenz(a,h)anthracene	ND		3900	690	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Dibenzofuran	ND		3900	460	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Diethyl phthalate	ND		3900	510	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Dimethyl phthalate	ND		3900	460	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Di-n-butyl phthalate	ND		3900	670	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Di-n-octyl phthalate	ND		3900	460	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Fluoranthene	ND		3900	410	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Fluorene	ND		3900	460	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Hexachlorobenzene	ND		3900	530	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Hexachlorobutadiene	ND		3900	570	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Hexachlorocyclopentadiene	ND		3900	530	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Hexachloroethane	ND		3900	510	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Indeno[1,2,3-cd]pyrene	ND		3900	480	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Isophorone	ND		3900	830	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Naphthalene	ND		3900	510	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Nitrobenzene	ND		3900	440	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
N-Nitrosodi-n-propylamine	ND		3900	670	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
N-Nitrosodiphenylamine	ND		3900	3200	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Pentachlorophenol	ND		7600	3900	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Phenanthrene	ND		3900	570	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Phenol	ND		3900	600	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20
Pyrene	ND		3900	460	ug/Kg	☼	06/29/18 14:25	06/30/18 23:30	20

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Methylene Chloride	6100	T J N	ug/Kg	☼	1.56	75-09-2	06/29/18 14:25	06/30/18 23:30	20
Unknown	4300	T J	ug/Kg	☼	4.43		06/29/18 14:25	06/30/18 23:30	20
Unknown	4000	T J	ug/Kg	☼	5.50		06/29/18 14:25	06/30/18 23:30	20
Unknown	4300	T J	ug/Kg	☼	5.99		06/29/18 14:25	06/30/18 23:30	20
Unknown	4700	T J	ug/Kg	☼	6.43		06/29/18 14:25	06/30/18 23:30	20
Unknown	4200	T J	ug/Kg	☼	7.26		06/29/18 14:25	06/30/18 23:30	20
Decane, 2,6,7-trimethyl-	8300	T J N	ug/Kg	☼	7.45	62108-25-2	06/29/18 14:25	06/30/18 23:30	20
Unknown	5800	T J	ug/Kg	☼	7.62		06/29/18 14:25	06/30/18 23:30	20
Heptylcyclohexane	3700	T J N	ug/Kg	☼	7.99	5617-41-4	06/29/18 14:25	06/30/18 23:30	20
Unknown	6400	T J	ug/Kg	☼	8.33		06/29/18 14:25	06/30/18 23:30	20
Unknown	4500	T J	ug/Kg	☼	8.37		06/29/18 14:25	06/30/18 23:30	20
Naphthalene, 2,6-dimethyl-	3800	T J N	ug/Kg	☼	8.54	581-42-0	06/29/18 14:25	06/30/18 23:30	20
Decane, 2-methyl-	11000	T J N	ug/Kg	☼	8.69	6975-98-0	06/29/18 14:25	06/30/18 23:30	20
Unknown	4800	T J	ug/Kg	☼	8.82		06/29/18 14:25	06/30/18 23:30	20

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-45 (4-6")

Lab Sample ID: 480-138156-5

Date Collected: 06/26/18 10:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 85.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	3900	T J	ug/Kg	☼	8.96		06/29/18 14:25	06/30/18 23:30	20
Unknown	4000	T J	ug/Kg	☼	9.25		06/29/18 14:25	06/30/18 23:30	20
Unknown	4600	T J	ug/Kg	☼	9.31		06/29/18 14:25	06/30/18 23:30	20
Pentadecane, 2,6,10-trimethyl-	9200	T J N	ug/Kg	☼	9.78	3892-00-0	06/29/18 14:25	06/30/18 23:30	20
Pentadecane, 2,6,10,14-tetramethyl-	12000	T J N	ug/Kg	☼	10.08	1921-70-6	06/29/18 14:25	06/30/18 23:30	20
Tetradecane	3900	T J N	ug/Kg	☼	10.92	629-59-4	06/29/18 14:25	06/30/18 23:30	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	108		54 - 120				06/29/18 14:25	06/30/18 23:30	20
2-Fluorobiphenyl	88		60 - 120				06/29/18 14:25	06/30/18 23:30	20
2-Fluorophenol	58		52 - 120				06/29/18 14:25	06/30/18 23:30	20
Nitrobenzene-d5	0	X	53 - 120				06/29/18 14:25	06/30/18 23:30	20
Phenol-d5	60		54 - 120				06/29/18 14:25	06/30/18 23:30	20
p-Terphenyl-d14	102		65 - 121				06/29/18 14:25	06/30/18 23:30	20

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.37	ug/Kg	☼	06/29/18 14:32	07/02/18 13:58	1
4,4'-DDE	ND		1.9	0.40	ug/Kg	☼	06/29/18 14:32	07/02/18 13:58	1
4,4'-DDT	ND		1.9	0.45	ug/Kg	☼	06/29/18 14:32	07/02/18 13:58	1
Aldrin	ND		1.9	0.47	ug/Kg	☼	06/29/18 14:32	07/02/18 13:58	1
alpha-BHC	ND		1.9	0.34	ug/Kg	☼	06/29/18 14:32	07/02/18 13:58	1
beta-BHC	ND		1.9	0.34	ug/Kg	☼	06/29/18 14:32	07/02/18 13:58	1
cis-Chlordane	ND		1.9	0.95	ug/Kg	☼	06/29/18 14:32	07/02/18 13:58	1
delta-BHC	ND		1.9	0.36	ug/Kg	☼	06/29/18 14:32	07/02/18 13:58	1
Dieldrin	ND		1.9	0.46	ug/Kg	☼	06/29/18 14:32	07/02/18 13:58	1
Endosulfan I	ND		1.9	0.37	ug/Kg	☼	06/29/18 14:32	07/02/18 13:58	1
Endosulfan II	ND		1.9	0.34	ug/Kg	☼	06/29/18 14:32	07/02/18 13:58	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg	☼	06/29/18 14:32	07/02/18 13:58	1
Endrin	ND		1.9	0.38	ug/Kg	☼	06/29/18 14:32	07/02/18 13:58	1
Endrin aldehyde	ND		1.9	0.49	ug/Kg	☼	06/29/18 14:32	07/02/18 13:58	1
Endrin ketone	ND		1.9	0.47	ug/Kg	☼	06/29/18 14:32	07/02/18 13:58	1
gamma-BHC (Lindane)	0.46	J B	1.9	0.35	ug/Kg	☼	06/29/18 14:32	07/02/18 13:58	1
Heptachlor	ND		1.9	0.41	ug/Kg	☼	06/29/18 14:32	07/02/18 13:58	1
Heptachlor epoxide	ND		1.9	0.49	ug/Kg	☼	06/29/18 14:32	07/02/18 13:58	1
Methoxychlor	ND		1.9	0.39	ug/Kg	☼	06/29/18 14:32	07/02/18 13:58	1
Toxaphene	ND		19	11	ug/Kg	☼	06/29/18 14:32	07/02/18 13:58	1
trans-Chlordane	ND		1.9	0.61	ug/Kg	☼	06/29/18 14:32	07/02/18 13:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	52		45 - 120				06/29/18 14:32	07/02/18 13:58	1
DCB Decachlorobiphenyl	51		45 - 120				06/29/18 14:32	07/02/18 13:58	1
Tetrachloro-m-xylene	52		30 - 124				06/29/18 14:32	07/02/18 13:58	1
Tetrachloro-m-xylene	50		30 - 124				06/29/18 14:32	07/02/18 13:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.24	0.046	mg/Kg	☼	06/29/18 07:30	07/02/18 16:18	1
PCB-1221	ND		0.24	0.046	mg/Kg	☼	06/29/18 07:30	07/02/18 16:18	1
PCB-1232	ND		0.24	0.046	mg/Kg	☼	06/29/18 07:30	07/02/18 16:18	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-45 (4-6")

Lab Sample ID: 480-138156-5

Date Collected: 06/26/18 10:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 85.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1242	ND		0.24	0.046	mg/Kg	☼	06/29/18 07:30	07/02/18 16:18	1
PCB-1248	ND		0.24	0.046	mg/Kg	☼	06/29/18 07:30	07/02/18 16:18	1
PCB-1254	ND		0.24	0.11	mg/Kg	☼	06/29/18 07:30	07/02/18 16:18	1
PCB-1260	ND		0.24	0.11	mg/Kg	☼	06/29/18 07:30	07/02/18 16:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	74		60 - 154				06/29/18 07:30	07/02/18 16:18	1
Tetrachloro-m-xylene	70		60 - 154				06/29/18 07:30	07/02/18 16:18	1
DCB Decachlorobiphenyl	72		65 - 174				06/29/18 07:30	07/02/18 16:18	1
DCB Decachlorobiphenyl	87		65 - 174				06/29/18 07:30	07/02/18 16:18	1

Method: 8151A - Chlorinated Herbicides by GC

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		19	6.1	ug/Kg	☼	06/29/18 07:20	07/06/18 21:36	1
Silvex (2,4,5-TP)	ND		19	6.9	ug/Kg	☼	06/29/18 07:20	07/06/18 21:36	1
2,4-D	ND		19	12	ug/Kg	☼	06/29/18 07:20	07/06/18 21:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	69		28 - 129				06/29/18 07:20	07/06/18 21:36	1
2,4-Dichlorophenylacetic acid	68		28 - 129				06/29/18 07:20	07/06/18 21:36	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	15000		11.7	5.2	mg/Kg	☼	07/05/18 10:12	07/06/18 04:57	1
Antimony	ND		17.6	0.47	mg/Kg	☼	07/05/18 10:12	07/06/18 04:57	1
Arsenic	15.0		2.3	0.47	mg/Kg	☼	07/05/18 10:12	07/06/18 04:57	1
Barium	162		0.59	0.13	mg/Kg	☼	07/05/18 10:12	07/06/18 04:57	1
Beryllium	0.74		0.23	0.033	mg/Kg	☼	07/05/18 10:12	07/06/18 04:57	1
Cadmium	0.12 J		0.23	0.035	mg/Kg	☼	07/05/18 10:12	07/06/18 04:57	1
Calcium	607 B		58.5	3.9	mg/Kg	☼	07/05/18 10:12	07/06/18 04:57	1
Chromium	17.1		0.59	0.23	mg/Kg	☼	07/05/18 10:12	07/06/18 04:57	1
Cobalt	14.8		0.59	0.059	mg/Kg	☼	07/05/18 10:12	07/06/18 04:57	1
Copper	15.2		1.2	0.25	mg/Kg	☼	07/05/18 10:12	07/06/18 04:57	1
Iron	26500		11.7	4.1	mg/Kg	☼	07/05/18 10:12	07/06/18 04:57	1
Lead	22.0		1.2	0.28	mg/Kg	☼	07/05/18 10:12	07/06/18 04:57	1
Magnesium	3380		23.4	1.1	mg/Kg	☼	07/05/18 10:12	07/06/18 04:57	1
Manganese	502 B		0.23	0.037	mg/Kg	☼	07/05/18 10:12	07/06/18 04:57	1
Nickel	26.0		5.9	0.27	mg/Kg	☼	07/05/18 10:12	07/06/18 04:57	1
Potassium	2520		35.1	23.4	mg/Kg	☼	07/05/18 10:12	07/06/18 04:57	1
Selenium	ND		4.7	0.47	mg/Kg	☼	07/05/18 10:12	07/06/18 04:57	1
Silver	ND		0.70	0.23	mg/Kg	☼	07/05/18 10:12	07/06/18 04:57	1
Sodium	46.1 J		164	15.2	mg/Kg	☼	07/05/18 10:12	07/06/18 04:57	1
Thallium	ND		7.0	0.35	mg/Kg	☼	07/05/18 10:12	07/06/18 04:57	1
Vanadium	22.7		0.59	0.13	mg/Kg	☼	07/05/18 10:12	07/06/18 04:57	1
Zinc	60.6		2.3	0.75	mg/Kg	☼	07/05/18 10:12	07/06/18 04:57	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.023	0.0094	mg/Kg	☼	07/05/18 13:20	07/05/18 14:50	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-46 (4-6')

Lab Sample ID: 480-138156-6

Date Collected: 06/26/18 09:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 81.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	6.0	0.44	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
1,1,2,2-Tetrachloroethane	ND	vs	6.0	0.97	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	6.0	1.4	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
1,1,2-Trichloroethane	ND	vs	6.0	0.78	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
1,1-Dichloroethane	ND	vs	6.0	0.73	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
1,1-Dichloroethene	ND	vs	6.0	0.73	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
1,2,4-Trichlorobenzene	ND	vs	6.0	0.36	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
1,2-Dibromo-3-Chloropropane	ND	vs	6.0	3.0	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
1,2-Dichlorobenzene	ND	vs	6.0	0.47	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
1,2-Dichloroethane	ND	vs	6.0	0.30	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
1,2-Dichloropropane	ND	vs	6.0	3.0	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
1,3-Dichlorobenzene	ND	vs	6.0	0.31	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
1,4-Dichlorobenzene	ND	vs	6.0	0.84	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
2-Butanone (MEK)	3.2	J vs	30	2.2	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
2-Hexanone	ND	vs	30	3.0	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
4-Methyl-2-pentanone (MIBK)	ND	vs	30	2.0	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Acetone	25	J vs	30	5.0	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Benzene	ND	vs	6.0	0.29	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Bromoform	ND	vs	6.0	3.0	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Bromomethane	ND	vs	6.0	0.54	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Carbon disulfide	ND	vs	6.0	3.0	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Carbon tetrachloride	ND	vs	6.0	0.58	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Chlorobenzene	ND	vs	6.0	0.79	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Dibromochloromethane	ND	vs	6.0	0.77	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Chloroethane	ND	* vs	6.0	1.4	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Chloroform	ND	vs	6.0	0.37	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Chloromethane	ND	vs	6.0	0.36	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
cis-1,2-Dichloroethene	ND	vs	6.0	0.77	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Cyclohexane	35	vs	6.0	0.84	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Bromodichloromethane	ND	vs	6.0	0.80	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Dichlorodifluoromethane	ND	vs	6.0	0.50	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Ethylbenzene	ND	vs	6.0	0.41	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
1,2-Dibromoethane	ND	vs	6.0	0.77	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Isopropylbenzene	ND	vs	6.0	0.90	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Methyl acetate	ND	vs	30	3.6	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Methyl tert-butyl ether	ND	vs	6.0	0.59	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Methylcyclohexane	75	vs	6.0	0.91	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Methylene Chloride	ND	vs	6.0	2.8	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Tetrachloroethene	ND	vs	6.0	0.80	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Toluene	ND	vs	6.0	0.45	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
trans-1,2-Dichloroethene	ND	vs	6.0	0.62	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
trans-1,3-Dichloropropene	ND	vs	6.0	2.6	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Trichloroethene	ND	vs	6.0	1.3	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Trichlorofluoromethane	ND	vs	6.0	0.57	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Vinyl chloride	ND	vs	6.0	0.73	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Xylenes, Total	2.6	J vs	12	1.0	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
cis-1,3-Dichloropropene	ND	vs	6.0	0.86	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1
Styrene	ND	vs	6.0	0.30	ug/Kg	☼	07/02/18 15:10	07/03/18 04:27	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-46 (4-6')

Lab Sample ID: 480-138156-6

Date Collected: 06/26/18 09:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 81.9

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Pentane, 3-methyl-	9.8	T J N	ug/Kg	☼	3.48	96-14-0	07/02/18 15:10	07/03/18 04:27	1
Cyclopentane, methyl-	20	T J N	ug/Kg	☼	4.18	96-37-7	07/02/18 15:10	07/03/18 04:27	1
Unknown	18	T J	ug/Kg	☼	5.05		07/02/18 15:10	07/03/18 04:27	1
Cyclopentane, ethyl-	6.6	T J N	ug/Kg	☼	5.78	1640-89-7	07/02/18 15:10	07/03/18 04:27	1
Cyclohexane, 1,3-dimethyl-, trans-	8.3	T J N	ug/Kg	☼	6.47	2207-03-6	07/02/18 15:10	07/03/18 04:27	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	104		64 - 126				07/02/18 15:10	07/03/18 04:27	1
4-Bromofluorobenzene (Surr)	96		72 - 126				07/02/18 15:10	07/03/18 04:27	1
Toluene-d8 (Surr)	100		71 - 125				07/02/18 15:10	07/03/18 04:27	1
Dibromofluoromethane (Surr)	98		60 - 140				07/02/18 15:10	07/03/18 04:27	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
2,4,5-Trichlorophenol	ND		200	55	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
2,4,6-Trichlorophenol	ND		200	40	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
2,4-Dichlorophenol	ND		200	21	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
2,4-Dimethylphenol	ND		200	49	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
2,4-Dinitrophenol	ND		2000	930	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
2,4-Dinitrotoluene	ND		200	42	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
2,6-Dinitrotoluene	ND		200	24	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
2-Chloronaphthalene	ND		200	33	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
2-Chlorophenol	ND		200	37	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
2-Methylnaphthalene	ND		200	40	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
2-Methylphenol	ND		200	24	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
2-Nitroaniline	ND		390	30	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
2-Nitrophenol	ND		200	57	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
3,3'-Dichlorobenzidine	ND		390	240	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
3-Nitroaniline	ND		390	56	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
4,6-Dinitro-2-methylphenol	ND		390	200	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
4-Bromophenyl phenyl ether	ND		200	29	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
4-Chloro-3-methylphenol	ND		200	50	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
4-Chloroaniline	ND		200	50	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
4-Chlorophenyl phenyl ether	ND		200	25	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
4-Methylphenol	ND		390	24	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
4-Nitroaniline	ND		390	110	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
4-Nitrophenol	ND		390	140	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Acenaphthene	ND		200	30	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Acenaphthylene	ND		200	26	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Acetophenone	ND		200	27	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Anthracene	ND		200	50	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Atrazine	ND		200	70	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Benzaldehyde	ND		200	160	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Benzo[a]anthracene	ND		200	20	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Benzo[a]pyrene	ND		200	30	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Benzo[b]fluoranthene	ND		200	32	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Benzo[g,h,i]perylene	ND		200	21	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Benzo[k]fluoranthene	ND		200	26	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Biphenyl	ND		200	30	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
bis (2-chloroisopropyl) ether	ND		200	40	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-46 (4-6')

Lab Sample ID: 480-138156-6

Date Collected: 06/26/18 09:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 81.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		200	43	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Bis(2-chloroethyl)ether	ND		200	26	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Bis(2-ethylhexyl) phthalate	ND		200	69	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Butyl benzyl phthalate	ND		200	33	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Caprolactam	ND		200	61	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Carbazole	ND		200	24	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Chrysene	ND		200	45	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Dibenz(a,h)anthracene	ND		200	36	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Dibenzofuran	ND		200	24	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Diethyl phthalate	ND		200	26	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Dimethyl phthalate	ND		200	24	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Di-n-butyl phthalate	ND		200	35	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Di-n-octyl phthalate	ND		200	24	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Fluoranthene	ND		200	21	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Fluorene	ND		200	24	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Hexachlorobenzene	ND		200	27	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Hexachlorobutadiene	ND		200	30	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Hexachlorocyclopentadiene	ND		200	27	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Hexachloroethane	ND		200	26	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Indeno[1,2,3-cd]pyrene	ND		200	25	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Isophorone	ND		200	43	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Naphthalene	ND		200	26	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Nitrobenzene	ND		200	23	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
N-Nitrosodi-n-propylamine	ND		200	35	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
N-Nitrosodiphenylamine	ND		200	160	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Pentachlorophenol	ND		390	200	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Phenanthrene	ND		200	30	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Phenol	ND		200	31	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1
Pyrene	ND		200	24	ug/Kg	☼	06/29/18 14:25	06/30/18 23:55	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	1400	T J	ug/Kg	☼	1.72		06/29/18 14:25	06/30/18 23:55	1
Unknown	510	T J	ug/Kg	☼	2.96		06/29/18 14:25	06/30/18 23:55	1
Unknown	180	T J	ug/Kg	☼	9.18		06/29/18 14:25	06/30/18 23:55	1
Cyclic octaatomic sulfur	430	T J N	ug/Kg	☼	11.76	10544-50-0	06/29/18 14:25	06/30/18 23:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	105		54 - 120	06/29/18 14:25	06/30/18 23:55	1
2-Fluorobiphenyl	90		60 - 120	06/29/18 14:25	06/30/18 23:55	1
2-Fluorophenol	83		52 - 120	06/29/18 14:25	06/30/18 23:55	1
Nitrobenzene-d5	89		53 - 120	06/29/18 14:25	06/30/18 23:55	1
Phenol-d5	90		54 - 120	06/29/18 14:25	06/30/18 23:55	1
p-Terphenyl-d14	111		65 - 121	06/29/18 14:25	06/30/18 23:55	1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.39	ug/Kg	☼	06/29/18 14:32	07/02/18 13:38	1
4,4'-DDE	ND		2.0	0.42	ug/Kg	☼	06/29/18 14:32	07/02/18 13:38	1
4,4'-DDT	ND		2.0	0.47	ug/Kg	☼	06/29/18 14:32	07/02/18 13:38	1
Aldrin	ND		2.0	0.50	ug/Kg	☼	06/29/18 14:32	07/02/18 13:38	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-46 (4-6')

Lab Sample ID: 480-138156-6

Date Collected: 06/26/18 09:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 81.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		2.0	0.36	ug/Kg	☼	06/29/18 14:32	07/02/18 13:38	1
beta-BHC	ND		2.0	0.36	ug/Kg	☼	06/29/18 14:32	07/02/18 13:38	1
cis-Chlordane	ND		2.0	1.0	ug/Kg	☼	06/29/18 14:32	07/02/18 13:38	1
delta-BHC	0.66	J B	2.0	0.37	ug/Kg	☼	06/29/18 14:32	07/02/18 13:38	1
Dieldrin	ND		2.0	0.48	ug/Kg	☼	06/29/18 14:32	07/02/18 13:38	1
Endosulfan I	ND		2.0	0.39	ug/Kg	☼	06/29/18 14:32	07/02/18 13:38	1
Endosulfan II	0.50	J	2.0	0.36	ug/Kg	☼	06/29/18 14:32	07/02/18 13:38	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg	☼	06/29/18 14:32	07/02/18 13:38	1
Endrin	ND		2.0	0.40	ug/Kg	☼	06/29/18 14:32	07/02/18 13:38	1
Endrin aldehyde	ND		2.0	0.51	ug/Kg	☼	06/29/18 14:32	07/02/18 13:38	1
Endrin ketone	ND		2.0	0.50	ug/Kg	☼	06/29/18 14:32	07/02/18 13:38	1
gamma-BHC (Lindane)	0.48	J B	2.0	0.37	ug/Kg	☼	06/29/18 14:32	07/02/18 13:38	1
Heptachlor	ND		2.0	0.44	ug/Kg	☼	06/29/18 14:32	07/02/18 13:38	1
Heptachlor epoxide	ND		2.0	0.52	ug/Kg	☼	06/29/18 14:32	07/02/18 13:38	1
Methoxychlor	ND		2.0	0.41	ug/Kg	☼	06/29/18 14:32	07/02/18 13:38	1
Toxaphene	ND		20	12	ug/Kg	☼	06/29/18 14:32	07/02/18 13:38	1
trans-Chlordane	ND		2.0	0.64	ug/Kg	☼	06/29/18 14:32	07/02/18 13:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	97		45 - 120	06/29/18 14:32	07/02/18 13:38	1
DCB Decachlorobiphenyl	82		45 - 120	06/29/18 14:32	07/02/18 13:38	1
Tetrachloro-m-xylene	88		30 - 124	06/29/18 14:32	07/02/18 13:38	1
Tetrachloro-m-xylene	87		30 - 124	06/29/18 14:32	07/02/18 13:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.27	0.053	mg/Kg	☼	06/29/18 07:30	07/02/18 16:34	1
PCB-1221	ND		0.27	0.053	mg/Kg	☼	06/29/18 07:30	07/02/18 16:34	1
PCB-1232	ND		0.27	0.053	mg/Kg	☼	06/29/18 07:30	07/02/18 16:34	1
PCB-1242	ND		0.27	0.053	mg/Kg	☼	06/29/18 07:30	07/02/18 16:34	1
PCB-1248	ND		0.27	0.053	mg/Kg	☼	06/29/18 07:30	07/02/18 16:34	1
PCB-1254	ND		0.27	0.13	mg/Kg	☼	06/29/18 07:30	07/02/18 16:34	1
PCB-1260	ND		0.27	0.13	mg/Kg	☼	06/29/18 07:30	07/02/18 16:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	91		60 - 154	06/29/18 07:30	07/02/18 16:34	1
Tetrachloro-m-xylene	81		60 - 154	06/29/18 07:30	07/02/18 16:34	1
DCB Decachlorobiphenyl	79		65 - 174	06/29/18 07:30	07/02/18 16:34	1
DCB Decachlorobiphenyl	97		65 - 174	06/29/18 07:30	07/02/18 16:34	1

Method: 8151A - Chlorinated Herbicides by GC

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		20	6.4	ug/Kg	☼	06/29/18 07:20	07/06/18 22:05	1
Silvex (2,4,5-TP)	ND		20	7.2	ug/Kg	☼	06/29/18 07:20	07/06/18 22:05	1
2,4-D	ND		20	13	ug/Kg	☼	06/29/18 07:20	07/06/18 22:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	56		28 - 129	06/29/18 07:20	07/06/18 22:05	1
2,4-Dichlorophenylacetic acid	64		28 - 129	06/29/18 07:20	07/06/18 22:05	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-46 (4-6')

Lab Sample ID: 480-138156-6

Date Collected: 06/26/18 09:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 81.9

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	15400		12.3	5.4	mg/Kg	☼	07/05/18 10:12	07/06/18 05:01	1
Antimony	ND		18.4	0.49	mg/Kg	☼	07/05/18 10:12	07/06/18 05:01	1
Arsenic	14.4		2.5	0.49	mg/Kg	☼	07/05/18 10:12	07/06/18 05:01	1
Barium	141		0.61	0.14	mg/Kg	☼	07/05/18 10:12	07/06/18 05:01	1
Beryllium	0.90		0.25	0.034	mg/Kg	☼	07/05/18 10:12	07/06/18 05:01	1
Cadmium	0.055	J	0.25	0.037	mg/Kg	☼	07/05/18 10:12	07/06/18 05:01	1
Calcium	2000	B	61.4	4.1	mg/Kg	☼	07/05/18 10:12	07/06/18 05:01	1
Chromium	18.5		0.61	0.25	mg/Kg	☼	07/05/18 10:12	07/06/18 05:01	1
Cobalt	18.6		0.61	0.061	mg/Kg	☼	07/05/18 10:12	07/06/18 05:01	1
Copper	21.0		1.2	0.26	mg/Kg	☼	07/05/18 10:12	07/06/18 05:01	1
Iron	30900		12.3	4.3	mg/Kg	☼	07/05/18 10:12	07/06/18 05:01	1
Lead	22.3		1.2	0.29	mg/Kg	☼	07/05/18 10:12	07/06/18 05:01	1
Magnesium	4260		24.6	1.1	mg/Kg	☼	07/05/18 10:12	07/06/18 05:01	1
Manganese	649	B	0.25	0.039	mg/Kg	☼	07/05/18 10:12	07/06/18 05:01	1
Nickel	32.3		6.1	0.28	mg/Kg	☼	07/05/18 10:12	07/06/18 05:01	1
Potassium	3150		36.8	24.6	mg/Kg	☼	07/05/18 10:12	07/06/18 05:01	1
Selenium	ND		4.9	0.49	mg/Kg	☼	07/05/18 10:12	07/06/18 05:01	1
Silver	ND		0.74	0.25	mg/Kg	☼	07/05/18 10:12	07/06/18 05:01	1
Sodium	68.8	J	172	16.0	mg/Kg	☼	07/05/18 10:12	07/06/18 05:01	1
Thallium	ND		7.4	0.37	mg/Kg	☼	07/05/18 10:12	07/06/18 05:01	1
Vanadium	23.3		0.61	0.14	mg/Kg	☼	07/05/18 10:12	07/06/18 05:01	1
Zinc	65.4		2.5	0.79	mg/Kg	☼	07/05/18 10:12	07/06/18 05:01	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.023	0.0095	mg/Kg	☼	07/05/18 13:20	07/05/18 14:51	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-47 (2-4")

Lab Sample ID: 480-138156-7

Date Collected: 06/26/18 08:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 85.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	5.7	0.41	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
1,1,2,2-Tetrachloroethane	ND	vs	5.7	0.92	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	5.7	1.3	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
1,1,2-Trichloroethane	ND	vs	5.7	0.73	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
1,1-Dichloroethane	ND	vs	5.7	0.69	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
1,1-Dichloroethene	ND	vs	5.7	0.69	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
1,2,4-Trichlorobenzene	ND	vs	5.7	0.34	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
1,2-Dibromo-3-Chloropropane	ND	vs	5.7	2.8	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
1,2-Dichlorobenzene	ND	vs	5.7	0.44	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
1,2-Dichloroethane	ND	vs	5.7	0.28	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
1,2-Dichloropropane	ND	vs	5.7	2.8	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
1,3-Dichlorobenzene	ND	vs	5.7	0.29	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
1,4-Dichlorobenzene	ND	vs	5.7	0.79	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
2-Butanone (MEK)	ND	vs	28	2.1	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
2-Hexanone	ND	vs	28	2.8	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
4-Methyl-2-pentanone (MIBK)	ND	vs	28	1.9	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Acetone	ND	vs	28	4.8	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Benzene	ND	vs	5.7	0.28	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Bromoform	ND	vs	5.7	2.8	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Bromomethane	ND	vs	5.7	0.51	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Carbon disulfide	ND	vs	5.7	2.8	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Carbon tetrachloride	ND	vs	5.7	0.55	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Chlorobenzene	ND	vs	5.7	0.75	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Dibromochloromethane	ND	vs	5.7	0.72	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Chloroethane	ND	* vs	5.7	1.3	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Chloroform	ND	vs	5.7	0.35	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Chloromethane	ND	vs	5.7	0.34	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
cis-1,2-Dichloroethene	ND	vs	5.7	0.72	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Cyclohexane	ND	vs	5.7	0.79	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Bromodichloromethane	ND	vs	5.7	0.76	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Dichlorodifluoromethane	ND	vs	5.7	0.47	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Ethylbenzene	ND	vs	5.7	0.39	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
1,2-Dibromoethane	ND	vs	5.7	0.73	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Isopropylbenzene	ND	vs	5.7	0.85	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Methyl acetate	ND	vs	28	3.4	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Methyl tert-butyl ether	ND	vs	5.7	0.56	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Methylcyclohexane	ND	vs	5.7	0.86	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Methylene Chloride	ND	vs	5.7	2.6	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Tetrachloroethene	ND	vs	5.7	0.76	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Toluene	ND	vs	5.7	0.43	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
trans-1,2-Dichloroethene	ND	vs	5.7	0.58	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
trans-1,3-Dichloropropene	ND	vs	5.7	2.5	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Trichloroethene	ND	vs	5.7	1.2	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Trichlorofluoromethane	ND	vs	5.7	0.53	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Vinyl chloride	ND	vs	5.7	0.69	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Xylenes, Total	ND	vs	11	0.95	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
cis-1,3-Dichloropropene	ND	vs	5.7	0.81	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1
Styrene	ND	vs	5.7	0.28	ug/Kg	☼	07/02/18 15:10	07/03/18 04:53	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-47 (2-4")

Lab Sample ID: 480-138156-7

Date Collected: 06/26/18 08:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 85.9

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		<i>ug/Kg</i>	<i>☼</i>			<i>07/02/18 15:10</i>	<i>07/03/18 04:53</i>	<i>1</i>
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>1,2-Dichloroethane-d4 (Surr)</i>	99		64 - 126				<i>07/02/18 15:10</i>	<i>07/03/18 04:53</i>	<i>1</i>
<i>4-Bromofluorobenzene (Surr)</i>	98		72 - 126				<i>07/02/18 15:10</i>	<i>07/03/18 04:53</i>	<i>1</i>
<i>Toluene-d8 (Surr)</i>	103		71 - 125				<i>07/02/18 15:10</i>	<i>07/03/18 04:53</i>	<i>1</i>
<i>Dibromofluoromethane (Surr)</i>	100		60 - 140				<i>07/02/18 15:10</i>	<i>07/03/18 04:53</i>	<i>1</i>

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		190	52	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
2,4,6-Trichlorophenol	ND		190	39	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
2,4-Dichlorophenol	ND		190	20	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
2,4-Dimethylphenol	ND		190	47	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
2,4-Dinitrophenol	ND		1900	890	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
2,4-Dinitrotoluene	ND		190	40	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
2,6-Dinitrotoluene	ND		190	23	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
2-Chloronaphthalene	ND		190	32	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
2-Chlorophenol	ND		190	35	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
2-Methylnaphthalene	ND		190	39	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
2-Methylphenol	ND		190	23	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
2-Nitroaniline	ND		370	28	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
2-Nitrophenol	ND		190	55	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
3,3'-Dichlorobenzidine	ND		370	230	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
3-Nitroaniline	ND		370	53	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
4,6-Dinitro-2-methylphenol	ND		370	190	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
4-Bromophenyl phenyl ether	ND		190	27	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
4-Chloro-3-methylphenol	ND		190	48	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
4-Chloroaniline	ND		190	48	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
4-Chlorophenyl phenyl ether	ND		190	24	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
4-Methylphenol	ND		370	23	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
4-Nitroaniline	ND		370	100	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
4-Nitrophenol	ND		370	140	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Acenaphthene	ND		190	28	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Acenaphthylene	ND		190	25	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Acetophenone	ND		190	26	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Anthracene	ND		190	48	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Atrazine	ND		190	67	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Benzaldehyde	ND		190	150	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Benzo[a]anthracene	ND		190	19	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Benzo[a]pyrene	ND		190	28	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Benzo[b]fluoranthene	ND		190	31	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Benzo[g,h,i]perylene	ND		190	20	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Benzo[k]fluoranthene	ND		190	25	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Biphenyl	ND		190	28	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
bis (2-chloroisopropyl) ether	ND		190	39	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Bis(2-chloroethoxy)methane	ND		190	41	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Bis(2-chloroethyl)ether	ND		190	25	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Bis(2-ethylhexyl) phthalate	ND		190	66	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Butyl benzyl phthalate	ND		190	32	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-47 (2-4")

Lab Sample ID: 480-138156-7

Date Collected: 06/26/18 08:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 85.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	ND		190	58	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Carbazole	ND		190	23	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Chrysene	ND		190	43	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Dibenz(a,h)anthracene	ND		190	34	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Dibenzofuran	ND		190	23	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Diethyl phthalate	ND		190	25	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Dimethyl phthalate	ND		190	23	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Di-n-butyl phthalate	ND		190	33	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Di-n-octyl phthalate	ND		190	23	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Fluoranthene	ND		190	20	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Fluorene	ND		190	23	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Hexachlorobenzene	ND		190	26	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Hexachlorobutadiene	ND		190	28	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Hexachlorocyclopentadiene	ND		190	26	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Hexachloroethane	ND		190	25	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Indeno[1,2,3-cd]pyrene	ND		190	24	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Isophorone	ND		190	41	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Naphthalene	ND		190	25	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Nitrobenzene	ND		190	22	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
N-Nitrosodi-n-propylamine	ND		190	33	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
N-Nitrosodiphenylamine	ND		190	160	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Pentachlorophenol	ND		370	190	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Phenanthrene	ND		190	28	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Phenol	ND		190	30	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1
Pyrene	ND		190	23	ug/Kg	☼	06/29/18 14:25	07/01/18 00:20	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	1100	T J	ug/Kg	☼	1.71		06/29/18 14:25	07/01/18 00:20	1
Unknown	510	T J	ug/Kg	☼	2.96		06/29/18 14:25	07/01/18 00:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	103		54 - 120	06/29/18 14:25	07/01/18 00:20	1
2-Fluorobiphenyl	86		60 - 120	06/29/18 14:25	07/01/18 00:20	1
2-Fluorophenol	81		52 - 120	06/29/18 14:25	07/01/18 00:20	1
Nitrobenzene-d5	88		53 - 120	06/29/18 14:25	07/01/18 00:20	1
Phenol-d5	85		54 - 120	06/29/18 14:25	07/01/18 00:20	1
p-Terphenyl-d14	110		65 - 121	06/29/18 14:25	07/01/18 00:20	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	14800		11.1	4.9	mg/Kg	☼	07/05/18 10:12	07/06/18 05:05	1
Antimony	ND		16.7	0.45	mg/Kg	☼	07/05/18 10:12	07/06/18 05:05	1
Arsenic	13.6		2.2	0.45	mg/Kg	☼	07/05/18 10:12	07/06/18 05:05	1
Barium	168		0.56	0.12	mg/Kg	☼	07/05/18 10:12	07/06/18 05:05	1
Beryllium	0.81		0.22	0.031	mg/Kg	☼	07/05/18 10:12	07/06/18 05:05	1
Cadmium	0.040	J	0.22	0.033	mg/Kg	☼	07/05/18 10:12	07/06/18 05:05	1
Calcium	4830	B	55.7	3.7	mg/Kg	☼	07/05/18 10:12	07/06/18 05:05	1
Chromium	17.4		0.56	0.22	mg/Kg	☼	07/05/18 10:12	07/06/18 05:05	1
Cobalt	15.8		0.56	0.056	mg/Kg	☼	07/05/18 10:12	07/06/18 05:05	1
Copper	19.2		1.1	0.23	mg/Kg	☼	07/05/18 10:12	07/06/18 05:05	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-47 (2-4")

Lab Sample ID: 480-138156-7

Date Collected: 06/26/18 08:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 85.9

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	28000		11.1	3.9	mg/Kg	☼	07/05/18 10:12	07/06/18 05:05	1
Lead	20.0		1.1	0.27	mg/Kg	☼	07/05/18 10:12	07/06/18 05:05	1
Magnesium	4600		22.3	1.0	mg/Kg	☼	07/05/18 10:12	07/06/18 05:05	1
Manganese	695	B	0.22	0.036	mg/Kg	☼	07/05/18 10:12	07/06/18 05:05	1
Nickel	28.8		5.6	0.26	mg/Kg	☼	07/05/18 10:12	07/06/18 05:05	1
Potassium	2880		33.4	22.3	mg/Kg	☼	07/05/18 10:12	07/06/18 05:05	1
Selenium	ND		4.5	0.45	mg/Kg	☼	07/05/18 10:12	07/06/18 05:05	1
Silver	ND		0.67	0.22	mg/Kg	☼	07/05/18 10:12	07/06/18 05:05	1
Sodium	79.5	J	156	14.5	mg/Kg	☼	07/05/18 10:12	07/06/18 05:05	1
Thallium	ND		6.7	0.33	mg/Kg	☼	07/05/18 10:12	07/06/18 05:05	1
Vanadium	20.5		0.56	0.12	mg/Kg	☼	07/05/18 10:12	07/06/18 05:05	1
Zinc	58.6		2.2	0.71	mg/Kg	☼	07/05/18 10:12	07/06/18 05:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.023	0.0094	mg/Kg	☼	07/05/18 13:20	07/05/18 14:53	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: MW-15 (4-6')

Lab Sample ID: 480-138156-8

Date Collected: 06/22/18 14:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 73.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1200	340	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
1,1,2,2-Tetrachloroethane	ND		1200	200	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F2	1200	610	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
1,1,2-Trichloroethane	ND		1200	250	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
1,1-Dichloroethane	ND		1200	380	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
1,1-Dichloroethene	ND		1200	420	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
1,2,4-Trichlorobenzene	ND		1200	460	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
1,2-Dibromo-3-Chloropropane	ND	F2	1200	610	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
1,2-Dichlorobenzene	ND		1200	310	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
1,2-Dichloroethane	ND		1200	500	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
1,2-Dichloropropane	ND		1200	200	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
1,3-Dichlorobenzene	ND		1200	320	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
1,4-Dichlorobenzene	ND		1200	170	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
2-Butanone (MEK)	ND	F1	6100	3600	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
2-Hexanone	ND	F1 *	6100	2500	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
4-Methyl-2-pentanone (MIBK)	ND		6100	390	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Acetone	ND	F1 *	6100	5000	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Benzene	ND		1200	230	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Bromoform	ND		1200	610	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Bromomethane	ND	F2	1200	270	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Carbon disulfide	ND		1200	550	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Carbon tetrachloride	ND		1200	310	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Chlorobenzene	ND		1200	160	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Dibromochloromethane	ND		1200	590	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Chloroethane	ND		1200	250	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Chloroform	ND		1200	830	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Chloromethane	ND		1200	290	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
cis-1,2-Dichloroethene	ND		1200	340	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Cyclohexane	ND	F1	1200	270	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Bromodichloromethane	ND		1200	240	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Dichlorodifluoromethane	ND		1200	530	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Ethylbenzene	ND		1200	350	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
1,2-Dibromoethane	ND		1200	210	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Isopropylbenzene	ND		1200	180	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Methyl acetate	ND	F1 *	6100	580	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Methyl tert-butyl ether	ND		1200	460	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Methylcyclohexane	23000		1200	570	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Methylene Chloride	ND		1200	240	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Tetrachloroethene	ND		1200	160	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Toluene	ND		1200	330	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
trans-1,2-Dichloroethene	ND		1200	290	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
trans-1,3-Dichloropropene	ND		1200	120	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Trichloroethene	ND		1200	340	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Trichlorofluoromethane	ND		1200	570	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Vinyl chloride	ND		1200	410	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Xylenes, Total	ND		2400	670	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
cis-1,3-Dichloropropene	ND		1200	290	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8
Styrene	ND		1200	290	ug/Kg	☼	07/02/18 11:36	07/03/18 02:41	8

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: MW-15 (4-6")

Lab Sample ID: 480-138156-8

Date Collected: 06/22/18 14:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 73.2

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Cyclohexane, 1,3-dimethyl-, cis-	21000	T J N	ug/Kg	☼	6.78	638-04-0	07/02/18 11:36	07/03/18 02:41	8
Unknown	16000	T J	ug/Kg	☼	8.02		07/02/18 11:36	07/03/18 02:41	8
Unknown	16000	T J	ug/Kg	☼	8.58		07/02/18 11:36	07/03/18 02:41	8
Unknown	15000	T J	ug/Kg	☼	8.87		07/02/18 11:36	07/03/18 02:41	8
Octane, 2,6-dimethyl-	16000	T J N	ug/Kg	☼	9.11	2051-30-1	07/02/18 11:36	07/03/18 02:41	8
Cyclohexane, propyl-	21000	T J N	ug/Kg	☼	9.25	1678-92-8	07/02/18 11:36	07/03/18 02:41	8
Unknown	22000	T J	ug/Kg	☼	9.44		07/02/18 11:36	07/03/18 02:41	8
Decane, 4-methyl-	14000	T J N	ug/Kg	☼	10.30	2847-72-5	07/02/18 11:36	07/03/18 02:41	8
Unknown	14000	T J	ug/Kg	☼	12.15		07/02/18 11:36	07/03/18 02:41	8
Unknown	17000	T J	ug/Kg	☼	12.33		07/02/18 11:36	07/03/18 02:41	8
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	119		53 - 146				07/02/18 11:36	07/03/18 02:41	8
4-Bromofluorobenzene (Surr)	110		49 - 148				07/02/18 11:36	07/03/18 02:41	8
Toluene-d8 (Surr)	94		50 - 149				07/02/18 11:36	07/03/18 02:41	8
Dibromofluoromethane (Surr)	102		60 - 140				07/02/18 11:36	07/03/18 02:41	8

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
2,4,5-Trichlorophenol	ND		4600	1200	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
2,4,6-Trichlorophenol	ND		4600	920	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
2,4-Dichlorophenol	ND		4600	490	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
2,4-Dimethylphenol	ND		4600	1100	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
2,4-Dinitrophenol	ND		45000	21000	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
2,4-Dinitrotoluene	ND		4600	950	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
2,6-Dinitrotoluene	ND		4600	540	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
2-Chloronaphthalene	ND		4600	760	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
2-Chlorophenol	ND		4600	840	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
2-Methylnaphthalene	ND		4600	920	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
2-Methylphenol	ND		4600	540	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
2-Nitroaniline	ND		8900	680	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
2-Nitrophenol	ND		4600	1300	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
3,3'-Dichlorobenzidine	ND		8900	5400	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
3-Nitroaniline	ND		8900	1300	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
4,6-Dinitro-2-methylphenol	ND		8900	4600	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
4-Bromophenyl phenyl ether	ND		4600	650	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
4-Chloro-3-methylphenol	ND		4600	1100	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
4-Chloroaniline	ND		4600	1100	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
4-Chlorophenyl phenyl ether	ND		4600	570	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
4-Methylphenol	ND		8900	540	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
4-Nitroaniline	ND		8900	2400	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
4-Nitrophenol	ND		8900	3200	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Acenaphthene	ND		4600	680	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Acenaphthylene	ND		4600	600	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Acetophenone	ND		4600	620	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Anthracene	ND		4600	1100	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Atrazine	ND		4600	1600	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Benzaldehyde	ND		4600	3700	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Benzo[a]anthracene	ND		4600	460	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Benzo[a]pyrene	ND		4600	680	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: MW-15 (4-6')

Lab Sample ID: 480-138156-8

Date Collected: 06/22/18 14:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 73.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		4600	730	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Benzo[g,h,i]perylene	ND		4600	490	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Benzo[k]fluoranthene	ND		4600	600	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Biphenyl	ND		4600	680	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
bis (2-chloroisopropyl) ether	ND		4600	920	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Bis(2-chloroethoxy)methane	ND		4600	980	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Bis(2-chloroethyl)ether	ND		4600	600	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Bis(2-ethylhexyl) phthalate	ND		4600	1600	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Butyl benzyl phthalate	ND		4600	760	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Caprolactam	ND		4600	1400	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Carbazole	ND		4600	540	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Chrysene	ND		4600	1000	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Dibenz(a,h)anthracene	ND		4600	810	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Dibenzofuran	ND		4600	540	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Diethyl phthalate	ND		4600	600	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Dimethyl phthalate	ND		4600	540	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Di-n-butyl phthalate	ND		4600	790	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Di-n-octyl phthalate	ND		4600	540	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Fluoranthene	ND		4600	490	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Fluorene	ND		4600	540	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Hexachlorobenzene	ND		4600	620	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Hexachlorobutadiene	ND		4600	680	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Hexachlorocyclopentadiene	ND		4600	620	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Hexachloroethane	ND		4600	600	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Indeno[1,2,3-cd]pyrene	ND		4600	570	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Isophorone	ND		4600	980	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Naphthalene	ND		4600	600	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Nitrobenzene	ND		4600	520	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
N-Nitrosodi-n-propylamine	ND		4600	790	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
N-Nitrosodiphenylamine	ND		4600	3700	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Pentachlorophenol	ND		8900	4600	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Phenanthrene	ND		4600	680	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Phenol	ND		4600	700	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20
Pyrene	ND		4600	540	ug/Kg	☼	06/29/18 14:25	07/01/18 00:45	20

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	5200	T J	ug/Kg	☼	5.50		06/29/18 14:25	07/01/18 00:45	20
Unknown	4800	T J	ug/Kg	☼	6.00		06/29/18 14:25	07/01/18 00:45	20
Cyclohexane, pentyl-	5700	T J N	ug/Kg	☼	6.44	4292-92-6	06/29/18 14:25	07/01/18 00:45	20
Unknown	5700	T J	ug/Kg	☼	6.55		06/29/18 14:25	07/01/18 00:45	20
Undecane, 2,6-dimethyl-	9400	T J N	ug/Kg	☼	7.02	17301-23-4	06/29/18 14:25	07/01/18 00:45	20
Cyclohexane, hexyl-	6000	T J N	ug/Kg	☼	7.26	4292-75-5	06/29/18 14:25	07/01/18 00:45	20
Unknown	5400	T J	ug/Kg	☼	7.32		06/29/18 14:25	07/01/18 00:45	20
Octane, 2,6-dimethyl-	15000	T J N	ug/Kg	☼	7.45	2051-30-1	06/29/18 14:25	07/01/18 00:45	20
Unknown	6600	T J	ug/Kg	☼	7.62		06/29/18 14:25	07/01/18 00:45	20
Heptylcyclohexane	8300	T J N	ug/Kg	☼	7.99	5617-41-4	06/29/18 14:25	07/01/18 00:45	20
Unknown	7000	T J	ug/Kg	☼	8.33		06/29/18 14:25	07/01/18 00:45	20
Heptadecane, 2,6,10,14-tetramethyl-	16000	T J N	ug/Kg	☼	8.70	18344-37-1	06/29/18 14:25	07/01/18 00:45	20
Unknown	6200	T J	ug/Kg	☼	8.96		06/29/18 14:25	07/01/18 00:45	20
Unknown	5600	T J	ug/Kg	☼	9.31		06/29/18 14:25	07/01/18 00:45	20

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: MW-15 (4-6')

Lab Sample ID: 480-138156-8

Date Collected: 06/22/18 14:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 73.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	5400	T J	ug/Kg	☼	9.57		06/29/18 14:25	07/01/18 00:45	20
Unknown	4800	T J	ug/Kg	☼	9.64		06/29/18 14:25	07/01/18 00:45	20
Pentadecane, 2,6,10-trimethyl-	15000	T J N	ug/Kg	☼	9.79	3892-00-0	06/29/18 14:25	07/01/18 00:45	20
Pentadecane, 2,6,10,14-tetramethyl-	21000	T J N	ug/Kg	☼	10.08	1921-70-6	06/29/18 14:25	07/01/18 00:45	20
Tetradecane, 2,6,10-trimethyl-	5500	T J N	ug/Kg	☼	10.92	14905-56-7	06/29/18 14:25	07/01/18 00:45	20
Unknown	13000	T J	ug/Kg	☼	16.61		06/29/18 14:25	07/01/18 00:45	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	115		54 - 120				06/29/18 14:25	07/01/18 00:45	20
2-Fluorobiphenyl	86		60 - 120				06/29/18 14:25	07/01/18 00:45	20
2-Fluorophenol	50	X	52 - 120				06/29/18 14:25	07/01/18 00:45	20
Nitrobenzene-d5	0	X	53 - 120				06/29/18 14:25	07/01/18 00:45	20
Phenol-d5	61		54 - 120				06/29/18 14:25	07/01/18 00:45	20
p-Terphenyl-d14	91		65 - 121				06/29/18 14:25	07/01/18 00:45	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	13600		13.0	5.7	mg/Kg	☼	07/05/18 10:12	07/06/18 05:09	1
Antimony	ND		19.5	0.52	mg/Kg	☼	07/05/18 10:12	07/06/18 05:09	1
Arsenic	18.7		2.6	0.52	mg/Kg	☼	07/05/18 10:12	07/06/18 05:09	1
Barium	141		0.65	0.14	mg/Kg	☼	07/05/18 10:12	07/06/18 05:09	1
Beryllium	0.87		0.26	0.036	mg/Kg	☼	07/05/18 10:12	07/06/18 05:09	1
Cadmium	0.17	J	0.26	0.039	mg/Kg	☼	07/05/18 10:12	07/06/18 05:09	1
Calcium	1100	B	64.9	4.3	mg/Kg	☼	07/05/18 10:12	07/06/18 05:09	1
Chromium	15.7		0.65	0.26	mg/Kg	☼	07/05/18 10:12	07/06/18 05:09	1
Cobalt	11.3		0.65	0.065	mg/Kg	☼	07/05/18 10:12	07/06/18 05:09	1
Copper	17.1		1.3	0.27	mg/Kg	☼	07/05/18 10:12	07/06/18 05:09	1
Iron	28300		13.0	4.5	mg/Kg	☼	07/05/18 10:12	07/06/18 05:09	1
Lead	27.5		1.3	0.31	mg/Kg	☼	07/05/18 10:12	07/06/18 05:09	1
Magnesium	2330		26.0	1.2	mg/Kg	☼	07/05/18 10:12	07/06/18 05:09	1
Manganese	864	B	0.26	0.042	mg/Kg	☼	07/05/18 10:12	07/06/18 05:09	1
Nickel	15.5		6.5	0.30	mg/Kg	☼	07/05/18 10:12	07/06/18 05:09	1
Potassium	1760		39.0	26.0	mg/Kg	☼	07/05/18 10:12	07/06/18 05:09	1
Selenium	ND		5.2	0.52	mg/Kg	☼	07/05/18 10:12	07/06/18 05:09	1
Silver	ND		0.78	0.26	mg/Kg	☼	07/05/18 10:12	07/06/18 05:09	1
Sodium	46.8	J	182	16.9	mg/Kg	☼	07/05/18 10:12	07/06/18 05:09	1
Thallium	ND		7.8	0.39	mg/Kg	☼	07/05/18 10:12	07/06/18 05:09	1
Vanadium	26.7		0.65	0.14	mg/Kg	☼	07/05/18 10:12	07/06/18 05:09	1
Zinc	49.6		2.6	0.83	mg/Kg	☼	07/05/18 10:12	07/06/18 05:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.037		0.027	0.011	mg/Kg	☼	07/05/18 13:20	07/05/18 14:54	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: MW-13 (8-10')

Lab Sample ID: 480-138156-9

Date Collected: 06/22/18 10:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 82.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	5.9	0.43	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
1,1,2,2-Tetrachloroethane	ND	vs	5.9	0.96	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	5.9	1.4	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
1,1,2-Trichloroethane	ND	vs	5.9	0.77	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
1,1-Dichloroethane	ND	vs	5.9	0.72	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
1,1-Dichloroethene	ND	vs	5.9	0.73	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
1,2,4-Trichlorobenzene	ND	vs	5.9	0.36	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
1,2-Dibromo-3-Chloropropane	ND	vs	5.9	3.0	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
1,2-Dichlorobenzene	ND	vs	5.9	0.46	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
1,2-Dichloroethane	ND	vs	5.9	0.30	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
1,2-Dichloropropane	ND	vs	5.9	3.0	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
1,3-Dichlorobenzene	ND	vs	5.9	0.31	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
1,4-Dichlorobenzene	ND	vs	5.9	0.83	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
2-Butanone (MEK)	ND	vs	30	2.2	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
2-Hexanone	ND	vs	30	3.0	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
4-Methyl-2-pentanone (MIBK)	ND	vs	30	1.9	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Acetone	ND	vs	30	5.0	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Benzene	ND	vs	5.9	0.29	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Bromoform	ND	vs	5.9	3.0	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Bromomethane	ND	vs	5.9	0.53	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Carbon disulfide	ND	vs	5.9	3.0	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Carbon tetrachloride	ND	vs	5.9	0.58	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Chlorobenzene	ND	vs	5.9	0.78	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Dibromochloromethane	ND	vs	5.9	0.76	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Chloroethane	ND	* vs	5.9	1.3	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Chloroform	ND	vs	5.9	0.37	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Chloromethane	ND	vs	5.9	0.36	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
cis-1,2-Dichloroethene	ND	vs	5.9	0.76	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Cyclohexane	ND	vs	5.9	0.83	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Bromodichloromethane	ND	vs	5.9	0.80	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Dichlorodifluoromethane	ND	vs	5.9	0.49	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Ethylbenzene	ND	vs	5.9	0.41	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
1,2-Dibromoethane	ND	vs	5.9	0.76	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Isopropylbenzene	ND	vs	5.9	0.90	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Methyl acetate	ND	vs	30	3.6	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Methyl tert-butyl ether	ND	vs	5.9	0.58	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Methylcyclohexane	ND	vs	5.9	0.90	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Methylene Chloride	ND	vs	5.9	2.7	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Tetrachloroethene	ND	vs	5.9	0.80	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Toluene	ND	vs	5.9	0.45	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
trans-1,2-Dichloroethene	ND	vs	5.9	0.61	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
trans-1,3-Dichloropropene	ND	vs	5.9	2.6	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Trichloroethene	ND	vs	5.9	1.3	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Trichlorofluoromethane	ND	vs	5.9	0.56	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Vinyl chloride	ND	vs	5.9	0.72	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Xylenes, Total	ND	vs	12	1.0	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
cis-1,3-Dichloropropene	ND	vs	5.9	0.86	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1
Styrene	ND	vs	5.9	0.30	ug/Kg	☼	07/02/18 15:10	07/03/18 05:18	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: MW-13 (8-10')

Lab Sample ID: 480-138156-9

Date Collected: 06/22/18 10:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 82.4

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		<i>ug/Kg</i>	<i>☼</i>			<i>07/02/18 15:10</i>	<i>07/03/18 05:18</i>	<i>1</i>
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>1,2-Dichloroethane-d4 (Surr)</i>	<i>100</i>		<i>64 - 126</i>				<i>07/02/18 15:10</i>	<i>07/03/18 05:18</i>	<i>1</i>
<i>4-Bromofluorobenzene (Surr)</i>	<i>94</i>		<i>72 - 126</i>				<i>07/02/18 15:10</i>	<i>07/03/18 05:18</i>	<i>1</i>
<i>Toluene-d8 (Surr)</i>	<i>103</i>		<i>71 - 125</i>				<i>07/02/18 15:10</i>	<i>07/03/18 05:18</i>	<i>1</i>
<i>Dibromofluoromethane (Surr)</i>	<i>100</i>		<i>60 - 140</i>				<i>07/02/18 15:10</i>	<i>07/03/18 05:18</i>	<i>1</i>

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		200	55	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
2,4,6-Trichlorophenol	ND		200	41	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
2,4-Dichlorophenol	ND		200	22	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
2,4-Dimethylphenol	ND		200	49	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
2,4-Dinitrophenol	ND		2000	940	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
2,4-Dinitrotoluene	ND		200	42	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
2,6-Dinitrotoluene	ND		200	24	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
2-Chloronaphthalene	ND		200	34	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
2-Chlorophenol	ND		200	37	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
2-Methylnaphthalene	ND		200	41	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
2-Methylphenol	ND		200	24	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
2-Nitroaniline	ND		400	30	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
2-Nitrophenol	ND		200	57	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
3,3'-Dichlorobenzidine	ND		400	240	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
3-Nitroaniline	ND		400	56	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
4,6-Dinitro-2-methylphenol	ND		400	200	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
4-Bromophenyl phenyl ether	ND		200	29	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
4-Chloro-3-methylphenol	ND		200	50	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
4-Chloroaniline	ND		200	50	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
4-Chlorophenyl phenyl ether	ND		200	25	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
4-Methylphenol	ND		400	24	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
4-Nitroaniline	ND		400	110	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
4-Nitrophenol	ND		400	140	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Acenaphthene	ND		200	30	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Acenaphthylene	ND		200	26	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Acetophenone	ND		200	28	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Anthracene	ND		200	50	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Atrazine	ND		200	71	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Benzaldehyde	ND		200	160	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Benzo[a]anthracene	ND		200	20	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Benzo[a]pyrene	ND		200	30	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Benzo[b]fluoranthene	ND		200	32	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Benzo[g,h,i]perylene	ND		200	22	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Benzo[k]fluoranthene	ND	F1	200	26	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Biphenyl	ND		200	30	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
bis (2-chloroisopropyl) ether	ND		200	41	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Bis(2-chloroethoxy)methane	ND		200	43	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Bis(2-chloroethyl)ether	ND		200	26	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Bis(2-ethylhexyl) phthalate	ND		200	69	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Butyl benzyl phthalate	ND	F1	200	34	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: MW-13 (8-10')

Lab Sample ID: 480-138156-9

Date Collected: 06/22/18 10:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 82.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	ND		200	61	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Carbazole	ND		200	24	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Chrysene	ND		200	46	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Dibenz(a,h)anthracene	ND		200	36	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Dibenzofuran	ND		200	24	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Diethyl phthalate	ND	F1	200	26	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Dimethyl phthalate	ND		200	24	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Di-n-butyl phthalate	ND		200	35	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Di-n-octyl phthalate	30	J	200	24	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Fluoranthene	ND	F1	200	22	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Fluorene	ND		200	24	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Hexachlorobenzene	ND		200	28	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Hexachlorobutadiene	ND		200	30	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Hexachlorocyclopentadiene	ND		200	28	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Hexachloroethane	ND		200	26	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Indeno[1,2,3-cd]pyrene	ND		200	25	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Isophorone	ND		200	43	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Naphthalene	ND		200	26	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Nitrobenzene	ND		200	23	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
N-Nitrosodi-n-propylamine	ND		200	35	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
N-Nitrosodiphenylamine	ND		200	170	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Pentachlorophenol	ND		400	200	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Phenanthrene	ND		200	30	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Phenol	ND		200	31	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1
Pyrene	ND		200	24	ug/Kg	☼	06/29/18 14:25	06/30/18 21:25	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	1300	T J	ug/Kg	☼	1.72		06/29/18 14:25	06/30/18 21:25	1
Unknown	810	T J	ug/Kg	☼	2.97		06/29/18 14:25	06/30/18 21:25	1
p-Xylene	240	T J N	ug/Kg	☼	3.49	106-42-3	06/29/18 14:25	06/30/18 21:25	1
Unknown	190	T J	ug/Kg	☼	13.66		06/29/18 14:25	06/30/18 21:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	92		54 - 120	06/29/18 14:25	06/30/18 21:25	1
2-Fluorobiphenyl	89		60 - 120	06/29/18 14:25	06/30/18 21:25	1
2-Fluorophenol	85		52 - 120	06/29/18 14:25	06/30/18 21:25	1
Nitrobenzene-d5	89		53 - 120	06/29/18 14:25	06/30/18 21:25	1
Phenol-d5	89		54 - 120	06/29/18 14:25	06/30/18 21:25	1
p-Terphenyl-d14	107		65 - 121	06/29/18 14:25	06/30/18 21:25	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	17200		11.4	5.0	mg/Kg	☼	07/05/18 10:12	07/06/18 05:13	1
Antimony	ND		17.1	0.46	mg/Kg	☼	07/05/18 10:12	07/06/18 05:13	1
Arsenic	17.7		2.3	0.46	mg/Kg	☼	07/05/18 10:12	07/06/18 05:13	1
Barium	211		0.57	0.13	mg/Kg	☼	07/05/18 10:12	07/06/18 05:13	1
Beryllium	1.1		0.23	0.032	mg/Kg	☼	07/05/18 10:12	07/06/18 05:13	1
Cadmium	ND		0.23	0.034	mg/Kg	☼	07/05/18 10:12	07/06/18 05:13	1
Calcium	3020	B	57.0	3.8	mg/Kg	☼	07/05/18 10:12	07/06/18 05:13	1
Chromium	23.4		0.57	0.23	mg/Kg	☼	07/05/18 10:12	07/06/18 05:13	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: MW-13 (8-10')

Lab Sample ID: 480-138156-9

Date Collected: 06/22/18 10:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 82.4

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	17.0		0.57	0.057	mg/Kg	☼	07/05/18 10:12	07/06/18 05:13	1
Copper	15.2		1.1	0.24	mg/Kg	☼	07/05/18 10:12	07/06/18 05:13	1
Iron	34600		11.4	4.0	mg/Kg	☼	07/05/18 10:12	07/06/18 05:13	1
Lead	17.7		1.1	0.27	mg/Kg	☼	07/05/18 10:12	07/06/18 05:13	1
Magnesium	5660		22.8	1.1	mg/Kg	☼	07/05/18 10:12	07/06/18 05:13	1
Manganese	423	B	0.23	0.036	mg/Kg	☼	07/05/18 10:12	07/06/18 05:13	1
Nickel	38.8		5.7	0.26	mg/Kg	☼	07/05/18 10:12	07/06/18 05:13	1
Potassium	2710		34.2	22.8	mg/Kg	☼	07/05/18 10:12	07/06/18 05:13	1
Selenium	ND		4.6	0.46	mg/Kg	☼	07/05/18 10:12	07/06/18 05:13	1
Silver	ND		0.68	0.23	mg/Kg	☼	07/05/18 10:12	07/06/18 05:13	1
Sodium	73.0	J	160	14.8	mg/Kg	☼	07/05/18 10:12	07/06/18 05:13	1
Thallium	ND		6.8	0.34	mg/Kg	☼	07/05/18 10:12	07/06/18 05:13	1
Vanadium	18.0		0.57	0.13	mg/Kg	☼	07/05/18 10:12	07/06/18 05:13	1
Zinc	78.5		2.3	0.73	mg/Kg	☼	07/05/18 10:12	07/06/18 05:13	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.023	0.0091	mg/Kg	☼	07/05/18 13:20	07/05/18 14:59	1

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (64-126)	BFB (72-126)	TOL (71-125)	DBFM (60-140)
480-138156-1	TP-41 (7.5-9")	100	97	102	100
480-138156-2	TP-42 (8-10")	99	100	102	99
480-138156-4	TP-44 (2-3")	101	98	101	101
480-138156-6	TP-46 (4-6")	104	96	100	98
480-138156-7	TP-47 (2-4")	99	98	103	100
480-138156-9	MW-13 (8-10")	100	94	103	100
LCS 480-422692/23-A	Lab Control Sample	96	103	103	100
LCS 480-423238/1-A	Lab Control Sample	95	103	103	100
MB 480-422692/2-A	Method Blank	99	99	101	99
MB 480-423238/2-A	Method Blank	98	98	102	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (53-146)	BFB (49-148)	TOL (50-149)	DBFM (60-140)
480-138156-3	TP-43 (7-9")	112	109	97	90
480-138156-5	TP-45 (4-6")	112	102	90	93
480-138156-8	MW-15 (4-6")	119	110	94	102
480-138156-8 MS	MW-15 (4-6")	109	101	93	96
480-138156-8 MSD	MW-15 (4-6")	110	109	95	97
LCS 480-422642/1-A	Lab Control Sample	110	106	94	97
MB 480-422642/2-A	Method Blank	106	103	96	90

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (54-120)	FBP (60-120)	2FP (52-120)	NBZ (53-120)	PHL (54-120)	TPHd14 (65-121)
480-138156-1	TP-41 (7.5-9")	92	93	86	92	89	111
480-138156-2	TP-42 (8-10")	0 X	87	0 X	0 X	0 X	106
480-138156-3	TP-43 (7-9")	112	100	85	97	93	114
480-138156-4	TP-44 (2-3")	97	90	80	89	88	104
480-138156-5	TP-45 (4-6")	108	88	58	0 X	60	102
480-138156-6	TP-46 (4-6")	105	90	83	89	90	111
480-138156-7	TP-47 (2-4")	103	86	81	88	85	110

TestAmerica Buffalo

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (54-120)	FBP (60-120)	2FP (52-120)	NBZ (53-120)	PHL (54-120)	TPHd14 (65-121)
480-138156-8	MW-15 (4-6')	115	86	50 X	0 X	61	91
480-138156-9	MW-13 (8-10')	92	89	85	89	89	107
480-138156-9 MS	MW-13 (8-10')	115	98	88	98	99	115
480-138156-9 MSD	MW-13 (8-10')	106	90	87	93	94	104
LCS 480-422353/2-A	Lab Control Sample	109	96	86	96	95	111
MB 480-422353/1-A	Method Blank	94	91	84	92	88	107
Surrogate Legend							
TBP = 2,4,6-Tribromophenol							
FBP = 2-Fluorobiphenyl							
2FP = 2-Fluorophenol							
NBZ = Nitrobenzene-d5							
PHL = Phenol-d5							
TPHd14 = p-Terphenyl-d14							

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1 (45-120)	DCBP2 (45-120)	TCX1 (30-124)	TCX2 (30-124)
480-138156-5	TP-45 (4-6")	52	51	52	50
480-138156-6	TP-46 (4-6')	97	82	88	87
480-138156-6 MS	TP-46 (4-6')	98	86	91	89
480-138156-6 MSD	TP-46 (4-6')	106	89	101	96
LCS 480-422358/2-A	Lab Control Sample	84	68	74	71
MB 480-422358/1-A	Method Blank	114	101	101	99
Surrogate Legend					
DCBP = DCB Decachlorobiphenyl					
TCX = Tetrachloro-m-xylene					

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TCX1 (60-154)	TCX2 (60-154)	DCBP1 (65-174)	DCBP2 (65-174)
480-138156-5	TP-45 (4-6")	74	70	72	87
480-138156-6	TP-46 (4-6')	91	81	79	97
LCS 480-422239/2-A	Lab Control Sample	103	85	81	96
MB 480-422239/1-A	Method Blank	85	79	68	80
Surrogate Legend					
TCX = Tetrachloro-m-xylene					
DCBP = DCB Decachlorobiphenyl					

TestAmerica Buffalo

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Method: 8151A - Chlorinated Herbicides by GC

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCPAA1 (28-129)	DCPAA2 (28-129)
480-138156-5	TP-45 (4-6")	69	68
480-138156-6	TP-46 (4-6')	56	64
LCS 480-422237/2-A	Lab Control Sample	97	66
MB 480-422237/1-A	Method Blank	74	69
Surrogate Legend			
DCPAA = 2,4-Dichlorophenylacetic acid			

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-422642/2-A

Matrix: Solid

Analysis Batch: 422725

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422642

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	28	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
1,1,2,2-Tetrachloroethane	ND		100	16	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	50	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
1,1,2-Trichloroethane	ND		100	21	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
1,1-Dichloroethane	ND		100	31	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
1,1-Dichloroethene	ND		100	35	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
1,2,4-Trichlorobenzene	ND		100	38	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
1,2-Dibromo-3-Chloropropane	ND		100	50	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
1,2-Dichlorobenzene	ND		100	26	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
1,2-Dichloroethane	ND		100	41	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
1,2-Dichloropropane	ND		100	16	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
1,3-Dichlorobenzene	ND		100	27	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
1,4-Dichlorobenzene	ND		100	14	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
2-Butanone (MEK)	ND		500	300	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
2-Hexanone	ND		500	210	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
4-Methyl-2-pentanone (MIBK)	ND		500	32	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Acetone	ND		500	410	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Benzene	ND		100	19	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Bromoform	ND		100	50	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Bromomethane	ND		100	22	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Carbon disulfide	ND		100	46	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Carbon tetrachloride	ND		100	26	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Chlorobenzene	ND		100	13	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Dibromochloromethane	ND		100	48	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Chloroethane	ND		100	21	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Chloroform	ND		100	69	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Chloromethane	ND		100	24	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
cis-1,2-Dichloroethene	ND		100	28	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Cyclohexane	ND		100	22	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Bromodichloromethane	ND		100	20	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Dichlorodifluoromethane	ND		100	44	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Ethylbenzene	ND		100	29	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
1,2-Dibromoethane	ND		100	18	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Isopropylbenzene	ND		100	15	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Methyl acetate	ND		500	48	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Methyl tert-butyl ether	ND		100	38	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Methylcyclohexane	ND		100	47	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Methylene Chloride	ND		100	20	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Tetrachloroethene	ND		100	13	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Toluene	ND		100	27	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
trans-1,2-Dichloroethene	ND		100	24	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
trans-1,3-Dichloropropene	ND		100	9.8	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Trichloroethene	ND		100	28	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Trichlorofluoromethane	ND		100	47	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Vinyl chloride	ND		100	34	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Xylenes, Total	ND		200	55	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
cis-1,3-Dichloropropene	ND		100	24	ug/Kg		07/02/18 11:36	07/02/18 22:29	1
Styrene	ND		100	24	ug/Kg		07/02/18 11:36	07/02/18 22:29	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		ug/Kg				07/02/18 11:36	07/02/18 22:29	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	106		53 - 146				07/02/18 11:36	07/02/18 22:29	1
4-Bromofluorobenzene (Surr)	103		49 - 148				07/02/18 11:36	07/02/18 22:29	1
Toluene-d8 (Surr)	96		50 - 149				07/02/18 11:36	07/02/18 22:29	1
Dibromofluoromethane (Surr)	90		60 - 140				07/02/18 11:36	07/02/18 22:29	1

Lab Sample ID: LCS 480-422642/1-A

Matrix: Solid

Analysis Batch: 422725

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422642

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>
1,1,1-Trichloroethane	2500	2380		ug/Kg		95	68 - 130
1,1,2,2-Tetrachloroethane	2500	2330		ug/Kg		93	73 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	2500	2310		ug/Kg		92	10 - 179
1,1,2-Trichloroethane	2500	2530		ug/Kg		101	80 - 120
1,1-Dichloroethane	2500	2540		ug/Kg		102	78 - 121
1,1-Dichloroethene	2500	2110		ug/Kg		84	48 - 133
1,2,4-Trichlorobenzene	2500	2630		ug/Kg		105	70 - 140
1,2-Dibromo-3-Chloropropane	2500	2250		ug/Kg		90	56 - 122
1,2-Dichlorobenzene	2500	2480		ug/Kg		99	78 - 125
1,2-Dichloroethane	2500	2800		ug/Kg		112	74 - 127
1,2-Dichloropropane	2500	2590		ug/Kg		103	80 - 120
1,3-Dichlorobenzene	2500	2530		ug/Kg		101	80 - 120
1,4-Dichlorobenzene	2500	2500		ug/Kg		100	80 - 120
2-Butanone (MEK)	12500	17300		ug/Kg		139	54 - 149
2-Hexanone	12500	17200	*	ug/Kg		138	59 - 127
4-Methyl-2-pentanone (MIBK)	12500	14400		ug/Kg		115	74 - 120
Acetone	12500	21800	*	ug/Kg		175	47 - 141
Benzene	2500	2420		ug/Kg		97	77 - 125
Bromoform	2500	2180		ug/Kg		87	48 - 125
Bromomethane	2500	2620		ug/Kg		105	39 - 149
Carbon disulfide	2500	1930		ug/Kg		77	40 - 136
Carbon tetrachloride	2500	2380		ug/Kg		95	54 - 135
Chlorobenzene	2500	2490		ug/Kg		100	76 - 126
Dibromochloromethane	2500	2220		ug/Kg		89	64 - 120
Chloroethane	2500	3070		ug/Kg		123	23 - 150
Chloroform	2500	2420		ug/Kg		97	78 - 120
Chloromethane	2500	2590		ug/Kg		104	61 - 124
cis-1,2-Dichloroethene	2500	2370		ug/Kg		95	79 - 124
Cyclohexane	2500	2380		ug/Kg		95	49 - 129
Bromodichloromethane	2500	2440		ug/Kg		98	71 - 121
Dichlorodifluoromethane	2500	2010		ug/Kg		80	10 - 150
Ethylbenzene	2500	2470		ug/Kg		99	78 - 124
1,2-Dibromoethane	2500	2580		ug/Kg		103	80 - 120
Isopropylbenzene	2500	2430		ug/Kg		97	76 - 120
Methyl acetate	5000	6440	*	ug/Kg		129	71 - 123
Methyl tert-butyl ether	2500	2370		ug/Kg		95	67 - 137
Methylcyclohexane	2500	2500		ug/Kg		100	50 - 130
Methylene Chloride	2500	2280		ug/Kg		91	75 - 118
Tetrachloroethene	2500	2610		ug/Kg		105	73 - 133

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

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

Lab Sample ID: LCS 480-422642/1-A

Matrix: Solid

Analysis Batch: 422725

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422642

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	2500	2450		ug/Kg		98	75 - 124
trans-1,2-Dichloroethene	2500	2260		ug/Kg		90	74 - 129
trans-1,3-Dichloropropene	2500	2330		ug/Kg		93	73 - 120
Trichloroethene	2500	2490		ug/Kg		100	75 - 131
Trichlorofluoromethane	2500	2740		ug/Kg		110	29 - 158
Vinyl chloride	2500	2350		ug/Kg		94	59 - 124
cis-1,3-Dichloropropene	2500	2360		ug/Kg		94	75 - 121
Styrene	2500	2530		ug/Kg		101	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	110		53 - 146
4-Bromofluorobenzene (Surr)	106		49 - 148
Toluene-d8 (Surr)	94		50 - 149
Dibromofluoromethane (Surr)	97		60 - 140

Lab Sample ID: 480-138156-8 MS

Matrix: Solid

Analysis Batch: 422725

Client Sample ID: MW-15 (4-6')

Prep Type: Total/NA

Prep Batch: 422642

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		3340	3220		ug/Kg	☼	96	64 - 142
1,1,2,2-Tetrachloroethane	ND		3340	2900		ug/Kg	☼	87	56 - 128
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F2	3340	2430		ug/Kg	☼	73	64 - 154
1,1,2-Trichloroethane	ND		3340	3580		ug/Kg	☼	107	63 - 133
1,1-Dichloroethane	ND		3340	3320		ug/Kg	☼	99	64 - 135
1,1-Dichloroethene	ND		3340	2840		ug/Kg	☼	85	62 - 145
1,2,4-Trichlorobenzene	ND		3340	3520		ug/Kg	☼	105	56 - 145
1,2-Dibromo-3-Chloropropane	ND	F2	3340	2330		ug/Kg	☼	70	40 - 122
1,2-Dichlorobenzene	ND		3340	3430		ug/Kg	☼	103	68 - 133
1,2-Dichloroethane	ND		3340	4090		ug/Kg	☼	122	62 - 135
1,2-Dichloropropane	ND		3340	3460		ug/Kg	☼	104	67 - 139
1,3-Dichlorobenzene	ND		3340	3320		ug/Kg	☼	99	68 - 136
1,4-Dichlorobenzene	ND		3340	3190		ug/Kg	☼	95	69 - 136
2-Butanone (MEK)	ND	F1	16700	19400		ug/Kg	☼	116	46 - 132
2-Hexanone	ND	F1 *	16700	23500	F1	ug/Kg	☼	140	44 - 130
4-Methyl-2-pentanone (MIBK)	ND		16700	20000		ug/Kg	☼	120	49 - 125
Acetone	ND	F1 *	16700	29600	F1	ug/Kg	☼	177	32 - 136
Benzene	ND		3340	3220		ug/Kg	☼	96	68 - 137
Bromoform	ND		3340	2180		ug/Kg	☼	65	43 - 134
Bromomethane	ND	F2	3340	3320		ug/Kg	☼	99	38 - 137
Carbon disulfide	ND		3340	2310		ug/Kg	☼	69	52 - 139
Carbon tetrachloride	ND		3340	3220		ug/Kg	☼	96	60 - 150
Chlorobenzene	ND		3340	3240		ug/Kg	☼	97	67 - 136
Dibromochloromethane	ND		3340	2500		ug/Kg	☼	75	57 - 137
Chloroethane	ND		3340	3570		ug/Kg	☼	107	34 - 140
Chloroform	ND		3340	3040		ug/Kg	☼	91	64 - 133
Chloromethane	ND		3340	3830		ug/Kg	☼	115	47 - 143

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

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

Lab Sample ID: 480-138156-8 MS

Matrix: Solid

Analysis Batch: 422725

Client Sample ID: MW-15 (4-6')

Prep Type: Total/NA

Prep Batch: 422642

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	ND		3340	3090		ug/Kg	✱	92	65 - 137
Cyclohexane	ND	F1	3340	6400	F1	ug/Kg	✱	191	63 - 149
Bromodichloromethane	ND		3340	3060		ug/Kg	✱	91	62 - 136
Dichlorodifluoromethane	ND		3340	2720		ug/Kg	✱	81	26 - 150
Ethylbenzene	ND		3340	3240		ug/Kg	✱	97	67 - 136
1,2-Dibromoethane	ND		3340	2850		ug/Kg	✱	85	65 - 133
Isopropylbenzene	ND		3340	3150		ug/Kg	✱	94	65 - 147
Methyl acetate	ND	F1 *	6680	8100		ug/Kg	✱	121	50 - 124
Methyl tert-butyl ether	ND		3340	2980		ug/Kg	✱	89	60 - 130
Methylcyclohexane	23000		3340	15500	4	ug/Kg	✱	-217	67 - 150
Methylene Chloride	ND		3340	2380		ug/Kg	✱	71	63 - 138
Tetrachloroethene	ND		3340	3400		ug/Kg	✱	102	67 - 150
Toluene	ND		3340	3070		ug/Kg	✱	92	68 - 137
trans-1,2-Dichloroethene	ND		3340	2980		ug/Kg	✱	89	65 - 138
trans-1,3-Dichloropropene	ND		3340	2320		ug/Kg	✱	69	58 - 143
Trichloroethene	ND		3340	2960		ug/Kg	✱	89	69 - 143
Trichlorofluoromethane	ND		3340	3610		ug/Kg	✱	108	35 - 150
Vinyl chloride	ND		3340	3440		ug/Kg	✱	103	56 - 150
cis-1,3-Dichloropropene	ND		3340	2600		ug/Kg	✱	78	61 - 148
Styrene	ND		3340	3080		ug/Kg	✱	92	68 - 137

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	109		53 - 146
4-Bromofluorobenzene (Surr)	101		49 - 148
Toluene-d8 (Surr)	93		50 - 149
Dibromofluoromethane (Surr)	96		60 - 140

Lab Sample ID: 480-138156-8 MSD

Matrix: Solid

Analysis Batch: 422725

Client Sample ID: MW-15 (4-6')

Prep Type: Total/NA

Prep Batch: 422642

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		3380	3270		ug/Kg	✱	97	64 - 142	2	20
1,1,1,2,2-Tetrachloroethane	ND		3380	2820		ug/Kg	✱	83	56 - 128	3	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F2	3380	3480	F2	ug/Kg	✱	103	64 - 154	35	20
1,1,2-Trichloroethane	ND		3380	3630		ug/Kg	✱	107	63 - 133	1	20
1,1-Dichloroethane	ND		3380	3410		ug/Kg	✱	101	64 - 135	3	20
1,1-Dichloroethene	ND		3380	2690		ug/Kg	✱	80	62 - 145	6	20
1,2,4-Trichlorobenzene	ND		3380	3410		ug/Kg	✱	101	56 - 145	3	20
1,2-Dibromo-3-Chloropropane	ND	F2	3380	3250	F2	ug/Kg	✱	96	40 - 122	33	20
1,2-Dichlorobenzene	ND		3380	3550		ug/Kg	✱	105	68 - 133	3	20
1,2-Dichloroethane	ND		3380	4230		ug/Kg	✱	125	62 - 135	3	20
1,2-Dichloropropane	ND		3380	3390		ug/Kg	✱	100	67 - 139	2	20
1,3-Dichlorobenzene	ND		3380	3100		ug/Kg	✱	92	68 - 136	7	20
1,4-Dichlorobenzene	ND		3380	3600		ug/Kg	✱	106	69 - 136	12	20
2-Butanone (MEK)	ND	F1	16900	22900	F1	ug/Kg	✱	136	46 - 132	17	20
2-Hexanone	ND	F1 *	16900	24800	F1	ug/Kg	✱	146	44 - 130	5	20

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

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

Lab Sample ID: 480-138156-8 MSD

Matrix: Solid

Analysis Batch: 422725

Client Sample ID: MW-15 (4-6')

Prep Type: Total/NA

Prep Batch: 422642

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone (MIBK)	ND		16900	20200		ug/Kg	✱	119	49 - 125	1	20
Acetone	ND	F1 *	16900	32600	F1	ug/Kg	✱	193	32 - 136	10	20
Benzene	ND		3380	3350		ug/Kg	✱	99	68 - 137	4	20
Bromoform	ND		3380	2580		ug/Kg	✱	76	43 - 134	17	20
Bromomethane	ND	F2	3380	4090	F2	ug/Kg	✱	121	38 - 137	21	20
Carbon disulfide	ND		3380	2210		ug/Kg	✱	65	52 - 139	5	20
Carbon tetrachloride	ND		3380	3330		ug/Kg	✱	98	60 - 150	3	20
Chlorobenzene	ND		3380	3220		ug/Kg	✱	95	67 - 136	1	20
Dibromochloromethane	ND		3380	2610		ug/Kg	✱	77	57 - 137	5	20
Chloroethane	ND		3380	3850		ug/Kg	✱	114	34 - 140	8	20
Chloroform	ND		3380	3310		ug/Kg	✱	98	64 - 133	8	20
Chloromethane	ND		3380	3850		ug/Kg	✱	114	47 - 143	0	20
cis-1,2-Dichloroethene	ND		3380	3480		ug/Kg	✱	103	65 - 137	12	20
Cyclohexane	ND	F1	3380	7010	F1	ug/Kg	✱	207	63 - 149	9	20
Bromodichloromethane	ND		3380	3120		ug/Kg	✱	92	62 - 136	2	20
Dichlorodifluoromethane	ND		3380	3020		ug/Kg	✱	89	26 - 150	11	20
Ethylbenzene	ND		3380	3440		ug/Kg	✱	102	67 - 136	6	20
1,2-Dibromoethane	ND		3380	3160		ug/Kg	✱	94	65 - 133	10	20
Isopropylbenzene	ND		3380	3460		ug/Kg	✱	102	65 - 147	9	20
Methyl acetate	ND	F1 *	6760	8960	F1	ug/Kg	✱	132	50 - 124	10	20
Methyl tert-butyl ether	ND		3380	3090		ug/Kg	✱	91	60 - 130	4	20
Methylcyclohexane	23000		3380	15000	4	ug/Kg	✱	-229	67 - 150	3	20
Methylene Chloride	ND		3380	2580		ug/Kg	✱	76	63 - 138	8	20
Tetrachloroethene	ND		3380	3570		ug/Kg	✱	106	67 - 150	5	20
Toluene	ND		3380	3270		ug/Kg	✱	97	68 - 137	6	20
trans-1,2-Dichloroethene	ND		3380	2890		ug/Kg	✱	85	65 - 138	3	20
trans-1,3-Dichloropropene	ND		3380	2680		ug/Kg	✱	79	58 - 143	14	20
Trichloroethene	ND		3380	3560		ug/Kg	✱	105	69 - 143	18	20
Trichlorofluoromethane	ND		3380	3690		ug/Kg	✱	109	35 - 150	2	20
Vinyl chloride	ND		3380	3610		ug/Kg	✱	107	56 - 150	5	20
cis-1,3-Dichloropropene	ND		3380	2840		ug/Kg	✱	84	61 - 148	9	20
Styrene	ND		3380	3280		ug/Kg	✱	97	68 - 137	6	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	110		53 - 146
4-Bromofluorobenzene (Surr)	109		49 - 148
Toluene-d8 (Surr)	95		50 - 149
Dibromofluoromethane (Surr)	97		60 - 140

Lab Sample ID: MB 480-422692/2-A

Matrix: Solid

Analysis Batch: 422735

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422692

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		07/02/18 15:10	07/02/18 22:24	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

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

Lab Sample ID: MB 480-422692/2-A

Matrix: Solid

Analysis Batch: 422735

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422692

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
2-Hexanone	ND		25	2.5	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Acetone	ND		25	4.2	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Benzene	ND		5.0	0.25	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Bromoform	ND		5.0	2.5	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Bromomethane	ND		5.0	0.45	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Chloroethane	ND		5.0	1.1	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Chloroform	ND		5.0	0.31	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Chloromethane	ND		5.0	0.30	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Cyclohexane	ND		5.0	0.70	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Methyl acetate	ND		25	3.0	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Toluene	ND		5.0	0.38	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Trichloroethene	ND		5.0	1.1	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Xylenes, Total	ND		10	0.84	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		07/02/18 15:10	07/02/18 22:24	1
Styrene	ND		5.0	0.25	ug/Kg		07/02/18 15:10	07/02/18 22:24	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/Kg				07/02/18 15:10	07/02/18 22:24	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

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

Lab Sample ID: MB 480-422692/2-A

Matrix: Solid

Analysis Batch: 422735

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422692

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		64 - 126	07/02/18 15:10	07/02/18 22:24	1
4-Bromofluorobenzene (Surr)	99		72 - 126	07/02/18 15:10	07/02/18 22:24	1
Toluene-d8 (Surr)	101		71 - 125	07/02/18 15:10	07/02/18 22:24	1
Dibromofluoromethane (Surr)	99		60 - 140	07/02/18 15:10	07/02/18 22:24	1

Lab Sample ID: LCS 480-422692/23-A

Matrix: Solid

Analysis Batch: 422735

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422692

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	42.1		ug/Kg		84	77 - 121
1,1,2,2-Tetrachloroethane	50.0	46.2		ug/Kg		92	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	44.3		ug/Kg		89	60 - 140
1,1,2-Trichloroethane	50.0	46.9		ug/Kg		94	78 - 122
1,1-Dichloroethane	50.0	46.2		ug/Kg		92	73 - 126
1,1-Dichloroethene	50.0	46.1		ug/Kg		92	59 - 125
1,2,4-Trichlorobenzene	50.0	45.7		ug/Kg		91	64 - 120
1,2-Dibromo-3-Chloropropane	50.0	43.0		ug/Kg		86	63 - 124
1,2-Dichlorobenzene	50.0	45.5		ug/Kg		91	75 - 120
1,2-Dichloroethane	50.0	41.6		ug/Kg		83	77 - 122
1,2-Dichloropropane	50.0	46.4		ug/Kg		93	75 - 124
1,3-Dichlorobenzene	50.0	46.3		ug/Kg		93	74 - 120
1,4-Dichlorobenzene	50.0	45.8		ug/Kg		92	73 - 120
2-Butanone (MEK)	250	257		ug/Kg		103	70 - 134
2-Hexanone	250	244		ug/Kg		98	59 - 130
4-Methyl-2-pentanone (MIBK)	250	235		ug/Kg		94	65 - 133
Acetone	250	235		ug/Kg		94	61 - 137
Benzene	50.0	48.1		ug/Kg		96	79 - 127
Bromoform	50.0	47.3		ug/Kg		95	68 - 126
Bromomethane	50.0	36.2		ug/Kg		72	37 - 149
Carbon disulfide	50.0	45.2		ug/Kg		90	64 - 131
Carbon tetrachloride	50.0	42.2		ug/Kg		84	75 - 135
Chlorobenzene	50.0	47.0		ug/Kg		94	76 - 124
Dibromochloromethane	50.0	47.0		ug/Kg		94	76 - 125
Chloroethane	50.0	33.7	*	ug/Kg		67	69 - 135
Chloroform	50.0	44.8		ug/Kg		90	80 - 120
Chloromethane	50.0	37.7		ug/Kg		75	63 - 127
cis-1,2-Dichloroethene	50.0	47.1		ug/Kg		94	81 - 120
Cyclohexane	50.0	44.7		ug/Kg		89	65 - 120
Bromodichloromethane	50.0	45.5		ug/Kg		91	80 - 122
Dichlorodifluoromethane	50.0	44.1		ug/Kg		88	57 - 142
Ethylbenzene	50.0	46.9		ug/Kg		94	80 - 120
1,2-Dibromoethane	50.0	46.8		ug/Kg		94	78 - 120
Isopropylbenzene	50.0	45.8		ug/Kg		92	72 - 120
Methyl acetate	100	102		ug/Kg		102	55 - 136
Methyl tert-butyl ether	50.0	42.9		ug/Kg		86	63 - 125
Methylcyclohexane	50.0	45.6		ug/Kg		91	60 - 140

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

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

Lab Sample ID: LCS 480-422692/23-A

Matrix: Solid

Analysis Batch: 422735

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422692

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	50.0	45.2		ug/Kg		90	61 - 127
Tetrachloroethene	50.0	46.7		ug/Kg		93	74 - 122
Toluene	50.0	47.0		ug/Kg		94	74 - 128
trans-1,2-Dichloroethene	50.0	47.2		ug/Kg		94	78 - 126
trans-1,3-Dichloropropene	50.0	44.7		ug/Kg		89	73 - 123
Trichloroethene	50.0	46.2		ug/Kg		92	77 - 129
Trichlorofluoromethane	50.0	38.6		ug/Kg		77	65 - 146
Vinyl chloride	50.0	38.1		ug/Kg		76	61 - 133
cis-1,3-Dichloropropene	50.0	46.3		ug/Kg		93	80 - 120
Styrene	50.0	47.1		ug/Kg		94	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		64 - 126
4-Bromofluorobenzene (Surr)	103		72 - 126
Toluene-d8 (Surr)	103		71 - 125
Dibromofluoromethane (Surr)	100		60 - 140

Lab Sample ID: MB 480-423238/2-A

Matrix: Solid

Analysis Batch: 423243

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423238

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
2-Hexanone	ND		25	2.5	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Acetone	ND		25	4.2	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Benzene	ND		5.0	0.25	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Bromoform	ND		5.0	2.5	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Bromomethane	ND		5.0	0.45	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Chloroethane	ND		5.0	1.1	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Chloroform	ND		5.0	0.31	ug/Kg		07/06/18 09:13	07/06/18 13:01	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

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

Lab Sample ID: MB 480-423238/2-A

Matrix: Solid

Analysis Batch: 423243

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423238

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		5.0	0.30	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Cyclohexane	ND		5.0	0.70	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Methyl acetate	ND		25	3.0	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Toluene	ND		5.0	0.38	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Trichloroethene	ND		5.0	1.1	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Xylenes, Total	0.902	J	10	0.84	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Styrene	ND		5.0	0.25	ug/Kg		07/06/18 09:13	07/06/18 13:01	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/Kg				07/06/18 09:13	07/06/18 13:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		64 - 126	07/06/18 09:13	07/06/18 13:01	1
4-Bromofluorobenzene (Surr)	98		72 - 126	07/06/18 09:13	07/06/18 13:01	1
Toluene-d8 (Surr)	102		71 - 125	07/06/18 09:13	07/06/18 13:01	1
Dibromofluoromethane (Surr)	99		60 - 140	07/06/18 09:13	07/06/18 13:01	1

Lab Sample ID: LCS 480-423238/1-A

Matrix: Solid

Analysis Batch: 423243

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423238

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	43.8		ug/Kg		88	77 - 121
1,1,1,2-Tetrachloroethane	50.0	49.6		ug/Kg		99	80 - 120
1,1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	46.4		ug/Kg		93	60 - 140
1,1,2-Trichloroethane	50.0	51.4		ug/Kg		103	78 - 122
1,1-Dichloroethane	50.0	48.3		ug/Kg		97	73 - 126
1,1-Dichloroethene	50.0	46.8		ug/Kg		94	59 - 125
1,2,4-Trichlorobenzene	50.0	49.4		ug/Kg		99	64 - 120
1,2-Dibromo-3-Chloropropane	50.0	43.3		ug/Kg		87	63 - 124
1,2-Dichlorobenzene	50.0	49.9		ug/Kg		100	75 - 120
1,2-Dichloroethane	50.0	44.6		ug/Kg		89	77 - 122

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

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

Lab Sample ID: LCS 480-423238/1-A

Matrix: Solid

Analysis Batch: 423243

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423238

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	50.0	51.0		ug/Kg		102	75 - 124
1,3-Dichlorobenzene	50.0	50.2		ug/Kg		100	74 - 120
1,4-Dichlorobenzene	50.0	50.3		ug/Kg		101	73 - 120
2-Butanone (MEK)	250	245		ug/Kg		98	70 - 134
2-Hexanone	250	235		ug/Kg		94	59 - 130
4-Methyl-2-pentanone (MIBK)	250	232		ug/Kg		93	65 - 133
Acetone	250	245		ug/Kg		98	61 - 137
Benzene	50.0	50.3		ug/Kg		101	79 - 127
Bromoform	50.0	54.0		ug/Kg		108	68 - 126
Bromomethane	50.0	44.9		ug/Kg		90	37 - 149
Carbon disulfide	50.0	46.9		ug/Kg		94	64 - 131
Carbon tetrachloride	50.0	45.0		ug/Kg		90	75 - 135
Chlorobenzene	50.0	50.6		ug/Kg		101	76 - 124
Dibromochloromethane	50.0	53.2		ug/Kg		106	76 - 125
Chloroethane	50.0	45.6		ug/Kg		91	69 - 135
Chloroform	50.0	47.1		ug/Kg		94	80 - 120
Chloromethane	50.0	41.7		ug/Kg		83	63 - 127
cis-1,2-Dichloroethene	50.0	49.3		ug/Kg		99	81 - 120
Cyclohexane	50.0	47.8		ug/Kg		96	65 - 120
Bromodichloromethane	50.0	49.9		ug/Kg		100	80 - 122
Dichlorodifluoromethane	50.0	43.5		ug/Kg		87	57 - 142
Ethylbenzene	50.0	50.4		ug/Kg		101	80 - 120
1,2-Dibromoethane	50.0	50.9		ug/Kg		102	78 - 120
Isopropylbenzene	50.0	49.5		ug/Kg		99	72 - 120
Methyl acetate	100	98.4		ug/Kg		98	55 - 136
Methyl tert-butyl ether	50.0	45.9		ug/Kg		92	63 - 125
Methylcyclohexane	50.0	49.8		ug/Kg		100	60 - 140
Methylene Chloride	50.0	50.2		ug/Kg		100	61 - 127
Tetrachloroethene	50.0	49.6		ug/Kg		99	74 - 122
Toluene	50.0	50.3		ug/Kg		101	74 - 128
trans-1,2-Dichloroethene	50.0	48.6		ug/Kg		97	78 - 126
trans-1,3-Dichloropropene	50.0	49.7		ug/Kg		99	73 - 123
Trichloroethene	50.0	48.4		ug/Kg		97	77 - 129
Trichlorofluoromethane	50.0	46.1		ug/Kg		92	65 - 146
Vinyl chloride	50.0	42.3		ug/Kg		85	61 - 133
cis-1,3-Dichloropropene	50.0	50.3		ug/Kg		101	80 - 120
Styrene	50.0	50.9		ug/Kg		102	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		64 - 126
4-Bromofluorobenzene (Surr)	103		72 - 126
Toluene-d8 (Surr)	103		71 - 125
Dibromofluoromethane (Surr)	100		60 - 140

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-422353/1-A

Matrix: Solid

Analysis Batch: 422501

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422353

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		170	45	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
2,4,6-Trichlorophenol	ND		170	34	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
2,4-Dimethylphenol	ND		170	40	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
2,4-Dinitrophenol	ND		1600	770	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
2,4-Dinitrotoluene	ND		170	35	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
2-Chloronaphthalene	ND		170	28	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
2-Chlorophenol	ND		170	31	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
2-Methylnaphthalene	ND		170	34	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
2-Methylphenol	ND		170	20	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
2-Nitroaniline	ND		330	25	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
2-Nitrophenol	ND		170	47	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
3,3'-Dichlorobenzidine	ND		330	200	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
3-Nitroaniline	ND		330	46	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
4,6-Dinitro-2-methylphenol	ND		330	170	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
4-Chloro-3-methylphenol	ND		170	41	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
4-Chloroaniline	ND		170	41	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
4-Methylphenol	ND		330	20	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
4-Nitroaniline	ND		330	88	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
4-Nitrophenol	ND		330	120	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Acenaphthene	ND		170	25	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Acenaphthylene	ND		170	22	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Acetophenone	ND		170	23	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Anthracene	ND		170	41	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Atrazine	ND		170	58	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Benzaldehyde	ND		170	130	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Benzo[a]anthracene	ND		170	17	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Benzo[a]pyrene	ND		170	25	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Biphenyl	ND		170	25	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
bis (2-chloroisopropyl) ether	ND		170	34	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Bis(2-chloroethoxy)methane	ND		170	36	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Bis(2-ethylhexyl) phthalate	ND		170	57	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Caprolactam	ND		170	50	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Carbazole	ND		170	20	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Chrysene	ND		170	38	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Dibenzofuran	ND		170	20	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Diethyl phthalate	ND		170	22	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Dimethyl phthalate	ND		170	20	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Di-n-butyl phthalate	ND		170	29	ug/Kg		06/29/18 14:25	06/30/18 19:44	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-422353/1-A

Matrix: Solid

Analysis Batch: 422501

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422353

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	ND		170	20	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Fluoranthene	ND		170	18	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Fluorene	ND		170	20	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Hexachlorobenzene	ND		170	23	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Hexachlorobutadiene	ND		170	25	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Hexachloroethane	ND		170	22	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Isophorone	ND		170	36	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Naphthalene	ND		170	22	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Nitrobenzene	ND		170	19	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
N-Nitrosodi-n-propylamine	ND		170	29	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Pentachlorophenol	ND		330	170	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Phenanthrene	ND		170	25	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Phenol	ND		170	26	ug/Kg		06/29/18 14:25	06/30/18 19:44	1
Pyrene	ND		170	20	ug/Kg		06/29/18 14:25	06/30/18 19:44	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	961	T J	ug/Kg		1.72		06/29/18 14:25	06/30/18 19:44	1
Unknown	562	T J	ug/Kg		2.95		06/29/18 14:25	06/30/18 19:44	1
p-Xylene	227	T J N	ug/Kg		3.48	106-42-3	06/29/18 14:25	06/30/18 19:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	94		54 - 120	06/29/18 14:25	06/30/18 19:44	1
2-Fluorobiphenyl	91		60 - 120	06/29/18 14:25	06/30/18 19:44	1
2-Fluorophenol	84		52 - 120	06/29/18 14:25	06/30/18 19:44	1
Nitrobenzene-d5	92		53 - 120	06/29/18 14:25	06/30/18 19:44	1
Phenol-d5	88		54 - 120	06/29/18 14:25	06/30/18 19:44	1
p-Terphenyl-d14	107		65 - 121	06/29/18 14:25	06/30/18 19:44	1

Lab Sample ID: LCS 480-422353/2-A

Matrix: Solid

Analysis Batch: 422501

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422353

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	1660	1700		ug/Kg		103	59 - 126
2,4,6-Trichlorophenol	1660	1710		ug/Kg		103	59 - 123
2,4-Dichlorophenol	1660	1600		ug/Kg		97	61 - 120
2,4-Dimethylphenol	1660	1700		ug/Kg		102	59 - 120
2,4-Dinitrophenol	3320	3240		ug/Kg		97	41 - 146
2,4-Dinitrotoluene	1660	1850		ug/Kg		112	63 - 120
2,6-Dinitrotoluene	1660	1720		ug/Kg		104	66 - 120
2-Chloronaphthalene	1660	1590		ug/Kg		96	57 - 120
2-Chlorophenol	1660	1510		ug/Kg		91	53 - 120
2-Methylnaphthalene	1660	1520		ug/Kg		91	59 - 120
2-Methylphenol	1660	1510		ug/Kg		91	54 - 120

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-422353/2-A

Matrix: Solid

Analysis Batch: 422501

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422353

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Nitroaniline	1660	1820		ug/Kg		109	61 - 120
2-Nitrophenol	1660	1570		ug/Kg		95	56 - 120
3,3'-Dichlorobenzidine	3320	3310		ug/Kg		100	54 - 120
3-Nitroaniline	1660	1500		ug/Kg		90	48 - 120
4,6-Dinitro-2-methylphenol	3320	3510		ug/Kg		106	49 - 122
4-Bromophenyl phenyl ether	1660	1790		ug/Kg		108	58 - 120
4-Chloro-3-methylphenol	1660	1750		ug/Kg		106	61 - 120
4-Chloroaniline	1660	1480		ug/Kg		89	38 - 120
4-Chlorophenyl phenyl ether	1660	1700		ug/Kg		102	63 - 124
4-Methylphenol	1660	1500		ug/Kg		90	55 - 120
4-Nitroaniline	1660	1650		ug/Kg		99	56 - 120
4-Nitrophenol	3320	4300		ug/Kg		130	43 - 147
Acenaphthene	1660	1660		ug/Kg		100	62 - 120
Acenaphthylene	1660	1800		ug/Kg		108	58 - 121
Acetophenone	1660	1580		ug/Kg		95	54 - 120
Anthracene	1660	1750		ug/Kg		106	62 - 120
Atrazine	3320	3630		ug/Kg		109	60 - 127
Benzaldehyde	3320	2900	E	ug/Kg		87	10 - 150
Benzo[a]anthracene	1660	1760		ug/Kg		106	65 - 120
Benzo[a]pyrene	1660	1750		ug/Kg		105	64 - 120
Benzo[b]fluoranthene	1660	1680		ug/Kg		101	64 - 120
Benzo[g,h,i]perylene	1660	1790		ug/Kg		107	45 - 145
Benzo[k]fluoranthene	1660	1750		ug/Kg		105	65 - 120
Biphenyl	1660	1600		ug/Kg		96	59 - 120
bis (2-chloroisopropyl) ether	1660	1410		ug/Kg		85	44 - 120
Bis(2-chloroethoxy)methane	1660	1550		ug/Kg		93	55 - 120
Bis(2-chloroethyl)ether	1660	1420		ug/Kg		85	45 - 120
Bis(2-ethylhexyl) phthalate	1660	2000		ug/Kg		120	61 - 133
Butyl benzyl phthalate	1660	1980		ug/Kg		119	61 - 129
Caprolactam	3320	3100		ug/Kg		93	47 - 120
Carbazole	1660	1720		ug/Kg		104	65 - 120
Chrysene	1660	1820		ug/Kg		110	64 - 120
Dibenz(a,h)anthracene	1660	1780		ug/Kg		107	54 - 132
Dibenzofuran	1660	1670		ug/Kg		101	63 - 120
Diethyl phthalate	1660	1880		ug/Kg		113	66 - 120
Dimethyl phthalate	1660	1850		ug/Kg		111	65 - 124
Di-n-butyl phthalate	1660	1960		ug/Kg		118	58 - 130
Di-n-octyl phthalate	1660	1970		ug/Kg		118	57 - 133
Fluoranthene	1660	1810		ug/Kg		109	62 - 120
Fluorene	1660	1710		ug/Kg		103	63 - 120
Hexachlorobenzene	1660	1840		ug/Kg		111	60 - 120
Hexachlorobutadiene	1660	1650		ug/Kg		100	45 - 120
Hexachlorocyclopentadiene	1660	1830		ug/Kg		110	47 - 120
Hexachloroethane	1660	1480		ug/Kg		89	41 - 120
Indeno[1,2,3-cd]pyrene	1660	1770		ug/Kg		107	56 - 134
Isophorone	1660	1770		ug/Kg		106	56 - 120
Naphthalene	1660	1500		ug/Kg		90	55 - 120
Nitrobenzene	1660	1580		ug/Kg		95	54 - 120

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-422353/2-A

Matrix: Solid

Analysis Batch: 422501

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422353

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Nitrosodi-n-propylamine	1660	1580		ug/Kg		95	52 - 120
Pentachlorophenol	3320	3170		ug/Kg		95	51 - 120
Phenanthrene	1660	1700		ug/Kg		102	60 - 120
Phenol	1660	1440		ug/Kg		87	53 - 120
Pyrene	1660	1780		ug/Kg		107	61 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	109		54 - 120
2-Fluorobiphenyl	96		60 - 120
2-Fluorophenol	86		52 - 120
Nitrobenzene-d5	96		53 - 120
Phenol-d5	95		54 - 120
p-Terphenyl-d14	111		65 - 121

Lab Sample ID: 480-138156-9 MS

Matrix: Solid

Analysis Batch: 422501

Client Sample ID: MW-13 (8-10')

Prep Type: Total/NA

Prep Batch: 422353

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	ND		2000	2290		ug/Kg	☼	115	46 - 120
2,4,6-Trichlorophenol	ND		2000	2170		ug/Kg	☼	109	41 - 123
2,4-Dichlorophenol	ND		2000	2150		ug/Kg	☼	108	45 - 120
2,4-Dimethylphenol	ND		2000	2220		ug/Kg	☼	111	52 - 120
2,4-Dinitrophenol	ND		3990	3620		ug/Kg	☼	91	41 - 146
2,4-Dinitrotoluene	ND		2000	2400		ug/Kg	☼	120	63 - 125
2,6-Dinitrotoluene	ND		2000	2260		ug/Kg	☼	113	66 - 120
2-Chloronaphthalene	ND		2000	2070		ug/Kg	☼	104	57 - 120
2-Chlorophenol	ND		2000	2020		ug/Kg	☼	101	43 - 120
2-Methylnaphthalene	ND		2000	2030		ug/Kg	☼	102	55 - 120
2-Methylphenol	ND		2000	2090		ug/Kg	☼	105	48 - 120
2-Nitroaniline	ND		2000	2400		ug/Kg	☼	120	61 - 120
2-Nitrophenol	ND		2000	2070		ug/Kg	☼	104	37 - 120
3,3'-Dichlorobenzidine	ND		3990	4420		ug/Kg	☼	111	37 - 126
3-Nitroaniline	ND		2000	2080		ug/Kg	☼	104	48 - 120
4,6-Dinitro-2-methylphenol	ND		3990	4420		ug/Kg	☼	111	23 - 149
4-Bromophenyl phenyl ether	ND		2000	2340		ug/Kg	☼	117	58 - 120
4-Chloro-3-methylphenol	ND		2000	2330		ug/Kg	☼	117	49 - 125
4-Chloroaniline	ND		2000	2050		ug/Kg	☼	103	38 - 120
4-Chlorophenyl phenyl ether	ND		2000	2250		ug/Kg	☼	113	63 - 124
4-Methylphenol	ND		2000	2020		ug/Kg	☼	101	50 - 120
4-Nitroaniline	ND		2000	2260		ug/Kg	☼	113	47 - 120
4-Nitrophenol	ND		3990	5510		ug/Kg	☼	138	31 - 147
Acenaphthene	ND		2000	2150		ug/Kg	☼	108	60 - 120
Acenaphthylene	ND		2000	2340		ug/Kg	☼	117	58 - 121
Acetophenone	ND		2000	2070		ug/Kg	☼	104	47 - 120
Anthracene	ND		2000	2310		ug/Kg	☼	116	62 - 120
Atrazine	ND		3990	5090		ug/Kg	☼	128	60 - 150
Benzaldehyde	ND		3990	4300	E	ug/Kg	☼	108	10 - 150

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-138156-9 MS

Matrix: Solid

Analysis Batch: 422501

Client Sample ID: MW-13 (8-10')

Prep Type: Total/NA

Prep Batch: 422353

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	ND		2000	2260		ug/Kg	☼	113	65 - 120
Benzo[a]pyrene	ND		2000	2300		ug/Kg	☼	115	64 - 120
Benzo[b]fluoranthene	ND		2000	2080		ug/Kg	☼	104	64 - 120
Benzo[g,h,i]perylene	ND		2000	2300		ug/Kg	☼	115	45 - 145
Benzo[k]fluoranthene	ND	F1	2000	2440	F1	ug/Kg	☼	122	65 - 120
Biphenyl	ND		2000	2090		ug/Kg	☼	105	58 - 120
bis (2-chloroisopropyl) ether	ND		2000	1830		ug/Kg	☼	92	31 - 120
Bis(2-chloroethoxy)methane	ND		2000	2030		ug/Kg	☼	102	52 - 120
Bis(2-chloroethyl)ether	ND		2000	1830		ug/Kg	☼	91	45 - 120
Bis(2-ethylhexyl) phthalate	ND		2000	2550		ug/Kg	☼	128	61 - 133
Butyl benzyl phthalate	ND	F1	2000	2550	F1	ug/Kg	☼	128	61 - 120
Caprolactam	ND		3990	4250		ug/Kg	☼	106	37 - 133
Carbazole	ND		2000	2290		ug/Kg	☼	115	59 - 120
Chrysene	ND		2000	2340		ug/Kg	☼	117	64 - 120
Dibenz(a,h)anthracene	ND		2000	2320		ug/Kg	☼	116	54 - 132
Dibenzofuran	ND		2000	2200		ug/Kg	☼	110	62 - 120
Diethyl phthalate	ND	F1	2000	2440	F1	ug/Kg	☼	122	66 - 120
Dimethyl phthalate	ND		2000	2380		ug/Kg	☼	119	65 - 124
Di-n-butyl phthalate	ND		2000	2600		ug/Kg	☼	130	58 - 130
Di-n-octyl phthalate	30	J	2000	2570		ug/Kg	☼	127	57 - 133
Fluoranthene	ND	F1	2000	2420	F1	ug/Kg	☼	121	62 - 120
Fluorene	ND		2000	2220		ug/Kg	☼	111	63 - 120
Hexachlorobenzene	ND		2000	2360		ug/Kg	☼	118	60 - 120
Hexachlorobutadiene	ND		2000	2150		ug/Kg	☼	108	45 - 120
Hexachlorocyclopentadiene	ND		2000	2270		ug/Kg	☼	114	31 - 120
Hexachloroethane	ND		2000	1870		ug/Kg	☼	94	21 - 120
Indeno[1,2,3-cd]pyrene	ND		2000	2290		ug/Kg	☼	115	56 - 134
Isophorone	ND		2000	2310		ug/Kg	☼	116	56 - 120
Naphthalene	ND		2000	1960		ug/Kg	☼	98	46 - 120
Nitrobenzene	ND		2000	2060		ug/Kg	☼	103	49 - 120
N-Nitrosodi-n-propylamine	ND		2000	2070		ug/Kg	☼	104	46 - 120
Pentachlorophenol	ND		3990	3790		ug/Kg	☼	95	25 - 136
Phenanthrene	ND		2000	2270		ug/Kg	☼	114	60 - 122
Phenol	ND		2000	1930		ug/Kg	☼	96	50 - 120
Pyrene	ND		2000	2310		ug/Kg	☼	116	61 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
2,4,6-Tribromophenol	115		54 - 120
2-Fluorobiphenyl	98		60 - 120
2-Fluorophenol	88		52 - 120
Nitrobenzene-d5	98		53 - 120
Phenol-d5	99		54 - 120
p-Terphenyl-d14	115		65 - 121

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-138156-9 MSD

Matrix: Solid

Analysis Batch: 422501

Client Sample ID: MW-13 (8-10')

Prep Type: Total/NA

Prep Batch: 422353

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4,5-Trichlorophenol	ND		1980	2020		ug/Kg	☼	102	46 - 120	12	18
2,4,6-Trichlorophenol	ND		1980	1970		ug/Kg	☼	100	41 - 123	10	19
2,4-Dichlorophenol	ND		1980	1930		ug/Kg	☼	98	45 - 120	10	19
2,4-Dimethylphenol	ND		1980	2020		ug/Kg	☼	102	52 - 120	10	42
2,4-Dinitrophenol	ND		3950	3130		ug/Kg	☼	79	41 - 146	14	22
2,4-Dinitrotoluene	ND		1980	2160		ug/Kg	☼	109	63 - 125	11	20
2,6-Dinitrotoluene	ND		1980	2000		ug/Kg	☼	101	66 - 120	12	15
2-Chloronaphthalene	ND		1980	1870		ug/Kg	☼	95	57 - 120	10	21
2-Chlorophenol	ND		1980	1860		ug/Kg	☼	94	43 - 120	8	25
2-Methylnaphthalene	ND		1980	1870		ug/Kg	☼	94	55 - 120	8	21
2-Methylphenol	ND		1980	1860		ug/Kg	☼	94	48 - 120	12	27
2-Nitroaniline	ND		1980	2100		ug/Kg	☼	106	61 - 120	13	15
2-Nitrophenol	ND		1980	1840		ug/Kg	☼	93	37 - 120	12	18
3,3'-Dichlorobenzidine	ND		3950	4000		ug/Kg	☼	101	37 - 126	10	25
3-Nitroaniline	ND		1980	1870		ug/Kg	☼	95	48 - 120	11	19
4,6-Dinitro-2-methylphenol	ND		3950	3940		ug/Kg	☼	100	23 - 149	12	15
4-Bromophenyl phenyl ether	ND		1980	2110		ug/Kg	☼	107	58 - 120	10	15
4-Chloro-3-methylphenol	ND		1980	2100		ug/Kg	☼	106	49 - 125	10	27
4-Chloroaniline	ND		1980	1880		ug/Kg	☼	95	38 - 120	9	22
4-Chlorophenyl phenyl ether	ND		1980	1970		ug/Kg	☼	100	63 - 124	13	16
4-Methylphenol	ND		1980	1850		ug/Kg	☼	94	50 - 120	9	24
4-Nitroaniline	ND		1980	1970		ug/Kg	☼	100	47 - 120	14	24
4-Nitrophenol	ND		3950	4780		ug/Kg	☼	121	31 - 147	14	25
Acenaphthene	ND		1980	1930		ug/Kg	☼	98	60 - 120	10	35
Acenaphthylene	ND		1980	2080		ug/Kg	☼	105	58 - 121	12	18
Acetophenone	ND		1980	1850		ug/Kg	☼	94	47 - 120	11	20
Anthracene	ND		1980	2070		ug/Kg	☼	105	62 - 120	11	15
Atrazine	ND		3950	4540		ug/Kg	☼	115	60 - 150	11	20
Benzaldehyde	ND		3950	3920	E	ug/Kg	☼	99	10 - 150	9	20
Benzo[a]anthracene	ND		1980	2040		ug/Kg	☼	104	65 - 120	10	15
Benzo[a]pyrene	ND		1980	2020		ug/Kg	☼	102	64 - 120	13	15
Benzo[b]fluoranthene	ND		1980	2010		ug/Kg	☼	102	64 - 120	4	15
Benzo[g,h,i]perylene	ND		1980	2080		ug/Kg	☼	105	45 - 145	10	15
Benzo[k]fluoranthene	ND	F1	1980	2010		ug/Kg	☼	101	65 - 120	20	22
Biphenyl	ND		1980	1860		ug/Kg	☼	94	58 - 120	12	20
bis (2-chloroisopropyl) ether	ND		1980	1650		ug/Kg	☼	84	31 - 120	10	24
Bis(2-chloroethoxy)methane	ND		1980	1870		ug/Kg	☼	95	52 - 120	8	17
Bis(2-chloroethyl)ether	ND		1980	1630		ug/Kg	☼	82	45 - 120	11	21
Bis(2-ethylhexyl) phthalate	ND		1980	2320		ug/Kg	☼	117	61 - 133	10	15
Butyl benzyl phthalate	ND	F1	1980	2310		ug/Kg	☼	117	61 - 120	10	16
Caprolactam	ND		3950	3790		ug/Kg	☼	96	37 - 133	11	20
Carbazole	ND		1980	2040		ug/Kg	☼	103	59 - 120	12	20
Chrysene	ND		1980	2110		ug/Kg	☼	107	64 - 120	11	15
Dibenz(a,h)anthracene	ND		1980	2080		ug/Kg	☼	105	54 - 132	11	15
Dibenzofuran	ND		1980	1940		ug/Kg	☼	98	62 - 120	13	15
Diethyl phthalate	ND	F1	1980	2180		ug/Kg	☼	110	66 - 120	11	15
Dimethyl phthalate	ND		1980	2150		ug/Kg	☼	109	65 - 124	10	15
Di-n-butyl phthalate	ND		1980	2310		ug/Kg	☼	117	58 - 130	11	15

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-138156-9 MSD

Matrix: Solid

Analysis Batch: 422501

Client Sample ID: MW-13 (8-10')

Prep Type: Total/NA

Prep Batch: 422353

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Di-n-octyl phthalate	30	J	1980	2290		ug/Kg	✱	115	57 - 133	11	16
Fluoranthene	ND	F1	1980	2170		ug/Kg	✱	110	62 - 120	11	15
Fluorene	ND		1980	1970		ug/Kg	✱	100	63 - 120	12	15
Hexachlorobenzene	ND		1980	2120		ug/Kg	✱	107	60 - 120	11	15
Hexachlorobutadiene	ND		1980	1960		ug/Kg	✱	99	45 - 120	9	44
Hexachlorocyclopentadiene	ND		1980	2000		ug/Kg	✱	101	31 - 120	12	49
Hexachloroethane	ND		1980	1720		ug/Kg	✱	87	21 - 120	9	46
Indeno[1,2,3-cd]pyrene	ND		1980	2050		ug/Kg	✱	104	56 - 134	11	15
Isophorone	ND		1980	2050		ug/Kg	✱	104	56 - 120	12	17
Naphthalene	ND		1980	1760		ug/Kg	✱	89	46 - 120	11	29
Nitrobenzene	ND		1980	1850		ug/Kg	✱	94	49 - 120	11	24
N-Nitrosodi-n-propylamine	ND		1980	1860		ug/Kg	✱	94	46 - 120	11	31
Pentachlorophenol	ND		3950	3500		ug/Kg	✱	89	25 - 136	8	35
Phenanthrene	ND		1980	2020		ug/Kg	✱	102	60 - 122	12	15
Phenol	ND		1980	1740		ug/Kg	✱	88	50 - 120	10	35
Pyrene	ND		1980	2110		ug/Kg	✱	107	61 - 133	9	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2,4,6-Tribromophenol	106		54 - 120
2-Fluorobiphenyl	90		60 - 120
2-Fluorophenol	87		52 - 120
Nitrobenzene-d5	93		53 - 120
Phenol-d5	94		54 - 120
p-Terphenyl-d14	104		65 - 121

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-422358/1-A

Matrix: Solid

Analysis Batch: 422621

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422358

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.32	ug/Kg		06/29/18 14:32	07/02/18 12:20	1
4,4'-DDE	ND		1.6	0.35	ug/Kg		06/29/18 14:32	07/02/18 12:20	1
4,4'-DDT	ND		1.6	0.38	ug/Kg		06/29/18 14:32	07/02/18 12:20	1
Aldrin	ND		1.6	0.40	ug/Kg		06/29/18 14:32	07/02/18 12:20	1
alpha-BHC	ND		1.6	0.30	ug/Kg		06/29/18 14:32	07/02/18 12:20	1
beta-BHC	ND		1.6	0.30	ug/Kg		06/29/18 14:32	07/02/18 12:20	1
cis-Chlordane	ND		1.6	0.82	ug/Kg		06/29/18 14:32	07/02/18 12:20	1
delta-BHC	0.395	J	1.6	0.31	ug/Kg		06/29/18 14:32	07/02/18 12:20	1
Dieldrin	ND		1.6	0.39	ug/Kg		06/29/18 14:32	07/02/18 12:20	1
Endosulfan I	ND		1.6	0.32	ug/Kg		06/29/18 14:32	07/02/18 12:20	1
Endosulfan II	ND		1.6	0.30	ug/Kg		06/29/18 14:32	07/02/18 12:20	1
Endosulfan sulfate	ND		1.6	0.31	ug/Kg		06/29/18 14:32	07/02/18 12:20	1
Endrin	ND		1.6	0.33	ug/Kg		06/29/18 14:32	07/02/18 12:20	1
Endrin aldehyde	ND		1.6	0.42	ug/Kg		06/29/18 14:32	07/02/18 12:20	1
Endrin ketone	ND		1.6	0.40	ug/Kg		06/29/18 14:32	07/02/18 12:20	1
gamma-BHC (Lindane)	0.561	J	1.6	0.30	ug/Kg		06/29/18 14:32	07/02/18 12:20	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

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

Lab Sample ID: MB 480-422358/1-A

Matrix: Solid

Analysis Batch: 422621

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422358

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor	ND		1.6	0.36	ug/Kg		06/29/18 14:32	07/02/18 12:20	1
Heptachlor epoxide	ND		1.6	0.42	ug/Kg		06/29/18 14:32	07/02/18 12:20	1
Methoxychlor	ND		1.6	0.34	ug/Kg		06/29/18 14:32	07/02/18 12:20	1
Toxaphene	ND		16	9.6	ug/Kg		06/29/18 14:32	07/02/18 12:20	1
trans-Chlordane	ND		1.6	0.52	ug/Kg		06/29/18 14:32	07/02/18 12:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	114		45 - 120	06/29/18 14:32	07/02/18 12:20	1
DCB Decachlorobiphenyl	101		45 - 120	06/29/18 14:32	07/02/18 12:20	1
Tetrachloro-m-xylene	101		30 - 124	06/29/18 14:32	07/02/18 12:20	1
Tetrachloro-m-xylene	99		30 - 124	06/29/18 14:32	07/02/18 12:20	1

Lab Sample ID: LCS 480-422358/2-A

Matrix: Solid

Analysis Batch: 422621

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422358

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.3	14.4		ug/Kg		89	56 - 120
4,4'-DDE	16.3	14.0		ug/Kg		86	44 - 120
4,4'-DDT	16.3	14.3		ug/Kg		88	38 - 120
Aldrin	16.3	12.2		ug/Kg		75	38 - 120
alpha-BHC	16.3	11.4		ug/Kg		70	39 - 120
beta-BHC	16.3	13.1		ug/Kg		81	40 - 120
cis-Chlordane	16.3	13.2		ug/Kg		81	47 - 120
delta-BHC	16.3	13.4		ug/Kg		82	45 - 120
Dieldrin	16.3	14.7		ug/Kg		90	58 - 120
Endosulfan I	16.3	14.2		ug/Kg		87	49 - 120
Endosulfan II	16.3	14.5		ug/Kg		89	55 - 120
Endosulfan sulfate	16.3	15.4		ug/Kg		94	49 - 124
Endrin	16.3	14.9		ug/Kg		92	58 - 120
Endrin aldehyde	16.3	12.3		ug/Kg		76	37 - 121
Endrin ketone	16.3	14.1		ug/Kg		87	46 - 123
gamma-BHC (Lindane)	16.3	12.8		ug/Kg		78	50 - 120
Heptachlor	16.3	13.3		ug/Kg		81	50 - 120
Heptachlor epoxide	16.3	13.1		ug/Kg		81	50 - 120
Methoxychlor	16.3	13.3		ug/Kg		82	58 - 133
trans-Chlordane	16.3	13.2		ug/Kg		81	48 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	84		45 - 120
DCB Decachlorobiphenyl	68		45 - 120
Tetrachloro-m-xylene	74		30 - 124
Tetrachloro-m-xylene	71		30 - 124

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

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

Lab Sample ID: 480-138156-6 MS

Matrix: Solid

Analysis Batch: 422621

Client Sample ID: TP-46 (4-6')

Prep Type: Total/NA

Prep Batch: 422358

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		20.3	19.7		ug/Kg	✱	97	37 - 126
4,4'-DDE	ND		20.3	17.9		ug/Kg	✱	88	34 - 120
4,4'-DDT	ND		20.3	19.6		ug/Kg	✱	96	43 - 123
Aldrin	ND		20.3	17.6		ug/Kg	✱	87	37 - 125
alpha-BHC	ND		20.3	16.2		ug/Kg	✱	79	39 - 120
beta-BHC	ND		20.3	19.1		ug/Kg	✱	94	36 - 120
cis-Chlordane	ND		20.3	18.4		ug/Kg	✱	91	35 - 120
delta-BHC	0.66	J B	20.3	19.2		ug/Kg	✱	91	34 - 120
Dieldrin	ND		20.3	19.7		ug/Kg	✱	97	45 - 120
Endosulfan I	ND		20.3	18.9		ug/Kg	✱	93	39 - 120
Endosulfan II	0.50	J	20.3	20.2		ug/Kg	✱	97	34 - 126
Endosulfan sulfate	ND		20.3	22.0		ug/Kg	✱	108	27 - 130
Endrin	ND		20.3	20.5		ug/Kg	✱	101	47 - 121
Endrin aldehyde	ND		20.3	18.2		ug/Kg	✱	89	33 - 123
Endrin ketone	ND		20.3	19.7		ug/Kg	✱	97	43 - 126
gamma-BHC (Lindane)	0.48	J B	20.3	18.7		ug/Kg	✱	90	50 - 120
Heptachlor	ND		20.3	18.8		ug/Kg	✱	92	42 - 120
Heptachlor epoxide	ND		20.3	19.1		ug/Kg	✱	94	40 - 120
Methoxychlor	ND		20.3	18.4		ug/Kg	✱	90	44 - 150
trans-Chlordane	ND		20.3	17.9		ug/Kg	✱	88	31 - 120
Surrogate	MS %Recovery	MS Qualifier	Limits						
DCB Decachlorobiphenyl	98		45 - 120						
DCB Decachlorobiphenyl	86		45 - 120						
Tetrachloro-m-xylene	91		30 - 124						
Tetrachloro-m-xylene	89		30 - 124						

Lab Sample ID: 480-138156-6 MSD

Matrix: Solid

Analysis Batch: 422621

Client Sample ID: TP-46 (4-6')

Prep Type: Total/NA

Prep Batch: 422358

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		20.1	21.5		ug/Kg	✱	107	37 - 126	8	21
4,4'-DDE	ND		20.1	19.5		ug/Kg	✱	97	34 - 120	8	18
4,4'-DDT	ND		20.1	20.9		ug/Kg	✱	104	43 - 123	7	25
Aldrin	ND		20.1	19.0		ug/Kg	✱	95	37 - 125	8	12
alpha-BHC	ND		20.1	16.5		ug/Kg	✱	82	39 - 120	2	15
beta-BHC	ND		20.1	20.3		ug/Kg	✱	101	36 - 120	6	19
cis-Chlordane	ND		20.1	20.3		ug/Kg	✱	101	35 - 120	9	23
delta-BHC	0.66	J B	20.1	20.5		ug/Kg	✱	99	34 - 120	7	14
Dieldrin	ND		20.1	21.7		ug/Kg	✱	108	45 - 120	10	12
Endosulfan I	ND		20.1	20.5		ug/Kg	✱	102	39 - 120	8	18
Endosulfan II	0.50	J	20.1	22.0		ug/Kg	✱	107	34 - 126	8	26
Endosulfan sulfate	ND		20.1	24.0		ug/Kg	✱	119	27 - 130	8	35
Endrin	ND		20.1	22.2		ug/Kg	✱	111	47 - 121	8	20
Endrin aldehyde	ND		20.1	20.3		ug/Kg	✱	101	33 - 123	11	47
Endrin ketone	ND		20.1	21.5		ug/Kg	✱	107	43 - 126	9	37
gamma-BHC (Lindane)	0.48	J B	20.1	19.9		ug/Kg	✱	97	50 - 120	6	12

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

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

Lab Sample ID: 480-138156-6 MSD

Matrix: Solid

Analysis Batch: 422621

Client Sample ID: TP-46 (4-6')

Prep Type: Total/NA

Prep Batch: 422358

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Heptachlor	ND		20.1	18.8		ug/Kg	✱	94	42 - 120	0	22
Heptachlor epoxide	ND		20.1	20.6		ug/Kg	✱	102	40 - 120	8	15
Methoxychlor	ND		20.1	20.0		ug/Kg	✱	100	44 - 150	8	24
trans-Chlordane	ND		20.1	19.8		ug/Kg	✱	99	31 - 120	10	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	106		45 - 120
DCB Decachlorobiphenyl	89		45 - 120
Tetrachloro-m-xylene	101		30 - 124
Tetrachloro-m-xylene	96		30 - 124

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

Lab Sample ID: MB 480-422239/1-A

Matrix: Solid

Analysis Batch: 422628

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422239

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.17	0.034	mg/Kg		06/29/18 07:30	07/02/18 14:09	1
PCB-1221	ND		0.17	0.034	mg/Kg		06/29/18 07:30	07/02/18 14:09	1
PCB-1232	ND		0.17	0.034	mg/Kg		06/29/18 07:30	07/02/18 14:09	1
PCB-1242	ND		0.17	0.034	mg/Kg		06/29/18 07:30	07/02/18 14:09	1
PCB-1248	ND		0.17	0.034	mg/Kg		06/29/18 07:30	07/02/18 14:09	1
PCB-1254	ND		0.17	0.080	mg/Kg		06/29/18 07:30	07/02/18 14:09	1
PCB-1260	ND		0.17	0.080	mg/Kg		06/29/18 07:30	07/02/18 14:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	85		60 - 154	06/29/18 07:30	07/02/18 14:09	1
Tetrachloro-m-xylene	79		60 - 154	06/29/18 07:30	07/02/18 14:09	1
DCB Decachlorobiphenyl	68		65 - 174	06/29/18 07:30	07/02/18 14:09	1
DCB Decachlorobiphenyl	80		65 - 174	06/29/18 07:30	07/02/18 14:09	1

Lab Sample ID: LCS 480-422239/2-A

Matrix: Solid

Analysis Batch: 422628

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422239

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	2.29	2.66		mg/Kg		116	51 - 185
PCB-1260	2.29	2.74		mg/Kg		120	61 - 184

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	103		60 - 154
Tetrachloro-m-xylene	85		60 - 154
DCB Decachlorobiphenyl	81		65 - 174
DCB Decachlorobiphenyl	96		65 - 174

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Method: 8151A - Chlorinated Herbicides by GC

Lab Sample ID: MB 480-422237/1-A

Matrix: Solid

Analysis Batch: 423305

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422237

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		16	5.3	ug/Kg		06/29/18 07:20	07/06/18 14:39	1
Silvex (2,4,5-TP)	ND		16	5.9	ug/Kg		06/29/18 07:20	07/06/18 14:39	1
2,4-D	ND		16	10	ug/Kg		06/29/18 07:20	07/06/18 14:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	74		28 - 129	06/29/18 07:20	07/06/18 14:39	1
2,4-Dichlorophenylacetic acid	69		28 - 129	06/29/18 07:20	07/06/18 14:39	1

Lab Sample ID: LCS 480-422237/2-A

Matrix: Solid

Analysis Batch: 423305

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422237

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-T	66.2	57.1		ug/Kg		86	41 - 120
Silvex (2,4,5-TP)	66.2	58.0		ug/Kg		88	39 - 125
2,4-D	66.2	58.9		ug/Kg		89	40 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4-Dichlorophenylacetic acid	97		28 - 129
2,4-Dichlorophenylacetic acid	66		28 - 129

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-422876/1-A

Matrix: Solid

Analysis Batch: 423211

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422876

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		9.8	4.3	mg/Kg		07/05/18 10:12	07/06/18 03:36	1
Antimony	ND		14.7	0.39	mg/Kg		07/05/18 10:12	07/06/18 03:36	1
Arsenic	ND		2.0	0.39	mg/Kg		07/05/18 10:12	07/06/18 03:36	1
Barium	ND		0.49	0.11	mg/Kg		07/05/18 10:12	07/06/18 03:36	1
Beryllium	ND		0.20	0.027	mg/Kg		07/05/18 10:12	07/06/18 03:36	1
Cadmium	ND		0.20	0.029	mg/Kg		07/05/18 10:12	07/06/18 03:36	1
Calcium	4.25	J	49.1	3.2	mg/Kg		07/05/18 10:12	07/06/18 03:36	1
Chromium	ND		0.49	0.20	mg/Kg		07/05/18 10:12	07/06/18 03:36	1
Cobalt	ND		0.49	0.049	mg/Kg		07/05/18 10:12	07/06/18 03:36	1
Copper	ND		0.98	0.21	mg/Kg		07/05/18 10:12	07/06/18 03:36	1
Iron	ND		9.8	3.4	mg/Kg		07/05/18 10:12	07/06/18 03:36	1
Lead	ND		0.98	0.24	mg/Kg		07/05/18 10:12	07/06/18 03:36	1
Magnesium	ND		19.6	0.91	mg/Kg		07/05/18 10:12	07/06/18 03:36	1
Manganese	0.0834	J	0.20	0.031	mg/Kg		07/05/18 10:12	07/06/18 03:36	1
Nickel	ND		4.9	0.23	mg/Kg		07/05/18 10:12	07/06/18 03:36	1
Potassium	ND		29.4	19.6	mg/Kg		07/05/18 10:12	07/06/18 03:36	1
Selenium	ND		3.9	0.39	mg/Kg		07/05/18 10:12	07/06/18 03:36	1
Silver	ND		0.59	0.20	mg/Kg		07/05/18 10:12	07/06/18 03:36	1
Sodium	ND		137	12.8	mg/Kg		07/05/18 10:12	07/06/18 03:36	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 480-422876/1-A

Matrix: Solid

Analysis Batch: 423211

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422876

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		5.9	0.29	mg/Kg		07/05/18 10:12	07/06/18 03:36	1
Vanadium	ND		0.49	0.11	mg/Kg		07/05/18 10:12	07/06/18 03:36	1
Zinc	ND		2.0	0.63	mg/Kg		07/05/18 10:12	07/06/18 03:36	1

Lab Sample ID: LCSSRM 480-422876/2-A

Matrix: Solid

Analysis Batch: 423211

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422876

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	8040	7792		mg/Kg		96.9	39.4 - 160.4
Antimony	91.4	66.12		mg/Kg		72.3	25.1 - 275.7
Arsenic	146	119.0		mg/Kg		81.5	69.9 - 132.9
Barium	102	83.30		mg/Kg		81.7	71.5 - 136.3
Beryllium	134	112.1		mg/Kg		83.7	75.4 - 138.1
Cadmium	63.2	55.93		mg/Kg		88.5	73.3 - 141.5
Calcium	5930	5243		mg/Kg		88.4	73.7 - 136.1
Chromium	89.3	74.50		mg/Kg		83.4	69.1 - 143.3
Cobalt	119	119.6		mg/Kg		100.5	74.6 - 142.0
Copper	60.8	51.24		mg/Kg		84.3	72.7 - 141.6
Iron	14400	11930		mg/Kg		82.9	35.6 - 163.9
Lead	98.5	98.65		mg/Kg		100.2	70.8 - 137.1
Magnesium	2580	2247		mg/Kg		87.1	63.6 - 136.0
Manganese	370	308.8		mg/Kg		83.5	75.7 - 134.3
Nickel	66.6	64.10		mg/Kg		96.2	70.7 - 146.2
Potassium	2340	2091		mg/Kg		89.3	59.8 - 140.2
Selenium	136	115.5		mg/Kg		84.9	67.1 - 136.8
Silver	48.9	40.16		mg/Kg		82.1	66.5 - 139.5
Sodium	318	273.9		mg/Kg		86.1	40.6 - 159.7
Thallium	138	129.2		mg/Kg		93.6	68.0 - 136.2
Vanadium	69.7	59.53		mg/Kg		85.4	58.7 - 141.3
Zinc	177	142.0		mg/Kg		80.2	69.5 - 131.1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-423048/1-A

Matrix: Solid

Analysis Batch: 423127

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423048

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0078	mg/Kg		07/05/18 13:20	07/05/18 14:41	1

Lab Sample ID: LCSSRM 480-423048/2-A ^10

Matrix: Solid

Analysis Batch: 423127

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423048

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	13.3	13.26		mg/Kg		99.7	51.2 - 148. 1

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

GC/MS VOA

Prep Batch: 422642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138156-3	TP-43 (7-9")	Total/NA	Solid	5035A_H	
480-138156-5	TP-45 (4-6")	Total/NA	Solid	5035A_H	
480-138156-8	MW-15 (4-6")	Total/NA	Solid	5035A_H	
MB 480-422642/2-A	Method Blank	Total/NA	Solid	5035A_H	
LCS 480-422642/1-A	Lab Control Sample	Total/NA	Solid	5035A_H	
480-138156-8 MS	MW-15 (4-6")	Total/NA	Solid	5035A_H	
480-138156-8 MSD	MW-15 (4-6")	Total/NA	Solid	5035A_H	

Prep Batch: 422692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138156-1	TP-41 (7.5-9')	Total/NA	Solid	5035A_L	
480-138156-4	TP-44 (2-3")	Total/NA	Solid	5035A_L	
480-138156-6	TP-46 (4-6')	Total/NA	Solid	5035A_L	
480-138156-7	TP-47 (2-4")	Total/NA	Solid	5035A_L	
480-138156-9	MW-13 (8-10')	Total/NA	Solid	5035A_L	
MB 480-422692/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-422692/23-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Analysis Batch: 422725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138156-3	TP-43 (7-9")	Total/NA	Solid	8260C	422642
480-138156-5	TP-45 (4-6")	Total/NA	Solid	8260C	422642
480-138156-8	MW-15 (4-6")	Total/NA	Solid	8260C	422642
MB 480-422642/2-A	Method Blank	Total/NA	Solid	8260C	422642
LCS 480-422642/1-A	Lab Control Sample	Total/NA	Solid	8260C	422642
480-138156-8 MS	MW-15 (4-6")	Total/NA	Solid	8260C	422642
480-138156-8 MSD	MW-15 (4-6")	Total/NA	Solid	8260C	422642

Analysis Batch: 422735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138156-1	TP-41 (7.5-9')	Total/NA	Solid	8260C	422692
480-138156-4	TP-44 (2-3")	Total/NA	Solid	8260C	422692
480-138156-6	TP-46 (4-6')	Total/NA	Solid	8260C	422692
480-138156-7	TP-47 (2-4")	Total/NA	Solid	8260C	422692
480-138156-9	MW-13 (8-10')	Total/NA	Solid	8260C	422692
MB 480-422692/2-A	Method Blank	Total/NA	Solid	8260C	422692
LCS 480-422692/23-A	Lab Control Sample	Total/NA	Solid	8260C	422692

Prep Batch: 423238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138156-2	TP-42 (8-10')	Total/NA	Solid	5035A_L	
MB 480-423238/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-423238/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Analysis Batch: 423243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138156-2	TP-42 (8-10')	Total/NA	Solid	8260C	423238
MB 480-423238/2-A	Method Blank	Total/NA	Solid	8260C	423238
LCS 480-423238/1-A	Lab Control Sample	Total/NA	Solid	8260C	423238

TestAmerica Buffalo

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

GC/MS Semi VOA

Prep Batch: 422353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138156-1	TP-41 (7.5-9')	Total/NA	Solid	3550C	
480-138156-2	TP-42 (8-10')	Total/NA	Solid	3550C	
480-138156-3	TP-43 (7-9")	Total/NA	Solid	3550C	
480-138156-4	TP-44 (2-3")	Total/NA	Solid	3550C	
480-138156-5	TP-45 (4-6")	Total/NA	Solid	3550C	
480-138156-6	TP-46 (4-6')	Total/NA	Solid	3550C	
480-138156-7	TP-47 (2-4")	Total/NA	Solid	3550C	
480-138156-8	MW-15 (4-6')	Total/NA	Solid	3550C	
480-138156-9	MW-13 (8-10')	Total/NA	Solid	3550C	
MB 480-422353/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-422353/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-138156-9 MS	MW-13 (8-10')	Total/NA	Solid	3550C	
480-138156-9 MSD	MW-13 (8-10')	Total/NA	Solid	3550C	

Analysis Batch: 422501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138156-1	TP-41 (7.5-9')	Total/NA	Solid	8270D	422353
480-138156-2	TP-42 (8-10')	Total/NA	Solid	8270D	422353
480-138156-3	TP-43 (7-9")	Total/NA	Solid	8270D	422353
480-138156-4	TP-44 (2-3")	Total/NA	Solid	8270D	422353
480-138156-5	TP-45 (4-6")	Total/NA	Solid	8270D	422353
480-138156-6	TP-46 (4-6')	Total/NA	Solid	8270D	422353
480-138156-7	TP-47 (2-4")	Total/NA	Solid	8270D	422353
480-138156-8	MW-15 (4-6')	Total/NA	Solid	8270D	422353
480-138156-9	MW-13 (8-10')	Total/NA	Solid	8270D	422353
MB 480-422353/1-A	Method Blank	Total/NA	Solid	8270D	422353
LCS 480-422353/2-A	Lab Control Sample	Total/NA	Solid	8270D	422353
480-138156-9 MS	MW-13 (8-10')	Total/NA	Solid	8270D	422353
480-138156-9 MSD	MW-13 (8-10')	Total/NA	Solid	8270D	422353

GC Semi VOA

Prep Batch: 422237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138156-5	TP-45 (4-6")	Total/NA	Solid	8151A	
480-138156-6	TP-46 (4-6')	Total/NA	Solid	8151A	
MB 480-422237/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 480-422237/2-A	Lab Control Sample	Total/NA	Solid	8151A	

Prep Batch: 422239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138156-5	TP-45 (4-6")	Total/NA	Solid	3550C	
480-138156-6	TP-46 (4-6')	Total/NA	Solid	3550C	
MB 480-422239/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-422239/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Prep Batch: 422358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138156-5	TP-45 (4-6")	Total/NA	Solid	3550C	
480-138156-6	TP-46 (4-6')	Total/NA	Solid	3550C	

TestAmerica Buffalo

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

GC Semi VOA (Continued)

Prep Batch: 422358 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-422358/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-422358/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-138156-6 MS	TP-46 (4-6')	Total/NA	Solid	3550C	
480-138156-6 MSD	TP-46 (4-6')	Total/NA	Solid	3550C	

Analysis Batch: 422621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138156-5	TP-45 (4-6")	Total/NA	Solid	8081B	422358
480-138156-6	TP-46 (4-6')	Total/NA	Solid	8081B	422358
MB 480-422358/1-A	Method Blank	Total/NA	Solid	8081B	422358
LCS 480-422358/2-A	Lab Control Sample	Total/NA	Solid	8081B	422358
480-138156-6 MS	TP-46 (4-6')	Total/NA	Solid	8081B	422358
480-138156-6 MSD	TP-46 (4-6')	Total/NA	Solid	8081B	422358

Analysis Batch: 422628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138156-5	TP-45 (4-6")	Total/NA	Solid	8082A	422239
480-138156-6	TP-46 (4-6')	Total/NA	Solid	8082A	422239
MB 480-422239/1-A	Method Blank	Total/NA	Solid	8082A	422239
LCS 480-422239/2-A	Lab Control Sample	Total/NA	Solid	8082A	422239

Analysis Batch: 423305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138156-5	TP-45 (4-6")	Total/NA	Solid	8151A	422237
480-138156-6	TP-46 (4-6')	Total/NA	Solid	8151A	422237
MB 480-422237/1-A	Method Blank	Total/NA	Solid	8151A	422237
LCS 480-422237/2-A	Lab Control Sample	Total/NA	Solid	8151A	422237

Metals

Prep Batch: 422876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138156-1	TP-41 (7.5-9')	Total/NA	Solid	3050B	
480-138156-2	TP-42 (8-10')	Total/NA	Solid	3050B	
480-138156-3	TP-43 (7-9")	Total/NA	Solid	3050B	
480-138156-4	TP-44 (2-3")	Total/NA	Solid	3050B	
480-138156-5	TP-45 (4-6")	Total/NA	Solid	3050B	
480-138156-6	TP-46 (4-6')	Total/NA	Solid	3050B	
480-138156-7	TP-47 (2-4")	Total/NA	Solid	3050B	
480-138156-8	MW-15 (4-6')	Total/NA	Solid	3050B	
480-138156-9	MW-13 (8-10')	Total/NA	Solid	3050B	
MB 480-422876/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-422876/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 423048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138156-1	TP-41 (7.5-9')	Total/NA	Solid	7471B	
480-138156-2	TP-42 (8-10')	Total/NA	Solid	7471B	
480-138156-3	TP-43 (7-9")	Total/NA	Solid	7471B	
480-138156-4	TP-44 (2-3")	Total/NA	Solid	7471B	

TestAmerica Buffalo

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Metals (Continued)

Prep Batch: 423048 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138156-5	TP-45 (4-6")	Total/NA	Solid	7471B	
480-138156-6	TP-46 (4-6')	Total/NA	Solid	7471B	
480-138156-7	TP-47 (2-4")	Total/NA	Solid	7471B	
480-138156-8	MW-15 (4-6")	Total/NA	Solid	7471B	
480-138156-9	MW-13 (8-10')	Total/NA	Solid	7471B	
MB 480-423048/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-423048/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 423127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138156-1	TP-41 (7.5-9')	Total/NA	Solid	7471B	423048
480-138156-2	TP-42 (8-10')	Total/NA	Solid	7471B	423048
480-138156-3	TP-43 (7-9")	Total/NA	Solid	7471B	423048
480-138156-4	TP-44 (2-3")	Total/NA	Solid	7471B	423048
480-138156-5	TP-45 (4-6")	Total/NA	Solid	7471B	423048
480-138156-6	TP-46 (4-6')	Total/NA	Solid	7471B	423048
480-138156-7	TP-47 (2-4")	Total/NA	Solid	7471B	423048
480-138156-8	MW-15 (4-6')	Total/NA	Solid	7471B	423048
480-138156-9	MW-13 (8-10')	Total/NA	Solid	7471B	423048
MB 480-423048/1-A	Method Blank	Total/NA	Solid	7471B	423048
LCSSRM 480-423048/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	423048

Analysis Batch: 423211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138156-1	TP-41 (7.5-9')	Total/NA	Solid	6010C	422876
480-138156-2	TP-42 (8-10')	Total/NA	Solid	6010C	422876
480-138156-3	TP-43 (7-9")	Total/NA	Solid	6010C	422876
480-138156-4	TP-44 (2-3")	Total/NA	Solid	6010C	422876
480-138156-5	TP-45 (4-6")	Total/NA	Solid	6010C	422876
480-138156-6	TP-46 (4-6')	Total/NA	Solid	6010C	422876
480-138156-7	TP-47 (2-4")	Total/NA	Solid	6010C	422876
480-138156-8	MW-15 (4-6')	Total/NA	Solid	6010C	422876
480-138156-9	MW-13 (8-10')	Total/NA	Solid	6010C	422876
MB 480-422876/1-A	Method Blank	Total/NA	Solid	6010C	422876
LCSSRM 480-422876/2-A	Lab Control Sample	Total/NA	Solid	6010C	422876

General Chemistry

Analysis Batch: 422211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138156-1	TP-41 (7.5-9')	Total/NA	Solid	Moisture	
480-138156-2	TP-42 (8-10')	Total/NA	Solid	Moisture	
480-138156-3	TP-43 (7-9")	Total/NA	Solid	Moisture	
480-138156-4	TP-44 (2-3")	Total/NA	Solid	Moisture	
480-138156-5	TP-45 (4-6")	Total/NA	Solid	Moisture	
480-138156-6	TP-46 (4-6')	Total/NA	Solid	Moisture	
480-138156-7	TP-47 (2-4")	Total/NA	Solid	Moisture	
480-138156-8	MW-15 (4-6')	Total/NA	Solid	Moisture	
480-138156-9	MW-13 (8-10')	Total/NA	Solid	Moisture	

TestAmerica Buffalo

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-41 (7.5-9')

Date Collected: 06/26/18 11:00

Date Received: 06/27/18 15:30

Lab Sample ID: 480-138156-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422211	06/28/18 18:18	KPK	TAL BUF

Client Sample ID: TP-41 (7.5-9')

Date Collected: 06/26/18 11:00

Date Received: 06/27/18 15:30

Lab Sample ID: 480-138156-1

Matrix: Solid

Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			422692	07/02/18 15:10	LMS	TAL BUF
Total/NA	Analysis	8260C		1	422735	07/03/18 03:36	LCH	TAL BUF
Total/NA	Prep	3550C			422353	06/29/18 14:25	ATG	TAL BUF
Total/NA	Analysis	8270D		1	422501	06/30/18 21:50	RJS	TAL BUF
Total/NA	Prep	3050B			422876	07/05/18 10:12	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423211	07/06/18 04:30	S1P	TAL BUF
Total/NA	Prep	7471B			423048	07/05/18 13:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	423127	07/05/18 14:44	BMB	TAL BUF

Client Sample ID: TP-42 (8-10')

Date Collected: 06/26/18 11:30

Date Received: 06/27/18 15:30

Lab Sample ID: 480-138156-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422211	06/28/18 18:18	KPK	TAL BUF

Client Sample ID: TP-42 (8-10')

Date Collected: 06/26/18 11:30

Date Received: 06/27/18 15:30

Lab Sample ID: 480-138156-2

Matrix: Solid

Percent Solids: 83.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			423238	07/06/18 09:13	CDC	TAL BUF
Total/NA	Analysis	8260C		1	423243	07/06/18 15:20	AMM	TAL BUF
Total/NA	Prep	3550C			422353	06/29/18 14:25	ATG	TAL BUF
Total/NA	Analysis	8270D		10	422501	06/30/18 22:15	RJS	TAL BUF
Total/NA	Prep	3050B			422876	07/05/18 10:12	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423211	07/06/18 04:34	S1P	TAL BUF
Total/NA	Prep	7471B			423048	07/05/18 13:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	423127	07/05/18 14:45	BMB	TAL BUF

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-43 (7-9")

Lab Sample ID: 480-138156-3

Date Collected: 06/26/18 10:30

Matrix: Solid

Date Received: 06/27/18 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422211	06/28/18 18:18	KPK	TAL BUF

Client Sample ID: TP-43 (7-9")

Lab Sample ID: 480-138156-3

Date Collected: 06/26/18 10:30

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 89.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			422642	07/02/18 11:36	LMS	TAL BUF
Total/NA	Analysis	8260C		1	422725	07/03/18 01:47	AEM	TAL BUF
Total/NA	Prep	3550C			422353	06/29/18 14:25	ATG	TAL BUF
Total/NA	Analysis	8270D		1	422501	06/30/18 22:40	RJS	TAL BUF
Total/NA	Prep	3050B			422876	07/05/18 10:12	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423211	07/06/18 04:38	S1P	TAL BUF
Total/NA	Prep	7471B			423048	07/05/18 13:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	423127	07/05/18 14:47	BMB	TAL BUF

Client Sample ID: TP-44 (2-3")

Lab Sample ID: 480-138156-4

Date Collected: 06/26/18 08:30

Matrix: Solid

Date Received: 06/27/18 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422211	06/28/18 18:18	KPK	TAL BUF

Client Sample ID: TP-44 (2-3")

Lab Sample ID: 480-138156-4

Date Collected: 06/26/18 08:30

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 85.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			422692	07/02/18 15:10	LMS	TAL BUF
Total/NA	Analysis	8260C		1	422735	07/03/18 04:01	LCH	TAL BUF
Total/NA	Prep	3550C			422353	06/29/18 14:25	ATG	TAL BUF
Total/NA	Analysis	8270D		1	422501	06/30/18 23:05	RJS	TAL BUF
Total/NA	Prep	3050B			422876	07/05/18 10:12	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423211	07/06/18 04:42	S1P	TAL BUF
Total/NA	Prep	7471B			423048	07/05/18 13:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	423127	07/05/18 14:48	BMB	TAL BUF

Client Sample ID: TP-45 (4-6")

Lab Sample ID: 480-138156-5

Date Collected: 06/26/18 10:00

Matrix: Solid

Date Received: 06/27/18 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422211	06/28/18 18:18	KPK	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-45 (4-6")

Date Collected: 06/26/18 10:00

Date Received: 06/27/18 15:30

Lab Sample ID: 480-138156-5

Matrix: Solid

Percent Solids: 85.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			422642	07/02/18 11:36	LMS	TAL BUF
Total/NA	Analysis	8260C		8	422725	07/03/18 02:14	AEM	TAL BUF
Total/NA	Prep	3550C			422353	06/29/18 14:25	ATG	TAL BUF
Total/NA	Analysis	8270D		20	422501	06/30/18 23:30	RJS	TAL BUF
Total/NA	Prep	3550C			422358	06/29/18 14:32	ATG	TAL BUF
Total/NA	Analysis	8081B		1	422621	07/02/18 13:58	BEK	TAL BUF
Total/NA	Prep	3550C			422239	06/29/18 07:30	RLT	TAL BUF
Total/NA	Analysis	8082A		1	422628	07/02/18 16:18	W1T	TAL BUF
Total/NA	Prep	8151A			422237	06/29/18 07:20	CAM	TAL BUF
Total/NA	Analysis	8151A		1	423305	07/06/18 21:36	BEK	TAL BUF
Total/NA	Prep	3050B			422876	07/05/18 10:12	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423211	07/06/18 04:57	S1P	TAL BUF
Total/NA	Prep	7471B			423048	07/05/18 13:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	423127	07/05/18 14:50	BMB	TAL BUF

Client Sample ID: TP-46 (4-6')

Date Collected: 06/26/18 09:00

Date Received: 06/27/18 15:30

Lab Sample ID: 480-138156-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422211	06/28/18 18:18	KPK	TAL BUF

Client Sample ID: TP-46 (4-6')

Date Collected: 06/26/18 09:00

Date Received: 06/27/18 15:30

Lab Sample ID: 480-138156-6

Matrix: Solid

Percent Solids: 81.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			422692	07/02/18 15:10	LMS	TAL BUF
Total/NA	Analysis	8260C		1	422735	07/03/18 04:27	LCH	TAL BUF
Total/NA	Prep	3550C			422353	06/29/18 14:25	ATG	TAL BUF
Total/NA	Analysis	8270D		1	422501	06/30/18 23:55	RJS	TAL BUF
Total/NA	Prep	3550C			422358	06/29/18 14:32	ATG	TAL BUF
Total/NA	Analysis	8081B		1	422621	07/02/18 13:38	BEK	TAL BUF
Total/NA	Prep	3550C			422239	06/29/18 07:30	RLT	TAL BUF
Total/NA	Analysis	8082A		1	422628	07/02/18 16:34	W1T	TAL BUF
Total/NA	Prep	8151A			422237	06/29/18 07:20	CAM	TAL BUF
Total/NA	Analysis	8151A		1	423305	07/06/18 22:05	BEK	TAL BUF
Total/NA	Prep	3050B			422876	07/05/18 10:12	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423211	07/06/18 05:01	S1P	TAL BUF
Total/NA	Prep	7471B			423048	07/05/18 13:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	423127	07/05/18 14:51	BMB	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: TP-47 (2-4")

Lab Sample ID: 480-138156-7

Date Collected: 06/26/18 08:00

Matrix: Solid

Date Received: 06/27/18 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422211	06/28/18 18:18	KPK	TAL BUF

Client Sample ID: TP-47 (2-4")

Lab Sample ID: 480-138156-7

Date Collected: 06/26/18 08:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 85.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			422692	07/02/18 15:10	LMS	TAL BUF
Total/NA	Analysis	8260C		1	422735	07/03/18 04:53	LCH	TAL BUF
Total/NA	Prep	3550C			422353	06/29/18 14:25	ATG	TAL BUF
Total/NA	Analysis	8270D		1	422501	07/01/18 00:20	RJS	TAL BUF
Total/NA	Prep	3050B			422876	07/05/18 10:12	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423211	07/06/18 05:05	S1P	TAL BUF
Total/NA	Prep	7471B			423048	07/05/18 13:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	423127	07/05/18 14:53	BMB	TAL BUF

Client Sample ID: MW-15 (4-6')

Lab Sample ID: 480-138156-8

Date Collected: 06/22/18 14:00

Matrix: Solid

Date Received: 06/27/18 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422211	06/28/18 18:18	KPK	TAL BUF

Client Sample ID: MW-15 (4-6')

Lab Sample ID: 480-138156-8

Date Collected: 06/22/18 14:00

Matrix: Solid

Date Received: 06/27/18 15:30

Percent Solids: 73.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			422642	07/02/18 11:36	LMS	TAL BUF
Total/NA	Analysis	8260C		8	422725	07/03/18 02:41	AEM	TAL BUF
Total/NA	Prep	3550C			422353	06/29/18 14:25	ATG	TAL BUF
Total/NA	Analysis	8270D		20	422501	07/01/18 00:45	RJS	TAL BUF
Total/NA	Prep	3050B			422876	07/05/18 10:12	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423211	07/06/18 05:09	S1P	TAL BUF
Total/NA	Prep	7471B			423048	07/05/18 13:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	423127	07/05/18 14:54	BMB	TAL BUF

Client Sample ID: MW-13 (8-10')

Lab Sample ID: 480-138156-9

Date Collected: 06/22/18 10:00

Matrix: Solid

Date Received: 06/27/18 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422211	06/28/18 18:18	KPK	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Client Sample ID: MW-13 (8-10')

Date Collected: 06/22/18 10:00

Date Received: 06/27/18 15:30

Lab Sample ID: 480-138156-9

Matrix: Solid
Percent Solids: 82.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			422692	07/02/18 15:10	LMS	TAL BUF
Total/NA	Analysis	8260C		1	422735	07/03/18 05:18	LCH	TAL BUF
Total/NA	Prep	3550C			422353	06/29/18 14:25	ATG	TAL BUF
Total/NA	Analysis	8270D		1	422501	06/30/18 21:25	RJS	TAL BUF
Total/NA	Prep	3050B			422876	07/05/18 10:12	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423211	07/06/18 05:13	S1P	TAL BUF
Total/NA	Prep	7471B			423048	07/05/18 13:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	423127	07/05/18 14:59	BMB	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-18 *

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Buffalo

Method Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8081B	Organochlorine Pesticides (GC)	SW846	TAL BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
8151A	Chlorinated Herbicides by GC	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
3050B	Preparation, Metals	SW846	TAL BUF
3550C	Ultrasonic Extraction	SW846	TAL BUF
5035A_H	Closed System Purge and Trap	SW846	TAL BUF
5035A_L	Closed System Purge and Trap	SW846	TAL BUF
7471B	Preparation, Mercury	SW846	TAL BUF
8151A	Extraction (Herbicides)	SW846	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138156-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-138156-1	TP-41 (7.5-9')	Solid	06/26/18 11:00	06/27/18 15:30
480-138156-2	TP-42 (8-10')	Solid	06/26/18 11:30	06/27/18 15:30
480-138156-3	TP-43 (7-9")	Solid	06/26/18 10:30	06/27/18 15:30
480-138156-4	TP-44 (2-3")	Solid	06/26/18 08:30	06/27/18 15:30
480-138156-5	TP-45 (4-6")	Solid	06/26/18 10:00	06/27/18 15:30
480-138156-6	TP-46 (4-6')	Solid	06/26/18 09:00	06/27/18 15:30
480-138156-7	TP-47 (2-4")	Solid	06/26/18 08:00	06/27/18 15:30
480-138156-8	MW-15 (4-6')	Solid	06/22/18 14:00	06/27/18 15:30
480-138156-9	MW-13 (8-10')	Solid	06/22/18 10:00	06/27/18 15:30

Chain of Custody Record



480-138156 COC

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

Date: 6/27/18

Site Contact: Nick Suraci

Lab Contact: Brian Fischer

Project Manager: Mike Lesakowski

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, New York 14218
(716) 856-0635
(716) 856-0583
Project Name: Supplemental RI Activities
Site: Oregon Road Site
P O # T0323-017-001-005-003

COC No. _____ of _____ COCs

Sampler: _____

For Lab Use Only:
Walk-in Client: _____
Lab Sampling: _____

Job / SDG No.: _____

Analysis Turnaround Time

☐ CALENDAR DAYS ☐ WORKING DAYS

TAT if different from Below _____

☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.
TP-41(7.5-9')	6/26/2018	11:00	G	Solid	3
TP-42 (8-10')	6/26/2018	11:30	G	Solid	3
TP-43 (7-9')	6/26/2018	10:30	G	Solid	3
TP-44 (2-3')	6/26/2018	8:30	G	Solid	3
TP-45 (4-6')	6/26/2018	10:00	G	Solid	5
TP-46 (4-6')	6/26/2018	9:00	G	Solid	3
TP-47 (2-4')	6/26/2018	8:00	G	Solid	3
MW -15 (4-6')	6/22/18	14:00	G	Solid	3
MW-13 (8-10')	6/22/18	10:00	G	Solid	3

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TCI VOC + TICs	TCI SVOCs + TICs	TAL Metals	Herbicides	Pesticides	PCBs	Sample Specific Notes:
TP-41(7.5-9')	6/26/2018	11:00	G	Solid	3			X	X	X				
TP-42 (8-10')	6/26/2018	11:30	G	Solid	3			X	X	X				
TP-43 (7-9')	6/26/2018	10:30	G	Solid	3			X	X	X				
TP-44 (2-3')	6/26/2018	8:30	G	Solid	3			X	X	X				CHANGES MADE BY
TP-45 (4-6')	6/26/2018	10:00	G	Solid	5			X	X	X				IN PROGRESS AT
TP-46 (4-6')	6/26/2018	9:00	G	Solid	3			X	X	X				CLIENTS DIRECTION
TP-47 (2-4')	6/26/2018	8:00	G	Solid	3			X	X	X				
MW -15 (4-6')	6/22/18	14:00	G	Solid	3			X	X	X				
MW-13 (8-10')	6/22/18	10:00	G	Solid	3			X	X	X				

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Special Instructions/QC Requirements & Comments: Cat-B Deliverable, NYSDEC EQUIS

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Custody Seal No.: _____

Relinquished by: _____ Company: _____ Date/Time: _____

Relinquished by: _____ Company: _____ Date/Time: _____

Relinquished by: _____ Company: _____ Date/Time: _____

Received in Laboratory: _____ Date/Time: 6/27/18 1530

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-138156-1

Login Number: 138156

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kinecki, Kenneth P

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	COC was incorrect as received, obtained revised coc from client
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	Benchmark
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-138304-1

Client Project/Site: Oregon Road Site - Olean, NY

For:

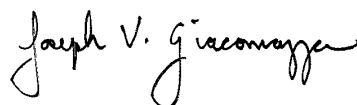
Benchmark Env. Eng. & Science, PLLC

2558 Hamburg Turnpike

Suite 300

Lackawanna, New York 14218

Attn: Mr. Michael Lesakowski



Authorized for release by:

7/20/2018 9:33:46 AM

Joe Giacomazza, Project Management Assistant II

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LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Definitions/Glossary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
vs	Reported analyte concentrations are below 200 ug/kg and may be biased low due to the sample not being collected according to 5035A-L low-level specifications.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F2	MS/MSD RPD exceeds control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
E	Result exceeded calibration range.
X	Surrogate is outside control limits

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
T	Result is a tentatively identified compound (TIC) and an estimated value.
N	Presumptive evidence of material.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
X	Surrogate is outside control limits
F2	MS/MSD RPD exceeds control limits
F1	MS and/or MSD Recovery is outside acceptance limits.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)

TestAmerica Buffalo

Definitions/Glossary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Job ID: 480-138304-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-138304-1

Comments

No additional comments.

Receipt

The samples were received on 6/29/2018 5:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 10.0° C.

Receipt Exceptions

All soil jars received without container labels.

GC/MS VOA

Method(s) 8260C: The matrix spike and matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-423426 and analytical batch 480-423427 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC/MS Semi VOA

Method(s) 8270D: The following sample required a dilution due to the nature of the sample matrix: SS-22 (0-2") (480-138304-5). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8270D: The following sample was diluted due to the nature of the sample matrix: SS-22 (0-2") (480-138304-5). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method(s) 8270D: The following samples were diluted due to the nature of the sample matrix: SS-21 (0-2') (480-138304-2), NS-23 (2'-1') (480-138304-3), SS-23 (0-2") (480-138304-4), SS-22 (0-2") (480-138304-5) and SS-24 (0-2") (480-138304-7). Elevated reporting limits (RLs) are provided.

Method(s) 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: NS-42 (2'-1') (480-138304-14[MSD]). These results have been reported and qualified.

Method(s) 8270D: The following compound has been spiked at a level above the upper range of the initial calibration for preparation batch 480-422683: Benzaldehyde. The matrix spike duplicate (MSD) recovered within acceptable limits for this analyte and has been qualified with an "E" flag. NS-42 (2'-1') (480-138304-14[MSD])

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-423763 recovered outside acceptance criteria, low biased, for Pentachlorophenol. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following sample is impacted: SS-29 (0-2") (480-138304-21).

Method(s) 8270D: The continuing calibration verification (CCV) analyzed in batch 480-423763 was outside the method criteria for the following analyte: 2,4,6-Tribromophenol (Surr). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated. The surrogate was within control limits for all samples and QC associated with the run. The following sample is impacted: SS-29 (0-2") (480-138304-21).

Method(s) 8270D: The following compound has been spiked at a level above the upper range of the initial calibration: Benzaldehyde. The laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) recovered within acceptable limits for this analyte and has been qualified with an "E" flag. (LCS 480-422686/2-A).

Case Narrative

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Job ID: 480-138304-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

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

GC Semi VOA

Method(s) 8081B: The following samples were diluted due to the nature of the sample matrix: (480-138304-A-7-A MS) and (480-138304-A-7-B MSD). As such, spike and surrogate recoveries are below the calibration range, estimated and not representative. Elevated reporting limits (RLs) are provided.

Method(s) 8081B: The following samples were diluted due to the nature of the sample matrix: SS-24 (0-2") (480-138304-7), NS-29 (2"-1') (480-138304-20) and SS-29 (0-2") (480-138304-21). As such, surrogate recoveries are below the calibration range, estimated and not representative. Elevated reporting limits (RLs) are provided.

Method(s) 8081B: All primary data for analytical batch 423008 is reported from the RTX-CLPI column.

Method(s) 8082A: All primary data for analytical batch 422801 is reported from the ZB-5 column.

Method(s) 8082A: The percent difference in a multi-component continuing calibration verification is assessed on the basis of the total amount, individual peak calculations are only listed for completeness.

Method(s) 8151A: All primary data for analytical batch 423554 is reported from the RTX-CLPI column.

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

Metals

Method(s) 6010C: The Serial Dilution (480-138304-A-5-A SD ^5) in batch 480-422880, exhibited results outside the quality control limits for Total Barium, Calcium, Chromium, Potassium, Magnesium, Manganese, Vanadium, and Zinc. However, the Post Digestion Spike was compliant so no corrective action was necessary.

Method(s) 6010C: The recovery of Post Spike, (480-138304-A-5-A PDS), in batch 480-422880 exhibited results outside the quality control limits for Total Aluminum. However, the Serial Dilution of this sample was compliant. Therefore, no corrective action was necessary.

Method(s) 6010C: The Serial Dilution and Post Spike (480-138304-A-5-A SD ^5) exceeded the quality control limits for Total Iron. Sample matrix is suspected, therefore, no corrective action was necessary.

Method(s) 6010C: The method blank for preparation batch 480-422881 and analytical batch 480-423441 contained Barium above the reporting limit (RL). Associated sample(s) NS-25 (2"-1') (480-138304-13), NS-42 (2"-1') (480-138304-14), SS-42 (0-2") (480-138304-15), NS-27 (2"-1') (480-138304-16), SS-27 (0-2") (480-138304-17), NS-28 (2"-1') (480-138304-18), SS-28 (0-2") (480-138304-19), NS-29 (2"-1') (480-138304-20) and SS-29 (0-2") (480-138304-21) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method(s) 6010C: The Serial Dilution (480-138304-B-14-C SD ^5) in batch 480-422881, exhibited results outside the quality control limits for Total Beryllium, Manganese, Calcium, Aluminum, Magnesium, Zinc, Vanadium, Potassium, Chromium, Arsenic, Iron and Barium. However, the Post Digestion Spike was compliant so no corrective action was necessary.

Method(s) 6010C: The Serial Dilution and Post Spike (480-138304-B-14-C PDS) exceeded the quality control limits for Total Aluminum, Barium, and Magnesium. Sample matrix is suspected, therefore, no corrective action was necessary.

Method(s) 6010C: The following samples were diluted for Total Cadmium due to the nature of the sample matrix: NS-42 (2"-1') (480-138304-14), NS-42 (2"-1') (480-138304-14[MS]), NS-42 (2"-1') (480-138304-14[MSD]), NS-27 (2"-1') (480-138304-16), NS-28 (2"-1') (480-138304-18), SS-28 (0-2") (480-138304-19), (480-138304-B-14-C PDS ^2) and (480-138304-B-14-C SD ^10). Elevated reporting limits (RLs) are provided.

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

Organic Prep

Method(s) 3550C: The following samples required a Florisil clean-up, via 3620C, to reduce matrix interferences: SS-24 (0-2")

Case Narrative

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Job ID: 480-138304-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

(480-138304-7), NS-24 (2"-1') (480-138304-8), SS-25 (0-2") (480-138304-12), NS-29 (2"-1') (480-138304-20), SS-29 (0-2") (480-138304-21), (480-138304-A-7 MS) and (480-138304-A-7 MSD).

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

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-21 (2"-1')

Lab Sample ID: 480-138304-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.48	J vs	6.1	0.38	ug/Kg	1	☼	8260C	Total/NA
Methylene Chloride	3.7	J vs	6.1	2.8	ug/Kg	1	☼	8260C	Total/NA
Acenaphthylene	27	J	200	26	ug/Kg	1	☼	8270D	Total/NA
Anthracene	80	J	200	50	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	240		200	20	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	210		200	30	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	270		200	32	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	150	J	200	22	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	120	J	200	26	ug/Kg	1	☼	8270D	Total/NA
Carbazole	40	J	200	24	ug/Kg	1	☼	8270D	Total/NA
Chrysene	250		200	46	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	48	J	200	36	ug/Kg	1	☼	8270D	Total/NA
Dibenzofuran	29	J	200	24	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	470		200	22	ug/Kg	1	☼	8270D	Total/NA
Fluorene	33	J	200	24	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	120	J	200	25	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	410		200	30	ug/Kg	1	☼	8270D	Total/NA
Pyrene	520		200	24	ug/Kg	1	☼	8270D	Total/NA
Aluminum	16500		12.3	5.4	mg/Kg	1	☼	6010C	Total/NA
Arsenic	12.0		2.5	0.49	mg/Kg	1	☼	6010C	Total/NA
Barium	176		0.61	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.89		0.25	0.034	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.17	J	0.25	0.037	mg/Kg	1	☼	6010C	Total/NA
Calcium	1670	B	61.3	4.0	mg/Kg	1	☼	6010C	Total/NA
Chromium	18.7		0.61	0.25	mg/Kg	1	☼	6010C	Total/NA
Cobalt	16.4		0.61	0.061	mg/Kg	1	☼	6010C	Total/NA
Copper	18.2		1.2	0.26	mg/Kg	1	☼	6010C	Total/NA
Iron	26300	B	12.3	4.3	mg/Kg	1	☼	6010C	Total/NA
Lead	33.2		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3490		24.5	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	1290	B	0.25	0.039	mg/Kg	1	☼	6010C	Total/NA
Nickel	24.7		6.1	0.28	mg/Kg	1	☼	6010C	Total/NA
Potassium	2320		36.8	24.5	mg/Kg	1	☼	6010C	Total/NA
Sodium	51.0	J	172	15.9	mg/Kg	1	☼	6010C	Total/NA
Vanadium	25.3		0.61	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	63.5		2.5	0.79	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.043		0.024	0.0097	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS-21 (0-2')

Lab Sample ID: 480-138304-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	160	J	1100	120	ug/Kg	5	☼	8270D	Total/NA
Pyrene	140	J	1100	130	ug/Kg	5	☼	8270D	Total/NA
Aluminum	14500		13.4	5.9	mg/Kg	1	☼	6010C	Total/NA
Arsenic	10.2		2.7	0.54	mg/Kg	1	☼	6010C	Total/NA
Barium	135		0.67	0.15	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.65		0.27	0.038	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.17	J	0.27	0.040	mg/Kg	1	☼	6010C	Total/NA
Calcium	1350	B	67.2	4.4	mg/Kg	1	☼	6010C	Total/NA
Chromium	15.6		0.67	0.27	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-21 (0-2') (Continued)

Lab Sample ID: 480-138304-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	12.2		0.67	0.067	mg/Kg	1	☼	6010C	Total/NA
Copper	15.3		1.3	0.28	mg/Kg	1	☼	6010C	Total/NA
Iron	24200	B	13.4	4.7	mg/Kg	1	☼	6010C	Total/NA
Lead	26.6		1.3	0.32	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3060		26.9	1.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	750	B	0.27	0.043	mg/Kg	1	☼	6010C	Total/NA
Nickel	19.8		6.7	0.31	mg/Kg	1	☼	6010C	Total/NA
Potassium	1740		40.3	26.9	mg/Kg	1	☼	6010C	Total/NA
Sodium	41.6	J	188	17.5	mg/Kg	1	☼	6010C	Total/NA
Vanadium	22.2		0.67	0.15	mg/Kg	1	☼	6010C	Total/NA
Zinc	60.2		2.7	0.86	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.047		0.028	0.011	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: NS-23 (2'-1')

Lab Sample ID: 480-138304-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.72	J vs	6.1	0.37	ug/Kg	1	☼	8260C	Total/NA
Trichloroethene	1.3	J vs	6.1	1.3	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	470	J	1000	100	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	500	J	1000	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	700	J	1000	160	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	330	J	1000	110	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	200	J	1000	130	ug/Kg	5	☼	8270D	Total/NA
Chrysene	470	J	1000	230	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	1100		1000	110	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	290	J	1000	130	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	610	J	1000	150	ug/Kg	5	☼	8270D	Total/NA
Pyrene	860	J	1000	120	ug/Kg	5	☼	8270D	Total/NA
Aluminum	17200		12.0	5.3	mg/Kg	1	☼	6010C	Total/NA
Arsenic	14.6		2.4	0.48	mg/Kg	1	☼	6010C	Total/NA
Barium	192		0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.87		0.24	0.034	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.14	J	0.24	0.036	mg/Kg	1	☼	6010C	Total/NA
Calcium	2270	B	60.0	4.0	mg/Kg	1	☼	6010C	Total/NA
Chromium	20.7		0.60	0.24	mg/Kg	1	☼	6010C	Total/NA
Cobalt	17.2		0.60	0.060	mg/Kg	1	☼	6010C	Total/NA
Copper	21.0		1.2	0.25	mg/Kg	1	☼	6010C	Total/NA
Iron	28700	B	12.0	4.2	mg/Kg	1	☼	6010C	Total/NA
Lead	62.3		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Magnesium	4260		24.0	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	886	B	0.24	0.038	mg/Kg	1	☼	6010C	Total/NA
Nickel	28.3		6.0	0.28	mg/Kg	1	☼	6010C	Total/NA
Potassium	2380		36.0	24.0	mg/Kg	1	☼	6010C	Total/NA
Sodium	49.2	J	168	15.6	mg/Kg	1	☼	6010C	Total/NA
Vanadium	26.0		0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	66.6		2.4	0.77	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.021	J	0.024	0.0097	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS-23 (0-2")

Lab Sample ID: 480-138304-4

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-23 (0-2") (Continued)

Lab Sample ID: 480-138304-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	210	J	1200	160	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	660	J	1200	120	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	710	J	1200	180	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	970	J	1200	200	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	530	J	1200	130	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	390	J	1200	160	ug/Kg	5	☼	8270D	Total/NA
Chrysene	690	J	1200	280	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	1600		1200	130	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	430	J	1200	150	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	1000	J	1200	180	ug/Kg	5	☼	8270D	Total/NA
Pyrene	1300		1200	150	ug/Kg	5	☼	8270D	Total/NA
Aluminum	14700		14.1	6.2	mg/Kg	1	☼	6010C	Total/NA
Arsenic	10.9		2.8	0.56	mg/Kg	1	☼	6010C	Total/NA
Barium	161		0.71	0.16	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.68		0.28	0.039	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.23	J	0.28	0.042	mg/Kg	1	☼	6010C	Total/NA
Calcium	2440	B	70.5	4.7	mg/Kg	1	☼	6010C	Total/NA
Chromium	17.2		0.71	0.28	mg/Kg	1	☼	6010C	Total/NA
Cobalt	11.7		0.71	0.071	mg/Kg	1	☼	6010C	Total/NA
Copper	15.9		1.4	0.30	mg/Kg	1	☼	6010C	Total/NA
Iron	21600	B	14.1	4.9	mg/Kg	1	☼	6010C	Total/NA
Lead	25.3		1.4	0.34	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3320		28.2	1.3	mg/Kg	1	☼	6010C	Total/NA
Manganese	713	B	0.28	0.045	mg/Kg	1	☼	6010C	Total/NA
Nickel	20.0		7.1	0.32	mg/Kg	1	☼	6010C	Total/NA
Potassium	2790		42.3	28.2	mg/Kg	1	☼	6010C	Total/NA
Sodium	44.2	J	197	18.3	mg/Kg	1	☼	6010C	Total/NA
Vanadium	22.9		0.71	0.16	mg/Kg	1	☼	6010C	Total/NA
Zinc	62.1		2.8	0.90	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.044		0.027	0.011	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS-22 (0-2")

Lab Sample ID: 480-138304-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	16600	F2	12.4	5.5	mg/Kg	1	☼	6010C	Total/NA
Arsenic	11.6		2.5	0.50	mg/Kg	1	☼	6010C	Total/NA
Barium	130	F1 F2	0.62	0.14	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.72		0.25	0.035	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.12	J	0.25	0.037	mg/Kg	1	☼	6010C	Total/NA
Calcium	1810	B F1	62.2	4.1	mg/Kg	1	☼	6010C	Total/NA
Chromium	18.7		0.62	0.25	mg/Kg	1	☼	6010C	Total/NA
Cobalt	12.0		0.62	0.062	mg/Kg	1	☼	6010C	Total/NA
Copper	14.6		1.2	0.26	mg/Kg	1	☼	6010C	Total/NA
Iron	24800	B F2	12.4	4.4	mg/Kg	1	☼	6010C	Total/NA
Lead	31.5		1.2	0.30	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3540	F1	24.9	1.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	550	B	0.25	0.040	mg/Kg	1	☼	6010C	Total/NA
Nickel	20.8		6.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Potassium	2310	F1	37.3	24.9	mg/Kg	1	☼	6010C	Total/NA
Sodium	45.8	J	174	16.2	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-22 (0-2") (Continued)

Lab Sample ID: 480-138304-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	25.8		0.62	0.14	mg/Kg	1	☼	6010C	Total/NA
Zinc	61.4	F1	2.5	0.80	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.045		0.025	0.0099	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: NS-22 (2"-1')

Lab Sample ID: 480-138304-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.4	J vs	5.8	1.3	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	90	J	200	20	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	91	J	200	30	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	120	J	200	32	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	76	J	200	22	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	39	J	200	26	ug/Kg	1	☼	8270D	Total/NA
Chrysene	91	J	200	45	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	170	J	200	22	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	58	J	200	25	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	100	J	200	30	ug/Kg	1	☼	8270D	Total/NA
Pyrene	170	J	200	24	ug/Kg	1	☼	8270D	Total/NA
Aluminum	17100		12.3	5.4	mg/Kg	1	☼	6010C	Total/NA
Arsenic	17.9		2.5	0.49	mg/Kg	1	☼	6010C	Total/NA
Barium	98.3		0.62	0.14	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.97		0.25	0.034	mg/Kg	1	☼	6010C	Total/NA
Calcium	1760	B	61.6	4.1	mg/Kg	1	☼	6010C	Total/NA
Chromium	19.8		0.62	0.25	mg/Kg	1	☼	6010C	Total/NA
Cobalt	18.1		0.62	0.062	mg/Kg	1	☼	6010C	Total/NA
Copper	21.1		1.2	0.26	mg/Kg	1	☼	6010C	Total/NA
Iron	34800	B	12.3	4.3	mg/Kg	1	☼	6010C	Total/NA
Lead	19.5		1.2	0.30	mg/Kg	1	☼	6010C	Total/NA
Magnesium	5270		24.6	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	692	B	0.25	0.039	mg/Kg	1	☼	6010C	Total/NA
Nickel	34.2		6.2	0.28	mg/Kg	1	☼	6010C	Total/NA
Potassium	3040		37.0	24.6	mg/Kg	1	☼	6010C	Total/NA
Sodium	70.1	J	172	16.0	mg/Kg	1	☼	6010C	Total/NA
Vanadium	22.5		0.62	0.14	mg/Kg	1	☼	6010C	Total/NA
Zinc	72.3		2.5	0.79	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.020	J	0.025	0.010	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS-24 (0-2")

Lab Sample ID: 480-138304-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	130	J	1200	120	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	230	J	1200	190	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	220	J	1200	130	ug/Kg	5	☼	8270D	Total/NA
Pyrene	180	J	1200	140	ug/Kg	5	☼	8270D	Total/NA
Endosulfan II	11	J B	23	4.1	ug/Kg	10	☼	8081B	Total/NA
Aluminum	17900		14.1	6.2	mg/Kg	1	☼	6010C	Total/NA
Arsenic	14.6		2.8	0.56	mg/Kg	1	☼	6010C	Total/NA
Barium	180		0.70	0.16	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.85		0.28	0.039	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.13	J	0.28	0.042	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-24 (0-2") (Continued)

Lab Sample ID: 480-138304-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Calcium	1510	B	70.5	4.7	mg/Kg	1		✱	6010C	Total/NA
Chromium	20.1		0.70	0.28	mg/Kg	1		✱	6010C	Total/NA
Cobalt	16.6		0.70	0.070	mg/Kg	1		✱	6010C	Total/NA
Copper	20.0		1.4	0.30	mg/Kg	1		✱	6010C	Total/NA
Iron	31200	B	14.1	4.9	mg/Kg	1		✱	6010C	Total/NA
Lead	25.9		1.4	0.34	mg/Kg	1		✱	6010C	Total/NA
Magnesium	3910		28.2	1.3	mg/Kg	1		✱	6010C	Total/NA
Manganese	1070	B	0.28	0.045	mg/Kg	1		✱	6010C	Total/NA
Nickel	25.8		7.0	0.32	mg/Kg	1		✱	6010C	Total/NA
Potassium	2480		42.3	28.2	mg/Kg	1		✱	6010C	Total/NA
Sodium	52.9	J	197	18.3	mg/Kg	1		✱	6010C	Total/NA
Vanadium	26.6		0.70	0.16	mg/Kg	1		✱	6010C	Total/NA
Zinc	72.1		2.8	0.90	mg/Kg	1		✱	6010C	Total/NA
Mercury	0.041		0.028	0.012	mg/Kg	1		✱	7471B	Total/NA

Client Sample ID: NS-24 (2"-1')

Lab Sample ID: 480-138304-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acenaphthylene	110	J	210	27	ug/Kg	1		✱	8270D	Total/NA
Anthracene	130	J	210	51	ug/Kg	1		✱	8270D	Total/NA
Benzo[a]anthracene	480		210	21	ug/Kg	1		✱	8270D	Total/NA
Benzo[a]pyrene	440		210	30	ug/Kg	1		✱	8270D	Total/NA
Benzo[b]fluoranthene	570		210	33	ug/Kg	1		✱	8270D	Total/NA
Benzo[g,h,i]perylene	310		210	22	ug/Kg	1		✱	8270D	Total/NA
Benzo[k]fluoranthene	220		210	27	ug/Kg	1		✱	8270D	Total/NA
Carbazole	30	J	210	24	ug/Kg	1		✱	8270D	Total/NA
Chrysene	450		210	46	ug/Kg	1		✱	8270D	Total/NA
Dibenz(a,h)anthracene	84	J	210	36	ug/Kg	1		✱	8270D	Total/NA
Fluoranthene	840		210	22	ug/Kg	1		✱	8270D	Total/NA
Fluorene	31	J	210	24	ug/Kg	1		✱	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	260		210	25	ug/Kg	1		✱	8270D	Total/NA
Phenanthrene	430		210	30	ug/Kg	1		✱	8270D	Total/NA
Pyrene	820		210	24	ug/Kg	1		✱	8270D	Total/NA
delta-BHC	0.42	J	2.0	0.38	ug/Kg	1		✱	8081B	Total/NA
Endosulfan sulfate	0.45	J B	2.0	0.38	ug/Kg	1		✱	8081B	Total/NA
Aluminum	16600		12.1	5.3	mg/Kg	1		✱	6010C	Total/NA
Arsenic	14.5		2.4	0.48	mg/Kg	1		✱	6010C	Total/NA
Barium	140		0.60	0.13	mg/Kg	1		✱	6010C	Total/NA
Beryllium	0.78		0.24	0.034	mg/Kg	1		✱	6010C	Total/NA
Cadmium	0.076	J	0.24	0.036	mg/Kg	1		✱	6010C	Total/NA
Calcium	830	B	60.4	4.0	mg/Kg	1		✱	6010C	Total/NA
Chromium	18.5		0.60	0.24	mg/Kg	1		✱	6010C	Total/NA
Cobalt	16.0		0.60	0.060	mg/Kg	1		✱	6010C	Total/NA
Copper	17.4		1.2	0.25	mg/Kg	1		✱	6010C	Total/NA
Iron	29700	B	12.1	4.2	mg/Kg	1		✱	6010C	Total/NA
Lead	23.1		1.2	0.29	mg/Kg	1		✱	6010C	Total/NA
Magnesium	3370		24.2	1.1	mg/Kg	1		✱	6010C	Total/NA
Manganese	833	B	0.24	0.039	mg/Kg	1		✱	6010C	Total/NA
Nickel	23.0		6.0	0.28	mg/Kg	1		✱	6010C	Total/NA
Potassium	2090		36.2	24.2	mg/Kg	1		✱	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-24 (2"-1') (Continued)

Lab Sample ID: 480-138304-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Sodium	45.0	J	169	15.7	mg/Kg	1		✱	6010C	Total/NA
Vanadium	25.5		0.60	0.13	mg/Kg	1		✱	6010C	Total/NA
Zinc	58.7		2.4	0.77	mg/Kg	1		✱	6010C	Total/NA
Mercury	0.029		0.023	0.0091	mg/Kg	1		✱	7471B	Total/NA

Client Sample ID: BD

Lab Sample ID: 480-138304-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzo[a]anthracene	26	J	210	21	ug/Kg	1		✱	8270D	Total/NA
Benzo[b]fluoranthene	45	J	210	34	ug/Kg	1		✱	8270D	Total/NA
Fluoranthene	48	J	210	23	ug/Kg	1		✱	8270D	Total/NA
Phenol	51	J	210	33	ug/Kg	1		✱	8270D	Total/NA
Pyrene	50	J	210	25	ug/Kg	1		✱	8270D	Total/NA
Aluminum	13200		12.3	5.4	mg/Kg	1		✱	6010C	Total/NA
Arsenic	13.1		2.5	0.49	mg/Kg	1		✱	6010C	Total/NA
Barium	134		0.61	0.13	mg/Kg	1		✱	6010C	Total/NA
Beryllium	0.67		0.25	0.034	mg/Kg	1		✱	6010C	Total/NA
Cadmium	0.056	J	0.25	0.037	mg/Kg	1		✱	6010C	Total/NA
Calcium	600	B	61.3	4.0	mg/Kg	1		✱	6010C	Total/NA
Chromium	15.0		0.61	0.25	mg/Kg	1		✱	6010C	Total/NA
Cobalt	13.1		0.61	0.061	mg/Kg	1		✱	6010C	Total/NA
Copper	19.5		1.2	0.26	mg/Kg	1		✱	6010C	Total/NA
Iron	24000	B	12.3	4.3	mg/Kg	1		✱	6010C	Total/NA
Lead	23.8		1.2	0.29	mg/Kg	1		✱	6010C	Total/NA
Magnesium	3020		24.5	1.1	mg/Kg	1		✱	6010C	Total/NA
Manganese	672	B	0.25	0.039	mg/Kg	1		✱	6010C	Total/NA
Nickel	23.4		6.1	0.28	mg/Kg	1		✱	6010C	Total/NA
Potassium	1780		36.8	24.5	mg/Kg	1		✱	6010C	Total/NA
Sodium	40.1	J	172	15.9	mg/Kg	1		✱	6010C	Total/NA
Vanadium	20.3		0.61	0.13	mg/Kg	1		✱	6010C	Total/NA
Zinc	52.4		2.5	0.78	mg/Kg	1		✱	6010C	Total/NA
Mercury	0.017	J	0.025	0.010	mg/Kg	1		✱	7471B	Total/NA

Client Sample ID: SS-26 (0-2")

Lab Sample ID: 480-138304-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzo[b]fluoranthene	39	J	210	34	ug/Kg	1		✱	8270D	Total/NA
Fluoranthene	45	J	210	22	ug/Kg	1		✱	8270D	Total/NA
Phenanthrene	33	J	210	31	ug/Kg	1		✱	8270D	Total/NA
Pyrene	48	J	210	25	ug/Kg	1		✱	8270D	Total/NA
Aluminum	11400		12.6	5.5	mg/Kg	1		✱	6010C	Total/NA
Arsenic	11.5		2.5	0.50	mg/Kg	1		✱	6010C	Total/NA
Barium	126		0.63	0.14	mg/Kg	1		✱	6010C	Total/NA
Beryllium	0.56		0.25	0.035	mg/Kg	1		✱	6010C	Total/NA
Cadmium	0.072	J	0.25	0.038	mg/Kg	1		✱	6010C	Total/NA
Calcium	1760	B	62.8	4.1	mg/Kg	1		✱	6010C	Total/NA
Chromium	13.3		0.63	0.25	mg/Kg	1		✱	6010C	Total/NA
Cobalt	12.7		0.63	0.063	mg/Kg	1		✱	6010C	Total/NA
Copper	15.6		1.3	0.26	mg/Kg	1		✱	6010C	Total/NA
Iron	22400	B	12.6	4.4	mg/Kg	1		✱	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-26 (0-2") (Continued)

Lab Sample ID: 480-138304-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Lead	22.7		1.3	0.30	mg/Kg	1		✱	6010C	Total/NA
Magnesium	2870		25.1	1.2	mg/Kg	1		✱	6010C	Total/NA
Manganese	694	B	0.25	0.040	mg/Kg	1		✱	6010C	Total/NA
Nickel	22.3		6.3	0.29	mg/Kg	1		✱	6010C	Total/NA
Potassium	1450		37.7	25.1	mg/Kg	1		✱	6010C	Total/NA
Sodium	40.5	J	176	16.3	mg/Kg	1		✱	6010C	Total/NA
Vanadium	17.1		0.63	0.14	mg/Kg	1		✱	6010C	Total/NA
Zinc	50.0		2.5	0.80	mg/Kg	1		✱	6010C	Total/NA
Mercury	0.018	J	0.025	0.010	mg/Kg	1		✱	7471B	Total/NA

Client Sample ID: NS-26 (2"-1')

Lab Sample ID: 480-138304-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Aluminum	9690		10.6	4.7	mg/Kg	1		✱	6010C	Total/NA
Arsenic	8.6		2.1	0.43	mg/Kg	1		✱	6010C	Total/NA
Barium	187		0.53	0.12	mg/Kg	1		✱	6010C	Total/NA
Beryllium	0.46		0.21	0.030	mg/Kg	1		✱	6010C	Total/NA
Cadmium	0.041	J	0.21	0.032	mg/Kg	1		✱	6010C	Total/NA
Calcium	498	B	53.1	3.5	mg/Kg	1		✱	6010C	Total/NA
Chromium	11.7		0.53	0.21	mg/Kg	1		✱	6010C	Total/NA
Cobalt	10.7		0.53	0.053	mg/Kg	1		✱	6010C	Total/NA
Copper	14.6		1.1	0.22	mg/Kg	1		✱	6010C	Total/NA
Iron	18600	B	10.6	3.7	mg/Kg	1		✱	6010C	Total/NA
Lead	12.9		1.1	0.26	mg/Kg	1		✱	6010C	Total/NA
Magnesium	2640		21.3	0.99	mg/Kg	1		✱	6010C	Total/NA
Manganese	426	B	0.21	0.034	mg/Kg	1		✱	6010C	Total/NA
Nickel	20.2		5.3	0.24	mg/Kg	1		✱	6010C	Total/NA
Potassium	1400		31.9	21.3	mg/Kg	1		✱	6010C	Total/NA
Sodium	30.9	J	149	13.8	mg/Kg	1		✱	6010C	Total/NA
Vanadium	14.4		0.53	0.12	mg/Kg	1		✱	6010C	Total/NA
Zinc	42.2		2.1	0.68	mg/Kg	1		✱	6010C	Total/NA

Client Sample ID: SS-25 (0-2")

Lab Sample ID: 480-138304-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Fluoranthene	21	J	200	21	ug/Kg	1		✱	8270D	Total/NA
Dieldrin	0.52	J	1.9	0.47	ug/Kg	1		✱	8081B	Total/NA
Endosulfan II	0.59	J B	1.9	0.35	ug/Kg	1		✱	8081B	Total/NA
Endrin	0.81	J	1.9	0.38	ug/Kg	1		✱	8081B	Total/NA
gamma-BHC (Lindane)	0.47	J B	1.9	0.36	ug/Kg	1		✱	8081B	Total/NA
Aluminum	13500		11.4	5.0	mg/Kg	1		✱	6010C	Total/NA
Arsenic	12.5		2.3	0.46	mg/Kg	1		✱	6010C	Total/NA
Barium	78.7		0.57	0.13	mg/Kg	1		✱	6010C	Total/NA
Beryllium	0.77		0.23	0.032	mg/Kg	1		✱	6010C	Total/NA
Calcium	1890	B	57.0	3.8	mg/Kg	1		✱	6010C	Total/NA
Chromium	16.2		0.57	0.23	mg/Kg	1		✱	6010C	Total/NA
Cobalt	16.2		0.57	0.057	mg/Kg	1		✱	6010C	Total/NA
Copper	16.3		1.1	0.24	mg/Kg	1		✱	6010C	Total/NA
Iron	25500	B	11.4	4.0	mg/Kg	1		✱	6010C	Total/NA
Lead	13.2		1.1	0.27	mg/Kg	1		✱	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-25 (0-2") (Continued)

Lab Sample ID: 480-138304-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	4220		22.8	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	571	B	0.23	0.037	mg/Kg	1	☼	6010C	Total/NA
Nickel	27.6		5.7	0.26	mg/Kg	1	☼	6010C	Total/NA
Potassium	2570		34.2	22.8	mg/Kg	1	☼	6010C	Total/NA
Sodium	50.8	J	160	14.8	mg/Kg	1	☼	6010C	Total/NA
Vanadium	18.2		0.57	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	60.1		2.3	0.73	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.0098	J	0.023	0.0094	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: NS-25 (2"-1')

Lab Sample ID: 480-138304-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.37	J vs	5.8	0.36	ug/Kg	1	☼	8260C	Total/NA
Trichloroethene	1.4	J vs	5.8	1.3	ug/Kg	1	☼	8260C	Total/NA
Fluoranthene	27	J	200	21	ug/Kg	1	☼	8270D	Total/NA
delta-BHC	0.51	J	1.9	0.36	ug/Kg	1	☼	8081B	Total/NA
Aluminum	16700		11.7	5.1	mg/Kg	1	☼	6010C	Total/NA
Antimony	0.72	J	17.5	0.47	mg/Kg	1	☼	6010C	Total/NA
Arsenic	16.4		2.3	0.47	mg/Kg	1	☼	6010C	Total/NA
Barium	120	B	0.58	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.92		0.23	0.033	mg/Kg	1	☼	6010C	Total/NA
Calcium	1810	B	58.4	3.9	mg/Kg	1	☼	6010C	Total/NA
Chromium	19.1		0.58	0.23	mg/Kg	1	☼	6010C	Total/NA
Cobalt	18.8		0.58	0.058	mg/Kg	1	☼	6010C	Total/NA
Copper	16.1		1.2	0.25	mg/Kg	1	☼	6010C	Total/NA
Iron	32700		11.7	4.1	mg/Kg	1	☼	6010C	Total/NA
Lead	19.4		1.2	0.28	mg/Kg	1	☼	6010C	Total/NA
Magnesium	4100		23.3	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	734		0.23	0.037	mg/Kg	1	☼	6010C	Total/NA
Nickel	31.1		5.8	0.27	mg/Kg	1	☼	6010C	Total/NA
Potassium	2670		35.0	23.3	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.50	J	4.7	0.47	mg/Kg	1	☼	6010C	Total/NA
Sodium	61.8	J	163	15.2	mg/Kg	1	☼	6010C	Total/NA
Vanadium	24.5		0.58	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	68.1		2.3	0.75	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.026		0.024	0.0097	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: NS-42 (2"-1')

Lab Sample ID: 480-138304-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	14600		11.1	4.9	mg/Kg	1	☼	6010C	Total/NA
Antimony	0.83	J F1	16.7	0.45	mg/Kg	1	☼	6010C	Total/NA
Arsenic	18.8		2.2	0.45	mg/Kg	1	☼	6010C	Total/NA
Barium	146	B F1	0.56	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.82		0.22	0.031	mg/Kg	1	☼	6010C	Total/NA
Calcium	1370	B	55.7	3.7	mg/Kg	1	☼	6010C	Total/NA
Chromium	18.0		0.56	0.22	mg/Kg	1	☼	6010C	Total/NA
Cobalt	15.5		0.56	0.056	mg/Kg	1	☼	6010C	Total/NA
Copper	18.5		1.1	0.23	mg/Kg	1	☼	6010C	Total/NA
Iron	32900		11.1	3.9	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-42 (2"-1") (Continued)

Lab Sample ID: 480-138304-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	17.6		1.1	0.27	mg/Kg	1	☼	6010C	Total/NA
Magnesium	4000		22.3	1.0	mg/Kg	1	☼	6010C	Total/NA
Manganese	787		0.22	0.036	mg/Kg	1	☼	6010C	Total/NA
Nickel	31.9		5.6	0.26	mg/Kg	1	☼	6010C	Total/NA
Potassium	2810	F1	33.4	22.3	mg/Kg	1	☼	6010C	Total/NA
Sodium	67.1	J F1	156	14.5	mg/Kg	1	☼	6010C	Total/NA
Vanadium	20.5		0.56	0.12	mg/Kg	1	☼	6010C	Total/NA
Zinc	65.0		2.2	0.71	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: SS-42 (0-2")

Lab Sample ID: 480-138304-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	12300		13.1	5.8	mg/Kg	1	☼	6010C	Total/NA
Antimony	0.72	J	19.7	0.52	mg/Kg	1	☼	6010C	Total/NA
Arsenic	16.7		2.6	0.52	mg/Kg	1	☼	6010C	Total/NA
Barium	117	B	0.66	0.14	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.71		0.26	0.037	mg/Kg	1	☼	6010C	Total/NA
Calcium	1940	B	65.5	4.3	mg/Kg	1	☼	6010C	Total/NA
Chromium	15.6		0.66	0.26	mg/Kg	1	☼	6010C	Total/NA
Cobalt	10.9		0.66	0.066	mg/Kg	1	☼	6010C	Total/NA
Copper	15.8		1.3	0.28	mg/Kg	1	☼	6010C	Total/NA
Iron	28700		13.1	4.6	mg/Kg	1	☼	6010C	Total/NA
Lead	13.6		1.3	0.31	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3450		26.2	1.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	339		0.26	0.042	mg/Kg	1	☼	6010C	Total/NA
Nickel	26.6		6.6	0.30	mg/Kg	1	☼	6010C	Total/NA
Potassium	2450		39.3	26.2	mg/Kg	1	☼	6010C	Total/NA
Sodium	49.3	J	183	17.0	mg/Kg	1	☼	6010C	Total/NA
Vanadium	16.8		0.66	0.14	mg/Kg	1	☼	6010C	Total/NA
Zinc	58.7		2.6	0.84	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: NS-27 (2"-1")

Lab Sample ID: 480-138304-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	14700		11.0	4.8	mg/Kg	1	☼	6010C	Total/NA
Antimony	0.69	J	16.5	0.44	mg/Kg	1	☼	6010C	Total/NA
Arsenic	18.0		2.2	0.44	mg/Kg	1	☼	6010C	Total/NA
Barium	150	B	0.55	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.87		0.22	0.031	mg/Kg	1	☼	6010C	Total/NA
Calcium	3410	B	55.0	3.6	mg/Kg	1	☼	6010C	Total/NA
Chromium	17.8		0.55	0.22	mg/Kg	1	☼	6010C	Total/NA
Cobalt	15.5		0.55	0.055	mg/Kg	1	☼	6010C	Total/NA
Copper	21.1		1.1	0.23	mg/Kg	1	☼	6010C	Total/NA
Iron	31000		11.0	3.8	mg/Kg	1	☼	6010C	Total/NA
Lead	16.8		1.1	0.26	mg/Kg	1	☼	6010C	Total/NA
Magnesium	5030		22.0	1.0	mg/Kg	1	☼	6010C	Total/NA
Manganese	583		0.22	0.035	mg/Kg	1	☼	6010C	Total/NA
Nickel	32.2		5.5	0.25	mg/Kg	1	☼	6010C	Total/NA
Potassium	2910		33.0	22.0	mg/Kg	1	☼	6010C	Total/NA
Sodium	74.0	J	154	14.3	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-27 (2"-1) (Continued)

Lab Sample ID: 480-138304-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	19.5		0.55	0.12	mg/Kg	1	☼	6010C	Total/NA
Zinc	66.1		2.2	0.70	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: SS-27 (0-2")

Lab Sample ID: 480-138304-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	14500		12.0	5.3	mg/Kg	1	☼	6010C	Total/NA
Antimony	0.54	J	18.0	0.48	mg/Kg	1	☼	6010C	Total/NA
Arsenic	9.5		2.4	0.48	mg/Kg	1	☼	6010C	Total/NA
Barium	81.4	B	0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.86		0.24	0.034	mg/Kg	1	☼	6010C	Total/NA
Calcium	1880	B	60.0	4.0	mg/Kg	1	☼	6010C	Total/NA
Chromium	17.0		0.60	0.24	mg/Kg	1	☼	6010C	Total/NA
Cobalt	14.4		0.60	0.060	mg/Kg	1	☼	6010C	Total/NA
Copper	17.7		1.2	0.25	mg/Kg	1	☼	6010C	Total/NA
Iron	29500		12.0	4.2	mg/Kg	1	☼	6010C	Total/NA
Lead	13.0		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Magnesium	4770		24.0	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	545		0.24	0.038	mg/Kg	1	☼	6010C	Total/NA
Nickel	30.3		6.0	0.28	mg/Kg	1	☼	6010C	Total/NA
Potassium	3220		36.0	24.0	mg/Kg	1	☼	6010C	Total/NA
Sodium	76.3	J	168	15.6	mg/Kg	1	☼	6010C	Total/NA
Vanadium	19.3		0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	65.3		2.4	0.77	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: NS-28 (2"-1")

Lab Sample ID: 480-138304-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.41	J vs	5.6	0.35	ug/Kg	1	☼	8260C	Total/NA
Aluminum	15900		11.8	5.2	mg/Kg	1	☼	6010C	Total/NA
Antimony	0.80	J	17.7	0.47	mg/Kg	1	☼	6010C	Total/NA
Arsenic	16.9		2.4	0.47	mg/Kg	1	☼	6010C	Total/NA
Barium	158	B	0.59	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.92		0.24	0.033	mg/Kg	1	☼	6010C	Total/NA
Calcium	2140	B	58.9	3.9	mg/Kg	1	☼	6010C	Total/NA
Chromium	18.6		0.59	0.24	mg/Kg	1	☼	6010C	Total/NA
Cobalt	17.6		0.59	0.059	mg/Kg	1	☼	6010C	Total/NA
Copper	19.6		1.2	0.25	mg/Kg	1	☼	6010C	Total/NA
Iron	33700		11.8	4.1	mg/Kg	1	☼	6010C	Total/NA
Lead	17.1		1.2	0.28	mg/Kg	1	☼	6010C	Total/NA
Magnesium	5170		23.6	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	795		0.24	0.038	mg/Kg	1	☼	6010C	Total/NA
Nickel	33.9		5.9	0.27	mg/Kg	1	☼	6010C	Total/NA
Potassium	3270		35.4	23.6	mg/Kg	1	☼	6010C	Total/NA
Sodium	83.3	J	165	15.3	mg/Kg	1	☼	6010C	Total/NA
Vanadium	21.7		0.59	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	72.1		2.4	0.75	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: SS-28 (0-2")

Lab Sample ID: 480-138304-19

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-28 (0-2") (Continued)

Lab Sample ID: 480-138304-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	16800		14.3	6.3	mg/Kg	1	☼	6010C	Total/NA
Antimony	0.81	J	21.5	0.57	mg/Kg	1	☼	6010C	Total/NA
Arsenic	16.2		2.9	0.57	mg/Kg	1	☼	6010C	Total/NA
Barium	110	B	0.72	0.16	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.91		0.29	0.040	mg/Kg	1	☼	6010C	Total/NA
Calcium	2970	B	71.7	4.7	mg/Kg	1	☼	6010C	Total/NA
Chromium	20.1		0.72	0.29	mg/Kg	1	☼	6010C	Total/NA
Cobalt	16.4		0.72	0.072	mg/Kg	1	☼	6010C	Total/NA
Copper	24.2		1.4	0.30	mg/Kg	1	☼	6010C	Total/NA
Iron	36500		14.3	5.0	mg/Kg	1	☼	6010C	Total/NA
Lead	15.8		1.4	0.34	mg/Kg	1	☼	6010C	Total/NA
Magnesium	5510		28.7	1.3	mg/Kg	1	☼	6010C	Total/NA
Manganese	709		0.29	0.046	mg/Kg	1	☼	6010C	Total/NA
Nickel	34.8		7.2	0.33	mg/Kg	1	☼	6010C	Total/NA
Potassium	3770		43.0	28.7	mg/Kg	1	☼	6010C	Total/NA
Sodium	82.9	J	201	18.6	mg/Kg	1	☼	6010C	Total/NA
Vanadium	22.9		0.72	0.16	mg/Kg	1	☼	6010C	Total/NA
Zinc	80.5		2.9	0.92	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.012	J	0.028	0.011	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: NS-29 (2"-1")

Lab Sample ID: 480-138304-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	170	J	230	23	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	150	J	230	33	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	210	J	230	36	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	130	J	230	24	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	98	J	230	29	ug/Kg	1	☼	8270D	Total/NA
Chrysene	180	J	230	50	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	45	J	230	40	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	350		230	24	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	110	J	230	28	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	170	J	230	33	ug/Kg	1	☼	8270D	Total/NA
Pyrene	370		230	26	ug/Kg	1	☼	8270D	Total/NA
Dieldrin	16	J	44	11	ug/Kg	20	☼	8081B	Total/NA
Aluminum	21600		14.0	6.2	mg/Kg	1	☼	6010C	Total/NA
Antimony	0.82	J	21.0	0.56	mg/Kg	1	☼	6010C	Total/NA
Arsenic	14.0		2.8	0.56	mg/Kg	1	☼	6010C	Total/NA
Barium	176	B	0.70	0.15	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.97		0.28	0.039	mg/Kg	1	☼	6010C	Total/NA
Calcium	1120	B	69.9	4.6	mg/Kg	1	☼	6010C	Total/NA
Chromium	24.1		0.70	0.28	mg/Kg	1	☼	6010C	Total/NA
Cobalt	13.1		0.70	0.070	mg/Kg	1	☼	6010C	Total/NA
Copper	17.4		1.4	0.29	mg/Kg	1	☼	6010C	Total/NA
Iron	34600		14.0	4.9	mg/Kg	1	☼	6010C	Total/NA
Lead	30.0		1.4	0.34	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3720		28.0	1.3	mg/Kg	1	☼	6010C	Total/NA
Manganese	554		0.28	0.045	mg/Kg	1	☼	6010C	Total/NA
Nickel	23.6		7.0	0.32	mg/Kg	1	☼	6010C	Total/NA
Potassium	2810		42.0	28.0	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-29 (2"-1") (Continued)

Lab Sample ID: 480-138304-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	60.1	J	196	18.2	mg/Kg	1	☼	6010C	Total/NA
Vanadium	39.4		0.70	0.15	mg/Kg	1	☼	6010C	Total/NA
Zinc	72.2		2.8	0.90	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.050		0.026	0.010	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS-29 (0-2")

Lab Sample ID: 480-138304-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	82	J	220	32	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	95	J	220	34	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	84	J F2	220	23	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	170	J	220	23	ug/Kg	1	☼	8270D	Total/NA
Pyrene	140	J	220	25	ug/Kg	1	☼	8270D	Total/NA
4,4'-DDD	21		21	4.2	ug/Kg	10	☼	8081B	Total/NA
Dieldrin	20	J	21	5.1	ug/Kg	10	☼	8081B	Total/NA
Aluminum	22400		13.3	5.9	mg/Kg	1	☼	6010C	Total/NA
Antimony	0.75	J	20.0	0.53	mg/Kg	1	☼	6010C	Total/NA
Arsenic	20.0		2.7	0.53	mg/Kg	1	☼	6010C	Total/NA
Barium	180	B	0.67	0.15	mg/Kg	1	☼	6010C	Total/NA
Beryllium	1.1		0.27	0.037	mg/Kg	1	☼	6010C	Total/NA
Calcium	1310	B	66.5	4.4	mg/Kg	1	☼	6010C	Total/NA
Chromium	25.3		0.67	0.27	mg/Kg	1	☼	6010C	Total/NA
Cobalt	13.9		0.67	0.067	mg/Kg	1	☼	6010C	Total/NA
Copper	17.7		1.3	0.28	mg/Kg	1	☼	6010C	Total/NA
Iron	39400		13.3	4.7	mg/Kg	1	☼	6010C	Total/NA
Lead	33.2		1.3	0.32	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3410		26.6	1.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	563		0.27	0.043	mg/Kg	1	☼	6010C	Total/NA
Nickel	20.9		6.7	0.31	mg/Kg	1	☼	6010C	Total/NA
Potassium	2750		39.9	26.6	mg/Kg	1	☼	6010C	Total/NA
Sodium	56.2	J	186	17.3	mg/Kg	1	☼	6010C	Total/NA
Vanadium	43.4		0.67	0.15	mg/Kg	1	☼	6010C	Total/NA
Zinc	78.9		2.7	0.85	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.039		0.025	0.010	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-21 (2"-1')

Lab Sample ID: 480-138304-1

Date Collected: 06/29/18 07:15

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 81.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	6.1	0.44	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
1,1,2,2-Tetrachloroethane	ND	vs	6.1	0.99	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	6.1	1.4	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
1,1,2-Trichloroethane	ND	vs	6.1	0.79	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
1,1-Dichloroethane	ND	vs	6.1	0.74	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
1,1-Dichloroethene	ND	vs	6.1	0.74	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
1,2,4-Trichlorobenzene	ND	vs	6.1	0.37	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
1,2-Dibromo-3-Chloropropane	ND	vs	6.1	3.0	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
1,2-Dichlorobenzene	ND	vs	6.1	0.48	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
1,2-Dichloroethane	ND	vs	6.1	0.31	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
1,2-Dichloropropane	ND	vs	6.1	3.0	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
1,3-Dichlorobenzene	ND	vs	6.1	0.31	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
1,4-Dichlorobenzene	ND	vs	6.1	0.85	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
2-Butanone (MEK)	ND	vs	30	2.2	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
2-Hexanone	ND	vs	30	3.0	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
4-Methyl-2-pentanone (MIBK)	ND	vs	30	2.0	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Acetone	ND	vs	30	5.1	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Benzene	ND	vs	6.1	0.30	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Bromoform	ND	vs	6.1	3.0	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Bromomethane	ND	vs	6.1	0.55	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Carbon disulfide	ND	vs	6.1	3.0	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Carbon tetrachloride	ND	vs	6.1	0.59	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Chlorobenzene	ND	vs	6.1	0.80	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Dibromochloromethane	ND	vs	6.1	0.78	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Chloroethane	ND	vs	6.1	1.4	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Chloroform	0.48	J vs	6.1	0.38	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Chloromethane	ND	vs	6.1	0.37	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
cis-1,2-Dichloroethene	ND	vs	6.1	0.78	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Cyclohexane	ND	vs	6.1	0.85	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Bromodichloromethane	ND	vs	6.1	0.82	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Dichlorodifluoromethane	ND	vs	6.1	0.50	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Ethylbenzene	ND	vs	6.1	0.42	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
1,2-Dibromoethane	ND	vs	6.1	0.78	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Isopropylbenzene	ND	vs	6.1	0.92	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Methyl acetate	ND	vs	30	3.7	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Methyl tert-butyl ether	ND	vs	6.1	0.60	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Methylcyclohexane	ND	vs	6.1	0.93	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Methylene Chloride	3.7	J vs	6.1	2.8	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Tetrachloroethene	ND	vs	6.1	0.82	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Toluene	ND	vs	6.1	0.46	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
trans-1,2-Dichloroethene	ND	vs	6.1	0.63	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
trans-1,3-Dichloropropene	ND	vs	6.1	2.7	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Trichloroethene	ND	vs	6.1	1.3	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Trichlorofluoromethane	ND	vs	6.1	0.58	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Vinyl chloride	ND	vs	6.1	0.74	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Xylenes, Total	ND	vs	12	1.0	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
cis-1,3-Dichloropropene	ND	vs	6.1	0.88	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1
Styrene	ND	vs	6.1	0.30	ug/Kg	☼	07/03/18 08:40	07/03/18 18:12	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-21 (2"-1')

Lab Sample ID: 480-138304-1

Date Collected: 06/29/18 07:15

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 81.3

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Cyclotrisiloxane, hexamethyl-	6.9	T J N	ug/Kg	☼	6.81	541-05-9	07/03/18 08:40	07/03/18 18:12	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	104		64 - 126				07/03/18 08:40	07/03/18 18:12	1
4-Bromofluorobenzene (Surr)	100		72 - 126				07/03/18 08:40	07/03/18 18:12	1
Toluene-d8 (Surr)	101		71 - 125				07/03/18 08:40	07/03/18 18:12	1
Dibromofluoromethane (Surr)	103		60 - 140				07/03/18 08:40	07/03/18 18:12	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		200	55	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
2,4,6-Trichlorophenol	ND		200	41	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
2,4-Dichlorophenol	ND		200	22	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
2,4-Dimethylphenol	ND		200	49	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
2,4-Dinitrophenol	ND		2000	940	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
2,4-Dinitrotoluene	ND		200	42	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
2,6-Dinitrotoluene	ND		200	24	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
2-Chloronaphthalene	ND		200	34	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
2-Chlorophenol	ND		200	37	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
2-Methylnaphthalene	ND		200	41	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
2-Methylphenol	ND		200	24	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
2-Nitroaniline	ND		400	30	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
2-Nitrophenol	ND		200	58	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
3,3'-Dichlorobenzidine	ND		400	240	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
3-Nitroaniline	ND		400	56	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
4,6-Dinitro-2-methylphenol	ND		400	200	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
4-Bromophenyl phenyl ether	ND		200	29	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
4-Chloro-3-methylphenol	ND		200	50	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
4-Chloroaniline	ND		200	50	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
4-Chlorophenyl phenyl ether	ND		200	25	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
4-Methylphenol	ND		400	24	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
4-Nitroaniline	ND		400	110	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
4-Nitrophenol	ND		400	140	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Acenaphthene	ND		200	30	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Acenaphthylene	27	J	200	26	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Acetophenone	ND		200	28	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Anthracene	80	J	200	50	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Atrazine	ND		200	71	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Benzaldehyde	ND		200	160	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Benzo[a]anthracene	240		200	20	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Benzo[a]pyrene	210		200	30	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Benzo[b]fluoranthene	270		200	32	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Benzo[g,h,i]perylene	150	J	200	22	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Benzo[k]fluoranthene	120	J	200	26	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Biphenyl	ND		200	30	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
bis (2-chloroisopropyl) ether	ND		200	41	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Bis(2-chloroethoxy)methane	ND		200	43	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Bis(2-chloroethyl)ether	ND		200	26	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Bis(2-ethylhexyl) phthalate	ND		200	70	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Butyl benzyl phthalate	ND		200	34	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-21 (2"-1")

Lab Sample ID: 480-138304-1

Date Collected: 06/29/18 07:15

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 81.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	ND		200	61	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Carbazole	40	J	200	24	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Chrysene	250		200	46	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Dibenz(a,h)anthracene	48	J	200	36	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Dibenzofuran	29	J	200	24	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Diethyl phthalate	ND		200	26	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Dimethyl phthalate	ND		200	24	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Di-n-butyl phthalate	ND		200	35	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Di-n-octyl phthalate	ND		200	24	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Fluoranthene	470		200	22	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Fluorene	33	J	200	24	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Hexachlorobenzene	ND		200	28	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Hexachlorobutadiene	ND		200	30	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Hexachlorocyclopentadiene	ND		200	28	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Hexachloroethane	ND		200	26	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Indeno[1,2,3-cd]pyrene	120	J	200	25	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Isophorone	ND		200	43	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Naphthalene	ND		200	26	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Nitrobenzene	ND		200	23	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
N-Nitrosodi-n-propylamine	ND		200	35	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
N-Nitrosodiphenylamine	ND		200	170	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Pentachlorophenol	ND		400	200	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Phenanthrene	410		200	30	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Phenol	ND		200	31	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1
Pyrene	520		200	24	ug/Kg	☼	07/02/18 14:22	07/09/18 15:18	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	700	T J	ug/Kg	☼	1.71		07/02/18 14:22	07/09/18 15:18	1
Unknown	610	T J	ug/Kg	☼	2.95		07/02/18 14:22	07/09/18 15:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	77		54 - 120	07/02/18 14:22	07/09/18 15:18	1
2-Fluorobiphenyl	97		60 - 120	07/02/18 14:22	07/09/18 15:18	1
2-Fluorophenol	75		52 - 120	07/02/18 14:22	07/09/18 15:18	1
Nitrobenzene-d5	88		53 - 120	07/02/18 14:22	07/09/18 15:18	1
Phenol-d5	76		54 - 120	07/02/18 14:22	07/09/18 15:18	1
p-Terphenyl-d14	116		65 - 121	07/02/18 14:22	07/09/18 15:18	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	16500		12.3	5.4	mg/Kg	☼	07/05/18 10:08	07/06/18 02:06	1
Antimony	ND		18.4	0.49	mg/Kg	☼	07/05/18 10:08	07/06/18 02:06	1
Arsenic	12.0		2.5	0.49	mg/Kg	☼	07/05/18 10:08	07/06/18 02:06	1
Barium	176		0.61	0.13	mg/Kg	☼	07/05/18 10:08	07/06/18 02:06	1
Beryllium	0.89		0.25	0.034	mg/Kg	☼	07/05/18 10:08	07/06/18 02:06	1
Cadmium	0.17	J	0.25	0.037	mg/Kg	☼	07/05/18 10:08	07/06/18 02:06	1
Calcium	1670	B	61.3	4.0	mg/Kg	☼	07/05/18 10:08	07/06/18 02:06	1
Chromium	18.7		0.61	0.25	mg/Kg	☼	07/05/18 10:08	07/06/18 02:06	1
Cobalt	16.4		0.61	0.061	mg/Kg	☼	07/05/18 10:08	07/06/18 02:06	1
Copper	18.2		1.2	0.26	mg/Kg	☼	07/05/18 10:08	07/06/18 02:06	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-21 (2"-1")

Lab Sample ID: 480-138304-1

Date Collected: 06/29/18 07:15

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 81.3

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	26300	B	12.3	4.3	mg/Kg	☼	07/05/18 10:08	07/06/18 02:06	1
Lead	33.2		1.2	0.29	mg/Kg	☼	07/05/18 10:08	07/06/18 02:06	1
Magnesium	3490		24.5	1.1	mg/Kg	☼	07/05/18 10:08	07/06/18 02:06	1
Manganese	1290	B	0.25	0.039	mg/Kg	☼	07/05/18 10:08	07/06/18 02:06	1
Nickel	24.7		6.1	0.28	mg/Kg	☼	07/05/18 10:08	07/06/18 02:06	1
Potassium	2320		36.8	24.5	mg/Kg	☼	07/05/18 10:08	07/06/18 02:06	1
Selenium	ND		4.9	0.49	mg/Kg	☼	07/05/18 10:08	07/06/18 02:06	1
Silver	ND		0.74	0.25	mg/Kg	☼	07/05/18 10:08	07/06/18 02:06	1
Sodium	51.0	J	172	15.9	mg/Kg	☼	07/05/18 10:08	07/06/18 02:06	1
Thallium	ND		7.4	0.37	mg/Kg	☼	07/05/18 10:08	07/06/18 02:06	1
Vanadium	25.3		0.61	0.13	mg/Kg	☼	07/05/18 10:08	07/06/18 02:06	1
Zinc	63.5		2.5	0.79	mg/Kg	☼	07/05/18 10:08	07/06/18 02:06	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.043		0.024	0.0097	mg/Kg	☼	07/16/18 14:20	07/16/18 15:23	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-21 (0-2')

Lab Sample ID: 480-138304-2

Date Collected: 06/29/18 07:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 73.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		1100	300	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
2,4,6-Trichlorophenol	ND		1100	220	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
2,4-Dichlorophenol	ND		1100	120	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
2,4-Dimethylphenol	ND		1100	270	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
2,4-Dinitrophenol	ND		11000	5200	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
2,4-Dinitrotoluene	ND		1100	230	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
2,6-Dinitrotoluene	ND		1100	130	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
2-Chloronaphthalene	ND		1100	180	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
2-Chlorophenol	ND		1100	200	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
2-Methylnaphthalene	ND		1100	220	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
2-Methylphenol	ND		1100	130	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
2-Nitroaniline	ND		2200	160	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
2-Nitrophenol	ND		1100	320	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
3,3'-Dichlorobenzidine	ND		2200	1300	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
3-Nitroaniline	ND		2200	310	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
4,6-Dinitro-2-methylphenol	ND		2200	1100	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
4-Bromophenyl phenyl ether	ND		1100	160	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
4-Chloro-3-methylphenol	ND		1100	280	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
4-Chloroaniline	ND		1100	280	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
4-Chlorophenyl phenyl ether	ND		1100	140	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
4-Methylphenol	ND		2200	130	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
4-Nitroaniline	ND		2200	590	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
4-Nitrophenol	ND		2200	780	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Acenaphthene	ND		1100	160	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Acenaphthylene	ND		1100	150	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Acetophenone	ND		1100	150	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Anthracene	ND		1100	280	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Atrazine	ND		1100	390	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Benzaldehyde	ND		1100	890	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Benzo[a]anthracene	ND		1100	110	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Benzo[a]pyrene	ND		1100	160	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Benzo[b]fluoranthene	ND		1100	180	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Benzo[g,h,i]perylene	ND		1100	120	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Benzo[k]fluoranthene	ND		1100	150	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Biphenyl	ND		1100	160	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
bis (2-chloroisopropyl) ether	ND		1100	220	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Bis(2-chloroethoxy)methane	ND		1100	240	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Bis(2-chloroethyl)ether	ND		1100	150	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Bis(2-ethylhexyl) phthalate	ND		1100	380	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Butyl benzyl phthalate	ND		1100	180	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Caprolactam	ND		1100	340	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Carbazole	ND		1100	130	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Chrysene	ND		1100	250	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Dibenz(a,h)anthracene	ND		1100	200	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Dibenzofuran	ND		1100	130	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Diethyl phthalate	ND		1100	150	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Dimethyl phthalate	ND		1100	130	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Di-n-butyl phthalate	ND		1100	190	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Di-n-octyl phthalate	ND		1100	130	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-21 (0-2')

Lab Sample ID: 480-138304-2

Date Collected: 06/29/18 07:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 73.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	160	J	1100	120	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Fluorene	ND		1100	130	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Hexachlorobenzene	ND		1100	150	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Hexachlorobutadiene	ND		1100	160	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Hexachlorocyclopentadiene	ND		1100	150	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Hexachloroethane	ND		1100	150	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Indeno[1,2,3-cd]pyrene	ND		1100	140	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Isophorone	ND		1100	240	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Naphthalene	ND		1100	150	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Nitrobenzene	ND		1100	130	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
N-Nitrosodi-n-propylamine	ND		1100	190	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
N-Nitrosodiphenylamine	ND		1100	910	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Pentachlorophenol	ND		2200	1100	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Phenanthrene	ND		1100	160	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Phenol	ND		1100	170	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5
Pyrene	140	J	1100	130	ug/Kg	☼	07/02/18 14:22	07/09/18 15:44	5

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Methylene Chloride	2200	T J N	ug/Kg	☼	1.57	75-09-2	07/02/18 14:22	07/09/18 15:44	5
Unknown	1400	T J	ug/Kg	☼	1.72		07/02/18 14:22	07/09/18 15:44	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	80		54 - 120	07/02/18 14:22	07/09/18 15:44	5
2-Fluorobiphenyl	85		60 - 120	07/02/18 14:22	07/09/18 15:44	5
2-Fluorophenol	65		52 - 120	07/02/18 14:22	07/09/18 15:44	5
Nitrobenzene-d5	67		53 - 120	07/02/18 14:22	07/09/18 15:44	5
Phenol-d5	68		54 - 120	07/02/18 14:22	07/09/18 15:44	5
p-Terphenyl-d14	97		65 - 121	07/02/18 14:22	07/09/18 15:44	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	14500		13.4	5.9	mg/Kg	☼	07/05/18 10:08	07/06/18 02:10	1
Antimony	ND		20.2	0.54	mg/Kg	☼	07/05/18 10:08	07/06/18 02:10	1
Arsenic	10.2		2.7	0.54	mg/Kg	☼	07/05/18 10:08	07/06/18 02:10	1
Barium	135		0.67	0.15	mg/Kg	☼	07/05/18 10:08	07/06/18 02:10	1
Beryllium	0.65		0.27	0.038	mg/Kg	☼	07/05/18 10:08	07/06/18 02:10	1
Cadmium	0.17	J	0.27	0.040	mg/Kg	☼	07/05/18 10:08	07/06/18 02:10	1
Calcium	1350	B	67.2	4.4	mg/Kg	☼	07/05/18 10:08	07/06/18 02:10	1
Chromium	15.6		0.67	0.27	mg/Kg	☼	07/05/18 10:08	07/06/18 02:10	1
Cobalt	12.2		0.67	0.067	mg/Kg	☼	07/05/18 10:08	07/06/18 02:10	1
Copper	15.3		1.3	0.28	mg/Kg	☼	07/05/18 10:08	07/06/18 02:10	1
Iron	24200	B	13.4	4.7	mg/Kg	☼	07/05/18 10:08	07/06/18 02:10	1
Lead	26.6		1.3	0.32	mg/Kg	☼	07/05/18 10:08	07/06/18 02:10	1
Magnesium	3060		26.9	1.2	mg/Kg	☼	07/05/18 10:08	07/06/18 02:10	1
Manganese	750	B	0.27	0.043	mg/Kg	☼	07/05/18 10:08	07/06/18 02:10	1
Nickel	19.8		6.7	0.31	mg/Kg	☼	07/05/18 10:08	07/06/18 02:10	1
Potassium	1740		40.3	26.9	mg/Kg	☼	07/05/18 10:08	07/06/18 02:10	1
Selenium	ND		5.4	0.54	mg/Kg	☼	07/05/18 10:08	07/06/18 02:10	1
Silver	ND		0.81	0.27	mg/Kg	☼	07/05/18 10:08	07/06/18 02:10	1
Sodium	41.6	J	188	17.5	mg/Kg	☼	07/05/18 10:08	07/06/18 02:10	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-21 (0-2')

Lab Sample ID: 480-138304-2

Date Collected: 06/29/18 07:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 73.9

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		8.1	0.40	mg/Kg	☼	07/05/18 10:08	07/06/18 02:10	1
Vanadium	22.2		0.67	0.15	mg/Kg	☼	07/05/18 10:08	07/06/18 02:10	1
Zinc	60.2		2.7	0.86	mg/Kg	☼	07/05/18 10:08	07/06/18 02:10	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.047		0.028	0.011	mg/Kg	☼	07/16/18 14:20	07/16/18 15:25	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-23 (2'-1')

Lab Sample ID: 480-138304-3

Date Collected: 06/29/18 07:45

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 82.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	6.1	0.44	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
1,1,2,2-Tetrachloroethane	ND	vs	6.1	0.98	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	6.1	1.4	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
1,1,2-Trichloroethane	ND	vs	6.1	0.79	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
1,1-Dichloroethane	ND	vs	6.1	0.74	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
1,1-Dichloroethene	ND	vs	6.1	0.74	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
1,2,4-Trichlorobenzene	ND	vs	6.1	0.37	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
1,2-Dibromo-3-Chloropropane	ND	vs	6.1	3.0	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
1,2-Dichlorobenzene	ND	vs	6.1	0.47	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
1,2-Dichloroethane	ND	vs	6.1	0.30	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
1,2-Dichloropropane	ND	vs	6.1	3.0	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
1,3-Dichlorobenzene	ND	vs	6.1	0.31	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
1,4-Dichlorobenzene	ND	vs	6.1	0.85	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
2-Butanone (MEK)	ND	vs	30	2.2	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
2-Hexanone	ND	vs	30	3.0	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
4-Methyl-2-pentanone (MIBK)	ND	vs	30	2.0	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Acetone	ND	vs	30	5.1	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Benzene	ND	vs	6.1	0.30	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Bromoform	ND	vs	6.1	3.0	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Bromomethane	ND	vs	6.1	0.55	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Carbon disulfide	ND	vs	6.1	3.0	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Carbon tetrachloride	ND	vs	6.1	0.59	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Chlorobenzene	ND	vs	6.1	0.80	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Dibromochloromethane	ND	vs	6.1	0.78	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Chloroethane	ND	vs	6.1	1.4	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Chloroform	0.72	J vs	6.1	0.37	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Chloromethane	ND	vs	6.1	0.37	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
cis-1,2-Dichloroethene	ND	vs	6.1	0.78	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Cyclohexane	ND	vs	6.1	0.85	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Bromodichloromethane	ND	vs	6.1	0.81	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Dichlorodifluoromethane	ND	vs	6.1	0.50	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Ethylbenzene	ND	vs	6.1	0.42	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
1,2-Dibromoethane	ND	vs	6.1	0.78	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Isopropylbenzene	ND	vs	6.1	0.91	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Methyl acetate	ND	vs	30	3.7	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Methyl tert-butyl ether	ND	vs	6.1	0.60	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Methylcyclohexane	ND	vs	6.1	0.92	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Methylene Chloride	ND	vs	6.1	2.8	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Tetrachloroethene	ND	vs	6.1	0.81	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Toluene	ND	vs	6.1	0.46	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
trans-1,2-Dichloroethene	ND	vs	6.1	0.63	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
trans-1,3-Dichloropropene	ND	vs	6.1	2.7	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Trichloroethene	1.3	J vs	6.1	1.3	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Trichlorofluoromethane	ND	vs	6.1	0.57	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Vinyl chloride	ND	vs	6.1	0.74	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Xylenes, Total	ND	vs	12	1.0	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
cis-1,3-Dichloropropene	ND	vs	6.1	0.87	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1
Styrene	ND	vs	6.1	0.30	ug/Kg	☼	07/06/18 09:13	07/06/18 18:44	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-23 (2'-1')

Lab Sample ID: 480-138304-3

Date Collected: 06/29/18 07:45

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 82.1

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Tridecane	6.2	T J N	ug/Kg	☼	12.36	629-50-5	07/06/18 09:13	07/06/18 18:44	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	97		64 - 126				07/06/18 09:13	07/06/18 18:44	1
4-Bromofluorobenzene (Surr)	96		72 - 126				07/06/18 09:13	07/06/18 18:44	1
Toluene-d8 (Surr)	106		71 - 125				07/06/18 09:13	07/06/18 18:44	1
Dibromofluoromethane (Surr)	98		60 - 140				07/06/18 09:13	07/06/18 18:44	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		1000	280	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
2,4,6-Trichlorophenol	ND		1000	210	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
2,4-Dichlorophenol	ND		1000	110	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
2,4-Dimethylphenol	ND		1000	250	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
2,4-Dinitrophenol	ND		10000	4700	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
2,4-Dinitrotoluene	ND		1000	210	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
2,6-Dinitrotoluene	ND		1000	120	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
2-Chloronaphthalene	ND		1000	170	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
2-Chlorophenol	ND		1000	190	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
2-Methylnaphthalene	ND		1000	210	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
2-Methylphenol	ND		1000	120	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
2-Nitroaniline	ND		2000	150	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
2-Nitrophenol	ND		1000	290	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
3,3'-Dichlorobenzidine	ND		2000	1200	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
3-Nitroaniline	ND		2000	280	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
4,6-Dinitro-2-methylphenol	ND		2000	1000	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
4-Bromophenyl phenyl ether	ND		1000	150	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
4-Chloro-3-methylphenol	ND		1000	250	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
4-Chloroaniline	ND		1000	250	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
4-Chlorophenyl phenyl ether	ND		1000	130	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
4-Methylphenol	ND		2000	120	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
4-Nitroaniline	ND		2000	540	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
4-Nitrophenol	ND		2000	720	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Acenaphthene	ND		1000	150	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Acenaphthylene	ND		1000	130	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Acetophenone	ND		1000	140	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Anthracene	ND		1000	250	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Atrazine	ND		1000	360	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Benzaldehyde	ND		1000	820	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Benzo[a]anthracene	470	J	1000	100	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Benzo[a]pyrene	500	J	1000	150	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Benzo[b]fluoranthene	700	J	1000	160	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Benzo[g,h,i]perylene	330	J	1000	110	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Benzo[k]fluoranthene	200	J	1000	130	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Biphenyl	ND		1000	150	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
bis (2-chloroisopropyl) ether	ND		1000	210	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Bis(2-chloroethoxy)methane	ND		1000	220	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Bis(2-chloroethyl)ether	ND		1000	130	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Bis(2-ethylhexyl) phthalate	ND		1000	350	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Butyl benzyl phthalate	ND		1000	170	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-23 (2'-1')

Lab Sample ID: 480-138304-3

Date Collected: 06/29/18 07:45

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 82.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	ND		1000	310	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Carbazole	ND		1000	120	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Chrysene	470	J	1000	230	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Dibenz(a,h)anthracene	ND		1000	180	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Dibenzofuran	ND		1000	120	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Diethyl phthalate	ND		1000	130	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Dimethyl phthalate	ND		1000	120	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Di-n-butyl phthalate	ND		1000	180	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Di-n-octyl phthalate	ND		1000	120	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Fluoranthene	1100		1000	110	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Fluorene	ND		1000	120	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Hexachlorobenzene	ND		1000	140	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Hexachlorobutadiene	ND		1000	150	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Hexachlorocyclopentadiene	ND		1000	140	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Hexachloroethane	ND		1000	130	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Indeno[1,2,3-cd]pyrene	290	J	1000	130	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Isophorone	ND		1000	220	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Naphthalene	ND		1000	130	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Nitrobenzene	ND		1000	110	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
N-Nitrosodi-n-propylamine	ND		1000	180	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
N-Nitrosodiphenylamine	ND		1000	830	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Pentachlorophenol	ND		2000	1000	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Phenanthrene	610	J	1000	150	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Phenol	ND		1000	160	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5
Pyrene	860	J	1000	120	ug/Kg	☼	07/02/18 14:22	07/09/18 16:10	5

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Methylene Chloride	2100	T J N	ug/Kg	☼	1.56	75-09-2	07/02/18 14:22	07/09/18 16:10	5
Acetic acid, chloro-, ethyl ester	1700	T J	ug/Kg	☼	1.71		07/02/18 14:22	07/09/18 16:10	5
Unknown	1400	T J	ug/Kg	☼	9.81		07/02/18 14:22	07/09/18 16:10	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	82		54 - 120	07/02/18 14:22	07/09/18 16:10	5
2-Fluorobiphenyl	89		60 - 120	07/02/18 14:22	07/09/18 16:10	5
2-Fluorophenol	66		52 - 120	07/02/18 14:22	07/09/18 16:10	5
Nitrobenzene-d5	74		53 - 120	07/02/18 14:22	07/09/18 16:10	5
Phenol-d5	64		54 - 120	07/02/18 14:22	07/09/18 16:10	5
p-Terphenyl-d14	99		65 - 121	07/02/18 14:22	07/09/18 16:10	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	17200		12.0	5.3	mg/Kg	☼	07/05/18 10:08	07/06/18 02:14	1
Antimony	ND		18.0	0.48	mg/Kg	☼	07/05/18 10:08	07/06/18 02:14	1
Arsenic	14.6		2.4	0.48	mg/Kg	☼	07/05/18 10:08	07/06/18 02:14	1
Barium	192		0.60	0.13	mg/Kg	☼	07/05/18 10:08	07/06/18 02:14	1
Beryllium	0.87		0.24	0.034	mg/Kg	☼	07/05/18 10:08	07/06/18 02:14	1
Cadmium	0.14	J	0.24	0.036	mg/Kg	☼	07/05/18 10:08	07/06/18 02:14	1
Calcium	2270	B	60.0	4.0	mg/Kg	☼	07/05/18 10:08	07/06/18 02:14	1
Chromium	20.7		0.60	0.24	mg/Kg	☼	07/05/18 10:08	07/06/18 02:14	1
Cobalt	17.2		0.60	0.060	mg/Kg	☼	07/05/18 10:08	07/06/18 02:14	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-23 (2'-1')

Lab Sample ID: 480-138304-3

Date Collected: 06/29/18 07:45

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 82.1

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	21.0		1.2	0.25	mg/Kg	☼	07/05/18 10:08	07/06/18 02:14	1
Iron	28700	B	12.0	4.2	mg/Kg	☼	07/05/18 10:08	07/06/18 02:14	1
Lead	62.3		1.2	0.29	mg/Kg	☼	07/05/18 10:08	07/06/18 02:14	1
Magnesium	4260		24.0	1.1	mg/Kg	☼	07/05/18 10:08	07/06/18 02:14	1
Manganese	886	B	0.24	0.038	mg/Kg	☼	07/05/18 10:08	07/06/18 02:14	1
Nickel	28.3		6.0	0.28	mg/Kg	☼	07/05/18 10:08	07/06/18 02:14	1
Potassium	2380		36.0	24.0	mg/Kg	☼	07/05/18 10:08	07/06/18 02:14	1
Selenium	ND		4.8	0.48	mg/Kg	☼	07/05/18 10:08	07/06/18 02:14	1
Silver	ND		0.72	0.24	mg/Kg	☼	07/05/18 10:08	07/06/18 02:14	1
Sodium	49.2	J	168	15.6	mg/Kg	☼	07/05/18 10:08	07/06/18 02:14	1
Thallium	ND		7.2	0.36	mg/Kg	☼	07/05/18 10:08	07/06/18 02:14	1
Vanadium	26.0		0.60	0.13	mg/Kg	☼	07/05/18 10:08	07/06/18 02:14	1
Zinc	66.6		2.4	0.77	mg/Kg	☼	07/05/18 10:08	07/06/18 02:14	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021	J	0.024	0.0097	mg/Kg	☼	07/16/18 14:20	07/16/18 15:27	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-23 (0-2")

Lab Sample ID: 480-138304-4

Date Collected: 06/29/18 08:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 67.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		1200	340	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
2,4,6-Trichlorophenol	ND		1200	250	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
2,4-Dichlorophenol	ND		1200	130	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
2,4-Dimethylphenol	ND		1200	300	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
2,4-Dinitrophenol	ND		12000	5800	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
2,4-Dinitrotoluene	ND		1200	260	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
2,6-Dinitrotoluene	ND		1200	150	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
2-Chloronaphthalene	ND		1200	210	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
2-Chlorophenol	ND		1200	230	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
2-Methylnaphthalene	ND		1200	250	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
2-Methylphenol	ND		1200	150	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
2-Nitroaniline	ND		2400	180	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
2-Nitrophenol	ND		1200	350	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
3,3'-Dichlorobenzidine	ND		2400	1500	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
3-Nitroaniline	ND		2400	340	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
4,6-Dinitro-2-methylphenol	ND		2400	1200	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
4-Bromophenyl phenyl ether	ND		1200	180	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
4-Chloro-3-methylphenol	ND		1200	310	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
4-Chloroaniline	ND		1200	310	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
4-Chlorophenyl phenyl ether	ND		1200	150	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
4-Methylphenol	ND		2400	150	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
4-Nitroaniline	ND		2400	650	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
4-Nitrophenol	ND		2400	870	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Acenaphthene	ND		1200	180	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Acenaphthylene	210	J	1200	160	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Acetophenone	ND		1200	170	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Anthracene	ND		1200	310	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Atrazine	ND		1200	430	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Benzaldehyde	ND		1200	990	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Benzo[a]anthracene	660	J	1200	120	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Benzo[a]pyrene	710	J	1200	180	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Benzo[b]fluoranthene	970	J	1200	200	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Benzo[g,h,i]perylene	530	J	1200	130	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Benzo[k]fluoranthene	390	J	1200	160	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Biphenyl	ND		1200	180	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
bis (2-chloroisopropyl) ether	ND		1200	250	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Bis(2-chloroethoxy)methane	ND		1200	260	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Bis(2-chloroethyl)ether	ND		1200	160	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Bis(2-ethylhexyl) phthalate	ND		1200	430	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Butyl benzyl phthalate	ND		1200	210	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Caprolactam	ND		1200	370	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Carbazole	ND		1200	150	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Chrysene	690	J	1200	280	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Dibenz(a,h)anthracene	ND		1200	220	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Dibenzofuran	ND		1200	150	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Diethyl phthalate	ND		1200	160	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Dimethyl phthalate	ND		1200	150	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Di-n-butyl phthalate	ND		1200	210	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Di-n-octyl phthalate	ND		1200	150	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-23 (0-2")

Lab Sample ID: 480-138304-4

Date Collected: 06/29/18 08:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 67.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	1600		1200	130	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Fluorene	ND		1200	150	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Hexachlorobenzene	ND		1200	170	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Hexachlorobutadiene	ND		1200	180	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Hexachlorocyclopentadiene	ND		1200	170	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Hexachloroethane	ND		1200	160	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Indeno[1,2,3-cd]pyrene	430	J	1200	150	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Isophorone	ND		1200	260	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Naphthalene	ND		1200	160	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Nitrobenzene	ND		1200	140	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
N-Nitrosodi-n-propylamine	ND		1200	210	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
N-Nitrosodiphenylamine	ND		1200	1000	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Pentachlorophenol	ND		2400	1200	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Phenanthrene	1000	J	1200	180	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Phenol	ND		1200	190	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5
Pyrene	1300		1200	150	ug/Kg	☼	07/02/18 14:22	07/09/18 16:35	5

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Methylene Chloride	2300	T J N	ug/Kg	☼	1.51	75-09-2	07/02/18 14:22	07/09/18 16:35	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	85		54 - 120	07/02/18 14:22	07/09/18 16:35	5
2-Fluorobiphenyl	87		60 - 120	07/02/18 14:22	07/09/18 16:35	5
2-Fluorophenol	68		52 - 120	07/02/18 14:22	07/09/18 16:35	5
Nitrobenzene-d5	70		53 - 120	07/02/18 14:22	07/09/18 16:35	5
Phenol-d5	70		54 - 120	07/02/18 14:22	07/09/18 16:35	5
p-Terphenyl-d14	98		65 - 121	07/02/18 14:22	07/09/18 16:35	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	14700		14.1	6.2	mg/Kg	☼	07/05/18 10:08	07/06/18 02:18	1
Antimony	ND		21.2	0.56	mg/Kg	☼	07/05/18 10:08	07/06/18 02:18	1
Arsenic	10.9		2.8	0.56	mg/Kg	☼	07/05/18 10:08	07/06/18 02:18	1
Barium	161		0.71	0.16	mg/Kg	☼	07/05/18 10:08	07/06/18 02:18	1
Beryllium	0.68		0.28	0.039	mg/Kg	☼	07/05/18 10:08	07/06/18 02:18	1
Cadmium	0.23	J	0.28	0.042	mg/Kg	☼	07/05/18 10:08	07/06/18 02:18	1
Calcium	2440	B	70.5	4.7	mg/Kg	☼	07/05/18 10:08	07/06/18 02:18	1
Chromium	17.2		0.71	0.28	mg/Kg	☼	07/05/18 10:08	07/06/18 02:18	1
Cobalt	11.7		0.71	0.071	mg/Kg	☼	07/05/18 10:08	07/06/18 02:18	1
Copper	15.9		1.4	0.30	mg/Kg	☼	07/05/18 10:08	07/06/18 02:18	1
Iron	21600	B	14.1	4.9	mg/Kg	☼	07/05/18 10:08	07/06/18 02:18	1
Lead	25.3		1.4	0.34	mg/Kg	☼	07/05/18 10:08	07/06/18 02:18	1
Magnesium	3320		28.2	1.3	mg/Kg	☼	07/05/18 10:08	07/06/18 02:18	1
Manganese	713	B	0.28	0.045	mg/Kg	☼	07/05/18 10:08	07/06/18 02:18	1
Nickel	20.0		7.1	0.32	mg/Kg	☼	07/05/18 10:08	07/06/18 02:18	1
Potassium	2790		42.3	28.2	mg/Kg	☼	07/05/18 10:08	07/06/18 02:18	1
Selenium	ND		5.6	0.56	mg/Kg	☼	07/05/18 10:08	07/06/18 02:18	1
Silver	ND		0.85	0.28	mg/Kg	☼	07/05/18 10:08	07/06/18 02:18	1
Sodium	44.2	J	197	18.3	mg/Kg	☼	07/05/18 10:08	07/06/18 02:18	1
Thallium	ND		8.5	0.42	mg/Kg	☼	07/05/18 10:08	07/06/18 02:18	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-23 (0-2")

Lab Sample ID: 480-138304-4

Date Collected: 06/29/18 08:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 67.8

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	22.9		0.71	0.16	mg/Kg	☼	07/05/18 10:08	07/06/18 02:18	1
Zinc	62.1		2.8	0.90	mg/Kg	☼	07/05/18 10:08	07/06/18 02:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.044		0.027	0.011	mg/Kg	☼	07/16/18 14:20	07/16/18 15:29	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-22 (0-2")

Lab Sample ID: 480-138304-5

Date Collected: 06/29/18 08:15

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		4200	1100	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
2,4,6-Trichlorophenol	ND		4200	840	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
2,4-Dichlorophenol	ND		4200	450	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
2,4-Dimethylphenol	ND		4200	1000	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
2,4-Dinitrophenol	ND		41000	19000	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
2,4-Dinitrotoluene	ND		4200	870	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
2,6-Dinitrotoluene	ND		4200	500	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
2-Chloronaphthalene	ND		4200	690	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
2-Chlorophenol	ND		4200	770	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
2-Methylnaphthalene	ND		4200	840	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
2-Methylphenol	ND		4200	500	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
2-Nitroaniline	ND		8200	620	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
2-Nitrophenol	ND		4200	1200	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
3,3'-Dichlorobenzidine	ND		8200	5000	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
3-Nitroaniline	ND		8200	1200	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
4,6-Dinitro-2-methylphenol	ND		8200	4200	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
4-Bromophenyl phenyl ether	ND		4200	600	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
4-Chloro-3-methylphenol	ND		4200	1000	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
4-Chloroaniline	ND		4200	1000	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
4-Chlorophenyl phenyl ether	ND		4200	520	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
4-Methylphenol	ND		8200	500	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
4-Nitroaniline	ND		8200	2200	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
4-Nitrophenol	ND		8200	3000	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Acenaphthene	ND		4200	620	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Acenaphthylene	ND		4200	550	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Acetophenone	ND		4200	570	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Anthracene	ND		4200	1000	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Atrazine	ND		4200	1500	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Benzaldehyde	ND		4200	3300	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Benzo[a]anthracene	ND		4200	420	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Benzo[a]pyrene	ND		4200	620	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Benzo[b]fluoranthene	ND		4200	670	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Benzo[g,h,i]perylene	ND		4200	450	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Benzo[k]fluoranthene	ND		4200	550	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Biphenyl	ND		4200	620	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
bis (2-chloroisopropyl) ether	ND		4200	840	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Bis(2-chloroethoxy)methane	ND		4200	890	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Bis(2-chloroethyl)ether	ND		4200	550	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Bis(2-ethylhexyl) phthalate	ND		4200	1400	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Butyl benzyl phthalate	ND		4200	690	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Caprolactam	ND		4200	1300	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Carbazole	ND		4200	500	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Chrysene	ND		4200	940	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Dibenz(a,h)anthracene	ND		4200	740	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Dibenzofuran	ND		4200	500	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Diethyl phthalate	ND		4200	550	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Dimethyl phthalate	ND		4200	500	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Di-n-butyl phthalate	ND		4200	720	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Di-n-octyl phthalate	ND		4200	500	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-22 (0-2")

Lab Sample ID: 480-138304-5

Date Collected: 06/29/18 08:15

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		4200	450	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Fluorene	ND		4200	500	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Hexachlorobenzene	ND		4200	570	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Hexachlorobutadiene	ND		4200	620	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Hexachlorocyclopentadiene	ND		4200	570	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Hexachloroethane	ND		4200	550	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Indeno[1,2,3-cd]pyrene	ND		4200	520	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Isophorone	ND		4200	890	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Naphthalene	ND		4200	550	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Nitrobenzene	ND		4200	470	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
N-Nitrosodi-n-propylamine	ND		4200	720	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
N-Nitrosodiphenylamine	ND		4200	3400	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Pentachlorophenol	ND		8200	4200	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Phenanthrene	ND		4200	620	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Phenol	ND		4200	650	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20
Pyrene	ND		4200	500	ug/Kg	☼	07/02/18 14:22	07/09/18 17:01	20

Tentatively Identified Compound

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Acetic acid, chloro-, ethyl ester	8100	T J	ug/Kg	☼	1.55		07/02/18 14:22	07/09/18 17:01	20
Methylene Chloride	4000	T J N	ug/Kg	☼	1.72	75-09-2	07/02/18 14:22	07/09/18 17:01	20

Surrogate

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	75		54 - 120	07/02/18 14:22	07/09/18 17:01	20
2-Fluorobiphenyl	45	X	60 - 120	07/02/18 14:22	07/09/18 17:01	20
2-Fluorophenol	0	X	52 - 120	07/02/18 14:22	07/09/18 17:01	20
Nitrobenzene-d5	29	X	53 - 120	07/02/18 14:22	07/09/18 17:01	20
Phenol-d5	0	X	54 - 120	07/02/18 14:22	07/09/18 17:01	20
p-Terphenyl-d14	52	X	65 - 121	07/02/18 14:22	07/09/18 17:01	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	16600	F2	12.4	5.5	mg/Kg	☼	07/05/18 10:08	07/06/18 02:22	1
Antimony	ND	F1	18.6	0.50	mg/Kg	☼	07/05/18 10:08	07/06/18 02:22	1
Arsenic	11.6		2.5	0.50	mg/Kg	☼	07/05/18 10:08	07/06/18 02:22	1
Barium	130	F1 F2	0.62	0.14	mg/Kg	☼	07/05/18 10:08	07/06/18 02:22	1
Beryllium	0.72		0.25	0.035	mg/Kg	☼	07/05/18 10:08	07/06/18 02:22	1
Cadmium	0.12	J	0.25	0.037	mg/Kg	☼	07/05/18 10:08	07/06/18 02:22	1
Calcium	1810	B F1	62.2	4.1	mg/Kg	☼	07/05/18 10:08	07/06/18 02:22	1
Chromium	18.7		0.62	0.25	mg/Kg	☼	07/05/18 10:08	07/06/18 02:22	1
Cobalt	12.0		0.62	0.062	mg/Kg	☼	07/05/18 10:08	07/06/18 02:22	1
Copper	14.6		1.2	0.26	mg/Kg	☼	07/05/18 10:08	07/06/18 02:22	1
Iron	24800	B F2	12.4	4.4	mg/Kg	☼	07/05/18 10:08	07/06/18 02:22	1
Lead	31.5		1.2	0.30	mg/Kg	☼	07/05/18 10:08	07/06/18 02:22	1
Magnesium	3540	F1	24.9	1.2	mg/Kg	☼	07/05/18 10:08	07/06/18 02:22	1
Manganese	550	B	0.25	0.040	mg/Kg	☼	07/05/18 10:08	07/06/18 02:22	1
Nickel	20.8		6.2	0.29	mg/Kg	☼	07/05/18 10:08	07/06/18 02:22	1
Potassium	2310	F1	37.3	24.9	mg/Kg	☼	07/05/18 10:08	07/06/18 02:22	1
Selenium	ND		5.0	0.50	mg/Kg	☼	07/05/18 10:08	07/06/18 02:22	1
Silver	ND		0.75	0.25	mg/Kg	☼	07/05/18 10:08	07/06/18 02:22	1
Sodium	45.8	J	174	16.2	mg/Kg	☼	07/05/18 10:08	07/06/18 02:22	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-22 (0-2")

Lab Sample ID: 480-138304-5

Date Collected: 06/29/18 08:15

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 79.8

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		7.5	0.37	mg/Kg	☼	07/05/18 10:08	07/06/18 02:22	1
Vanadium	25.8		0.62	0.14	mg/Kg	☼	07/05/18 10:08	07/06/18 02:22	1
Zinc	61.4	F1	2.5	0.80	mg/Kg	☼	07/05/18 10:08	07/06/18 02:22	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.045		0.025	0.0099	mg/Kg	☼	07/16/18 14:20	07/16/18 15:31	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-22 (2"-1')

Lab Sample ID: 480-138304-6

Date Collected: 06/29/18 08:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 83.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	5.8	0.42	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
1,1,2,2-Tetrachloroethane	ND	vs	5.8	0.94	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	5.8	1.3	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
1,1,2-Trichloroethane	ND	vs	5.8	0.76	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
1,1-Dichloroethane	ND	vs	5.8	0.71	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
1,1-Dichloroethene	ND	vs	5.8	0.71	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
1,2,4-Trichlorobenzene	ND	vs	5.8	0.35	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
1,2-Dibromo-3-Chloropropane	ND	vs	5.8	2.9	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
1,2-Dichlorobenzene	ND	vs	5.8	0.46	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
1,2-Dichloroethane	ND	vs	5.8	0.29	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
1,2-Dichloropropane	ND	vs	5.8	2.9	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
1,3-Dichlorobenzene	ND	vs	5.8	0.30	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
1,4-Dichlorobenzene	ND	vs	5.8	0.82	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
2-Butanone (MEK)	ND	vs	29	2.1	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
2-Hexanone	ND	vs	29	2.9	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
4-Methyl-2-pentanone (MIBK)	ND	vs	29	1.9	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Acetone	ND	vs	29	4.9	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Benzene	ND	vs	5.8	0.29	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Bromoform	ND	vs	5.8	2.9	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Bromomethane	ND	vs	5.8	0.52	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Carbon disulfide	ND	vs	5.8	2.9	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Carbon tetrachloride	ND	vs	5.8	0.56	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Chlorobenzene	ND	vs	5.8	0.77	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Dibromochloromethane	ND	vs	5.8	0.75	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Chloroethane	ND	vs	5.8	1.3	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Chloroform	ND	vs	5.8	0.36	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Chloromethane	ND	vs	5.8	0.35	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
cis-1,2-Dichloroethene	ND	vs	5.8	0.75	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Cyclohexane	ND	vs	5.8	0.82	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Bromodichloromethane	ND	vs	5.8	0.78	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Dichlorodifluoromethane	ND	vs	5.8	0.48	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Ethylbenzene	ND	vs	5.8	0.40	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
1,2-Dibromoethane	ND	vs	5.8	0.75	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Isopropylbenzene	ND	vs	5.8	0.88	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Methyl acetate	ND	vs	29	3.5	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Methyl tert-butyl ether	ND	vs	5.8	0.57	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Methylcyclohexane	ND	vs	5.8	0.89	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Methylene Chloride	ND	vs	5.8	2.7	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Tetrachloroethene	ND	vs	5.8	0.78	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Toluene	ND	vs	5.8	0.44	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
trans-1,2-Dichloroethene	ND	vs	5.8	0.60	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
trans-1,3-Dichloropropene	ND	vs	5.8	2.6	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Trichloroethene	2.4	J vs	5.8	1.3	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Trichlorofluoromethane	ND	vs	5.8	0.55	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Vinyl chloride	ND	vs	5.8	0.71	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Xylenes, Total	ND	vs	12	0.98	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
cis-1,3-Dichloropropene	ND	vs	5.8	0.84	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1
Styrene	ND	vs	5.8	0.29	ug/Kg	☼	07/06/18 09:13	07/06/18 19:10	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-22 (2"-1')

Lab Sample ID: 480-138304-6

Date Collected: 06/29/18 08:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 83.2

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		<i>ug/Kg</i>	<i>☼</i>			<i>07/06/18 09:13</i>	<i>07/06/18 19:10</i>	<i>1</i>
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		64 - 126				07/06/18 09:13	07/06/18 19:10	1
4-Bromofluorobenzene (Surr)	99		72 - 126				07/06/18 09:13	07/06/18 19:10	1
Toluene-d8 (Surr)	102		71 - 125				07/06/18 09:13	07/06/18 19:10	1
Dibromofluoromethane (Surr)	98		60 - 140				07/06/18 09:13	07/06/18 19:10	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		200	55	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
2,4,6-Trichlorophenol	ND		200	41	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
2,4-Dichlorophenol	ND		200	22	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
2,4-Dimethylphenol	ND		200	49	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
2,4-Dinitrophenol	ND		2000	940	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
2,4-Dinitrotoluene	ND		200	42	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
2,6-Dinitrotoluene	ND		200	24	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
2-Chloronaphthalene	ND		200	33	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
2-Chlorophenol	ND		200	37	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
2-Methylnaphthalene	ND		200	41	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
2-Methylphenol	ND		200	24	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
2-Nitroaniline	ND		390	30	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
2-Nitrophenol	ND		200	57	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
3,3'-Dichlorobenzidine	ND		390	240	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
3-Nitroaniline	ND		390	56	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
4,6-Dinitro-2-methylphenol	ND		390	200	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
4-Bromophenyl phenyl ether	ND		200	29	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
4-Chloro-3-methylphenol	ND		200	50	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
4-Chloroaniline	ND		200	50	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
4-Chlorophenyl phenyl ether	ND		200	25	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
4-Methylphenol	ND		390	24	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
4-Nitroaniline	ND		390	110	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
4-Nitrophenol	ND		390	140	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Acenaphthene	ND		200	30	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Acenaphthylene	ND		200	26	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Acetophenone	ND		200	27	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Anthracene	ND		200	50	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Atrazine	ND		200	71	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Benzaldehyde	ND		200	160	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Benzo[a]anthracene	90	J	200	20	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Benzo[a]pyrene	91	J	200	30	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Benzo[b]fluoranthene	120	J	200	32	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Benzo[g,h,i]perylene	76	J	200	22	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Benzo[k]fluoranthene	39	J	200	26	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Biphenyl	ND		200	30	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
bis (2-chloroisopropyl) ether	ND		200	41	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Bis(2-chloroethoxy)methane	ND		200	43	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Bis(2-chloroethyl)ether	ND		200	26	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Bis(2-ethylhexyl) phthalate	ND		200	69	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Butyl benzyl phthalate	ND		200	33	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-22 (2"-1")

Lab Sample ID: 480-138304-6

Date Collected: 06/29/18 08:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 83.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	ND		200	61	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Carbazole	ND		200	24	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Chrysene	91	J	200	45	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Dibenz(a,h)anthracene	ND		200	36	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Dibenzofuran	ND		200	24	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Diethyl phthalate	ND		200	26	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Dimethyl phthalate	ND		200	24	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Di-n-butyl phthalate	ND		200	35	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Di-n-octyl phthalate	ND		200	24	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Fluoranthene	170	J	200	22	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Fluorene	ND		200	24	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Hexachlorobenzene	ND		200	27	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Hexachlorobutadiene	ND		200	30	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Hexachlorocyclopentadiene	ND		200	27	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Hexachloroethane	ND		200	26	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Indeno[1,2,3-cd]pyrene	58	J	200	25	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Isophorone	ND		200	43	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Naphthalene	ND		200	26	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Nitrobenzene	ND		200	23	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
N-Nitrosodi-n-propylamine	ND		200	35	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
N-Nitrosodiphenylamine	ND		200	160	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Pentachlorophenol	ND		390	200	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Phenanthrene	100	J	200	30	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Phenol	ND		200	31	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1
Pyrene	170	J	200	24	ug/Kg	☼	07/02/18 14:22	07/09/18 17:26	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	880	T J	ug/Kg	☼	1.71		07/02/18 14:22	07/09/18 17:26	1
Unknown	420	T J	ug/Kg	☼	2.96		07/02/18 14:22	07/09/18 17:26	1
Benzene, 1,3-dimethyl-	320	T J N	ug/Kg	☼	3.46	108-38-3	07/02/18 14:22	07/09/18 17:26	1
Unknown	420	T J	ug/Kg	☼	9.89		07/02/18 14:22	07/09/18 17:26	1
Unknown	370	T J	ug/Kg	☼	12.45		07/02/18 14:22	07/09/18 17:26	1
Unknown	380	T J	ug/Kg	☼	13.50		07/02/18 14:22	07/09/18 17:26	1
Unknown	350	T J	ug/Kg	☼	15.69		07/02/18 14:22	07/09/18 17:26	1
Unknown	310	T J	ug/Kg	☼	16.17		07/02/18 14:22	07/09/18 17:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	90		54 - 120	07/02/18 14:22	07/09/18 17:26	1
2-Fluorobiphenyl	103		60 - 120	07/02/18 14:22	07/09/18 17:26	1
2-Fluorophenol	83		52 - 120	07/02/18 14:22	07/09/18 17:26	1
Nitrobenzene-d5	90		53 - 120	07/02/18 14:22	07/09/18 17:26	1
Phenol-d5	84		54 - 120	07/02/18 14:22	07/09/18 17:26	1
p-Terphenyl-d14	115		65 - 121	07/02/18 14:22	07/09/18 17:26	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	17100		12.3	5.4	mg/Kg	☼	07/05/18 10:08	07/06/18 02:52	1
Antimony	ND		18.5	0.49	mg/Kg	☼	07/05/18 10:08	07/06/18 02:52	1
Arsenic	17.9		2.5	0.49	mg/Kg	☼	07/05/18 10:08	07/06/18 02:52	1
Barium	98.3		0.62	0.14	mg/Kg	☼	07/05/18 10:08	07/06/18 02:52	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-22 (2"-1')

Lab Sample ID: 480-138304-6

Date Collected: 06/29/18 08:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 83.2

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.97		0.25	0.034	mg/Kg	☼	07/05/18 10:08	07/06/18 02:52	1
Cadmium	ND		0.25	0.037	mg/Kg	☼	07/05/18 10:08	07/06/18 02:52	1
Calcium	1760	B	61.6	4.1	mg/Kg	☼	07/05/18 10:08	07/06/18 02:52	1
Chromium	19.8		0.62	0.25	mg/Kg	☼	07/05/18 10:08	07/06/18 02:52	1
Cobalt	18.1		0.62	0.062	mg/Kg	☼	07/05/18 10:08	07/06/18 02:52	1
Copper	21.1		1.2	0.26	mg/Kg	☼	07/05/18 10:08	07/06/18 02:52	1
Iron	34800	B	12.3	4.3	mg/Kg	☼	07/05/18 10:08	07/06/18 02:52	1
Lead	19.5		1.2	0.30	mg/Kg	☼	07/05/18 10:08	07/06/18 02:52	1
Magnesium	5270		24.6	1.1	mg/Kg	☼	07/05/18 10:08	07/06/18 02:52	1
Manganese	692	B	0.25	0.039	mg/Kg	☼	07/05/18 10:08	07/06/18 02:52	1
Nickel	34.2		6.2	0.28	mg/Kg	☼	07/05/18 10:08	07/06/18 02:52	1
Potassium	3040		37.0	24.6	mg/Kg	☼	07/05/18 10:08	07/06/18 02:52	1
Selenium	ND		4.9	0.49	mg/Kg	☼	07/05/18 10:08	07/06/18 02:52	1
Silver	ND		0.74	0.25	mg/Kg	☼	07/05/18 10:08	07/06/18 02:52	1
Sodium	70.1	J	172	16.0	mg/Kg	☼	07/05/18 10:08	07/06/18 02:52	1
Thallium	ND		7.4	0.37	mg/Kg	☼	07/05/18 10:08	07/06/18 02:52	1
Vanadium	22.5		0.62	0.14	mg/Kg	☼	07/05/18 10:08	07/06/18 02:52	1
Zinc	72.3		2.5	0.79	mg/Kg	☼	07/05/18 10:08	07/06/18 02:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020	J	0.025	0.010	mg/Kg	☼	07/16/18 14:20	07/16/18 15:32	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-24 (0-2")

Lab Sample ID: 480-138304-7

Date Collected: 06/29/18 08:45

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 71.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		1200	320	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
2,4,6-Trichlorophenol	ND		1200	240	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
2,4-Dichlorophenol	ND		1200	130	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
2,4-Dimethylphenol	ND		1200	290	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
2,4-Dinitrophenol	ND		12000	5500	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
2,4-Dinitrotoluene	ND		1200	240	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
2,6-Dinitrotoluene	ND		1200	140	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
2-Chloronaphthalene	ND		1200	190	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
2-Chlorophenol	ND		1200	220	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
2-Methylnaphthalene	ND		1200	240	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
2-Methylphenol	ND		1200	140	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
2-Nitroaniline	ND		2300	170	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
2-Nitrophenol	ND		1200	330	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
3,3'-Dichlorobenzidine	ND		2300	1400	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
3-Nitroaniline	ND		2300	330	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
4,6-Dinitro-2-methylphenol	ND		2300	1200	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
4-Bromophenyl phenyl ether	ND		1200	170	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
4-Chloro-3-methylphenol	ND		1200	290	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
4-Chloroaniline	ND		1200	290	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
4-Chlorophenyl phenyl ether	ND		1200	150	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
4-Methylphenol	ND		2300	140	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
4-Nitroaniline	ND		2300	620	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
4-Nitrophenol	ND		2300	830	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Acenaphthene	ND		1200	170	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Acenaphthylene	ND		1200	150	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Acetophenone	ND		1200	160	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Anthracene	ND		1200	290	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Atrazine	ND		1200	410	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Benzaldehyde	ND		1200	940	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Benzo[a]anthracene	130	J	1200	120	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Benzo[a]pyrene	ND		1200	170	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Benzo[b]fluoranthene	230	J	1200	190	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Benzo[g,h,i]perylene	ND		1200	130	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Benzo[k]fluoranthene	ND		1200	150	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Biphenyl	ND		1200	170	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
bis (2-chloroisopropyl) ether	ND		1200	240	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Bis(2-chloroethoxy)methane	ND		1200	250	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Bis(2-chloroethyl)ether	ND		1200	150	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Bis(2-ethylhexyl) phthalate	ND		1200	400	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Butyl benzyl phthalate	ND		1200	190	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Caprolactam	ND		1200	350	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Carbazole	ND		1200	140	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Chrysene	ND		1200	260	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Dibenz(a,h)anthracene	ND		1200	210	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Dibenzofuran	ND		1200	140	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Diethyl phthalate	ND		1200	150	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Dimethyl phthalate	ND		1200	140	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Di-n-butyl phthalate	ND		1200	200	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Di-n-octyl phthalate	ND		1200	140	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-24 (0-2")

Lab Sample ID: 480-138304-7

Date Collected: 06/29/18 08:45

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 71.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	220	J	1200	130	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Fluorene	ND		1200	140	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Hexachlorobenzene	ND		1200	160	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Hexachlorobutadiene	ND		1200	170	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Hexachlorocyclopentadiene	ND		1200	160	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Hexachloroethane	ND		1200	150	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Indeno[1,2,3-cd]pyrene	ND		1200	150	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Isophorone	ND		1200	250	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Naphthalene	ND		1200	150	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Nitrobenzene	ND		1200	130	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
N-Nitrosodi-n-propylamine	ND		1200	200	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
N-Nitrosodiphenylamine	ND		1200	960	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Pentachlorophenol	ND		2300	1200	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Phenanthrene	ND		1200	170	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Phenol	ND		1200	180	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5
Pyrene	180	J	1200	140	ug/Kg	☼	07/02/18 14:22	07/09/18 17:52	5

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Methylene Chloride	2500	T J N	ug/Kg	☼	1.56	75-09-2	07/02/18 14:22	07/09/18 17:52	5
Unknown	2000	T J	ug/Kg	☼	1.71		07/02/18 14:22	07/09/18 17:52	5
Unknown	1100	T J	ug/Kg	☼	13.54		07/02/18 14:22	07/09/18 17:52	5
Unknown	1100	T J	ug/Kg	☼	13.98		07/02/18 14:22	07/09/18 17:52	5
Unknown	1400	T J	ug/Kg	☼	15.67		07/02/18 14:22	07/09/18 17:52	5
Unknown	950	T J	ug/Kg	☼	16.16		07/02/18 14:22	07/09/18 17:52	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	87		54 - 120	07/02/18 14:22	07/09/18 17:52	5
2-Fluorobiphenyl	90		60 - 120	07/02/18 14:22	07/09/18 17:52	5
2-Fluorophenol	76		52 - 120	07/02/18 14:22	07/09/18 17:52	5
Nitrobenzene-d5	78		53 - 120	07/02/18 14:22	07/09/18 17:52	5
Phenol-d5	74		54 - 120	07/02/18 14:22	07/09/18 17:52	5
p-Terphenyl-d14	98		65 - 121	07/02/18 14:22	07/09/18 17:52	5

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		23	4.5	ug/Kg	☼	07/03/18 14:15	07/05/18 15:09	10
4,4'-DDE	ND		23	4.8	ug/Kg	☼	07/03/18 14:15	07/05/18 15:09	10
4,4'-DDT	ND		23	5.4	ug/Kg	☼	07/03/18 14:15	07/05/18 15:09	10
Aldrin	ND	F2	23	5.6	ug/Kg	☼	07/03/18 14:15	07/05/18 15:09	10
alpha-BHC	ND		23	4.1	ug/Kg	☼	07/03/18 14:15	07/05/18 15:09	10
beta-BHC	ND		23	4.1	ug/Kg	☼	07/03/18 14:15	07/05/18 15:09	10
cis-Chlordane	ND		23	11	ug/Kg	☼	07/03/18 14:15	07/05/18 15:09	10
delta-BHC	ND		23	4.3	ug/Kg	☼	07/03/18 14:15	07/05/18 15:09	10
Dieldrin	ND	F2	23	5.5	ug/Kg	☼	07/03/18 14:15	07/05/18 15:09	10
Endosulfan I	ND	F1 F2	23	4.4	ug/Kg	☼	07/03/18 14:15	07/05/18 15:09	10
Endosulfan II	11	J B	23	4.1	ug/Kg	☼	07/03/18 14:15	07/05/18 15:09	10
Endosulfan sulfate	ND		23	4.3	ug/Kg	☼	07/03/18 14:15	07/05/18 15:09	10
Endrin	ND		23	4.5	ug/Kg	☼	07/03/18 14:15	07/05/18 15:09	10
Endrin aldehyde	ND		23	5.9	ug/Kg	☼	07/03/18 14:15	07/05/18 15:09	10
Endrin ketone	ND		23	5.6	ug/Kg	☼	07/03/18 14:15	07/05/18 15:09	10

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-24 (0-2")

Lab Sample ID: 480-138304-7

Date Collected: 06/29/18 08:45

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 71.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	ND		23	4.2	ug/Kg	☼	07/03/18 14:15	07/05/18 15:09	10
Heptachlor	ND		23	5.0	ug/Kg	☼	07/03/18 14:15	07/05/18 15:09	10
Heptachlor epoxide	ND	F2	23	5.9	ug/Kg	☼	07/03/18 14:15	07/05/18 15:09	10
Methoxychlor	ND		23	4.7	ug/Kg	☼	07/03/18 14:15	07/05/18 15:09	10
Toxaphene	ND		230	130	ug/Kg	☼	07/03/18 14:15	07/05/18 15:09	10
trans-Chlordane	ND	F2	23	7.3	ug/Kg	☼	07/03/18 14:15	07/05/18 15:09	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	100		45 - 120	07/03/18 14:15	07/05/18 15:09	10
DCB Decachlorobiphenyl	107		45 - 120	07/03/18 14:15	07/05/18 15:09	10
Tetrachloro-m-xylene	109		30 - 124	07/03/18 14:15	07/05/18 15:09	10
Tetrachloro-m-xylene	115		30 - 124	07/03/18 14:15	07/05/18 15:09	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.29	0.058	mg/Kg	☼	07/02/18 15:18	07/03/18 18:52	1
PCB-1221	ND		0.29	0.058	mg/Kg	☼	07/02/18 15:18	07/03/18 18:52	1
PCB-1232	ND		0.29	0.058	mg/Kg	☼	07/02/18 15:18	07/03/18 18:52	1
PCB-1242	ND		0.29	0.058	mg/Kg	☼	07/02/18 15:18	07/03/18 18:52	1
PCB-1248	ND		0.29	0.058	mg/Kg	☼	07/02/18 15:18	07/03/18 18:52	1
PCB-1254	ND		0.29	0.14	mg/Kg	☼	07/02/18 15:18	07/03/18 18:52	1
PCB-1260	ND		0.29	0.14	mg/Kg	☼	07/02/18 15:18	07/03/18 18:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	96		60 - 154	07/02/18 15:18	07/03/18 18:52	1
Tetrachloro-m-xylene	80		60 - 154	07/02/18 15:18	07/03/18 18:52	1
DCB Decachlorobiphenyl	79		65 - 174	07/02/18 15:18	07/03/18 18:52	1
DCB Decachlorobiphenyl	94		65 - 174	07/02/18 15:18	07/03/18 18:52	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		23	7.4	ug/Kg	☼	07/05/18 07:15	07/09/18 18:28	1
Silvex (2,4,5-TP)	ND		23	8.3	ug/Kg	☼	07/05/18 07:15	07/09/18 18:28	1
2,4-D	ND		23	15	ug/Kg	☼	07/05/18 07:15	07/09/18 18:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	71		28 - 129	07/05/18 07:15	07/09/18 18:28	1
2,4-Dichlorophenylacetic acid	64		28 - 129	07/05/18 07:15	07/09/18 18:28	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	17900		14.1	6.2	mg/Kg	☼	07/05/18 10:08	07/06/18 02:56	1
Antimony	ND		21.1	0.56	mg/Kg	☼	07/05/18 10:08	07/06/18 02:56	1
Arsenic	14.6		2.8	0.56	mg/Kg	☼	07/05/18 10:08	07/06/18 02:56	1
Barium	180		0.70	0.16	mg/Kg	☼	07/05/18 10:08	07/06/18 02:56	1
Beryllium	0.85		0.28	0.039	mg/Kg	☼	07/05/18 10:08	07/06/18 02:56	1
Cadmium	0.13	J	0.28	0.042	mg/Kg	☼	07/05/18 10:08	07/06/18 02:56	1
Calcium	1510	B	70.5	4.7	mg/Kg	☼	07/05/18 10:08	07/06/18 02:56	1
Chromium	20.1		0.70	0.28	mg/Kg	☼	07/05/18 10:08	07/06/18 02:56	1
Cobalt	16.6		0.70	0.070	mg/Kg	☼	07/05/18 10:08	07/06/18 02:56	1
Copper	20.0		1.4	0.30	mg/Kg	☼	07/05/18 10:08	07/06/18 02:56	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-24 (0-2")

Lab Sample ID: 480-138304-7

Date Collected: 06/29/18 08:45

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 71.6

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	31200	B	14.1	4.9	mg/Kg	☼	07/05/18 10:08	07/06/18 02:56	1
Lead	25.9		1.4	0.34	mg/Kg	☼	07/05/18 10:08	07/06/18 02:56	1
Magnesium	3910		28.2	1.3	mg/Kg	☼	07/05/18 10:08	07/06/18 02:56	1
Manganese	1070	B	0.28	0.045	mg/Kg	☼	07/05/18 10:08	07/06/18 02:56	1
Nickel	25.8		7.0	0.32	mg/Kg	☼	07/05/18 10:08	07/06/18 02:56	1
Potassium	2480		42.3	28.2	mg/Kg	☼	07/05/18 10:08	07/06/18 02:56	1
Selenium	ND		5.6	0.56	mg/Kg	☼	07/05/18 10:08	07/06/18 02:56	1
Silver	ND		0.85	0.28	mg/Kg	☼	07/05/18 10:08	07/06/18 02:56	1
Sodium	52.9	J	197	18.3	mg/Kg	☼	07/05/18 10:08	07/06/18 02:56	1
Thallium	ND		8.5	0.42	mg/Kg	☼	07/05/18 10:08	07/06/18 02:56	1
Vanadium	26.6		0.70	0.16	mg/Kg	☼	07/05/18 10:08	07/06/18 02:56	1
Zinc	72.1		2.8	0.90	mg/Kg	☼	07/05/18 10:08	07/06/18 02:56	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.041		0.028	0.012	mg/Kg	☼	07/16/18 14:20	07/16/18 15:34	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-24 (2"-1')

Lab Sample ID: 480-138304-8

Date Collected: 06/29/18 09:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 81.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	6.0	0.44	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
1,1,2,2-Tetrachloroethane	ND	vs	6.0	0.98	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	6.0	1.4	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
1,1,2-Trichloroethane	ND	vs	6.0	0.79	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
1,1-Dichloroethane	ND	vs	6.0	0.74	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
1,1-Dichloroethene	ND	vs	6.0	0.74	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
1,2,4-Trichlorobenzene	ND	vs	6.0	0.37	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
1,2-Dibromo-3-Chloropropane	ND	vs	6.0	3.0	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
1,2-Dichlorobenzene	ND	vs	6.0	0.47	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
1,2-Dichloroethane	ND	vs	6.0	0.30	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
1,2-Dichloropropane	ND	vs	6.0	3.0	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
1,3-Dichlorobenzene	ND	vs	6.0	0.31	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
1,4-Dichlorobenzene	ND	vs	6.0	0.85	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
2-Butanone (MEK)	ND	vs	30	2.2	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
2-Hexanone	ND	vs	30	3.0	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
4-Methyl-2-pentanone (MIBK)	ND	vs	30	2.0	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Acetone	ND	vs	30	5.1	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Benzene	ND	vs	6.0	0.30	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Bromoform	ND	vs	6.0	3.0	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Bromomethane	ND	vs	6.0	0.54	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Carbon disulfide	ND	vs	6.0	3.0	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Carbon tetrachloride	ND	vs	6.0	0.59	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Chlorobenzene	ND	vs	6.0	0.80	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Dibromochloromethane	ND	vs	6.0	0.77	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Chloroethane	ND	vs	6.0	1.4	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Chloroform	ND	vs	6.0	0.37	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Chloromethane	ND	vs	6.0	0.37	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
cis-1,2-Dichloroethene	ND	vs	6.0	0.77	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Cyclohexane	ND	vs	6.0	0.85	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Bromodichloromethane	ND	vs	6.0	0.81	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Dichlorodifluoromethane	ND	vs	6.0	0.50	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Ethylbenzene	ND	vs	6.0	0.42	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
1,2-Dibromoethane	ND	vs	6.0	0.78	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Isopropylbenzene	ND	vs	6.0	0.91	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Methyl acetate	ND	vs	30	3.7	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Methyl tert-butyl ether	ND	vs	6.0	0.59	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Methylcyclohexane	ND	vs	6.0	0.92	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Methylene Chloride	ND	vs	6.0	2.8	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Tetrachloroethene	ND	vs	6.0	0.81	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Toluene	ND	vs	6.0	0.46	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
trans-1,2-Dichloroethene	ND	vs	6.0	0.62	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
trans-1,3-Dichloropropene	ND	vs	6.0	2.7	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Trichloroethene	ND	vs	6.0	1.3	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Trichlorofluoromethane	ND	vs	6.0	0.57	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Vinyl chloride	ND	vs	6.0	0.74	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Xylenes, Total	ND	vs	12	1.0	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
cis-1,3-Dichloropropene	ND	vs	6.0	0.87	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1
Styrene	ND	vs	6.0	0.30	ug/Kg	☼	07/06/18 09:13	07/06/18 19:35	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-24 (2"-1')

Lab Sample ID: 480-138304-8

Date Collected: 06/29/18 09:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 81.8

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		<i>ug/Kg</i>	<i>☼</i>			<i>07/06/18 09:13</i>	<i>07/06/18 19:35</i>	<i>1</i>
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>1,2-Dichloroethane-d4 (Surr)</i>	98		64 - 126				<i>07/06/18 09:13</i>	<i>07/06/18 19:35</i>	<i>1</i>
<i>4-Bromofluorobenzene (Surr)</i>	100		72 - 126				<i>07/06/18 09:13</i>	<i>07/06/18 19:35</i>	<i>1</i>
<i>Toluene-d8 (Surr)</i>	102		71 - 125				<i>07/06/18 09:13</i>	<i>07/06/18 19:35</i>	<i>1</i>
<i>Dibromofluoromethane (Surr)</i>	99		60 - 140				<i>07/06/18 09:13</i>	<i>07/06/18 19:35</i>	<i>1</i>

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		210	56	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
2,4,6-Trichlorophenol	ND		210	41	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
2,4-Dichlorophenol	ND		210	22	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
2,4-Dimethylphenol	ND		210	50	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
2,4-Dinitrophenol	ND		2000	950	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
2,4-Dinitrotoluene	ND		210	42	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
2,6-Dinitrotoluene	ND		210	24	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
2-Chloronaphthalene	ND		210	34	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
2-Chlorophenol	ND		210	38	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
2-Methylnaphthalene	ND		210	41	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
2-Methylphenol	ND		210	24	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
2-Nitroaniline	ND		400	30	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
2-Nitrophenol	ND		210	58	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
3,3'-Dichlorobenzidine	ND		400	240	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
3-Nitroaniline	ND		400	57	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
4,6-Dinitro-2-methylphenol	ND		400	210	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
4-Bromophenyl phenyl ether	ND		210	29	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
4-Chloro-3-methylphenol	ND		210	51	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
4-Chloroaniline	ND		210	51	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
4-Chlorophenyl phenyl ether	ND		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
4-Methylphenol	ND		400	24	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
4-Nitroaniline	ND		400	110	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
4-Nitrophenol	ND		400	140	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Acenaphthene	ND		210	30	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Acenaphthylene	110	J	210	27	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Acetophenone	ND		210	28	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Anthracene	130	J	210	51	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Atrazine	ND		210	72	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Benzaldehyde	ND		210	160	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Benzo[a]anthracene	480		210	21	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Benzo[a]pyrene	440		210	30	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Benzo[b]fluoranthene	570		210	33	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Benzo[g,h,i]perylene	310		210	22	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Benzo[k]fluoranthene	220		210	27	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Biphenyl	ND		210	30	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
bis (2-chloroisopropyl) ether	ND		210	41	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Bis(2-chloroethoxy)methane	ND		210	44	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Bis(2-chloroethyl)ether	ND		210	27	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Bis(2-ethylhexyl) phthalate	ND		210	70	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Butyl benzyl phthalate	ND		210	34	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-24 (2"-1')

Lab Sample ID: 480-138304-8

Date Collected: 06/29/18 09:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 81.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	ND		210	62	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Carbazole	30	J	210	24	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Chrysene	450		210	46	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Dibenz(a,h)anthracene	84	J	210	36	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Dibenzofuran	ND		210	24	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Diethyl phthalate	ND		210	27	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Dimethyl phthalate	ND		210	24	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Di-n-butyl phthalate	ND		210	35	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Di-n-octyl phthalate	ND		210	24	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Fluoranthene	840		210	22	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Fluorene	31	J	210	24	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Hexachlorobenzene	ND		210	28	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Hexachlorobutadiene	ND		210	30	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Hexachlorocyclopentadiene	ND		210	28	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Hexachloroethane	ND		210	27	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Indeno[1,2,3-cd]pyrene	260		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Isophorone	ND		210	44	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Naphthalene	ND		210	27	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Nitrobenzene	ND		210	23	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
N-Nitrosodi-n-propylamine	ND		210	35	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
N-Nitrosodiphenylamine	ND		210	170	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Pentachlorophenol	ND		400	210	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Phenanthrene	430		210	30	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Phenol	ND		210	32	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1
Pyrene	820		210	24	ug/Kg	☼	07/02/18 14:22	07/09/18 18:17	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	780	T J	ug/Kg	☼	1.70		07/02/18 14:22	07/09/18 18:17	1
Unknown	770	T J	ug/Kg	☼	2.97		07/02/18 14:22	07/09/18 18:17	1
Benzene, 1,3-dimethyl-	370	T J N	ug/Kg	☼	3.46	108-38-3	07/02/18 14:22	07/09/18 18:17	1
Eicosane	240	T J N	ug/Kg	☼	13.92	112-95-8	07/02/18 14:22	07/09/18 18:17	1
Unknown	210	T J	ug/Kg	☼	13.98		07/02/18 14:22	07/09/18 18:17	1
Benzo[e]pyrene	310	T J N	ug/Kg	☼	14.04	192-97-2	07/02/18 14:22	07/09/18 18:17	1
Unknown	270	T J	ug/Kg	☼	15.23		07/02/18 14:22	07/09/18 18:17	1
Unknown	260	T J	ug/Kg	☼	15.87		07/02/18 14:22	07/09/18 18:17	1
Unknown	1000	T J	ug/Kg	☼	16.16		07/02/18 14:22	07/09/18 18:17	1
3,4:8,9-Dibenzopyrene	240	T J N	ug/Kg	☼	16.21	189-64-0	07/02/18 14:22	07/09/18 18:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	77		54 - 120	07/02/18 14:22	07/09/18 18:17	1
2-Fluorobiphenyl	89		60 - 120	07/02/18 14:22	07/09/18 18:17	1
2-Fluorophenol	69		52 - 120	07/02/18 14:22	07/09/18 18:17	1
Nitrobenzene-d5	79		53 - 120	07/02/18 14:22	07/09/18 18:17	1
Phenol-d5	73		54 - 120	07/02/18 14:22	07/09/18 18:17	1
p-Terphenyl-d14	106		65 - 121	07/02/18 14:22	07/09/18 18:17	1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.39	ug/Kg	☼	07/03/18 14:15	07/05/18 15:29	1
4,4'-DDE	ND		2.0	0.42	ug/Kg	☼	07/03/18 14:15	07/05/18 15:29	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-24 (2"-1')

Lab Sample ID: 480-138304-8

Date Collected: 06/29/18 09:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		2.0	0.47	ug/Kg	☼	07/03/18 14:15	07/05/18 15:29	1
Aldrin	ND		2.0	0.50	ug/Kg	☼	07/03/18 14:15	07/05/18 15:29	1
alpha-BHC	ND		2.0	0.36	ug/Kg	☼	07/03/18 14:15	07/05/18 15:29	1
beta-BHC	ND		2.0	0.36	ug/Kg	☼	07/03/18 14:15	07/05/18 15:29	1
cis-Chlordane	ND		2.0	1.0	ug/Kg	☼	07/03/18 14:15	07/05/18 15:29	1
delta-BHC	0.42	J	2.0	0.38	ug/Kg	☼	07/03/18 14:15	07/05/18 15:29	1
Dieldrin	ND		2.0	0.49	ug/Kg	☼	07/03/18 14:15	07/05/18 15:29	1
Endosulfan I	ND		2.0	0.39	ug/Kg	☼	07/03/18 14:15	07/05/18 15:29	1
Endosulfan II	ND		2.0	0.36	ug/Kg	☼	07/03/18 14:15	07/05/18 15:29	1
Endosulfan sulfate	0.45	J B	2.0	0.38	ug/Kg	☼	07/03/18 14:15	07/05/18 15:29	1
Endrin	ND		2.0	0.40	ug/Kg	☼	07/03/18 14:15	07/05/18 15:29	1
Endrin aldehyde	ND		2.0	0.52	ug/Kg	☼	07/03/18 14:15	07/05/18 15:29	1
Endrin ketone	ND		2.0	0.50	ug/Kg	☼	07/03/18 14:15	07/05/18 15:29	1
gamma-BHC (Lindane)	ND		2.0	0.37	ug/Kg	☼	07/03/18 14:15	07/05/18 15:29	1
Heptachlor	ND		2.0	0.44	ug/Kg	☼	07/03/18 14:15	07/05/18 15:29	1
Heptachlor epoxide	ND		2.0	0.52	ug/Kg	☼	07/03/18 14:15	07/05/18 15:29	1
Methoxychlor	ND		2.0	0.41	ug/Kg	☼	07/03/18 14:15	07/05/18 15:29	1
Toxaphene	ND		20	12	ug/Kg	☼	07/03/18 14:15	07/05/18 15:29	1
trans-Chlordane	ND		2.0	0.64	ug/Kg	☼	07/03/18 14:15	07/05/18 15:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	90		45 - 120	07/03/18 14:15	07/05/18 15:29	1
DCB Decachlorobiphenyl	108		45 - 120	07/03/18 14:15	07/05/18 15:29	1
Tetrachloro-m-xylene	84		30 - 124	07/03/18 14:15	07/05/18 15:29	1
Tetrachloro-m-xylene	83		30 - 124	07/03/18 14:15	07/05/18 15:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.23	0.045	mg/Kg	☼	07/02/18 15:18	07/03/18 19:08	1
PCB-1221	ND		0.23	0.045	mg/Kg	☼	07/02/18 15:18	07/03/18 19:08	1
PCB-1232	ND		0.23	0.045	mg/Kg	☼	07/02/18 15:18	07/03/18 19:08	1
PCB-1242	ND		0.23	0.045	mg/Kg	☼	07/02/18 15:18	07/03/18 19:08	1
PCB-1248	ND		0.23	0.045	mg/Kg	☼	07/02/18 15:18	07/03/18 19:08	1
PCB-1254	ND		0.23	0.11	mg/Kg	☼	07/02/18 15:18	07/03/18 19:08	1
PCB-1260	ND		0.23	0.11	mg/Kg	☼	07/02/18 15:18	07/03/18 19:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	100		60 - 154	07/02/18 15:18	07/03/18 19:08	1
Tetrachloro-m-xylene	83		60 - 154	07/02/18 15:18	07/03/18 19:08	1
DCB Decachlorobiphenyl	85		65 - 174	07/02/18 15:18	07/03/18 19:08	1
DCB Decachlorobiphenyl	100		65 - 174	07/02/18 15:18	07/03/18 19:08	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		20	6.5	ug/Kg	☼	07/05/18 07:15	07/09/18 18:58	1
Silvex (2,4,5-TP)	ND		20	7.3	ug/Kg	☼	07/05/18 07:15	07/09/18 18:58	1
2,4-D	ND		20	13	ug/Kg	☼	07/05/18 07:15	07/09/18 18:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	72		28 - 129	07/05/18 07:15	07/09/18 18:58	1
2,4-Dichlorophenylacetic acid	69		28 - 129	07/05/18 07:15	07/09/18 18:58	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	16600		12.1	5.3	mg/Kg	☼	07/05/18 10:08	07/06/18 03:00	1
Antimony	ND		18.1	0.48	mg/Kg	☼	07/05/18 10:08	07/06/18 03:00	1
Arsenic	14.5		2.4	0.48	mg/Kg	☼	07/05/18 10:08	07/06/18 03:00	1
Barium	140		0.60	0.13	mg/Kg	☼	07/05/18 10:08	07/06/18 03:00	1
Beryllium	0.78		0.24	0.034	mg/Kg	☼	07/05/18 10:08	07/06/18 03:00	1
Cadmium	0.076	J	0.24	0.036	mg/Kg	☼	07/05/18 10:08	07/06/18 03:00	1
Calcium	830	B	60.4	4.0	mg/Kg	☼	07/05/18 10:08	07/06/18 03:00	1
Chromium	18.5		0.60	0.24	mg/Kg	☼	07/05/18 10:08	07/06/18 03:00	1
Cobalt	16.0		0.60	0.060	mg/Kg	☼	07/05/18 10:08	07/06/18 03:00	1
Copper	17.4		1.2	0.25	mg/Kg	☼	07/05/18 10:08	07/06/18 03:00	1
Iron	29700	B	12.1	4.2	mg/Kg	☼	07/05/18 10:08	07/06/18 03:00	1
Lead	23.1		1.2	0.29	mg/Kg	☼	07/05/18 10:08	07/06/18 03:00	1
Magnesium	3370		24.2	1.1	mg/Kg	☼	07/05/18 10:08	07/06/18 03:00	1
Manganese	833	B	0.24	0.039	mg/Kg	☼	07/05/18 10:08	07/06/18 03:00	1
Nickel	23.0		6.0	0.28	mg/Kg	☼	07/05/18 10:08	07/06/18 03:00	1
Potassium	2090		36.2	24.2	mg/Kg	☼	07/05/18 10:08	07/06/18 03:00	1
Selenium	ND		4.8	0.48	mg/Kg	☼	07/05/18 10:08	07/06/18 03:00	1
Silver	ND		0.72	0.24	mg/Kg	☼	07/05/18 10:08	07/06/18 03:00	1
Sodium	45.0	J	169	15.7	mg/Kg	☼	07/05/18 10:08	07/06/18 03:00	1
Thallium	ND		7.2	0.36	mg/Kg	☼	07/05/18 10:08	07/06/18 03:00	1
Vanadium	25.5		0.60	0.13	mg/Kg	☼	07/05/18 10:08	07/06/18 03:00	1
Zinc	58.7		2.4	0.77	mg/Kg	☼	07/05/18 10:08	07/06/18 03:00	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029		0.023	0.0091	mg/Kg	☼	07/16/18 14:20	07/16/18 15:36	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: BD

Lab Sample ID: 480-138304-9

Date Collected: 06/29/18 09:10

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 78.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		210	58	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
2,4,6-Trichlorophenol	ND		210	43	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
2,4-Dichlorophenol	ND		210	23	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
2,4-Dimethylphenol	ND		210	51	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
2,4-Dinitrophenol	ND		2100	980	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
2,4-Dinitrotoluene	ND		210	44	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
2,6-Dinitrotoluene	ND		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
2-Chloronaphthalene	ND		210	35	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
2-Chlorophenol	ND		210	39	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
2-Methylnaphthalene	ND		210	43	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
2-Methylphenol	ND		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
2-Nitroaniline	ND		410	31	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
2-Nitrophenol	ND		210	60	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
3,3'-Dichlorobenzidine	ND		410	250	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
3-Nitroaniline	ND		410	59	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
4,6-Dinitro-2-methylphenol	ND		410	210	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
4-Bromophenyl phenyl ether	ND		210	30	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
4-Chloro-3-methylphenol	ND		210	53	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
4-Chloroaniline	ND		210	53	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
4-Chlorophenyl phenyl ether	ND		210	26	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
4-Methylphenol	ND		410	25	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
4-Nitroaniline	ND		410	110	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
4-Nitrophenol	ND		410	150	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Acenaphthene	ND		210	31	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Acenaphthylene	ND		210	28	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Acetophenone	ND		210	29	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Anthracene	ND		210	53	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Atrazine	ND		210	74	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Benzaldehyde	ND		210	170	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Benzo[a]anthracene	26	J	210	21	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Benzo[a]pyrene	ND		210	31	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Benzo[b]fluoranthene	45	J	210	34	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Benzo[g,h,i]perylene	ND		210	23	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Benzo[k]fluoranthene	ND		210	28	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Biphenyl	ND		210	31	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
bis (2-chloroisopropyl) ether	ND		210	43	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Bis(2-chloroethoxy)methane	ND		210	45	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Bis(2-chloroethyl)ether	ND		210	28	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Bis(2-ethylhexyl) phthalate	ND		210	73	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Butyl benzyl phthalate	ND		210	35	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Caprolactam	ND		210	64	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Carbazole	ND		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Chrysene	ND		210	48	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Dibenz(a,h)anthracene	ND		210	38	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Dibenzofuran	ND		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Diethyl phthalate	ND		210	28	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Dimethyl phthalate	ND		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Di-n-butyl phthalate	ND		210	36	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Di-n-octyl phthalate	ND		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: BD

Lab Sample ID: 480-138304-9

Date Collected: 06/29/18 09:10

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 78.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	48	J	210	23	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Fluorene	ND		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Hexachlorobenzene	ND		210	29	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Hexachlorobutadiene	ND		210	31	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Hexachlorocyclopentadiene	ND		210	29	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Hexachloroethane	ND		210	28	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Indeno[1,2,3-cd]pyrene	ND		210	26	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Isophorone	ND		210	45	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Naphthalene	ND		210	28	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Nitrobenzene	ND		210	24	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
N-Nitrosodi-n-propylamine	ND		210	36	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
N-Nitrosodiphenylamine	ND		210	170	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Pentachlorophenol	ND		410	210	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Phenanthrene	ND		210	31	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Phenol	51	J	210	33	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1
Pyrene	50	J	210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 18:43	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	770	T J	ug/Kg	☼	1.70		07/02/18 14:22	07/09/18 18:43	1
Unknown	880	T J	ug/Kg	☼	2.96		07/02/18 14:22	07/09/18 18:43	1
Benzene, 1,3-dimethyl-	510	T J N	ug/Kg	☼	3.46	108-38-3	07/02/18 14:22	07/09/18 18:43	1
1R-.alpha.-Pinene	360	T J N	ug/Kg	☼	4.35	7785-70-8	07/02/18 14:22	07/09/18 18:43	1
Cyclohexane,	310	T J N	ug/Kg	☼	8.30	515-13-9	07/02/18 14:22	07/09/18 18:43	1
1-ethenyl-1-methyl-2,4-bis(1-methyle thenyl)-, [									
1H-Cycloprop[e]azulene,	450	T J N	ug/Kg	☼	8.97	489-39-4	07/02/18 14:22	07/09/18 18:43	1
decahydro-1,1,7-trimethyl-4-methylen									
Unknown	180	T J	ug/Kg	☼	11.78		07/02/18 14:22	07/09/18 18:43	1
Unknown	290	T J	ug/Kg	☼	13.56		07/02/18 14:22	07/09/18 18:43	1
Eicosane	180	T J N	ug/Kg	☼	13.92	112-95-8	07/02/18 14:22	07/09/18 18:43	1
Unknown	440	T J	ug/Kg	☼	14.62		07/02/18 14:22	07/09/18 18:43	1
Unknown	2000	T J	ug/Kg	☼	16.10		07/02/18 14:22	07/09/18 18:43	1
Unknown	3300	T J	ug/Kg	☼	16.16		07/02/18 14:22	07/09/18 18:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	84		54 - 120	07/02/18 14:22	07/09/18 18:43	1
2-Fluorobiphenyl	94		60 - 120	07/02/18 14:22	07/09/18 18:43	1
2-Fluorophenol	75		52 - 120	07/02/18 14:22	07/09/18 18:43	1
Nitrobenzene-d5	84		53 - 120	07/02/18 14:22	07/09/18 18:43	1
Phenol-d5	76		54 - 120	07/02/18 14:22	07/09/18 18:43	1
p-Terphenyl-d14	114		65 - 121	07/02/18 14:22	07/09/18 18:43	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	13200		12.3	5.4	mg/Kg	☼	07/05/18 10:08	07/06/18 03:05	1
Antimony	ND		18.4	0.49	mg/Kg	☼	07/05/18 10:08	07/06/18 03:05	1
Arsenic	13.1		2.5	0.49	mg/Kg	☼	07/05/18 10:08	07/06/18 03:05	1
Barium	134		0.61	0.13	mg/Kg	☼	07/05/18 10:08	07/06/18 03:05	1
Beryllium	0.67		0.25	0.034	mg/Kg	☼	07/05/18 10:08	07/06/18 03:05	1
Cadmium	0.056	J	0.25	0.037	mg/Kg	☼	07/05/18 10:08	07/06/18 03:05	1
Calcium	600	B	61.3	4.0	mg/Kg	☼	07/05/18 10:08	07/06/18 03:05	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: BD

Lab Sample ID: 480-138304-9

Date Collected: 06/29/18 09:10

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 78.3

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	15.0		0.61	0.25	mg/Kg	☼	07/05/18 10:08	07/06/18 03:05	1
Cobalt	13.1		0.61	0.061	mg/Kg	☼	07/05/18 10:08	07/06/18 03:05	1
Copper	19.5		1.2	0.26	mg/Kg	☼	07/05/18 10:08	07/06/18 03:05	1
Iron	24000	B	12.3	4.3	mg/Kg	☼	07/05/18 10:08	07/06/18 03:05	1
Lead	23.8		1.2	0.29	mg/Kg	☼	07/05/18 10:08	07/06/18 03:05	1
Magnesium	3020		24.5	1.1	mg/Kg	☼	07/05/18 10:08	07/06/18 03:05	1
Manganese	672	B	0.25	0.039	mg/Kg	☼	07/05/18 10:08	07/06/18 03:05	1
Nickel	23.4		6.1	0.28	mg/Kg	☼	07/05/18 10:08	07/06/18 03:05	1
Potassium	1780		36.8	24.5	mg/Kg	☼	07/05/18 10:08	07/06/18 03:05	1
Selenium	ND		4.9	0.49	mg/Kg	☼	07/05/18 10:08	07/06/18 03:05	1
Silver	ND		0.74	0.25	mg/Kg	☼	07/05/18 10:08	07/06/18 03:05	1
Sodium	40.1	J	172	15.9	mg/Kg	☼	07/05/18 10:08	07/06/18 03:05	1
Thallium	ND		7.4	0.37	mg/Kg	☼	07/05/18 10:08	07/06/18 03:05	1
Vanadium	20.3		0.61	0.13	mg/Kg	☼	07/05/18 10:08	07/06/18 03:05	1
Zinc	52.4		2.5	0.78	mg/Kg	☼	07/05/18 10:08	07/06/18 03:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017	J	0.025	0.010	mg/Kg	☼	07/16/18 14:20	07/16/18 15:40	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-26 (0-2")

Lab Sample ID: 480-138304-10

Date Collected: 06/29/18 09:15

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 79.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		210	57	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
2,4,6-Trichlorophenol	ND		210	42	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
2,4-Dichlorophenol	ND		210	22	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
2,4-Dimethylphenol	ND		210	51	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
2,4-Dinitrophenol	ND		2100	970	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
2,4-Dinitrotoluene	ND		210	44	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
2,6-Dinitrotoluene	ND		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
2-Chloronaphthalene	ND		210	35	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
2-Chlorophenol	ND		210	39	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
2-Methylnaphthalene	ND		210	42	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
2-Methylphenol	ND		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
2-Nitroaniline	ND		410	31	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
2-Nitrophenol	ND		210	60	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
3,3'-Dichlorobenzidine	ND		410	250	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
3-Nitroaniline	ND		410	58	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
4,6-Dinitro-2-methylphenol	ND		410	210	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
4-Bromophenyl phenyl ether	ND		210	30	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
4-Chloro-3-methylphenol	ND		210	52	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
4-Chloroaniline	ND		210	52	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
4-Chlorophenyl phenyl ether	ND		210	26	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
4-Methylphenol	ND		410	25	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
4-Nitroaniline	ND		410	110	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
4-Nitrophenol	ND		410	150	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Acenaphthene	ND		210	31	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Acenaphthylene	ND		210	27	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Acetophenone	ND		210	29	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Anthracene	ND		210	52	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Atrazine	ND		210	73	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Benzaldehyde	ND		210	170	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Benzo[a]anthracene	ND		210	21	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Benzo[a]pyrene	ND		210	31	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Benzo[b]fluoranthene	39	J	210	34	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Benzo[g,h,i]perylene	ND		210	22	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Benzo[k]fluoranthene	ND		210	27	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Biphenyl	ND		210	31	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
bis (2-chloroisopropyl) ether	ND		210	42	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Bis(2-chloroethoxy)methane	ND		210	45	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Bis(2-chloroethyl)ether	ND		210	27	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Bis(2-ethylhexyl) phthalate	ND		210	72	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Butyl benzyl phthalate	ND		210	35	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Caprolactam	ND		210	63	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Carbazole	ND		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Chrysene	ND		210	47	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Dibenz(a,h)anthracene	ND		210	37	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Dibenzofuran	ND		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Diethyl phthalate	ND		210	27	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Dimethyl phthalate	ND		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Di-n-butyl phthalate	ND		210	36	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Di-n-octyl phthalate	ND		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-26 (0-2")

Lab Sample ID: 480-138304-10

Date Collected: 06/29/18 09:15

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 79.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	45	J	210	22	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Fluorene	ND		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Hexachlorobenzene	ND		210	29	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Hexachlorobutadiene	ND		210	31	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Hexachlorocyclopentadiene	ND		210	29	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Hexachloroethane	ND		210	27	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Indeno[1,2,3-cd]pyrene	ND		210	26	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Isophorone	ND		210	45	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Naphthalene	ND		210	27	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Nitrobenzene	ND		210	24	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
N-Nitrosodi-n-propylamine	ND		210	36	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
N-Nitrosodiphenylamine	ND		210	170	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Pentachlorophenol	ND		410	210	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Phenanthrene	33	J	210	31	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Phenol	ND		210	32	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1
Pyrene	48	J	210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 19:08	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	730	T J	ug/Kg	☼	1.70		07/02/18 14:22	07/09/18 19:08	1
Unknown	830	T J	ug/Kg	☼	2.94		07/02/18 14:22	07/09/18 19:08	1
Benzene, 1,3-dimethyl-	470	T J N	ug/Kg	☼	3.45	108-38-3	07/02/18 14:22	07/09/18 19:08	1
1R-.alpha.-Pinene	250	T J N	ug/Kg	☼	4.34	7785-70-8	07/02/18 14:22	07/09/18 19:08	1
Cyclohexane,	180	T J N	ug/Kg	☼	8.29	515-13-9	07/02/18 14:22	07/09/18 19:08	1
1-ethenyl-1-methyl-2,4-bis(1-methyle									
thenyl)-, [									
Benzofuran	300	T J N	ug/Kg	☼	8.63	271-89-6	07/02/18 14:22	07/09/18 19:08	1
1H-Cycloprop[e]azulene,	170	T J N	ug/Kg	☼	8.96	25246-27-9	07/02/18 14:22	07/09/18 19:08	1
decahydro-1,1,7-trimethyl-4-methylen									
Unknown	230	T J	ug/Kg	☼	13.97		07/02/18 14:22	07/09/18 19:08	1
Unknown	230	T J	ug/Kg	☼	14.47		07/02/18 14:22	07/09/18 19:08	1
Unknown	200	T J	ug/Kg	☼	15.03		07/02/18 14:22	07/09/18 19:08	1
Unknown	170	T J	ug/Kg	☼	15.82		07/02/18 14:22	07/09/18 19:08	1
Unknown	930	T J	ug/Kg	☼	16.10		07/02/18 14:22	07/09/18 19:08	1
Friedelin	1900	T J N	ug/Kg	☼	16.15	559-74-0	07/02/18 14:22	07/09/18 19:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	87		54 - 120	07/02/18 14:22	07/09/18 19:08	1
2-Fluorobiphenyl	96		60 - 120	07/02/18 14:22	07/09/18 19:08	1
2-Fluorophenol	77		52 - 120	07/02/18 14:22	07/09/18 19:08	1
Nitrobenzene-d5	87		53 - 120	07/02/18 14:22	07/09/18 19:08	1
Phenol-d5	79		54 - 120	07/02/18 14:22	07/09/18 19:08	1
p-Terphenyl-d14	115		65 - 121	07/02/18 14:22	07/09/18 19:08	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11400		12.6	5.5	mg/Kg	☼	07/05/18 10:08	07/06/18 03:09	1
Antimony	ND		18.8	0.50	mg/Kg	☼	07/05/18 10:08	07/06/18 03:09	1
Arsenic	11.5		2.5	0.50	mg/Kg	☼	07/05/18 10:08	07/06/18 03:09	1
Barium	126		0.63	0.14	mg/Kg	☼	07/05/18 10:08	07/06/18 03:09	1
Beryllium	0.56		0.25	0.035	mg/Kg	☼	07/05/18 10:08	07/06/18 03:09	1
Cadmium	0.072	J	0.25	0.038	mg/Kg	☼	07/05/18 10:08	07/06/18 03:09	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-26 (0-2")

Lab Sample ID: 480-138304-10

Date Collected: 06/29/18 09:15

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 79.2

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1760	B	62.8	4.1	mg/Kg	☼	07/05/18 10:08	07/06/18 03:09	1
Chromium	13.3		0.63	0.25	mg/Kg	☼	07/05/18 10:08	07/06/18 03:09	1
Cobalt	12.7		0.63	0.063	mg/Kg	☼	07/05/18 10:08	07/06/18 03:09	1
Copper	15.6		1.3	0.26	mg/Kg	☼	07/05/18 10:08	07/06/18 03:09	1
Iron	22400	B	12.6	4.4	mg/Kg	☼	07/05/18 10:08	07/06/18 03:09	1
Lead	22.7		1.3	0.30	mg/Kg	☼	07/05/18 10:08	07/06/18 03:09	1
Magnesium	2870		25.1	1.2	mg/Kg	☼	07/05/18 10:08	07/06/18 03:09	1
Manganese	694	B	0.25	0.040	mg/Kg	☼	07/05/18 10:08	07/06/18 03:09	1
Nickel	22.3		6.3	0.29	mg/Kg	☼	07/05/18 10:08	07/06/18 03:09	1
Potassium	1450		37.7	25.1	mg/Kg	☼	07/05/18 10:08	07/06/18 03:09	1
Selenium	ND		5.0	0.50	mg/Kg	☼	07/05/18 10:08	07/06/18 03:09	1
Silver	ND		0.75	0.25	mg/Kg	☼	07/05/18 10:08	07/06/18 03:09	1
Sodium	40.5	J	176	16.3	mg/Kg	☼	07/05/18 10:08	07/06/18 03:09	1
Thallium	ND		7.5	0.38	mg/Kg	☼	07/05/18 10:08	07/06/18 03:09	1
Vanadium	17.1		0.63	0.14	mg/Kg	☼	07/05/18 10:08	07/06/18 03:09	1
Zinc	50.0		2.5	0.80	mg/Kg	☼	07/05/18 10:08	07/06/18 03:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.025	0.010	mg/Kg	☼	07/16/18 14:20	07/16/18 15:42	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-26 (2"-1')

Lab Sample ID: 480-138304-11

Date Collected: 06/29/18 09:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 91.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	5.4	0.39	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
1,1,2,2-Tetrachloroethane	ND	vs	5.4	0.88	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	5.4	1.2	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
1,1,2-Trichloroethane	ND	vs	5.4	0.71	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
1,1-Dichloroethane	ND	vs	5.4	0.66	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
1,1-Dichloroethene	ND	vs	5.4	0.67	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
1,2,4-Trichlorobenzene	ND	vs	5.4	0.33	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
1,2-Dibromo-3-Chloropropane	ND	vs	5.4	2.7	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
1,2-Dichlorobenzene	ND	vs	5.4	0.43	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
1,2-Dichloroethane	ND	vs	5.4	0.27	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
1,2-Dichloropropane	ND	vs	5.4	2.7	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
1,3-Dichlorobenzene	ND	vs	5.4	0.28	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
1,4-Dichlorobenzene	ND	vs	5.4	0.76	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
2-Butanone (MEK)	ND	vs	27	2.0	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
2-Hexanone	ND	vs	27	2.7	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
4-Methyl-2-pentanone (MIBK)	ND	vs	27	1.8	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Acetone	ND	vs	27	4.6	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Benzene	ND	vs	5.4	0.27	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Bromoform	ND	vs	5.4	2.7	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Bromomethane	ND	vs	5.4	0.49	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Carbon disulfide	ND	vs	5.4	2.7	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Carbon tetrachloride	ND	vs	5.4	0.53	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Chlorobenzene	ND	vs	5.4	0.72	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Dibromochloromethane	ND	vs	5.4	0.70	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Chloroethane	ND	vs	5.4	1.2	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Chloroform	ND	vs	5.4	0.34	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Chloromethane	ND	vs	5.4	0.33	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
cis-1,2-Dichloroethene	ND	vs	5.4	0.70	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Cyclohexane	ND	vs	5.4	0.76	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Bromodichloromethane	ND	vs	5.4	0.73	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Dichlorodifluoromethane	ND	vs	5.4	0.45	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Ethylbenzene	ND	vs	5.4	0.38	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
1,2-Dibromoethane	ND	vs	5.4	0.70	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Isopropylbenzene	ND	vs	5.4	0.82	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Methyl acetate	ND	vs	27	3.3	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Methyl tert-butyl ether	ND	vs	5.4	0.53	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Methylcyclohexane	ND	vs	5.4	0.83	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Methylene Chloride	ND	vs	5.4	2.5	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Tetrachloroethene	ND	vs	5.4	0.73	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Toluene	ND	vs	5.4	0.41	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
trans-1,2-Dichloroethene	ND	vs	5.4	0.56	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
trans-1,3-Dichloropropene	ND	vs	5.4	2.4	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Trichloroethene	ND	vs	5.4	1.2	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Trichlorofluoromethane	ND	vs	5.4	0.51	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Vinyl chloride	ND	vs	5.4	0.66	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Xylenes, Total	ND	vs	11	0.91	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
cis-1,3-Dichloropropene	ND	vs	5.4	0.78	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1
Styrene	ND	vs	5.4	0.27	ug/Kg	☼	07/06/18 09:13	07/06/18 20:01	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-26 (2"-1')

Lab Sample ID: 480-138304-11

Date Collected: 06/29/18 09:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 91.2

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		<i>ug/Kg</i>	<i>☼</i>			<i>07/06/18 09:13</i>	<i>07/06/18 20:01</i>	<i>1</i>
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		64 - 126				07/06/18 09:13	07/06/18 20:01	1
4-Bromofluorobenzene (Surr)	97		72 - 126				07/06/18 09:13	07/06/18 20:01	1
Toluene-d8 (Surr)	103		71 - 125				07/06/18 09:13	07/06/18 20:01	1
Dibromofluoromethane (Surr)	96		60 - 140				07/06/18 09:13	07/06/18 20:01	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		180	50	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
2,4,6-Trichlorophenol	ND		180	37	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
2,4-Dichlorophenol	ND		180	19	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
2,4-Dimethylphenol	ND		180	44	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
2,4-Dinitrophenol	ND		1800	850	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
2,4-Dinitrotoluene	ND		180	38	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
2,6-Dinitrotoluene	ND		180	22	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
2-Chloronaphthalene	ND		180	30	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
2-Chlorophenol	ND		180	33	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
2-Methylnaphthalene	ND		180	37	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
2-Methylphenol	ND		180	22	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
2-Nitroaniline	ND		360	27	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
2-Nitrophenol	ND		180	52	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
3,3'-Dichlorobenzidine	ND		360	220	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
3-Nitroaniline	ND		360	51	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
4,6-Dinitro-2-methylphenol	ND		360	180	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
4-Bromophenyl phenyl ether	ND		180	26	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
4-Chloro-3-methylphenol	ND		180	45	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
4-Chloroaniline	ND		180	45	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
4-Chlorophenyl phenyl ether	ND		180	23	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
4-Methylphenol	ND		360	22	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
4-Nitroaniline	ND		360	96	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
4-Nitrophenol	ND		360	130	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Acenaphthene	ND		180	27	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Acenaphthylene	ND		180	24	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Acetophenone	ND		180	25	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Anthracene	ND		180	45	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Atrazine	ND		180	64	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Benzaldehyde	ND		180	150	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Benzo[a]anthracene	ND		180	18	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Benzo[a]pyrene	ND		180	27	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Benzo[b]fluoranthene	ND		180	29	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Benzo[g,h,i]perylene	ND		180	19	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Benzo[k]fluoranthene	ND		180	24	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Biphenyl	ND		180	27	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
bis (2-chloroisopropyl) ether	ND		180	37	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Bis(2-chloroethoxy)methane	ND		180	39	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Bis(2-chloroethyl)ether	ND		180	24	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Bis(2-ethylhexyl) phthalate	ND		180	63	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Butyl benzyl phthalate	ND		180	30	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-26 (2"-1')

Lab Sample ID: 480-138304-11

Date Collected: 06/29/18 09:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 91.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	ND		180	55	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Carbazole	ND		180	22	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Chrysene	ND		180	41	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Dibenz(a,h)anthracene	ND		180	32	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Dibenzofuran	ND		180	22	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Diethyl phthalate	ND		180	24	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Dimethyl phthalate	ND		180	22	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Di-n-butyl phthalate	ND		180	31	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Di-n-octyl phthalate	ND		180	22	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Fluoranthene	ND		180	19	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Fluorene	ND		180	22	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Hexachlorobenzene	ND		180	25	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Hexachlorobutadiene	ND		180	27	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Hexachlorocyclopentadiene	ND		180	25	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Hexachloroethane	ND		180	24	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Indeno[1,2,3-cd]pyrene	ND		180	23	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Isophorone	ND		180	39	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Naphthalene	ND		180	24	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Nitrobenzene	ND		180	21	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
N-Nitrosodi-n-propylamine	ND		180	31	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
N-Nitrosodiphenylamine	ND		180	150	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Pentachlorophenol	ND		360	180	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Phenanthrene	ND		180	27	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Phenol	ND		180	28	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1
Pyrene	ND		180	22	ug/Kg	☼	07/02/18 14:22	07/09/18 19:33	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	740	T J	ug/Kg	☼	1.70		07/02/18 14:22	07/09/18 19:33	1
Unknown	460	T J	ug/Kg	☼	2.97		07/02/18 14:22	07/09/18 19:33	1
p-Xylene	150	T J N	ug/Kg	☼	3.44	106-42-3	07/02/18 14:22	07/09/18 19:33	1
Unknown	340	T J	ug/Kg	☼	13.99		07/02/18 14:22	07/09/18 19:33	1
Unknown	310	T J	ug/Kg	☼	16.14		07/02/18 14:22	07/09/18 19:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	79		54 - 120	07/02/18 14:22	07/09/18 19:33	1
2-Fluorobiphenyl	96		60 - 120	07/02/18 14:22	07/09/18 19:33	1
2-Fluorophenol	73		52 - 120	07/02/18 14:22	07/09/18 19:33	1
Nitrobenzene-d5	84		53 - 120	07/02/18 14:22	07/09/18 19:33	1
Phenol-d5	75		54 - 120	07/02/18 14:22	07/09/18 19:33	1
p-Terphenyl-d14	110		65 - 121	07/02/18 14:22	07/09/18 19:33	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9690		10.6	4.7	mg/Kg	☼	07/05/18 10:08	07/06/18 03:24	1
Antimony	ND		15.9	0.43	mg/Kg	☼	07/05/18 10:08	07/06/18 03:24	1
Arsenic	8.6		2.1	0.43	mg/Kg	☼	07/05/18 10:08	07/06/18 03:24	1
Barium	187		0.53	0.12	mg/Kg	☼	07/05/18 10:08	07/06/18 03:24	1
Beryllium	0.46		0.21	0.030	mg/Kg	☼	07/05/18 10:08	07/06/18 03:24	1
Cadmium	0.041	J	0.21	0.032	mg/Kg	☼	07/05/18 10:08	07/06/18 03:24	1
Calcium	498	B	53.1	3.5	mg/Kg	☼	07/05/18 10:08	07/06/18 03:24	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-26 (2"-1")

Lab Sample ID: 480-138304-11

Date Collected: 06/29/18 09:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 91.2

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	11.7		0.53	0.21	mg/Kg	☼	07/05/18 10:08	07/06/18 03:24	1
Cobalt	10.7		0.53	0.053	mg/Kg	☼	07/05/18 10:08	07/06/18 03:24	1
Copper	14.6		1.1	0.22	mg/Kg	☼	07/05/18 10:08	07/06/18 03:24	1
Iron	18600	B	10.6	3.7	mg/Kg	☼	07/05/18 10:08	07/06/18 03:24	1
Lead	12.9		1.1	0.26	mg/Kg	☼	07/05/18 10:08	07/06/18 03:24	1
Magnesium	2640		21.3	0.99	mg/Kg	☼	07/05/18 10:08	07/06/18 03:24	1
Manganese	426	B	0.21	0.034	mg/Kg	☼	07/05/18 10:08	07/06/18 03:24	1
Nickel	20.2		5.3	0.24	mg/Kg	☼	07/05/18 10:08	07/06/18 03:24	1
Potassium	1400		31.9	21.3	mg/Kg	☼	07/05/18 10:08	07/06/18 03:24	1
Selenium	ND		4.3	0.43	mg/Kg	☼	07/05/18 10:08	07/06/18 03:24	1
Silver	ND		0.64	0.21	mg/Kg	☼	07/05/18 10:08	07/06/18 03:24	1
Sodium	30.9	J	149	13.8	mg/Kg	☼	07/05/18 10:08	07/06/18 03:24	1
Thallium	ND		6.4	0.32	mg/Kg	☼	07/05/18 10:08	07/06/18 03:24	1
Vanadium	14.4		0.53	0.12	mg/Kg	☼	07/05/18 10:08	07/06/18 03:24	1
Zinc	42.2		2.1	0.68	mg/Kg	☼	07/05/18 10:08	07/06/18 03:24	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0081	mg/Kg	☼	07/16/18 14:20	07/16/18 15:43	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-25 (0-2")

Lab Sample ID: 480-138304-12

Date Collected: 06/29/18 09:45

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 84.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		200	54	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
2,4,6-Trichlorophenol	ND		200	40	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
2,4-Dichlorophenol	ND		200	21	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
2,4-Dimethylphenol	ND		200	48	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
2,4-Dinitrophenol	ND		1900	910	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
2,4-Dinitrotoluene	ND		200	41	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
2,6-Dinitrotoluene	ND		200	23	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
2-Chloronaphthalene	ND		200	33	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
2-Chlorophenol	ND		200	36	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
2-Methylnaphthalene	ND		200	40	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
2-Methylphenol	ND		200	23	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
2-Nitroaniline	ND		380	29	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
2-Nitrophenol	ND		200	56	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
3,3'-Dichlorobenzidine	ND		380	230	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
3-Nitroaniline	ND		380	55	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
4,6-Dinitro-2-methylphenol	ND		380	200	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
4-Bromophenyl phenyl ether	ND		200	28	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
4-Chloro-3-methylphenol	ND		200	49	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
4-Chloroaniline	ND		200	49	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
4-Chlorophenyl phenyl ether	ND		200	24	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
4-Methylphenol	ND		380	23	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
4-Nitroaniline	ND		380	100	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
4-Nitrophenol	ND		380	140	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Acenaphthene	ND		200	29	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Acenaphthylene	ND		200	26	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Acetophenone	ND		200	27	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Anthracene	ND		200	49	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Atrazine	ND		200	69	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Benzaldehyde	ND		200	160	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Benzo[a]anthracene	ND		200	20	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Benzo[a]pyrene	ND		200	29	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Benzo[b]fluoranthene	ND		200	31	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Benzo[g,h,i]perylene	ND		200	21	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Benzo[k]fluoranthene	ND		200	26	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Biphenyl	ND		200	29	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
bis (2-chloroisopropyl) ether	ND		200	40	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Bis(2-chloroethoxy)methane	ND		200	42	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Bis(2-chloroethyl)ether	ND		200	26	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Bis(2-ethylhexyl) phthalate	ND		200	68	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Butyl benzyl phthalate	ND		200	33	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Caprolactam	ND		200	59	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Carbazole	ND		200	23	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Chrysene	ND		200	44	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Dibenz(a,h)anthracene	ND		200	35	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Dibenzofuran	ND		200	23	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Diethyl phthalate	ND		200	26	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Dimethyl phthalate	ND		200	23	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Di-n-butyl phthalate	ND		200	34	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Di-n-octyl phthalate	ND		200	23	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-25 (0-2")

Lab Sample ID: 480-138304-12

Date Collected: 06/29/18 09:45

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 84.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	21	J	200	21	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Fluorene	ND		200	23	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Hexachlorobenzene	ND		200	27	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Hexachlorobutadiene	ND		200	29	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Hexachlorocyclopentadiene	ND		200	27	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Hexachloroethane	ND		200	26	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Indeno[1,2,3-cd]pyrene	ND		200	24	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Isophorone	ND		200	42	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Naphthalene	ND		200	26	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Nitrobenzene	ND		200	22	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
N-Nitrosodi-n-propylamine	ND		200	34	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
N-Nitrosodiphenylamine	ND		200	160	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Pentachlorophenol	ND		380	200	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Phenanthrene	ND		200	29	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Phenol	ND		200	30	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1
Pyrene	ND		200	23	ug/Kg	☼	07/02/18 14:22	07/09/18 19:58	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	880	T J	ug/Kg	☼	1.69		07/02/18 14:22	07/09/18 19:58	1
Unknown	650	T J	ug/Kg	☼	2.94		07/02/18 14:22	07/09/18 19:58	1
Benzene, 1,3-dimethyl-	160	T J N	ug/Kg	☼	3.45	108-38-3	07/02/18 14:22	07/09/18 19:58	1
1,21-Docosadiene	200	T J N	ug/Kg	☼	13.78	53057-53-7	07/02/18 14:22	07/09/18 19:58	1
Cycloeicosane	690	T J N	ug/Kg	☼	13.97	296-56-0	07/02/18 14:22	07/09/18 19:58	1
1,19-Eicosadiene	200	T J N	ug/Kg	☼	14.27	14811-95-1	07/02/18 14:22	07/09/18 19:58	1
Unknown	210	T J	ug/Kg	☼	14.48		07/02/18 14:22	07/09/18 19:58	1
Unknown	280	T J	ug/Kg	☼	15.07		07/02/18 14:22	07/09/18 19:58	1
Unknown	350	T J	ug/Kg	☼	15.67		07/02/18 14:22	07/09/18 19:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	75		54 - 120	07/02/18 14:22	07/09/18 19:58	1
2-Fluorobiphenyl	93		60 - 120	07/02/18 14:22	07/09/18 19:58	1
2-Fluorophenol	79		52 - 120	07/02/18 14:22	07/09/18 19:58	1
Nitrobenzene-d5	84		53 - 120	07/02/18 14:22	07/09/18 19:58	1
Phenol-d5	79		54 - 120	07/02/18 14:22	07/09/18 19:58	1
p-Terphenyl-d14	104		65 - 121	07/02/18 14:22	07/09/18 19:58	1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.38	ug/Kg	☼	07/03/18 14:15	07/05/18 15:49	1
4,4'-DDE	ND		1.9	0.41	ug/Kg	☼	07/03/18 14:15	07/05/18 15:49	1
4,4'-DDT	ND		1.9	0.45	ug/Kg	☼	07/03/18 14:15	07/05/18 15:49	1
Aldrin	ND		1.9	0.48	ug/Kg	☼	07/03/18 14:15	07/05/18 15:49	1
alpha-BHC	ND		1.9	0.35	ug/Kg	☼	07/03/18 14:15	07/05/18 15:49	1
beta-BHC	ND		1.9	0.35	ug/Kg	☼	07/03/18 14:15	07/05/18 15:49	1
cis-Chlordane	ND		1.9	0.97	ug/Kg	☼	07/03/18 14:15	07/05/18 15:49	1
delta-BHC	ND		1.9	0.36	ug/Kg	☼	07/03/18 14:15	07/05/18 15:49	1
Dieldrin	0.52	J	1.9	0.47	ug/Kg	☼	07/03/18 14:15	07/05/18 15:49	1
Endosulfan I	ND		1.9	0.37	ug/Kg	☼	07/03/18 14:15	07/05/18 15:49	1
Endosulfan II	0.59	J B	1.9	0.35	ug/Kg	☼	07/03/18 14:15	07/05/18 15:49	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg	☼	07/03/18 14:15	07/05/18 15:49	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-25 (0-2")

Lab Sample ID: 480-138304-12

Date Collected: 06/29/18 09:45

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 84.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endrin	0.81	J	1.9	0.38	ug/Kg	☼	07/03/18 14:15	07/05/18 15:49	1
Endrin aldehyde	ND		1.9	0.50	ug/Kg	☼	07/03/18 14:15	07/05/18 15:49	1
Endrin ketone	ND		1.9	0.48	ug/Kg	☼	07/03/18 14:15	07/05/18 15:49	1
gamma-BHC (Lindane)	0.47	J B	1.9	0.36	ug/Kg	☼	07/03/18 14:15	07/05/18 15:49	1
Heptachlor	ND		1.9	0.42	ug/Kg	☼	07/03/18 14:15	07/05/18 15:49	1
Heptachlor epoxide	ND		1.9	0.50	ug/Kg	☼	07/03/18 14:15	07/05/18 15:49	1
Methoxychlor	ND		1.9	0.40	ug/Kg	☼	07/03/18 14:15	07/05/18 15:49	1
Toxaphene	ND		19	11	ug/Kg	☼	07/03/18 14:15	07/05/18 15:49	1
trans-Chlordane	ND		1.9	0.62	ug/Kg	☼	07/03/18 14:15	07/05/18 15:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	72		45 - 120				07/03/18 14:15	07/05/18 15:49	1
DCB Decachlorobiphenyl	81		45 - 120				07/03/18 14:15	07/05/18 15:49	1
Tetrachloro-m-xylene	65		30 - 124				07/03/18 14:15	07/05/18 15:49	1
Tetrachloro-m-xylene	64		30 - 124				07/03/18 14:15	07/05/18 15:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.23	0.044	mg/Kg	☼	07/02/18 15:18	07/03/18 19:24	1
PCB-1221	ND		0.23	0.044	mg/Kg	☼	07/02/18 15:18	07/03/18 19:24	1
PCB-1232	ND		0.23	0.044	mg/Kg	☼	07/02/18 15:18	07/03/18 19:24	1
PCB-1242	ND		0.23	0.044	mg/Kg	☼	07/02/18 15:18	07/03/18 19:24	1
PCB-1248	ND		0.23	0.044	mg/Kg	☼	07/02/18 15:18	07/03/18 19:24	1
PCB-1254	ND		0.23	0.11	mg/Kg	☼	07/02/18 15:18	07/03/18 19:24	1
PCB-1260	ND		0.23	0.11	mg/Kg	☼	07/02/18 15:18	07/03/18 19:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	95		60 - 154				07/02/18 15:18	07/03/18 19:24	1
Tetrachloro-m-xylene	82		60 - 154				07/02/18 15:18	07/03/18 19:24	1
DCB Decachlorobiphenyl	72		65 - 174				07/02/18 15:18	07/03/18 19:24	1
DCB Decachlorobiphenyl	86		65 - 174				07/02/18 15:18	07/03/18 19:24	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		19	6.2	ug/Kg	☼	07/05/18 07:15	07/09/18 19:28	1
Silvex (2,4,5-TP)	ND		19	7.0	ug/Kg	☼	07/05/18 07:15	07/09/18 19:28	1
2,4-D	ND		19	12	ug/Kg	☼	07/05/18 07:15	07/09/18 19:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	68		28 - 129				07/05/18 07:15	07/09/18 19:28	1
2,4-Dichlorophenylacetic acid	63		28 - 129				07/05/18 07:15	07/09/18 19:28	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	13500		11.4	5.0	mg/Kg	☼	07/05/18 10:08	07/06/18 03:28	1
Antimony	ND		17.1	0.46	mg/Kg	☼	07/05/18 10:08	07/06/18 03:28	1
Arsenic	12.5		2.3	0.46	mg/Kg	☼	07/05/18 10:08	07/06/18 03:28	1
Barium	78.7		0.57	0.13	mg/Kg	☼	07/05/18 10:08	07/06/18 03:28	1
Beryllium	0.77		0.23	0.032	mg/Kg	☼	07/05/18 10:08	07/06/18 03:28	1
Cadmium	ND		0.23	0.034	mg/Kg	☼	07/05/18 10:08	07/06/18 03:28	1
Calcium	1890	B	57.0	3.8	mg/Kg	☼	07/05/18 10:08	07/06/18 03:28	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-25 (0-2")

Lab Sample ID: 480-138304-12

Date Collected: 06/29/18 09:45

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 84.5

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	16.2		0.57	0.23	mg/Kg	☼	07/05/18 10:08	07/06/18 03:28	1
Cobalt	16.2		0.57	0.057	mg/Kg	☼	07/05/18 10:08	07/06/18 03:28	1
Copper	16.3		1.1	0.24	mg/Kg	☼	07/05/18 10:08	07/06/18 03:28	1
Iron	25500	B	11.4	4.0	mg/Kg	☼	07/05/18 10:08	07/06/18 03:28	1
Lead	13.2		1.1	0.27	mg/Kg	☼	07/05/18 10:08	07/06/18 03:28	1
Magnesium	4220		22.8	1.1	mg/Kg	☼	07/05/18 10:08	07/06/18 03:28	1
Manganese	571	B	0.23	0.037	mg/Kg	☼	07/05/18 10:08	07/06/18 03:28	1
Nickel	27.6		5.7	0.26	mg/Kg	☼	07/05/18 10:08	07/06/18 03:28	1
Potassium	2570		34.2	22.8	mg/Kg	☼	07/05/18 10:08	07/06/18 03:28	1
Selenium	ND		4.6	0.46	mg/Kg	☼	07/05/18 10:08	07/06/18 03:28	1
Silver	ND		0.68	0.23	mg/Kg	☼	07/05/18 10:08	07/06/18 03:28	1
Sodium	50.8	J	160	14.8	mg/Kg	☼	07/05/18 10:08	07/06/18 03:28	1
Thallium	ND		6.8	0.34	mg/Kg	☼	07/05/18 10:08	07/06/18 03:28	1
Vanadium	18.2		0.57	0.13	mg/Kg	☼	07/05/18 10:08	07/06/18 03:28	1
Zinc	60.1		2.3	0.73	mg/Kg	☼	07/05/18 10:08	07/06/18 03:28	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0098	J	0.023	0.0094	mg/Kg	☼	07/16/18 14:20	07/16/18 15:45	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-25 (2"-1')

Lab Sample ID: 480-138304-13

Date Collected: 06/29/18 10:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 84.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	5.8	0.42	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
1,1,2,2-Tetrachloroethane	ND	vs	5.8	0.94	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	5.8	1.3	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
1,1,2-Trichloroethane	ND	vs	5.8	0.76	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
1,1-Dichloroethane	ND	vs	5.8	0.71	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
1,1-Dichloroethene	ND	vs	5.8	0.71	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
1,2,4-Trichlorobenzene	ND	vs	5.8	0.35	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
1,2-Dibromo-3-Chloropropane	ND	vs	5.8	2.9	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
1,2-Dichlorobenzene	ND	vs	5.8	0.45	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
1,2-Dichloroethane	ND	vs	5.8	0.29	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
1,2-Dichloropropane	ND	vs	5.8	2.9	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
1,3-Dichlorobenzene	ND	vs	5.8	0.30	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
1,4-Dichlorobenzene	ND	vs	5.8	0.81	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
2-Butanone (MEK)	ND	vs	29	2.1	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
2-Hexanone	ND	vs	29	2.9	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
4-Methyl-2-pentanone (MIBK)	ND	vs	29	1.9	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Acetone	ND	vs	29	4.9	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Benzene	ND	vs	5.8	0.28	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Bromoform	ND	vs	5.8	2.9	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Bromomethane	ND	vs	5.8	0.52	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Carbon disulfide	ND	vs	5.8	2.9	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Carbon tetrachloride	ND	vs	5.8	0.56	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Chlorobenzene	ND	vs	5.8	0.77	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Dibromochloromethane	ND	vs	5.8	0.74	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Chloroethane	ND	vs	5.8	1.3	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Chloroform	0.37	J vs	5.8	0.36	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Chloromethane	ND	vs	5.8	0.35	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
cis-1,2-Dichloroethene	ND	vs	5.8	0.74	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Cyclohexane	ND	vs	5.8	0.81	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Bromodichloromethane	ND	vs	5.8	0.78	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Dichlorodifluoromethane	ND	vs	5.8	0.48	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Ethylbenzene	ND	vs	5.8	0.40	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
1,2-Dibromoethane	ND	vs	5.8	0.75	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Isopropylbenzene	ND	vs	5.8	0.88	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Methyl acetate	ND	vs	29	3.5	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Methyl tert-butyl ether	ND	vs	5.8	0.57	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Methylcyclohexane	ND	vs	5.8	0.88	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Methylene Chloride	ND	vs	5.8	2.7	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Tetrachloroethene	ND	vs	5.8	0.78	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Toluene	ND	vs	5.8	0.44	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
trans-1,2-Dichloroethene	ND	vs	5.8	0.60	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
trans-1,3-Dichloropropene	ND	vs	5.8	2.6	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Trichloroethene	1.4	J vs	5.8	1.3	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Trichlorofluoromethane	ND	vs	5.8	0.55	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Vinyl chloride	ND	vs	5.8	0.71	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Xylenes, Total	ND	vs	12	0.98	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
cis-1,3-Dichloropropene	ND	vs	5.8	0.84	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1
Styrene	ND	vs	5.8	0.29	ug/Kg	☼	07/06/18 09:13	07/06/18 20:26	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-25 (2"-1')

Lab Sample ID: 480-138304-13

Date Collected: 06/29/18 10:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 84.2

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		<i>ug/Kg</i>	<i>☼</i>			<i>07/06/18 09:13</i>	<i>07/06/18 20:26</i>	<i>1</i>
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>1,2-Dichloroethane-d4 (Surr)</i>	99		64 - 126				<i>07/06/18 09:13</i>	<i>07/06/18 20:26</i>	<i>1</i>
<i>4-Bromofluorobenzene (Surr)</i>	100		72 - 126				<i>07/06/18 09:13</i>	<i>07/06/18 20:26</i>	<i>1</i>
<i>Toluene-d8 (Surr)</i>	102		71 - 125				<i>07/06/18 09:13</i>	<i>07/06/18 20:26</i>	<i>1</i>
<i>Dibromofluoromethane (Surr)</i>	99		60 - 140				<i>07/06/18 09:13</i>	<i>07/06/18 20:26</i>	<i>1</i>

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		200	53	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
2,4,6-Trichlorophenol	ND		200	39	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
2,4-Dichlorophenol	ND		200	21	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
2,4-Dimethylphenol	ND		200	47	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
2,4-Dinitrophenol	ND		1900	900	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
2,4-Dinitrotoluene	ND		200	40	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
2,6-Dinitrotoluene	ND		200	23	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
2-Chloronaphthalene	ND		200	32	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
2-Chlorophenol	ND		200	36	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
2-Methylnaphthalene	ND		200	39	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
2-Methylphenol	ND		200	23	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
2-Nitroaniline	ND		380	29	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
2-Nitrophenol	ND		200	55	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
3,3'-Dichlorobenzidine	ND		380	230	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
3-Nitroaniline	ND		380	54	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
4,6-Dinitro-2-methylphenol	ND		380	200	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
4-Bromophenyl phenyl ether	ND		200	28	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
4-Chloro-3-methylphenol	ND		200	48	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
4-Chloroaniline	ND		200	48	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
4-Chlorophenyl phenyl ether	ND		200	24	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
4-Methylphenol	ND		380	23	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
4-Nitroaniline	ND		380	100	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
4-Nitrophenol	ND		380	140	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Acenaphthene	ND		200	29	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Acenaphthylene	ND		200	25	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Acetophenone	ND		200	26	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Anthracene	ND		200	48	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Atrazine	ND		200	68	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Benzaldehyde	ND		200	160	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Benzo[a]anthracene	ND		200	20	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Benzo[a]pyrene	ND		200	29	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Benzo[b]fluoranthene	ND		200	31	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Benzo[g,h,i]perylene	ND		200	21	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Benzo[k]fluoranthene	ND		200	25	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Biphenyl	ND		200	29	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
bis (2-chloroisopropyl) ether	ND		200	39	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Bis(2-chloroethoxy)methane	ND		200	41	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Bis(2-chloroethyl)ether	ND		200	25	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Bis(2-ethylhexyl) phthalate	ND		200	67	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Butyl benzyl phthalate	ND		200	32	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-25 (2"-1')

Lab Sample ID: 480-138304-13

Date Collected: 06/29/18 10:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 84.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	ND		200	59	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Carbazole	ND		200	23	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Chrysene	ND		200	44	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Dibenz(a,h)anthracene	ND		200	35	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Dibenzofuran	ND		200	23	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Diethyl phthalate	ND		200	25	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Dimethyl phthalate	ND		200	23	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Di-n-butyl phthalate	ND		200	33	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Di-n-octyl phthalate	ND		200	23	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Fluoranthene	27	J	200	21	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Fluorene	ND		200	23	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Hexachlorobenzene	ND		200	26	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Hexachlorobutadiene	ND		200	29	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Hexachlorocyclopentadiene	ND		200	26	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Hexachloroethane	ND		200	25	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Indeno[1,2,3-cd]pyrene	ND		200	24	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Isophorone	ND		200	41	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Naphthalene	ND		200	25	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Nitrobenzene	ND		200	22	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
N-Nitrosodi-n-propylamine	ND		200	33	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
N-Nitrosodiphenylamine	ND		200	160	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Pentachlorophenol	ND		380	200	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Phenanthrene	ND		200	29	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Phenol	ND		200	30	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1
Pyrene	ND		200	23	ug/Kg	☼	07/02/18 14:22	07/09/18 20:24	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	740	T J	ug/Kg	☼	1.67		07/02/18 14:22	07/09/18 20:24	1
Unknown	530	T J	ug/Kg	☼	2.92		07/02/18 14:22	07/09/18 20:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	70		54 - 120	07/02/18 14:22	07/09/18 20:24	1
2-Fluorobiphenyl	86		60 - 120	07/02/18 14:22	07/09/18 20:24	1
2-Fluorophenol	68		52 - 120	07/02/18 14:22	07/09/18 20:24	1
Nitrobenzene-d5	77		53 - 120	07/02/18 14:22	07/09/18 20:24	1
Phenol-d5	71		54 - 120	07/02/18 14:22	07/09/18 20:24	1
p-Terphenyl-d14	112		65 - 121	07/02/18 14:22	07/09/18 20:24	1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.38	ug/Kg	☼	07/03/18 14:15	07/05/18 16:08	1
4,4'-DDE	ND		1.9	0.41	ug/Kg	☼	07/03/18 14:15	07/05/18 16:08	1
4,4'-DDT	ND		1.9	0.45	ug/Kg	☼	07/03/18 14:15	07/05/18 16:08	1
Aldrin	ND		1.9	0.47	ug/Kg	☼	07/03/18 14:15	07/05/18 16:08	1
alpha-BHC	ND		1.9	0.35	ug/Kg	☼	07/03/18 14:15	07/05/18 16:08	1
beta-BHC	ND		1.9	0.35	ug/Kg	☼	07/03/18 14:15	07/05/18 16:08	1
cis-Chlordane	ND		1.9	0.96	ug/Kg	☼	07/03/18 14:15	07/05/18 16:08	1
delta-BHC	0.51	J	1.9	0.36	ug/Kg	☼	07/03/18 14:15	07/05/18 16:08	1
Dieldrin	ND		1.9	0.46	ug/Kg	☼	07/03/18 14:15	07/05/18 16:08	1
Endosulfan I	ND		1.9	0.37	ug/Kg	☼	07/03/18 14:15	07/05/18 16:08	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-25 (2"-1')

Lab Sample ID: 480-138304-13

Date Collected: 06/29/18 10:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan II	ND		1.9	0.35	ug/Kg	☼	07/03/18 14:15	07/05/18 16:08	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg	☼	07/03/18 14:15	07/05/18 16:08	1
Endrin	ND		1.9	0.38	ug/Kg	☼	07/03/18 14:15	07/05/18 16:08	1
Endrin aldehyde	ND		1.9	0.49	ug/Kg	☼	07/03/18 14:15	07/05/18 16:08	1
Endrin ketone	ND		1.9	0.47	ug/Kg	☼	07/03/18 14:15	07/05/18 16:08	1
gamma-BHC (Lindane)	ND		1.9	0.35	ug/Kg	☼	07/03/18 14:15	07/05/18 16:08	1
Heptachlor	ND		1.9	0.42	ug/Kg	☼	07/03/18 14:15	07/05/18 16:08	1
Heptachlor epoxide	ND		1.9	0.50	ug/Kg	☼	07/03/18 14:15	07/05/18 16:08	1
Methoxychlor	ND		1.9	0.39	ug/Kg	☼	07/03/18 14:15	07/05/18 16:08	1
Toxaphene	ND		19	11	ug/Kg	☼	07/03/18 14:15	07/05/18 16:08	1
trans-Chlordane	ND		1.9	0.61	ug/Kg	☼	07/03/18 14:15	07/05/18 16:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	93		45 - 120	07/03/18 14:15	07/05/18 16:08	1
DCB Decachlorobiphenyl	128	X	45 - 120	07/03/18 14:15	07/05/18 16:08	1
Tetrachloro-m-xylene	99		30 - 124	07/03/18 14:15	07/05/18 16:08	1
Tetrachloro-m-xylene	95		30 - 124	07/03/18 14:15	07/05/18 16:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.22	0.044	mg/Kg	☼	07/02/18 15:18	07/03/18 19:40	1
PCB-1221	ND		0.22	0.044	mg/Kg	☼	07/02/18 15:18	07/03/18 19:40	1
PCB-1232	ND		0.22	0.044	mg/Kg	☼	07/02/18 15:18	07/03/18 19:40	1
PCB-1242	ND		0.22	0.044	mg/Kg	☼	07/02/18 15:18	07/03/18 19:40	1
PCB-1248	ND		0.22	0.044	mg/Kg	☼	07/02/18 15:18	07/03/18 19:40	1
PCB-1254	ND		0.22	0.10	mg/Kg	☼	07/02/18 15:18	07/03/18 19:40	1
PCB-1260	ND		0.22	0.10	mg/Kg	☼	07/02/18 15:18	07/03/18 19:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	88		60 - 154	07/02/18 15:18	07/03/18 19:40	1
Tetrachloro-m-xylene	78		60 - 154	07/02/18 15:18	07/03/18 19:40	1
DCB Decachlorobiphenyl	73		65 - 174	07/02/18 15:18	07/03/18 19:40	1
DCB Decachlorobiphenyl	89		65 - 174	07/02/18 15:18	07/03/18 19:40	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		19	6.2	ug/Kg	☼	07/05/18 07:15	07/09/18 19:57	1
Silvex (2,4,5-TP)	ND		19	6.9	ug/Kg	☼	07/05/18 07:15	07/09/18 19:57	1
2,4-D	ND		19	12	ug/Kg	☼	07/05/18 07:15	07/09/18 19:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	69		28 - 129	07/05/18 07:15	07/09/18 19:57	1
2,4-Dichlorophenylacetic acid	67		28 - 129	07/05/18 07:15	07/09/18 19:57	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	16700		11.7	5.1	mg/Kg	☼	07/06/18 10:15	07/06/18 18:52	1
Antimony	0.72	J	17.5	0.47	mg/Kg	☼	07/06/18 10:15	07/06/18 18:52	1
Arsenic	16.4		2.3	0.47	mg/Kg	☼	07/06/18 10:15	07/06/18 18:52	1
Barium	120	B	0.58	0.13	mg/Kg	☼	07/06/18 10:15	07/06/18 18:52	1
Beryllium	0.92		0.23	0.033	mg/Kg	☼	07/06/18 10:15	07/06/18 18:52	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-25 (2"-1")

Lab Sample ID: 480-138304-13

Date Collected: 06/29/18 10:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 84.2

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.23	0.035	mg/Kg	☼	07/06/18 10:15	07/06/18 18:52	1
Calcium	1810	B	58.4	3.9	mg/Kg	☼	07/06/18 10:15	07/06/18 18:52	1
Chromium	19.1		0.58	0.23	mg/Kg	☼	07/06/18 10:15	07/06/18 18:52	1
Cobalt	18.8		0.58	0.058	mg/Kg	☼	07/06/18 10:15	07/06/18 18:52	1
Copper	16.1		1.2	0.25	mg/Kg	☼	07/06/18 10:15	07/06/18 18:52	1
Iron	32700		11.7	4.1	mg/Kg	☼	07/06/18 10:15	07/06/18 18:52	1
Lead	19.4		1.2	0.28	mg/Kg	☼	07/06/18 10:15	07/06/18 18:52	1
Magnesium	4100		23.3	1.1	mg/Kg	☼	07/06/18 10:15	07/06/18 18:52	1
Manganese	734		0.23	0.037	mg/Kg	☼	07/06/18 10:15	07/06/18 18:52	1
Nickel	31.1		5.8	0.27	mg/Kg	☼	07/06/18 10:15	07/06/18 18:52	1
Potassium	2670		35.0	23.3	mg/Kg	☼	07/06/18 10:15	07/06/18 18:52	1
Selenium	0.50	J	4.7	0.47	mg/Kg	☼	07/06/18 10:15	07/06/18 18:52	1
Silver	ND		0.70	0.23	mg/Kg	☼	07/06/18 10:15	07/06/18 18:52	1
Sodium	61.8	J	163	15.2	mg/Kg	☼	07/06/18 10:15	07/06/18 18:52	1
Thallium	ND		7.0	0.35	mg/Kg	☼	07/06/18 10:15	07/06/18 18:52	1
Vanadium	24.5		0.58	0.13	mg/Kg	☼	07/06/18 10:15	07/06/18 18:52	1
Zinc	68.1		2.3	0.75	mg/Kg	☼	07/06/18 10:15	07/06/18 18:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.024	0.0097	mg/Kg	☼	07/16/18 14:20	07/16/18 15:47	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-42 (2"-1')

Lab Sample ID: 480-138304-14

Date Collected: 06/29/18 12:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 88.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	F1 vs	5.6	0.40	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
1,1,2,2-Tetrachloroethane	ND	F1 vs	5.6	0.90	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	5.6	1.3	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
1,1,2-Trichloroethane	ND	vs	5.6	0.72	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
1,1-Dichloroethane	ND	vs	5.6	0.68	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
1,1-Dichloroethene	ND	vs	5.6	0.68	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
1,2,4-Trichlorobenzene	ND	vs	5.6	0.34	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
1,2-Dibromo-3-Chloropropane	ND	F1 vs	5.6	2.8	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
1,2-Dichlorobenzene	ND	vs	5.6	0.43	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
1,2-Dichloroethane	ND	F1 vs	5.6	0.28	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
1,2-Dichloropropane	ND	vs	5.6	2.8	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
1,3-Dichlorobenzene	ND	vs	5.6	0.29	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
1,4-Dichlorobenzene	ND	vs	5.6	0.78	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
2-Butanone (MEK)	ND	F1 vs	28	2.0	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
2-Hexanone	ND	vs	28	2.8	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
4-Methyl-2-pentanone (MIBK)	ND	vs	28	1.8	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Acetone	ND	F1 vs	28	4.7	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Benzene	ND	vs	5.6	0.27	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Bromoform	ND	vs	5.6	2.8	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Bromomethane	ND	vs	5.6	0.50	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Carbon disulfide	ND	vs	5.6	2.8	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Carbon tetrachloride	ND	vs	5.6	0.54	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Chlorobenzene	ND	vs	5.6	0.73	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Dibromochloromethane	ND	vs	5.6	0.71	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Chloroethane	ND	vs	5.6	1.3	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Chloroform	ND	vs	5.6	0.34	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Chloromethane	ND	vs	5.6	0.34	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
cis-1,2-Dichloroethene	ND	vs	5.6	0.71	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Cyclohexane	ND	vs	5.6	0.78	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Bromodichloromethane	ND	vs	5.6	0.74	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Dichlorodifluoromethane	ND	vs	5.6	0.46	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Ethylbenzene	ND	vs	5.6	0.38	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
1,2-Dibromoethane	ND	vs	5.6	0.71	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Isopropylbenzene	ND	vs	5.6	0.84	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Methyl acetate	ND	vs	28	3.4	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Methyl tert-butyl ether	ND	vs	5.6	0.55	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Methylcyclohexane	ND	vs	5.6	0.84	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Methylene Chloride	ND	vs	5.6	2.6	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Tetrachloroethene	ND	vs	5.6	0.74	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Toluene	ND	vs	5.6	0.42	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
trans-1,2-Dichloroethene	ND	vs	5.6	0.57	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
trans-1,3-Dichloropropene	ND	vs	5.6	2.4	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Trichloroethene	ND	vs	5.6	1.2	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Trichlorofluoromethane	ND	vs	5.6	0.53	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Vinyl chloride	ND	vs	5.6	0.68	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Xylenes, Total	ND	vs	11	0.93	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
cis-1,3-Dichloropropene	ND	vs	5.6	0.80	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1
Styrene	ND	vs	5.6	0.28	ug/Kg	☼	07/06/18 09:13	07/06/18 20:52	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-42 (2"-1')

Lab Sample ID: 480-138304-14

Date Collected: 06/29/18 12:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 88.8

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		<i>ug/Kg</i>	<i>☼</i>			<i>07/06/18 09:13</i>	<i>07/06/18 20:52</i>	<i>1</i>
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		64 - 126				07/06/18 09:13	07/06/18 20:52	1
4-Bromofluorobenzene (Surr)	100		72 - 126				07/06/18 09:13	07/06/18 20:52	1
Toluene-d8 (Surr)	102		71 - 125				07/06/18 09:13	07/06/18 20:52	1
Dibromofluoromethane (Surr)	98		60 - 140				07/06/18 09:13	07/06/18 20:52	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		190	52	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
2,4,6-Trichlorophenol	ND		190	38	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
2,4-Dichlorophenol	ND		190	20	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
2,4-Dimethylphenol	ND		190	46	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
2,4-Dinitrophenol	ND		1900	880	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
2,4-Dinitrotoluene	ND		190	39	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
2,6-Dinitrotoluene	ND		190	23	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
2-Chloronaphthalene	ND		190	32	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
2-Chlorophenol	ND		190	35	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
2-Methylnaphthalene	ND		190	38	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
2-Methylphenol	ND		190	23	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
2-Nitroaniline	ND		370	28	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
2-Nitrophenol	ND		190	54	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
3,3'-Dichlorobenzidine	ND	F2	370	230	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
3-Nitroaniline	ND		370	53	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
4,6-Dinitro-2-methylphenol	ND		370	190	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
4-Bromophenyl phenyl ether	ND	F2	190	27	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
4-Chloro-3-methylphenol	ND		190	47	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
4-Chloroaniline	ND		190	47	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
4-Chlorophenyl phenyl ether	ND		190	24	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
4-Methylphenol	ND		370	23	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
4-Nitroaniline	ND		370	100	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
4-Nitrophenol	ND		370	130	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Acenaphthene	ND		190	28	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Acenaphthylene	ND		190	25	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Acetophenone	ND		190	26	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Anthracene	ND		190	47	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Atrazine	ND		190	66	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Benzaldehyde	ND		190	150	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Benzo[a]anthracene	ND		190	19	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Benzo[a]pyrene	ND		190	28	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Benzo[b]fluoranthene	ND		190	30	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Benzo[g,h,i]perylene	ND		190	20	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Benzo[k]fluoranthene	ND		190	25	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Biphenyl	ND		190	28	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
bis (2-chloroisopropyl) ether	ND		190	38	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Bis(2-chloroethoxy)methane	ND		190	41	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Bis(2-chloroethyl)ether	ND		190	25	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Bis(2-ethylhexyl) phthalate	ND		190	65	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Butyl benzyl phthalate	ND	F1	190	32	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-42 (2"-1')

Lab Sample ID: 480-138304-14

Date Collected: 06/29/18 12:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 88.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	ND		190	57	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Carbazole	ND		190	23	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Chrysene	ND		190	43	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Dibenz(a,h)anthracene	ND		190	34	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Dibenzofuran	ND		190	23	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Diethyl phthalate	ND	F2	190	25	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Dimethyl phthalate	ND		190	23	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Di-n-butyl phthalate	ND		190	33	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Di-n-octyl phthalate	ND		190	23	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Fluoranthene	ND		190	20	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Fluorene	ND		190	23	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Hexachlorobenzene	ND		190	26	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Hexachlorobutadiene	ND		190	28	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Hexachlorocyclopentadiene	ND		190	26	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Hexachloroethane	ND		190	25	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Indeno[1,2,3-cd]pyrene	ND		190	24	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Isophorone	ND		190	41	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Naphthalene	ND		190	25	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Nitrobenzene	ND		190	21	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
N-Nitrosodi-n-propylamine	ND		190	33	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
N-Nitrosodiphenylamine	ND		190	160	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Pentachlorophenol	ND		370	190	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Phenanthrene	ND		190	28	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Phenol	ND		190	29	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1
Pyrene	ND		190	23	ug/Kg	☼	07/02/18 14:22	07/09/18 14:53	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	330	T J	ug/Kg	☼	1.57		07/02/18 14:22	07/09/18 14:53	1
Unknown	840	T J	ug/Kg	☼	1.70		07/02/18 14:22	07/09/18 14:53	1
Unknown	600	T J	ug/Kg	☼	2.95		07/02/18 14:22	07/09/18 14:53	1
Unknown	200	T J	ug/Kg	☼	13.99		07/02/18 14:22	07/09/18 14:53	1
Unknown	240	T J	ug/Kg	☼	15.30		07/02/18 14:22	07/09/18 14:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	72		54 - 120	07/02/18 14:22	07/09/18 14:53	1
2-Fluorobiphenyl	93		60 - 120	07/02/18 14:22	07/09/18 14:53	1
2-Fluorophenol	75		52 - 120	07/02/18 14:22	07/09/18 14:53	1
Nitrobenzene-d5	82		53 - 120	07/02/18 14:22	07/09/18 14:53	1
Phenol-d5	78		54 - 120	07/02/18 14:22	07/09/18 14:53	1
p-Terphenyl-d14	113		65 - 121	07/02/18 14:22	07/09/18 14:53	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	14600		11.1	4.9	mg/Kg	☼	07/06/18 10:15	07/06/18 18:56	1
Antimony	0.83	J F1	16.7	0.45	mg/Kg	☼	07/06/18 10:15	07/06/18 18:56	1
Arsenic	18.8		2.2	0.45	mg/Kg	☼	07/06/18 10:15	07/06/18 18:56	1
Barium	146	B F1	0.56	0.12	mg/Kg	☼	07/06/18 10:15	07/06/18 18:56	1
Beryllium	0.82		0.22	0.031	mg/Kg	☼	07/06/18 10:15	07/06/18 18:56	1
Cadmium	ND		0.45	0.067	mg/Kg	☼	07/06/18 10:15	07/10/18 00:39	2
Calcium	1370	B	55.7	3.7	mg/Kg	☼	07/06/18 10:15	07/06/18 18:56	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-42 (2"-1")

Lab Sample ID: 480-138304-14

Date Collected: 06/29/18 12:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 88.8

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	18.0		0.56	0.22	mg/Kg	☼	07/06/18 10:15	07/06/18 18:56	1
Cobalt	15.5		0.56	0.056	mg/Kg	☼	07/06/18 10:15	07/06/18 18:56	1
Copper	18.5		1.1	0.23	mg/Kg	☼	07/06/18 10:15	07/06/18 18:56	1
Iron	32900		11.1	3.9	mg/Kg	☼	07/06/18 10:15	07/06/18 18:56	1
Lead	17.6		1.1	0.27	mg/Kg	☼	07/06/18 10:15	07/06/18 18:56	1
Magnesium	4000		22.3	1.0	mg/Kg	☼	07/06/18 10:15	07/06/18 18:56	1
Manganese	787		0.22	0.036	mg/Kg	☼	07/06/18 10:15	07/06/18 18:56	1
Nickel	31.9		5.6	0.26	mg/Kg	☼	07/06/18 10:15	07/06/18 18:56	1
Potassium	2810	F1	33.4	22.3	mg/Kg	☼	07/06/18 10:15	07/06/18 18:56	1
Selenium	ND		4.5	0.45	mg/Kg	☼	07/06/18 10:15	07/06/18 18:56	1
Silver	ND		0.67	0.22	mg/Kg	☼	07/06/18 10:15	07/06/18 18:56	1
Sodium	67.1	J F1	156	14.5	mg/Kg	☼	07/06/18 10:15	07/06/18 18:56	1
Thallium	ND		6.7	0.33	mg/Kg	☼	07/06/18 10:15	07/06/18 18:56	1
Vanadium	20.5		0.56	0.12	mg/Kg	☼	07/06/18 10:15	07/06/18 18:56	1
Zinc	65.0		2.2	0.71	mg/Kg	☼	07/06/18 10:15	07/06/18 18:56	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.022	0.0090	mg/Kg	☼	07/16/18 14:20	07/16/18 15:49	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-42 (0-2")

Lab Sample ID: 480-138304-15

Date Collected: 06/29/18 11:45

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 78.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		210	58	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
2,4,6-Trichlorophenol	ND		210	43	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
2,4-Dichlorophenol	ND		210	23	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
2,4-Dimethylphenol	ND		210	51	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
2,4-Dinitrophenol	ND		2100	980	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
2,4-Dinitrotoluene	ND		210	44	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
2,6-Dinitrotoluene	ND		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
2-Chloronaphthalene	ND		210	35	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
2-Chlorophenol	ND		210	39	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
2-Methylnaphthalene	ND		210	43	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
2-Methylphenol	ND		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
2-Nitroaniline	ND		410	31	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
2-Nitrophenol	ND		210	60	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
3,3'-Dichlorobenzidine	ND		410	250	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
3-Nitroaniline	ND		410	59	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
4,6-Dinitro-2-methylphenol	ND		410	210	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
4-Bromophenyl phenyl ether	ND		210	30	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
4-Chloro-3-methylphenol	ND		210	53	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
4-Chloroaniline	ND		210	53	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
4-Chlorophenyl phenyl ether	ND		210	26	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
4-Methylphenol	ND		410	25	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
4-Nitroaniline	ND		410	110	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
4-Nitrophenol	ND		410	150	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Acenaphthene	ND		210	31	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Acenaphthylene	ND		210	28	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Acetophenone	ND		210	29	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Anthracene	ND		210	53	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Atrazine	ND		210	74	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Benzaldehyde	ND		210	170	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Benzo[a]anthracene	ND		210	21	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Benzo[a]pyrene	ND		210	31	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Benzo[b]fluoranthene	ND		210	34	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Benzo[g,h,i]perylene	ND		210	23	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Benzo[k]fluoranthene	ND		210	28	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Biphenyl	ND		210	31	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
bis (2-chloroisopropyl) ether	ND		210	43	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Bis(2-chloroethoxy)methane	ND		210	45	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Bis(2-chloroethyl)ether	ND		210	28	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Bis(2-ethylhexyl) phthalate	ND		210	73	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Butyl benzyl phthalate	ND		210	35	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Caprolactam	ND		210	64	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Carbazole	ND		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Chrysene	ND		210	48	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Dibenz(a,h)anthracene	ND		210	38	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Dibenzofuran	ND		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Diethyl phthalate	ND		210	28	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Dimethyl phthalate	ND		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Di-n-butyl phthalate	ND		210	36	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Di-n-octyl phthalate	ND		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-42 (0-2")

Lab Sample ID: 480-138304-15

Date Collected: 06/29/18 11:45

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 78.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		210	23	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Fluorene	ND		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Hexachlorobenzene	ND		210	29	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Hexachlorobutadiene	ND		210	31	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Hexachlorocyclopentadiene	ND		210	29	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Hexachloroethane	ND		210	28	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Indeno[1,2,3-cd]pyrene	ND		210	26	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Isophorone	ND		210	45	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Naphthalene	ND		210	28	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Nitrobenzene	ND		210	24	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
N-Nitrosodi-n-propylamine	ND		210	36	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
N-Nitrosodiphenylamine	ND		210	170	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Pentachlorophenol	ND		410	210	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Phenanthrene	ND		210	31	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Phenol	ND		210	33	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1
Pyrene	ND		210	25	ug/Kg	☼	07/02/18 14:22	07/09/18 20:49	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	1000	T J	ug/Kg	☼	1.72		07/02/18 14:22	07/09/18 20:49	1
Unknown	650	T J	ug/Kg	☼	2.99		07/02/18 14:22	07/09/18 20:49	1
Nonacosane	200	T J N	ug/Kg	☼	13.92	630-03-5	07/02/18 14:22	07/09/18 20:49	1
Nonadecane	220	T J N	ug/Kg	☼	14.40	629-92-5	07/02/18 14:22	07/09/18 20:49	1
Unknown	330	T J	ug/Kg	☼	14.65		07/02/18 14:22	07/09/18 20:49	1
5-Cholestene-3-ol, 24-methyl-	560	T J N	ug/Kg	☼	14.96	1000214-17-4	07/02/18 14:22	07/09/18 20:49	1
Unknown	510	T J	ug/Kg	☼	15.04		07/02/18 14:22	07/09/18 20:49	1
Unknown	260	T J	ug/Kg	☼	15.43		07/02/18 14:22	07/09/18 20:49	1
Unknown	480	T J	ug/Kg	☼	15.57		07/02/18 14:22	07/09/18 20:49	1
Unknown	320	T J	ug/Kg	☼	15.61		07/02/18 14:22	07/09/18 20:49	1
Unknown	630	T J	ug/Kg	☼	15.67		07/02/18 14:22	07/09/18 20:49	1
Unknown	870	T J	ug/Kg	☼	15.81		07/02/18 14:22	07/09/18 20:49	1
Unknown	540	T J	ug/Kg	☼	15.93		07/02/18 14:22	07/09/18 20:49	1
Unknown	270	T J	ug/Kg	☼	16.23		07/02/18 14:22	07/09/18 20:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	77		54 - 120	07/02/18 14:22	07/09/18 20:49	1
2-Fluorobiphenyl	91		60 - 120	07/02/18 14:22	07/09/18 20:49	1
2-Fluorophenol	72		52 - 120	07/02/18 14:22	07/09/18 20:49	1
Nitrobenzene-d5	80		53 - 120	07/02/18 14:22	07/09/18 20:49	1
Phenol-d5	74		54 - 120	07/02/18 14:22	07/09/18 20:49	1
p-Terphenyl-d14	100		65 - 121	07/02/18 14:22	07/09/18 20:49	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12300		13.1	5.8	mg/Kg	☼	07/06/18 10:15	07/06/18 19:26	1
Antimony	0.72	J	19.7	0.52	mg/Kg	☼	07/06/18 10:15	07/06/18 19:26	1
Arsenic	16.7		2.6	0.52	mg/Kg	☼	07/06/18 10:15	07/06/18 19:26	1
Barium	117	B	0.66	0.14	mg/Kg	☼	07/06/18 10:15	07/06/18 19:26	1
Beryllium	0.71		0.26	0.037	mg/Kg	☼	07/06/18 10:15	07/06/18 19:26	1
Cadmium	ND		0.26	0.039	mg/Kg	☼	07/06/18 10:15	07/06/18 19:26	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-42 (0-2")

Lab Sample ID: 480-138304-15

Date Collected: 06/29/18 11:45

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 78.7

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1940	B	65.5	4.3	mg/Kg	☼	07/06/18 10:15	07/06/18 19:26	1
Chromium	15.6		0.66	0.26	mg/Kg	☼	07/06/18 10:15	07/06/18 19:26	1
Cobalt	10.9		0.66	0.066	mg/Kg	☼	07/06/18 10:15	07/06/18 19:26	1
Copper	15.8		1.3	0.28	mg/Kg	☼	07/06/18 10:15	07/06/18 19:26	1
Iron	28700		13.1	4.6	mg/Kg	☼	07/06/18 10:15	07/06/18 19:26	1
Lead	13.6		1.3	0.31	mg/Kg	☼	07/06/18 10:15	07/06/18 19:26	1
Magnesium	3450		26.2	1.2	mg/Kg	☼	07/06/18 10:15	07/06/18 19:26	1
Manganese	339		0.26	0.042	mg/Kg	☼	07/06/18 10:15	07/06/18 19:26	1
Nickel	26.6		6.6	0.30	mg/Kg	☼	07/06/18 10:15	07/06/18 19:26	1
Potassium	2450		39.3	26.2	mg/Kg	☼	07/06/18 10:15	07/06/18 19:26	1
Selenium	ND		5.2	0.52	mg/Kg	☼	07/06/18 10:15	07/06/18 19:26	1
Silver	ND		0.79	0.26	mg/Kg	☼	07/06/18 10:15	07/06/18 19:26	1
Sodium	49.3	J	183	17.0	mg/Kg	☼	07/06/18 10:15	07/06/18 19:26	1
Thallium	ND		7.9	0.39	mg/Kg	☼	07/06/18 10:15	07/06/18 19:26	1
Vanadium	16.8		0.66	0.14	mg/Kg	☼	07/06/18 10:15	07/06/18 19:26	1
Zinc	58.7		2.6	0.84	mg/Kg	☼	07/06/18 10:15	07/06/18 19:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.026	0.011	mg/Kg	☼	07/16/18 14:20	07/16/18 15:57	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-27 (2"-1)

Lab Sample ID: 480-138304-16

Date Collected: 06/29/18 11:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 88.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	5.5	0.40	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
1,1,2,2-Tetrachloroethane	ND	vs	5.5	0.90	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	5.5	1.3	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
1,1,2-Trichloroethane	ND	vs	5.5	0.72	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
1,1-Dichloroethane	ND	vs	5.5	0.68	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
1,1-Dichloroethene	ND	vs	5.5	0.68	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
1,2,4-Trichlorobenzene	ND	vs	5.5	0.34	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
1,2-Dibromo-3-Chloropropane	ND	vs	5.5	2.8	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
1,2-Dichlorobenzene	ND	vs	5.5	0.43	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
1,2-Dichloroethane	ND	vs	5.5	0.28	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
1,2-Dichloropropane	ND	vs	5.5	2.8	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
1,3-Dichlorobenzene	ND	vs	5.5	0.28	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
1,4-Dichlorobenzene	ND	vs	5.5	0.78	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
2-Butanone (MEK)	ND	vs	28	2.0	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
2-Hexanone	ND	vs	28	2.8	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
4-Methyl-2-pentanone (MIBK)	ND	vs	28	1.8	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Acetone	ND	vs	28	4.7	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Benzene	ND	vs	5.5	0.27	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Bromoform	ND	vs	5.5	2.8	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Bromomethane	ND	vs	5.5	0.50	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Carbon disulfide	ND	vs	5.5	2.8	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Carbon tetrachloride	ND	vs	5.5	0.54	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Chlorobenzene	ND	vs	5.5	0.73	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Dibromochloromethane	ND	vs	5.5	0.71	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Chloroethane	ND	vs	5.5	1.3	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Chloroform	ND	vs	5.5	0.34	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Chloromethane	ND	vs	5.5	0.33	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
cis-1,2-Dichloroethene	ND	vs	5.5	0.71	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Cyclohexane	ND	vs	5.5	0.78	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Bromodichloromethane	ND	vs	5.5	0.74	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Dichlorodifluoromethane	ND	vs	5.5	0.46	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Ethylbenzene	ND	vs	5.5	0.38	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
1,2-Dibromoethane	ND	vs	5.5	0.71	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Isopropylbenzene	ND	vs	5.5	0.83	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Methyl acetate	ND	vs	28	3.3	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Methyl tert-butyl ether	ND	vs	5.5	0.54	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Methylcyclohexane	ND	vs	5.5	0.84	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Methylene Chloride	ND	vs	5.5	2.5	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Tetrachloroethene	ND	vs	5.5	0.74	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Toluene	ND	vs	5.5	0.42	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
trans-1,2-Dichloroethene	ND	vs	5.5	0.57	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
trans-1,3-Dichloropropene	ND	vs	5.5	2.4	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Trichloroethene	ND	vs	5.5	1.2	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Trichlorofluoromethane	ND	vs	5.5	0.52	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Vinyl chloride	ND	vs	5.5	0.68	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Xylenes, Total	ND	vs	11	0.93	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
cis-1,3-Dichloropropene	ND	vs	5.5	0.80	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1
Styrene	ND	vs	5.5	0.28	ug/Kg	☼	07/09/18 07:54	07/09/18 15:45	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-27 (2"-1)

Lab Sample ID: 480-138304-16

Date Collected: 06/29/18 11:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 88.9

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		<i>ug/Kg</i>	<i>☼</i>			<i>07/09/18 07:54</i>	<i>07/09/18 15:45</i>	<i>1</i>
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>1,2-Dichloroethane-d4 (Surr)</i>	<i>101</i>		<i>64 - 126</i>				<i>07/09/18 07:54</i>	<i>07/09/18 15:45</i>	<i>1</i>
<i>4-Bromofluorobenzene (Surr)</i>	<i>99</i>		<i>72 - 126</i>				<i>07/09/18 07:54</i>	<i>07/09/18 15:45</i>	<i>1</i>
<i>Toluene-d8 (Surr)</i>	<i>102</i>		<i>71 - 125</i>				<i>07/09/18 07:54</i>	<i>07/09/18 15:45</i>	<i>1</i>
<i>Dibromofluoromethane (Surr)</i>	<i>101</i>		<i>60 - 140</i>				<i>07/09/18 07:54</i>	<i>07/09/18 15:45</i>	<i>1</i>

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
2,4,5-Trichlorophenol	ND		190	51	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
2,4,6-Trichlorophenol	ND		190	38	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
2,4-Dichlorophenol	ND		190	20	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
2,4-Dimethylphenol	ND		190	45	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
2,4-Dinitrophenol	ND		1800	870	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
2,4-Dinitrotoluene	ND		190	39	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
2,6-Dinitrotoluene	ND		190	22	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
2-Chloronaphthalene	ND		190	31	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
2-Chlorophenol	ND		190	34	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
2-Methylnaphthalene	ND		190	38	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
2-Methylphenol	ND		190	22	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
2-Nitroaniline	ND		360	28	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
2-Nitrophenol	ND		190	53	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
3,3'-Dichlorobenzidine	ND		360	220	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
3-Nitroaniline	ND		360	52	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
4,6-Dinitro-2-methylphenol	ND		360	190	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
4-Bromophenyl phenyl ether	ND		190	27	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
4-Chloro-3-methylphenol	ND		190	46	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
4-Chloroaniline	ND		190	46	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
4-Chlorophenyl phenyl ether	ND		190	23	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
4-Methylphenol	ND		360	22	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
4-Nitroaniline	ND		360	98	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
4-Nitrophenol	ND		360	130	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Acenaphthene	ND		190	28	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Acenaphthylene	ND		190	24	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Acetophenone	ND		190	25	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Anthracene	ND		190	46	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Atrazine	ND		190	65	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Benzaldehyde	ND		190	150	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Benzo[a]anthracene	ND		190	19	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Benzo[a]pyrene	ND		190	28	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Benzo[b]fluoranthene	ND		190	30	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Benzo[g,h,i]perylene	ND		190	20	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Benzo[k]fluoranthene	ND		190	24	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Biphenyl	ND		190	28	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
bis (2-chloroisopropyl) ether	ND		190	38	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Bis(2-chloroethoxy)methane	ND		190	40	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Bis(2-chloroethyl)ether	ND		190	24	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Bis(2-ethylhexyl) phthalate	ND		190	64	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Butyl benzyl phthalate	ND		190	31	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-27 (2"-1)

Lab Sample ID: 480-138304-16

Date Collected: 06/29/18 11:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 88.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	ND		190	56	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Carbazole	ND		190	22	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Chrysene	ND		190	42	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Dibenz(a,h)anthracene	ND		190	33	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Dibenzofuran	ND		190	22	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Diethyl phthalate	ND		190	24	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Dimethyl phthalate	ND		190	22	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Di-n-butyl phthalate	ND		190	32	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Di-n-octyl phthalate	ND		190	22	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Fluoranthene	ND		190	20	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Fluorene	ND		190	22	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Hexachlorobenzene	ND		190	25	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Hexachlorobutadiene	ND		190	28	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Hexachlorocyclopentadiene	ND		190	25	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Hexachloroethane	ND		190	24	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Indeno[1,2,3-cd]pyrene	ND		190	23	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Isophorone	ND		190	40	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Naphthalene	ND		190	24	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Nitrobenzene	ND		190	21	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
N-Nitrosodi-n-propylamine	ND		190	32	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
N-Nitrosodiphenylamine	ND		190	150	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Pentachlorophenol	ND		360	190	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Phenanthrene	ND		190	28	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Phenol	ND		190	29	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1
Pyrene	ND		190	22	ug/Kg	☼	07/02/18 14:22	07/09/18 21:14	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	720	T J	ug/Kg	☼	1.71		07/02/18 14:22	07/09/18 21:14	1
Unknown	550	T J	ug/Kg	☼	2.97		07/02/18 14:22	07/09/18 21:14	1
Cyclic octaatomic sulfur	190	T J N	ug/Kg	☼	11.75	10544-50-0	07/02/18 14:22	07/09/18 21:14	1
Unknown	190	T J	ug/Kg	☼	15.24		07/02/18 14:22	07/09/18 21:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	71		54 - 120	07/02/18 14:22	07/09/18 21:14	1
2-Fluorobiphenyl	88		60 - 120	07/02/18 14:22	07/09/18 21:14	1
2-Fluorophenol	71		52 - 120	07/02/18 14:22	07/09/18 21:14	1
Nitrobenzene-d5	77		53 - 120	07/02/18 14:22	07/09/18 21:14	1
Phenol-d5	71		54 - 120	07/02/18 14:22	07/09/18 21:14	1
p-Terphenyl-d14	110		65 - 121	07/02/18 14:22	07/09/18 21:14	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	14700		11.0	4.8	mg/Kg	☼	07/06/18 10:15	07/06/18 19:29	1
Antimony	0.69	J	16.5	0.44	mg/Kg	☼	07/06/18 10:15	07/06/18 19:29	1
Arsenic	18.0		2.2	0.44	mg/Kg	☼	07/06/18 10:15	07/06/18 19:29	1
Barium	150	B	0.55	0.12	mg/Kg	☼	07/06/18 10:15	07/06/18 19:29	1
Beryllium	0.87		0.22	0.031	mg/Kg	☼	07/06/18 10:15	07/06/18 19:29	1
Cadmium	ND		0.44	0.066	mg/Kg	☼	07/06/18 10:15	07/10/18 00:57	2
Calcium	3410	B	55.0	3.6	mg/Kg	☼	07/06/18 10:15	07/06/18 19:29	1
Chromium	17.8		0.55	0.22	mg/Kg	☼	07/06/18 10:15	07/06/18 19:29	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-27 (2"-1)

Lab Sample ID: 480-138304-16

Date Collected: 06/29/18 11:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 88.9

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	15.5		0.55	0.055	mg/Kg	☼	07/06/18 10:15	07/06/18 19:29	1
Copper	21.1		1.1	0.23	mg/Kg	☼	07/06/18 10:15	07/06/18 19:29	1
Iron	31000		11.0	3.8	mg/Kg	☼	07/06/18 10:15	07/06/18 19:29	1
Lead	16.8		1.1	0.26	mg/Kg	☼	07/06/18 10:15	07/06/18 19:29	1
Magnesium	5030		22.0	1.0	mg/Kg	☼	07/06/18 10:15	07/06/18 19:29	1
Manganese	583		0.22	0.035	mg/Kg	☼	07/06/18 10:15	07/06/18 19:29	1
Nickel	32.2		5.5	0.25	mg/Kg	☼	07/06/18 10:15	07/06/18 19:29	1
Potassium	2910		33.0	22.0	mg/Kg	☼	07/06/18 10:15	07/06/18 19:29	1
Selenium	ND		4.4	0.44	mg/Kg	☼	07/06/18 10:15	07/06/18 19:29	1
Silver	ND		0.66	0.22	mg/Kg	☼	07/06/18 10:15	07/06/18 19:29	1
Sodium	74.0	J	154	14.3	mg/Kg	☼	07/06/18 10:15	07/06/18 19:29	1
Thallium	ND		6.6	0.33	mg/Kg	☼	07/06/18 10:15	07/06/18 19:29	1
Vanadium	19.5		0.55	0.12	mg/Kg	☼	07/06/18 10:15	07/06/18 19:29	1
Zinc	66.1		2.2	0.70	mg/Kg	☼	07/06/18 10:15	07/06/18 19:29	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.023	0.0091	mg/Kg	☼	07/16/18 14:20	07/16/18 16:03	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-27 (0-2")

Date Collected: 06/29/18 11:15

Date Received: 06/29/18 17:50

Lab Sample ID: 480-138304-17

Matrix: Solid

Percent Solids: 81.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		210	56	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
2,4,6-Trichlorophenol	ND		210	41	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
2,4-Dichlorophenol	ND		210	22	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
2,4-Dimethylphenol	ND		210	50	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
2,4-Dinitrophenol	ND		2000	950	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
2,4-Dinitrotoluene	ND		210	43	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
2,6-Dinitrotoluene	ND		210	24	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
2-Chloronaphthalene	ND		210	34	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
2-Chlorophenol	ND		210	38	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
2-Methylnaphthalene	ND		210	41	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
2-Methylphenol	ND		210	24	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
2-Nitroaniline	ND		400	30	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
2-Nitrophenol	ND		210	58	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
3,3'-Dichlorobenzidine	ND		400	240	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
3-Nitroaniline	ND		400	57	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
4,6-Dinitro-2-methylphenol	ND		400	210	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
4-Bromophenyl phenyl ether	ND		210	29	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
4-Chloro-3-methylphenol	ND		210	51	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
4-Chloroaniline	ND		210	51	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
4-Chlorophenyl phenyl ether	ND		210	26	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
4-Methylphenol	ND		400	24	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
4-Nitroaniline	ND		400	110	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
4-Nitrophenol	ND		400	140	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Acenaphthene	ND		210	30	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Acenaphthylene	ND		210	27	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Acetophenone	ND		210	28	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Anthracene	ND		210	51	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Atrazine	ND		210	72	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Benzaldehyde	ND		210	160	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Benzo[a]anthracene	ND		210	21	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Benzo[a]pyrene	ND		210	30	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Benzo[b]fluoranthene	ND		210	33	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Benzo[g,h,i]perylene	ND		210	22	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Benzo[k]fluoranthene	ND		210	27	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Biphenyl	ND		210	30	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
bis (2-chloroisopropyl) ether	ND		210	41	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Bis(2-chloroethoxy)methane	ND		210	44	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Bis(2-chloroethyl)ether	ND		210	27	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Bis(2-ethylhexyl) phthalate	ND		210	71	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Butyl benzyl phthalate	ND		210	34	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Caprolactam	ND		210	62	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Carbazole	ND		210	24	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Chrysene	ND		210	46	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Dibenz(a,h)anthracene	ND		210	37	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Dibenzofuran	ND		210	24	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Diethyl phthalate	ND		210	27	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Dimethyl phthalate	ND		210	24	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Di-n-butyl phthalate	ND		210	35	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Di-n-octyl phthalate	ND		210	24	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-27 (0-2")

Lab Sample ID: 480-138304-17

Date Collected: 06/29/18 11:15

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 81.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		210	22	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Fluorene	ND		210	24	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Hexachlorobenzene	ND		210	28	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Hexachlorobutadiene	ND		210	30	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Hexachlorocyclopentadiene	ND		210	28	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Hexachloroethane	ND		210	27	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Indeno[1,2,3-cd]pyrene	ND		210	26	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Isophorone	ND		210	44	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Naphthalene	ND		210	27	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Nitrobenzene	ND		210	23	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
N-Nitrosodi-n-propylamine	ND		210	35	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
N-Nitrosodiphenylamine	ND		210	170	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Pentachlorophenol	ND		400	210	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Phenanthrene	ND		210	30	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Phenol	ND		210	32	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1
Pyrene	ND		210	24	ug/Kg	☼	07/02/18 14:22	07/09/18 21:39	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	880	T J	ug/Kg	☼	1.72		07/02/18 14:22	07/09/18 21:39	1
Unknown	380	T J	ug/Kg	☼	2.97		07/02/18 14:22	07/09/18 21:39	1
p-Xylene	210	T J N	ug/Kg	☼	3.48	106-42-3	07/02/18 14:22	07/09/18 21:39	1
2H-1-Benzopyran-2-one	240	T J N	ug/Kg	☼	8.64	91-64-5	07/02/18 14:22	07/09/18 21:39	1
Unknown	260	T J	ug/Kg	☼	9.89		07/02/18 14:22	07/09/18 21:39	1
Unknown	320	T J	ug/Kg	☼	10.61		07/02/18 14:22	07/09/18 21:39	1
1,21-Docosadiene	190	T J N	ug/Kg	☼	13.78	53057-53-7	07/02/18 14:22	07/09/18 21:39	1
Pentacosane	170	T J N	ug/Kg	☼	13.91	629-99-2	07/02/18 14:22	07/09/18 21:39	1
1-Eicosanol	650	T J N	ug/Kg	☼	13.98	629-96-9	07/02/18 14:22	07/09/18 21:39	1
Unknown	190	T J	ug/Kg	☼	14.26		07/02/18 14:22	07/09/18 21:39	1
Nonadecane	170	T J N	ug/Kg	☼	14.38	629-92-5	07/02/18 14:22	07/09/18 21:39	1
Unknown	200	T J	ug/Kg	☼	15.42		07/02/18 14:22	07/09/18 21:39	1
Unknown	300	T J	ug/Kg	☼	15.46		07/02/18 14:22	07/09/18 21:39	1
Unknown	220	T J	ug/Kg	☼	15.51		07/02/18 14:22	07/09/18 21:39	1
Unknown	310	T J	ug/Kg	☼	15.65		07/02/18 14:22	07/09/18 21:39	1
Unknown	320	T J	ug/Kg	☼	15.78		07/02/18 14:22	07/09/18 21:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	76		54 - 120	07/02/18 14:22	07/09/18 21:39	1
2-Fluorobiphenyl	89		60 - 120	07/02/18 14:22	07/09/18 21:39	1
2-Fluorophenol	76		52 - 120	07/02/18 14:22	07/09/18 21:39	1
Nitrobenzene-d5	81		53 - 120	07/02/18 14:22	07/09/18 21:39	1
Phenol-d5	75		54 - 120	07/02/18 14:22	07/09/18 21:39	1
p-Terphenyl-d14	110		65 - 121	07/02/18 14:22	07/09/18 21:39	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	14500		12.0	5.3	mg/Kg	☼	07/06/18 10:15	07/06/18 19:33	1
Antimony	0.54	J	18.0	0.48	mg/Kg	☼	07/06/18 10:15	07/06/18 19:33	1
Arsenic	9.5		2.4	0.48	mg/Kg	☼	07/06/18 10:15	07/06/18 19:33	1
Barium	81.4	B	0.60	0.13	mg/Kg	☼	07/06/18 10:15	07/06/18 19:33	1
Beryllium	0.86		0.24	0.034	mg/Kg	☼	07/06/18 10:15	07/06/18 19:33	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-27 (0-2")

Lab Sample ID: 480-138304-17

Date Collected: 06/29/18 11:15

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 81.3

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.24	0.036	mg/Kg	☼	07/06/18 10:15	07/06/18 19:33	1
Calcium	1880	B	60.0	4.0	mg/Kg	☼	07/06/18 10:15	07/06/18 19:33	1
Chromium	17.0		0.60	0.24	mg/Kg	☼	07/06/18 10:15	07/06/18 19:33	1
Cobalt	14.4		0.60	0.060	mg/Kg	☼	07/06/18 10:15	07/06/18 19:33	1
Copper	17.7		1.2	0.25	mg/Kg	☼	07/06/18 10:15	07/06/18 19:33	1
Iron	29500		12.0	4.2	mg/Kg	☼	07/06/18 10:15	07/06/18 19:33	1
Lead	13.0		1.2	0.29	mg/Kg	☼	07/06/18 10:15	07/06/18 19:33	1
Magnesium	4770		24.0	1.1	mg/Kg	☼	07/06/18 10:15	07/06/18 19:33	1
Manganese	545		0.24	0.038	mg/Kg	☼	07/06/18 10:15	07/06/18 19:33	1
Nickel	30.3		6.0	0.28	mg/Kg	☼	07/06/18 10:15	07/06/18 19:33	1
Potassium	3220		36.0	24.0	mg/Kg	☼	07/06/18 10:15	07/06/18 19:33	1
Selenium	ND		4.8	0.48	mg/Kg	☼	07/06/18 10:15	07/06/18 19:33	1
Silver	ND		0.72	0.24	mg/Kg	☼	07/06/18 10:15	07/06/18 19:33	1
Sodium	76.3	J	168	15.6	mg/Kg	☼	07/06/18 10:15	07/06/18 19:33	1
Thallium	ND		7.2	0.36	mg/Kg	☼	07/06/18 10:15	07/06/18 19:33	1
Vanadium	19.3		0.60	0.13	mg/Kg	☼	07/06/18 10:15	07/06/18 19:33	1
Zinc	65.3		2.4	0.77	mg/Kg	☼	07/06/18 10:15	07/06/18 19:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.025	0.0099	mg/Kg	☼	07/16/18 14:20	07/16/18 16:04	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-28 (2"-1')

Lab Sample ID: 480-138304-18

Date Collected: 06/29/18 11:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 88.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	5.6	0.41	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
1,1,2,2-Tetrachloroethane	ND	vs	5.6	0.91	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	5.6	1.3	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
1,1,2-Trichloroethane	ND	vs	5.6	0.73	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
1,1-Dichloroethane	ND	vs	5.6	0.68	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
1,1-Dichloroethene	ND	vs	5.6	0.68	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
1,2,4-Trichlorobenzene	ND	vs	5.6	0.34	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
1,2-Dibromo-3-Chloropropane	ND	vs	5.6	2.8	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
1,2-Dichlorobenzene	ND	vs	5.6	0.44	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
1,2-Dichloroethane	ND	vs	5.6	0.28	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
1,2-Dichloropropane	ND	vs	5.6	2.8	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
1,3-Dichlorobenzene	ND	vs	5.6	0.29	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
1,4-Dichlorobenzene	ND	vs	5.6	0.78	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
2-Butanone (MEK)	ND	vs	28	2.0	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
2-Hexanone	ND	vs	28	2.8	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
4-Methyl-2-pentanone (MIBK)	ND	vs	28	1.8	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Acetone	ND	vs	28	4.7	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Benzene	ND	vs	5.6	0.27	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Bromoform	ND	vs	5.6	2.8	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Bromomethane	ND	vs	5.6	0.50	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Carbon disulfide	ND	vs	5.6	2.8	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Carbon tetrachloride	ND	vs	5.6	0.54	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Chlorobenzene	ND	vs	5.6	0.74	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Dibromochloromethane	ND	vs	5.6	0.72	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Chloroethane	ND	vs	5.6	1.3	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Chloroform	0.41	J vs	5.6	0.35	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Chloromethane	ND	vs	5.6	0.34	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
cis-1,2-Dichloroethene	ND	vs	5.6	0.72	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Cyclohexane	ND	vs	5.6	0.78	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Bromodichloromethane	ND	vs	5.6	0.75	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Dichlorodifluoromethane	ND	vs	5.6	0.46	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Ethylbenzene	ND	vs	5.6	0.39	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
1,2-Dibromoethane	ND	vs	5.6	0.72	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Isopropylbenzene	ND	vs	5.6	0.84	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Methyl acetate	ND	vs	28	3.4	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Methyl tert-butyl ether	ND	vs	5.6	0.55	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Methylcyclohexane	ND	vs	5.6	0.85	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Methylene Chloride	ND	vs	5.6	2.6	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Tetrachloroethene	ND	vs	5.6	0.75	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Toluene	ND	vs	5.6	0.42	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
trans-1,2-Dichloroethene	ND	vs	5.6	0.58	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
trans-1,3-Dichloropropene	ND	vs	5.6	2.5	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Trichloroethene	ND	vs	5.6	1.2	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Trichlorofluoromethane	ND	vs	5.6	0.53	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Vinyl chloride	ND	vs	5.6	0.68	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Xylenes, Total	ND	vs	11	0.94	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
cis-1,3-Dichloropropene	ND	vs	5.6	0.81	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1
Styrene	ND	vs	5.6	0.28	ug/Kg	☼	07/09/18 07:54	07/09/18 16:10	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-28 (2"-1')

Lab Sample ID: 480-138304-18

Date Collected: 06/29/18 11:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 88.3

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		<i>ug/Kg</i>	<i>☼</i>			<i>07/09/18 07:54</i>	<i>07/09/18 16:10</i>	<i>1</i>
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>1,2-Dichloroethane-d4 (Surr)</i>	99		64 - 126				<i>07/09/18 07:54</i>	<i>07/09/18 16:10</i>	<i>1</i>
<i>4-Bromofluorobenzene (Surr)</i>	95		72 - 126				<i>07/09/18 07:54</i>	<i>07/09/18 16:10</i>	<i>1</i>
<i>Toluene-d8 (Surr)</i>	105		71 - 125				<i>07/09/18 07:54</i>	<i>07/09/18 16:10</i>	<i>1</i>
<i>Dibromofluoromethane (Surr)</i>	102		60 - 140				<i>07/09/18 07:54</i>	<i>07/09/18 16:10</i>	<i>1</i>

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		190	52	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
2,4,6-Trichlorophenol	ND		190	38	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
2,4-Dichlorophenol	ND		190	20	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
2,4-Dimethylphenol	ND		190	46	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
2,4-Dinitrophenol	ND		1900	880	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
2,4-Dinitrotoluene	ND		190	39	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
2,6-Dinitrotoluene	ND		190	22	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
2-Chloronaphthalene	ND		190	31	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
2-Chlorophenol	ND		190	35	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
2-Methylnaphthalene	ND		190	38	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
2-Methylphenol	ND		190	22	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
2-Nitroaniline	ND		370	28	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
2-Nitrophenol	ND		190	54	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
3,3'-Dichlorobenzidine	ND		370	220	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
3-Nitroaniline	ND		370	53	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
4,6-Dinitro-2-methylphenol	ND		370	190	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
4-Bromophenyl phenyl ether	ND		190	27	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
4-Chloro-3-methylphenol	ND		190	47	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
4-Chloroaniline	ND		190	47	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
4-Chlorophenyl phenyl ether	ND		190	24	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
4-Methylphenol	ND		370	22	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
4-Nitroaniline	ND		370	100	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
4-Nitrophenol	ND		370	130	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Acenaphthene	ND		190	28	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Acenaphthylene	ND		190	25	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Acetophenone	ND		190	26	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Anthracene	ND		190	47	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Atrazine	ND		190	66	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Benzaldehyde	ND		190	150	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Benzo[a]anthracene	ND		190	19	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Benzo[a]pyrene	ND		190	28	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Benzo[b]fluoranthene	ND		190	30	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Benzo[g,h,i]perylene	ND		190	20	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Benzo[k]fluoranthene	ND		190	25	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Biphenyl	ND		190	28	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
bis (2-chloroisopropyl) ether	ND		190	38	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Bis(2-chloroethoxy)methane	ND		190	40	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Bis(2-chloroethyl)ether	ND		190	25	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Bis(2-ethylhexyl) phthalate	ND		190	65	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Butyl benzyl phthalate	ND		190	31	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-28 (2"-1')

Lab Sample ID: 480-138304-18

Date Collected: 06/29/18 11:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 88.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	ND		190	57	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Carbazole	ND		190	22	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Chrysene	ND		190	43	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Dibenz(a,h)anthracene	ND		190	34	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Dibenzofuran	ND		190	22	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Diethyl phthalate	ND		190	25	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Dimethyl phthalate	ND		190	22	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Di-n-butyl phthalate	ND		190	33	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Di-n-octyl phthalate	ND		190	22	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Fluoranthene	ND		190	20	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Fluorene	ND		190	22	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Hexachlorobenzene	ND		190	26	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Hexachlorobutadiene	ND		190	28	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Hexachlorocyclopentadiene	ND		190	26	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Hexachloroethane	ND		190	25	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Indeno[1,2,3-cd]pyrene	ND		190	24	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Isophorone	ND		190	40	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Naphthalene	ND		190	25	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Nitrobenzene	ND		190	21	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
N-Nitrosodi-n-propylamine	ND		190	33	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
N-Nitrosodiphenylamine	ND		190	160	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Pentachlorophenol	ND		370	190	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Phenanthrene	ND		190	28	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Phenol	ND		190	29	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1
Pyrene	ND		190	22	ug/Kg	☼	07/02/18 14:22	07/09/18 22:04	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	350	T J	ug/Kg	☼	1.57		07/02/18 14:22	07/09/18 22:04	1
Unknown	790	T J	ug/Kg	☼	1.72		07/02/18 14:22	07/09/18 22:04	1
Unknown	400	T J	ug/Kg	☼	2.97		07/02/18 14:22	07/09/18 22:04	1
Benzene, 1,3-dimethyl-	180	T J N	ug/Kg	☼	3.48	108-38-3	07/02/18 14:22	07/09/18 22:04	1
Cyclic octaatomic sulfur	200	T J N	ug/Kg	☼	11.75	10544-50-0	07/02/18 14:22	07/09/18 22:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	68		54 - 120	07/02/18 14:22	07/09/18 22:04	1
2-Fluorobiphenyl	85		60 - 120	07/02/18 14:22	07/09/18 22:04	1
2-Fluorophenol	71		52 - 120	07/02/18 14:22	07/09/18 22:04	1
Nitrobenzene-d5	74		53 - 120	07/02/18 14:22	07/09/18 22:04	1
Phenol-d5	70		54 - 120	07/02/18 14:22	07/09/18 22:04	1
p-Terphenyl-d14	103		65 - 121	07/02/18 14:22	07/09/18 22:04	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	15900		11.8	5.2	mg/Kg	☼	07/06/18 10:15	07/06/18 19:37	1
Antimony	0.80	J	17.7	0.47	mg/Kg	☼	07/06/18 10:15	07/06/18 19:37	1
Arsenic	16.9		2.4	0.47	mg/Kg	☼	07/06/18 10:15	07/06/18 19:37	1
Barium	158	B	0.59	0.13	mg/Kg	☼	07/06/18 10:15	07/06/18 19:37	1
Beryllium	0.92		0.24	0.033	mg/Kg	☼	07/06/18 10:15	07/06/18 19:37	1
Cadmium	ND		0.47	0.071	mg/Kg	☼	07/06/18 10:15	07/10/18 01:01	2
Calcium	2140	B	58.9	3.9	mg/Kg	☼	07/06/18 10:15	07/06/18 19:37	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-28 (2"-1")

Lab Sample ID: 480-138304-18

Date Collected: 06/29/18 11:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 88.3

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	18.6		0.59	0.24	mg/Kg	☼	07/06/18 10:15	07/06/18 19:37	1
Cobalt	17.6		0.59	0.059	mg/Kg	☼	07/06/18 10:15	07/06/18 19:37	1
Copper	19.6		1.2	0.25	mg/Kg	☼	07/06/18 10:15	07/06/18 19:37	1
Iron	33700		11.8	4.1	mg/Kg	☼	07/06/18 10:15	07/06/18 19:37	1
Lead	17.1		1.2	0.28	mg/Kg	☼	07/06/18 10:15	07/06/18 19:37	1
Magnesium	5170		23.6	1.1	mg/Kg	☼	07/06/18 10:15	07/06/18 19:37	1
Manganese	795		0.24	0.038	mg/Kg	☼	07/06/18 10:15	07/06/18 19:37	1
Nickel	33.9		5.9	0.27	mg/Kg	☼	07/06/18 10:15	07/06/18 19:37	1
Potassium	3270		35.4	23.6	mg/Kg	☼	07/06/18 10:15	07/06/18 19:37	1
Selenium	ND		4.7	0.47	mg/Kg	☼	07/06/18 10:15	07/06/18 19:37	1
Silver	ND		0.71	0.24	mg/Kg	☼	07/06/18 10:15	07/06/18 19:37	1
Sodium	83.3	J	165	15.3	mg/Kg	☼	07/06/18 10:15	07/06/18 19:37	1
Thallium	ND		7.1	0.35	mg/Kg	☼	07/06/18 10:15	07/06/18 19:37	1
Vanadium	21.7		0.59	0.13	mg/Kg	☼	07/06/18 10:15	07/06/18 19:37	1
Zinc	72.1		2.4	0.75	mg/Kg	☼	07/06/18 10:15	07/06/18 19:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.022	0.0088	mg/Kg	☼	07/16/18 14:20	07/16/18 16:06	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-28 (0-2")

Lab Sample ID: 480-138304-19

Date Collected: 06/29/18 10:45

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 69.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		240	65	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
2,4,6-Trichlorophenol	ND		240	48	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
2,4-Dichlorophenol	ND		240	26	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
2,4-Dimethylphenol	ND		240	58	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
2,4-Dinitrophenol	ND		2400	1100	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
2,4-Dinitrotoluene	ND		240	50	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
2,6-Dinitrotoluene	ND		240	28	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
2-Chloronaphthalene	ND		240	40	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
2-Chlorophenol	ND		240	44	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
2-Methylnaphthalene	ND		240	48	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
2-Methylphenol	ND		240	28	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
2-Nitroaniline	ND		470	36	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
2-Nitrophenol	ND		240	68	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
3,3'-Dichlorobenzidine	ND		470	280	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
3-Nitroaniline	ND		470	67	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
4,6-Dinitro-2-methylphenol	ND		470	240	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
4-Bromophenyl phenyl ether	ND		240	34	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
4-Chloro-3-methylphenol	ND		240	60	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
4-Chloroaniline	ND		240	60	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
4-Chlorophenyl phenyl ether	ND		240	30	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
4-Methylphenol	ND		470	28	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
4-Nitroaniline	ND		470	130	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
4-Nitrophenol	ND		470	170	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Acenaphthene	ND		240	36	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Acenaphthylene	ND		240	31	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Acetophenone	ND		240	33	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Anthracene	ND		240	60	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Atrazine	ND		240	84	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Benzaldehyde	ND		240	190	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Benzo[a]anthracene	ND		240	24	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Benzo[a]pyrene	ND		240	36	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Benzo[b]fluoranthene	ND		240	38	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Benzo[g,h,i]perylene	ND		240	26	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Benzo[k]fluoranthene	ND		240	31	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Biphenyl	ND		240	36	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
bis (2-chloroisopropyl) ether	ND		240	48	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Bis(2-chloroethoxy)methane	ND		240	51	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Bis(2-chloroethyl)ether	ND		240	31	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Bis(2-ethylhexyl) phthalate	ND		240	82	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Butyl benzyl phthalate	ND		240	40	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Caprolactam	ND		240	73	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Carbazole	ND		240	28	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Chrysene	ND		240	54	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Dibenz(a,h)anthracene	ND		240	43	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Dibenzofuran	ND		240	28	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Diethyl phthalate	ND		240	31	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Dimethyl phthalate	ND		240	28	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Di-n-butyl phthalate	ND		240	41	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Di-n-octyl phthalate	ND		240	28	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-28 (0-2")

Lab Sample ID: 480-138304-19

Date Collected: 06/29/18 10:45

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 69.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		240	26	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Fluorene	ND		240	28	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Hexachlorobenzene	ND		240	33	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Hexachlorobutadiene	ND		240	36	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Hexachlorocyclopentadiene	ND		240	33	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Hexachloroethane	ND		240	31	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Indeno[1,2,3-cd]pyrene	ND		240	30	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Isophorone	ND		240	51	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Naphthalene	ND		240	31	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Nitrobenzene	ND		240	27	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
N-Nitrosodi-n-propylamine	ND		240	41	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
N-Nitrosodiphenylamine	ND		240	200	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Pentachlorophenol	ND		470	240	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Phenanthrene	ND		240	36	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Phenol	ND		240	37	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1
Pyrene	ND		240	28	ug/Kg	☼	07/02/18 14:22	07/09/18 22:28	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	1100	T J	ug/Kg	☼	1.71		07/02/18 14:22	07/09/18 22:28	1
Unknown	780	T J	ug/Kg	☼	2.98		07/02/18 14:22	07/09/18 22:28	1
p-Xylene	240	T J N	ug/Kg	☼	3.48	106-42-3	07/02/18 14:22	07/09/18 22:28	1
Unknown	460	T J	ug/Kg	☼	13.98		07/02/18 14:22	07/09/18 22:28	1
Octacosane	250	T J N	ug/Kg	☼	14.38	630-02-4	07/02/18 14:22	07/09/18 22:28	1
Unknown	270	T J	ug/Kg	☼	14.66		07/02/18 14:22	07/09/18 22:28	1
Unknown	390	T J	ug/Kg	☼	14.96		07/02/18 14:22	07/09/18 22:28	1
Stigmasterol	500	T J N	ug/Kg	☼	15.03	83-48-7	07/02/18 14:22	07/09/18 22:28	1
Stigmasterol, 22,23-dihydro-	1100	T J N	ug/Kg	☼	15.21	1000214-20-7	07/02/18 14:22	07/09/18 22:28	1
Unknown	1300	T J	ug/Kg	☼	15.28		07/02/18 14:22	07/09/18 22:28	1
Unknown	240	T J	ug/Kg	☼	15.41		07/02/18 14:22	07/09/18 22:28	1
5(1H)-Azulene, 2,4,6,7,8,8a-hexahydro-3,8-dimethyl-4-(1-me	310	T J N	ug/Kg	☼	15.45	6754-66-1	07/02/18 14:22	07/09/18 22:28	1
Unknown	530	T J	ug/Kg	☼	15.65		07/02/18 14:22	07/09/18 22:28	1
Unknown	570	T J	ug/Kg	☼	15.81		07/02/18 14:22	07/09/18 22:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	77		54 - 120	07/02/18 14:22	07/09/18 22:28	1
2-Fluorobiphenyl	96		60 - 120	07/02/18 14:22	07/09/18 22:28	1
2-Fluorophenol	78		52 - 120	07/02/18 14:22	07/09/18 22:28	1
Nitrobenzene-d5	85		53 - 120	07/02/18 14:22	07/09/18 22:28	1
Phenol-d5	78		54 - 120	07/02/18 14:22	07/09/18 22:28	1
p-Terphenyl-d14	109		65 - 121	07/02/18 14:22	07/09/18 22:28	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	16800		14.3	6.3	mg/Kg	☼	07/06/18 10:15	07/06/18 19:41	1
Antimony	0.81	J	21.5	0.57	mg/Kg	☼	07/06/18 10:15	07/06/18 19:41	1
Arsenic	16.2		2.9	0.57	mg/Kg	☼	07/06/18 10:15	07/06/18 19:41	1
Barium	110	B	0.72	0.16	mg/Kg	☼	07/06/18 10:15	07/06/18 19:41	1
Beryllium	0.91		0.29	0.040	mg/Kg	☼	07/06/18 10:15	07/06/18 19:41	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-28 (0-2")

Lab Sample ID: 480-138304-19

Date Collected: 06/29/18 10:45

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 69.1

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.57	0.086	mg/Kg	☼	07/06/18 10:15	07/10/18 01:04	2
Calcium	2970	B	71.7	4.7	mg/Kg	☼	07/06/18 10:15	07/06/18 19:41	1
Chromium	20.1		0.72	0.29	mg/Kg	☼	07/06/18 10:15	07/06/18 19:41	1
Cobalt	16.4		0.72	0.072	mg/Kg	☼	07/06/18 10:15	07/06/18 19:41	1
Copper	24.2		1.4	0.30	mg/Kg	☼	07/06/18 10:15	07/06/18 19:41	1
Iron	36500		14.3	5.0	mg/Kg	☼	07/06/18 10:15	07/06/18 19:41	1
Lead	15.8		1.4	0.34	mg/Kg	☼	07/06/18 10:15	07/06/18 19:41	1
Magnesium	5510		28.7	1.3	mg/Kg	☼	07/06/18 10:15	07/06/18 19:41	1
Manganese	709		0.29	0.046	mg/Kg	☼	07/06/18 10:15	07/06/18 19:41	1
Nickel	34.8		7.2	0.33	mg/Kg	☼	07/06/18 10:15	07/06/18 19:41	1
Potassium	3770		43.0	28.7	mg/Kg	☼	07/06/18 10:15	07/06/18 19:41	1
Selenium	ND		5.7	0.57	mg/Kg	☼	07/06/18 10:15	07/06/18 19:41	1
Silver	ND		0.86	0.29	mg/Kg	☼	07/06/18 10:15	07/06/18 19:41	1
Sodium	82.9	J	201	18.6	mg/Kg	☼	07/06/18 10:15	07/06/18 19:41	1
Thallium	ND		8.6	0.43	mg/Kg	☼	07/06/18 10:15	07/06/18 19:41	1
Vanadium	22.9		0.72	0.16	mg/Kg	☼	07/06/18 10:15	07/06/18 19:41	1
Zinc	80.5		2.9	0.92	mg/Kg	☼	07/06/18 10:15	07/06/18 19:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.012	J	0.028	0.011	mg/Kg	☼	07/16/18 14:20	07/16/18 16:08	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-29 (2"-1')

Lab Sample ID: 480-138304-20

Date Collected: 06/29/18 10:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 73.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	6.7	0.49	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
1,1,2,2-Tetrachloroethane	ND	vs	6.7	1.1	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	6.7	1.5	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
1,1,2-Trichloroethane	ND	vs	6.7	0.87	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
1,1-Dichloroethane	ND	vs	6.7	0.82	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
1,1-Dichloroethene	ND	vs	6.7	0.82	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
1,2,4-Trichlorobenzene	ND	vs	6.7	0.41	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
1,2-Dibromo-3-Chloropropane	ND	vs	6.7	3.3	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
1,2-Dichlorobenzene	ND	vs	6.7	0.52	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
1,2-Dichloroethane	ND	vs	6.7	0.34	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
1,2-Dichloropropane	ND	vs	6.7	3.3	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
1,3-Dichlorobenzene	ND	vs	6.7	0.34	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
1,4-Dichlorobenzene	ND	vs	6.7	0.94	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
2-Butanone (MEK)	ND	vs	33	2.4	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
2-Hexanone	ND	vs	33	3.3	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
4-Methyl-2-pentanone (MIBK)	ND	vs	33	2.2	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Acetone	ND	vs	33	5.6	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Benzene	ND	vs	6.7	0.33	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Bromoform	ND	vs	6.7	3.3	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Bromomethane	ND	vs	6.7	0.60	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Carbon disulfide	ND	vs	6.7	3.3	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Carbon tetrachloride	ND	vs	6.7	0.65	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Chlorobenzene	ND	vs	6.7	0.88	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Dibromochloromethane	ND	vs	6.7	0.86	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Chloroethane	ND	vs	6.7	1.5	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Chloroform	ND	vs	6.7	0.41	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Chloromethane	ND	vs	6.7	0.40	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
cis-1,2-Dichloroethene	ND	vs	6.7	0.86	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Cyclohexane	ND	vs	6.7	0.94	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Bromodichloromethane	ND	vs	6.7	0.90	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Dichlorodifluoromethane	ND	vs	6.7	0.55	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Ethylbenzene	ND	vs	6.7	0.46	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
1,2-Dibromoethane	ND	vs	6.7	0.86	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Isopropylbenzene	ND	vs	6.7	1.0	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Methyl acetate	ND	vs	33	4.0	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Methyl tert-butyl ether	ND	vs	6.7	0.66	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Methylcyclohexane	ND	vs	6.7	1.0	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Methylene Chloride	ND	vs	6.7	3.1	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Tetrachloroethene	ND	vs	6.7	0.90	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Toluene	ND	vs	6.7	0.51	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
trans-1,2-Dichloroethene	ND	vs	6.7	0.69	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
trans-1,3-Dichloropropene	ND	vs	6.7	2.9	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Trichloroethene	ND	vs	6.7	1.5	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Trichlorofluoromethane	ND	vs	6.7	0.63	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Vinyl chloride	ND	vs	6.7	0.82	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Xylenes, Total	ND	vs	13	1.1	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
cis-1,3-Dichloropropene	ND	vs	6.7	0.96	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1
Styrene	ND	vs	6.7	0.33	ug/Kg	☼	07/09/18 07:54	07/09/18 16:36	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-29 (2"-1")

Lab Sample ID: 480-138304-20

Date Collected: 06/29/18 10:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 73.6

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		<i>ug/Kg</i>	<i>☼</i>			<i>07/09/18 07:54</i>	<i>07/09/18 16:36</i>	<i>1</i>
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>1,2-Dichloroethane-d4 (Surr)</i>	<i>101</i>		<i>64 - 126</i>				<i>07/09/18 07:54</i>	<i>07/09/18 16:36</i>	<i>1</i>
<i>4-Bromofluorobenzene (Surr)</i>	<i>98</i>		<i>72 - 126</i>				<i>07/09/18 07:54</i>	<i>07/09/18 16:36</i>	<i>1</i>
<i>Toluene-d8 (Surr)</i>	<i>103</i>		<i>71 - 125</i>				<i>07/09/18 07:54</i>	<i>07/09/18 16:36</i>	<i>1</i>
<i>Dibromofluoromethane (Surr)</i>	<i>101</i>		<i>60 - 140</i>				<i>07/09/18 07:54</i>	<i>07/09/18 16:36</i>	<i>1</i>

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		230	61	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
2,4,6-Trichlorophenol	ND		230	45	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
2,4-Dichlorophenol	ND		230	24	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
2,4-Dimethylphenol	ND		230	54	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
2,4-Dinitrophenol	ND		2200	1000	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
2,4-Dinitrotoluene	ND		230	46	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
2,6-Dinitrotoluene	ND		230	26	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
2-Chloronaphthalene	ND		230	37	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
2-Chlorophenol	ND		230	41	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
2-Methylnaphthalene	ND		230	45	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
2-Methylphenol	ND		230	26	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
2-Nitroaniline	ND		440	33	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
2-Nitrophenol	ND		230	64	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
3,3'-Dichlorobenzidine	ND		440	260	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
3-Nitroaniline	ND		440	62	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
4,6-Dinitro-2-methylphenol	ND		440	230	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
4-Bromophenyl phenyl ether	ND		230	32	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
4-Chloro-3-methylphenol	ND		230	56	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
4-Chloroaniline	ND		230	56	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
4-Chlorophenyl phenyl ether	ND		230	28	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
4-Methylphenol	ND		440	26	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
4-Nitroaniline	ND		440	120	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
4-Nitrophenol	ND		440	160	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Acenaphthene	ND		230	33	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Acenaphthylene	ND		230	29	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Acetophenone	ND		230	30	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Anthracene	ND		230	56	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Atrazine	ND		230	78	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Benzaldehyde	ND		230	180	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Benzo[a]anthracene	170	J	230	23	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Benzo[a]pyrene	150	J	230	33	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Benzo[b]fluoranthene	210	J	230	36	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Benzo[g,h,i]perylene	130	J	230	24	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Benzo[k]fluoranthene	98	J	230	29	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Biphenyl	ND		230	33	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
bis (2-chloroisopropyl) ether	ND		230	45	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Bis(2-chloroethoxy)methane	ND		230	48	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Bis(2-chloroethyl)ether	ND		230	29	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Bis(2-ethylhexyl) phthalate	ND		230	77	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Butyl benzyl phthalate	ND		230	37	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-29 (2"-1')

Lab Sample ID: 480-138304-20

Date Collected: 06/29/18 10:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 73.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	ND		230	68	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Carbazole	ND		230	26	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Chrysene	180	J	230	50	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Dibenz(a,h)anthracene	45	J	230	40	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Dibenzofuran	ND		230	26	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Diethyl phthalate	ND		230	29	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Dimethyl phthalate	ND		230	26	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Di-n-butyl phthalate	ND		230	38	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Di-n-octyl phthalate	ND		230	26	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Fluoranthene	350		230	24	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Fluorene	ND		230	26	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Hexachlorobenzene	ND		230	30	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Hexachlorobutadiene	ND		230	33	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Hexachlorocyclopentadiene	ND		230	30	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Hexachloroethane	ND		230	29	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Indeno[1,2,3-cd]pyrene	110	J	230	28	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Isophorone	ND		230	48	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Naphthalene	ND		230	29	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Nitrobenzene	ND		230	25	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
N-Nitrosodi-n-propylamine	ND		230	38	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
N-Nitrosodiphenylamine	ND		230	180	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Pentachlorophenol	ND		440	230	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Phenanthrene	170	J	230	33	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Phenol	ND		230	34	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1
Pyrene	370		230	26	ug/Kg	☼	07/02/18 14:22	07/09/18 22:53	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	810	T J	ug/Kg	☼	1.71		07/02/18 14:22	07/09/18 22:53	1
p-Xylene	230	T J N	ug/Kg	☼	3.47	106-42-3	07/02/18 14:22	07/09/18 22:53	1
Unknown	200	T J	ug/Kg	☼	12.94		07/02/18 14:22	07/09/18 22:53	1
Unknown	480	T J	ug/Kg	☼	13.47		07/02/18 14:22	07/09/18 22:53	1
Bicyclo[10.8.0]eicosane, (E)-	240	T J N	ug/Kg	☼	13.78	1000155-85-0	07/02/18 14:22	07/09/18 22:53	1
Tricosane	450	T J N	ug/Kg	☼	13.91	638-67-5	07/02/18 14:22	07/09/18 22:53	1
Unknown	520	T J	ug/Kg	☼	13.97		07/02/18 14:22	07/09/18 22:53	1
Benzo[e]pyrene	210	T J N	ug/Kg	☼	14.03	192-97-2	07/02/18 14:22	07/09/18 22:53	1
Hentriacontane	700	T J N	ug/Kg	☼	14.39	630-04-6	07/02/18 14:22	07/09/18 22:53	1
Unknown	390	T J	ug/Kg	☼	14.47		07/02/18 14:22	07/09/18 22:53	1
.gamma.-Sitosterol	680	T J N	ug/Kg	☼	15.23	83-47-6	07/02/18 14:22	07/09/18 22:53	1
Unknown	570	T J	ug/Kg	☼	15.29		07/02/18 14:22	07/09/18 22:53	1
Unknown	610	T J	ug/Kg	☼	15.46		07/02/18 14:22	07/09/18 22:53	1
Unknown	580	T J	ug/Kg	☼	15.61		07/02/18 14:22	07/09/18 22:53	1
Unknown	220	T J	ug/Kg	☼	15.79		07/02/18 14:22	07/09/18 22:53	1
Unknown	1500	T J	ug/Kg	☼	15.86		07/02/18 14:22	07/09/18 22:53	1
Unknown	1100	T J	ug/Kg	☼	15.93		07/02/18 14:22	07/09/18 22:53	1
Unknown	870	T J	ug/Kg	☼	16.14		07/02/18 14:22	07/09/18 22:53	1
Unknown	230	T J	ug/Kg	☼	16.43		07/02/18 14:22	07/09/18 22:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	69		54 - 120	07/02/18 14:22	07/09/18 22:53	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-29 (2"-1')

Lab Sample ID: 480-138304-20

Date Collected: 06/29/18 10:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 73.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	83		60 - 120	07/02/18 14:22	07/09/18 22:53	1
2-Fluorophenol	69		52 - 120	07/02/18 14:22	07/09/18 22:53	1
Nitrobenzene-d5	77		53 - 120	07/02/18 14:22	07/09/18 22:53	1
Phenol-d5	68		54 - 120	07/02/18 14:22	07/09/18 22:53	1
p-Terphenyl-d14	95		65 - 121	07/02/18 14:22	07/09/18 22:53	1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		44	8.6	ug/Kg	☼	07/03/18 14:15	07/05/18 16:28	20
4,4'-DDE	ND		44	9.3	ug/Kg	☼	07/03/18 14:15	07/05/18 16:28	20
4,4'-DDT	ND		44	10	ug/Kg	☼	07/03/18 14:15	07/05/18 16:28	20
Aldrin	ND		44	11	ug/Kg	☼	07/03/18 14:15	07/05/18 16:28	20
alpha-BHC	ND		44	8.0	ug/Kg	☼	07/03/18 14:15	07/05/18 16:28	20
beta-BHC	ND		44	8.0	ug/Kg	☼	07/03/18 14:15	07/05/18 16:28	20
cis-Chlordane	ND		44	22	ug/Kg	☼	07/03/18 14:15	07/05/18 16:28	20
delta-BHC	ND		44	8.3	ug/Kg	☼	07/03/18 14:15	07/05/18 16:28	20
Dieldrin	16	J	44	11	ug/Kg	☼	07/03/18 14:15	07/05/18 16:28	20
Endosulfan I	ND		44	8.5	ug/Kg	☼	07/03/18 14:15	07/05/18 16:28	20
Endosulfan II	ND		44	8.0	ug/Kg	☼	07/03/18 14:15	07/05/18 16:28	20
Endosulfan sulfate	ND		44	8.3	ug/Kg	☼	07/03/18 14:15	07/05/18 16:28	20
Endrin	ND		44	8.8	ug/Kg	☼	07/03/18 14:15	07/05/18 16:28	20
Endrin aldehyde	ND		44	11	ug/Kg	☼	07/03/18 14:15	07/05/18 16:28	20
Endrin ketone	ND		44	11	ug/Kg	☼	07/03/18 14:15	07/05/18 16:28	20
gamma-BHC (Lindane)	ND		44	8.1	ug/Kg	☼	07/03/18 14:15	07/05/18 16:28	20
Heptachlor	ND		44	9.6	ug/Kg	☼	07/03/18 14:15	07/05/18 16:28	20
Heptachlor epoxide	ND		44	11	ug/Kg	☼	07/03/18 14:15	07/05/18 16:28	20
Methoxychlor	ND		44	9.1	ug/Kg	☼	07/03/18 14:15	07/05/18 16:28	20
Toxaphene	ND		440	260	ug/Kg	☼	07/03/18 14:15	07/05/18 16:28	20
trans-Chlordane	ND		44	14	ug/Kg	☼	07/03/18 14:15	07/05/18 16:28	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	114		45 - 120	07/03/18 14:15	07/05/18 16:28	20
DCB Decachlorobiphenyl	122	X	45 - 120	07/03/18 14:15	07/05/18 16:28	20
Tetrachloro-m-xylene	121		30 - 124	07/03/18 14:15	07/05/18 16:28	20
Tetrachloro-m-xylene	142	X	30 - 124	07/03/18 14:15	07/05/18 16:28	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.29	0.057	mg/Kg	☼	07/02/18 15:18	07/03/18 20:28	1
PCB-1221	ND		0.29	0.057	mg/Kg	☼	07/02/18 15:18	07/03/18 20:28	1
PCB-1232	ND		0.29	0.057	mg/Kg	☼	07/02/18 15:18	07/03/18 20:28	1
PCB-1242	ND		0.29	0.057	mg/Kg	☼	07/02/18 15:18	07/03/18 20:28	1
PCB-1248	ND		0.29	0.057	mg/Kg	☼	07/02/18 15:18	07/03/18 20:28	1
PCB-1254	ND		0.29	0.14	mg/Kg	☼	07/02/18 15:18	07/03/18 20:28	1
PCB-1260	ND		0.29	0.14	mg/Kg	☼	07/02/18 15:18	07/03/18 20:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	102		60 - 154	07/02/18 15:18	07/03/18 20:28	1
Tetrachloro-m-xylene	91		60 - 154	07/02/18 15:18	07/03/18 20:28	1
DCB Decachlorobiphenyl	87		65 - 174	07/02/18 15:18	07/03/18 20:28	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-29 (2"-1')

Lab Sample ID: 480-138304-20

Date Collected: 06/29/18 10:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 73.6

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	105		65 - 174	07/02/18 15:18	07/03/18 20:28	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		22	7.2	ug/Kg	☼	07/05/18 07:15	07/09/18 20:27	1
Silvex (2,4,5-TP)	ND		22	8.1	ug/Kg	☼	07/05/18 07:15	07/09/18 20:27	1
2,4-D	ND		22	14	ug/Kg	☼	07/05/18 07:15	07/09/18 20:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	67		28 - 129	07/05/18 07:15	07/09/18 20:27	1
2,4-Dichlorophenylacetic acid	64		28 - 129	07/05/18 07:15	07/09/18 20:27	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	21600		14.0	6.2	mg/Kg	☼	07/06/18 10:15	07/06/18 19:59	1
Antimony	0.82	J	21.0	0.56	mg/Kg	☼	07/06/18 10:15	07/06/18 19:59	1
Arsenic	14.0		2.8	0.56	mg/Kg	☼	07/06/18 10:15	07/06/18 19:59	1
Barium	176	B	0.70	0.15	mg/Kg	☼	07/06/18 10:15	07/06/18 19:59	1
Beryllium	0.97		0.28	0.039	mg/Kg	☼	07/06/18 10:15	07/06/18 19:59	1
Cadmium	ND		0.28	0.042	mg/Kg	☼	07/06/18 10:15	07/06/18 19:59	1
Calcium	1120	B	69.9	4.6	mg/Kg	☼	07/06/18 10:15	07/06/18 19:59	1
Chromium	24.1		0.70	0.28	mg/Kg	☼	07/06/18 10:15	07/06/18 19:59	1
Cobalt	13.1		0.70	0.070	mg/Kg	☼	07/06/18 10:15	07/06/18 19:59	1
Copper	17.4		1.4	0.29	mg/Kg	☼	07/06/18 10:15	07/06/18 19:59	1
Iron	34600		14.0	4.9	mg/Kg	☼	07/06/18 10:15	07/06/18 19:59	1
Lead	30.0		1.4	0.34	mg/Kg	☼	07/06/18 10:15	07/06/18 19:59	1
Magnesium	3720		28.0	1.3	mg/Kg	☼	07/06/18 10:15	07/06/18 19:59	1
Manganese	554		0.28	0.045	mg/Kg	☼	07/06/18 10:15	07/06/18 19:59	1
Nickel	23.6		7.0	0.32	mg/Kg	☼	07/06/18 10:15	07/06/18 19:59	1
Potassium	2810		42.0	28.0	mg/Kg	☼	07/06/18 10:15	07/06/18 19:59	1
Selenium	ND		5.6	0.56	mg/Kg	☼	07/06/18 10:15	07/06/18 19:59	1
Silver	ND		0.84	0.28	mg/Kg	☼	07/06/18 10:15	07/06/18 19:59	1
Sodium	60.1	J	196	18.2	mg/Kg	☼	07/06/18 10:15	07/06/18 19:59	1
Thallium	ND		8.4	0.42	mg/Kg	☼	07/06/18 10:15	07/06/18 19:59	1
Vanadium	39.4		0.70	0.15	mg/Kg	☼	07/06/18 10:15	07/06/18 19:59	1
Zinc	72.2		2.8	0.90	mg/Kg	☼	07/06/18 10:15	07/06/18 19:59	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.050		0.026	0.010	mg/Kg	☼	07/16/18 14:20	07/16/18 16:09	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-29 (0-2")

Lab Sample ID: 480-138304-21

Date Collected: 06/29/18 10:15

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 76.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		220	59	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
2,4,6-Trichlorophenol	ND		220	43	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
2,4-Dichlorophenol	ND		220	23	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
2,4-Dimethylphenol	ND		220	52	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
2,4-Dinitrophenol	ND		2100	1000	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
2,4-Dinitrotoluene	ND		220	45	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
2,6-Dinitrotoluene	ND		220	25	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
2-Chloronaphthalene	ND		220	36	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
2-Chlorophenol	ND		220	39	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
2-Methylnaphthalene	ND		220	43	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
2-Methylphenol	ND		220	25	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
2-Nitroaniline	ND		420	32	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
2-Nitrophenol	ND		220	61	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
3,3'-Dichlorobenzidine	ND	F1 F2	420	250	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
3-Nitroaniline	ND		420	60	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
4,6-Dinitro-2-methylphenol	ND		420	220	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
4-Bromophenyl phenyl ether	ND		220	31	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
4-Chloro-3-methylphenol	ND		220	53	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
4-Chloroaniline	ND		220	53	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
4-Chlorophenyl phenyl ether	ND		220	27	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
4-Methylphenol	ND		420	25	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
4-Nitroaniline	ND		420	110	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
4-Nitrophenol	ND		420	150	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Acenaphthene	ND		220	32	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Acenaphthylene	ND		220	28	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Acetophenone	ND		220	29	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Anthracene	ND		220	53	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Atrazine	ND		220	75	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Benzaldehyde	ND		220	170	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Benzo[a]anthracene	ND		220	22	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Benzo[a]pyrene	82	J	220	32	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Benzo[b]fluoranthene	95	J	220	34	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Benzo[g,h,i]perylene	84	J F2	220	23	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Benzo[k]fluoranthene	ND		220	28	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Biphenyl	ND		220	32	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
bis (2-chloroisopropyl) ether	ND		220	43	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Bis(2-chloroethoxy)methane	ND		220	46	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Bis(2-chloroethyl)ether	ND		220	28	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Bis(2-ethylhexyl) phthalate	ND		220	74	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Butyl benzyl phthalate	ND		220	36	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Caprolactam	ND		220	65	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Carbazole	ND		220	25	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Chrysene	ND		220	48	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Dibenz(a,h)anthracene	ND		220	38	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Dibenzofuran	ND		220	25	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Diethyl phthalate	ND		220	28	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Dimethyl phthalate	ND		220	25	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Di-n-butyl phthalate	ND		220	37	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Di-n-octyl phthalate	ND		220	25	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-29 (0-2")

Lab Sample ID: 480-138304-21

Date Collected: 06/29/18 10:15

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 76.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	170	J	220	23	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Fluorene	ND		220	25	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Hexachlorobenzene	ND		220	29	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Hexachlorobutadiene	ND		220	32	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Hexachlorocyclopentadiene	ND		220	29	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Hexachloroethane	ND		220	28	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Indeno[1,2,3-cd]pyrene	ND		220	27	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Isophorone	ND		220	46	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Naphthalene	ND		220	28	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Nitrobenzene	ND		220	24	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
N-Nitrosodi-n-propylamine	ND		220	37	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
N-Nitrosodiphenylamine	ND		220	180	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Pentachlorophenol	ND		420	220	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Phenanthrene	ND		220	32	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Phenol	ND		220	33	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1
Pyrene	140	J	220	25	ug/Kg	☼	07/02/18 14:33	07/10/18 19:23	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	390	T J	ug/Kg	☼	4.49		07/02/18 14:33	07/10/18 19:23	1
D-Limonene	670	T J N	ug/Kg	☼	6.68	5989-27-5	07/02/18 14:33	07/10/18 19:23	1
Unknown	450	T J	ug/Kg	☼	10.11		07/02/18 14:33	07/10/18 19:23	1
Unknown	5600	T J	ug/Kg	☼	10.89		07/02/18 14:33	07/10/18 19:23	1
Tridecanoic acid	390	T J N	ug/Kg	☼	12.12	638-53-9	07/02/18 14:33	07/10/18 19:23	1
Unknown	240	T J	ug/Kg	☼	12.37		07/02/18 14:33	07/10/18 19:23	1
Unknown	840	T J	ug/Kg	☼	12.68		07/02/18 14:33	07/10/18 19:23	1
Unknown	340	T J	ug/Kg	☼	12.72		07/02/18 14:33	07/10/18 19:23	1
Unknown	1000	T J	ug/Kg	☼	12.86		07/02/18 14:33	07/10/18 19:23	1
Unknown	400	T J	ug/Kg	☼	13.32		07/02/18 14:33	07/10/18 19:23	1
Unknown	230	T J	ug/Kg	☼	13.40		07/02/18 14:33	07/10/18 19:23	1
Unknown	570	T J	ug/Kg	☼	13.59		07/02/18 14:33	07/10/18 19:23	1
Unknown	2800	T J	ug/Kg	☼	13.66		07/02/18 14:33	07/10/18 19:23	1
Unknown	470	T J	ug/Kg	☼	14.56		07/02/18 14:33	07/10/18 19:23	1
Unknown	250	T J	ug/Kg	☼	14.81		07/02/18 14:33	07/10/18 19:23	1
Unknown	720	T J	ug/Kg	☼	14.98		07/02/18 14:33	07/10/18 19:23	1
Heneicosane, 11-(1-ethylpropyl)-	1100	T J N	ug/Kg	☼	15.72	55282-11-6	07/02/18 14:33	07/10/18 19:23	1
Unknown	270	T J	ug/Kg	☼	16.62		07/02/18 14:33	07/10/18 19:23	1
Unknown	3200	T J	ug/Kg	☼	18.73		07/02/18 14:33	07/10/18 19:23	1
Unknown	670	T J	ug/Kg	☼	19.35		07/02/18 14:33	07/10/18 19:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	64		54 - 120	07/02/18 14:33	07/10/18 19:23	1
2-Fluorobiphenyl	77		60 - 120	07/02/18 14:33	07/10/18 19:23	1
2-Fluorophenol	66		52 - 120	07/02/18 14:33	07/10/18 19:23	1
Nitrobenzene-d5	66		53 - 120	07/02/18 14:33	07/10/18 19:23	1
Phenol-d5	64		54 - 120	07/02/18 14:33	07/10/18 19:23	1
p-Terphenyl-d14	84		65 - 121	07/02/18 14:33	07/10/18 19:23	1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	21		21	4.2	ug/Kg	☼	07/03/18 14:15	07/05/18 16:47	10

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-29 (0-2")

Lab Sample ID: 480-138304-21

Date Collected: 06/29/18 10:15

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 76.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDE	ND		21	4.5	ug/Kg	☼	07/03/18 14:15	07/05/18 16:47	10
4,4'-DDT	ND		21	5.0	ug/Kg	☼	07/03/18 14:15	07/05/18 16:47	10
Aldrin	ND		21	5.3	ug/Kg	☼	07/03/18 14:15	07/05/18 16:47	10
alpha-BHC	ND		21	3.9	ug/Kg	☼	07/03/18 14:15	07/05/18 16:47	10
beta-BHC	ND		21	3.9	ug/Kg	☼	07/03/18 14:15	07/05/18 16:47	10
cis-Chlordane	ND		21	11	ug/Kg	☼	07/03/18 14:15	07/05/18 16:47	10
delta-BHC	ND		21	4.0	ug/Kg	☼	07/03/18 14:15	07/05/18 16:47	10
Dieldrin	20	J	21	5.1	ug/Kg	☼	07/03/18 14:15	07/05/18 16:47	10
Endosulfan I	ND		21	4.1	ug/Kg	☼	07/03/18 14:15	07/05/18 16:47	10
Endosulfan II	ND		21	3.9	ug/Kg	☼	07/03/18 14:15	07/05/18 16:47	10
Endosulfan sulfate	ND		21	4.0	ug/Kg	☼	07/03/18 14:15	07/05/18 16:47	10
Endrin	ND		21	4.2	ug/Kg	☼	07/03/18 14:15	07/05/18 16:47	10
Endrin aldehyde	ND		21	5.5	ug/Kg	☼	07/03/18 14:15	07/05/18 16:47	10
Endrin ketone	ND		21	5.3	ug/Kg	☼	07/03/18 14:15	07/05/18 16:47	10
gamma-BHC (Lindane)	ND		21	3.9	ug/Kg	☼	07/03/18 14:15	07/05/18 16:47	10
Heptachlor	ND		21	4.6	ug/Kg	☼	07/03/18 14:15	07/05/18 16:47	10
Heptachlor epoxide	ND		21	5.5	ug/Kg	☼	07/03/18 14:15	07/05/18 16:47	10
Methoxychlor	ND		21	4.4	ug/Kg	☼	07/03/18 14:15	07/05/18 16:47	10
Toxaphene	ND		210	120	ug/Kg	☼	07/03/18 14:15	07/05/18 16:47	10
trans-Chlordane	ND		21	6.8	ug/Kg	☼	07/03/18 14:15	07/05/18 16:47	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	98		45 - 120	07/03/18 14:15	07/05/18 16:47	10
DCB Decachlorobiphenyl	160	X	45 - 120	07/03/18 14:15	07/05/18 16:47	10
Tetrachloro-m-xylene	107		30 - 124	07/03/18 14:15	07/05/18 16:47	10
Tetrachloro-m-xylene	104		30 - 124	07/03/18 14:15	07/05/18 16:47	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.33	0.064	mg/Kg	☼	07/02/18 15:18	07/03/18 20:44	1
PCB-1221	ND		0.33	0.064	mg/Kg	☼	07/02/18 15:18	07/03/18 20:44	1
PCB-1232	ND		0.33	0.064	mg/Kg	☼	07/02/18 15:18	07/03/18 20:44	1
PCB-1242	ND		0.33	0.064	mg/Kg	☼	07/02/18 15:18	07/03/18 20:44	1
PCB-1248	ND		0.33	0.064	mg/Kg	☼	07/02/18 15:18	07/03/18 20:44	1
PCB-1254	ND		0.33	0.15	mg/Kg	☼	07/02/18 15:18	07/03/18 20:44	1
PCB-1260	ND		0.33	0.15	mg/Kg	☼	07/02/18 15:18	07/03/18 20:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	103		60 - 154	07/02/18 15:18	07/03/18 20:44	1
Tetrachloro-m-xylene	88		60 - 154	07/02/18 15:18	07/03/18 20:44	1
DCB Decachlorobiphenyl	89		65 - 174	07/02/18 15:18	07/03/18 20:44	1
DCB Decachlorobiphenyl	108		65 - 174	07/02/18 15:18	07/03/18 20:44	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		21	6.8	ug/Kg	☼	07/05/18 07:15	07/09/18 21:27	1
Silvex (2,4,5-TP)	ND		21	7.7	ug/Kg	☼	07/05/18 07:15	07/09/18 21:27	1
2,4-D	ND		21	13	ug/Kg	☼	07/05/18 07:15	07/09/18 21:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	65		28 - 129	07/05/18 07:15	07/09/18 21:27	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-29 (0-2")

Lab Sample ID: 480-138304-21

Date Collected: 06/29/18 10:15

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 76.5

Method: 8151A - Herbicides (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	68		28 - 129	07/05/18 07:15	07/09/18 21:27	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	22400		13.3	5.9	mg/Kg	☼	07/06/18 10:15	07/06/18 20:03	1
Antimony	0.75	J	20.0	0.53	mg/Kg	☼	07/06/18 10:15	07/06/18 20:03	1
Arsenic	20.0		2.7	0.53	mg/Kg	☼	07/06/18 10:15	07/06/18 20:03	1
Barium	180	B	0.67	0.15	mg/Kg	☼	07/06/18 10:15	07/06/18 20:03	1
Beryllium	1.1		0.27	0.037	mg/Kg	☼	07/06/18 10:15	07/06/18 20:03	1
Cadmium	ND		0.27	0.040	mg/Kg	☼	07/06/18 10:15	07/06/18 20:03	1
Calcium	1310	B	66.5	4.4	mg/Kg	☼	07/06/18 10:15	07/06/18 20:03	1
Chromium	25.3		0.67	0.27	mg/Kg	☼	07/06/18 10:15	07/06/18 20:03	1
Cobalt	13.9		0.67	0.067	mg/Kg	☼	07/06/18 10:15	07/06/18 20:03	1
Copper	17.7		1.3	0.28	mg/Kg	☼	07/06/18 10:15	07/06/18 20:03	1
Iron	39400		13.3	4.7	mg/Kg	☼	07/06/18 10:15	07/06/18 20:03	1
Lead	33.2		1.3	0.32	mg/Kg	☼	07/06/18 10:15	07/06/18 20:03	1
Magnesium	3410		26.6	1.2	mg/Kg	☼	07/06/18 10:15	07/06/18 20:03	1
Manganese	563		0.27	0.043	mg/Kg	☼	07/06/18 10:15	07/06/18 20:03	1
Nickel	20.9		6.7	0.31	mg/Kg	☼	07/06/18 10:15	07/06/18 20:03	1
Potassium	2750		39.9	26.6	mg/Kg	☼	07/06/18 10:15	07/06/18 20:03	1
Selenium	ND		5.3	0.53	mg/Kg	☼	07/06/18 10:15	07/06/18 20:03	1
Silver	ND		0.80	0.27	mg/Kg	☼	07/06/18 10:15	07/06/18 20:03	1
Sodium	56.2	J	186	17.3	mg/Kg	☼	07/06/18 10:15	07/06/18 20:03	1
Thallium	ND		8.0	0.40	mg/Kg	☼	07/06/18 10:15	07/06/18 20:03	1
Vanadium	43.4		0.67	0.15	mg/Kg	☼	07/06/18 10:15	07/06/18 20:03	1
Zinc	78.9		2.7	0.85	mg/Kg	☼	07/06/18 10:15	07/06/18 20:03	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039		0.025	0.010	mg/Kg	☼	07/16/18 14:20	07/16/18 16:14	1

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (64-126)	BFB (72-126)	TOL (71-125)	DBFM (60-140)
480-138304-1	NS-21 (2"-1')	104	100	101	103
480-138304-3	NS-23 (2'-1')	97	96	106	98
480-138304-6	NS-22 (2"-1')	99	99	102	98
480-138304-8	NS-24 (2"-1')	98	100	102	99
480-138304-11	NS-26 (2"-1')	94	97	103	96
480-138304-13	NS-25 (2"-1')	99	100	102	99
480-138304-14	NS-42 (2"-1')	98	100	102	98
480-138304-14 MS	NS-42 (2"-1')	91	103	104	101
480-138304-14 MSD	NS-42 (2"-1')	91	103	104	100
480-138304-16	NS-27 (2"-1)	101	99	102	101
480-138304-18	NS-28 (2"-1')	99	95	105	102
480-138304-20	NS-29 (2"-1')	101	98	103	101
LCS 480-422781/1-A	Lab Control Sample	97	102	102	102
LCS 480-423238/1-A	Lab Control Sample	95	103	103	100
LCS 480-423426/1-A	Lab Control Sample	97	104	103	101
MB 480-422781/2-A	Method Blank	103	100	101	101
MB 480-423238/2-A	Method Blank	98	98	102	99
MB 480-423426/2-A	Method Blank	94	99	103	97

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (54-120)	FBP (60-120)	2FP (52-120)	NBZ (53-120)	PHL (54-120)	TPHd14 (65-121)
480-138304-1	NS-21 (2"-1')	77	97	75	88	76	116
480-138304-2	SS-21 (0-2')	80	85	65	67	68	97
480-138304-3	NS-23 (2'-1')	82	89	66	74	64	99
480-138304-4	SS-23 (0-2")	85	87	68	70	70	98
480-138304-5	SS-22 (0-2")	75	45 X	0 X	29 X	0 X	52 X
480-138304-6	NS-22 (2"-1')	90	103	83	90	84	115
480-138304-7	SS-24 (0-2")	87	90	76	78	74	98
480-138304-8	NS-24 (2"-1')	77	89	69	79	73	106
480-138304-9	BD	84	94	75	84	76	114
480-138304-10	SS-26 (0-2")	87	96	77	87	79	115
480-138304-11	NS-26 (2"-1')	79	96	73	84	75	110
480-138304-12	SS-25 (0-2")	75	93	79	84	79	104
480-138304-13	NS-25 (2"-1')	70	86	68	77	71	112
480-138304-14	NS-42 (2"-1')	72	93	75	82	78	113
480-138304-14 MS	NS-42 (2"-1')	83	93	72	83	74	111
480-138304-14 MSD	NS-42 (2"-1')	95	106	84	92	85	128 X
480-138304-15	SS-42 (0-2")	77	91	72	80	74	100
480-138304-16	NS-27 (2"-1)	71	88	71	77	71	110

TestAmerica Buffalo

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (54-120)	FBP (60-120)	2FP (52-120)	NBZ (53-120)	PHL (54-120)	TPHD14 (65-121)
480-138304-17	SS-27 (0-2")	76	89	76	81	75	110
480-138304-18	NS-28 (2"-1')	68	85	71	74	70	103
480-138304-19	SS-28 (0-2")	77	96	78	85	78	109
480-138304-20	NS-29 (2"-1')	69	83	69	77	68	95
480-138304-21	SS-29 (0-2")	64	77	66	66	64	84
480-138304-21 MS	SS-29 (0-2")	60	74	64	62	69	75
480-138304-21 MSD	SS-29 (0-2")	61	77	61	63	63	79
LCS 480-422683/2-A	Lab Control Sample	92	87	79	79	80	99
LCS 480-422686/2-A	Lab Control Sample	60	71	66	62	66	85
MB 480-422683/1-A	Method Blank	82	93	83	85	86	115
MB 480-422686/1-A	Method Blank	55	72	64	62	62	87

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHD14 = p-Terphenyl-d14

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1 (45-120)	DCBP2 (45-120)	TCX1 (30-124)	TCX2 (30-124)
480-138304-7	SS-24 (0-2")	100	107	109	115
480-138304-7 MS	SS-24 (0-2")	108	100	122	123
480-138304-7 MSD	SS-24 (0-2")	88	117	119	117
480-138304-8	NS-24 (2"-1')	90	108	84	83
480-138304-12	SS-25 (0-2")	72	81	65	64
480-138304-13	NS-25 (2"-1')	93	128 X	99	95
480-138304-20	NS-29 (2"-1')	114	122 X	121	142 X
480-138304-21	SS-29 (0-2")	98	160 X	107	104
LCS 480-422854/2-A	Lab Control Sample	96	75	84	81
MB 480-422854/1-A	Method Blank	98	77	86	85

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TCX1 (60-154)	TCX2 (60-154)	DCBP1 (65-174)	DCBP2 (65-174)
480-138304-7	SS-24 (0-2")	96	80	79	94
480-138304-8	NS-24 (2"-1')	100	83	85	100
480-138304-12	SS-25 (0-2")	95	82	72	86

TestAmerica Buffalo

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TCX1 (60-154)	TCX2 (60-154)	DCBP1 (65-174)	DCBP2 (65-174)
480-138304-13	NS-25 (2"-1')	88	78	73	89
480-138304-20	NS-29 (2"-1')	102	91	87	105
480-138304-21	SS-29 (0-2")	103	88	89	108
LCS 480-422693/2-A	Lab Control Sample	103	88	85	100
MB 480-422693/1-A	Method Blank	87	85	79	92
Surrogate Legend					
TCX = Tetrachloro-m-xylene					
DCBP = DCB Decachlorobiphenyl					

Method: 8151A - Herbicides (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCPAA1 (28-129)	DCPAA2 (28-129)
480-138304-7	SS-24 (0-2")	71	64
480-138304-8	NS-24 (2"-1')	72	69
480-138304-12	SS-25 (0-2")	68	63
480-138304-13	NS-25 (2"-1')	69	67
480-138304-20	NS-29 (2"-1')	67	64
480-138304-21	SS-29 (0-2")	65	68
LCS 480-422982/2-A	Lab Control Sample	70	64
MB 480-422982/1-A	Method Blank	53	60
Surrogate Legend			
DCPAA = 2,4-Dichlorophenylacetic acid			

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-422781/2-A

Matrix: Solid

Analysis Batch: 422759

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422781

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
2-Hexanone	ND		25	2.5	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Acetone	ND		25	4.2	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Benzene	ND		5.0	0.25	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Bromoform	ND		5.0	2.5	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Bromomethane	ND		5.0	0.45	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Chloroethane	ND		5.0	1.1	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Chloroform	ND		5.0	0.31	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Chloromethane	ND		5.0	0.30	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Cyclohexane	ND		5.0	0.70	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Methyl acetate	ND		25	3.0	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Toluene	ND		5.0	0.38	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Trichloroethene	ND		5.0	1.1	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Xylenes, Total	ND		10	0.84	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		07/03/18 08:40	07/03/18 11:38	1
Styrene	ND		5.0	0.25	ug/Kg		07/03/18 08:40	07/03/18 11:38	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		ug/Kg				07/03/18 08:40	07/03/18 11:38	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	103		64 - 126				07/03/18 08:40	07/03/18 11:38	1
4-Bromofluorobenzene (Surr)	100		72 - 126				07/03/18 08:40	07/03/18 11:38	1
Toluene-d8 (Surr)	101		71 - 125				07/03/18 08:40	07/03/18 11:38	1
Dibromofluoromethane (Surr)	101		60 - 140				07/03/18 08:40	07/03/18 11:38	1

Lab Sample ID: LCS 480-422781/1-A

Matrix: Solid

Analysis Batch: 422759

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422781

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>
1,1,1-Trichloroethane	50.0	41.9		ug/Kg		84	77 - 121
1,1,2,2-Tetrachloroethane	50.0	48.0		ug/Kg		96	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	43.1		ug/Kg		86	60 - 140
1,1,2-Trichloroethane	50.0	49.0		ug/Kg		98	78 - 122
1,1-Dichloroethane	50.0	47.7		ug/Kg		95	73 - 126
1,1-Dichloroethene	50.0	45.2		ug/Kg		90	59 - 125
1,2,4-Trichlorobenzene	50.0	46.3		ug/Kg		93	64 - 120
1,2-Dibromo-3-Chloropropane	50.0	42.8		ug/Kg		86	63 - 124
1,2-Dichlorobenzene	50.0	47.0		ug/Kg		94	75 - 120
1,2-Dichloroethane	50.0	44.3		ug/Kg		89	77 - 122
1,2-Dichloropropane	50.0	49.2		ug/Kg		98	75 - 124
1,3-Dichlorobenzene	50.0	47.2		ug/Kg		94	74 - 120
1,4-Dichlorobenzene	50.0	47.5		ug/Kg		95	73 - 120
2-Butanone (MEK)	250	262		ug/Kg		105	70 - 134
2-Hexanone	250	244		ug/Kg		98	59 - 130
4-Methyl-2-pentanone (MIBK)	250	236		ug/Kg		94	65 - 133
Acetone	250	240		ug/Kg		96	61 - 137
Benzene	50.0	49.6		ug/Kg		99	79 - 127
Bromoform	50.0	49.6		ug/Kg		99	68 - 126
Bromomethane	50.0	42.5		ug/Kg		85	37 - 149
Carbon disulfide	50.0	45.6		ug/Kg		91	64 - 131
Carbon tetrachloride	50.0	41.9		ug/Kg		84	75 - 135
Chlorobenzene	50.0	48.1		ug/Kg		96	76 - 124
Dibromochloromethane	50.0	49.5		ug/Kg		99	76 - 125
Chloroethane	50.0	39.3		ug/Kg		79	69 - 135
Chloroform	50.0	46.3		ug/Kg		93	80 - 120
Chloromethane	50.0	42.2		ug/Kg		84	63 - 127
cis-1,2-Dichloroethene	50.0	48.9		ug/Kg		98	81 - 120
Cyclohexane	50.0	44.2		ug/Kg		88	65 - 120
Bromodichloromethane	50.0	48.3		ug/Kg		97	80 - 122
Dichlorodifluoromethane	50.0	44.9		ug/Kg		90	57 - 142
Ethylbenzene	50.0	47.4		ug/Kg		95	80 - 120
1,2-Dibromoethane	50.0	48.9		ug/Kg		98	78 - 120
Isopropylbenzene	50.0	45.6		ug/Kg		91	72 - 120
Methyl acetate	100	105		ug/Kg		105	55 - 136
Methyl tert-butyl ether	50.0	45.8		ug/Kg		92	63 - 125
Methylcyclohexane	50.0	45.6		ug/Kg		91	60 - 140
Methylene Chloride	50.0	47.3		ug/Kg		95	61 - 127
Tetrachloroethene	50.0	46.0		ug/Kg		92	74 - 122

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

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

Lab Sample ID: LCS 480-422781/1-A

Matrix: Solid

Analysis Batch: 422759

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422781

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	50.0	47.5		ug/Kg		95	74 - 128
trans-1,2-Dichloroethene	50.0	48.1		ug/Kg		96	78 - 126
trans-1,3-Dichloropropene	50.0	47.1		ug/Kg		94	73 - 123
Trichloroethene	50.0	47.0		ug/Kg		94	77 - 129
Trichlorofluoromethane	50.0	41.7		ug/Kg		83	65 - 146
Vinyl chloride	50.0	41.8		ug/Kg		84	61 - 133
cis-1,3-Dichloropropene	50.0	49.1		ug/Kg		98	80 - 120
Styrene	50.0	48.3		ug/Kg		97	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		64 - 126
4-Bromofluorobenzene (Surr)	102		72 - 126
Toluene-d8 (Surr)	102		71 - 125
Dibromofluoromethane (Surr)	102		60 - 140

Lab Sample ID: MB 480-423238/2-A

Matrix: Solid

Analysis Batch: 423243

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423238

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
2-Hexanone	ND		25	2.5	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Acetone	ND		25	4.2	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Benzene	ND		5.0	0.25	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Bromoform	ND		5.0	2.5	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Bromomethane	ND		5.0	0.45	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Chloroethane	ND		5.0	1.1	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Chloroform	ND		5.0	0.31	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Chloromethane	ND		5.0	0.30	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		07/06/18 09:13	07/06/18 13:01	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

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

Lab Sample ID: MB 480-423238/2-A

Matrix: Solid

Analysis Batch: 423243

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423238

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		5.0	0.70	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Methyl acetate	ND		25	3.0	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Toluene	ND		5.0	0.38	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Trichloroethene	ND		5.0	1.1	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Xylenes, Total	0.902	J	10	0.84	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		07/06/18 09:13	07/06/18 13:01	1
Styrene	ND		5.0	0.25	ug/Kg		07/06/18 09:13	07/06/18 13:01	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/Kg				07/06/18 09:13	07/06/18 13:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		64 - 126	07/06/18 09:13	07/06/18 13:01	1
4-Bromofluorobenzene (Surr)	98		72 - 126	07/06/18 09:13	07/06/18 13:01	1
Toluene-d8 (Surr)	102		71 - 125	07/06/18 09:13	07/06/18 13:01	1
Dibromofluoromethane (Surr)	99		60 - 140	07/06/18 09:13	07/06/18 13:01	1

Lab Sample ID: LCS 480-423238/1-A

Matrix: Solid

Analysis Batch: 423243

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423238

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	43.8		ug/Kg		88	77 - 121
1,1,2,2-Tetrachloroethane	50.0	49.6		ug/Kg		99	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	46.4		ug/Kg		93	60 - 140
1,1,2-Trichloroethane	50.0	51.4		ug/Kg		103	78 - 122
1,1-Dichloroethane	50.0	48.3		ug/Kg		97	73 - 126
1,1-Dichloroethene	50.0	46.8		ug/Kg		94	59 - 125
1,2,4-Trichlorobenzene	50.0	49.4		ug/Kg		99	64 - 120
1,2-Dibromo-3-Chloropropane	50.0	43.3		ug/Kg		87	63 - 124
1,2-Dichlorobenzene	50.0	49.9		ug/Kg		100	75 - 120
1,2-Dichloroethane	50.0	44.6		ug/Kg		89	77 - 122
1,2-Dichloropropane	50.0	51.0		ug/Kg		102	75 - 124
1,3-Dichlorobenzene	50.0	50.2		ug/Kg		100	74 - 120

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

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

Lab Sample ID: LCS 480-423238/1-A

Matrix: Solid

Analysis Batch: 423243

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423238

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	50.0	50.3		ug/Kg		101	73 - 120
2-Butanone (MEK)	250	245		ug/Kg		98	70 - 134
2-Hexanone	250	235		ug/Kg		94	59 - 130
4-Methyl-2-pentanone (MIBK)	250	232		ug/Kg		93	65 - 133
Acetone	250	245		ug/Kg		98	61 - 137
Benzene	50.0	50.3		ug/Kg		101	79 - 127
Bromoform	50.0	54.0		ug/Kg		108	68 - 126
Bromomethane	50.0	44.9		ug/Kg		90	37 - 149
Carbon disulfide	50.0	46.9		ug/Kg		94	64 - 131
Carbon tetrachloride	50.0	45.0		ug/Kg		90	75 - 135
Chlorobenzene	50.0	50.6		ug/Kg		101	76 - 124
Dibromochloromethane	50.0	53.2		ug/Kg		106	76 - 125
Chloroethane	50.0	45.6		ug/Kg		91	69 - 135
Chloroform	50.0	47.1		ug/Kg		94	80 - 120
Chloromethane	50.0	41.7		ug/Kg		83	63 - 127
cis-1,2-Dichloroethene	50.0	49.3		ug/Kg		99	81 - 120
Cyclohexane	50.0	47.8		ug/Kg		96	65 - 120
Bromodichloromethane	50.0	49.9		ug/Kg		100	80 - 122
Dichlorodifluoromethane	50.0	43.5		ug/Kg		87	57 - 142
Ethylbenzene	50.0	50.4		ug/Kg		101	80 - 120
1,2-Dibromoethane	50.0	50.9		ug/Kg		102	78 - 120
Isopropylbenzene	50.0	49.5		ug/Kg		99	72 - 120
Methyl acetate	100	98.4		ug/Kg		98	55 - 136
Methyl tert-butyl ether	50.0	45.9		ug/Kg		92	63 - 125
Methylcyclohexane	50.0	49.8		ug/Kg		100	60 - 140
Methylene Chloride	50.0	50.2		ug/Kg		100	61 - 127
Tetrachloroethene	50.0	49.6		ug/Kg		99	74 - 122
Toluene	50.0	50.3		ug/Kg		101	74 - 128
trans-1,2-Dichloroethene	50.0	48.6		ug/Kg		97	78 - 126
trans-1,3-Dichloropropene	50.0	49.7		ug/Kg		99	73 - 123
Trichloroethene	50.0	48.4		ug/Kg		97	77 - 129
Trichlorofluoromethane	50.0	46.1		ug/Kg		92	65 - 146
Vinyl chloride	50.0	42.3		ug/Kg		85	61 - 133
cis-1,3-Dichloropropene	50.0	50.3		ug/Kg		101	80 - 120
Styrene	50.0	50.9		ug/Kg		102	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		64 - 126
4-Bromofluorobenzene (Surr)	103		72 - 126
Toluene-d8 (Surr)	103		71 - 125
Dibromofluoromethane (Surr)	100		60 - 140

Lab Sample ID: MB 480-423426/2-A

Matrix: Solid

Analysis Batch: 423427

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423426

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		07/09/18 07:54	07/09/18 12:59	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

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

Lab Sample ID: MB 480-423426/2-A

Matrix: Solid

Analysis Batch: 423427

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423426

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
2-Hexanone	ND		25	2.5	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Acetone	ND		25	4.2	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Benzene	ND		5.0	0.25	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Bromoform	ND		5.0	2.5	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Bromomethane	ND		5.0	0.45	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Chloroethane	ND		5.0	1.1	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Chloroform	ND		5.0	0.31	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Chloromethane	ND		5.0	0.30	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Cyclohexane	ND		5.0	0.70	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Methyl acetate	ND		25	3.0	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Toluene	ND		5.0	0.38	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Trichloroethene	ND		5.0	1.1	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Xylenes, Total	ND		10	0.84	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		07/09/18 07:54	07/09/18 12:59	1
Styrene	ND		5.0	0.25	ug/Kg		07/09/18 07:54	07/09/18 12:59	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

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

Lab Sample ID: MB 480-423426/2-A

Matrix: Solid

Analysis Batch: 423427

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423426

<i>Tentatively Identified Compound</i>	<i>MB</i> <i>Est. Result</i>	<i>MB</i> <i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		<i>ug/Kg</i>				07/09/18 07:54	07/09/18 12:59	1
<i>Surrogate</i>	<i>MB</i> <i>%Recovery</i>	<i>MB</i> <i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	94		64 - 126				07/09/18 07:54	07/09/18 12:59	1
4-Bromofluorobenzene (Surr)	99		72 - 126				07/09/18 07:54	07/09/18 12:59	1
Toluene-d8 (Surr)	103		71 - 125				07/09/18 07:54	07/09/18 12:59	1
Dibromofluoromethane (Surr)	97		60 - 140				07/09/18 07:54	07/09/18 12:59	1

Lab Sample ID: LCS 480-423426/1-A

Matrix: Solid

Analysis Batch: 423427

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423426

<i>Analyte</i>	<i>Spike</i> <i>Added</i>	<i>LCS</i> <i>Result</i>	<i>LCS</i> <i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec.</i> <i>Limits</i>
1,1,1-Trichloroethane	50.0	44.0		ug/Kg		88	77 - 121
1,1,2,2-Tetrachloroethane	50.0	50.1		ug/Kg		100	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	46.8		ug/Kg		94	60 - 140
1,1,2-Trichloroethane	50.0	49.9		ug/Kg		100	78 - 122
1,1-Dichloroethane	50.0	48.5		ug/Kg		97	73 - 126
1,1-Dichloroethene	50.0	48.3		ug/Kg		97	59 - 125
1,2,4-Trichlorobenzene	50.0	48.5		ug/Kg		97	64 - 120
1,2-Dibromo-3-Chloropropane	50.0	47.6		ug/Kg		95	63 - 124
1,2-Dichlorobenzene	50.0	47.5		ug/Kg		95	75 - 120
1,2-Dichloroethane	50.0	43.1		ug/Kg		86	77 - 122
1,2-Dichloropropane	50.0	49.8		ug/Kg		100	75 - 124
1,3-Dichlorobenzene	50.0	48.3		ug/Kg		97	74 - 120
1,4-Dichlorobenzene	50.0	48.1		ug/Kg		96	73 - 120
2-Butanone (MEK)	250	295		ug/Kg		118	70 - 134
2-Hexanone	250	269		ug/Kg		108	59 - 130
4-Methyl-2-pentanone (MIBK)	250	260		ug/Kg		104	65 - 133
Acetone	250	298		ug/Kg		119	61 - 137
Benzene	50.0	50.3		ug/Kg		101	79 - 127
Bromoform	50.0	54.0		ug/Kg		108	68 - 126
Bromomethane	50.0	40.4		ug/Kg		81	37 - 149
Carbon disulfide	50.0	48.9		ug/Kg		98	64 - 131
Carbon tetrachloride	50.0	44.5		ug/Kg		89	75 - 135
Chlorobenzene	50.0	49.2		ug/Kg		98	76 - 124
Dibromochloromethane	50.0	51.1		ug/Kg		102	76 - 125
Chloroethane	50.0	39.9		ug/Kg		80	69 - 135
Chloroform	50.0	46.9		ug/Kg		94	80 - 120
Chloromethane	50.0	40.0		ug/Kg		80	63 - 127
cis-1,2-Dichloroethene	50.0	49.2		ug/Kg		98	81 - 120
Cyclohexane	50.0	48.0		ug/Kg		96	65 - 120
Bromodichloromethane	50.0	48.3		ug/Kg		97	80 - 122
Dichlorodifluoromethane	50.0	44.9		ug/Kg		90	57 - 142
Ethylbenzene	50.0	49.2		ug/Kg		98	80 - 120
1,2-Dibromoethane	50.0	50.0		ug/Kg		100	78 - 120
Isopropylbenzene	50.0	47.4		ug/Kg		95	72 - 120

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

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

Lab Sample ID: LCS 480-423426/1-A

Matrix: Solid

Analysis Batch: 423427

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423426

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	100	111		ug/Kg		111	55 - 136
Methyl tert-butyl ether	50.0	45.9		ug/Kg		92	63 - 125
Methylcyclohexane	50.0	49.1		ug/Kg		98	60 - 140
Methylene Chloride	50.0	48.8		ug/Kg		98	61 - 127
Tetrachloroethene	50.0	49.3		ug/Kg		99	74 - 122
Toluene	50.0	49.1		ug/Kg		98	74 - 128
trans-1,2-Dichloroethene	50.0	49.4		ug/Kg		99	78 - 126
trans-1,3-Dichloropropene	50.0	47.9		ug/Kg		96	73 - 123
Trichloroethene	50.0	48.8		ug/Kg		98	77 - 129
Trichlorofluoromethane	50.0	42.3		ug/Kg		85	65 - 146
Vinyl chloride	50.0	40.5		ug/Kg		81	61 - 133
cis-1,3-Dichloropropene	50.0	49.2		ug/Kg		98	80 - 120
Styrene	50.0	49.5		ug/Kg		99	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		64 - 126
4-Bromofluorobenzene (Surr)	104		72 - 126
Toluene-d8 (Surr)	103		71 - 125
Dibromofluoromethane (Surr)	101		60 - 140

Lab Sample ID: 480-138304-14 MS

Matrix: Solid

Analysis Batch: 423427

Client Sample ID: NS-42 (2"-1')

Prep Type: Total/NA

Prep Batch: 423426

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND	F1 vs	56.1	46.5	vs	ug/Kg	☼	83	77 - 121
1,1,2,2-Tetrachloroethane	ND	F1 vs	56.1	45.6	vs	ug/Kg	☼	81	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	56.1	49.2	vs	ug/Kg	☼	88	60 - 140
1,1,2-Trichloroethane	ND	vs	56.1	50.1	vs	ug/Kg	☼	89	78 - 122
1,1-Dichloroethane	ND	vs	56.1	52.1	vs	ug/Kg	☼	93	73 - 126
1,1-Dichloroethene	ND	vs	56.1	51.3	vs	ug/Kg	☼	91	59 - 125
1,2,4-Trichlorobenzene	ND	vs	56.1	41.9	vs	ug/Kg	☼	75	64 - 120
1,2-Dibromo-3-Chloropropane	ND	F1 vs	56.1	34.4	F1 vs	ug/Kg	☼	61	63 - 124
1,2-Dichlorobenzene	ND	vs	56.1	47.1	vs	ug/Kg	☼	84	75 - 120
1,2-Dichloroethane	ND	F1 vs	56.1	44.3	vs	ug/Kg	☼	79	77 - 122
1,2-Dichloropropane	ND	vs	56.1	52.7	vs	ug/Kg	☼	94	75 - 124
1,3-Dichlorobenzene	ND	vs	56.1	48.0	vs	ug/Kg	☼	86	74 - 120
1,4-Dichlorobenzene	ND	vs	56.1	48.1	vs	ug/Kg	☼	86	73 - 120
2-Butanone (MEK)	ND	F1 vs	280	199	vs	ug/Kg	☼	71	70 - 134
2-Hexanone	ND	vs	280	193	vs	ug/Kg	☼	69	59 - 130
4-Methyl-2-pentanone (MIBK)	ND	vs	280	207	vs	ug/Kg	☼	74	65 - 133
Acetone	ND	F1 vs	280	174	vs	ug/Kg	☼	62	61 - 137
Benzene	ND	vs	56.1	54.7	vs	ug/Kg	☼	98	79 - 127
Bromoform	ND	vs	56.1	46.4	vs	ug/Kg	☼	83	68 - 126
Bromomethane	ND	vs	56.1	45.4	vs	ug/Kg	☼	81	37 - 149
Carbon disulfide	ND	vs	56.1	50.0	vs	ug/Kg	☼	89	64 - 131
Carbon tetrachloride	ND	vs	56.1	45.6	vs	ug/Kg	☼	81	75 - 135

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

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

Lab Sample ID: 480-138304-14 MS

Matrix: Solid

Analysis Batch: 423427

Client Sample ID: NS-42 (2"-1')

Prep Type: Total/NA

Prep Batch: 423426

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobenzene	ND	vs	56.1	51.6	vs	ug/Kg	☼	92	76 - 124
Dibromochloromethane	ND	vs	56.1	50.1	vs	ug/Kg	☼	89	76 - 125
Chloroethane	ND	vs	56.1	43.6	vs	ug/Kg	☼	78	69 - 135
Chloroform	ND	vs	56.1	51.0	vs	ug/Kg	☼	91	80 - 120
Chloromethane	ND	vs	56.1	40.9	vs	ug/Kg	☼	73	63 - 127
cis-1,2-Dichloroethene	ND	vs	56.1	53.1	vs	ug/Kg	☼	95	80 - 120
Cyclohexane	ND	vs	56.1	49.1	vs	ug/Kg	☼	88	65 - 120
Bromodichloromethane	ND	vs	56.1	50.8	vs	ug/Kg	☼	91	80 - 122
Dichlorodifluoromethane	ND	vs	56.1	44.7	vs	ug/Kg	☼	80	57 - 142
Ethylbenzene	ND	vs	56.1	51.7	vs	ug/Kg	☼	92	80 - 120
1,2-Dibromoethane	ND	vs	56.1	47.2	vs	ug/Kg	☼	84	78 - 120
Isopropylbenzene	ND	vs	56.1	49.5	vs	ug/Kg	☼	88	72 - 120
Methyl acetate	ND	vs	112	110	vs	ug/Kg	☼	99	55 - 136
Methyl tert-butyl ether	ND	vs	56.1	45.9	vs	ug/Kg	☼	82	63 - 125
Methylcyclohexane	ND	vs	56.1	48.5	vs	ug/Kg	☼	87	60 - 140
Methylene Chloride	ND	vs	56.1	52.9	vs	ug/Kg	☼	94	61 - 127
Tetrachloroethene	ND	vs	56.1	50.7	vs	ug/Kg	☼	91	74 - 122
Toluene	ND	vs	56.1	52.7	vs	ug/Kg	☼	94	74 - 128
trans-1,2-Dichloroethene	ND	vs	56.1	53.3	vs	ug/Kg	☼	95	78 - 126
trans-1,3-Dichloropropene	ND	vs	56.1	45.9	vs	ug/Kg	☼	82	73 - 123
Trichloroethene	ND	vs	56.1	51.0	vs	ug/Kg	☼	91	77 - 129
Trichlorofluoromethane	ND	vs	56.1	43.7	vs	ug/Kg	☼	78	65 - 146
Vinyl chloride	ND	vs	56.1	39.7	vs	ug/Kg	☼	71	61 - 133
cis-1,3-Dichloropropene	ND	vs	56.1	48.4	vs	ug/Kg	☼	86	80 - 120
Styrene	ND	vs	56.1	51.1	vs	ug/Kg	☼	91	80 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		64 - 126
4-Bromofluorobenzene (Surr)	103		72 - 126
Toluene-d8 (Surr)	104		71 - 125
Dibromofluoromethane (Surr)	101		60 - 140

Lab Sample ID: 480-138304-14 MSD

Matrix: Solid

Analysis Batch: 423427

Client Sample ID: NS-42 (2"-1')

Prep Type: Total/NA

Prep Batch: 423426

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
1,1,1-Trichloroethane	ND	F1 vs	55.6	42.0	F1 vs	ug/Kg	☼	75	77 - 121	10	30
1,1,1,2,2-Tetrachloroethane	ND	F1 vs	55.6	42.5	F1 vs	ug/Kg	☼	76	80 - 120	7	30
1,1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	55.6	44.9	vs	ug/Kg	☼	81	60 - 140	9	30
1,1,2-Trichloroethane	ND	vs	55.6	46.5	vs	ug/Kg	☼	84	78 - 122	8	30
1,1-Dichloroethane	ND	vs	55.6	46.8	vs	ug/Kg	☼	84	73 - 126	11	30
1,1-Dichloroethene	ND	vs	55.6	45.4	vs	ug/Kg	☼	82	59 - 125	12	30
1,2,4-Trichlorobenzene	ND	vs	55.6	38.7	vs	ug/Kg	☼	70	64 - 120	8	30
1,2-Dibromo-3-Chloropropane	ND	F1 vs	55.6	33.4	F1 vs	ug/Kg	☼	60	63 - 124	3	30
1,2-Dichlorobenzene	ND	vs	55.6	43.7	vs	ug/Kg	☼	79	75 - 120	7	30
1,2-Dichloroethane	ND	F1 vs	55.6	40.7	F1 vs	ug/Kg	☼	73	77 - 122	8	30

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

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

Lab Sample ID: 480-138304-14 MSD

Matrix: Solid

Analysis Batch: 423427

Client Sample ID: NS-42 (2"-1')

Prep Type: Total/NA

Prep Batch: 423426

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloropropane	ND	vs	55.6	48.6	vs	ug/Kg	☼	87	75 - 124	8	30
1,3-Dichlorobenzene	ND	vs	55.6	44.1	vs	ug/Kg	☼	79	74 - 120	9	30
1,4-Dichlorobenzene	ND	vs	55.6	44.0	vs	ug/Kg	☼	79	73 - 120	9	30
2-Butanone (MEK)	ND	F1 vs	278	178	F1 vs	ug/Kg	☼	64	70 - 134	11	30
2-Hexanone	ND	vs	278	179	vs	ug/Kg	☼	64	59 - 130	7	30
4-Methyl-2-pentanone (MIBK)	ND	vs	278	195	vs	ug/Kg	☼	70	65 - 133	6	30
Acetone	ND	F1 vs	278	152	F1 vs	ug/Kg	☼	55	61 - 137	14	30
Benzene	ND	vs	55.6	49.0	vs	ug/Kg	☼	88	79 - 127	11	30
Bromoform	ND	vs	55.6	44.7	vs	ug/Kg	☼	80	68 - 126	4	30
Bromomethane	ND	vs	55.6	39.0	vs	ug/Kg	☼	70	37 - 149	15	30
Carbon disulfide	ND	vs	55.6	44.2	vs	ug/Kg	☼	80	64 - 131	12	30
Carbon tetrachloride	ND	vs	55.6	42.0	vs	ug/Kg	☼	75	75 - 135	8	30
Chlorobenzene	ND	vs	55.6	47.4	vs	ug/Kg	☼	85	76 - 124	9	30
Dibromochloromethane	ND	vs	55.6	47.7	vs	ug/Kg	☼	86	76 - 125	5	30
Chloroethane	ND	vs	55.6	38.3	vs	ug/Kg	☼	69	69 - 135	13	30
Chloroform	ND	vs	55.6	45.9	vs	ug/Kg	☼	83	80 - 120	10	30
Chloromethane	ND	vs	55.6	35.8	vs	ug/Kg	☼	64	63 - 127	13	30
cis-1,2-Dichloroethene	ND	vs	55.6	47.7	vs	ug/Kg	☼	86	80 - 120	11	30
Cyclohexane	ND	vs	55.6	43.7	vs	ug/Kg	☼	79	65 - 120	12	30
Bromodichloromethane	ND	vs	55.6	47.3	vs	ug/Kg	☼	85	80 - 122	7	30
Dichlorodifluoromethane	ND	vs	55.6	39.7	vs	ug/Kg	☼	71	57 - 142	12	30
Ethylbenzene	ND	vs	55.6	47.1	vs	ug/Kg	☼	85	80 - 120	9	30
1,2-Dibromoethane	ND	vs	55.6	43.9	vs	ug/Kg	☼	79	78 - 120	7	30
Isopropylbenzene	ND	vs	55.6	44.6	vs	ug/Kg	☼	80	72 - 120	11	30
Methyl acetate	ND	vs	111	100	vs	ug/Kg	☼	90	55 - 136	10	30
Methyl tert-butyl ether	ND	vs	55.6	42.3	vs	ug/Kg	☼	76	63 - 125	8	30
Methylcyclohexane	ND	vs	55.6	43.2	vs	ug/Kg	☼	78	60 - 140	12	30
Methylene Chloride	ND	vs	55.6	46.2	vs	ug/Kg	☼	83	61 - 127	14	30
Tetrachloroethene	ND	vs	55.6	46.1	vs	ug/Kg	☼	83	74 - 122	10	30
Toluene	ND	vs	55.6	47.5	vs	ug/Kg	☼	85	74 - 128	10	30
trans-1,2-Dichloroethene	ND	vs	55.6	47.4	vs	ug/Kg	☼	85	78 - 126	12	30
trans-1,3-Dichloropropene	ND	vs	55.6	42.8	vs	ug/Kg	☼	77	73 - 123	7	30
Trichloroethene	ND	vs	55.6	46.2	vs	ug/Kg	☼	83	77 - 129	10	30
Trichlorofluoromethane	ND	vs	55.6	38.9	vs	ug/Kg	☼	70	65 - 146	12	30
Vinyl chloride	ND	vs	55.6	35.9	vs	ug/Kg	☼	65	61 - 133	10	30
cis-1,3-Dichloropropene	ND	vs	55.6	44.7	vs	ug/Kg	☼	80	80 - 120	8	30
Styrene	ND	vs	55.6	46.6	vs	ug/Kg	☼	84	80 - 120	9	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		64 - 126
4-Bromofluorobenzene (Surr)	103		72 - 126
Toluene-d8 (Surr)	104		71 - 125
Dibromofluoromethane (Surr)	100		60 - 140

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-422683/1-A

Matrix: Solid

Analysis Batch: 423511

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422683

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		170	45	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
2,4,6-Trichlorophenol	ND		170	33	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
2,4-Dimethylphenol	ND		170	40	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
2,4-Dinitrophenol	ND		1600	770	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
2,4-Dinitrotoluene	ND		170	34	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
2-Chloronaphthalene	ND		170	28	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
2-Chlorophenol	ND		170	30	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
2-Methylnaphthalene	ND		170	33	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
2-Methylphenol	ND		170	20	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
2-Nitroaniline	ND		320	25	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
2-Nitrophenol	ND		170	47	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
3,3'-Dichlorobenzidine	ND		320	200	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
3-Nitroaniline	ND		320	46	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
4,6-Dinitro-2-methylphenol	ND		320	170	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
4-Chloro-3-methylphenol	ND		170	41	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
4-Chloroaniline	ND		170	41	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
4-Methylphenol	ND		320	20	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
4-Nitroaniline	ND		320	87	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
4-Nitrophenol	ND		320	120	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Acenaphthene	ND		170	25	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Acenaphthylene	ND		170	22	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Acetophenone	ND		170	23	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Anthracene	ND		170	41	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Atrazine	ND		170	58	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Benzaldehyde	ND		170	130	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Benzo[a]anthracene	ND		170	17	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Benzo[a]pyrene	ND		170	25	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Biphenyl	ND		170	25	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
bis (2-chloroisopropyl) ether	ND		170	33	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Bis(2-chloroethoxy)methane	ND		170	35	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Bis(2-ethylhexyl) phthalate	ND		170	57	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Caprolactam	ND		170	50	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Carbazole	ND		170	20	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Chrysene	ND		170	37	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Dibenz(a,h)anthracene	ND		170	29	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Dibenzofuran	ND		170	20	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Diethyl phthalate	ND		170	22	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Dimethyl phthalate	ND		170	20	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Di-n-butyl phthalate	ND		170	28	ug/Kg		07/02/18 14:22	07/09/18 13:11	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-422683/1-A

Matrix: Solid

Analysis Batch: 423511

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422683

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	ND		170	20	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Fluoranthene	ND		170	18	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Fluorene	ND		170	20	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Hexachlorobenzene	ND		170	23	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Hexachlorobutadiene	ND		170	25	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Hexachloroethane	ND		170	22	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Isophorone	ND		170	35	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Naphthalene	ND		170	22	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Nitrobenzene	ND		170	19	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
N-Nitrosodi-n-propylamine	ND		170	28	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Pentachlorophenol	ND		320	170	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Phenanthrene	ND		170	25	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Phenol	ND		170	26	ug/Kg		07/02/18 14:22	07/09/18 13:11	1
Pyrene	ND		170	20	ug/Kg		07/02/18 14:22	07/09/18 13:11	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	436	T J	ug/Kg		1.70		07/02/18 14:22	07/09/18 13:11	1
Unknown	268	T J	ug/Kg		2.95		07/02/18 14:22	07/09/18 13:11	1
Unknown	321	T J	ug/Kg		2.98		07/02/18 14:22	07/09/18 13:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	82		54 - 120	07/02/18 14:22	07/09/18 13:11	1
2-Fluorobiphenyl	93		60 - 120	07/02/18 14:22	07/09/18 13:11	1
2-Fluorophenol	83		52 - 120	07/02/18 14:22	07/09/18 13:11	1
Nitrobenzene-d5	85		53 - 120	07/02/18 14:22	07/09/18 13:11	1
Phenol-d5	86		54 - 120	07/02/18 14:22	07/09/18 13:11	1
p-Terphenyl-d14	115		65 - 121	07/02/18 14:22	07/09/18 13:11	1

Lab Sample ID: LCS 480-422683/2-A

Matrix: Solid

Analysis Batch: 423748

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422683

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	1640	1630		ug/Kg		99	59 - 126
2,4,6-Trichlorophenol	1640	1620		ug/Kg		99	59 - 123
2,4-Dichlorophenol	1640	1620		ug/Kg		99	61 - 120
2,4-Dimethylphenol	1640	1640		ug/Kg		100	59 - 120
2,4-Dinitrophenol	3280	2470		ug/Kg		75	41 - 146
2,4-Dinitrotoluene	1640	1580		ug/Kg		96	63 - 120
2,6-Dinitrotoluene	1640	1540		ug/Kg		94	66 - 120
2-Chloronaphthalene	1640	1540		ug/Kg		94	57 - 120
2-Chlorophenol	1640	1450		ug/Kg		88	53 - 120
2-Methylnaphthalene	1640	1510		ug/Kg		92	59 - 120
2-Methylphenol	1640	1480		ug/Kg		90	54 - 120

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-422683/2-A

Matrix: Solid

Analysis Batch: 423748

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422683

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Nitroaniline	1640	1540		ug/Kg		94	61 - 120
2-Nitrophenol	1640	1450		ug/Kg		88	56 - 120
3,3'-Dichlorobenzidine	3280	2390		ug/Kg		73	54 - 120
3-Nitroaniline	1640	981		ug/Kg		60	48 - 120
4,6-Dinitro-2-methylphenol	3280	2850		ug/Kg		87	49 - 122
4-Bromophenyl phenyl ether	1640	1600		ug/Kg		97	58 - 120
4-Chloro-3-methylphenol	1640	1570		ug/Kg		95	61 - 120
4-Chloroaniline	1640	706		ug/Kg		43	38 - 120
4-Chlorophenyl phenyl ether	1640	1620		ug/Kg		99	63 - 124
4-Methylphenol	1640	1510		ug/Kg		92	55 - 120
4-Nitroaniline	1640	1180		ug/Kg		72	56 - 120
4-Nitrophenol	3280	3340		ug/Kg		102	43 - 147
Acenaphthene	1640	1560		ug/Kg		95	62 - 120
Acenaphthylene	1640	1700		ug/Kg		104	58 - 121
Acetophenone	1640	1480		ug/Kg		90	54 - 120
Anthracene	1640	1570		ug/Kg		96	62 - 120
Atrazine	3280	2070		ug/Kg		63	60 - 127
Benzaldehyde	3280	2520		ug/Kg		77	10 - 150
Benzo[a]anthracene	1640	1640		ug/Kg		100	65 - 120
Benzo[a]pyrene	1640	1670		ug/Kg		102	64 - 120
Benzo[b]fluoranthene	1640	1730		ug/Kg		105	64 - 120
Benzo[g,h,i]perylene	1640	1510		ug/Kg		92	45 - 145
Benzo[k]fluoranthene	1640	1700		ug/Kg		104	65 - 120
Biphenyl	1640	1540		ug/Kg		94	59 - 120
bis (2-chloroisopropyl) ether	1640	1300		ug/Kg		79	44 - 120
Bis(2-chloroethoxy)methane	1640	1460		ug/Kg		89	55 - 120
Bis(2-chloroethyl)ether	1640	1450		ug/Kg		88	45 - 120
Bis(2-ethylhexyl) phthalate	1640	1560		ug/Kg		95	61 - 133
Butyl benzyl phthalate	1640	1630		ug/Kg		99	61 - 129
Caprolactam	3280	3030		ug/Kg		92	47 - 120
Carbazole	1640	1570		ug/Kg		96	65 - 120
Chrysene	1640	1620		ug/Kg		99	64 - 120
Dibenz(a,h)anthracene	1640	1500		ug/Kg		91	54 - 132
Dibenzofuran	1640	1570		ug/Kg		95	63 - 120
Diethyl phthalate	1640	1620		ug/Kg		98	66 - 120
Dimethyl phthalate	1640	1610		ug/Kg		98	65 - 124
Di-n-butyl phthalate	1640	1590		ug/Kg		97	58 - 130
Di-n-octyl phthalate	1640	1520		ug/Kg		93	57 - 133
Fluoranthene	1640	1590		ug/Kg		97	62 - 120
Fluorene	1640	1570		ug/Kg		96	63 - 120
Hexachlorobenzene	1640	1680		ug/Kg		102	60 - 120
Hexachlorobutadiene	1640	1500		ug/Kg		92	45 - 120
Hexachlorocyclopentadiene	1640	1920		ug/Kg		117	47 - 120
Hexachloroethane	1640	1330		ug/Kg		81	41 - 120
Indeno[1,2,3-cd]pyrene	1640	1500		ug/Kg		91	56 - 134
Isophorone	1640	1580		ug/Kg		96	56 - 120
Naphthalene	1640	1460		ug/Kg		89	55 - 120
Nitrobenzene	1640	1430		ug/Kg		87	54 - 120

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-422683/2-A

Matrix: Solid

Analysis Batch: 423748

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422683

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Nitrosodi-n-propylamine	1640	1470		ug/Kg		90	52 - 120
Pentachlorophenol	3280	2760		ug/Kg		84	51 - 120
Phenanthrene	1640	1590		ug/Kg		97	60 - 120
Phenol	1640	1300		ug/Kg		79	53 - 120
Pyrene	1640	1730		ug/Kg		105	61 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	92		54 - 120
2-Fluorobiphenyl	87		60 - 120
2-Fluorophenol	79		52 - 120
Nitrobenzene-d5	79		53 - 120
Phenol-d5	80		54 - 120
p-Terphenyl-d14	99		65 - 121

Lab Sample ID: 480-138304-14 MS

Matrix: Solid

Analysis Batch: 423511

Client Sample ID: NS-42 (2"-1')

Prep Type: Total/NA

Prep Batch: 422683

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	ND		1840	1720		ug/Kg	☼	93	46 - 120
2,4,6-Trichlorophenol	ND		1840	1730		ug/Kg	☼	94	41 - 123
2,4-Dichlorophenol	ND		1840	1540		ug/Kg	☼	83	45 - 120
2,4-Dimethylphenol	ND		1840	1500		ug/Kg	☼	82	52 - 120
2,4-Dinitrophenol	ND		3690	2790		ug/Kg	☼	76	41 - 146
2,4-Dinitrotoluene	ND		1840	1750		ug/Kg	☼	95	63 - 125
2,6-Dinitrotoluene	ND		1840	1680		ug/Kg	☼	91	66 - 120
2-Chloronaphthalene	ND		1840	1680		ug/Kg	☼	91	57 - 120
2-Chlorophenol	ND		1840	1380		ug/Kg	☼	75	43 - 120
2-Methylnaphthalene	ND		1840	1500		ug/Kg	☼	81	55 - 120
2-Methylphenol	ND		1840	1310		ug/Kg	☼	71	48 - 120
2-Nitroaniline	ND		1840	1630		ug/Kg	☼	88	61 - 120
2-Nitrophenol	ND		1840	1540		ug/Kg	☼	84	37 - 120
3,3'-Dichlorobenzidine	ND	F2	3690	2710		ug/Kg	☼	73	37 - 126
3-Nitroaniline	ND		1840	1350		ug/Kg	☼	73	48 - 120
4,6-Dinitro-2-methylphenol	ND		3690	3410		ug/Kg	☼	93	23 - 149
4-Bromophenyl phenyl ether	ND	F2	1840	1750		ug/Kg	☼	95	58 - 120
4-Chloro-3-methylphenol	ND		1840	1560		ug/Kg	☼	85	49 - 125
4-Chloroaniline	ND		1840	1250		ug/Kg	☼	68	38 - 120
4-Chlorophenyl phenyl ether	ND		1840	1670		ug/Kg	☼	91	63 - 124
4-Methylphenol	ND		1840	1270		ug/Kg	☼	69	50 - 120
4-Nitroaniline	ND		1840	1220		ug/Kg	☼	66	47 - 120
4-Nitrophenol	ND		3690	3190		ug/Kg	☼	87	31 - 147
Acenaphthene	ND		1840	1650		ug/Kg	☼	89	60 - 120
Acenaphthylene	ND		1840	1800		ug/Kg	☼	98	58 - 121
Acetophenone	ND		1840	1370		ug/Kg	☼	74	47 - 120
Anthracene	ND		1840	1760		ug/Kg	☼	95	62 - 120
Atrazine	ND		3690	3480		ug/Kg	☼	94	60 - 150
Benzaldehyde	ND		3690	2920		ug/Kg	☼	79	10 - 150

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-138304-14 MS

Matrix: Solid

Analysis Batch: 423511

Client Sample ID: NS-42 (2"-1')

Prep Type: Total/NA

Prep Batch: 422683

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	ND		1840	1810		ug/Kg	☼	98	65 - 120
Benzo[a]pyrene	ND		1840	1780		ug/Kg	☼	96	64 - 120
Benzo[b]fluoranthene	ND		1840	1820		ug/Kg	☼	99	64 - 120
Benzo[g,h,i]perylene	ND		1840	1520		ug/Kg	☼	82	45 - 145
Benzo[k]fluoranthene	ND		1840	1790		ug/Kg	☼	97	65 - 120
Biphenyl	ND		1840	1670		ug/Kg	☼	91	58 - 120
bis (2-chloroisopropyl) ether	ND		1840	1160		ug/Kg	☼	63	31 - 120
Bis(2-chloroethoxy)methane	ND		1840	1470		ug/Kg	☼	80	52 - 120
Bis(2-chloroethyl)ether	ND		1840	1250		ug/Kg	☼	68	45 - 120
Bis(2-ethylhexyl) phthalate	ND		1840	2100		ug/Kg	☼	114	61 - 133
Butyl benzyl phthalate	ND	F1	1840	2170		ug/Kg	☼	118	61 - 120
Caprolactam	ND		3690	2670		ug/Kg	☼	72	37 - 133
Carbazole	ND		1840	1670		ug/Kg	☼	90	59 - 120
Chrysene	ND		1840	1800		ug/Kg	☼	98	64 - 120
Dibenz(a,h)anthracene	ND		1840	1520		ug/Kg	☼	82	54 - 132
Dibenzofuran	ND		1840	1670		ug/Kg	☼	91	62 - 120
Diethyl phthalate	ND	F2	1840	1720		ug/Kg	☼	93	66 - 120
Dimethyl phthalate	ND		1840	1790		ug/Kg	☼	97	65 - 124
Di-n-butyl phthalate	ND		1840	1910		ug/Kg	☼	104	58 - 130
Di-n-octyl phthalate	ND		1840	1930		ug/Kg	☼	105	57 - 133
Fluoranthene	ND		1840	1730		ug/Kg	☼	94	62 - 120
Fluorene	ND		1840	1650		ug/Kg	☼	89	63 - 120
Hexachlorobenzene	ND		1840	1670		ug/Kg	☼	90	60 - 120
Hexachlorobutadiene	ND		1840	1620		ug/Kg	☼	88	45 - 120
Hexachlorocyclopentadiene	ND		1840	1780		ug/Kg	☼	96	31 - 120
Hexachloroethane	ND		1840	1310		ug/Kg	☼	71	21 - 120
Indeno[1,2,3-cd]pyrene	ND		1840	1520		ug/Kg	☼	82	56 - 134
Isophorone	ND		1840	1610		ug/Kg	☼	87	56 - 120
Naphthalene	ND		1840	1480		ug/Kg	☼	80	46 - 120
Nitrobenzene	ND		1840	1460		ug/Kg	☼	79	49 - 120
N-Nitrosodi-n-propylamine	ND		1840	1280		ug/Kg	☼	69	46 - 120
Pentachlorophenol	ND		3690	2610		ug/Kg	☼	71	25 - 136
Phenanthrene	ND		1840	1750		ug/Kg	☼	95	60 - 122
Phenol	ND		1840	1210		ug/Kg	☼	66	50 - 120
Pyrene	ND		1840	2120		ug/Kg	☼	115	61 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
2,4,6-Tribromophenol	83		54 - 120
2-Fluorobiphenyl	93		60 - 120
2-Fluorophenol	72		52 - 120
Nitrobenzene-d5	83		53 - 120
Phenol-d5	74		54 - 120
p-Terphenyl-d14	111		65 - 121

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-138304-14 MSD

Matrix: Solid

Analysis Batch: 423511

Client Sample ID: NS-42 (2"-1')

Prep Type: Total/NA

Prep Batch: 422683

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4,5-Trichlorophenol	ND		1860	1970		ug/Kg	✱	106	46 - 120	14	18
2,4,6-Trichlorophenol	ND		1860	1980		ug/Kg	✱	106	41 - 123	13	19
2,4-Dichlorophenol	ND		1860	1770		ug/Kg	✱	95	45 - 120	14	19
2,4-Dimethylphenol	ND		1860	1790		ug/Kg	✱	97	52 - 120	18	42
2,4-Dinitrophenol	ND		3710	2760		ug/Kg	✱	74	41 - 146	1	22
2,4-Dinitrotoluene	ND		1860	1990		ug/Kg	✱	107	63 - 125	13	20
2,6-Dinitrotoluene	ND		1860	1930		ug/Kg	✱	104	66 - 120	14	15
2-Chloronaphthalene	ND		1860	1890		ug/Kg	✱	102	57 - 120	12	21
2-Chlorophenol	ND		1860	1590		ug/Kg	✱	86	43 - 120	14	25
2-Methylnaphthalene	ND		1860	1730		ug/Kg	✱	93	55 - 120	14	21
2-Methylphenol	ND		1860	1560		ug/Kg	✱	84	48 - 120	17	27
2-Nitroaniline	ND		1860	1880		ug/Kg	✱	101	61 - 120	14	15
2-Nitrophenol	ND		1860	1760		ug/Kg	✱	95	37 - 120	13	18
3,3'-Dichlorobenzidine	ND	F2	3710	3540	F2	ug/Kg	✱	95	37 - 126	27	25
3-Nitroaniline	ND		1860	1560		ug/Kg	✱	84	48 - 120	14	19
4,6-Dinitro-2-methylphenol	ND		3710	3590		ug/Kg	✱	97	23 - 149	5	15
4-Bromophenyl phenyl ether	ND	F2	1860	2050	F2	ug/Kg	✱	111	58 - 120	16	15
4-Chloro-3-methylphenol	ND		1860	1720		ug/Kg	✱	93	49 - 125	10	27
4-Chloroaniline	ND		1860	1370		ug/Kg	✱	74	38 - 120	9	22
4-Chlorophenyl phenyl ether	ND		1860	1910		ug/Kg	✱	103	63 - 124	13	16
4-Methylphenol	ND		1860	1530		ug/Kg	✱	82	50 - 120	18	24
4-Nitroaniline	ND		1860	1420		ug/Kg	✱	76	47 - 120	15	24
4-Nitrophenol	ND		3710	4120		ug/Kg	✱	111	31 - 147	25	25
Acenaphthene	ND		1860	1890		ug/Kg	✱	102	60 - 120	14	35
Acenaphthylene	ND		1860	2060		ug/Kg	✱	111	58 - 121	13	18
Acetophenone	ND		1860	1630		ug/Kg	✱	88	47 - 120	18	20
Anthracene	ND		1860	1980		ug/Kg	✱	106	62 - 120	12	15
Atrazine	ND		3710	3930		ug/Kg	✱	106	60 - 150	12	20
Benzaldehyde	ND		3710	3240	E	ug/Kg	✱	87	10 - 150	10	20
Benzo[a]anthracene	ND		1860	2030		ug/Kg	✱	109	65 - 120	11	15
Benzo[a]pyrene	ND		1860	2040		ug/Kg	✱	110	64 - 120	14	15
Benzo[b]fluoranthene	ND		1860	2050		ug/Kg	✱	111	64 - 120	12	15
Benzo[g,h,i]perylene	ND		1860	1700		ug/Kg	✱	91	45 - 145	11	15
Benzo[k]fluoranthene	ND		1860	2090		ug/Kg	✱	113	65 - 120	16	22
Biphenyl	ND		1860	1910		ug/Kg	✱	103	58 - 120	13	20
bis (2-chloroisopropyl) ether	ND		1860	1350		ug/Kg	✱	73	31 - 120	15	24
Bis(2-chloroethoxy)methane	ND		1860	1640		ug/Kg	✱	88	52 - 120	11	17
Bis(2-chloroethyl)ether	ND		1860	1440		ug/Kg	✱	77	45 - 120	14	21
Bis(2-ethylhexyl) phthalate	ND		1860	2360		ug/Kg	✱	127	61 - 133	11	15
Butyl benzyl phthalate	ND	F1	1860	2490	F1	ug/Kg	✱	134	61 - 120	14	16
Caprolactam	ND		3710	3160		ug/Kg	✱	85	37 - 133	17	20
Carbazole	ND		1860	1770		ug/Kg	✱	95	59 - 120	6	20
Chrysene	ND		1860	2040		ug/Kg	✱	110	64 - 120	13	15
Dibenz(a,h)anthracene	ND		1860	1720		ug/Kg	✱	93	54 - 132	12	15
Dibenzofuran	ND		1860	1900		ug/Kg	✱	102	62 - 120	13	15
Diethyl phthalate	ND	F2	1860	2010	F2	ug/Kg	✱	108	66 - 120	16	15
Dimethyl phthalate	ND		1860	2070		ug/Kg	✱	112	65 - 124	14	15
Di-n-butyl phthalate	ND		1860	2120		ug/Kg	✱	114	58 - 130	10	15

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-138304-14 MSD

Matrix: Solid

Analysis Batch: 423511

Client Sample ID: NS-42 (2"-1')

Prep Type: Total/NA

Prep Batch: 422683

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Di-n-octyl phthalate	ND		1860	2190		ug/Kg	✱	118	57 - 133	13	16
Fluoranthene	ND		1860	1860		ug/Kg	✱	100	62 - 120	7	15
Fluorene	ND		1860	1900		ug/Kg	✱	102	63 - 120	14	15
Hexachlorobenzene	ND		1860	1940		ug/Kg	✱	104	60 - 120	15	15
Hexachlorobutadiene	ND		1860	1850		ug/Kg	✱	100	45 - 120	14	44
Hexachlorocyclopentadiene	ND		1860	2080		ug/Kg	✱	112	31 - 120	16	49
Hexachloroethane	ND		1860	1550		ug/Kg	✱	84	21 - 120	17	46
Indeno[1,2,3-cd]pyrene	ND		1860	1700		ug/Kg	✱	91	56 - 134	11	15
Isophorone	ND		1860	1830		ug/Kg	✱	98	56 - 120	13	17
Naphthalene	ND		1860	1660		ug/Kg	✱	89	46 - 120	12	29
Nitrobenzene	ND		1860	1660		ug/Kg	✱	90	49 - 120	13	24
N-Nitrosodi-n-propylamine	ND		1860	1510		ug/Kg	✱	82	46 - 120	17	31
Pentachlorophenol	ND		3710	3080		ug/Kg	✱	83	25 - 136	16	35
Phenanthrene	ND		1860	1970		ug/Kg	✱	106	60 - 122	12	15
Phenol	ND		1860	1410		ug/Kg	✱	76	50 - 120	15	35
Pyrene	ND		1860	2480		ug/Kg	✱	133	61 - 133	16	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2,4,6-Tribromophenol	95		54 - 120
2-Fluorobiphenyl	106		60 - 120
2-Fluorophenol	84		52 - 120
Nitrobenzene-d5	92		53 - 120
Phenol-d5	85		54 - 120
p-Terphenyl-d14	128	X	65 - 121

Lab Sample ID: MB 480-422686/1-A

Matrix: Solid

Analysis Batch: 423763

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422686

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		170	46	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
2,4,6-Trichlorophenol	ND		170	34	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
2,4-Dimethylphenol	ND		170	41	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
2,4-Dinitrophenol	ND		1700	780	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
2,4-Dinitrotoluene	ND		170	35	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
2-Chloronaphthalene	ND		170	28	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
2-Chlorophenol	ND		170	31	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
2-Methylnaphthalene	ND		170	34	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
2-Methylphenol	ND		170	20	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
2-Nitroaniline	ND		330	25	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
2-Nitrophenol	ND		170	48	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
3,3'-Dichlorobenzidine	ND		330	200	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
3-Nitroaniline	ND		330	47	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
4,6-Dinitro-2-methylphenol	ND		330	170	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
4-Chloro-3-methylphenol	ND		170	42	ug/Kg		07/02/18 14:33	07/10/18 17:32	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-422686/1-A

Matrix: Solid

Analysis Batch: 423763

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422686

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		170	42	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
4-Methylphenol	ND		330	20	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
4-Nitroaniline	ND		330	89	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
4-Nitrophenol	ND		330	120	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Acenaphthene	ND		170	25	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Acenaphthylene	ND		170	22	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Acetophenone	ND		170	23	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Anthracene	ND		170	42	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Atrazine	ND		170	59	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Benzaldehyde	ND		170	130	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Benzo[a]anthracene	ND		170	17	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Benzo[a]pyrene	ND		170	25	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Biphenyl	ND		170	25	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
bis (2-chloroisopropyl) ether	ND		170	34	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Bis(2-chloroethoxy)methane	ND		170	36	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Bis(2-ethylhexyl) phthalate	ND		170	58	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Caprolactam	ND		170	51	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Carbazole	ND		170	20	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Chrysene	ND		170	38	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Dibenzofuran	ND		170	20	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Diethyl phthalate	ND		170	22	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Dimethyl phthalate	ND		170	20	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Di-n-butyl phthalate	ND		170	29	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Fluoranthene	ND		170	18	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Fluorene	ND		170	20	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Hexachlorobenzene	ND		170	23	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Hexachlorobutadiene	ND		170	25	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Hexachloroethane	ND		170	22	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Isophorone	ND		170	36	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Naphthalene	ND		170	22	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Nitrobenzene	ND		170	19	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
N-Nitrosodi-n-propylamine	ND		170	29	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Pentachlorophenol	ND		330	170	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Phenanthrene	ND		170	25	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Phenol	ND		170	26	ug/Kg		07/02/18 14:33	07/10/18 17:32	1
Pyrene	ND		170	20	ug/Kg		07/02/18 14:33	07/10/18 17:32	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-422686/1-A

Matrix: Solid

Analysis Batch: 423763

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422686

Tentatively Identified Compound	MB MB		Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
	Est. Result	Qualifier							
Unknown	287	T J	ug/Kg		4.49		07/02/18 14:33	07/10/18 17:32	1
Unknown	134	T J	ug/Kg		4.96		07/02/18 14:33	07/10/18 17:32	1
Surrogate	MB MB		Limits				Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
2,4,6-Tribromophenol	55		54 - 120				07/02/18 14:33	07/10/18 17:32	1
2-Fluorobiphenyl	72		60 - 120				07/02/18 14:33	07/10/18 17:32	1
2-Fluorophenol	64		52 - 120				07/02/18 14:33	07/10/18 17:32	1
Nitrobenzene-d5	62		53 - 120				07/02/18 14:33	07/10/18 17:32	1
Phenol-d5	62		54 - 120				07/02/18 14:33	07/10/18 17:32	1
p-Terphenyl-d14	87		65 - 121				07/02/18 14:33	07/10/18 17:32	1

Lab Sample ID: LCS 480-422686/2-A

Matrix: Solid

Analysis Batch: 423763

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422686

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	1640	1260		ug/Kg		77	59 - 126
2,4,6-Trichlorophenol	1640	1210		ug/Kg		74	59 - 123
2,4-Dichlorophenol	1640	1270		ug/Kg		78	61 - 120
2,4-Dimethylphenol	1640	1230		ug/Kg		75	59 - 120
2,4-Dinitrophenol	3290	1990		ug/Kg		61	41 - 146
2,4-Dinitrotoluene	1640	1240		ug/Kg		75	63 - 120
2,6-Dinitrotoluene	1640	1370		ug/Kg		83	66 - 120
2-Chloronaphthalene	1640	1240		ug/Kg		76	57 - 120
2-Chlorophenol	1640	1240		ug/Kg		75	53 - 120
2-Methylnaphthalene	1640	1300		ug/Kg		79	59 - 120
2-Methylphenol	1640	1230		ug/Kg		75	54 - 120
2-Nitroaniline	1640	1190		ug/Kg		72	61 - 120
2-Nitrophenol	1640	1220		ug/Kg		74	56 - 120
3,3'-Dichlorobenzidine	3290	2590		ug/Kg		79	54 - 120
3-Nitroaniline	1640	1230		ug/Kg		75	48 - 120
4,6-Dinitro-2-methylphenol	3290	2360		ug/Kg		72	49 - 122
4-Bromophenyl phenyl ether	1640	1280		ug/Kg		78	58 - 120
4-Chloro-3-methylphenol	1640	1230		ug/Kg		75	61 - 120
4-Chloroaniline	1640	1140		ug/Kg		70	38 - 120
4-Chlorophenyl phenyl ether	1640	1300		ug/Kg		79	63 - 124
4-Methylphenol	1640	1210		ug/Kg		73	55 - 120
4-Nitroaniline	1640	1230		ug/Kg		75	56 - 120
4-Nitrophenol	3290	2440		ug/Kg		74	43 - 147
Acenaphthene	1640	1340		ug/Kg		82	62 - 120
Acenaphthylene	1640	1430		ug/Kg		87	58 - 121
Acetophenone	1640	1240		ug/Kg		76	54 - 120
Anthracene	1640	1360		ug/Kg		83	62 - 120
Atrazine	3290	3000		ug/Kg		91	60 - 127
Benzaldehyde	3290	2650	E	ug/Kg		81	10 - 150
Benzo[a]anthracene	1640	1520		ug/Kg		93	65 - 120
Benzo[a]pyrene	1640	1610		ug/Kg		98	64 - 120

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-422686/2-A

Matrix: Solid

Analysis Batch: 423763

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422686

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[b]fluoranthene	1640	1580		ug/Kg		96	64 - 120
Benzo[g,h,i]perylene	1640	1340		ug/Kg		82	45 - 145
Benzo[k]fluoranthene	1640	1580		ug/Kg		96	65 - 120
Biphenyl	1640	1300		ug/Kg		79	59 - 120
bis (2-chloroisopropyl) ether	1640	1500		ug/Kg		92	44 - 120
Bis(2-chloroethoxy)methane	1640	1160		ug/Kg		71	55 - 120
Bis(2-chloroethyl)ether	1640	1050		ug/Kg		64	45 - 120
Bis(2-ethylhexyl) phthalate	1640	1510		ug/Kg		92	61 - 133
Butyl benzyl phthalate	1640	1450		ug/Kg		88	61 - 129
Caprolactam	3290	2980		ug/Kg		91	47 - 120
Carbazole	1640	1360		ug/Kg		83	65 - 120
Chrysene	1640	1500		ug/Kg		91	64 - 120
Dibenz(a,h)anthracene	1640	1300		ug/Kg		79	54 - 132
Dibenzofuran	1640	1340		ug/Kg		82	63 - 120
Diethyl phthalate	1640	1390		ug/Kg		84	66 - 120
Dimethyl phthalate	1640	1380		ug/Kg		84	65 - 124
Di-n-butyl phthalate	1640	1420		ug/Kg		86	58 - 130
Di-n-octyl phthalate	1640	1500		ug/Kg		91	57 - 133
Fluoranthene	1640	1370		ug/Kg		83	62 - 120
Fluorene	1640	1360		ug/Kg		83	63 - 120
Hexachlorobenzene	1640	1260		ug/Kg		77	60 - 120
Hexachlorobutadiene	1640	1160		ug/Kg		71	45 - 120
Hexachlorocyclopentadiene	1640	1290		ug/Kg		78	47 - 120
Hexachloroethane	1640	1100		ug/Kg		67	41 - 120
Indeno[1,2,3-cd]pyrene	1640	1360		ug/Kg		83	56 - 134
Isophorone	1640	1270		ug/Kg		77	56 - 120
Naphthalene	1640	1200		ug/Kg		73	55 - 120
Nitrobenzene	1640	1080		ug/Kg		66	54 - 120
N-Nitrosodi-n-propylamine	1640	1170		ug/Kg		71	52 - 120
Pentachlorophenol	3290	2190		ug/Kg		67	51 - 120
Phenanthrene	1640	1440		ug/Kg		88	60 - 120
Phenol	1640	1100		ug/Kg		67	53 - 120
Pyrene	1640	1560		ug/Kg		95	61 - 133

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol	60		54 - 120
2-Fluorobiphenyl	71		60 - 120
2-Fluorophenol	66		52 - 120
Nitrobenzene-d5	62		53 - 120
Phenol-d5	66		54 - 120
p-Terphenyl-d14	85		65 - 121

Lab Sample ID: 480-138304-21 MS

Matrix: Solid

Analysis Batch: 423763

Client Sample ID: SS-29 (0-2")

Prep Type: Total/NA

Prep Batch: 422686

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	ND		2120	1690		ug/Kg		80	46 - 120

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-138304-21 MS

Matrix: Solid

Analysis Batch: 423763

Client Sample ID: SS-29 (0-2")

Prep Type: Total/NA

Prep Batch: 422686

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,6-Trichlorophenol	ND		2120	1620		ug/Kg	☼	76	41 - 123
2,4-Dichlorophenol	ND		2120	1710		ug/Kg	☼	81	45 - 120
2,4-Dimethylphenol	ND		2120	1580		ug/Kg	☼	75	52 - 120
2,4-Dinitrophenol	ND		4230	3210		ug/Kg	☼	76	41 - 146
2,4-Dinitrotoluene	ND		2120	1700		ug/Kg	☼	80	63 - 125
2,6-Dinitrotoluene	ND		2120	1590		ug/Kg	☼	75	66 - 120
2-Chloronaphthalene	ND		2120	1710		ug/Kg	☼	81	57 - 120
2-Chlorophenol	ND		2120	1710		ug/Kg	☼	81	43 - 120
2-Methylnaphthalene	ND		2120	1670		ug/Kg	☼	79	55 - 120
2-Methylphenol	ND		2120	1650		ug/Kg	☼	78	48 - 120
2-Nitroaniline	ND		2120	1620		ug/Kg	☼	76	61 - 120
2-Nitrophenol	ND		2120	1600		ug/Kg	☼	75	37 - 120
3,3'-Dichlorobenzidine	ND	F1 F2	4230	1040	F1	ug/Kg	☼	25	37 - 126
3-Nitroaniline	ND		2120	1430		ug/Kg	☼	68	48 - 120
4,6-Dinitro-2-methylphenol	ND		4230	3160		ug/Kg	☼	75	23 - 149
4-Bromophenyl phenyl ether	ND		2120	1600		ug/Kg	☼	76	58 - 120
4-Chloro-3-methylphenol	ND		2120	1710		ug/Kg	☼	81	49 - 125
4-Chloroaniline	ND		2120	1400		ug/Kg	☼	66	38 - 120
4-Chlorophenyl phenyl ether	ND		2120	1690		ug/Kg	☼	80	63 - 124
4-Methylphenol	ND		2120	1610		ug/Kg	☼	76	50 - 120
4-Nitroaniline	ND		2120	1330		ug/Kg	☼	63	47 - 120
4-Nitrophenol	ND		4230	3160		ug/Kg	☼	75	31 - 147
Acenaphthene	ND		2120	1770		ug/Kg	☼	84	60 - 120
Acenaphthylene	ND		2120	1910		ug/Kg	☼	90	58 - 121
Acetophenone	ND		2120	1530		ug/Kg	☼	72	47 - 120
Anthracene	ND		2120	1700		ug/Kg	☼	80	62 - 120
Atrazine	ND		4230	4200		ug/Kg	☼	99	60 - 150
Benzaldehyde	ND		4230	3300		ug/Kg	☼	78	10 - 150
Benzo[a]anthracene	ND		2120	1900		ug/Kg	☼	90	65 - 120
Benzo[a]pyrene	82	J	2120	2070		ug/Kg	☼	94	64 - 120
Benzo[b]fluoranthene	95	J	2120	2000		ug/Kg	☼	90	64 - 120
Benzo[g,h,i]perylene	84	J F2	2120	2010		ug/Kg	☼	91	45 - 145
Benzo[k]fluoranthene	ND		2120	1990		ug/Kg	☼	94	65 - 120
Biphenyl	ND		2120	1630		ug/Kg	☼	77	58 - 120
bis (2-chloroisopropyl) ether	ND		2120	1870		ug/Kg	☼	89	31 - 120
Bis(2-chloroethoxy)methane	ND		2120	1490		ug/Kg	☼	70	52 - 120
Bis(2-chloroethyl)ether	ND		2120	1500		ug/Kg	☼	71	45 - 120
Bis(2-ethylhexyl) phthalate	ND		2120	1840		ug/Kg	☼	87	61 - 133
Butyl benzyl phthalate	ND		2120	1850		ug/Kg	☼	87	61 - 120
Caprolactam	ND		4230	4120		ug/Kg	☼	97	37 - 133
Carbazole	ND		2120	1760		ug/Kg	☼	83	59 - 120
Chrysene	ND		2120	1840		ug/Kg	☼	87	64 - 120
Dibenz(a,h)anthracene	ND		2120	1910		ug/Kg	☼	90	54 - 132
Dibenzofuran	ND		2120	1760		ug/Kg	☼	83	62 - 120
Diethyl phthalate	ND		2120	1850		ug/Kg	☼	88	66 - 120
Dimethyl phthalate	ND		2120	1810		ug/Kg	☼	86	65 - 124
Di-n-butyl phthalate	ND		2120	1860		ug/Kg	☼	88	58 - 130
Di-n-octyl phthalate	ND		2120	1920		ug/Kg	☼	91	57 - 133

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-138304-21 MS

Matrix: Solid

Analysis Batch: 423763

Client Sample ID: SS-29 (0-2")

Prep Type: Total/NA

Prep Batch: 422686

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoranthene	170	J	2120	1980		ug/Kg	✱	86	62 - 120
Fluorene	ND		2120	1790		ug/Kg	✱	84	63 - 120
Hexachlorobenzene	ND		2120	1630		ug/Kg	✱	77	60 - 120
Hexachlorobutadiene	ND		2120	1580		ug/Kg	✱	75	45 - 120
Hexachlorocyclopentadiene	ND		2120	1710		ug/Kg	✱	81	31 - 120
Hexachloroethane	ND		2120	1340		ug/Kg	✱	64	21 - 120
Indeno[1,2,3-cd]pyrene	ND		2120	1960		ug/Kg	✱	93	56 - 134
Isophorone	ND		2120	1670		ug/Kg	✱	79	56 - 120
Naphthalene	ND		2120	1580		ug/Kg	✱	75	46 - 120
Nitrobenzene	ND		2120	1450		ug/Kg	✱	68	49 - 120
N-Nitrosodi-n-propylamine	ND		2120	1430		ug/Kg	✱	68	46 - 120
Pentachlorophenol	ND		4230	2850		ug/Kg	✱	67	25 - 136
Phenanthrene	ND		2120	1840		ug/Kg	✱	87	60 - 122
Phenol	ND		2120	1510		ug/Kg	✱	72	50 - 120
Pyrene	140	J	2120	1900		ug/Kg	✱	83	61 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
2,4,6-Tribromophenol	60		54 - 120
2-Fluorobiphenyl	74		60 - 120
2-Fluorophenol	64		52 - 120
Nitrobenzene-d5	62		53 - 120
Phenol-d5	69		54 - 120
p-Terphenyl-d14	75		65 - 121

Lab Sample ID: 480-138304-21 MSD

Matrix: Solid

Analysis Batch: 423763

Client Sample ID: SS-29 (0-2")

Prep Type: Total/NA

Prep Batch: 422686

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
2,4,5-Trichlorophenol	ND		2160	1780		ug/Kg	✱	83	46 - 120	5	18
2,4,6-Trichlorophenol	ND		2160	1820		ug/Kg	✱	84	41 - 123	12	19
2,4-Dichlorophenol	ND		2160	1770		ug/Kg	✱	82	45 - 120	4	19
2,4-Dimethylphenol	ND		2160	1680		ug/Kg	✱	78	52 - 120	6	42
2,4-Dinitrophenol	ND		4320	3410		ug/Kg	✱	79	41 - 146	6	22
2,4-Dinitrotoluene	ND		2160	1870		ug/Kg	✱	87	63 - 125	10	20
2,6-Dinitrotoluene	ND		2160	1730		ug/Kg	✱	80	66 - 120	8	15
2-Chloronaphthalene	ND		2160	1710		ug/Kg	✱	79	57 - 120	0	21
2-Chlorophenol	ND		2160	1500		ug/Kg	✱	69	43 - 120	13	25
2-Methylnaphthalene	ND		2160	1720		ug/Kg	✱	80	55 - 120	3	21
2-Methylphenol	ND		2160	1530		ug/Kg	✱	71	48 - 120	8	27
2-Nitroaniline	ND		2160	1760		ug/Kg	✱	81	61 - 120	8	15
2-Nitrophenol	ND		2160	1740		ug/Kg	✱	81	37 - 120	9	18
3,3'-Dichlorobenzidine	ND	F1 F2	4320	1350	F1 F2	ug/Kg	✱	31	37 - 126	26	25
3-Nitroaniline	ND		2160	1610		ug/Kg	✱	75	48 - 120	12	19
4,6-Dinitro-2-methylphenol	ND		4320	3240		ug/Kg	✱	75	23 - 149	2	15
4-Bromophenyl phenyl ether	ND		2160	1770		ug/Kg	✱	82	58 - 120	10	15
4-Chloro-3-methylphenol	ND		2160	1760		ug/Kg	✱	82	49 - 125	3	27
4-Chloroaniline	ND		2160	1380		ug/Kg	✱	64	38 - 120	1	22

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-138304-21 MSD

Matrix: Solid

Analysis Batch: 423763

Client Sample ID: SS-29 (0-2")

Prep Type: Total/NA

Prep Batch: 422686

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Chlorophenyl phenyl ether	ND		2160	1830		ug/Kg	☼	85	63 - 124	8	16
4-Methylphenol	ND		2160	1600		ug/Kg	☼	74	50 - 120	1	24
4-Nitroaniline	ND		2160	1500		ug/Kg	☼	70	47 - 120	13	24
4-Nitrophenol	ND		4320	3580		ug/Kg	☼	83	31 - 147	12	25
Acenaphthene	ND		2160	1920		ug/Kg	☼	89	60 - 120	8	35
Acenaphthylene	ND		2160	1990		ug/Kg	☼	92	58 - 121	4	18
Acetophenone	ND		2160	1510		ug/Kg	☼	70	47 - 120	1	20
Anthracene	ND		2160	1770		ug/Kg	☼	82	62 - 120	4	15
Atrazine	ND		4320	4460		ug/Kg	☼	103	60 - 150	6	20
Benzaldehyde	ND		4320	3180		ug/Kg	☼	74	10 - 150	4	20
Benzo[a]anthracene	ND		2160	1930		ug/Kg	☼	90	65 - 120	2	15
Benzo[a]pyrene	82	J	2160	2110		ug/Kg	☼	94	64 - 120	2	15
Benzo[b]fluoranthene	95	J	2160	2150		ug/Kg	☼	95	64 - 120	7	15
Benzo[g,h,i]perylene	84	J F2	2160	2380	F2	ug/Kg	☼	106	45 - 145	17	15
Benzo[k]fluoranthene	ND		2160	2070		ug/Kg	☼	96	65 - 120	4	22
Biphenyl	ND		2160	1780		ug/Kg	☼	82	58 - 120	9	20
bis (2-chloroisopropyl) ether	ND		2160	1740		ug/Kg	☼	80	31 - 120	8	24
Bis(2-chloroethoxy)methane	ND		2160	1580		ug/Kg	☼	73	52 - 120	6	17
Bis(2-chloroethyl)ether	ND		2160	1310		ug/Kg	☼	61	45 - 120	14	21
Bis(2-ethylhexyl) phthalate	ND		2160	1970		ug/Kg	☼	91	61 - 133	7	15
Butyl benzyl phthalate	ND		2160	1930		ug/Kg	☼	89	61 - 120	4	16
Caprolactam	ND		4320	4360		ug/Kg	☼	101	37 - 133	6	20
Carbazole	ND		2160	1930		ug/Kg	☼	89	59 - 120	9	20
Chrysene	ND		2160	1990		ug/Kg	☼	92	64 - 120	8	15
Dibenz(a,h)anthracene	ND		2160	2160		ug/Kg	☼	100	54 - 132	13	15
Dibenzofuran	ND		2160	1850		ug/Kg	☼	86	62 - 120	6	15
Diethyl phthalate	ND		2160	1980		ug/Kg	☼	92	66 - 120	7	15
Dimethyl phthalate	ND		2160	1920		ug/Kg	☼	89	65 - 124	6	15
Di-n-butyl phthalate	ND		2160	1970		ug/Kg	☼	91	58 - 130	6	15
Di-n-octyl phthalate	ND		2160	1960		ug/Kg	☼	91	57 - 133	2	16
Fluoranthene	170	J	2160	2020		ug/Kg	☼	86	62 - 120	2	15
Fluorene	ND		2160	1920		ug/Kg	☼	89	63 - 120	7	15
Hexachlorobenzene	ND		2160	1580		ug/Kg	☼	73	60 - 120	3	15
Hexachlorobutadiene	ND		2160	1510		ug/Kg	☼	70	45 - 120	5	44
Hexachlorocyclopentadiene	ND		2160	1630		ug/Kg	☼	75	31 - 120	5	49
Hexachloroethane	ND		2160	1260		ug/Kg	☼	58	21 - 120	6	46
Indeno[1,2,3-cd]pyrene	ND		2160	2270		ug/Kg	☼	105	56 - 134	15	15
Isophorone	ND		2160	1690		ug/Kg	☼	78	56 - 120	1	17
Naphthalene	ND		2160	1570		ug/Kg	☼	73	46 - 120	0	29
Nitrobenzene	ND		2160	1450		ug/Kg	☼	67	49 - 120	0	24
N-Nitrosodi-n-propylamine	ND		2160	1440		ug/Kg	☼	67	46 - 120	1	31
Pentachlorophenol	ND		4320	3270		ug/Kg	☼	76	25 - 136	14	35
Phenanthrene	ND		2160	1950		ug/Kg	☼	90	60 - 122	6	15
Phenol	ND		2160	1420		ug/Kg	☼	66	50 - 120	6	35
Pyrene	140	J	2160	2000		ug/Kg	☼	86	61 - 133	5	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2,4,6-Tribromophenol	61		54 - 120

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-138304-21 MSD

Matrix: Solid

Analysis Batch: 423763

Client Sample ID: SS-29 (0-2")

Prep Type: Total/NA

Prep Batch: 422686

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl	77		60 - 120
2-Fluorophenol	61		52 - 120
Nitrobenzene-d5	63		53 - 120
Phenol-d5	63		54 - 120
p-Terphenyl-d14	79		65 - 121

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-422854/1-A

Matrix: Solid

Analysis Batch: 423008

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422854

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.32	ug/Kg		07/03/18 14:15	07/05/18 13:52	1
4,4'-DDE	ND		1.7	0.35	ug/Kg		07/03/18 14:15	07/05/18 13:52	1
4,4'-DDT	ND		1.7	0.39	ug/Kg		07/03/18 14:15	07/05/18 13:52	1
Aldrin	ND		1.7	0.41	ug/Kg		07/03/18 14:15	07/05/18 13:52	1
alpha-BHC	ND		1.7	0.30	ug/Kg		07/03/18 14:15	07/05/18 13:52	1
beta-BHC	ND		1.7	0.30	ug/Kg		07/03/18 14:15	07/05/18 13:52	1
cis-Chlordane	ND		1.7	0.83	ug/Kg		07/03/18 14:15	07/05/18 13:52	1
delta-BHC	ND		1.7	0.31	ug/Kg		07/03/18 14:15	07/05/18 13:52	1
Dieldrin	ND		1.7	0.40	ug/Kg		07/03/18 14:15	07/05/18 13:52	1
Endosulfan I	ND		1.7	0.32	ug/Kg		07/03/18 14:15	07/05/18 13:52	1
Endosulfan II	0.855	J	1.7	0.30	ug/Kg		07/03/18 14:15	07/05/18 13:52	1
Endosulfan sulfate	0.339	J	1.7	0.31	ug/Kg		07/03/18 14:15	07/05/18 13:52	1
Endrin	ND		1.7	0.33	ug/Kg		07/03/18 14:15	07/05/18 13:52	1
Endrin aldehyde	ND		1.7	0.43	ug/Kg		07/03/18 14:15	07/05/18 13:52	1
Endrin ketone	ND		1.7	0.41	ug/Kg		07/03/18 14:15	07/05/18 13:52	1
gamma-BHC (Lindane)	0.383	J	1.7	0.31	ug/Kg		07/03/18 14:15	07/05/18 13:52	1
Heptachlor	ND		1.7	0.36	ug/Kg		07/03/18 14:15	07/05/18 13:52	1
Heptachlor epoxide	ND		1.7	0.43	ug/Kg		07/03/18 14:15	07/05/18 13:52	1
Methoxychlor	ND		1.7	0.34	ug/Kg		07/03/18 14:15	07/05/18 13:52	1
Toxaphene	ND		17	9.7	ug/Kg		07/03/18 14:15	07/05/18 13:52	1
trans-Chlordane	ND		1.7	0.53	ug/Kg		07/03/18 14:15	07/05/18 13:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	98		45 - 120	07/03/18 14:15	07/05/18 13:52	1
DCB Decachlorobiphenyl	77		45 - 120	07/03/18 14:15	07/05/18 13:52	1
Tetrachloro-m-xylene	86		30 - 124	07/03/18 14:15	07/05/18 13:52	1
Tetrachloro-m-xylene	85		30 - 124	07/03/18 14:15	07/05/18 13:52	1

Lab Sample ID: LCS 480-422854/2-A

Matrix: Solid

Analysis Batch: 423008

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422854

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.5	15.9		ug/Kg		97	56 - 120

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

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

Lab Sample ID: LCS 480-422854/2-A

Matrix: Solid

Analysis Batch: 423008

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422854

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDE	16.5	14.9		ug/Kg		90	44 - 120
4,4'-DDT	16.5	14.9		ug/Kg		91	38 - 120
Aldrin	16.5	12.6		ug/Kg		76	38 - 120
alpha-BHC	16.5	12.2		ug/Kg		74	39 - 120
beta-BHC	16.5	14.0		ug/Kg		85	40 - 120
cis-Chlordane	16.5	14.9		ug/Kg		90	47 - 120
delta-BHC	16.5	14.0		ug/Kg		85	45 - 120
Dieldrin	16.5	16.0		ug/Kg		97	58 - 120
Endosulfan I	16.5	15.5		ug/Kg		94	49 - 120
Endosulfan II	16.5	16.5		ug/Kg		100	55 - 120
Endosulfan sulfate	16.5	16.9		ug/Kg		103	49 - 124
Endrin	16.5	16.5		ug/Kg		100	58 - 120
Endrin aldehyde	16.5	13.5		ug/Kg		82	37 - 121
Endrin ketone	16.5	14.9		ug/Kg		90	46 - 123
gamma-BHC (Lindane)	16.5	13.4		ug/Kg		81	50 - 120
Heptachlor	16.5	13.8		ug/Kg		84	50 - 120
Heptachlor epoxide	16.5	14.6		ug/Kg		89	50 - 120
Methoxychlor	16.5	14.6		ug/Kg		88	58 - 133
trans-Chlordane	16.5	15.5		ug/Kg		94	48 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	96		45 - 120
DCB Decachlorobiphenyl	75		45 - 120
Tetrachloro-m-xylene	84		30 - 124
Tetrachloro-m-xylene	81		30 - 124

Lab Sample ID: 480-138304-7 MS

Matrix: Solid

Analysis Batch: 423008

Client Sample ID: SS-24 (0-2")

Prep Type: Total/NA

Prep Batch: 422854

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		22.6	23.8		ug/Kg	☼	106	37 - 126
4,4'-DDE	ND		22.6	20.3	J	ug/Kg	☼	90	34 - 120
4,4'-DDT	ND		22.6	21.7	J	ug/Kg	☼	96	43 - 123
Aldrin	ND	F2	22.6	21.3	J	ug/Kg	☼	94	37 - 125
alpha-BHC	ND		22.6	20.5	J	ug/Kg	☼	91	39 - 120
beta-BHC	ND		22.6	19.2	J	ug/Kg	☼	85	36 - 120
cis-Chlordane	ND		22.6	22.0	J	ug/Kg	☼	98	35 - 120
delta-BHC	ND		22.6	21.1	J	ug/Kg	☼	94	34 - 120
Dieldrin	ND	F2	22.6	24.4		ug/Kg	☼	108	45 - 120
Endosulfan I	ND	F1 F2	22.6	67.6	F1	ug/Kg	☼	300	39 - 120
Endosulfan II	11	J B	22.6	27.9		ug/Kg	☼	75	34 - 126
Endosulfan sulfate	ND		22.6	29.2		ug/Kg	☼	129	27 - 130
Endrin	ND		22.6	23.3		ug/Kg	☼	103	47 - 121
Endrin aldehyde	ND		22.6	19.1	J	ug/Kg	☼	85	33 - 123
Endrin ketone	ND		22.6	20.9	J	ug/Kg	☼	93	43 - 126
gamma-BHC (Lindane)	ND		22.6	21.7	J	ug/Kg	☼	96	50 - 120
Heptachlor	ND		22.6	19.8	J	ug/Kg	☼	88	42 - 120

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

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

Lab Sample ID: 480-138304-7 MS

Matrix: Solid

Analysis Batch: 423008

Client Sample ID: SS-24 (0-2")

Prep Type: Total/NA

Prep Batch: 422854

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Heptachlor epoxide	ND	F2	22.6	22.2	J	ug/Kg	☼	98	40 - 120
Methoxychlor	ND		22.6	20.0	J	ug/Kg	☼	89	44 - 150
trans-Chlordane	ND	F2	22.6	21.6	J	ug/Kg	☼	96	31 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	108		45 - 120
DCB Decachlorobiphenyl	100		45 - 120
Tetrachloro-m-xylene	122		30 - 124
Tetrachloro-m-xylene	123		30 - 124

Lab Sample ID: 480-138304-7 MSD

Matrix: Solid

Analysis Batch: 423008

Client Sample ID: SS-24 (0-2")

Prep Type: Total/NA

Prep Batch: 422854

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		23.2	21.4	J	ug/Kg	☼	92	37 - 126	11	21
4,4'-DDE	ND		23.2	18.4	J	ug/Kg	☼	79	34 - 120	10	18
4,4'-DDT	ND		23.2	20.0	J	ug/Kg	☼	86	43 - 123	8	25
Aldrin	ND	F2	23.2	17.6	J F2	ug/Kg	☼	76	37 - 125	19	12
alpha-BHC	ND		23.2	22.2	J	ug/Kg	☼	96	39 - 120	8	15
beta-BHC	ND		23.2	18.0	J	ug/Kg	☼	78	36 - 120	7	19
cis-Chlordane	ND		23.2	22.3	J	ug/Kg	☼	97	35 - 120	1	23
delta-BHC	ND		23.2	20.1	J	ug/Kg	☼	87	34 - 120	5	14
Dieldrin	ND	F2	23.2	21.1	J F2	ug/Kg	☼	91	45 - 120	14	12
Endosulfan I	ND	F1 F2	23.2	52.5	F1 F2	ug/Kg	☼	227	39 - 120	25	18
Endosulfan II	11	J B	23.2	25.8		ug/Kg	☼	64	34 - 126	8	26
Endosulfan sulfate	ND		23.2	22.9	J	ug/Kg	☼	99	27 - 130	24	35
Endrin	ND		23.2	22.6	J	ug/Kg	☼	98	47 - 121	3	20
Endrin aldehyde	ND		23.2	20.2	J	ug/Kg	☼	87	33 - 123	5	47
Endrin ketone	ND		23.2	20.3	J	ug/Kg	☼	87	43 - 126	3	37
gamma-BHC (Lindane)	ND		23.2	21.6	J	ug/Kg	☼	93	50 - 120	0	12
Heptachlor	ND		23.2	17.0	J	ug/Kg	☼	73	42 - 120	15	22
Heptachlor epoxide	ND	F2	23.2	17.1	J F2	ug/Kg	☼	74	40 - 120	26	15
Methoxychlor	ND		23.2	18.7	J	ug/Kg	☼	81	44 - 150	7	24
trans-Chlordane	ND	F2	23.2	18.4	J F2	ug/Kg	☼	79	31 - 120	16	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	88		45 - 120
DCB Decachlorobiphenyl	117		45 - 120
Tetrachloro-m-xylene	119		30 - 124
Tetrachloro-m-xylene	117		30 - 124

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

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

Lab Sample ID: MB 480-422693/1-A

Matrix: Solid

Analysis Batch: 422801

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422693

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.25	0.048	mg/Kg		07/02/18 15:18	07/03/18 14:52	1
PCB-1221	ND		0.25	0.048	mg/Kg		07/02/18 15:18	07/03/18 14:52	1
PCB-1232	ND		0.25	0.048	mg/Kg		07/02/18 15:18	07/03/18 14:52	1
PCB-1242	ND		0.25	0.048	mg/Kg		07/02/18 15:18	07/03/18 14:52	1
PCB-1248	ND		0.25	0.048	mg/Kg		07/02/18 15:18	07/03/18 14:52	1
PCB-1254	ND		0.25	0.11	mg/Kg		07/02/18 15:18	07/03/18 14:52	1
PCB-1260	ND		0.25	0.11	mg/Kg		07/02/18 15:18	07/03/18 14:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	87		60 - 154	07/02/18 15:18	07/03/18 14:52	1
Tetrachloro-m-xylene	85		60 - 154	07/02/18 15:18	07/03/18 14:52	1
DCB Decachlorobiphenyl	79		65 - 174	07/02/18 15:18	07/03/18 14:52	1
DCB Decachlorobiphenyl	92		65 - 174	07/02/18 15:18	07/03/18 14:52	1

Lab Sample ID: LCS 480-422693/2-A

Matrix: Solid

Analysis Batch: 422801

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422693

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	2.42	2.70		mg/Kg		112	51 - 185
PCB-1260	2.42	2.75		mg/Kg		114	61 - 184

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	103		60 - 154
Tetrachloro-m-xylene	88		60 - 154
DCB Decachlorobiphenyl	85		65 - 174
DCB Decachlorobiphenyl	100		65 - 174

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 480-422982/1-A

Matrix: Solid

Analysis Batch: 423554

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422982

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		17	5.3	ug/Kg		07/05/18 07:15	07/09/18 16:00	1
Silvex (2,4,5-TP)	ND		17	6.0	ug/Kg		07/05/18 07:15	07/09/18 16:00	1
2,4-D	ND		17	10	ug/Kg		07/05/18 07:15	07/09/18 16:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	53		28 - 129	07/05/18 07:15	07/09/18 16:00	1
2,4-Dichlorophenylacetic acid	60		28 - 129	07/05/18 07:15	07/09/18 16:00	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCS 480-422982/2-A

Matrix: Solid

Analysis Batch: 423554

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422982

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-T	65.8	74.9		ug/Kg		114	41 - 120
Silvex (2,4,5-TP)	65.8	55.4		ug/Kg		84	39 - 125
2,4-D	65.8	50.4		ug/Kg		77	40 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4-Dichlorophenylacetic acid	70		28 - 129
2,4-Dichlorophenylacetic acid	64		28 - 129

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-422880/1-A

Matrix: Solid

Analysis Batch: 423209

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422880

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		9.8	4.3	mg/Kg		07/05/18 10:08	07/06/18 01:50	1
Antimony	ND		14.7	0.39	mg/Kg		07/05/18 10:08	07/06/18 01:50	1
Arsenic	ND		2.0	0.39	mg/Kg		07/05/18 10:08	07/06/18 01:50	1
Barium	ND		0.49	0.11	mg/Kg		07/05/18 10:08	07/06/18 01:50	1
Beryllium	ND		0.20	0.027	mg/Kg		07/05/18 10:08	07/06/18 01:50	1
Cadmium	ND		0.20	0.029	mg/Kg		07/05/18 10:08	07/06/18 01:50	1
Calcium	5.67	J	49.0	3.2	mg/Kg		07/05/18 10:08	07/06/18 01:50	1
Chromium	ND		0.49	0.20	mg/Kg		07/05/18 10:08	07/06/18 01:50	1
Cobalt	ND		0.49	0.049	mg/Kg		07/05/18 10:08	07/06/18 01:50	1
Copper	ND		0.98	0.21	mg/Kg		07/05/18 10:08	07/06/18 01:50	1
Iron	5.65	J	9.8	3.4	mg/Kg		07/05/18 10:08	07/06/18 01:50	1
Lead	ND		0.98	0.24	mg/Kg		07/05/18 10:08	07/06/18 01:50	1
Magnesium	ND		19.6	0.91	mg/Kg		07/05/18 10:08	07/06/18 01:50	1
Manganese	0.121	J	0.20	0.031	mg/Kg		07/05/18 10:08	07/06/18 01:50	1
Nickel	ND		4.9	0.23	mg/Kg		07/05/18 10:08	07/06/18 01:50	1
Potassium	ND		29.4	19.6	mg/Kg		07/05/18 10:08	07/06/18 01:50	1
Selenium	ND		3.9	0.39	mg/Kg		07/05/18 10:08	07/06/18 01:50	1
Silver	ND		0.59	0.20	mg/Kg		07/05/18 10:08	07/06/18 01:50	1
Sodium	ND		137	12.7	mg/Kg		07/05/18 10:08	07/06/18 01:50	1
Thallium	ND		5.9	0.29	mg/Kg		07/05/18 10:08	07/06/18 01:50	1
Vanadium	ND		0.49	0.11	mg/Kg		07/05/18 10:08	07/06/18 01:50	1
Zinc	ND		2.0	0.63	mg/Kg		07/05/18 10:08	07/06/18 01:50	1

Lab Sample ID: LCSSRM 480-422880/2-A

Matrix: Solid

Analysis Batch: 423209

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422880

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	8040	7585		mg/Kg		94.3	39.4 - 160.4
Antimony	91.4	63.69		mg/Kg		69.7	25.1 - 275.7

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-422880/2-A

Matrix: Solid

Analysis Batch: 423209

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422880

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	146	121.4		mg/Kg		83.1	69.9 - 132.9
Barium	102	87.82		mg/Kg		86.1	71.5 - 136.3
Beryllium	134	109.5		mg/Kg		81.7	75.4 - 138.1
Cadmium	63.2	55.54		mg/Kg		87.9	73.3 - 141.5
Calcium	5930	5205		mg/Kg		87.8	73.7 - 136.1
Chromium	89.3	73.59		mg/Kg		82.4	69.1 - 143.3
Cobalt	119	118.8		mg/Kg		99.9	74.6 - 142.0
Copper	60.8	49.60		mg/Kg		81.6	72.7 - 141.6
Iron	14400	12540		mg/Kg		87.1	35.6 - 163.9
Lead	98.5	98.62		mg/Kg		100.1	70.8 - 137.1
Magnesium	2580	2269		mg/Kg		87.9	63.6 - 136.0
Manganese	370	303.8		mg/Kg		82.1	75.7 - 134.3
Nickel	66.6	62.27		mg/Kg		93.5	70.7 - 146.2
Potassium	2340	2058		mg/Kg		87.9	59.8 - 140.2
Selenium	136	118.0		mg/Kg		86.8	67.1 - 136.8
Silver	48.9	40.16		mg/Kg		82.1	66.5 - 139.5
Sodium	318	275.3		mg/Kg		86.6	40.6 - 159.7
Thallium	138	124.9		mg/Kg		90.5	68.0 - 136.2
Vanadium	69.7	60.92		mg/Kg		87.4	58.7 - 141.3
Zinc	177	137.2		mg/Kg		77.5	69.5 - 131.1

Lab Sample ID: 480-138304-5 MS

Matrix: Solid

Analysis Batch: 423209

Client Sample ID: SS-22 (0-2")

Prep Type: Total/NA

Prep Batch: 422880

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	16600	F2	2500	22920	4	mg/Kg	✱	254	75 - 125
Antimony	ND	F1	50.0	26.44	F1	mg/Kg	✱	53	75 - 125
Arsenic	11.6		50.0	52.16		mg/Kg	✱	81	75 - 125
Barium	130	F1 F2	50.0	174.0		mg/Kg	✱	88	75 - 125
Beryllium	0.72		50.0	42.72		mg/Kg	✱	84	75 - 125
Cadmium	0.12	J	50.0	46.34		mg/Kg	✱	92	75 - 125
Calcium	1810	B F1	2500	3423	F1	mg/Kg	✱	65	75 - 125

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-138304-5 MS

Matrix: Solid

Analysis Batch: 423209

Client Sample ID: SS-22 (0-2")

Prep Type: Total/NA

Prep Batch: 422880

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	18.7		50.0	62.14		mg/Kg	✱	87	75 - 125
Cobalt	12.0		50.0	56.86		mg/Kg	✱	90	75 - 125
Copper	14.6		50.0	53.91		mg/Kg	✱	79	75 - 125
Iron	24800	B F2	2500	22410	4	mg/Kg	✱	-94	75 - 125
Lead	31.5		50.0	69.40		mg/Kg	✱	76	75 - 125
Magnesium	3540	F1	2500	5304	F1	mg/Kg	✱	71	75 - 125
Manganese	550	B	50.0	546.4	4	mg/Kg	✱	-7	75 - 125
Nickel	20.8		50.0	62.29		mg/Kg	✱	83	75 - 125
Potassium	2310	F1	2500	6593	F1	mg/Kg	✱	171	75 - 125
Selenium	ND		50.0	43.31		mg/Kg	✱	87	75 - 125
Silver	ND		12.5	11.67		mg/Kg	✱	93	75 - 125
Sodium	45.8	J	2500	2104		mg/Kg	✱	82	75 - 125
Thallium	ND		50.0	44.36		mg/Kg	✱	89	75 - 125
Vanadium	25.8		50.0	74.12		mg/Kg	✱	97	75 - 125
Zinc	61.4	F1	50.0	90.75	F1	mg/Kg	✱	59	75 - 125

Lab Sample ID: 480-138304-5 MSD

Matrix: Solid

Analysis Batch: 423209

Client Sample ID: SS-22 (0-2")

Prep Type: Total/NA

Prep Batch: 422880

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	16600	F2	2530	29930	4 F2	mg/Kg	✱	527	75 - 125	27	20
Antimony	ND	F1	50.7	23.76	F1	mg/Kg	✱	47	75 - 125	11	20
Arsenic	11.6		50.7	56.70		mg/Kg	✱	89	75 - 125	8	20
Barium	130	F1 F2	50.7	223.3	F1 F2	mg/Kg	✱	184	75 - 125	25	20
Beryllium	0.72		50.7	44.37		mg/Kg	✱	86	75 - 125	4	20
Cadmium	0.12	J	50.7	48.07		mg/Kg	✱	95	75 - 125	4	20
Calcium	1810	B F1	2530	3962		mg/Kg	✱	85	75 - 125	15	20
Chromium	18.7		50.7	69.37		mg/Kg	✱	100	75 - 125	11	20
Cobalt	12.0		50.7	61.30		mg/Kg	✱	97	75 - 125	8	20
Copper	14.6		50.7	60.12		mg/Kg	✱	90	75 - 125	11	20
Iron	24800	B F2	2530	28150	4 F2	mg/Kg	✱	133	75 - 125	23	20
Lead	31.5		50.7	81.86		mg/Kg	✱	99	75 - 125	16	20
Magnesium	3540	F1	2530	6212		mg/Kg	✱	106	75 - 125	16	20
Manganese	550	B	50.7	650.8	4	mg/Kg	✱	199	75 - 125	17	20
Nickel	20.8		50.7	69.70		mg/Kg	✱	96	75 - 125	11	20
Potassium	2310	F1	2530	7920	F1	mg/Kg	✱	221	75 - 125	18	20
Selenium	ND		50.7	44.24		mg/Kg	✱	87	75 - 125	2	20
Silver	ND		12.7	12.16		mg/Kg	✱	96	75 - 125	4	20
Sodium	45.8	J	2540	2192		mg/Kg	✱	85	75 - 125	4	20
Thallium	ND		50.7	46.91		mg/Kg	✱	93	75 - 125	6	20
Vanadium	25.8		50.7	85.63		mg/Kg	✱	118	75 - 125	14	20
Zinc	61.4	F1	50.7	107.3		mg/Kg	✱	91	75 - 125	17	20

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 480-422881/1-A

Matrix: Solid

Analysis Batch: 423441

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422881

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		10	4.4	mg/Kg		07/06/18 10:15	07/06/18 18:45	1
Antimony	ND		15.0	0.40	mg/Kg		07/06/18 10:15	07/06/18 18:45	1
Arsenic	ND		2.0	0.40	mg/Kg		07/06/18 10:15	07/06/18 18:45	1
Barium	1.26		0.50	0.11	mg/Kg		07/06/18 10:15	07/06/18 18:45	1
Beryllium	ND		0.20	0.028	mg/Kg		07/06/18 10:15	07/06/18 18:45	1
Cadmium	ND		0.20	0.030	mg/Kg		07/06/18 10:15	07/06/18 18:45	1
Calcium	4.87	J	49.9	3.3	mg/Kg		07/06/18 10:15	07/06/18 18:45	1
Chromium	ND		0.50	0.20	mg/Kg		07/06/18 10:15	07/06/18 18:45	1
Cobalt	ND		0.50	0.050	mg/Kg		07/06/18 10:15	07/06/18 18:45	1
Copper	ND		1.0	0.21	mg/Kg		07/06/18 10:15	07/06/18 18:45	1
Iron	ND		10	3.5	mg/Kg		07/06/18 10:15	07/06/18 18:45	1
Lead	ND		1.0	0.24	mg/Kg		07/06/18 10:15	07/06/18 18:45	1
Magnesium	ND		19.9	0.92	mg/Kg		07/06/18 10:15	07/06/18 18:45	1
Manganese	ND		0.20	0.032	mg/Kg		07/06/18 10:15	07/06/18 18:45	1
Nickel	ND		5.0	0.23	mg/Kg		07/06/18 10:15	07/06/18 18:45	1
Potassium	ND		29.9	19.9	mg/Kg		07/06/18 10:15	07/06/18 18:45	1
Selenium	ND		4.0	0.40	mg/Kg		07/06/18 10:15	07/06/18 18:45	1
Silver	ND		0.60	0.20	mg/Kg		07/06/18 10:15	07/06/18 18:45	1
Sodium	ND		140	13.0	mg/Kg		07/06/18 10:15	07/06/18 18:45	1
Thallium	ND		6.0	0.30	mg/Kg		07/06/18 10:15	07/06/18 18:45	1
Vanadium	ND		0.50	0.11	mg/Kg		07/06/18 10:15	07/06/18 18:45	1
Zinc	ND		2.0	0.64	mg/Kg		07/06/18 10:15	07/06/18 18:45	1

Lab Sample ID: LCSSRM 480-422881/2-A

Matrix: Solid

Analysis Batch: 423441

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422881

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	8040	7701		mg/Kg		95.8	39.4 - 160. 4
Antimony	91.4	61.27		mg/Kg		67.0	25.1 - 275. 7
Arsenic	146	123.5		mg/Kg		84.6	69.9 - 132. 9
Barium	102	87.23		mg/Kg		85.5	71.5 - 136. 3
Beryllium	134	114.5		mg/Kg		85.4	75.4 - 138. 1
Cadmium	63.2	54.69		mg/Kg		86.5	73.3 - 141. 5
Calcium	5930	4922		mg/Kg		83.0	73.7 - 136. 1
Chromium	89.3	76.13		mg/Kg		85.3	69.1 - 143. 3
Cobalt	119	119.2		mg/Kg		100.2	74.6 - 142. 0
Copper	60.8	53.10		mg/Kg		87.3	72.7 - 141. 6
Iron	14400	13210		mg/Kg		91.7	35.6 - 163. 9

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-422881/2-A

Matrix: Solid

Analysis Batch: 423441

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422881

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	98.5	94.02		mg/Kg		95.5	70.8 - 137.1
Magnesium	2580	2289		mg/Kg		88.7	63.6 - 136.0
Manganese	370	322.9		mg/Kg		87.3	75.7 - 134.3
Nickel	66.6	66.54		mg/Kg		99.9	70.7 - 146.2
Potassium	2340	2204		mg/Kg		94.2	59.8 - 140.2
Selenium	136	117.1		mg/Kg		86.1	67.1 - 136.8
Silver	48.9	41.69		mg/Kg		85.3	66.5 - 139.5
Sodium	318	288.5		mg/Kg		90.7	40.6 - 159.7
Thallium	138	140.4		mg/Kg		101.7	68.0 - 136.2
Vanadium	69.7	62.48		mg/Kg		89.6	58.7 - 141.3
Zinc	177	153.8		mg/Kg		86.9	69.5 - 131.1

Lab Sample ID: 480-138304-14 MS

Matrix: Solid

Analysis Batch: 423441

Client Sample ID: NS-42 (2"-1')

Prep Type: Total/NA

Prep Batch: 422881

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	14600		2190	24220	4	mg/Kg	☼	440	75 - 125
Antimony	0.83	J F1	43.7	17.80	F1	mg/Kg	☼	39	75 - 125
Arsenic	18.8		43.7	60.58		mg/Kg	☼	95	75 - 125
Barium	146	B F1	43.7	180.4		mg/Kg	☼	79	75 - 125
Beryllium	0.82		43.7	36.89		mg/Kg	☼	82	75 - 125
Calcium	1370	B	2190	3057		mg/Kg	☼	77	75 - 125
Chromium	18.0		43.7	58.74		mg/Kg	☼	93	75 - 125
Cobalt	15.5		43.7	57.93		mg/Kg	☼	97	75 - 125
Copper	18.5		43.7	56.29		mg/Kg	☼	86	75 - 125
Iron	32900		2190	40960	4	mg/Kg	☼	369	75 - 125
Lead	17.6		43.7	61.93		mg/Kg	☼	101	75 - 125
Magnesium	4000		2190	6200		mg/Kg	☼	101	75 - 125
Manganese	787		43.7	644.2	4	mg/Kg	☼	-326	75 - 125
Nickel	31.9		43.7	76.39		mg/Kg	☼	102	75 - 125
Potassium	2810	F1	2190	6332	F1	mg/Kg	☼	161	75 - 125
Selenium	ND		43.7	35.13		mg/Kg	☼	80	75 - 125
Silver	ND		10.9	9.82		mg/Kg	☼	90	75 - 125
Sodium	67.1	J F1	2190	142.1	J F1	mg/Kg	☼	3	75 - 125
Thallium	ND		43.7	42.05		mg/Kg	☼	96	75 - 125
Vanadium	20.5		43.7	70.50		mg/Kg	☼	114	75 - 125
Zinc	65.0		43.7	103.9		mg/Kg	☼	89	75 - 125

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-138304-14 MS

Matrix: Solid

Analysis Batch: 423717

Client Sample ID: NS-42 (2"-1')

Prep Type: Total/NA

Prep Batch: 422881

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	ND		43.7	40.57		mg/Kg	✱	93	75 - 125

Lab Sample ID: 480-138304-14 MSD

Matrix: Solid

Analysis Batch: 423441

Client Sample ID: NS-42 (2"-1')

Prep Type: Total/NA

Prep Batch: 422881

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	14600		2270	25320	4	mg/Kg	✱	474	75 - 125	4	20
Antimony	0.83	J F1	45.3	17.90	F1	mg/Kg	✱	38	75 - 125	1	20
Arsenic	18.8		45.3	56.21		mg/Kg	✱	83	75 - 125	7	20
Barium	146	B F1	45.3	177.5	F1	mg/Kg	✱	70	75 - 125	2	20
Beryllium	0.82		45.3	37.90		mg/Kg	✱	82	75 - 125	3	20
Calcium	1370	B	2270	3113		mg/Kg	✱	77	75 - 125	2	20
Chromium	18.0		45.3	60.86		mg/Kg	✱	95	75 - 125	4	20
Cobalt	15.5		45.3	57.45		mg/Kg	✱	93	75 - 125	1	20
Copper	18.5		45.3	56.51		mg/Kg	✱	84	75 - 125	0	20
Iron	32900		2270	35110	4	mg/Kg	✱	98	75 - 125	15	20
Lead	17.6		45.3	62.10		mg/Kg	✱	98	75 - 125	0	20
Magnesium	4000		2270	6381		mg/Kg	✱	105	75 - 125	3	20
Manganese	787		45.3	742.3	4	mg/Kg	✱	-99	75 - 125	14	20
Nickel	31.9		45.3	76.08		mg/Kg	✱	97	75 - 125	0	20
Potassium	2810	F1	2270	6958	F1	mg/Kg	✱	183	75 - 125	9	20
Selenium	ND		45.3	36.61		mg/Kg	✱	81	75 - 125	4	20
Silver	ND		11.3	10.33		mg/Kg	✱	91	75 - 125	5	20
Sodium	67.1	J F1	2270	158.0	J F1	mg/Kg	✱	4	75 - 125	11	20
Thallium	ND		45.3	43.35		mg/Kg	✱	96	75 - 125	3	20
Vanadium	20.5		45.3	73.43		mg/Kg	✱	117	75 - 125	4	20
Zinc	65.0		45.3	104.2		mg/Kg	✱	86	75 - 125	0	20

Lab Sample ID: 480-138304-14 MSD

Matrix: Solid

Analysis Batch: 423717

Client Sample ID: NS-42 (2"-1')

Prep Type: Total/NA

Prep Batch: 422881

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	ND		45.3	42.06		mg/Kg	✱	93	75 - 125	4	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-424635/1-A

Matrix: Solid

Analysis Batch: 424674

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 424635

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0081	mg/Kg		07/16/18 14:20	07/16/18 15:19	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: LCSSRM 480-424635/2-A ^10

Matrix: Solid

Analysis Batch: 424674

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 424635

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	23.7	12.52		mg/Kg		52.8	27.7 - 110.1

Lab Sample ID: 480-138304-14 MS

Matrix: Solid

Analysis Batch: 424674

Client Sample ID: NS-42 (2"-1')

Prep Type: Total/NA

Prep Batch: 424635

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.355	0.349		mg/Kg	☼	99	80 - 120

Lab Sample ID: 480-138304-14 MSD

Matrix: Solid

Analysis Batch: 424674

Client Sample ID: NS-42 (2"-1')

Prep Type: Total/NA

Prep Batch: 424635

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Mercury	ND		0.380	0.371		mg/Kg	☼	98	80 - 120	6	20

Lab Sample ID: MB 480-424637/1-A

Matrix: Solid

Analysis Batch: 424674

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 424637

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.0084	mg/Kg		07/16/18 14:20	07/16/18 16:11	1

Lab Sample ID: LCSSRM 480-424637/2-A ^10

Matrix: Solid

Analysis Batch: 424674

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 424637

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	23.7	11.77		mg/Kg		49.7	27.7 - 110.1

Lab Sample ID: 480-138304-21 MS

Matrix: Solid

Analysis Batch: 424674

Client Sample ID: SS-29 (0-2")

Prep Type: Total/NA

Prep Batch: 424637

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.039		0.424	0.438		mg/Kg	☼	94	80 - 120

Lab Sample ID: 480-138304-21 MSD

Matrix: Solid

Analysis Batch: 424674

Client Sample ID: SS-29 (0-2")

Prep Type: Total/NA

Prep Batch: 424637

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Mercury	0.039		0.433	0.443		mg/Kg	☼	93	80 - 120	1	20

TestAmerica Buffalo

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

GC/MS VOA

Analysis Batch: 422759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-1	NS-21 (2"-1')	Total/NA	Solid	8260C	422781
MB 480-422781/2-A	Method Blank	Total/NA	Solid	8260C	422781
LCS 480-422781/1-A	Lab Control Sample	Total/NA	Solid	8260C	422781

Prep Batch: 422781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-1	NS-21 (2"-1')	Total/NA	Solid	5035A_L	
MB 480-422781/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-422781/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Prep Batch: 423238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-3	NS-23 (2"-1')	Total/NA	Solid	5035A_L	
480-138304-6	NS-22 (2"-1')	Total/NA	Solid	5035A_L	
480-138304-8	NS-24 (2"-1')	Total/NA	Solid	5035A_L	
480-138304-11	NS-26 (2"-1')	Total/NA	Solid	5035A_L	
480-138304-13	NS-25 (2"-1')	Total/NA	Solid	5035A_L	
480-138304-14	NS-42 (2"-1')	Total/NA	Solid	5035A_L	
MB 480-423238/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-423238/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Analysis Batch: 423243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-3	NS-23 (2"-1')	Total/NA	Solid	8260C	423238
480-138304-6	NS-22 (2"-1')	Total/NA	Solid	8260C	423238
480-138304-8	NS-24 (2"-1')	Total/NA	Solid	8260C	423238
480-138304-11	NS-26 (2"-1')	Total/NA	Solid	8260C	423238
480-138304-13	NS-25 (2"-1')	Total/NA	Solid	8260C	423238
480-138304-14	NS-42 (2"-1')	Total/NA	Solid	8260C	423238
MB 480-423238/2-A	Method Blank	Total/NA	Solid	8260C	423238
LCS 480-423238/1-A	Lab Control Sample	Total/NA	Solid	8260C	423238

Prep Batch: 423426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-16	NS-27 (2"-1')	Total/NA	Solid	5035A_L	
480-138304-18	NS-28 (2"-1')	Total/NA	Solid	5035A_L	
480-138304-20	NS-29 (2"-1')	Total/NA	Solid	5035A_L	
MB 480-423426/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-423426/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	
480-138304-14 MS	NS-42 (2"-1')	Total/NA	Solid	5035A_L	
480-138304-14 MSD	NS-42 (2"-1')	Total/NA	Solid	5035A_L	

Analysis Batch: 423427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-16	NS-27 (2"-1')	Total/NA	Solid	8260C	423426
480-138304-18	NS-28 (2"-1')	Total/NA	Solid	8260C	423426
480-138304-20	NS-29 (2"-1')	Total/NA	Solid	8260C	423426
MB 480-423426/2-A	Method Blank	Total/NA	Solid	8260C	423426
LCS 480-423426/1-A	Lab Control Sample	Total/NA	Solid	8260C	423426
480-138304-14 MS	NS-42 (2"-1')	Total/NA	Solid	8260C	423426
480-138304-14 MSD	NS-42 (2"-1')	Total/NA	Solid	8260C	423426

TestAmerica Buffalo

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

GC/MS Semi VOA

Prep Batch: 422683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-1	NS-21 (2"-1')	Total/NA	Solid	3550C	
480-138304-2	SS-21 (0-2')	Total/NA	Solid	3550C	
480-138304-3	NS-23 (2'-1')	Total/NA	Solid	3550C	
480-138304-4	SS-23 (0-2")	Total/NA	Solid	3550C	
480-138304-5	SS-22 (0-2")	Total/NA	Solid	3550C	
480-138304-6	NS-22 (2"-1')	Total/NA	Solid	3550C	
480-138304-7	SS-24 (0-2")	Total/NA	Solid	3550C	
480-138304-8	NS-24 (2"-1')	Total/NA	Solid	3550C	
480-138304-9	BD	Total/NA	Solid	3550C	
480-138304-10	SS-26 (0-2")	Total/NA	Solid	3550C	
480-138304-11	NS-26 (2"-1')	Total/NA	Solid	3550C	
480-138304-12	SS-25 (0-2")	Total/NA	Solid	3550C	
480-138304-13	NS-25 (2"-1')	Total/NA	Solid	3550C	
480-138304-14	NS-42 (2"-1')	Total/NA	Solid	3550C	
480-138304-15	SS-42 (0-2")	Total/NA	Solid	3550C	
480-138304-16	NS-27 (2"-1)	Total/NA	Solid	3550C	
480-138304-17	SS-27 (0-2")	Total/NA	Solid	3550C	
480-138304-18	NS-28 (2"-1')	Total/NA	Solid	3550C	
480-138304-19	SS-28 (0-2")	Total/NA	Solid	3550C	
480-138304-20	NS-29 (2"-1')	Total/NA	Solid	3550C	
MB 480-422683/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-422683/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-138304-14 MS	NS-42 (2"-1')	Total/NA	Solid	3550C	
480-138304-14 MSD	NS-42 (2"-1')	Total/NA	Solid	3550C	

Prep Batch: 422686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-21	SS-29 (0-2")	Total/NA	Solid	3550C	
MB 480-422686/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-422686/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-138304-21 MS	SS-29 (0-2")	Total/NA	Solid	3550C	
480-138304-21 MSD	SS-29 (0-2")	Total/NA	Solid	3550C	

Analysis Batch: 423511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-1	NS-21 (2"-1')	Total/NA	Solid	8270D	422683
480-138304-2	SS-21 (0-2')	Total/NA	Solid	8270D	422683
480-138304-3	NS-23 (2'-1')	Total/NA	Solid	8270D	422683
480-138304-4	SS-23 (0-2")	Total/NA	Solid	8270D	422683
480-138304-5	SS-22 (0-2")	Total/NA	Solid	8270D	422683
480-138304-6	NS-22 (2"-1')	Total/NA	Solid	8270D	422683
480-138304-7	SS-24 (0-2")	Total/NA	Solid	8270D	422683
480-138304-8	NS-24 (2"-1')	Total/NA	Solid	8270D	422683
480-138304-9	BD	Total/NA	Solid	8270D	422683
480-138304-10	SS-26 (0-2")	Total/NA	Solid	8270D	422683
480-138304-11	NS-26 (2"-1')	Total/NA	Solid	8270D	422683
480-138304-12	SS-25 (0-2")	Total/NA	Solid	8270D	422683
480-138304-13	NS-25 (2"-1')	Total/NA	Solid	8270D	422683
480-138304-14	NS-42 (2"-1')	Total/NA	Solid	8270D	422683
480-138304-15	SS-42 (0-2")	Total/NA	Solid	8270D	422683
480-138304-16	NS-27 (2"-1)	Total/NA	Solid	8270D	422683

TestAmerica Buffalo

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

GC/MS Semi VOA (Continued)

Analysis Batch: 423511 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-17	SS-27 (0-2")	Total/NA	Solid	8270D	422683
480-138304-18	NS-28 (2"-1")	Total/NA	Solid	8270D	422683
480-138304-19	SS-28 (0-2")	Total/NA	Solid	8270D	422683
480-138304-20	NS-29 (2"-1")	Total/NA	Solid	8270D	422683
MB 480-422683/1-A	Method Blank	Total/NA	Solid	8270D	422683
480-138304-14 MS	NS-42 (2"-1")	Total/NA	Solid	8270D	422683
480-138304-14 MSD	NS-42 (2"-1")	Total/NA	Solid	8270D	422683

Analysis Batch: 423748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-422683/2-A	Lab Control Sample	Total/NA	Solid	8270D	422683

Analysis Batch: 423763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-21	SS-29 (0-2")	Total/NA	Solid	8270D	422686
MB 480-422686/1-A	Method Blank	Total/NA	Solid	8270D	422686
LCS 480-422686/2-A	Lab Control Sample	Total/NA	Solid	8270D	422686
480-138304-21 MS	SS-29 (0-2")	Total/NA	Solid	8270D	422686
480-138304-21 MSD	SS-29 (0-2")	Total/NA	Solid	8270D	422686

GC Semi VOA

Prep Batch: 422693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-7	SS-24 (0-2")	Total/NA	Solid	3550C	
480-138304-8	NS-24 (2"-1")	Total/NA	Solid	3550C	
480-138304-12	SS-25 (0-2")	Total/NA	Solid	3550C	
480-138304-13	NS-25 (2"-1")	Total/NA	Solid	3550C	
480-138304-20	NS-29 (2"-1")	Total/NA	Solid	3550C	
480-138304-21	SS-29 (0-2")	Total/NA	Solid	3550C	
MB 480-422693/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-422693/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 422801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-7	SS-24 (0-2")	Total/NA	Solid	8082A	422693
480-138304-8	NS-24 (2"-1")	Total/NA	Solid	8082A	422693
480-138304-12	SS-25 (0-2")	Total/NA	Solid	8082A	422693
480-138304-13	NS-25 (2"-1")	Total/NA	Solid	8082A	422693
480-138304-20	NS-29 (2"-1")	Total/NA	Solid	8082A	422693
480-138304-21	SS-29 (0-2")	Total/NA	Solid	8082A	422693
MB 480-422693/1-A	Method Blank	Total/NA	Solid	8082A	422693
LCS 480-422693/2-A	Lab Control Sample	Total/NA	Solid	8082A	422693

Prep Batch: 422854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-7	SS-24 (0-2")	Total/NA	Solid	3550C	
480-138304-8	NS-24 (2"-1")	Total/NA	Solid	3550C	
480-138304-12	SS-25 (0-2")	Total/NA	Solid	3550C	
480-138304-13	NS-25 (2"-1")	Total/NA	Solid	3550C	

TestAmerica Buffalo

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

GC Semi VOA (Continued)

Prep Batch: 422854 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-20	NS-29 (2"-1')	Total/NA	Solid	3550C	
480-138304-21	SS-29 (0-2")	Total/NA	Solid	3550C	
MB 480-422854/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-422854/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-138304-7 MS	SS-24 (0-2")	Total/NA	Solid	3550C	
480-138304-7 MSD	SS-24 (0-2")	Total/NA	Solid	3550C	

Prep Batch: 422982

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-7	SS-24 (0-2")	Total/NA	Solid	8151A	
480-138304-8	NS-24 (2"-1')	Total/NA	Solid	8151A	
480-138304-12	SS-25 (0-2")	Total/NA	Solid	8151A	
480-138304-13	NS-25 (2"-1')	Total/NA	Solid	8151A	
480-138304-20	NS-29 (2"-1')	Total/NA	Solid	8151A	
480-138304-21	SS-29 (0-2")	Total/NA	Solid	8151A	
MB 480-422982/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 480-422982/2-A	Lab Control Sample	Total/NA	Solid	8151A	

Analysis Batch: 423008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-7	SS-24 (0-2")	Total/NA	Solid	8081B	422854
480-138304-8	NS-24 (2"-1')	Total/NA	Solid	8081B	422854
480-138304-12	SS-25 (0-2")	Total/NA	Solid	8081B	422854
480-138304-13	NS-25 (2"-1')	Total/NA	Solid	8081B	422854
480-138304-20	NS-29 (2"-1')	Total/NA	Solid	8081B	422854
480-138304-21	SS-29 (0-2")	Total/NA	Solid	8081B	422854
MB 480-422854/1-A	Method Blank	Total/NA	Solid	8081B	422854
LCS 480-422854/2-A	Lab Control Sample	Total/NA	Solid	8081B	422854
480-138304-7 MS	SS-24 (0-2")	Total/NA	Solid	8081B	422854
480-138304-7 MSD	SS-24 (0-2")	Total/NA	Solid	8081B	422854

Analysis Batch: 423554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-7	SS-24 (0-2")	Total/NA	Solid	8151A	422982
480-138304-8	NS-24 (2"-1')	Total/NA	Solid	8151A	422982
480-138304-12	SS-25 (0-2")	Total/NA	Solid	8151A	422982
480-138304-13	NS-25 (2"-1')	Total/NA	Solid	8151A	422982
480-138304-20	NS-29 (2"-1')	Total/NA	Solid	8151A	422982
480-138304-21	SS-29 (0-2")	Total/NA	Solid	8151A	422982
MB 480-422982/1-A	Method Blank	Total/NA	Solid	8151A	422982
LCS 480-422982/2-A	Lab Control Sample	Total/NA	Solid	8151A	422982

Metals

Prep Batch: 422880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-1	NS-21 (2"-1')	Total/NA	Solid	3050B	
480-138304-2	SS-21 (0-2')	Total/NA	Solid	3050B	
480-138304-3	NS-23 (2'-1')	Total/NA	Solid	3050B	
480-138304-4	SS-23 (0-2")	Total/NA	Solid	3050B	

TestAmerica Buffalo

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Metals (Continued)

Prep Batch: 422880 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-5	SS-22 (0-2")	Total/NA	Solid	3050B	
480-138304-6	NS-22 (2"-1')	Total/NA	Solid	3050B	
480-138304-7	SS-24 (0-2")	Total/NA	Solid	3050B	
480-138304-8	NS-24 (2"-1')	Total/NA	Solid	3050B	
480-138304-9	BD	Total/NA	Solid	3050B	
480-138304-10	SS-26 (0-2")	Total/NA	Solid	3050B	
480-138304-11	NS-26 (2"-1')	Total/NA	Solid	3050B	
480-138304-12	SS-25 (0-2")	Total/NA	Solid	3050B	
MB 480-422880/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-422880/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-138304-5 MS	SS-22 (0-2")	Total/NA	Solid	3050B	
480-138304-5 MSD	SS-22 (0-2")	Total/NA	Solid	3050B	

Prep Batch: 422881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-13	NS-25 (2"-1')	Total/NA	Solid	3050B	
480-138304-14	NS-42 (2"-1')	Total/NA	Solid	3050B	
480-138304-15	SS-42 (0-2")	Total/NA	Solid	3050B	
480-138304-16	NS-27 (2"-1)	Total/NA	Solid	3050B	
480-138304-17	SS-27 (0-2")	Total/NA	Solid	3050B	
480-138304-18	NS-28 (2"-1')	Total/NA	Solid	3050B	
480-138304-19	SS-28 (0-2")	Total/NA	Solid	3050B	
480-138304-20	NS-29 (2"-1')	Total/NA	Solid	3050B	
480-138304-21	SS-29 (0-2")	Total/NA	Solid	3050B	
MB 480-422881/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-422881/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-138304-14 MS	NS-42 (2"-1')	Total/NA	Solid	3050B	
480-138304-14 MSD	NS-42 (2"-1')	Total/NA	Solid	3050B	

Analysis Batch: 423209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-1	NS-21 (2"-1')	Total/NA	Solid	6010C	422880
480-138304-2	SS-21 (0-2')	Total/NA	Solid	6010C	422880
480-138304-3	NS-23 (2'-1')	Total/NA	Solid	6010C	422880
480-138304-4	SS-23 (0-2")	Total/NA	Solid	6010C	422880
480-138304-5	SS-22 (0-2")	Total/NA	Solid	6010C	422880
480-138304-6	NS-22 (2"-1')	Total/NA	Solid	6010C	422880
480-138304-7	SS-24 (0-2")	Total/NA	Solid	6010C	422880
480-138304-8	NS-24 (2"-1')	Total/NA	Solid	6010C	422880
480-138304-9	BD	Total/NA	Solid	6010C	422880
480-138304-10	SS-26 (0-2")	Total/NA	Solid	6010C	422880
480-138304-11	NS-26 (2"-1')	Total/NA	Solid	6010C	422880
480-138304-12	SS-25 (0-2")	Total/NA	Solid	6010C	422880
MB 480-422880/1-A	Method Blank	Total/NA	Solid	6010C	422880
LCSSRM 480-422880/2-A	Lab Control Sample	Total/NA	Solid	6010C	422880
480-138304-5 MS	SS-22 (0-2")	Total/NA	Solid	6010C	422880
480-138304-5 MSD	SS-22 (0-2")	Total/NA	Solid	6010C	422880

Analysis Batch: 423441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-13	NS-25 (2"-1')	Total/NA	Solid	6010C	422881

TestAmerica Buffalo

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Metals (Continued)

Analysis Batch: 423441 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-14	NS-42 (2"-1')	Total/NA	Solid	6010C	422881
480-138304-15	SS-42 (0-2")	Total/NA	Solid	6010C	422881
480-138304-16	NS-27 (2"-1')	Total/NA	Solid	6010C	422881
480-138304-17	SS-27 (0-2")	Total/NA	Solid	6010C	422881
480-138304-18	NS-28 (2"-1')	Total/NA	Solid	6010C	422881
480-138304-19	SS-28 (0-2")	Total/NA	Solid	6010C	422881
480-138304-20	NS-29 (2"-1')	Total/NA	Solid	6010C	422881
480-138304-21	SS-29 (0-2")	Total/NA	Solid	6010C	422881
MB 480-422881/1-A	Method Blank	Total/NA	Solid	6010C	422881
LCSSRM 480-422881/2-A	Lab Control Sample	Total/NA	Solid	6010C	422881
480-138304-14 MS	NS-42 (2"-1')	Total/NA	Solid	6010C	422881
480-138304-14 MSD	NS-42 (2"-1')	Total/NA	Solid	6010C	422881

Analysis Batch: 423717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-14	NS-42 (2"-1')	Total/NA	Solid	6010C	422881
480-138304-16	NS-27 (2"-1')	Total/NA	Solid	6010C	422881
480-138304-18	NS-28 (2"-1')	Total/NA	Solid	6010C	422881
480-138304-19	SS-28 (0-2")	Total/NA	Solid	6010C	422881
480-138304-14 MS	NS-42 (2"-1')	Total/NA	Solid	6010C	422881
480-138304-14 MSD	NS-42 (2"-1')	Total/NA	Solid	6010C	422881

Prep Batch: 424635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-1	NS-21 (2"-1')	Total/NA	Solid	7471B	
480-138304-2	SS-21 (0-2')	Total/NA	Solid	7471B	
480-138304-3	NS-23 (2'-1')	Total/NA	Solid	7471B	
480-138304-4	SS-23 (0-2")	Total/NA	Solid	7471B	
480-138304-5	SS-22 (0-2")	Total/NA	Solid	7471B	
480-138304-6	NS-22 (2"-1')	Total/NA	Solid	7471B	
480-138304-7	SS-24 (0-2")	Total/NA	Solid	7471B	
480-138304-8	NS-24 (2"-1')	Total/NA	Solid	7471B	
480-138304-9	BD	Total/NA	Solid	7471B	
480-138304-10	SS-26 (0-2")	Total/NA	Solid	7471B	
480-138304-11	NS-26 (2"-1')	Total/NA	Solid	7471B	
480-138304-12	SS-25 (0-2")	Total/NA	Solid	7471B	
480-138304-13	NS-25 (2"-1')	Total/NA	Solid	7471B	
480-138304-14	NS-42 (2"-1')	Total/NA	Solid	7471B	
480-138304-15	SS-42 (0-2")	Total/NA	Solid	7471B	
480-138304-16	NS-27 (2"-1')	Total/NA	Solid	7471B	
480-138304-17	SS-27 (0-2")	Total/NA	Solid	7471B	
480-138304-18	NS-28 (2"-1')	Total/NA	Solid	7471B	
480-138304-19	SS-28 (0-2")	Total/NA	Solid	7471B	
480-138304-20	NS-29 (2"-1')	Total/NA	Solid	7471B	
MB 480-424635/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-424635/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	
480-138304-14 MS	NS-42 (2"-1')	Total/NA	Solid	7471B	
480-138304-14 MSD	NS-42 (2"-1')	Total/NA	Solid	7471B	

TestAmerica Buffalo

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Metals (Continued)

Prep Batch: 424637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-21	SS-29 (0-2")	Total/NA	Solid	7471B	
MB 480-424637/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-424637/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	
480-138304-21 MS	SS-29 (0-2")	Total/NA	Solid	7471B	
480-138304-21 MSD	SS-29 (0-2")	Total/NA	Solid	7471B	

Analysis Batch: 424674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-1	NS-21 (2"-1')	Total/NA	Solid	7471B	424635
480-138304-2	SS-21 (0-2')	Total/NA	Solid	7471B	424635
480-138304-3	NS-23 (2'-1')	Total/NA	Solid	7471B	424635
480-138304-4	SS-23 (0-2")	Total/NA	Solid	7471B	424635
480-138304-5	SS-22 (0-2")	Total/NA	Solid	7471B	424635
480-138304-6	NS-22 (2"-1')	Total/NA	Solid	7471B	424635
480-138304-7	SS-24 (0-2")	Total/NA	Solid	7471B	424635
480-138304-8	NS-24 (2"-1')	Total/NA	Solid	7471B	424635
480-138304-9	BD	Total/NA	Solid	7471B	424635
480-138304-10	SS-26 (0-2")	Total/NA	Solid	7471B	424635
480-138304-11	NS-26 (2"-1')	Total/NA	Solid	7471B	424635
480-138304-12	SS-25 (0-2")	Total/NA	Solid	7471B	424635
480-138304-13	NS-25 (2"-1')	Total/NA	Solid	7471B	424635
480-138304-14	NS-42 (2"-1')	Total/NA	Solid	7471B	424635
480-138304-15	SS-42 (0-2")	Total/NA	Solid	7471B	424635
480-138304-16	NS-27 (2"-1)	Total/NA	Solid	7471B	424635
480-138304-17	SS-27 (0-2")	Total/NA	Solid	7471B	424635
480-138304-18	NS-28 (2"-1')	Total/NA	Solid	7471B	424635
480-138304-19	SS-28 (0-2")	Total/NA	Solid	7471B	424635
480-138304-20	NS-29 (2"-1')	Total/NA	Solid	7471B	424635
480-138304-21	SS-29 (0-2")	Total/NA	Solid	7471B	424637
MB 480-424635/1-A	Method Blank	Total/NA	Solid	7471B	424635
MB 480-424637/1-A	Method Blank	Total/NA	Solid	7471B	424637
LCSSRM 480-424635/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	424635
LCSSRM 480-424637/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	424637
480-138304-14 MS	NS-42 (2"-1')	Total/NA	Solid	7471B	424635
480-138304-14 MSD	NS-42 (2"-1')	Total/NA	Solid	7471B	424635
480-138304-21 MS	SS-29 (0-2")	Total/NA	Solid	7471B	424637
480-138304-21 MSD	SS-29 (0-2")	Total/NA	Solid	7471B	424637

General Chemistry

Analysis Batch: 422455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-1	NS-21 (2"-1')	Total/NA	Solid	Moisture	
480-138304-2	SS-21 (0-2')	Total/NA	Solid	Moisture	
480-138304-3	NS-23 (2'-1')	Total/NA	Solid	Moisture	
480-138304-4	SS-23 (0-2")	Total/NA	Solid	Moisture	
480-138304-5	SS-22 (0-2")	Total/NA	Solid	Moisture	
480-138304-6	NS-22 (2"-1')	Total/NA	Solid	Moisture	
480-138304-7	SS-24 (0-2")	Total/NA	Solid	Moisture	
480-138304-8	NS-24 (2"-1')	Total/NA	Solid	Moisture	

TestAmerica Buffalo

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

General Chemistry (Continued)

Analysis Batch: 422455 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138304-9	BD	Total/NA	Solid	Moisture	
480-138304-10	SS-26 (0-2")	Total/NA	Solid	Moisture	
480-138304-11	NS-26 (2"-1')	Total/NA	Solid	Moisture	
480-138304-12	SS-25 (0-2")	Total/NA	Solid	Moisture	
480-138304-13	NS-25 (2"-1')	Total/NA	Solid	Moisture	
480-138304-14	NS-42 (2"-1')	Total/NA	Solid	Moisture	
480-138304-15	SS-42 (0-2")	Total/NA	Solid	Moisture	
480-138304-16	NS-27 (2"-1')	Total/NA	Solid	Moisture	
480-138304-17	SS-27 (0-2")	Total/NA	Solid	Moisture	
480-138304-18	NS-28 (2"-1')	Total/NA	Solid	Moisture	
480-138304-19	SS-28 (0-2")	Total/NA	Solid	Moisture	
480-138304-20	NS-29 (2"-1')	Total/NA	Solid	Moisture	
480-138304-21	SS-29 (0-2")	Total/NA	Solid	Moisture	
480-138304-14 MS	NS-42 (2"-1')	Total/NA	Solid	Moisture	
480-138304-14 MSD	NS-42 (2"-1')	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-21 (2"-1')

Date Collected: 06/29/18 07:15

Date Received: 06/29/18 17:50

Lab Sample ID: 480-138304-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422455	06/30/18 07:11	CSW	TAL BUF

Client Sample ID: NS-21 (2"-1')

Date Collected: 06/29/18 07:15

Date Received: 06/29/18 17:50

Lab Sample ID: 480-138304-1

Matrix: Solid

Percent Solids: 81.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			422781	07/03/18 08:40	LMS	TAL BUF
Total/NA	Analysis	8260C		1	422759	07/03/18 18:12	AEM	TAL BUF
Total/NA	Prep	3550C			422683	07/02/18 14:22	ATG	TAL BUF
Total/NA	Analysis	8270D		1	423511	07/09/18 15:18	RJS	TAL BUF
Total/NA	Prep	3050B			422880	07/05/18 10:08	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423209	07/06/18 02:06	AMH	TAL BUF
Total/NA	Prep	7471B			424635	07/16/18 14:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	424674	07/16/18 15:23	BMB	TAL BUF

Client Sample ID: SS-21 (0-2')

Date Collected: 06/29/18 07:30

Date Received: 06/29/18 17:50

Lab Sample ID: 480-138304-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422455	06/30/18 07:11	CSW	TAL BUF

Client Sample ID: SS-21 (0-2')

Date Collected: 06/29/18 07:30

Date Received: 06/29/18 17:50

Lab Sample ID: 480-138304-2

Matrix: Solid

Percent Solids: 73.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			422683	07/02/18 14:22	ATG	TAL BUF
Total/NA	Analysis	8270D		5	423511	07/09/18 15:44	RJS	TAL BUF
Total/NA	Prep	3050B			422880	07/05/18 10:08	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423209	07/06/18 02:10	AMH	TAL BUF
Total/NA	Prep	7471B			424635	07/16/18 14:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	424674	07/16/18 15:25	BMB	TAL BUF

Client Sample ID: NS-23 (2'-1')

Date Collected: 06/29/18 07:45

Date Received: 06/29/18 17:50

Lab Sample ID: 480-138304-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422455	06/30/18 07:11	CSW	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-23 (2'-1')

Lab Sample ID: 480-138304-3

Date Collected: 06/29/18 07:45

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			423238	07/06/18 09:13	CDC	TAL BUF
Total/NA	Analysis	8260C		1	423243	07/06/18 18:44	AMM	TAL BUF
Total/NA	Prep	3550C			422683	07/02/18 14:22	ATG	TAL BUF
Total/NA	Analysis	8270D		5	423511	07/09/18 16:10	RJS	TAL BUF
Total/NA	Prep	3050B			422880	07/05/18 10:08	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423209	07/06/18 02:14	AMH	TAL BUF
Total/NA	Prep	7471B			424635	07/16/18 14:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	424674	07/16/18 15:27	BMB	TAL BUF

Client Sample ID: SS-23 (0-2")

Lab Sample ID: 480-138304-4

Date Collected: 06/29/18 08:00

Matrix: Solid

Date Received: 06/29/18 17:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422455	06/30/18 07:11	CSW	TAL BUF

Client Sample ID: SS-23 (0-2")

Lab Sample ID: 480-138304-4

Date Collected: 06/29/18 08:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 67.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			422683	07/02/18 14:22	ATG	TAL BUF
Total/NA	Analysis	8270D		5	423511	07/09/18 16:35	RJS	TAL BUF
Total/NA	Prep	3050B			422880	07/05/18 10:08	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423209	07/06/18 02:18	AMH	TAL BUF
Total/NA	Prep	7471B			424635	07/16/18 14:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	424674	07/16/18 15:29	BMB	TAL BUF

Client Sample ID: SS-22 (0-2")

Lab Sample ID: 480-138304-5

Date Collected: 06/29/18 08:15

Matrix: Solid

Date Received: 06/29/18 17:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422455	06/30/18 07:11	CSW	TAL BUF

Client Sample ID: SS-22 (0-2")

Lab Sample ID: 480-138304-5

Date Collected: 06/29/18 08:15

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			422683	07/02/18 14:22	ATG	TAL BUF
Total/NA	Analysis	8270D		20	423511	07/09/18 17:01	RJS	TAL BUF
Total/NA	Prep	3050B			422880	07/05/18 10:08	KMP	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-22 (0-2")

Lab Sample ID: 480-138304-5

Date Collected: 06/29/18 08:15

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010C		1	423209	07/06/18 02:22	AMH	TAL BUF
Total/NA	Prep	7471B			424635	07/16/18 14:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	424674	07/16/18 15:31	BMB	TAL BUF

Client Sample ID: NS-22 (2"-1')

Lab Sample ID: 480-138304-6

Date Collected: 06/29/18 08:30

Matrix: Solid

Date Received: 06/29/18 17:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422455	06/30/18 07:11	CSW	TAL BUF

Client Sample ID: NS-22 (2"-1')

Lab Sample ID: 480-138304-6

Date Collected: 06/29/18 08:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 83.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			423238	07/06/18 09:13	CDC	TAL BUF
Total/NA	Analysis	8260C		1	423243	07/06/18 19:10	AMM	TAL BUF
Total/NA	Prep	3550C			422683	07/02/18 14:22	ATG	TAL BUF
Total/NA	Analysis	8270D		1	423511	07/09/18 17:26	RJS	TAL BUF
Total/NA	Prep	3050B			422880	07/05/18 10:08	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423209	07/06/18 02:52	AMH	TAL BUF
Total/NA	Prep	7471B			424635	07/16/18 14:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	424674	07/16/18 15:32	BMB	TAL BUF

Client Sample ID: SS-24 (0-2")

Lab Sample ID: 480-138304-7

Date Collected: 06/29/18 08:45

Matrix: Solid

Date Received: 06/29/18 17:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422455	06/30/18 07:11	CSW	TAL BUF

Client Sample ID: SS-24 (0-2")

Lab Sample ID: 480-138304-7

Date Collected: 06/29/18 08:45

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 71.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			422683	07/02/18 14:22	ATG	TAL BUF
Total/NA	Analysis	8270D		5	423511	07/09/18 17:52	RJS	TAL BUF
Total/NA	Prep	3550C			422854	07/03/18 14:15	ATG	TAL BUF
Total/NA	Analysis	8081B		10	423008	07/05/18 15:09	JLS	TAL BUF
Total/NA	Prep	3550C			422693	07/02/18 15:18	SGD	TAL BUF
Total/NA	Analysis	8082A		1	422801	07/03/18 18:52	W1T	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			422982	07/05/18 07:15	SMP	TAL BUF
Total/NA	Analysis	8151A		1	423554	07/09/18 18:28	BEK	TAL BUF
Total/NA	Prep	3050B			422880	07/05/18 10:08	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423209	07/06/18 02:56	AMH	TAL BUF
Total/NA	Prep	7471B			424635	07/16/18 14:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	424674	07/16/18 15:34	BMB	TAL BUF

Client Sample ID: NS-24 (2"-1')

Lab Sample ID: 480-138304-8

Date Collected: 06/29/18 09:00

Matrix: Solid

Date Received: 06/29/18 17:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422455	06/30/18 07:11	CSW	TAL BUF

Client Sample ID: NS-24 (2"-1')

Lab Sample ID: 480-138304-8

Date Collected: 06/29/18 09:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 81.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			423238	07/06/18 09:13	CDC	TAL BUF
Total/NA	Analysis	8260C		1	423243	07/06/18 19:35	AMM	TAL BUF
Total/NA	Prep	3550C			422683	07/02/18 14:22	ATG	TAL BUF
Total/NA	Analysis	8270D		1	423511	07/09/18 18:17	RJS	TAL BUF
Total/NA	Prep	3550C			422854	07/03/18 14:15	ATG	TAL BUF
Total/NA	Analysis	8081B		1	423008	07/05/18 15:29	JLS	TAL BUF
Total/NA	Prep	3550C			422693	07/02/18 15:18	SGD	TAL BUF
Total/NA	Analysis	8082A		1	422801	07/03/18 19:08	W1T	TAL BUF
Total/NA	Prep	8151A			422982	07/05/18 07:15	SMP	TAL BUF
Total/NA	Analysis	8151A		1	423554	07/09/18 18:58	BEK	TAL BUF
Total/NA	Prep	3050B			422880	07/05/18 10:08	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423209	07/06/18 03:00	AMH	TAL BUF
Total/NA	Prep	7471B			424635	07/16/18 14:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	424674	07/16/18 15:36	BMB	TAL BUF

Client Sample ID: BD

Lab Sample ID: 480-138304-9

Date Collected: 06/29/18 09:10

Matrix: Solid

Date Received: 06/29/18 17:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422455	06/30/18 07:11	CSW	TAL BUF

Client Sample ID: BD

Lab Sample ID: 480-138304-9

Date Collected: 06/29/18 09:10

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 78.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			422683	07/02/18 14:22	ATG	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: BD

Lab Sample ID: 480-138304-9

Date Collected: 06/29/18 09:10

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 78.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D		1	423511	07/09/18 18:43	RJS	TAL BUF
Total/NA	Prep	3050B			422880	07/05/18 10:08	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423209	07/06/18 03:05	AMH	TAL BUF
Total/NA	Prep	7471B			424635	07/16/18 14:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	424674	07/16/18 15:40	BMB	TAL BUF

Client Sample ID: SS-26 (0-2")

Lab Sample ID: 480-138304-10

Date Collected: 06/29/18 09:15

Matrix: Solid

Date Received: 06/29/18 17:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422455	06/30/18 07:11	CSW	TAL BUF

Client Sample ID: SS-26 (0-2")

Lab Sample ID: 480-138304-10

Date Collected: 06/29/18 09:15

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 79.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			422683	07/02/18 14:22	ATG	TAL BUF
Total/NA	Analysis	8270D		1	423511	07/09/18 19:08	RJS	TAL BUF
Total/NA	Prep	3050B			422880	07/05/18 10:08	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423209	07/06/18 03:09	AMH	TAL BUF
Total/NA	Prep	7471B			424635	07/16/18 14:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	424674	07/16/18 15:42	BMB	TAL BUF

Client Sample ID: NS-26 (2"-1')

Lab Sample ID: 480-138304-11

Date Collected: 06/29/18 09:30

Matrix: Solid

Date Received: 06/29/18 17:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422455	06/30/18 07:11	CSW	TAL BUF

Client Sample ID: NS-26 (2"-1')

Lab Sample ID: 480-138304-11

Date Collected: 06/29/18 09:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 91.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			423238	07/06/18 09:13	CDC	TAL BUF
Total/NA	Analysis	8260C		1	423243	07/06/18 20:01	AMM	TAL BUF
Total/NA	Prep	3550C			422683	07/02/18 14:22	ATG	TAL BUF
Total/NA	Analysis	8270D		1	423511	07/09/18 19:33	RJS	TAL BUF
Total/NA	Prep	3050B			422880	07/05/18 10:08	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423209	07/06/18 03:24	AMH	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			424635	07/16/18 14:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	424674	07/16/18 15:43	BMB	TAL BUF

Client Sample ID: SS-25 (0-2")

Lab Sample ID: 480-138304-12

Date Collected: 06/29/18 09:45

Matrix: Solid

Date Received: 06/29/18 17:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422455	06/30/18 07:11	CSW	TAL BUF

Client Sample ID: SS-25 (0-2")

Lab Sample ID: 480-138304-12

Date Collected: 06/29/18 09:45

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 84.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			422683	07/02/18 14:22	ATG	TAL BUF
Total/NA	Analysis	8270D		1	423511	07/09/18 19:58	RJS	TAL BUF
Total/NA	Prep	3550C			422854	07/03/18 14:15	ATG	TAL BUF
Total/NA	Analysis	8081B		1	423008	07/05/18 15:49	JLS	TAL BUF
Total/NA	Prep	3550C			422693	07/02/18 15:18	SGD	TAL BUF
Total/NA	Analysis	8082A		1	422801	07/03/18 19:24	W1T	TAL BUF
Total/NA	Prep	8151A			422982	07/05/18 07:15	SMP	TAL BUF
Total/NA	Analysis	8151A		1	423554	07/09/18 19:28	BEK	TAL BUF
Total/NA	Prep	3050B			422880	07/05/18 10:08	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423209	07/06/18 03:28	AMH	TAL BUF
Total/NA	Prep	7471B			424635	07/16/18 14:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	424674	07/16/18 15:45	BMB	TAL BUF

Client Sample ID: NS-25 (2"-1')

Lab Sample ID: 480-138304-13

Date Collected: 06/29/18 10:00

Matrix: Solid

Date Received: 06/29/18 17:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422455	06/30/18 07:11	CSW	TAL BUF

Client Sample ID: NS-25 (2"-1')

Lab Sample ID: 480-138304-13

Date Collected: 06/29/18 10:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 84.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			423238	07/06/18 09:13	CDC	TAL BUF
Total/NA	Analysis	8260C		1	423243	07/06/18 20:26	AMM	TAL BUF
Total/NA	Prep	3550C			422683	07/02/18 14:22	ATG	TAL BUF
Total/NA	Analysis	8270D		1	423511	07/09/18 20:24	RJS	TAL BUF
Total/NA	Prep	3550C			422854	07/03/18 14:15	ATG	TAL BUF
Total/NA	Analysis	8081B		1	423008	07/05/18 16:08	JLS	TAL BUF
Total/NA	Prep	3550C			422693	07/02/18 15:18	SGD	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: NS-25 (2"-1')

Lab Sample ID: 480-138304-13

Date Collected: 06/29/18 10:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 84.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082A		1	422801	07/03/18 19:40	W1T	TAL BUF
Total/NA	Prep	8151A			422982	07/05/18 07:15	SMP	TAL BUF
Total/NA	Analysis	8151A		1	423554	07/09/18 19:57	BEK	TAL BUF
Total/NA	Prep	3050B			422881	07/06/18 10:15	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423441	07/06/18 18:52	S1P	TAL BUF
Total/NA	Prep	7471B			424635	07/16/18 14:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	424674	07/16/18 15:47	BMB	TAL BUF

Client Sample ID: NS-42 (2"-1')

Lab Sample ID: 480-138304-14

Date Collected: 06/29/18 12:00

Matrix: Solid

Date Received: 06/29/18 17:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422455	06/30/18 07:11	CSW	TAL BUF

Client Sample ID: NS-42 (2"-1')

Lab Sample ID: 480-138304-14

Date Collected: 06/29/18 12:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			423238	07/06/18 09:13	CDC	TAL BUF
Total/NA	Analysis	8260C		1	423243	07/06/18 20:52	AMM	TAL BUF
Total/NA	Prep	3550C			422683	07/02/18 14:22	ATG	TAL BUF
Total/NA	Analysis	8270D		1	423511	07/09/18 14:53	RJS	TAL BUF
Total/NA	Prep	3050B			422881	07/06/18 10:15	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423441	07/06/18 18:56	S1P	TAL BUF
Total/NA	Prep	3050B			422881	07/06/18 10:15	KMP	TAL BUF
Total/NA	Analysis	6010C		2	423717	07/10/18 00:39	S1P	TAL BUF
Total/NA	Prep	7471B			424635	07/16/18 14:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	424674	07/16/18 15:49	BMB	TAL BUF

Client Sample ID: SS-42 (0-2")

Lab Sample ID: 480-138304-15

Date Collected: 06/29/18 11:45

Matrix: Solid

Date Received: 06/29/18 17:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422455	06/30/18 07:11	CSW	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-42 (0-2")

Lab Sample ID: 480-138304-15

Date Collected: 06/29/18 11:45

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 78.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			422683	07/02/18 14:22	ATG	TAL BUF
Total/NA	Analysis	8270D		1	423511	07/09/18 20:49	RJS	TAL BUF
Total/NA	Prep	3050B			422881	07/06/18 10:15	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423441	07/06/18 19:26	S1P	TAL BUF
Total/NA	Prep	7471B			424635	07/16/18 14:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	424674	07/16/18 15:57	BMB	TAL BUF

Client Sample ID: NS-27 (2"-1)

Lab Sample ID: 480-138304-16

Date Collected: 06/29/18 11:30

Matrix: Solid

Date Received: 06/29/18 17:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422455	06/30/18 07:11	CSW	TAL BUF

Client Sample ID: NS-27 (2"-1)

Lab Sample ID: 480-138304-16

Date Collected: 06/29/18 11:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			423426	07/09/18 07:54	AMM	TAL BUF
Total/NA	Analysis	8260C		1	423427	07/09/18 15:45	AEM	TAL BUF
Total/NA	Prep	3550C			422683	07/02/18 14:22	ATG	TAL BUF
Total/NA	Analysis	8270D		1	423511	07/09/18 21:14	RJS	TAL BUF
Total/NA	Prep	3050B			422881	07/06/18 10:15	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423441	07/06/18 19:29	S1P	TAL BUF
Total/NA	Prep	3050B			422881	07/06/18 10:15	KMP	TAL BUF
Total/NA	Analysis	6010C		2	423717	07/10/18 00:57	S1P	TAL BUF
Total/NA	Prep	7471B			424635	07/16/18 14:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	424674	07/16/18 16:03	BMB	TAL BUF

Client Sample ID: SS-27 (0-2")

Lab Sample ID: 480-138304-17

Date Collected: 06/29/18 11:15

Matrix: Solid

Date Received: 06/29/18 17:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422455	06/30/18 07:11	CSW	TAL BUF

Client Sample ID: SS-27 (0-2")

Lab Sample ID: 480-138304-17

Date Collected: 06/29/18 11:15

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 81.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			422683	07/02/18 14:22	ATG	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-27 (0-2")

Lab Sample ID: 480-138304-17

Date Collected: 06/29/18 11:15

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 81.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D		1	423511	07/09/18 21:39	RJS	TAL BUF
Total/NA	Prep	3050B			422881	07/06/18 10:15	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423441	07/06/18 19:33	S1P	TAL BUF
Total/NA	Prep	7471B			424635	07/16/18 14:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	424674	07/16/18 16:04	BMB	TAL BUF

Client Sample ID: NS-28 (2"-1')

Lab Sample ID: 480-138304-18

Date Collected: 06/29/18 11:00

Matrix: Solid

Date Received: 06/29/18 17:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422455	06/30/18 07:11	CSW	TAL BUF

Client Sample ID: NS-28 (2"-1')

Lab Sample ID: 480-138304-18

Date Collected: 06/29/18 11:00

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 88.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			423426	07/09/18 07:54	AMM	TAL BUF
Total/NA	Analysis	8260C		1	423427	07/09/18 16:10	AEM	TAL BUF
Total/NA	Prep	3550C			422683	07/02/18 14:22	ATG	TAL BUF
Total/NA	Analysis	8270D		1	423511	07/09/18 22:04	RJS	TAL BUF
Total/NA	Prep	3050B			422881	07/06/18 10:15	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423441	07/06/18 19:37	S1P	TAL BUF
Total/NA	Prep	3050B			422881	07/06/18 10:15	KMP	TAL BUF
Total/NA	Analysis	6010C		2	423717	07/10/18 01:01	S1P	TAL BUF
Total/NA	Prep	7471B			424635	07/16/18 14:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	424674	07/16/18 16:06	BMB	TAL BUF

Client Sample ID: SS-28 (0-2")

Lab Sample ID: 480-138304-19

Date Collected: 06/29/18 10:45

Matrix: Solid

Date Received: 06/29/18 17:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422455	06/30/18 07:11	CSW	TAL BUF

Client Sample ID: SS-28 (0-2")

Lab Sample ID: 480-138304-19

Date Collected: 06/29/18 10:45

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 69.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			422683	07/02/18 14:22	ATG	TAL BUF
Total/NA	Analysis	8270D		1	423511	07/09/18 22:28	RJS	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			422881	07/06/18 10:15	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423441	07/06/18 19:41	S1P	TAL BUF
Total/NA	Prep	3050B			422881	07/06/18 10:15	KMP	TAL BUF
Total/NA	Analysis	6010C		2	423717	07/10/18 01:04	S1P	TAL BUF
Total/NA	Prep	7471B			424635	07/16/18 14:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	424674	07/16/18 16:08	BMB	TAL BUF

Client Sample ID: NS-29 (2"-1')

Lab Sample ID: 480-138304-20

Date Collected: 06/29/18 10:30

Matrix: Solid

Date Received: 06/29/18 17:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422455	06/30/18 07:11	CSW	TAL BUF

Client Sample ID: NS-29 (2"-1')

Lab Sample ID: 480-138304-20

Date Collected: 06/29/18 10:30

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 73.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			423426	07/09/18 07:54	AMM	TAL BUF
Total/NA	Analysis	8260C		1	423427	07/09/18 16:36	AEM	TAL BUF
Total/NA	Prep	3550C			422683	07/02/18 14:22	ATG	TAL BUF
Total/NA	Analysis	8270D		1	423511	07/09/18 22:53	RJS	TAL BUF
Total/NA	Prep	3550C			422854	07/03/18 14:15	ATG	TAL BUF
Total/NA	Analysis	8081B		20	423008	07/05/18 16:28	JLS	TAL BUF
Total/NA	Prep	3550C			422693	07/02/18 15:18	SGD	TAL BUF
Total/NA	Analysis	8082A		1	422801	07/03/18 20:28	W1T	TAL BUF
Total/NA	Prep	8151A			422982	07/05/18 07:15	SMP	TAL BUF
Total/NA	Analysis	8151A		1	423554	07/09/18 20:27	BEK	TAL BUF
Total/NA	Prep	3050B			422881	07/06/18 10:15	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423441	07/06/18 19:59	S1P	TAL BUF
Total/NA	Prep	7471B			424635	07/16/18 14:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	424674	07/16/18 16:09	BMB	TAL BUF

Client Sample ID: SS-29 (0-2")

Lab Sample ID: 480-138304-21

Date Collected: 06/29/18 10:15

Matrix: Solid

Date Received: 06/29/18 17:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	422455	06/30/18 07:11	CSW	TAL BUF

Client Sample ID: SS-29 (0-2")

Lab Sample ID: 480-138304-21

Date Collected: 06/29/18 10:15

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 76.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			422686	07/02/18 14:33	ATG	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Client Sample ID: SS-29 (0-2")

Lab Sample ID: 480-138304-21

Date Collected: 06/29/18 10:15

Matrix: Solid

Date Received: 06/29/18 17:50

Percent Solids: 76.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D		1	423763	07/10/18 19:23	PJQ	TAL BUF
Total/NA	Prep	3550C			422854	07/03/18 14:15	ATG	TAL BUF
Total/NA	Analysis	8081B		10	423008	07/05/18 16:47	JLS	TAL BUF
Total/NA	Prep	3550C			422693	07/02/18 15:18	SGD	TAL BUF
Total/NA	Analysis	8082A		1	422801	07/03/18 20:44	W1T	TAL BUF
Total/NA	Prep	8151A			422982	07/05/18 07:15	SMP	TAL BUF
Total/NA	Analysis	8151A		1	423554	07/09/18 21:27	BEK	TAL BUF
Total/NA	Prep	3050B			422881	07/06/18 10:15	KMP	TAL BUF
Total/NA	Analysis	6010C		1	423441	07/06/18 20:03	S1P	TAL BUF
Total/NA	Prep	7471B			424637	07/16/18 14:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	424674	07/16/18 16:14	BMB	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8081B	Organochlorine Pesticides (GC)	SW846	TAL BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
8151A	Herbicides (GC)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
3050B	Preparation, Metals	SW846	TAL BUF
3550C	Ultrasonic Extraction	SW846	TAL BUF
5035A_L	Closed System Purge and Trap	SW846	TAL BUF
7471B	Preparation, Mercury	SW846	TAL BUF
8151A	Extraction (Herbicides)	SW846	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138304-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-138304-1	NS-21 (2"-1')	Solid	06/29/18 07:15	06/29/18 17:50
480-138304-2	SS-21 (0-2')	Solid	06/29/18 07:30	06/29/18 17:50
480-138304-3	NS-23 (2'-1')	Solid	06/29/18 07:45	06/29/18 17:50
480-138304-4	SS-23 (0-2")	Solid	06/29/18 08:00	06/29/18 17:50
480-138304-5	SS-22 (0-2")	Solid	06/29/18 08:15	06/29/18 17:50
480-138304-6	NS-22 (2"-1')	Solid	06/29/18 08:30	06/29/18 17:50
480-138304-7	SS-24 (0-2")	Solid	06/29/18 08:45	06/29/18 17:50
480-138304-8	NS-24 (2"-1')	Solid	06/29/18 09:00	06/29/18 17:50
480-138304-9	BD	Solid	06/29/18 09:10	06/29/18 17:50
480-138304-10	SS-26 (0-2")	Solid	06/29/18 09:15	06/29/18 17:50
480-138304-11	NS-26 (2"-1')	Solid	06/29/18 09:30	06/29/18 17:50
480-138304-12	SS-25 (0-2")	Solid	06/29/18 09:45	06/29/18 17:50
480-138304-13	NS-25 (2"-1')	Solid	06/29/18 10:00	06/29/18 17:50
480-138304-14	NS-42 (2"-1')	Solid	06/29/18 12:00	06/29/18 17:50
480-138304-15	SS-42 (0-2")	Solid	06/29/18 11:45	06/29/18 17:50
480-138304-16	NS-27 (2"-1)	Solid	06/29/18 11:30	06/29/18 17:50
480-138304-17	SS-27 (0-2")	Solid	06/29/18 11:15	06/29/18 17:50
480-138304-18	NS-28 (2"-1')	Solid	06/29/18 11:00	06/29/18 17:50
480-138304-19	SS-28 (0-2")	Solid	06/29/18 10:45	06/29/18 17:50
480-138304-20	NS-29 (2"-1')	Solid	06/29/18 10:30	06/29/18 17:50
480-138304-21	SS-29 (0-2")	Solid	06/29/18 10:15	06/29/18 17:50

TestAmerica Buffalo
10 Hazelwood Drive

Amherst, NY 14228
Phone: 716.691.2600 Fax: 716.691.7991

Chain of Custody Record 243353

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact		Project Manager: <u>Bobbi Mirek</u>		Site Contact: <u>Mike Savi</u>		Date: <u>6/29/10</u>		COC No: <u>1</u> of <u>2</u> COCs	
Company Name: <u>TOMKINS ENV RESTORATION</u>		Tel/Fax: <u>716-713-3437</u>		Lab Contact: <u>Don Fick</u>		Carrier:		Sampler:	
Address: <u>2558 Huron Ave</u>		Analysis Turnaround Time		Perform MS / MSD (Y / N)		Filtered Sample (Y / N)		For Lab Use Only:	
City/State/Zip: <u>Buffalo, NY 14216</u>		☐ CALENDAR DAYS ☐ WORKING DAYS		TAT if different from Below		480-138304 COC		Walk-in Client:	
Phone: <u>716-713-3437</u>		☐ 2 weeks ☒ 1 week ☐ 2 days ☐ 1 day		Sample Date		Sample Time		Lab Sampling:	
Project Name: <u>SOPHIA R.I.</u>		Sample Type (C=Comp, G=Grab)		Matrix		# of Cont.		Job / SDG No.:	
Site: <u>Oneida RD site</u>		Sample Date		Sample Time		Matrix		Sample Specific Notes:	
P O # <u>10323-017-001-005-003</u>		Sample Identification		Sample Date		Sample Time		Sample Specific Notes:	
NS-21 (2" x 1")		6/29/10 7:15		6		Soil		3	
SS-21 (0-2")		7:30		1		Soil		2	
NS-23 (2" x 1")		7:45		1		Soil		3	
SS-23 (0-2")		8:00		1		Soil		2	
SS-22 (0-2")		8:15		1		Soil		2	
NS-22 (2" x 1")		8:30		1		Soil		3	
SS-24 (0-2")		8:45		1		Soil		5	
NS-24 (2" x 1")		9:00		1		Soil		6	
BD		9:10		1		Soil		2	
SS-26 (0-2")		9:15		1		Soil		2	
NS-26 (2" x 1")		9:30		1		Soil		3	
SS-25 (0-2")		9:45		1		Soil		5	
Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other		1		1		1		1	
Possible Hazard Identification:		Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.		Return to Client		Disposal by Lab		Archive for	
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown									
Special Instructions/QC Requirements & Comments:		Categorize B deliverable, NysDel Evis		Cooler Temp. (°C): Obs'd: <u>10.0</u> Cor'd: <u>10.0</u>		Therm ID No.: <u>1</u>		Date/Time: <u>6-29-10 16:10</u>	
Custody Seal No.:		Company: <u>TOMKINS</u>		Received by: <u>Don Fick</u>		Company: <u>WCS</u>		Date/Time: <u>6/29/10 17:50</u>	
Relinquished by:		Company: <u>WCS</u>		Received by: <u>Don Fick</u>		Company: <u>WCS</u>		Date/Time: <u>6/29/10 17:50</u>	
Relinquished by:		Company: <u>WCS</u>		Received in Laboratory by:		Company:		Date/Time:	

TestAmerica Buffalo
10 Hazelwood Drive

Amherst, NY 14228
Phone: 716.691.2600 Fax: 716.691.7991

Chain of Custody Record 243354

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0719)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Company Name: <u>TestAmerica Buffalo</u>		Client Contact		Project Manager: <u>Mike Lesakowski</u>		Site Contact: <u>Mike Lesakowski</u>		Date: <u>6/29/18</u>		COC No: <u>2</u> of <u>2</u> COCs					
Address: <u>2558 Hamburg Tpke</u>		Tel/Fax: <u>716-713-3937</u>		Analysis Turnaround Time		Lab Contact: <u>Mike Lesakowski</u>		Carrier:		Sampler:					
City/State/Zip: <u>Buffalo, NY 14216</u>		Phone: <u>716-713-3937</u>		☐ CALENDAR DAYS ☐ WORKING DAYS		Perform MS / MSD (Y / N)		Walk-in Client:		For Lab Use Only:					
Fax: <u>716-713-3937</u>		TAT if different from Below		☒ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Filtered Sample (Y / N)		Lab Sampling:		Job / SDG No.:					
Project Name: <u>General Remedial RI</u>		Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=Grab)		Matrix		# of Cont.		Sample Specific Notes:	
Site: <u>02117 RD 514</u>		<u>NS-25 (2"-1")</u>		<u>6/24/18</u>		<u>10:00</u>		<u>G</u>		<u>Soil</u>		<u>6</u>		<u>Residuals</u>	
P O # <u>10323-017-001-003-003</u>		<u>NS-42 (2"-1")</u>		<u>12:00</u>		<u>11:45</u>		<u>G</u>		<u>Soil</u>		<u>6</u>		<u>Residuals</u>	
		<u>SS-42 (0-2")</u>		<u>11:30</u>		<u>11:30</u>		<u>G</u>		<u>Soil</u>		<u>2</u>		<u>Residuals</u>	
		<u>NS-27 (2"-1")</u>		<u>11:15</u>		<u>11:15</u>		<u>G</u>		<u>Soil</u>		<u>3</u>		<u>Residuals</u>	
		<u>SS-27 (0-2")</u>		<u>11:00</u>		<u>10:45</u>		<u>G</u>		<u>Soil</u>		<u>2</u>		<u>Residuals</u>	
		<u>NS-28 (2"-1")</u>		<u>10:30</u>		<u>10:30</u>		<u>G</u>		<u>Soil</u>		<u>3</u>		<u>Residuals</u>	
		<u>SS-28 (0-2")</u>		<u>10:15</u>		<u>10:15</u>		<u>G</u>		<u>Soil</u>		<u>2</u>		<u>Residuals</u>	
		<u>NS-29 (2"-1")</u>		<u>10:15</u>		<u>10:15</u>		<u>G</u>		<u>Soil</u>		<u>6</u>		<u>Residuals</u>	
		<u>SS-24 (0-2")</u>		<u>10:15</u>		<u>10:15</u>		<u>G</u>		<u>Soil</u>		<u>5</u>		<u>Residuals</u>	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other														Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.														☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown	
Special Instructions/ QC Requirements & Comments: <u>Cat B deliv to client, NYS Dec 2018</u>														☐ Return to Client ☐ Disposal by Lab ☐ Archive for Months	
Custody Seal No.: <u>NO ICE</u>														Therm ID No.: <u>#1</u>	
Relinquished by: <u>Turner</u>														Date/Time: <u>6/29/18 1600</u>	
Relinquished by: <u>WCS</u>														Date/Time: <u>6/29/18 1750</u>	
Relinquished by:														Date/Time:	

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-138304-1

Login Number: 138304

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	False	Containers are not labeled.
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	False	Containers are not labeled.
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	TURNKEY
Samples received within 48 hours of sampling.	N/A	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-138450-1

Client Project/Site: Oregon Road Site - Olean, NY

For:

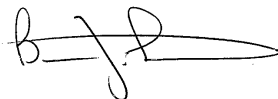
Benchmark Env. Eng. & Science, PLLC

2558 Hamburg Turnpike

Suite 300

Lackawanna, New York 14218

Attn: Mr. Michael Lesakowski



Authorized for release by:

7/25/2018 11:06:08 AM

Brian Fischer, Manager of Project Management

(716)504-9835

brian.fischer@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Definitions/Glossary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Case Narrative

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

Job ID: 480-138450-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-138450-1

Comments

No additional comments.

Receipt

The sample was received on 7/6/2018 2:30 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.8° C.

GC/MS VOA

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

GC/MS Semi VOA

Method(s) 8270D: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 480-423419 and analytical batch 480-423737 recovered outside control limits for the following analytes: Dimethyl phthalate, 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, Atrazine, Benzo(k)fluoranthene, 2,4-Dinitrotoluene and Acenaphthylene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following sample is impacted: SW-4 (480-138450-1).

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

GC Semi VOA

Method(s) 8081B: All primary data for analytical batch 423232 is reported from the RTX-CLPI column.

Method(s) 8082A: The continuing calibration verification (CCV 480-423235/10) associated with batch 480-423235 recovered above the upper control limit for PCB-1248. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: SW-4 (480-138450-1).

Method(s) 8082A: All primary data for analytical batch 423235 is reported from the ZB-5 column.

Method(s) 8082A: The percent difference in a multi-component continuing calibration verification is assessed on the basis of the total amount, individual peak calculations are only listed for completeness.

Method(s) 8151A: All primary data for analytical batch 423554 is reported from the RTX-CLPI column.

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

Metals

Method(s) 6010C: The continuing calibration verification (CCV 480-423704/35) associated with batch 480-423704 recovered above the upper control limit for Total Cadmium. The samples associated with this CCV, SW-4 (480-138450-1), were non-detects for the affected analytes; therefore, the data have been reported.

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

Organic Prep

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-423186.

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 480-423419.

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-423187.

Case Narrative

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

Job ID: 480-138450-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Method(s) 8151A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-423184.

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

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

Client Sample ID: SW-4

Lab Sample ID: 480-138450-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.6	J	10	3.0	ug/L	1		8260C	Total/NA
Barium	0.28		0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	63.6		0.50	0.10	mg/L	1		6010C	Total/NA
Iron	0.27		0.050	0.019	mg/L	1		6010C	Total/NA
Magnesium	14.2		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.76		0.0030	0.00040	mg/L	1		6010C	Total/NA
Potassium	2.2		0.50	0.10	mg/L	1		6010C	Total/NA
Sodium	145		1.0	0.32	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

Client Sample ID: SW-4

Lab Sample ID: 480-138450-1

Date Collected: 07/05/18 11:30

Matrix: Water

Date Received: 07/06/18 02:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/06/18 14:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/06/18 14:34	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/06/18 14:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/06/18 14:34	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/06/18 14:34	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/06/18 14:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/06/18 14:34	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/06/18 14:34	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/06/18 14:34	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/06/18 14:34	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/06/18 14:34	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/06/18 14:34	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/06/18 14:34	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/06/18 14:34	1
2-Hexanone	ND		5.0	1.2	ug/L			07/06/18 14:34	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/06/18 14:34	1
Acetone	3.6	J	10	3.0	ug/L			07/06/18 14:34	1
Benzene	ND		1.0	0.41	ug/L			07/06/18 14:34	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/06/18 14:34	1
Bromoform	ND		1.0	0.26	ug/L			07/06/18 14:34	1
Bromomethane	ND		1.0	0.69	ug/L			07/06/18 14:34	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/06/18 14:34	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/06/18 14:34	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/06/18 14:34	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/06/18 14:34	1
Chloroethane	ND		1.0	0.32	ug/L			07/06/18 14:34	1
Chloroform	ND		1.0	0.34	ug/L			07/06/18 14:34	1
Chloromethane	ND		1.0	0.35	ug/L			07/06/18 14:34	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/06/18 14:34	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/06/18 14:34	1
Cyclohexane	ND		1.0	0.18	ug/L			07/06/18 14:34	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/06/18 14:34	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/06/18 14:34	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/06/18 14:34	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/06/18 14:34	1
Methyl acetate	ND		2.5	1.3	ug/L			07/06/18 14:34	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/06/18 14:34	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/06/18 14:34	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/06/18 14:34	1
Styrene	ND		1.0	0.73	ug/L			07/06/18 14:34	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/06/18 14:34	1
Toluene	ND		1.0	0.51	ug/L			07/06/18 14:34	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/06/18 14:34	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/06/18 14:34	1
Trichloroethene	ND		1.0	0.46	ug/L			07/06/18 14:34	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/06/18 14:34	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/06/18 14:34	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/06/18 14:34	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

Client Sample ID: SW-4

Lab Sample ID: 480-138450-1

Date Collected: 07/05/18 11:30

Matrix: Water

Date Received: 07/06/18 02:30

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		<i>ug/L</i>					07/06/18 14:34	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	101		80 - 120					07/06/18 14:34	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	97		77 - 120					07/06/18 14:34	1
<i>4-Bromofluorobenzene (Surr)</i>	101		73 - 120					07/06/18 14:34	1
<i>Dibromofluoromethane (Surr)</i>	96		75 - 123					07/06/18 14:34	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		5.0	0.65	ug/L		07/09/18 07:24	07/10/18 15:46	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		07/09/18 07:24	07/10/18 15:46	1
2,4,5-Trichlorophenol	ND *		5.0	0.48	ug/L		07/09/18 07:24	07/10/18 15:46	1
2,4,6-Trichlorophenol	ND *		5.0	0.61	ug/L		07/09/18 07:24	07/10/18 15:46	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		07/09/18 07:24	07/10/18 15:46	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		07/09/18 07:24	07/10/18 15:46	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		07/09/18 07:24	07/10/18 15:46	1
2,4-Dinitrotoluene	ND *		5.0	0.45	ug/L		07/09/18 07:24	07/10/18 15:46	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		07/09/18 07:24	07/10/18 15:46	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		07/09/18 07:24	07/10/18 15:46	1
2-Chlorophenol	ND		5.0	0.53	ug/L		07/09/18 07:24	07/10/18 15:46	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		07/09/18 07:24	07/10/18 15:46	1
2-Methylphenol	ND		5.0	0.40	ug/L		07/09/18 07:24	07/10/18 15:46	1
2-Nitroaniline	ND		10	0.42	ug/L		07/09/18 07:24	07/10/18 15:46	1
2-Nitrophenol	ND		5.0	0.48	ug/L		07/09/18 07:24	07/10/18 15:46	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		07/09/18 07:24	07/10/18 15:46	1
3-Nitroaniline	ND		10	0.48	ug/L		07/09/18 07:24	07/10/18 15:46	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		07/09/18 07:24	07/10/18 15:46	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		07/09/18 07:24	07/10/18 15:46	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		07/09/18 07:24	07/10/18 15:46	1
4-Chloroaniline	ND		5.0	0.59	ug/L		07/09/18 07:24	07/10/18 15:46	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		07/09/18 07:24	07/10/18 15:46	1
4-Methylphenol	ND		10	0.36	ug/L		07/09/18 07:24	07/10/18 15:46	1
4-Nitroaniline	ND		10	0.25	ug/L		07/09/18 07:24	07/10/18 15:46	1
4-Nitrophenol	ND		10	1.5	ug/L		07/09/18 07:24	07/10/18 15:46	1
Acenaphthene	ND		5.0	0.41	ug/L		07/09/18 07:24	07/10/18 15:46	1
Acenaphthylene	ND *		5.0	0.38	ug/L		07/09/18 07:24	07/10/18 15:46	1
Acetophenone	ND		5.0	0.54	ug/L		07/09/18 07:24	07/10/18 15:46	1
Anthracene	ND		5.0	0.28	ug/L		07/09/18 07:24	07/10/18 15:46	1
Atrazine	ND *		5.0	0.46	ug/L		07/09/18 07:24	07/10/18 15:46	1
Benzaldehyde	ND		5.0	0.27	ug/L		07/09/18 07:24	07/10/18 15:46	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		07/09/18 07:24	07/10/18 15:46	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		07/09/18 07:24	07/10/18 15:46	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		07/09/18 07:24	07/10/18 15:46	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		07/09/18 07:24	07/10/18 15:46	1
Benzo(k)fluoranthene	ND *		5.0	0.73	ug/L		07/09/18 07:24	07/10/18 15:46	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		07/09/18 07:24	07/10/18 15:46	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		07/09/18 07:24	07/10/18 15:46	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		07/09/18 07:24	07/10/18 15:46	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		07/09/18 07:24	07/10/18 15:46	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

Client Sample ID: SW-4

Lab Sample ID: 480-138450-1

Date Collected: 07/05/18 11:30

Matrix: Water

Date Received: 07/06/18 02:30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	ND		5.0	2.2	ug/L		07/09/18 07:24	07/10/18 15:46	1
Carbazole	ND		5.0	0.30	ug/L		07/09/18 07:24	07/10/18 15:46	1
Chrysene	ND		5.0	0.33	ug/L		07/09/18 07:24	07/10/18 15:46	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		07/09/18 07:24	07/10/18 15:46	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		07/09/18 07:24	07/10/18 15:46	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		07/09/18 07:24	07/10/18 15:46	1
Dibenzofuran	ND		10	0.51	ug/L		07/09/18 07:24	07/10/18 15:46	1
Diethyl phthalate	ND		5.0	0.22	ug/L		07/09/18 07:24	07/10/18 15:46	1
Dimethyl phthalate	ND	*	5.0	0.36	ug/L		07/09/18 07:24	07/10/18 15:46	1
Fluoranthene	ND		5.0	0.40	ug/L		07/09/18 07:24	07/10/18 15:46	1
Fluorene	ND		5.0	0.36	ug/L		07/09/18 07:24	07/10/18 15:46	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		07/09/18 07:24	07/10/18 15:46	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		07/09/18 07:24	07/10/18 15:46	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		07/09/18 07:24	07/10/18 15:46	1
Hexachloroethane	ND		5.0	0.59	ug/L		07/09/18 07:24	07/10/18 15:46	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		07/09/18 07:24	07/10/18 15:46	1
Isophorone	ND		5.0	0.43	ug/L		07/09/18 07:24	07/10/18 15:46	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		07/09/18 07:24	07/10/18 15:46	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		07/09/18 07:24	07/10/18 15:46	1
Naphthalene	ND		5.0	0.76	ug/L		07/09/18 07:24	07/10/18 15:46	1
Nitrobenzene	ND		5.0	0.29	ug/L		07/09/18 07:24	07/10/18 15:46	1
Pentachlorophenol	ND		10	2.2	ug/L		07/09/18 07:24	07/10/18 15:46	1
Phenanthrene	ND		5.0	0.44	ug/L		07/09/18 07:24	07/10/18 15:46	1
Phenol	ND		5.0	0.39	ug/L		07/09/18 07:24	07/10/18 15:46	1
Pyrene	ND		5.0	0.34	ug/L		07/09/18 07:24	07/10/18 15:46	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	4.0	T J	ug/L		2.75		07/09/18 07:24	07/10/18 15:46	1
Unknown	180	T J	ug/L		3.18		07/09/18 07:24	07/10/18 15:46	1
Unknown	13	T J	ug/L		5.05		07/09/18 07:24	07/10/18 15:46	1
Cyclotetrasiloxane, octamethyl-	3.4	T J N	ug/L		6.15	556-67-2	07/09/18 07:24	07/10/18 15:46	1
Cyclopentasiloxane, decamethyl-	3.7	T J N	ug/L		7.10	541-02-6	07/09/18 07:24	07/10/18 15:46	1
Unknown	2.8	T J	ug/L		7.98		07/09/18 07:24	07/10/18 15:46	1
Unknown	2.1	T J	ug/L		8.76		07/09/18 07:24	07/10/18 15:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	105		41 - 120	07/09/18 07:24	07/10/18 15:46	1
2-Fluorobiphenyl	101		48 - 120	07/09/18 07:24	07/10/18 15:46	1
2-Fluorophenol	76		35 - 120	07/09/18 07:24	07/10/18 15:46	1
Nitrobenzene-d5	85		46 - 120	07/09/18 07:24	07/10/18 15:46	1
p-Terphenyl-d14	93		59 - 136	07/09/18 07:24	07/10/18 15:46	1
Phenol-d5	60		22 - 120	07/09/18 07:24	07/10/18 15:46	1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.050	0.0092	ug/L		07/06/18 07:40	07/06/18 16:27	1
4,4'-DDE	ND		0.050	0.012	ug/L		07/06/18 07:40	07/06/18 16:27	1
4,4'-DDT	ND		0.050	0.011	ug/L		07/06/18 07:40	07/06/18 16:27	1
Aldrin	ND		0.050	0.0081	ug/L		07/06/18 07:40	07/06/18 16:27	1
alpha-BHC	ND		0.050	0.0077	ug/L		07/06/18 07:40	07/06/18 16:27	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

Client Sample ID: SW-4

Lab Sample ID: 480-138450-1

Date Collected: 07/05/18 11:30

Matrix: Water

Date Received: 07/06/18 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-Chlordane	ND		0.050	0.015	ug/L		07/06/18 07:40	07/06/18 16:27	1
beta-BHC	ND		0.050	0.025	ug/L		07/06/18 07:40	07/06/18 16:27	1
delta-BHC	ND		0.050	0.010	ug/L		07/06/18 07:40	07/06/18 16:27	1
Dieldrin	ND		0.050	0.0098	ug/L		07/06/18 07:40	07/06/18 16:27	1
Endosulfan I	ND		0.050	0.011	ug/L		07/06/18 07:40	07/06/18 16:27	1
Endosulfan II	ND		0.050	0.012	ug/L		07/06/18 07:40	07/06/18 16:27	1
Endosulfan sulfate	ND		0.050	0.016	ug/L		07/06/18 07:40	07/06/18 16:27	1
Endrin	ND		0.050	0.014	ug/L		07/06/18 07:40	07/06/18 16:27	1
Endrin aldehyde	ND		0.050	0.016	ug/L		07/06/18 07:40	07/06/18 16:27	1
Endrin ketone	ND		0.050	0.012	ug/L		07/06/18 07:40	07/06/18 16:27	1
gamma-BHC (Lindane)	ND		0.050	0.0080	ug/L		07/06/18 07:40	07/06/18 16:27	1
trans-Chlordane	ND		0.050	0.011	ug/L		07/06/18 07:40	07/06/18 16:27	1
Heptachlor	ND		0.050	0.0085	ug/L		07/06/18 07:40	07/06/18 16:27	1
Heptachlor epoxide	ND		0.050	0.0074	ug/L		07/06/18 07:40	07/06/18 16:27	1
Methoxychlor	ND		0.050	0.014	ug/L		07/06/18 07:40	07/06/18 16:27	1
Toxaphene	ND		0.50	0.12	ug/L		07/06/18 07:40	07/06/18 16:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	54		20 - 120	07/06/18 07:40	07/06/18 16:27	1
DCB Decachlorobiphenyl	63		20 - 120	07/06/18 07:40	07/06/18 16:27	1
Tetrachloro-m-xylene	96		44 - 120	07/06/18 07:40	07/06/18 16:27	1
Tetrachloro-m-xylene	86		44 - 120	07/06/18 07:40	07/06/18 16:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.18	ug/L		07/06/18 07:48	07/06/18 15:54	1
PCB-1221	ND		0.50	0.18	ug/L		07/06/18 07:48	07/06/18 15:54	1
PCB-1232	ND		0.50	0.18	ug/L		07/06/18 07:48	07/06/18 15:54	1
PCB-1242	ND		0.50	0.18	ug/L		07/06/18 07:48	07/06/18 15:54	1
PCB-1248	ND		0.50	0.18	ug/L		07/06/18 07:48	07/06/18 15:54	1
PCB-1254	ND		0.50	0.25	ug/L		07/06/18 07:48	07/06/18 15:54	1
PCB-1260	ND		0.50	0.25	ug/L		07/06/18 07:48	07/06/18 15:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	42		19 - 120	07/06/18 07:48	07/06/18 15:54	1
DCB Decachlorobiphenyl	49		19 - 120	07/06/18 07:48	07/06/18 15:54	1
Tetrachloro-m-xylene	92		39 - 121	07/06/18 07:48	07/06/18 15:54	1
Tetrachloro-m-xylene	85		39 - 121	07/06/18 07:48	07/06/18 15:54	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		0.52	0.070	ug/L		07/06/18 07:25	07/10/18 00:25	1
Silvex (2,4,5-TP)	ND		0.52	0.052	ug/L		07/06/18 07:25	07/10/18 00:25	1
2,4-D	ND		0.52	0.18	ug/L		07/06/18 07:25	07/10/18 00:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	83		48 - 132	07/06/18 07:25	07/10/18 00:25	1
2,4-Dichlorophenylacetic acid	67		48 - 132	07/06/18 07:25	07/10/18 00:25	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

Client Sample ID: SW-4

Lab Sample ID: 480-138450-1

Date Collected: 07/05/18 11:30

Matrix: Water

Date Received: 07/06/18 02:30

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		07/06/18 16:03	07/09/18 22:22	1
Antimony	ND		0.020	0.0068	mg/L		07/06/18 16:03	07/09/18 22:22	1
Arsenic	ND		0.015	0.0056	mg/L		07/06/18 16:03	07/09/18 22:22	1
Barium	0.28		0.0020	0.00070	mg/L		07/06/18 16:03	07/09/18 22:22	1
Beryllium	ND		0.0020	0.00030	mg/L		07/06/18 16:03	07/09/18 22:22	1
Cadmium	ND		0.0020	0.00050	mg/L		07/06/18 16:03	07/09/18 22:22	1
Calcium	63.6		0.50	0.10	mg/L		07/06/18 16:03	07/09/18 22:22	1
Chromium	ND		0.0040	0.0010	mg/L		07/06/18 16:03	07/09/18 22:22	1
Cobalt	ND		0.0040	0.00063	mg/L		07/06/18 16:03	07/09/18 22:22	1
Copper	ND		0.010	0.0016	mg/L		07/06/18 16:03	07/09/18 22:22	1
Iron	0.27		0.050	0.019	mg/L		07/06/18 16:03	07/09/18 22:22	1
Lead	ND		0.010	0.0030	mg/L		07/06/18 16:03	07/09/18 22:22	1
Magnesium	14.2		0.20	0.043	mg/L		07/06/18 16:03	07/09/18 22:22	1
Manganese	0.76		0.0030	0.00040	mg/L		07/06/18 16:03	07/09/18 22:22	1
Nickel	ND		0.010	0.0013	mg/L		07/06/18 16:03	07/09/18 22:22	1
Potassium	2.2		0.50	0.10	mg/L		07/06/18 16:03	07/09/18 22:22	1
Selenium	ND		0.025	0.0087	mg/L		07/06/18 16:03	07/09/18 22:22	1
Silver	ND		0.0060	0.0017	mg/L		07/06/18 16:03	07/09/18 22:22	1
Sodium	145		1.0	0.32	mg/L		07/06/18 16:03	07/09/18 22:22	1
Thallium	ND		0.020	0.010	mg/L		07/06/18 16:03	07/09/18 22:22	1
Vanadium	ND		0.0050	0.0015	mg/L		07/06/18 16:03	07/09/18 22:22	1
Zinc	ND		0.010	0.0015	mg/L		07/06/18 16:03	07/09/18 22:22	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		07/18/18 11:20	07/18/18 15:26	1

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TOL (80-120)	DCA (77-120)	BFB (73-120)	DBFM (75-123)
480-138450-1	SW-4	101	97	101	96
LCS 480-423199/5	Lab Control Sample	99	104	105	106
MB 480-423199/7	Method Blank	99	105	100	102

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (41-120)	FBP (48-120)	2FP (35-120)	NBZ (46-120)	TPHd14 (59-136)	PHL (22-120)
480-138450-1	SW-4	105	101	76	85	93	60
LCS 480-423419/2-A	Lab Control Sample	101	99	76	96	99	61
LCSD 480-423419/3-A	Lab Control Sample Dup	104	100	89	96	105	62
MB 480-423419/1-A	Method Blank	87	93	73	81	102	56

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
TPHd14 = p-Terphenyl-d14
PHL = Phenol-d5

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1 (20-120)	DCBP2 (20-120)	TCX1 (44-120)	TCX2 (44-120)
480-138450-1	SW-4	54	63	96	86
LCS 480-423186/2-A	Lab Control Sample	46	46	82	90
LCSD 480-423186/3-A	Lab Control Sample Dup	41	41	79	86
MB 480-423186/1-A	Method Blank	56	62	90	86

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1 (19-120)	DCBP2 (19-120)	TCX1 (39-121)	TCX2 (39-121)
480-138450-1	SW-4	42	49	92	85
LCS 480-423187/2-A	Lab Control Sample	37	44	85	73
LCSD 480-423187/3-A	Lab Control Sample Dup	43	50	102	90
MB 480-423187/1-A	Method Blank	33	37	92	82
Surrogate Legend					
DCBP = DCB Decachlorobiphenyl					
TCX = Tetrachloro-m-xylene					

Method: 8151A - Herbicides (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCPAA1 (48-132)	DCPAA2 (48-132)
480-138450-1	SW-4	83	67
LCS 480-423184/2-A	Lab Control Sample	68	82
LCSD 480-423184/3-A	Lab Control Sample Dup	68	76
MB 480-423184/1-A	Method Blank	71	58
Surrogate Legend			
DCPAA = 2,4-Dichlorophenylacetic acid			

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-423199/7

Matrix: Water

Analysis Batch: 423199

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/06/18 11:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/06/18 11:11	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/06/18 11:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/06/18 11:11	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/06/18 11:11	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/06/18 11:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/06/18 11:11	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/06/18 11:11	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/06/18 11:11	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/06/18 11:11	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/06/18 11:11	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/06/18 11:11	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/06/18 11:11	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/06/18 11:11	1
2-Hexanone	ND		5.0	1.2	ug/L			07/06/18 11:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/06/18 11:11	1
Acetone	ND		10	3.0	ug/L			07/06/18 11:11	1
Benzene	ND		1.0	0.41	ug/L			07/06/18 11:11	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/06/18 11:11	1
Bromoform	ND		1.0	0.26	ug/L			07/06/18 11:11	1
Bromomethane	ND		1.0	0.69	ug/L			07/06/18 11:11	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/06/18 11:11	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/06/18 11:11	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/06/18 11:11	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/06/18 11:11	1
Chloroethane	ND		1.0	0.32	ug/L			07/06/18 11:11	1
Chloroform	ND		1.0	0.34	ug/L			07/06/18 11:11	1
Chloromethane	ND		1.0	0.35	ug/L			07/06/18 11:11	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/06/18 11:11	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/06/18 11:11	1
Cyclohexane	ND		1.0	0.18	ug/L			07/06/18 11:11	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/06/18 11:11	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/06/18 11:11	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/06/18 11:11	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/06/18 11:11	1
Methyl acetate	ND		2.5	1.3	ug/L			07/06/18 11:11	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/06/18 11:11	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/06/18 11:11	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/06/18 11:11	1
Styrene	ND		1.0	0.73	ug/L			07/06/18 11:11	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/06/18 11:11	1
Toluene	ND		1.0	0.51	ug/L			07/06/18 11:11	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/06/18 11:11	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/06/18 11:11	1
Trichloroethene	ND		1.0	0.46	ug/L			07/06/18 11:11	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/06/18 11:11	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/06/18 11:11	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/06/18 11:11	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		ug/L					07/06/18 11:11	1

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	99		80 - 120		07/06/18 11:11	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	105		77 - 120		07/06/18 11:11	1
<i>4-Bromofluorobenzene (Surr)</i>	100		73 - 120		07/06/18 11:11	1
<i>Dibromofluoromethane (Surr)</i>	102		75 - 123		07/06/18 11:11	1

Lab Sample ID: LCS 480-423199/5

Matrix: Water

Analysis Batch: 423199

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>
1,1,1-Trichloroethane	25.0	24.8		ug/L		99	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.8		ug/L		103	76 - 120
1,1,2-Trichloroethane	25.0	24.3		ug/L		97	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	21.8		ug/L		87	61 - 148
1,1-Dichloroethane	25.0	24.1		ug/L		97	77 - 120
1,1-Dichloroethene	25.0	22.2		ug/L		89	66 - 127
1,2,4-Trichlorobenzene	25.0	24.5		ug/L		98	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	26.4		ug/L		106	56 - 134
1,2-Dichlorobenzene	25.0	24.1		ug/L		96	80 - 124
1,2-Dichloroethane	25.0	23.9		ug/L		96	75 - 120
1,2-Dichloropropane	25.0	23.3		ug/L		93	76 - 120
1,3-Dichlorobenzene	25.0	24.0		ug/L		96	77 - 120
1,4-Dichlorobenzene	25.0	24.1		ug/L		96	80 - 120
2-Butanone (MEK)	125	148		ug/L		119	57 - 140
2-Hexanone	125	139		ug/L		111	65 - 127
4-Methyl-2-pentanone (MIBK)	125	134		ug/L		107	71 - 125
Acetone	125	145		ug/L		116	56 - 142
Benzene	25.0	24.2		ug/L		97	71 - 124
Bromodichloromethane	25.0	25.2		ug/L		101	80 - 122
Bromoform	25.0	25.8		ug/L		103	61 - 132
Bromomethane	25.0	22.8		ug/L		91	55 - 144
Carbon disulfide	25.0	22.9		ug/L		92	59 - 134
Carbon tetrachloride	25.0	25.9		ug/L		104	72 - 134
Chlorobenzene	25.0	24.2		ug/L		97	80 - 120
Dibromochloromethane	25.0	26.5		ug/L		106	75 - 125
Chloroethane	25.0	24.2		ug/L		97	69 - 136
Chloroform	25.0	22.7		ug/L		91	73 - 127
Chloromethane	25.0	20.5		ug/L		82	68 - 124
cis-1,2-Dichloroethene	25.0	24.9		ug/L		99	74 - 124
cis-1,3-Dichloropropene	25.0	24.0		ug/L		96	74 - 124
Cyclohexane	25.0	24.6		ug/L		98	59 - 135
Dichlorodifluoromethane	25.0	18.4		ug/L		73	59 - 135
Ethylbenzene	25.0	24.9		ug/L		100	77 - 123
1,2-Dibromoethane	25.0	24.8		ug/L		99	77 - 120
Isopropylbenzene	25.0	24.6		ug/L		98	77 - 122
Methyl acetate	50.0	51.4		ug/L		103	74 - 133
Methyl tert-butyl ether	25.0	23.5		ug/L		94	77 - 120
Methylcyclohexane	25.0	27.1		ug/L		108	68 - 134
Methylene Chloride	25.0	23.1		ug/L		92	75 - 124

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

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

Lab Sample ID: LCS 480-423199/5

Matrix: Water

Analysis Batch: 423199

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	25.0	24.5		ug/L		98	80 - 120
Tetrachloroethene	25.0	24.3		ug/L		97	74 - 122
Toluene	25.0	24.5		ug/L		98	80 - 122
trans-1,2-Dichloroethene	25.0	24.7		ug/L		99	73 - 127
trans-1,3-Dichloropropene	25.0	24.3		ug/L		97	80 - 120
Trichloroethene	25.0	23.6		ug/L		94	74 - 123
Trichlorofluoromethane	25.0	28.0		ug/L		112	62 - 150
Vinyl chloride	25.0	22.7		ug/L		91	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	99		80 - 120
1,2-Dichloroethane-d4 (Surr)	104		77 - 120
4-Bromofluorobenzene (Surr)	105		73 - 120
Dibromofluoromethane (Surr)	106		75 - 123

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-423419/1-A

Matrix: Water

Analysis Batch: 423737

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423419

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		5.0	0.65	ug/L		07/09/18 07:24	07/10/18 13:20	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		07/09/18 07:24	07/10/18 13:20	1
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		07/09/18 07:24	07/10/18 13:20	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		07/09/18 07:24	07/10/18 13:20	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		07/09/18 07:24	07/10/18 13:20	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		07/09/18 07:24	07/10/18 13:20	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		07/09/18 07:24	07/10/18 13:20	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		07/09/18 07:24	07/10/18 13:20	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		07/09/18 07:24	07/10/18 13:20	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		07/09/18 07:24	07/10/18 13:20	1
2-Chlorophenol	ND		5.0	0.53	ug/L		07/09/18 07:24	07/10/18 13:20	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		07/09/18 07:24	07/10/18 13:20	1
2-Methylphenol	ND		5.0	0.40	ug/L		07/09/18 07:24	07/10/18 13:20	1
2-Nitroaniline	ND		10	0.42	ug/L		07/09/18 07:24	07/10/18 13:20	1
2-Nitrophenol	ND		5.0	0.48	ug/L		07/09/18 07:24	07/10/18 13:20	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		07/09/18 07:24	07/10/18 13:20	1
3-Nitroaniline	ND		10	0.48	ug/L		07/09/18 07:24	07/10/18 13:20	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		07/09/18 07:24	07/10/18 13:20	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		07/09/18 07:24	07/10/18 13:20	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		07/09/18 07:24	07/10/18 13:20	1
4-Chloroaniline	ND		5.0	0.59	ug/L		07/09/18 07:24	07/10/18 13:20	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		07/09/18 07:24	07/10/18 13:20	1
4-Methylphenol	ND		10	0.36	ug/L		07/09/18 07:24	07/10/18 13:20	1
4-Nitroaniline	ND		10	0.25	ug/L		07/09/18 07:24	07/10/18 13:20	1
4-Nitrophenol	ND		10	1.5	ug/L		07/09/18 07:24	07/10/18 13:20	1
Acenaphthene	ND		5.0	0.41	ug/L		07/09/18 07:24	07/10/18 13:20	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-423419/1-A

Matrix: Water

Analysis Batch: 423737

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423419

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	ND		5.0	0.38	ug/L		07/09/18 07:24	07/10/18 13:20	1
Acetophenone	ND		5.0	0.54	ug/L		07/09/18 07:24	07/10/18 13:20	1
Anthracene	ND		5.0	0.28	ug/L		07/09/18 07:24	07/10/18 13:20	1
Atrazine	ND		5.0	0.46	ug/L		07/09/18 07:24	07/10/18 13:20	1
Benzaldehyde	ND		5.0	0.27	ug/L		07/09/18 07:24	07/10/18 13:20	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		07/09/18 07:24	07/10/18 13:20	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		07/09/18 07:24	07/10/18 13:20	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		07/09/18 07:24	07/10/18 13:20	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		07/09/18 07:24	07/10/18 13:20	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		07/09/18 07:24	07/10/18 13:20	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		07/09/18 07:24	07/10/18 13:20	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		07/09/18 07:24	07/10/18 13:20	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		07/09/18 07:24	07/10/18 13:20	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		07/09/18 07:24	07/10/18 13:20	1
Caprolactam	ND		5.0	2.2	ug/L		07/09/18 07:24	07/10/18 13:20	1
Carbazole	ND		5.0	0.30	ug/L		07/09/18 07:24	07/10/18 13:20	1
Chrysene	ND		5.0	0.33	ug/L		07/09/18 07:24	07/10/18 13:20	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		07/09/18 07:24	07/10/18 13:20	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		07/09/18 07:24	07/10/18 13:20	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		07/09/18 07:24	07/10/18 13:20	1
Dibenzofuran	ND		10	0.51	ug/L		07/09/18 07:24	07/10/18 13:20	1
Diethyl phthalate	ND		5.0	0.22	ug/L		07/09/18 07:24	07/10/18 13:20	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		07/09/18 07:24	07/10/18 13:20	1
Fluoranthene	ND		5.0	0.40	ug/L		07/09/18 07:24	07/10/18 13:20	1
Fluorene	ND		5.0	0.36	ug/L		07/09/18 07:24	07/10/18 13:20	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		07/09/18 07:24	07/10/18 13:20	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		07/09/18 07:24	07/10/18 13:20	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		07/09/18 07:24	07/10/18 13:20	1
Hexachloroethane	ND		5.0	0.59	ug/L		07/09/18 07:24	07/10/18 13:20	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		07/09/18 07:24	07/10/18 13:20	1
Isophorone	ND		5.0	0.43	ug/L		07/09/18 07:24	07/10/18 13:20	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		07/09/18 07:24	07/10/18 13:20	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		07/09/18 07:24	07/10/18 13:20	1
Naphthalene	ND		5.0	0.76	ug/L		07/09/18 07:24	07/10/18 13:20	1
Nitrobenzene	ND		5.0	0.29	ug/L		07/09/18 07:24	07/10/18 13:20	1
Pentachlorophenol	ND		10	2.2	ug/L		07/09/18 07:24	07/10/18 13:20	1
Phenanthrene	ND		5.0	0.44	ug/L		07/09/18 07:24	07/10/18 13:20	1
Phenol	ND		5.0	0.39	ug/L		07/09/18 07:24	07/10/18 13:20	1
Pyrene	ND		5.0	0.34	ug/L		07/09/18 07:24	07/10/18 13:20	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	4.69	T J	ug/L		2.74		07/09/18 07:24	07/10/18 13:20	1
Unknown	194	T J	ug/L		3.18		07/09/18 07:24	07/10/18 13:20	1
Pyridine	0.604	J	ug/L		4.03	110-86-1	07/09/18 07:24	07/10/18 13:20	1
Cyclotetrasiloxane, octamethyl-	3.41	T J N	ug/L		6.15	556-67-2	07/09/18 07:24	07/10/18 13:20	1
Cyclopentasiloxane, decamethyl-	3.31	T J N	ug/L		7.10	541-02-6	07/09/18 07:24	07/10/18 13:20	1
Cyclohexasiloxane, dodecamethyl-	2.91	T J N	ug/L		7.98	540-97-6	07/09/18 07:24	07/10/18 13:20	1
Unknown	2.39	T J	ug/L		8.76		07/09/18 07:24	07/10/18 13:20	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	87		41 - 120	07/09/18 07:24	07/10/18 13:20	1
2-Fluorobiphenyl	93		48 - 120	07/09/18 07:24	07/10/18 13:20	1
2-Fluorophenol	73		35 - 120	07/09/18 07:24	07/10/18 13:20	1
Nitrobenzene-d5	81		46 - 120	07/09/18 07:24	07/10/18 13:20	1
p-Terphenyl-d14	102		59 - 136	07/09/18 07:24	07/10/18 13:20	1
Phenol-d5	56		22 - 120	07/09/18 07:24	07/10/18 13:20	1

Lab Sample ID: LCS 480-423419/2-A

Matrix: Water

Analysis Batch: 423737

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423419

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biphenyl	32.0	34.0		ug/L		106	59 - 120
bis (2-chloroisopropyl) ether	32.0	35.3		ug/L		110	21 - 136
2,4,5-Trichlorophenol	32.0	39.0		ug/L		122	65 - 126
2,4,6-Trichlorophenol	32.0	39.0	*	ug/L		122	64 - 120
2,4-Dichlorophenol	32.0	34.0		ug/L		106	63 - 120
2,4-Dimethylphenol	32.0	33.3		ug/L		104	47 - 120
2,4-Dinitrophenol	64.0	70.2		ug/L		110	31 - 137
2,4-Dinitrotoluene	32.0	36.2		ug/L		113	69 - 120
2,6-Dinitrotoluene	32.0	35.9		ug/L		112	68 - 120
2-Chloronaphthalene	32.0	33.8		ug/L		106	58 - 120
2-Chlorophenol	32.0	33.4		ug/L		104	48 - 120
2-Methylnaphthalene	32.0	31.3		ug/L		98	59 - 120
2-Methylphenol	32.0	33.9		ug/L		106	39 - 120
2-Nitroaniline	32.0	36.6		ug/L		114	54 - 127
2-Nitrophenol	32.0	33.0		ug/L		103	52 - 125
3,3'-Dichlorobenzidine	64.0	65.0		ug/L		102	49 - 135
3-Nitroaniline	32.0	32.4		ug/L		101	51 - 120
4,6-Dinitro-2-methylphenol	64.0	69.5		ug/L		109	46 - 136
4-Bromophenyl phenyl ether	32.0	34.9		ug/L		109	65 - 120
4-Chloro-3-methylphenol	32.0	34.6		ug/L		108	61 - 123
4-Chloroaniline	32.0	29.9		ug/L		94	30 - 120
4-Chlorophenyl phenyl ether	32.0	34.8		ug/L		109	62 - 120
4-Methylphenol	32.0	33.4		ug/L		104	29 - 131
4-Nitroaniline	32.0	35.6		ug/L		111	65 - 120
4-Nitrophenol	64.0	60.7		ug/L		95	45 - 120
Acenaphthene	32.0	33.0		ug/L		103	60 - 120
Acenaphthylene	32.0	37.7		ug/L		118	63 - 120
Acetophenone	32.0	35.5		ug/L		111	45 - 120
Anthracene	32.0	34.2		ug/L		107	67 - 120
Atrazine	64.0	82.8		ug/L		129	71 - 130
Benzaldehyde	64.0	59.5		ug/L		93	10 - 140
Benzo(a)anthracene	32.0	35.1		ug/L		110	70 - 121
Benzo(a)pyrene	32.0	35.2		ug/L		110	60 - 123
Benzo(b)fluoranthene	32.0	38.3		ug/L		120	66 - 126
Benzo(g,h,i)perylene	32.0	34.5		ug/L		108	66 - 150
Benzo(k)fluoranthene	32.0	36.0		ug/L		113	65 - 124
Bis(2-chloroethoxy)methane	32.0	34.2		ug/L		107	50 - 128
Bis(2-chloroethyl)ether	32.0	34.6		ug/L		108	44 - 120
Bis(2-ethylhexyl) phthalate	32.0	33.9		ug/L		106	63 - 139
Butyl benzyl phthalate	32.0	34.4		ug/L		108	70 - 129
Caprolactam	64.0	30.5		ug/L		48	22 - 120
Carbazole	32.0	35.5		ug/L		111	66 - 123

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-423419/2-A

Matrix: Water

Analysis Batch: 423737

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423419

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chrysene	32.0	33.4		ug/L		104	69 - 120
Di-n-butyl phthalate	32.0	38.2		ug/L		119	69 - 131
Di-n-octyl phthalate	32.0	35.0		ug/L		109	63 - 140
Dibenz(a,h)anthracene	32.0	35.5		ug/L		111	65 - 135
Dibenzofuran	32.0	33.0		ug/L		103	66 - 120
Diethyl phthalate	32.0	37.8		ug/L		118	59 - 127
Dimethyl phthalate	32.0	38.0		ug/L		119	68 - 120
Fluoranthene	32.0	37.1		ug/L		116	69 - 126
Fluorene	32.0	35.2		ug/L		110	66 - 120
Hexachlorobenzene	32.0	35.1		ug/L		110	61 - 120
Hexachlorobutadiene	32.0	28.3		ug/L		88	35 - 120
Hexachlorocyclopentadiene	32.0	27.6		ug/L		86	31 - 120
Hexachloroethane	32.0	31.7		ug/L		99	43 - 120
Indeno(1,2,3-cd)pyrene	32.0	35.3		ug/L		110	69 - 146
Isophorone	32.0	37.4		ug/L		117	55 - 120
N-Nitrosodi-n-propylamine	32.0	36.7		ug/L		115	32 - 140
Naphthalene	32.0	31.5		ug/L		98	57 - 120
Nitrobenzene	32.0	32.8		ug/L		102	53 - 123
Pentachlorophenol	64.0	69.4		ug/L		108	29 - 136
Phenanthrene	32.0	33.6		ug/L		105	68 - 120
Phenol	32.0	22.4		ug/L		70	17 - 120
Pyrene	32.0	33.8		ug/L		106	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	101		41 - 120
2-Fluorobiphenyl	99		48 - 120
2-Fluorophenol	76		35 - 120
Nitrobenzene-d5	96		46 - 120
p-Terphenyl-d14	99		59 - 136
Phenol-d5	61		22 - 120

Lab Sample ID: LCSD 480-423419/3-A

Matrix: Water

Analysis Batch: 423737

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 423419

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Biphenyl	32.0	34.1		ug/L		107	59 - 120	0	20
bis (2-chloroisopropyl) ether	32.0	30.0		ug/L		94	21 - 136	16	24
2,4,5-Trichlorophenol	32.0	40.9	*	ug/L		128	65 - 126	5	18
2,4,6-Trichlorophenol	32.0	39.8	*	ug/L		124	64 - 120	2	19
2,4-Dichlorophenol	32.0	36.5		ug/L		114	63 - 120	7	19
2,4-Dimethylphenol	32.0	35.2		ug/L		110	47 - 120	5	42
2,4-Dinitrophenol	64.0	74.7		ug/L		117	31 - 137	6	22
2,4-Dinitrotoluene	32.0	39.1	*	ug/L		122	69 - 120	8	20
2,6-Dinitrotoluene	32.0	36.9		ug/L		115	68 - 120	3	15
2-Chloronaphthalene	32.0	34.0		ug/L		106	58 - 120	1	21
2-Chlorophenol	32.0	33.6		ug/L		105	48 - 120	1	25
2-Methylnaphthalene	32.0	33.8		ug/L		106	59 - 120	8	21

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-423419/3-A

Matrix: Water

Analysis Batch: 423737

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 423419

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
										RPD Limit
2-Methylphenol	32.0	32.1		ug/L		100	39 - 120		5	27
2-Nitroaniline	32.0	35.2		ug/L		110	54 - 127		4	15
2-Nitrophenol	32.0	34.6		ug/L		108	52 - 125		5	18
3,3'-Dichlorobenzidine	64.0	70.3		ug/L		110	49 - 135		8	25
3-Nitroaniline	32.0	33.2		ug/L		104	51 - 120		3	19
4,6-Dinitro-2-methylphenol	64.0	74.0		ug/L		116	46 - 136		6	15
4-Bromophenyl phenyl ether	32.0	35.9		ug/L		112	65 - 120		3	15
4-Chloro-3-methylphenol	32.0	36.1		ug/L		113	61 - 123		4	27
4-Chloroaniline	32.0	31.8		ug/L		99	30 - 120		6	22
4-Chlorophenyl phenyl ether	32.0	36.6		ug/L		114	62 - 120		5	16
4-Methylphenol	32.0	31.2		ug/L		97	29 - 131		7	24
4-Nitroaniline	32.0	37.5		ug/L		117	65 - 120		5	24
4-Nitrophenol	64.0	66.4		ug/L		104	45 - 120		9	48
Acenaphthene	32.0	34.5		ug/L		108	60 - 120		4	24
Acenaphthylene	32.0	39.3	*	ug/L		123	63 - 120		4	18
Acetophenone	32.0	33.2		ug/L		104	45 - 120		7	20
Anthracene	32.0	36.2		ug/L		113	67 - 120		6	15
Atrazine	64.0	89.2	*	ug/L		139	71 - 130		7	20
Benzaldehyde	64.0	61.8		ug/L		97	10 - 140		4	20
Benzo(a)anthracene	32.0	36.8		ug/L		115	70 - 121		5	15
Benzo(a)pyrene	32.0	37.5		ug/L		117	60 - 123		6	15
Benzo(b)fluoranthene	32.0	39.7		ug/L		124	66 - 126		4	15
Benzo(g,h,i)perylene	32.0	38.2		ug/L		119	66 - 150		10	15
Benzo(k)fluoranthene	32.0	39.9	*	ug/L		125	65 - 124		10	22
Bis(2-chloroethoxy)methane	32.0	33.7		ug/L		105	50 - 128		1	17
Bis(2-chloroethyl)ether	32.0	31.6		ug/L		99	44 - 120		9	21
Bis(2-ethylhexyl) phthalate	32.0	36.2		ug/L		113	63 - 139		7	15
Butyl benzyl phthalate	32.0	36.1		ug/L		113	70 - 129		5	16
Caprolactam	64.0	31.6		ug/L		49	22 - 120		4	20
Carbazole	32.0	37.2		ug/L		116	66 - 123		5	20
Chrysene	32.0	35.2		ug/L		110	69 - 120		5	15
Di-n-butyl phthalate	32.0	40.2		ug/L		126	69 - 131		5	15
Di-n-octyl phthalate	32.0	38.1		ug/L		119	63 - 140		9	16
Dibenz(a,h)anthracene	32.0	38.4		ug/L		120	65 - 135		8	15
Dibenzofuran	32.0	35.6		ug/L		111	66 - 120		8	15
Diethyl phthalate	32.0	40.3		ug/L		126	59 - 127		6	15
Dimethyl phthalate	32.0	38.9	*	ug/L		121	68 - 120		2	15
Fluoranthene	32.0	38.8		ug/L		121	69 - 126		4	15
Fluorene	32.0	36.6		ug/L		114	66 - 120		4	15
Hexachlorobenzene	32.0	36.2		ug/L		113	61 - 120		3	15
Hexachlorobutadiene	32.0	33.2		ug/L		104	35 - 120		16	44
Hexachlorocyclopentadiene	32.0	29.9		ug/L		93	31 - 120		8	49
Hexachloroethane	32.0	30.1		ug/L		94	43 - 120		5	46
Indeno(1,2,3-cd)pyrene	32.0	38.5		ug/L		120	69 - 146		8	15
Isophorone	32.0	37.4		ug/L		117	55 - 120		0	17
N-Nitrosodi-n-propylamine	32.0	33.4		ug/L		104	32 - 140		9	31
Naphthalene	32.0	32.6		ug/L		102	57 - 120		4	29
Nitrobenzene	32.0	32.8		ug/L		103	53 - 123		0	24

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-423419/3-A

Matrix: Water

Analysis Batch: 423737

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 423419

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pentachlorophenol	64.0	76.0		ug/L		119	29 - 136	9	37
Phenanthrene	32.0	35.4		ug/L		111	68 - 120	5	15
Phenol	32.0	22.6		ug/L		71	17 - 120	1	34
Pyrene	32.0	35.5		ug/L		111	70 - 125	5	19

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol	104		41 - 120
2-Fluorobiphenyl	100		48 - 120
2-Fluorophenol	89		35 - 120
Nitrobenzene-d5	96		46 - 120
p-Terphenyl-d14	105		59 - 136
Phenol-d5	62		22 - 120

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-423186/1-A

Matrix: Water

Analysis Batch: 423232

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423186

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.050	0.0092	ug/L		07/06/18 07:40	07/06/18 15:28	1
4,4'-DDE	ND		0.050	0.012	ug/L		07/06/18 07:40	07/06/18 15:28	1
4,4'-DDT	ND		0.050	0.011	ug/L		07/06/18 07:40	07/06/18 15:28	1
Aldrin	ND		0.050	0.0081	ug/L		07/06/18 07:40	07/06/18 15:28	1
alpha-BHC	ND		0.050	0.0077	ug/L		07/06/18 07:40	07/06/18 15:28	1
cis-Chlordane	ND		0.050	0.015	ug/L		07/06/18 07:40	07/06/18 15:28	1
beta-BHC	ND		0.050	0.025	ug/L		07/06/18 07:40	07/06/18 15:28	1
delta-BHC	ND		0.050	0.010	ug/L		07/06/18 07:40	07/06/18 15:28	1
Dieldrin	ND		0.050	0.0098	ug/L		07/06/18 07:40	07/06/18 15:28	1
Endosulfan I	ND		0.050	0.011	ug/L		07/06/18 07:40	07/06/18 15:28	1
Endosulfan II	ND		0.050	0.012	ug/L		07/06/18 07:40	07/06/18 15:28	1
Endosulfan sulfate	ND		0.050	0.016	ug/L		07/06/18 07:40	07/06/18 15:28	1
Endrin	ND		0.050	0.014	ug/L		07/06/18 07:40	07/06/18 15:28	1
Endrin aldehyde	ND		0.050	0.016	ug/L		07/06/18 07:40	07/06/18 15:28	1
Endrin ketone	ND		0.050	0.012	ug/L		07/06/18 07:40	07/06/18 15:28	1
gamma-BHC (Lindane)	ND		0.050	0.0080	ug/L		07/06/18 07:40	07/06/18 15:28	1
trans-Chlordane	ND		0.050	0.011	ug/L		07/06/18 07:40	07/06/18 15:28	1
Heptachlor	ND		0.050	0.0085	ug/L		07/06/18 07:40	07/06/18 15:28	1
Heptachlor epoxide	ND		0.050	0.0074	ug/L		07/06/18 07:40	07/06/18 15:28	1
Methoxychlor	ND		0.050	0.014	ug/L		07/06/18 07:40	07/06/18 15:28	1
Toxaphene	ND		0.50	0.12	ug/L		07/06/18 07:40	07/06/18 15:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	56		20 - 120	07/06/18 07:40	07/06/18 15:28	1
DCB Decachlorobiphenyl	62		20 - 120	07/06/18 07:40	07/06/18 15:28	1
Tetrachloro-m-xylene	90		44 - 120	07/06/18 07:40	07/06/18 15:28	1
Tetrachloro-m-xylene	86		44 - 120	07/06/18 07:40	07/06/18 15:28	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

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

Lab Sample ID: LCS 480-423186/2-A

Matrix: Water

Analysis Batch: 423232

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423186

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.400	0.444		ug/L		111	64 - 129
4,4'-DDE	0.400	0.406		ug/L		102	50 - 120
4,4'-DDT	0.400	0.458		ug/L		114	59 - 120
Aldrin	0.400	0.373		ug/L		93	40 - 125
alpha-BHC	0.400	0.360		ug/L		90	52 - 125
cis-Chlordane	0.400	0.418		ug/L		105	52 - 120
beta-BHC	0.400	0.424		ug/L		106	51 - 120
delta-BHC	0.400	0.385		ug/L		96	51 - 120
Dieldrin	0.400	0.448		ug/L		112	66 - 128
Endosulfan I	0.400	0.433		ug/L		108	57 - 120
Endosulfan II	0.400	0.478		ug/L		119	66 - 131
Endosulfan sulfate	0.400	0.445		ug/L		111	66 - 136
Endrin	0.400	0.508		ug/L		127	65 - 135
Endrin aldehyde	0.400	0.407		ug/L		102	61 - 134
Endrin ketone	0.400	0.462		ug/L		115	71 - 133
gamma-BHC (Lindane)	0.400	0.420		ug/L		105	56 - 120
trans-Chlordane	0.400	0.434		ug/L		108	54 - 120
Heptachlor	0.400	0.422		ug/L		106	58 - 120
Heptachlor epoxide	0.400	0.464		ug/L		116	65 - 125
Methoxychlor	0.400	0.468		ug/L		117	50 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	46		20 - 120
DCB Decachlorobiphenyl	46		20 - 120
Tetrachloro-m-xylene	82		44 - 120
Tetrachloro-m-xylene	90		44 - 120

Lab Sample ID: LCSD 480-423186/3-A

Matrix: Water

Analysis Batch: 423232

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 423186

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	0.400	0.425		ug/L		106	64 - 129	4	23
4,4'-DDE	0.400	0.380		ug/L		95	50 - 120	7	22
4,4'-DDT	0.400	0.437		ug/L		109	59 - 120	5	24
Aldrin	0.400	0.357		ug/L		89	40 - 125	4	25
alpha-BHC	0.400	0.347		ug/L		87	52 - 125	4	24
cis-Chlordane	0.400	0.401		ug/L		100	52 - 120	4	23
beta-BHC	0.400	0.412		ug/L		103	51 - 120	3	24
delta-BHC	0.400	0.382		ug/L		96	51 - 120	1	24
Dieldrin	0.400	0.429		ug/L		107	66 - 128	4	24
Endosulfan I	0.400	0.420		ug/L		105	57 - 120	3	30
Endosulfan II	0.400	0.457		ug/L		114	66 - 131	4	40
Endosulfan sulfate	0.400	0.425		ug/L		106	66 - 136	5	24
Endrin	0.400	0.488		ug/L		122	65 - 135	4	24
Endrin aldehyde	0.400	0.396		ug/L		99	61 - 134	3	28
Endrin ketone	0.400	0.443		ug/L		111	71 - 133	4	26
gamma-BHC (Lindane)	0.400	0.405		ug/L		101	56 - 120	4	24

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

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

Lab Sample ID: LCSD 480-423186/3-A

Matrix: Water

Analysis Batch: 423232

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 423186

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
trans-Chlordane	0.400	0.416		ug/L		104	54 - 120	4	24
Heptachlor	0.400	0.409		ug/L		102	58 - 120	3	25
Heptachlor epoxide	0.400	0.446		ug/L		111	65 - 125	4	23
Methoxychlor	0.400	0.448		ug/L		112	50 - 150	5	26

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	41		20 - 120
DCB Decachlorobiphenyl	41		20 - 120
Tetrachloro-m-xylene	79		44 - 120
Tetrachloro-m-xylene	86		44 - 120

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

Lab Sample ID: MB 480-423187/1-A

Matrix: Water

Analysis Batch: 423235

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423187

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.18	ug/L		07/06/18 07:48	07/06/18 15:06	1
PCB-1221	ND		0.50	0.18	ug/L		07/06/18 07:48	07/06/18 15:06	1
PCB-1232	ND		0.50	0.18	ug/L		07/06/18 07:48	07/06/18 15:06	1
PCB-1242	ND		0.50	0.18	ug/L		07/06/18 07:48	07/06/18 15:06	1
PCB-1248	ND		0.50	0.18	ug/L		07/06/18 07:48	07/06/18 15:06	1
PCB-1254	ND		0.50	0.25	ug/L		07/06/18 07:48	07/06/18 15:06	1
PCB-1260	ND		0.50	0.25	ug/L		07/06/18 07:48	07/06/18 15:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	33		19 - 120	07/06/18 07:48	07/06/18 15:06	1
DCB Decachlorobiphenyl	37		19 - 120	07/06/18 07:48	07/06/18 15:06	1
Tetrachloro-m-xylene	92		39 - 121	07/06/18 07:48	07/06/18 15:06	1
Tetrachloro-m-xylene	82		39 - 121	07/06/18 07:48	07/06/18 15:06	1

Lab Sample ID: LCS 480-423187/2-A

Matrix: Water

Analysis Batch: 423235

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423187

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	4.00	4.24		ug/L		106	62 - 130
PCB-1260	4.00	3.07		ug/L		77	56 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	37		19 - 120
DCB Decachlorobiphenyl	44		19 - 120
Tetrachloro-m-xylene	85		39 - 121
Tetrachloro-m-xylene	73		39 - 121

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

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

Lab Sample ID: LCSD 480-423187/3-A

Matrix: Water

Analysis Batch: 423235

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 423187

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	4.00	5.07		ug/L		127	62 - 130	18	50
PCB-1260	4.00	3.70		ug/L		92	56 - 123	19	50
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
DCB Decachlorobiphenyl	43		19 - 120						
DCB Decachlorobiphenyl	50		19 - 120						
Tetrachloro-m-xylene	102		39 - 121						
Tetrachloro-m-xylene	90		39 - 121						

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 480-423184/1-A

Matrix: Water

Analysis Batch: 423554

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423184

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		0.50	0.068	ug/L		07/06/18 07:25	07/09/18 22:26	1
Silvex (2,4,5-TP)	ND		0.50	0.050	ug/L		07/06/18 07:25	07/09/18 22:26	1
2,4-D	ND		0.50	0.17	ug/L		07/06/18 07:25	07/09/18 22:26	1
Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac			
2,4-Dichlorophenylacetic acid	71		48 - 132	07/06/18 07:25	07/09/18 22:26	1			
2,4-Dichlorophenylacetic acid	58		48 - 132	07/06/18 07:25	07/09/18 22:26	1			

Lab Sample ID: LCS 480-423184/2-A

Matrix: Water

Analysis Batch: 423554

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423184

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4,5-T	2.00	1.72		ug/L		86	41 - 150	0	50
Silvex (2,4,5-TP)	2.00	1.71		ug/L		85	49 - 150	0	50
2,4-D	2.00	2.04		ug/L		102	36 - 150	19	50
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
2,4-Dichlorophenylacetic acid	68		48 - 132						
2,4-Dichlorophenylacetic acid	82		48 - 132						

Lab Sample ID: LCSD 480-423184/3-A

Matrix: Water

Analysis Batch: 423554

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 423184

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4,5-T	2.00	1.71		ug/L		86	41 - 150	0	50
Silvex (2,4,5-TP)	2.00	1.72		ug/L		86	49 - 150	0	50
2,4-D	2.00	1.68		ug/L		84	36 - 150	19	50

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCSD 480-423184/3-A

Matrix: Water

Analysis Batch: 423554

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 423184

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4-Dichlorophenylacetic acid	68		48 - 132
2,4-Dichlorophenylacetic acid	76		48 - 132

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-423331/1-A

Matrix: Water

Analysis Batch: 423704

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423331

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		07/06/18 16:03	07/09/18 20:54	1
Antimony	ND		0.020	0.0068	mg/L		07/06/18 16:03	07/09/18 20:54	1
Arsenic	ND		0.015	0.0056	mg/L		07/06/18 16:03	07/09/18 20:54	1
Barium	ND		0.0020	0.00070	mg/L		07/06/18 16:03	07/09/18 20:54	1
Beryllium	ND		0.0020	0.00030	mg/L		07/06/18 16:03	07/09/18 20:54	1
Cadmium	ND	^	0.0020	0.00050	mg/L		07/06/18 16:03	07/09/18 20:54	1
Calcium	ND		0.50	0.10	mg/L		07/06/18 16:03	07/09/18 20:54	1
Chromium	ND		0.0040	0.0010	mg/L		07/06/18 16:03	07/09/18 20:54	1
Cobalt	ND		0.0040	0.00063	mg/L		07/06/18 16:03	07/09/18 20:54	1
Copper	ND		0.010	0.0016	mg/L		07/06/18 16:03	07/09/18 20:54	1
Iron	ND		0.050	0.019	mg/L		07/06/18 16:03	07/09/18 20:54	1
Lead	ND		0.010	0.0030	mg/L		07/06/18 16:03	07/09/18 20:54	1
Magnesium	ND		0.20	0.043	mg/L		07/06/18 16:03	07/09/18 20:54	1
Manganese	0.000700	J	0.0030	0.00040	mg/L		07/06/18 16:03	07/09/18 20:54	1
Nickel	ND		0.010	0.0013	mg/L		07/06/18 16:03	07/09/18 20:54	1
Potassium	ND		0.50	0.10	mg/L		07/06/18 16:03	07/09/18 20:54	1
Selenium	ND		0.025	0.0087	mg/L		07/06/18 16:03	07/09/18 20:54	1
Silver	ND		0.0060	0.0017	mg/L		07/06/18 16:03	07/09/18 20:54	1
Sodium	0.719	J	1.0	0.32	mg/L		07/06/18 16:03	07/09/18 20:54	1
Thallium	ND		0.020	0.010	mg/L		07/06/18 16:03	07/09/18 20:54	1
Vanadium	ND		0.0050	0.0015	mg/L		07/06/18 16:03	07/09/18 20:54	1
Zinc	ND		0.010	0.0015	mg/L		07/06/18 16:03	07/09/18 20:54	1

Lab Sample ID: LCS 480-423331/2-A

Matrix: Water

Analysis Batch: 423901

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423331

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	9.54		mg/L		95	80 - 120
Antimony	0.200	0.198		mg/L		99	80 - 120
Arsenic	0.200	0.202		mg/L		101	80 - 120
Barium	0.200	0.201		mg/L		100	80 - 120
Beryllium	0.200	0.201		mg/L		101	80 - 120
Cadmium	0.200	0.204		mg/L		102	80 - 120
Calcium	10.0	9.78		mg/L		98	80 - 120
Chromium	0.200	0.194		mg/L		97	80 - 120
Cobalt	0.200	0.188		mg/L		94	80 - 120
Copper	0.200	0.192		mg/L		96	80 - 120

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-423331/2-A

Matrix: Water

Analysis Batch: 423901

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423331

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	9.68		mg/L		97	80 - 120
Lead	0.200	0.201		mg/L		101	80 - 120
Magnesium	10.0	9.83		mg/L		98	80 - 120
Manganese	0.200	0.195		mg/L		98	80 - 120
Nickel	0.200	0.193		mg/L		96	80 - 120
Potassium	10.0	9.10		mg/L		91	80 - 120
Selenium	0.200	0.194		mg/L		97	80 - 120
Silver	0.0500	0.0538		mg/L		108	80 - 120
Sodium	10.0	9.15		mg/L		91	80 - 120
Thallium	0.200	0.199		mg/L		99	80 - 120
Vanadium	0.200	0.201		mg/L		100	80 - 120
Zinc	0.200	0.207		mg/L		104	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-424876/1-A

Matrix: Water

Analysis Batch: 425159

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 424876

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		07/18/18 11:20	07/18/18 15:22	1

Lab Sample ID: LCS 480-424876/2-A

Matrix: Water

Analysis Batch: 425159

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 424876

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00667	0.00610		mg/L		91	80 - 120

Lab Sample ID: 480-138450-1 MS

Matrix: Water

Analysis Batch: 425159

Client Sample ID: SW-4

Prep Type: Total/NA

Prep Batch: 424876

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00667	0.00620		mg/L		93	80 - 120

Lab Sample ID: 480-138450-1 MSD

Matrix: Water

Analysis Batch: 425159

Client Sample ID: SW-4

Prep Type: Total/NA

Prep Batch: 424876

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Mercury	ND		0.00667	0.00620		mg/L		93	80 - 120	0	20

TestAmerica Buffalo

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

GC/MS VOA

Analysis Batch: 423199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138450-1	SW-4	Total/NA	Water	8260C	
MB 480-423199/7	Method Blank	Total/NA	Water	8260C	
LCS 480-423199/5	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 423419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138450-1	SW-4	Total/NA	Water	3510C	
MB 480-423419/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-423419/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-423419/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 423737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138450-1	SW-4	Total/NA	Water	8270D	423419
MB 480-423419/1-A	Method Blank	Total/NA	Water	8270D	423419
LCS 480-423419/2-A	Lab Control Sample	Total/NA	Water	8270D	423419
LCSD 480-423419/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	423419

GC Semi VOA

Prep Batch: 423184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138450-1	SW-4	Total/NA	Water	8151A	
MB 480-423184/1-A	Method Blank	Total/NA	Water	8151A	
LCS 480-423184/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 480-423184/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	

Prep Batch: 423186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138450-1	SW-4	Total/NA	Water	3510C	
MB 480-423186/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-423186/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-423186/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 423187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138450-1	SW-4	Total/NA	Water	3510C	
MB 480-423187/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-423187/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-423187/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 423232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138450-1	SW-4	Total/NA	Water	8081B	423186
MB 480-423186/1-A	Method Blank	Total/NA	Water	8081B	423186
LCS 480-423186/2-A	Lab Control Sample	Total/NA	Water	8081B	423186
LCSD 480-423186/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	423186

TestAmerica Buffalo

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

GC Semi VOA (Continued)

Analysis Batch: 423235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138450-1	SW-4	Total/NA	Water	8082A	423187
MB 480-423187/1-A	Method Blank	Total/NA	Water	8082A	423187
LCS 480-423187/2-A	Lab Control Sample	Total/NA	Water	8082A	423187
LCSD 480-423187/3-A	Lab Control Sample Dup	Total/NA	Water	8082A	423187

Analysis Batch: 423554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138450-1	SW-4	Total/NA	Water	8151A	423184
MB 480-423184/1-A	Method Blank	Total/NA	Water	8151A	423184
LCS 480-423184/2-A	Lab Control Sample	Total/NA	Water	8151A	423184
LCSD 480-423184/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	423184

Metals

Prep Batch: 423331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138450-1	SW-4	Total/NA	Water	3005A	
MB 480-423331/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-423331/2-A	Lab Control Sample	Total/NA	Water	3005A	

Analysis Batch: 423704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138450-1	SW-4	Total/NA	Water	6010C	423331
MB 480-423331/1-A	Method Blank	Total/NA	Water	6010C	423331

Analysis Batch: 423901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-423331/2-A	Lab Control Sample	Total/NA	Water	6010C	423331

Prep Batch: 424876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138450-1	SW-4	Total/NA	Water	7470A	
MB 480-424876/1-A	Method Blank	Total/NA	Water	7470A	
LCS 480-424876/2-A	Lab Control Sample	Total/NA	Water	7470A	
480-138450-1 MS	SW-4	Total/NA	Water	7470A	
480-138450-1 MSD	SW-4	Total/NA	Water	7470A	

Analysis Batch: 425159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138450-1	SW-4	Total/NA	Water	7470A	424876
MB 480-424876/1-A	Method Blank	Total/NA	Water	7470A	424876
LCS 480-424876/2-A	Lab Control Sample	Total/NA	Water	7470A	424876
480-138450-1 MS	SW-4	Total/NA	Water	7470A	424876
480-138450-1 MSD	SW-4	Total/NA	Water	7470A	424876

TestAmerica Buffalo

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

Client Sample ID: SW-4

Date Collected: 07/05/18 11:30

Date Received: 07/06/18 02:30

Lab Sample ID: 480-138450-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	423199	07/06/18 14:34	RLB	TAL BUF
Total/NA	Prep	3510C			423419	07/09/18 07:24	AAP	TAL BUF
Total/NA	Analysis	8270D		1	423737	07/10/18 15:46	RJS	TAL BUF
Total/NA	Prep	3510C			423186	07/06/18 07:40	AAP	TAL BUF
Total/NA	Analysis	8081B		1	423232	07/06/18 16:27	JLS	TAL BUF
Total/NA	Prep	3510C			423187	07/06/18 07:48	AAP	TAL BUF
Total/NA	Analysis	8082A		1	423235	07/06/18 15:54	W1T	TAL BUF
Total/NA	Prep	8151A			423184	07/06/18 07:25	JMP	TAL BUF
Total/NA	Analysis	8151A		1	423554	07/10/18 00:25	BEK	TAL BUF
Total/NA	Prep	3005A			423331	07/06/18 16:03	JAK	TAL BUF
Total/NA	Analysis	6010C		1	423704	07/09/18 22:22	AMH	TAL BUF
Total/NA	Prep	7470A			424876	07/18/18 11:20	BMB	TAL BUF
Total/NA	Analysis	7470A		1	425159	07/18/18 15:26	BMB	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-19

- 1
- 2
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Method Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8081B	Organochlorine Pesticides (GC)	SW846	TAL BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
8151A	Herbicides (GC)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7470A	Mercury (CVAA)	SW846	TAL BUF
3005A	Preparation, Total Metals	SW846	TAL BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF
7470A	Preparation, Mercury	SW846	TAL BUF
8151A	Extraction (Herbicides)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138450-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-138450-1	SW-4	Water	07/05/18 11:30	07/06/18 02:30

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TestAmerica Buffalo

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING



Client Information Client Contact: Mr. Michael Lesakowski Company: Benchmark Env. Eng. & Science, PLLC Address: 2558 Hamburg Turnpike Suite 300 City: Lackawanna State, Zip: NY, 14218 Phone: 716-856-0599(Tel) Email: mlesakowski@benchmarkturnkey.com Project Name: Oregon Road Site - Olean, NY (GW/SW) Site: <u>Oregon Road Site</u>		Sampler: <u>Nick Solovoi</u> Lab PM: Fischer, Brian J Phone: <u>716-713-3437</u> E-Mail: brian.fischer@testamericainc.com Carried: 480-138450 COC	
Due Date Requested: TAT Requested (days): <u>70323-017-001-055033</u> PO #: <u>70323-017-001-055033</u> Purchase Order Requested: <u>70323-017-001-055033</u> WO #: <u>70323-017-001-055033</u> Project #: 48018334 SSOW#: <u>48018334</u>		Analysis Requested 8082A - TCL PCBs - OLM04.2 8081B - TCL PCBs - OLM04.2 8270D - (MOD) TCL SVOA - OLM04.2 6010C, 7470A 8260C - (MOD) TCL list OLM04.2 8151A - Local Method PFC_IDA - PFAS, Standard List (21 analytes) 8270D, SIM, MS, ID - SIM List	
Sample Identification SW-4		Field Filtered Sample (Yes or No) ☒ Perform MS/MSD (Yes or No) ☒ 8082A - TCL PCBs - OLM04.2 8081B - TCL PCBs - OLM04.2 8270D - (MOD) TCL SVOA - OLM04.2 6010C, 7470A 8260C - (MOD) TCL list OLM04.2 8151A - Local Method PFC_IDA - PFAS, Standard List (21 analytes) 8270D, SIM, MS, ID - SIM List	
Sample Date: <u>7/5/18</u> Sample Time: <u>11:30</u> Sample Type (C=Comp, G=grab): <u>G</u> Matrix (W=water, B=soil, O=waste/oil, BT=Tissue, A=Air): <u>Water</u>		Preservation Code: <u>6</u> Special Instructions/Note:	
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify) <u>Categories B, MS Del Envs</u>		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months	
Empty Kit Relinquished by: <u>[Signature]</u> Relinquished by: <u>[Signature]</u> Relinquished by: <u>[Signature]</u>		Method of Shipment: <u>7/5/18 13:30</u> Date/Time: <u>7/5/18 13:30</u> Date/Time: <u>7/5/18 13:30</u> Date/Time: <u>7/5/18 13:30</u>	
Custody Seals Intact: <u>Yes</u> Custody Seal No.: <u>3.8</u>		Cooler Temperature(s) °C and Other Remarks: <u>#1</u>	

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-138450-1

Login Number: 138450

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	BENCHMARK
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-138451-1

Client Project/Site: Oregon Road Site - Olean, NY

For:

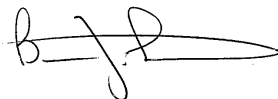
Benchmark Env. Eng. & Science, PLLC

2558 Hamburg Turnpike

Suite 300

Lackawanna, New York 14218

Attn: Mr. Michael Lesakowski



Authorized for release by:

7/25/2018 10:59:55 AM

Brian Fischer, Manager of Project Management

(716)504-9835

brian.fischer@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Definitions/Glossary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
vs	Reported analyte concentrations are below 200 ug/kg and may be biased low due to the sample not being collected according to 5035A-L low-level specifications.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
T	Result is a tentatively identified compound (TIC) and an estimated value.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)

Definitions/Glossary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

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Case Narrative

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

Job ID: 480-138451-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-138451-1

Comments

No additional comments.

Receipt

The sample was received on 7/6/2018 2:30 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.8° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-423654 recovered outside acceptance criteria, low biased, for Chloromethane and Vinyl chloride. A reporting limit (RL) standard was analyzed, and the target analytes were detected. Since the associated sample was non-detect for these analytes, the data have been reported. The following sample is impacted: SED-4 (480-138451-1).

Method(s) 8260C: Due to the coelution of Ethyl Acetate with 2-Butanone in the full spike solution, 2-Butanone (MEK) exceeded control limits in the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) associated with preparation batch 480-423653 and analytical batch 480-423654. The following sample was affected : SED-4 (480-138451-1).

Method(s) 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-423653 and analytical batch 480-423654 were outside control limits. Sample matrix interference is suspected. The data has been qualified and reported.

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

GC/MS Semi VOA

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-424165 recovered above the upper control limit for Atrazine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: SED-4 (480-138451-1).

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-424165 recovered outside acceptance criteria, low biased, for Pentachlorophenol. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following sample is impacted: SED-4 (480-138451-1).

Method(s) 8270D: The continuing calibration verification (CCV) analyzed in batch 480-424165 was outside the method criteria for the following analyte: 2,4,6-Tribromophenol (surr). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated. 2,4,6-Tribromophenol (surr) was within control limits for all associated samples and batch QC. The following sample is impacted: SED-4 (480-138451-1).

Method(s) 8270D: The following compound has been spiked at a level above the upper range of the initial calibration: Benzaldehyde. The laboratory control sample (LCS) recovered within acceptable limits for this analyte and has been qualified with an "E" flag. (LCS 480-423289/2-A)

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

GC Semi VOA

Method(s) 8081B: The following samples were diluted due to the nature of the sample matrix: SED-4 (480-138451-1), (480-138451-B-1-B MS) and (480-138451-B-1-C MSD). Elevated reporting limits (RLs) are provided.

Method(s) 8081B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-423422 and analytical batch 480-423684 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Case Narrative

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

Job ID: 480-138451-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Method(s) 8081B: All primary data for analytical batch 423684 is reported from the RTX-CLPI column.

Method(s) 8082A: The continuing calibration verification (CCV 480-424101/14) associated with batch 480-424101 recovered above the upper control limit for PCB-1254. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: SED-4 (480-138451-1).

Method(s) 8082A: All primary data for analytical batch 424101 is reported from the ZB-35 column.

Method(s) 8082A: The percent difference in a multi-component continuing calibration verification is assessed on the basis of the total amount, individual peak calculations are only listed for completeness.

Method(s) 8151A: All primary data for analytical batch 424224 is reported from the RTX-CLPI column.

Method(s) 8151A: The continuing calibration verification (CCV 480-424224/23) associated with analytical batch 480-424224 recovered above the upper control limit for the analytes 2,4-D, Silvex (2,4,5-TP) and 2,4,5-T and the surrogate 2,4-Dichlorophenylacetic acid. The sample associated with this CCV was non-detect for the affected analytes and the surrogate results are not adversely affected; therefore, the data have been reported. The following sample is impacted: SED-4 (480-138451-1).

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

Metals

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

Organic Prep

Method(s) 3550C: The following samples required a Florisil clean-up, via EPA Method 3620C, to reduce matrix interferences: SED-4 (480-138451-1), (480-138451-B-1 MS) and (480-138451-B-1 MSD).

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

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

Client Sample ID: SED-4

Lab Sample ID: 480-138451-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
2-Butanone (MEK)	5.7	J F1 * vs	35	2.6	ug/Kg	1	✱		8260C	Total/NA
Acetone	36	F1 vs	35	5.9	ug/Kg	1	✱		8260C	Total/NA
Anthracene	84	J	240	60	ug/Kg	1	✱		8270D	Total/NA
Benzo[a]anthracene	300		240	24	ug/Kg	1	✱		8270D	Total/NA
Benzo[a]pyrene	280		240	36	ug/Kg	1	✱		8270D	Total/NA
Benzo[b]fluoranthene	380		240	39	ug/Kg	1	✱		8270D	Total/NA
Benzo[g,h,i]perylene	210	J	240	26	ug/Kg	1	✱		8270D	Total/NA
Benzo[k]fluoranthene	150	J	240	32	ug/Kg	1	✱		8270D	Total/NA
Chrysene	290		240	54	ug/Kg	1	✱		8270D	Total/NA
Fluoranthene	580		240	26	ug/Kg	1	✱		8270D	Total/NA
Indeno[1,2,3-cd]pyrene	190	J	240	30	ug/Kg	1	✱		8270D	Total/NA
Phenanthrene	270		240	36	ug/Kg	1	✱		8270D	Total/NA
Pyrene	500		240	29	ug/Kg	1	✱		8270D	Total/NA
4,4'-DDD	5.0		4.8	0.92	ug/Kg	2	✱		8081B	Total/NA
alpha-BHC	1.1	J	4.8	0.85	ug/Kg	2	✱		8081B	Total/NA
Endrin ketone	4.9		4.8	1.2	ug/Kg	2	✱		8081B	Total/NA
gamma-BHC (Lindane)	2.7	J B	4.8	0.87	ug/Kg	2	✱		8081B	Total/NA
Aluminum	20000		14.8	6.5	mg/Kg	1	✱		6010C	Total/NA
Arsenic	6.3	B	3.0	0.59	mg/Kg	1	✱		6010C	Total/NA
Barium	147		0.74	0.16	mg/Kg	1	✱		6010C	Total/NA
Beryllium	0.82		0.30	0.041	mg/Kg	1	✱		6010C	Total/NA
Cadmium	0.17	J	0.30	0.044	mg/Kg	1	✱		6010C	Total/NA
Calcium	1400	B	74.1	4.9	mg/Kg	1	✱		6010C	Total/NA
Chromium	22.2		0.74	0.30	mg/Kg	1	✱		6010C	Total/NA
Cobalt	11.0		0.74	0.074	mg/Kg	1	✱		6010C	Total/NA
Copper	17.0		1.5	0.31	mg/Kg	1	✱		6010C	Total/NA
Iron	23700		14.8	5.2	mg/Kg	1	✱		6010C	Total/NA
Lead	26.6		1.5	0.36	mg/Kg	1	✱		6010C	Total/NA
Magnesium	3800		29.6	1.4	mg/Kg	1	✱		6010C	Total/NA
Manganese	280	B	0.30	0.047	mg/Kg	1	✱		6010C	Total/NA
Nickel	25.0		7.4	0.34	mg/Kg	1	✱		6010C	Total/NA
Potassium	2380		44.5	29.6	mg/Kg	1	✱		6010C	Total/NA
Sodium	213		207	19.3	mg/Kg	1	✱		6010C	Total/NA
Vanadium	28.1		0.74	0.16	mg/Kg	1	✱		6010C	Total/NA
Zinc	87.4		3.0	0.95	mg/Kg	1	✱		6010C	Total/NA
Mercury	0.064		0.028	0.011	mg/Kg	1	✱		7471B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

Client Sample ID: SED-4

Lab Sample ID: 480-138451-1

Date Collected: 07/05/18 12:00

Matrix: Solid

Date Received: 07/06/18 02:30

Percent Solids: 69.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	F1 vs	7.0	0.51	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
1,1,2,2-Tetrachloroethane	ND	F1 vs	7.0	1.1	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	7.0	1.6	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
1,1,2-Trichloroethane	ND	F1 vs	7.0	0.92	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
1,1-Dichloroethane	ND	vs	7.0	0.86	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
1,1-Dichloroethene	ND	vs	7.0	0.86	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
1,2,4-Trichlorobenzene	ND	F1 vs	7.0	0.43	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
1,2-Dibromo-3-Chloropropane	ND	F1 vs	7.0	3.5	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
1,2-Dichlorobenzene	ND	F1 vs	7.0	0.55	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
1,2-Dichloroethane	ND	F1 vs	7.0	0.35	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
1,2-Dichloropropane	ND	vs	7.0	3.5	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
1,3-Dichlorobenzene	ND	F1 vs	7.0	0.36	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
1,4-Dichlorobenzene	ND	F1 vs	7.0	0.99	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
2-Butanone (MEK)	5.7	J F1 * vs	35	2.6	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
2-Hexanone	ND	F1 vs	35	3.5	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
4-Methyl-2-pentanone (MIBK)	ND	F1 vs	35	2.3	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Acetone	36	F1 vs	35	5.9	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Benzene	ND	vs	7.0	0.35	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Bromoform	ND	F1 vs	7.0	3.5	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Bromomethane	ND	vs	7.0	0.63	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Carbon disulfide	ND	F1 vs	7.0	3.5	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Carbon tetrachloride	ND	F1 vs	7.0	0.68	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Chlorobenzene	ND	F1 vs	7.0	0.93	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Dibromochloromethane	ND	F1 vs	7.0	0.90	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Chloroethane	ND	F1 vs	7.0	1.6	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Chloroform	ND	F1 vs	7.0	0.44	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Chloromethane	ND	F1 vs	7.0	0.43	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
cis-1,2-Dichloroethene	ND	F1 vs	7.0	0.90	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Cyclohexane	ND	F1 vs	7.0	0.99	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Bromodichloromethane	ND	F1 vs	7.0	0.94	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Dichlorodifluoromethane	ND	vs	7.0	0.58	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Ethylbenzene	ND	F1 vs	7.0	0.49	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
1,2-Dibromoethane	ND	F1 vs	7.0	0.90	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Isopropylbenzene	ND	F1 vs	7.0	1.1	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Methyl acetate	ND	vs	35	4.3	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Methyl tert-butyl ether	ND	vs	7.0	0.69	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Methylcyclohexane	ND	F1 vs	7.0	1.1	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Methylene Chloride	ND	vs	7.0	3.2	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Tetrachloroethene	ND	F1 vs	7.0	0.94	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Toluene	ND	vs	7.0	0.53	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
trans-1,2-Dichloroethene	ND	F1 vs	7.0	0.73	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
trans-1,3-Dichloropropene	ND	F1 vs	7.0	3.1	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Trichloroethene	ND	F1 vs	7.0	1.5	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Trichlorofluoromethane	ND	F1 vs	7.0	0.67	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Vinyl chloride	ND	F1 vs	7.0	0.86	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Xylenes, Total	ND	F1 vs	14	1.2	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
cis-1,3-Dichloropropene	ND	F1 vs	7.0	1.0	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1
Styrene	ND	F1 vs	7.0	0.35	ug/Kg	☼	07/10/18 07:42	07/10/18 18:47	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

Client Sample ID: SED-4

Lab Sample ID: 480-138451-1

Date Collected: 07/05/18 12:00

Matrix: Solid

Date Received: 07/06/18 02:30

Percent Solids: 69.3

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/Kg	☼			07/10/18 07:42	07/10/18 18:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		64 - 126				07/10/18 07:42	07/10/18 18:47	1
4-Bromofluorobenzene (Surr)	99		72 - 126				07/10/18 07:42	07/10/18 18:47	1
Toluene-d8 (Surr)	102		71 - 125				07/10/18 07:42	07/10/18 18:47	1
Dibromofluoromethane (Surr)	99		60 - 140				07/10/18 07:42	07/10/18 18:47	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		240	36	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
bis (2-chloroisopropyl) ether	ND		240	49	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
2,4,5-Trichlorophenol	ND		240	66	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
2,4,6-Trichlorophenol	ND		240	49	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
2,4-Dichlorophenol	ND		240	26	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
2,4-Dimethylphenol	ND		240	59	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
2,4-Dinitrophenol	ND		2400	1100	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
2,4-Dinitrotoluene	ND		240	50	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
2,6-Dinitrotoluene	ND		240	29	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
2-Chloronaphthalene	ND		240	40	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
2-Chlorophenol	ND		240	44	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
2-Methylnaphthalene	ND		240	49	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
2-Methylphenol	ND		240	29	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
2-Nitroaniline	ND		470	36	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
2-Nitrophenol	ND		240	69	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
3,3'-Dichlorobenzidine	ND		470	290	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
3-Nitroaniline	ND		470	67	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
4,6-Dinitro-2-methylphenol	ND		470	240	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
4-Bromophenyl phenyl ether	ND		240	34	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
4-Chloro-3-methylphenol	ND		240	60	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
4-Chloroaniline	ND		240	60	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
4-Chlorophenyl phenyl ether	ND		240	30	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
4-Methylphenol	ND		470	29	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
4-Nitroaniline	ND		470	130	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
4-Nitrophenol	ND		470	170	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Acenaphthene	ND		240	36	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Acenaphthylene	ND		240	32	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Acetophenone	ND		240	33	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Anthracene	84 J		240	60	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Atrazine	ND		240	85	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Benzaldehyde	ND		240	190	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Benzo[a]anthracene	300		240	24	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Benzo[a]pyrene	280		240	36	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Benzo[b]fluoranthene	380		240	39	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Benzo[g,h,i]perylene	210 J		240	26	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Benzo[k]fluoranthene	150 J		240	32	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Bis(2-chloroethoxy)methane	ND		240	52	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Bis(2-chloroethyl)ether	ND		240	32	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Bis(2-ethylhexyl) phthalate	ND		240	83	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Butyl benzyl phthalate	ND		240	40	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

Client Sample ID: SED-4

Lab Sample ID: 480-138451-1

Date Collected: 07/05/18 12:00

Matrix: Solid

Date Received: 07/06/18 02:30

Percent Solids: 69.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	ND		240	73	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Carbazole	ND		240	29	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Chrysene	290		240	54	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Di-n-butyl phthalate	ND		240	42	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Di-n-octyl phthalate	ND		240	29	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Dibenz(a,h)anthracene	ND		240	43	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Dibenzofuran	ND		240	29	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Diethyl phthalate	ND		240	32	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Dimethyl phthalate	ND		240	29	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Fluoranthene	580		240	26	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Fluorene	ND		240	29	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Hexachlorobenzene	ND		240	33	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Hexachlorobutadiene	ND		240	36	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Hexachlorocyclopentadiene	ND		240	33	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Hexachloroethane	ND		240	32	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Indeno[1,2,3-cd]pyrene	190 J		240	30	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Isophorone	ND		240	52	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
N-Nitrosodi-n-propylamine	ND		240	42	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
N-Nitrosodiphenylamine	ND		240	200	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Naphthalene	ND		240	32	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Nitrobenzene	ND		240	27	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Pentachlorophenol	ND		470	240	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Phenanthrene	270		240	36	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Phenol	ND		240	37	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1
Pyrene	500		240	29	ug/Kg	☼	07/06/18 14:09	07/12/18 20:28	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	530	T J	ug/Kg	☼	4.48		07/06/18 14:09	07/12/18 20:28	1
Unknown	190	T J	ug/Kg	☼	12.12		07/06/18 14:09	07/12/18 20:28	1
Unknown	390	T J	ug/Kg	☼	14.58		07/06/18 14:09	07/12/18 20:28	1
Unknown	240	T J	ug/Kg	☼	14.77		07/06/18 14:09	07/12/18 20:28	1
Unknown	560	T J	ug/Kg	☼	14.81		07/06/18 14:09	07/12/18 20:28	1
Unknown	280	T J	ug/Kg	☼	14.89		07/06/18 14:09	07/12/18 20:28	1
Unknown	300	T J	ug/Kg	☼	14.98		07/06/18 14:09	07/12/18 20:28	1
Unknown	330	T J	ug/Kg	☼	15.22		07/06/18 14:09	07/12/18 20:28	1
Unknown	230	T J	ug/Kg	☼	15.37		07/06/18 14:09	07/12/18 20:28	1
Unknown	270	T J	ug/Kg	☼	15.60		07/06/18 14:09	07/12/18 20:28	1
Unknown	240	T J	ug/Kg	☼	15.72		07/06/18 14:09	07/12/18 20:28	1
Unknown	230	T J	ug/Kg	☼	16.03		07/06/18 14:09	07/12/18 20:28	1
Unknown	740	T J	ug/Kg	☼	18.74		07/06/18 14:09	07/12/18 20:28	1
Unknown	270	T J	ug/Kg	☼	19.36		07/06/18 14:09	07/12/18 20:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	69		54 - 120	07/06/18 14:09	07/12/18 20:28	1
2-Fluorobiphenyl	83		60 - 120	07/06/18 14:09	07/12/18 20:28	1
2-Fluorophenol	72		52 - 120	07/06/18 14:09	07/12/18 20:28	1
Nitrobenzene-d5	73		53 - 120	07/06/18 14:09	07/12/18 20:28	1
p-Terphenyl-d14	91		65 - 121	07/06/18 14:09	07/12/18 20:28	1
Phenol-d5	67		54 - 120	07/06/18 14:09	07/12/18 20:28	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

Client Sample ID: SED-4

Lab Sample ID: 480-138451-1

Date Collected: 07/05/18 12:00

Matrix: Solid

Date Received: 07/06/18 02:30

Percent Solids: 69.3

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	5.0		4.8	0.92	ug/Kg	☼	07/09/18 07:37	07/10/18 15:45	2
4,4'-DDE	ND		4.8	1.0	ug/Kg	☼	07/09/18 07:37	07/10/18 15:45	2
4,4'-DDT	ND		4.8	1.1	ug/Kg	☼	07/09/18 07:37	07/10/18 15:45	2
Aldrin	ND		4.8	1.2	ug/Kg	☼	07/09/18 07:37	07/10/18 15:45	2
alpha-BHC	1.1	J	4.8	0.85	ug/Kg	☼	07/09/18 07:37	07/10/18 15:45	2
cis-Chlordane	ND		4.8	2.4	ug/Kg	☼	07/09/18 07:37	07/10/18 15:45	2
beta-BHC	ND		4.8	0.85	ug/Kg	☼	07/09/18 07:37	07/10/18 15:45	2
delta-BHC	ND		4.8	0.88	ug/Kg	☼	07/09/18 07:37	07/10/18 15:45	2
Dieldrin	ND		4.8	1.1	ug/Kg	☼	07/09/18 07:37	07/10/18 15:45	2
Endosulfan I	ND		4.8	0.91	ug/Kg	☼	07/09/18 07:37	07/10/18 15:45	2
Endosulfan II	ND		4.8	0.85	ug/Kg	☼	07/09/18 07:37	07/10/18 15:45	2
Endosulfan sulfate	ND		4.8	0.89	ug/Kg	☼	07/09/18 07:37	07/10/18 15:45	2
Endrin	ND		4.8	0.94	ug/Kg	☼	07/09/18 07:37	07/10/18 15:45	2
Endrin aldehyde	ND		4.8	1.2	ug/Kg	☼	07/09/18 07:37	07/10/18 15:45	2
Endrin ketone	4.9		4.8	1.2	ug/Kg	☼	07/09/18 07:37	07/10/18 15:45	2
gamma-BHC (Lindane)	2.7	J B	4.8	0.87	ug/Kg	☼	07/09/18 07:37	07/10/18 15:45	2
trans-Chlordane	ND		4.8	1.5	ug/Kg	☼	07/09/18 07:37	07/10/18 15:45	2
Heptachlor	ND	F1	4.8	1.0	ug/Kg	☼	07/09/18 07:37	07/10/18 15:45	2
Heptachlor epoxide	ND		4.8	1.2	ug/Kg	☼	07/09/18 07:37	07/10/18 15:45	2
Methoxychlor	ND		4.8	0.97	ug/Kg	☼	07/09/18 07:37	07/10/18 15:45	2
Toxaphene	ND		48	28	ug/Kg	☼	07/09/18 07:37	07/10/18 15:45	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	81		45 - 120	07/09/18 07:37	07/10/18 15:45	2
DCB Decachlorobiphenyl	142	X	45 - 120	07/09/18 07:37	07/10/18 15:45	2
Tetrachloro-m-xylene	80		30 - 124	07/09/18 07:37	07/10/18 15:45	2
Tetrachloro-m-xylene	69		30 - 124	07/09/18 07:37	07/10/18 15:45	2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.24	0.048	mg/Kg	☼	07/10/18 14:36	07/12/18 16:51	1
PCB-1221	ND		0.24	0.048	mg/Kg	☼	07/10/18 14:36	07/12/18 16:51	1
PCB-1232	ND		0.24	0.048	mg/Kg	☼	07/10/18 14:36	07/12/18 16:51	1
PCB-1242	ND		0.24	0.048	mg/Kg	☼	07/10/18 14:36	07/12/18 16:51	1
PCB-1248	ND		0.24	0.048	mg/Kg	☼	07/10/18 14:36	07/12/18 16:51	1
PCB-1254	ND		0.24	0.11	mg/Kg	☼	07/10/18 14:36	07/12/18 16:51	1
PCB-1260	ND		0.24	0.11	mg/Kg	☼	07/10/18 14:36	07/12/18 16:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	100		60 - 154	07/10/18 14:36	07/12/18 16:51	1
Tetrachloro-m-xylene	100		60 - 154	07/10/18 14:36	07/12/18 16:51	1
DCB Decachlorobiphenyl	104		65 - 174	07/10/18 14:36	07/12/18 16:51	1
DCB Decachlorobiphenyl	100		65 - 174	07/10/18 14:36	07/12/18 16:51	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		24	7.6	ug/Kg	☼	07/10/18 06:38	07/13/18 23:14	1
Silvex (2,4,5-TP)	ND		24	8.6	ug/Kg	☼	07/10/18 06:38	07/13/18 23:14	1
2,4-D	ND		24	15	ug/Kg	☼	07/10/18 06:38	07/13/18 23:14	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

Client Sample ID: SED-4

Date Collected: 07/05/18 12:00

Date Received: 07/06/18 02:30

Lab Sample ID: 480-138451-1

Matrix: Solid

Percent Solids: 69.3

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	73		28 - 129	07/10/18 06:38	07/13/18 23:14	1
2,4-Dichlorophenylacetic acid	72		28 - 129	07/10/18 06:38	07/13/18 23:14	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	20000		14.8	6.5	mg/Kg	☼	07/10/18 09:45	07/10/18 22:37	1
Antimony	ND		22.2	0.59	mg/Kg	☼	07/10/18 09:45	07/10/18 22:37	1
Arsenic	6.3	B	3.0	0.59	mg/Kg	☼	07/10/18 09:45	07/10/18 22:37	1
Barium	147		0.74	0.16	mg/Kg	☼	07/10/18 09:45	07/10/18 22:37	1
Beryllium	0.82		0.30	0.041	mg/Kg	☼	07/10/18 09:45	07/10/18 22:37	1
Cadmium	0.17	J	0.30	0.044	mg/Kg	☼	07/10/18 09:45	07/10/18 22:37	1
Calcium	1400	B	74.1	4.9	mg/Kg	☼	07/10/18 09:45	07/10/18 22:37	1
Chromium	22.2		0.74	0.30	mg/Kg	☼	07/10/18 09:45	07/10/18 22:37	1
Cobalt	11.0		0.74	0.074	mg/Kg	☼	07/10/18 09:45	07/10/18 22:37	1
Copper	17.0		1.5	0.31	mg/Kg	☼	07/10/18 09:45	07/10/18 22:37	1
Iron	23700		14.8	5.2	mg/Kg	☼	07/10/18 09:45	07/10/18 22:37	1
Lead	26.6		1.5	0.36	mg/Kg	☼	07/10/18 09:45	07/10/18 22:37	1
Magnesium	3800		29.6	1.4	mg/Kg	☼	07/10/18 09:45	07/10/18 22:37	1
Manganese	280	B	0.30	0.047	mg/Kg	☼	07/10/18 09:45	07/10/18 22:37	1
Nickel	25.0		7.4	0.34	mg/Kg	☼	07/10/18 09:45	07/10/18 22:37	1
Potassium	2380		44.5	29.6	mg/Kg	☼	07/10/18 09:45	07/10/18 22:37	1
Selenium	ND		5.9	0.59	mg/Kg	☼	07/10/18 09:45	07/10/18 22:37	1
Silver	ND		0.89	0.30	mg/Kg	☼	07/10/18 09:45	07/10/18 22:37	1
Sodium	213		207	19.3	mg/Kg	☼	07/10/18 09:45	07/10/18 22:37	1
Thallium	ND		8.9	0.44	mg/Kg	☼	07/10/18 09:45	07/10/18 22:37	1
Vanadium	28.1		0.74	0.16	mg/Kg	☼	07/10/18 09:45	07/10/18 22:37	1
Zinc	87.4		3.0	0.95	mg/Kg	☼	07/10/18 09:45	07/10/18 22:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.064		0.028	0.011	mg/Kg	☼	07/20/18 11:20	07/20/18 12:57	1

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (64-126)	BFB (72-126)	TOL (71-125)	DBFM (60-140)
480-138451-1	SED-4	97	99	102	99
480-138451-1 MS	SED-4	83	99	106	97
480-138451-1 MSD	SED-4	85	99	104	98
LCS 480-423653/22-A	Lab Control Sample	101	103	103	100
LCSD 480-423653/2-A	Lab Control Sample Dup	98	103	104	97
MB 480-423653/3-A	Method Blank	95	100	102	96

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (54-120)	FBP (60-120)	2FP (52-120)	NBZ (53-120)	TPHd14 (65-121)	PHL (54-120)
480-138451-1	SED-4	69	83	72	73	91	67
LCS 480-423289/2-A	Lab Control Sample	78	86	79	72	89	74
MB 480-423289/1-A	Method Blank	61	80	71	70	92	72

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
TPHd14 = p-Terphenyl-d14
PHL = Phenol-d5

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1 (45-120)	DCBP2 (45-120)	TCX1 (30-124)	TCX2 (30-124)
480-138451-1	SED-4	81	142 X	80	69
480-138451-1 MS	SED-4	74	124 X	104	73
480-138451-1 MSD	SED-4	69	170 X	102	73
LCS 480-423422/2-A	Lab Control Sample	84	91	74	56
MB 480-423422/1-A	Method Blank	88	98	74	56

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TCX1 (60-154)	TCX2 (60-154)	DCBP1 (65-174)	DCBP2 (65-174)
480-138451-1	SED-4	100	100	104	100
LCS 480-423784/2-A	Lab Control Sample	137	127	136	131
MB 480-423784/1-A	Method Blank	114	113	120	117
Surrogate Legend					
TCX = Tetrachloro-m-xylene					
DCBP = DCB Decachlorobiphenyl					

Method: 8151A - Herbicides (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCPAA1 (28-129)	DCPAA2 (28-129)
480-138451-1	SED-4	73	72
LCS 480-423645/2-A	Lab Control Sample	84	71
MB 480-423645/1-A	Method Blank	60	72
Surrogate Legend			
DCPAA = 2,4-Dichlorophenylacetic acid			

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-423653/3-A

Matrix: Solid

Analysis Batch: 423654

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423653

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
2-Hexanone	ND		25	2.5	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Acetone	ND		25	4.2	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Benzene	ND		5.0	0.25	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Bromoform	ND		5.0	2.5	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Bromomethane	ND		5.0	0.45	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Chloroethane	ND		5.0	1.1	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Chloroform	ND		5.0	0.31	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Chloromethane	ND		5.0	0.30	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Cyclohexane	ND		5.0	0.70	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Methyl acetate	ND		25	3.0	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Toluene	ND		5.0	0.38	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Trichloroethene	ND		5.0	1.1	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Xylenes, Total	ND		10	0.84	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		07/10/18 07:42	07/10/18 12:38	1
Styrene	ND		5.0	0.25	ug/Kg		07/10/18 07:42	07/10/18 12:38	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		ug/Kg				07/10/18 07:42	07/10/18 12:38	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	95		64 - 126				07/10/18 07:42	07/10/18 12:38	1
4-Bromofluorobenzene (Surr)	100		72 - 126				07/10/18 07:42	07/10/18 12:38	1
Toluene-d8 (Surr)	102		71 - 125				07/10/18 07:42	07/10/18 12:38	1
Dibromofluoromethane (Surr)	96		60 - 140				07/10/18 07:42	07/10/18 12:38	1

Lab Sample ID: LCS 480-423653/22-A

Matrix: Solid

Analysis Batch: 423654

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423653

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>
1,1,1-Trichloroethane	50.0	42.0		ug/Kg		84	77 - 121
1,1,2,2-Tetrachloroethane	50.0	49.6		ug/Kg		99	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	43.9		ug/Kg		88	60 - 140
1,1,2-Trichloroethane	50.0	48.8		ug/Kg		98	78 - 122
1,1-Dichloroethane	50.0	48.2		ug/Kg		96	73 - 126
1,1-Dichloroethene	50.0	45.9		ug/Kg		92	59 - 125
1,2,4-Trichlorobenzene	50.0	48.3		ug/Kg		97	64 - 120
1,2-Dibromo-3-Chloropropane	50.0	47.7		ug/Kg		95	63 - 124
1,2-Dichlorobenzene	50.0	46.6		ug/Kg		93	75 - 120
1,2-Dichloroethane	50.0	41.3		ug/Kg		83	77 - 122
1,2-Dichloropropane	50.0	48.4		ug/Kg		97	75 - 124
1,3-Dichlorobenzene	50.0	47.6		ug/Kg		95	74 - 120
1,4-Dichlorobenzene	50.0	47.6		ug/Kg		95	73 - 120
2-Butanone (MEK)	250	487	*	ug/Kg		195	70 - 134
2-Hexanone	250	260		ug/Kg		104	59 - 130
4-Methyl-2-pentanone (MIBK)	250	253		ug/Kg		101	65 - 133
Acetone	250	287		ug/Kg		115	61 - 137
Benzene	50.0	48.7		ug/Kg		97	79 - 127
Bromoform	50.0	52.0		ug/Kg		104	68 - 126
Bromomethane	50.0	41.6		ug/Kg		83	37 - 149
Carbon disulfide	50.0	47.2		ug/Kg		94	64 - 131
Carbon tetrachloride	50.0	42.7		ug/Kg		85	75 - 135
Chlorobenzene	50.0	48.7		ug/Kg		97	76 - 124
Dibromochloromethane	50.0	49.7		ug/Kg		99	76 - 125
Chloroethane	50.0	42.2		ug/Kg		84	69 - 135
Chloroform	50.0	45.1		ug/Kg		90	80 - 120
Chloromethane	50.0	37.9		ug/Kg		76	63 - 127
cis-1,2-Dichloroethene	50.0	47.9		ug/Kg		96	81 - 120
Cyclohexane	50.0	45.8		ug/Kg		92	65 - 120
Bromodichloromethane	50.0	46.4		ug/Kg		93	80 - 122
Dichlorodifluoromethane	50.0	42.0		ug/Kg		84	57 - 142
Ethylbenzene	50.0	48.2		ug/Kg		96	80 - 120
1,2-Dibromoethane	50.0	48.7		ug/Kg		97	78 - 120
Isopropylbenzene	50.0	47.0		ug/Kg		94	72 - 120
Methyl acetate	100	114		ug/Kg		114	55 - 136
Methyl tert-butyl ether	50.0	44.3		ug/Kg		89	63 - 125
Methylcyclohexane	50.0	46.4		ug/Kg		93	60 - 140
Methylene Chloride	50.0	47.0		ug/Kg		94	61 - 127
Tetrachloroethene	50.0	51.9		ug/Kg		104	74 - 122

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

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

Lab Sample ID: LCS 480-423653/22-A

Matrix: Solid

Analysis Batch: 423654

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423653

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	50.0	48.3		ug/Kg		97	74 - 128
trans-1,2-Dichloroethene	50.0	47.6		ug/Kg		95	78 - 126
trans-1,3-Dichloropropene	50.0	47.5		ug/Kg		95	73 - 123
Trichloroethene	50.0	47.4		ug/Kg		95	77 - 129
Trichlorofluoromethane	50.0	42.2		ug/Kg		84	65 - 146
Vinyl chloride	50.0	39.8		ug/Kg		80	61 - 133
cis-1,3-Dichloropropene	50.0	49.4		ug/Kg		99	80 - 120
Styrene	50.0	48.6		ug/Kg		97	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		64 - 126
4-Bromofluorobenzene (Surr)	103		72 - 126
Toluene-d8 (Surr)	103		71 - 125
Dibromofluoromethane (Surr)	100		60 - 140

Lab Sample ID: LCSD 480-423653/2-A

Matrix: Solid

Analysis Batch: 423654

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 423653

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	50.0	41.9		ug/Kg		84	77 - 121	0	20
1,1,2,2-Tetrachloroethane	50.0	52.7		ug/Kg		105	80 - 120	6	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	44.1		ug/Kg		88	60 - 140	0	20
1,1,2-Trichloroethane	50.0	50.5		ug/Kg		101	78 - 122	3	20
1,1-Dichloroethane	50.0	48.6		ug/Kg		97	73 - 126	1	20
1,1-Dichloroethene	50.0	45.6		ug/Kg		91	59 - 125	1	20
1,2,4-Trichlorobenzene	50.0	49.0		ug/Kg		98	64 - 120	2	20
1,2-Dibromo-3-Chloropropane	50.0	53.8		ug/Kg		108	63 - 124	12	20
1,2-Dichlorobenzene	50.0	48.4		ug/Kg		97	75 - 120	4	20
1,2-Dichloroethane	50.0	41.8		ug/Kg		84	77 - 122	1	20
1,2-Dichloropropane	50.0	48.7		ug/Kg		97	75 - 124	1	20
1,3-Dichlorobenzene	50.0	48.3		ug/Kg		97	74 - 120	1	20
1,4-Dichlorobenzene	50.0	48.8		ug/Kg		98	73 - 120	2	20
2-Butanone (MEK)	250	538	*	ug/Kg		215	70 - 134	10	20
2-Hexanone	250	291		ug/Kg		117	59 - 130	11	20
4-Methyl-2-pentanone (MIBK)	250	279		ug/Kg		112	65 - 133	10	20
Acetone	250	324		ug/Kg		129	61 - 137	12	20
Benzene	50.0	49.5		ug/Kg		99	79 - 127	2	20
Bromoform	50.0	54.5		ug/Kg		109	68 - 126	5	20
Bromomethane	50.0	42.6		ug/Kg		85	37 - 149	2	20
Carbon disulfide	50.0	46.1		ug/Kg		92	64 - 131	2	20
Carbon tetrachloride	50.0	42.0		ug/Kg		84	75 - 135	2	20
Chlorobenzene	50.0	50.0		ug/Kg		100	76 - 124	3	20
Dibromochloromethane	50.0	51.1		ug/Kg		102	76 - 125	3	20
Chloroethane	50.0	40.9		ug/Kg		82	69 - 135	3	20
Chloroform	50.0	46.0		ug/Kg		92	80 - 120	2	20
Chloromethane	50.0	38.6		ug/Kg		77	63 - 127	2	20

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

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

Lab Sample ID: LCSD 480-423653/2-A

Matrix: Solid

Analysis Batch: 423654

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 423653

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	50.0	48.1		ug/Kg		96	81 - 120	0	20
Cyclohexane	50.0	46.0		ug/Kg		92	65 - 120	1	20
Bromodichloromethane	50.0	47.1		ug/Kg		94	80 - 122	1	20
Dichlorodifluoromethane	50.0	41.9		ug/Kg		84	57 - 142	0	20
Ethylbenzene	50.0	49.3		ug/Kg		99	80 - 120	2	20
1,2-Dibromoethane	50.0	50.9		ug/Kg		102	78 - 120	4	20
Isopropylbenzene	50.0	47.7		ug/Kg		95	72 - 120	2	20
Methyl acetate	100	126		ug/Kg		126	55 - 136	10	20
Methyl tert-butyl ether	50.0	45.3		ug/Kg		91	63 - 125	2	20
Methylcyclohexane	50.0	46.8		ug/Kg		94	60 - 140	1	20
Methylene Chloride	50.0	47.3		ug/Kg		95	61 - 127	1	20
Tetrachloroethene	50.0	55.3		ug/Kg		111	74 - 122	6	20
Toluene	50.0	49.4		ug/Kg		99	74 - 128	2	20
trans-1,2-Dichloroethene	50.0	47.8		ug/Kg		96	78 - 126	1	20
trans-1,3-Dichloropropene	50.0	48.7		ug/Kg		97	73 - 123	3	20
Trichloroethene	50.0	48.0		ug/Kg		96	77 - 129	1	20
Trichlorofluoromethane	50.0	41.6		ug/Kg		83	65 - 146	1	20
Vinyl chloride	50.0	39.1		ug/Kg		78	61 - 133	2	20
cis-1,3-Dichloropropene	50.0	50.1		ug/Kg		100	80 - 120	1	20
Styrene	50.0	49.4		ug/Kg		99	80 - 120	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		64 - 126
4-Bromofluorobenzene (Surr)	103		72 - 126
Toluene-d8 (Surr)	104		71 - 125
Dibromofluoromethane (Surr)	97		60 - 140

Lab Sample ID: 480-138451-1 MS

Matrix: Solid

Analysis Batch: 423654

Client Sample ID: SED-4

Prep Type: Total/NA

Prep Batch: 423653

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND	F1 vs	69.5	51.7	F1 vs	ug/Kg	✱	74	77 - 121
1,1,2,2-Tetrachloroethane	ND	F1 vs	69.5	48.3	F1 vs	ug/Kg	✱	69	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	69.5	53.5	vs	ug/Kg	✱	77	60 - 140
1,1,2-Trichloroethane	ND	F1 vs	69.5	54.2	vs	ug/Kg	✱	78	78 - 122
1,1-Dichloroethane	ND	vs	69.5	58.6	vs	ug/Kg	✱	84	73 - 126
1,1-Dichloroethene	ND	vs	69.5	57.2	vs	ug/Kg	✱	82	59 - 125
1,2,4-Trichlorobenzene	ND	F1 vs	69.5	37.8	F1 vs	ug/Kg	✱	54	64 - 120
1,2-Dibromo-3-Chloropropane	ND	F1 vs	69.5	33.2	F1 vs	ug/Kg	✱	48	63 - 124
1,2-Dichlorobenzene	ND	F1 vs	69.5	50.4	F1 vs	ug/Kg	✱	73	75 - 120
1,2-Dichloroethane	ND	F1 vs	69.5	47.6	F1 vs	ug/Kg	✱	69	77 - 122
1,2-Dichloropropane	ND	vs	69.5	59.6	vs	ug/Kg	✱	86	75 - 124
1,3-Dichlorobenzene	ND	F1 vs	69.5	52.9	vs	ug/Kg	✱	76	74 - 120
1,4-Dichlorobenzene	ND	F1 vs	69.5	52.4	vs	ug/Kg	✱	75	73 - 120
2-Butanone (MEK)	5.7	J F1 * vs	347	186	F1 vs	ug/Kg	✱	52	70 - 134
2-Hexanone	ND	F1 vs	347	185	F1 vs	ug/Kg	✱	53	59 - 130

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

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

Lab Sample ID: 480-138451-1 MS

Matrix: Solid

Analysis Batch: 423654

Client Sample ID: SED-4

Prep Type: Total/NA

Prep Batch: 423653

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Methyl-2-pentanone (MIBK)	ND	F1 vs	347	201	F1 vs	ug/Kg	✱	58	65 - 133
Acetone	36	F1 vs	347	182	F1 vs	ug/Kg	✱	42	61 - 137
Benzene	ND	vs	69.5	61.3	vs	ug/Kg	✱	88	79 - 127
Bromoform	ND	F1 vs	69.5	45.1	F1 vs	ug/Kg	✱	65	68 - 126
Bromomethane	ND	vs	69.5	55.3	vs	ug/Kg	✱	80	37 - 149
Carbon disulfide	ND	F1 vs	69.5	53.3	vs	ug/Kg	✱	77	64 - 131
Carbon tetrachloride	ND	F1 vs	69.5	48.7	F1 vs	ug/Kg	✱	70	75 - 135
Chlorobenzene	ND	F1 vs	69.5	58.0	vs	ug/Kg	✱	83	76 - 124
Dibromochloromethane	ND	F1 vs	69.5	52.5	vs	ug/Kg	✱	76	76 - 125
Chloroethane	ND	F1 vs	69.5	56.4	vs	ug/Kg	✱	81	69 - 135
Chloroform	ND	F1 vs	69.5	56.5	vs	ug/Kg	✱	81	80 - 120
Chloromethane	ND	F1 vs	69.5	47.5	vs	ug/Kg	✱	68	63 - 127
cis-1,2-Dichloroethene	ND	F1 vs	69.5	58.9	vs	ug/Kg	✱	85	80 - 120
Cyclohexane	ND	F1 vs	69.5	52.9	vs	ug/Kg	✱	76	65 - 120
Bromodichloromethane	ND	F1 vs	69.5	54.6	F1 vs	ug/Kg	✱	79	80 - 122
Dichlorodifluoromethane	ND	vs	69.5	50.7	vs	ug/Kg	✱	73	57 - 142
Ethylbenzene	ND	F1 vs	69.5	59.0	vs	ug/Kg	✱	85	80 - 120
1,2-Dibromoethane	ND	F1 vs	69.5	49.4	F1 vs	ug/Kg	✱	71	78 - 120
Isopropylbenzene	ND	F1 vs	69.5	58.7	vs	ug/Kg	✱	85	72 - 120
Methyl acetate	ND	vs	139	112	vs	ug/Kg	✱	81	55 - 136
Methyl tert-butyl ether	ND	vs	69.5	48.2	vs	ug/Kg	✱	69	63 - 125
Methylcyclohexane	ND	F1 vs	69.5	50.4	vs	ug/Kg	✱	73	60 - 140
Methylene Chloride	ND	vs	69.5	58.1	vs	ug/Kg	✱	84	61 - 127
Tetrachloroethene	ND	F1 vs	69.5	57.4	vs	ug/Kg	✱	83	74 - 122
Toluene	ND	vs	69.5	60.9	vs	ug/Kg	✱	88	74 - 128
trans-1,2-Dichloroethene	ND	F1 vs	69.5	58.7	vs	ug/Kg	✱	84	78 - 126
trans-1,3-Dichloropropene	ND	F1 vs	69.5	49.5	F1 vs	ug/Kg	✱	71	73 - 123
Trichloroethene	ND	F1 vs	69.5	56.9	vs	ug/Kg	✱	82	77 - 129
Trichlorofluoromethane	ND	F1 vs	69.5	54.4	vs	ug/Kg	✱	78	65 - 146
Vinyl chloride	ND	F1 vs	69.5	48.4	vs	ug/Kg	✱	70	61 - 133
cis-1,3-Dichloropropene	ND	F1 vs	69.5	53.8	F1 vs	ug/Kg	✱	77	80 - 120
Styrene	ND	F1 vs	69.5	55.2	F1 vs	ug/Kg	✱	79	80 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	83		64 - 126
4-Bromofluorobenzene (Surr)	99		72 - 126
Toluene-d8 (Surr)	106		71 - 125
Dibromofluoromethane (Surr)	97		60 - 140

Lab Sample ID: 480-138451-1 MSD

Matrix: Solid

Analysis Batch: 423654

Client Sample ID: SED-4

Prep Type: Total/NA

Prep Batch: 423653

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
1,1,1-Trichloroethane	ND	F1 vs	71.8	45.8	F1 vs	ug/Kg	✱	64	77 - 121	12	30
1,1,2,2-Tetrachloroethane	ND	F1 vs	71.8	45.6	F1 vs	ug/Kg	✱	63	80 - 120	6	30
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	71.8	44.9	vs	ug/Kg	✱	63	60 - 140	17	30

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

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

Lab Sample ID: 480-138451-1 MSD

Matrix: Solid

Analysis Batch: 423654

Client Sample ID: SED-4

Prep Type: Total/NA

Prep Batch: 423653

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2-Trichloroethane	ND	F1 vs	71.8	51.2	F1 vs	ug/Kg	✱	71	78 - 122	6	30
1,1-Dichloroethane	ND	vs	71.8	53.9	vs	ug/Kg	✱	75	73 - 126	8	30
1,1-Dichloroethene	ND	vs	71.8	49.0	vs	ug/Kg	✱	68	59 - 125	15	30
1,2,4-Trichlorobenzene	ND	F1 vs	71.8	33.8	F1 vs	ug/Kg	✱	47	64 - 120	11	30
1,2-Dibromo-3-Chloropropane	ND	F1 vs	71.8	30.9	F1 vs	ug/Kg	✱	43	63 - 124	7	30
1,2-Dichlorobenzene	ND	F1 vs	71.8	44.9	F1 vs	ug/Kg	✱	63	75 - 120	11	30
1,2-Dichloroethane	ND	F1 vs	71.8	45.8	F1 vs	ug/Kg	✱	64	77 - 122	4	30
1,2-Dichloropropane	ND	vs	71.8	56.9	vs	ug/Kg	✱	79	75 - 124	5	30
1,3-Dichlorobenzene	ND	F1 vs	71.8	46.1	F1 vs	ug/Kg	✱	64	74 - 120	14	30
1,4-Dichlorobenzene	ND	F1 vs	71.8	45.4	F1 vs	ug/Kg	✱	63	73 - 120	14	30
2-Butanone (MEK)	5.7	J F1 * vs	359	192	F1 vs	ug/Kg	✱	52	70 - 134	3	30
2-Hexanone	ND	F1 vs	359	184	F1 vs	ug/Kg	✱	51	59 - 130	0	30
4-Methyl-2-pentanone (MIBK)	ND	F1 vs	359	200	F1 vs	ug/Kg	✱	56	65 - 133	0	30
Acetone	36	F1 vs	359	205	F1 vs	ug/Kg	✱	47	61 - 137	12	30
Benzene	ND	vs	71.8	56.5	vs	ug/Kg	✱	79	79 - 127	8	30
Bromoform	ND	F1 vs	71.8	43.9	F1 vs	ug/Kg	✱	61	68 - 126	3	30
Bromomethane	ND	vs	71.8	47.7	vs	ug/Kg	✱	66	37 - 149	15	30
Carbon disulfide	ND	F1 vs	71.8	44.2	F1 vs	ug/Kg	✱	62	64 - 131	19	30
Carbon tetrachloride	ND	F1 vs	71.8	43.8	F1 vs	ug/Kg	✱	61	75 - 135	11	30
Chlorobenzene	ND	F1 vs	71.8	52.1	F1 vs	ug/Kg	✱	73	76 - 124	11	30
Dibromochloromethane	ND	F1 vs	71.8	50.3	F1 vs	ug/Kg	✱	70	76 - 125	4	30
Chloroethane	ND	F1 vs	71.8	45.6	F1 vs	ug/Kg	✱	64	69 - 135	21	30
Chloroform	ND	F1 vs	71.8	52.8	F1 vs	ug/Kg	✱	73	80 - 120	7	30
Chloromethane	ND	F1 vs	71.8	39.1	F1 vs	ug/Kg	✱	54	63 - 127	19	30
cis-1,2-Dichloroethene	ND	F1 vs	71.8	54.8	F1 vs	ug/Kg	✱	76	80 - 120	7	30
Cyclohexane	ND	F1 vs	71.8	44.5	F1 vs	ug/Kg	✱	62	65 - 120	17	30
Bromodichloromethane	ND	F1 vs	71.8	52.2	F1 vs	ug/Kg	✱	73	80 - 122	4	30
Dichlorodifluoromethane	ND	vs	71.8	42.4	vs	ug/Kg	✱	59	57 - 142	18	30
Ethylbenzene	ND	F1 vs	71.8	52.3	F1 vs	ug/Kg	✱	73	80 - 120	12	30
1,2-Dibromoethane	ND	F1 vs	71.8	47.1	F1 vs	ug/Kg	✱	66	78 - 120	5	30
Isopropylbenzene	ND	F1 vs	71.8	51.0	F1 vs	ug/Kg	✱	71	72 - 120	14	30
Methyl acetate	ND	vs	144	109	vs	ug/Kg	✱	76	55 - 136	3	30
Methyl tert-butyl ether	ND	vs	71.8	46.7	vs	ug/Kg	✱	65	63 - 125	3	30
Methylcyclohexane	ND	F1 vs	71.8	42.0	F1 vs	ug/Kg	✱	58	60 - 140	18	30
Methylene Chloride	ND	vs	71.8	54.0	vs	ug/Kg	✱	75	61 - 127	7	30
Tetrachloroethene	ND	F1 vs	71.8	49.4	F1 vs	ug/Kg	✱	69	74 - 122	15	30
Toluene	ND	vs	71.8	54.2	vs	ug/Kg	✱	76	74 - 128	12	30
trans-1,2-Dichloroethene	ND	F1 vs	71.8	52.5	F1 vs	ug/Kg	✱	73	78 - 126	11	30
trans-1,3-Dichloropropene	ND	F1 vs	71.8	47.0	F1 vs	ug/Kg	✱	65	73 - 123	5	30
Trichloroethene	ND	F1 vs	71.8	51.0	F1 vs	ug/Kg	✱	71	77 - 129	11	30
Trichlorofluoromethane	ND	F1 vs	71.8	44.7	F1 vs	ug/Kg	✱	62	65 - 146	20	30
Vinyl chloride	ND	F1 vs	71.8	37.7	F1 vs	ug/Kg	✱	53	61 - 133	25	30
cis-1,3-Dichloropropene	ND	F1 vs	71.8	51.6	F1 vs	ug/Kg	✱	72	80 - 120	4	30
Styrene	ND	F1 vs	71.8	49.3	F1 vs	ug/Kg	✱	69	80 - 120	11	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	85		64 - 126
4-Bromofluorobenzene (Surr)	99		72 - 126

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

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

Lab Sample ID: 480-138451-1 MSD

Matrix: Solid

Analysis Batch: 423654

Client Sample ID: SED-4

Prep Type: Total/NA

Prep Batch: 423653

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	104		71 - 125
Dibromofluoromethane (Surr)	98		60 - 140

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-423289/1-A

Matrix: Solid

Analysis Batch: 424165

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423289

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		170	24	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
bis (2-chloroisopropyl) ether	ND		170	33	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
2,4,5-Trichlorophenol	ND		170	45	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
2,4,6-Trichlorophenol	ND		170	33	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
2,4-Dimethylphenol	ND		170	40	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
2,4-Dinitrophenol	ND		1600	760	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
2,4-Dinitrotoluene	ND		170	34	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
2-Chloronaphthalene	ND		170	27	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
2-Chlorophenol	ND		170	30	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
2-Methylnaphthalene	ND		170	33	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
2-Methylphenol	ND		170	20	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
2-Nitroaniline	ND		320	24	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
2-Nitrophenol	ND		170	47	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
3,3'-Dichlorobenzidine	ND		320	200	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
3-Nitroaniline	ND		320	46	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
4,6-Dinitro-2-methylphenol	ND		320	170	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
4-Bromophenyl phenyl ether	ND		170	23	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
4-Chloro-3-methylphenol	ND		170	41	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
4-Chloroaniline	ND		170	41	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
4-Chlorophenyl phenyl ether	ND		170	20	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
4-Methylphenol	ND		320	20	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
4-Nitroaniline	ND		320	87	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
4-Nitrophenol	ND		320	120	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Acenaphthene	ND		170	24	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Acenaphthylene	ND		170	21	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Acetophenone	ND		170	22	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Anthracene	ND		170	41	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Atrazine	ND		170	58	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Benzaldehyde	ND		170	130	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Benzo[a]anthracene	ND		170	17	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Benzo[a]pyrene	ND		170	24	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Benzo[b]fluoranthene	ND		170	26	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Benzo[k]fluoranthene	ND		170	21	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Bis(2-chloroethoxy)methane	ND		170	35	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Bis(2-chloroethyl)ether	ND		170	21	ug/Kg		07/06/18 14:09	07/12/18 18:11	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-423289/1-A

Matrix: Solid

Analysis Batch: 424165

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423289

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND		170	57	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Butyl benzyl phthalate	ND		170	27	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Caprolactam	ND		170	50	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Carbazole	ND		170	20	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Chrysene	ND		170	37	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Di-n-butyl phthalate	ND		170	28	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Dibenz(a,h)anthracene	ND		170	29	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Dibenzofuran	ND		170	20	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Diethyl phthalate	ND		170	21	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Dimethyl phthalate	ND		170	20	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Fluoranthene	ND		170	18	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Fluorene	ND		170	20	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Hexachlorobenzene	ND		170	22	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Hexachlorobutadiene	ND		170	24	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Hexachlorocyclopentadiene	ND		170	22	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Hexachloroethane	ND		170	21	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Indeno[1,2,3-cd]pyrene	ND		170	20	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Isophorone	ND		170	35	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
N-Nitrosodi-n-propylamine	ND		170	28	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
N-Nitrosodiphenylamine	ND		170	130	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Naphthalene	ND		170	21	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Nitrobenzene	ND		170	19	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Pentachlorophenol	ND		320	170	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Phenanthrene	ND		170	24	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Phenol	ND		170	25	ug/Kg		07/06/18 14:09	07/12/18 18:11	1
Pyrene	ND		170	20	ug/Kg		07/06/18 14:09	07/12/18 18:11	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	423	T J	ug/Kg		4.48		07/06/18 14:09	07/12/18 18:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	61		54 - 120	07/06/18 14:09	07/12/18 18:11	1
2-Fluorobiphenyl	80		60 - 120	07/06/18 14:09	07/12/18 18:11	1
2-Fluorophenol	71		52 - 120	07/06/18 14:09	07/12/18 18:11	1
Nitrobenzene-d5	70		53 - 120	07/06/18 14:09	07/12/18 18:11	1
p-Terphenyl-d14	92		65 - 121	07/06/18 14:09	07/12/18 18:11	1
Phenol-d5	72		54 - 120	07/06/18 14:09	07/12/18 18:11	1

Lab Sample ID: LCS 480-423289/2-A

Matrix: Solid

Analysis Batch: 424165

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423289

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biphenyl	1660	1530		ug/Kg		92	59 - 120
bis (2-chloroisopropyl) ether	1660	1680		ug/Kg		101	44 - 120
2,4,5-Trichlorophenol	1660	1540		ug/Kg		93	59 - 126

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-423289/2-A

Matrix: Solid

Analysis Batch: 424165

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423289

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,6-Trichlorophenol	1660	1630		ug/Kg		98	59 - 123
2,4-Dichlorophenol	1660	1520		ug/Kg		92	61 - 120
2,4-Dimethylphenol	1660	1510		ug/Kg		91	59 - 120
2,4-Dinitrophenol	3320	2950		ug/Kg		89	41 - 146
2,4-Dinitrotoluene	1660	1680		ug/Kg		101	63 - 120
2,6-Dinitrotoluene	1660	1580		ug/Kg		95	66 - 120
2-Chloronaphthalene	1660	1530		ug/Kg		92	57 - 120
2-Chlorophenol	1660	1420		ug/Kg		86	53 - 120
2-Methylnaphthalene	1660	1520		ug/Kg		91	59 - 120
2-Methylphenol	1660	1500		ug/Kg		90	54 - 120
2-Nitroaniline	1660	1570		ug/Kg		95	61 - 120
2-Nitrophenol	1660	1420		ug/Kg		86	56 - 120
3,3'-Dichlorobenzidine	3320	3250		ug/Kg		98	54 - 120
3-Nitroaniline	1660	1660		ug/Kg		100	48 - 120
4,6-Dinitro-2-methylphenol	3320	3110		ug/Kg		93	49 - 122
4-Bromophenyl phenyl ether	1660	1500		ug/Kg		90	58 - 120
4-Chloro-3-methylphenol	1660	1520		ug/Kg		92	61 - 120
4-Chloroaniline	1660	1360		ug/Kg		82	38 - 120
4-Chlorophenyl phenyl ether	1660	1610		ug/Kg		97	63 - 124
4-Methylphenol	1660	1480		ug/Kg		89	55 - 120
4-Nitroaniline	1660	1590		ug/Kg		96	56 - 120
4-Nitrophenol	3320	3140		ug/Kg		94	43 - 147
Acenaphthene	1660	1620		ug/Kg		98	62 - 120
Acenaphthylene	1660	1770		ug/Kg		106	58 - 121
Acetophenone	1660	1470		ug/Kg		89	54 - 120
Anthracene	1660	1610		ug/Kg		97	62 - 120
Atrazine	3320	3970		ug/Kg		119	60 - 127
Benzaldehyde	3320	2860	E	ug/Kg		86	10 - 150
Benzo[a]anthracene	1660	1720		ug/Kg		103	65 - 120
Benzo[a]pyrene	1660	1870		ug/Kg		112	64 - 120
Benzo[b]fluoranthene	1660	1910		ug/Kg		115	64 - 120
Benzo[g,h,i]perylene	1660	1840		ug/Kg		110	45 - 145
Benzo[k]fluoranthene	1660	1680		ug/Kg		101	65 - 120
Bis(2-chloroethoxy)methane	1660	1270		ug/Kg		77	55 - 120
Bis(2-chloroethyl)ether	1660	1210		ug/Kg		73	45 - 120
Bis(2-ethylhexyl) phthalate	1660	1700		ug/Kg		102	61 - 133
Butyl benzyl phthalate	1660	1630		ug/Kg		98	61 - 129
Caprolactam	3320	3640		ug/Kg		109	47 - 120
Carbazole	1660	1690		ug/Kg		102	65 - 120
Chrysene	1660	1640		ug/Kg		99	64 - 120
Di-n-butyl phthalate	1660	1760		ug/Kg		106	58 - 130
Di-n-octyl phthalate	1660	1710		ug/Kg		103	57 - 133
Dibenz(a,h)anthracene	1660	1710		ug/Kg		103	54 - 132
Dibenzofuran	1660	1620		ug/Kg		98	63 - 120
Diethyl phthalate	1660	1740		ug/Kg		105	66 - 120
Dimethyl phthalate	1660	1690		ug/Kg		102	65 - 124
Fluoranthene	1660	1700		ug/Kg		102	62 - 120
Fluorene	1660	1700		ug/Kg		103	63 - 120

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-423289/2-A

Matrix: Solid

Analysis Batch: 424165

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423289

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorobenzene	1660	1420		ug/Kg		85	60 - 120
Hexachlorobutadiene	1660	1290		ug/Kg		78	45 - 120
Hexachlorocyclopentadiene	1660	998		ug/Kg		60	47 - 120
Hexachloroethane	1660	1210		ug/Kg		73	41 - 120
Indeno[1,2,3-cd]pyrene	1660	1790		ug/Kg		107	56 - 134
Isophorone	1660	1500		ug/Kg		90	56 - 120
N-Nitrosodi-n-propylamine	1660	1460		ug/Kg		88	52 - 120
Naphthalene	1660	1420		ug/Kg		85	55 - 120
Nitrobenzene	1660	1240		ug/Kg		75	54 - 120
Pentachlorophenol	3320	2450		ug/Kg		74	51 - 120
Phenanthrene	1660	1720		ug/Kg		103	60 - 120
Phenol	1660	1480		ug/Kg		89	53 - 120
Pyrene	1660	1680		ug/Kg		101	61 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	78		54 - 120
2-Fluorobiphenyl	86		60 - 120
2-Fluorophenol	79		52 - 120
Nitrobenzene-d5	72		53 - 120
p-Terphenyl-d14	89		65 - 121
Phenol-d5	74		54 - 120

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-423422/1-A

Matrix: Solid

Analysis Batch: 423684

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423422

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.31	ug/Kg		07/09/18 07:37	07/10/18 12:11	1
4,4'-DDE	ND		1.6	0.34	ug/Kg		07/09/18 07:37	07/10/18 12:11	1
4,4'-DDT	ND		1.6	0.38	ug/Kg		07/09/18 07:37	07/10/18 12:11	1
Aldrin	ND		1.6	0.40	ug/Kg		07/09/18 07:37	07/10/18 12:11	1
alpha-BHC	ND		1.6	0.29	ug/Kg		07/09/18 07:37	07/10/18 12:11	1
cis-Chlordane	ND		1.6	0.81	ug/Kg		07/09/18 07:37	07/10/18 12:11	1
beta-BHC	ND		1.6	0.29	ug/Kg		07/09/18 07:37	07/10/18 12:11	1
delta-BHC	ND		1.6	0.30	ug/Kg		07/09/18 07:37	07/10/18 12:11	1
Dieldrin	ND		1.6	0.39	ug/Kg		07/09/18 07:37	07/10/18 12:11	1
Endosulfan I	ND		1.6	0.31	ug/Kg		07/09/18 07:37	07/10/18 12:11	1
Endosulfan II	ND		1.6	0.29	ug/Kg		07/09/18 07:37	07/10/18 12:11	1
Endosulfan sulfate	0.331	J	1.6	0.30	ug/Kg		07/09/18 07:37	07/10/18 12:11	1
Endrin	ND		1.6	0.32	ug/Kg		07/09/18 07:37	07/10/18 12:11	1
Endrin aldehyde	ND		1.6	0.41	ug/Kg		07/09/18 07:37	07/10/18 12:11	1
Endrin ketone	ND		1.6	0.40	ug/Kg		07/09/18 07:37	07/10/18 12:11	1
gamma-BHC (Lindane)	0.601	J	1.6	0.30	ug/Kg		07/09/18 07:37	07/10/18 12:11	1
trans-Chlordane	ND		1.6	0.51	ug/Kg		07/09/18 07:37	07/10/18 12:11	1
Heptachlor	ND		1.6	0.35	ug/Kg		07/09/18 07:37	07/10/18 12:11	1
Heptachlor epoxide	ND		1.6	0.42	ug/Kg		07/09/18 07:37	07/10/18 12:11	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

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

Lab Sample ID: MB 480-423422/1-A

Matrix: Solid

Analysis Batch: 423684

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423422

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methoxychlor	ND		1.6	0.33	ug/Kg		07/09/18 07:37	07/10/18 12:11	1
Toxaphene	ND		16	9.4	ug/Kg		07/09/18 07:37	07/10/18 12:11	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	88		45 - 120				07/09/18 07:37	07/10/18 12:11	1
DCB Decachlorobiphenyl	98		45 - 120				07/09/18 07:37	07/10/18 12:11	1
Tetrachloro-m-xylene	74		30 - 124				07/09/18 07:37	07/10/18 12:11	1
Tetrachloro-m-xylene	56		30 - 124				07/09/18 07:37	07/10/18 12:11	1

Lab Sample ID: LCS 480-423422/2-A

Matrix: Solid

Analysis Batch: 423684

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423422

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.2	13.9		ug/Kg		86	56 - 120
4,4'-DDE	16.2	13.6		ug/Kg		84	44 - 120
4,4'-DDT	16.2	13.5		ug/Kg		83	38 - 120
Aldrin	16.2	10.2		ug/Kg		63	38 - 120
alpha-BHC	16.2	10.4		ug/Kg		64	39 - 120
cis-Chlordane	16.2	12.1		ug/Kg		75	47 - 120
beta-BHC	16.2	12.6		ug/Kg		77	40 - 120
delta-BHC	16.2	12.7		ug/Kg		78	45 - 120
Dieldrin	16.2	14.2		ug/Kg		88	58 - 120
Endosulfan I	16.2	13.6		ug/Kg		84	49 - 120
Endosulfan II	16.2	13.8		ug/Kg		85	55 - 120
Endosulfan sulfate	16.2	15.9		ug/Kg		98	49 - 124
Endrin	16.2	14.4		ug/Kg		89	58 - 120
Endrin aldehyde	16.2	11.4		ug/Kg		70	37 - 121
Endrin ketone	16.2	13.5		ug/Kg		83	46 - 123
gamma-BHC (Lindane)	16.2	12.0		ug/Kg		74	50 - 120
trans-Chlordane	16.2	11.4		ug/Kg		70	48 - 120
Heptachlor	16.2	12.4		ug/Kg		77	50 - 120
Heptachlor epoxide	16.2	12.1		ug/Kg		75	50 - 120
Methoxychlor	16.2	13.6		ug/Kg		83	58 - 133
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
DCB Decachlorobiphenyl	84		45 - 120				
DCB Decachlorobiphenyl	91		45 - 120				
Tetrachloro-m-xylene	74		30 - 124				
Tetrachloro-m-xylene	56		30 - 124				

Lab Sample ID: 480-138451-1 MS

Matrix: Solid

Analysis Batch: 423684

Client Sample ID: SED-4

Prep Type: Total/NA

Prep Batch: 423422

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	7.4	F1 F2	23.7	21.6		ug/Kg	☼	60	37 - 126
4,4'-DDE	ND	F1	23.7	17.1		ug/Kg	☼	72	34 - 120

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

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

Lab Sample ID: 480-138451-1 MS

Matrix: Solid

Analysis Batch: 423684

Client Sample ID: SED-4

Prep Type: Total/NA

Prep Batch: 423422

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDT	ND		23.7	19.2		ug/Kg	✱	81	43 - 123
Aldrin	ND		23.7	18.4		ug/Kg	✱	77	37 - 125
alpha-BHC	1.4	J	23.7	19.3		ug/Kg	✱	76	39 - 120
cis-Chlordane	ND		23.7	17.0		ug/Kg	✱	72	35 - 120
beta-BHC	ND		23.7	24.0		ug/Kg	✱	101	36 - 120
delta-BHC	ND		23.7	24.7		ug/Kg	✱	104	34 - 120
Dieldrin	ND	F1 F2	23.7	19.1		ug/Kg	✱	80	45 - 120
Endosulfan I	ND	F1	23.7	18.2		ug/Kg	✱	77	39 - 120
Endosulfan II	ND	F2	23.7	18.8		ug/Kg	✱	79	34 - 126
Endosulfan sulfate	ND		23.7	21.5		ug/Kg	✱	91	27 - 130
Endrin	ND	F1 F2	23.7	19.9		ug/Kg	✱	84	47 - 121
Endrin aldehyde	ND		23.7	19.3		ug/Kg	✱	81	33 - 123
Endrin ketone	4.1	J	23.7	21.2		ug/Kg	✱	72	43 - 126
gamma-BHC (Lindane)	2.3	J B * F1	23.7	25.8		ug/Kg	✱	99	50 - 120
trans-Chlordane	ND	* F1	23.7	15.9		ug/Kg	✱	67	31 - 120
Heptachlor	ND		23.7	33.8	F1	ug/Kg	✱	143	42 - 120
Heptachlor epoxide	ND	F1	23.7	17.2		ug/Kg	✱	73	40 - 120
Methoxychlor	ND		23.7	21.0		ug/Kg	✱	88	44 - 150

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	74		45 - 120
DCB Decachlorobiphenyl	124	X	45 - 120
Tetrachloro-m-xylene	104		30 - 124
Tetrachloro-m-xylene	73		30 - 124

Lab Sample ID: 480-138451-1 MSD

Matrix: Solid

Analysis Batch: 423684

Client Sample ID: SED-4

Prep Type: Total/NA

Prep Batch: 423422

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
4,4'-DDD	7.4	F1 F2	23.5	21.3		ug/Kg	✱	59	37 - 126	2	21
4,4'-DDE	ND	F1	23.5	15.3		ug/Kg	✱	65	34 - 120	11	18
4,4'-DDT	ND		23.5	17.3		ug/Kg	✱	74	43 - 123	10	25
Aldrin	ND		23.5	16.5		ug/Kg	✱	70	37 - 125	10	12
alpha-BHC	1.4	J	23.5	18.0		ug/Kg	✱	71	39 - 120	7	15
cis-Chlordane	ND		23.5	14.9		ug/Kg	✱	64	35 - 120	13	23
beta-BHC	ND		23.5	22.6		ug/Kg	✱	96	36 - 120	6	19
delta-BHC	ND		23.5	24.1		ug/Kg	✱	103	34 - 120	3	14
Dieldrin	ND	F1 F2	23.5	17.5		ug/Kg	✱	75	45 - 120	9	12
Endosulfan I	ND	F1	23.5	16.6		ug/Kg	✱	71	39 - 120	10	18
Endosulfan II	ND	F2	23.5	17.4		ug/Kg	✱	74	34 - 126	8	26
Endosulfan sulfate	ND		23.5	19.9		ug/Kg	✱	85	27 - 130	8	35
Endrin	ND	F1 F2	23.5	18.3		ug/Kg	✱	78	47 - 121	8	20
Endrin aldehyde	ND		23.5	17.9		ug/Kg	✱	76	33 - 123	8	47
Endrin ketone	4.1	J	23.5	17.5		ug/Kg	✱	57	43 - 126	19	37
gamma-BHC (Lindane)	2.3	J B * F1	23.5	25.0		ug/Kg	✱	97	50 - 120	3	12
trans-Chlordane	ND	* F1	23.5	14.2		ug/Kg	✱	60	31 - 120	11	15
Heptachlor	ND		23.5	33.8	F1	ug/Kg	✱	144	42 - 120	0	22

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

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

Lab Sample ID: 480-138451-1 MSD

Matrix: Solid

Analysis Batch: 423684

Client Sample ID: SED-4

Prep Type: Total/NA

Prep Batch: 423422

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Heptachlor epoxide	ND	F1	23.5	15.5		ug/Kg	✱	66	40 - 120	11	15
Methoxychlor	ND		23.5	19.4		ug/Kg	✱	82	44 - 150	8	24
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
DCB Decachlorobiphenyl	69		45 - 120								
DCB Decachlorobiphenyl	170	X	45 - 120								
Tetrachloro-m-xylene	102		30 - 124								
Tetrachloro-m-xylene	73		30 - 124								

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

Lab Sample ID: MB 480-423784/1-A

Matrix: Solid

Analysis Batch: 424101

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423784

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.23	0.046	mg/Kg		07/10/18 14:36	07/12/18 15:34	1
PCB-1221	ND		0.23	0.046	mg/Kg		07/10/18 14:36	07/12/18 15:34	1
PCB-1232	ND		0.23	0.046	mg/Kg		07/10/18 14:36	07/12/18 15:34	1
PCB-1242	ND		0.23	0.046	mg/Kg		07/10/18 14:36	07/12/18 15:34	1
PCB-1248	ND		0.23	0.046	mg/Kg		07/10/18 14:36	07/12/18 15:34	1
PCB-1254	ND		0.23	0.11	mg/Kg		07/10/18 14:36	07/12/18 15:34	1
PCB-1260	ND		0.23	0.11	mg/Kg		07/10/18 14:36	07/12/18 15:34	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	114		60 - 154				07/10/18 14:36	07/12/18 15:34	1
Tetrachloro-m-xylene	113		60 - 154				07/10/18 14:36	07/12/18 15:34	1
DCB Decachlorobiphenyl	120		65 - 174				07/10/18 14:36	07/12/18 15:34	1
DCB Decachlorobiphenyl	117		65 - 174				07/10/18 14:36	07/12/18 15:34	1

Lab Sample ID: LCS 480-423784/2-A

Matrix: Solid

Analysis Batch: 424101

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423784

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	2.35	3.28		mg/Kg		140	51 - 185
PCB-1260	2.35	3.51		mg/Kg		150	61 - 184
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Tetrachloro-m-xylene	137		60 - 154				
Tetrachloro-m-xylene	127		60 - 154				
DCB Decachlorobiphenyl	136		65 - 174				
DCB Decachlorobiphenyl	131		65 - 174				

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 480-423645/1-A

Matrix: Solid

Analysis Batch: 424224

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423645

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		16	5.3	ug/Kg		07/10/18 06:38	07/13/18 20:15	1
Silvex (2,4,5-TP)	ND		16	5.9	ug/Kg		07/10/18 06:38	07/13/18 20:15	1
2,4-D	ND		16	10	ug/Kg		07/10/18 06:38	07/13/18 20:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	60		28 - 129	07/10/18 06:38	07/13/18 20:15	1
2,4-Dichlorophenylacetic acid	72		28 - 129	07/10/18 06:38	07/13/18 20:15	1

Lab Sample ID: LCS 480-423645/2-A

Matrix: Solid

Analysis Batch: 424224

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423645

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-T	65.2	59.1		ug/Kg		91	41 - 120
Silvex (2,4,5-TP)	65.2	56.5		ug/Kg		87	39 - 125
2,4-D	65.2	63.0		ug/Kg		97	40 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4-Dichlorophenylacetic acid	84		28 - 129
2,4-Dichlorophenylacetic acid	71		28 - 129

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-423380/1-A

Matrix: Solid

Analysis Batch: 423908

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423380

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		9.8	4.3	mg/Kg		07/10/18 09:45	07/10/18 21:44	1
Antimony	ND		14.7	0.39	mg/Kg		07/10/18 09:45	07/10/18 21:44	1
Arsenic	0.402	J	2.0	0.39	mg/Kg		07/10/18 09:45	07/10/18 21:44	1
Barium	ND		0.49	0.11	mg/Kg		07/10/18 09:45	07/10/18 21:44	1
Beryllium	ND		0.20	0.027	mg/Kg		07/10/18 09:45	07/10/18 21:44	1
Cadmium	ND		0.20	0.029	mg/Kg		07/10/18 09:45	07/10/18 21:44	1
Calcium	7.64	J	49.0	3.2	mg/Kg		07/10/18 09:45	07/10/18 21:44	1
Chromium	ND		0.49	0.20	mg/Kg		07/10/18 09:45	07/10/18 21:44	1
Cobalt	ND		0.49	0.049	mg/Kg		07/10/18 09:45	07/10/18 21:44	1
Copper	ND		0.98	0.21	mg/Kg		07/10/18 09:45	07/10/18 21:44	1
Iron	ND		9.8	3.4	mg/Kg		07/10/18 09:45	07/10/18 21:44	1
Lead	ND		0.98	0.24	mg/Kg		07/10/18 09:45	07/10/18 21:44	1
Magnesium	ND		19.6	0.91	mg/Kg		07/10/18 09:45	07/10/18 21:44	1
Manganese	0.0608	J	0.20	0.031	mg/Kg		07/10/18 09:45	07/10/18 21:44	1
Nickel	ND		4.9	0.23	mg/Kg		07/10/18 09:45	07/10/18 21:44	1
Potassium	ND		29.4	19.6	mg/Kg		07/10/18 09:45	07/10/18 21:44	1
Selenium	ND		3.9	0.39	mg/Kg		07/10/18 09:45	07/10/18 21:44	1
Silver	ND		0.59	0.20	mg/Kg		07/10/18 09:45	07/10/18 21:44	1
Sodium	ND		137	12.7	mg/Kg		07/10/18 09:45	07/10/18 21:44	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 480-423380/1-A

Matrix: Solid

Analysis Batch: 423908

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423380

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		5.9	0.29	mg/Kg		07/10/18 09:45	07/10/18 21:44	1
Vanadium	ND		0.49	0.11	mg/Kg		07/10/18 09:45	07/10/18 21:44	1
Zinc	ND		2.0	0.63	mg/Kg		07/10/18 09:45	07/10/18 21:44	1

Lab Sample ID: LCSSRM 480-423380/2-A

Matrix: Solid

Analysis Batch: 423908

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423380

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	8040	7582		mg/Kg		94.3	39.4 - 160.4
Antimony	91.4	55.24		mg/Kg		60.4	25.1 - 275.7
Arsenic	146	122.9		mg/Kg		84.2	69.9 - 132.9
Barium	102	89.01		mg/Kg		87.3	71.5 - 136.3
Beryllium	134	117.3		mg/Kg		87.5	75.4 - 138.1
Cadmium	63.2	54.49		mg/Kg		86.2	73.3 - 141.5
Calcium	5930	5199		mg/Kg		87.7	73.7 - 136.1
Chromium	89.3	77.50		mg/Kg		86.8	69.1 - 143.3
Cobalt	119	119.3		mg/Kg		100.2	74.6 - 142.0
Copper	60.8	51.42		mg/Kg		84.6	72.7 - 141.6
Iron	14400	13210		mg/Kg		91.7	35.6 - 163.9
Lead	98.5	96.18		mg/Kg		97.6	70.8 - 137.1
Magnesium	2580	2252		mg/Kg		87.3	63.6 - 136.0
Manganese	370	325.9		mg/Kg		88.1	75.7 - 134.3
Nickel	66.6	65.72		mg/Kg		98.7	70.7 - 146.2
Potassium	2340	2076		mg/Kg		88.7	59.8 - 140.2
Selenium	136	115.4		mg/Kg		84.9	67.1 - 136.8
Silver	48.9	41.54		mg/Kg		84.9	66.5 - 139.5
Sodium	318	285.8		mg/Kg		89.9	40.6 - 159.7
Thallium	138	135.0		mg/Kg		97.8	68.0 - 136.2
Vanadium	69.7	61.58		mg/Kg		88.3	58.7 - 141.3
Zinc	177	156.1		mg/Kg		88.2	69.5 - 131.1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-425357/1-A
Matrix: Solid
Analysis Batch: 425588

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 425357

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0080	mg/Kg		07/20/18 11:20	07/20/18 12:46	1

Lab Sample ID: LCDSRM 480-425357/3-A ^10
Matrix: Solid
Analysis Batch: 425588

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 425357

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	23.7	13.02		mg/Kg		55.0	27.7 - 110. 1	1	20

Lab Sample ID: LCSSRM 480-425357/2-A ^10
Matrix: Solid
Analysis Batch: 425588

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 425357

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	23.7	12.90		mg/Kg		54.4	27.7 - 110. 1		

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

GC/MS VOA

Prep Batch: 423653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138451-1	SED-4	Total/NA	Solid	5035A_L	
MB 480-423653/3-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-423653/22-A	Lab Control Sample	Total/NA	Solid	5035A_L	
LCSD 480-423653/2-A	Lab Control Sample Dup	Total/NA	Solid	5035A_L	
480-138451-1 MS	SED-4	Total/NA	Solid	5035A_L	
480-138451-1 MSD	SED-4	Total/NA	Solid	5035A_L	

Analysis Batch: 423654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138451-1	SED-4	Total/NA	Solid	8260C	423653
MB 480-423653/3-A	Method Blank	Total/NA	Solid	8260C	423653
LCS 480-423653/22-A	Lab Control Sample	Total/NA	Solid	8260C	423653
LCSD 480-423653/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	423653
480-138451-1 MS	SED-4	Total/NA	Solid	8260C	423653
480-138451-1 MSD	SED-4	Total/NA	Solid	8260C	423653

GC/MS Semi VOA

Prep Batch: 423289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138451-1	SED-4	Total/NA	Solid	3550C	
MB 480-423289/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-423289/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 424165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138451-1	SED-4	Total/NA	Solid	8270D	423289
MB 480-423289/1-A	Method Blank	Total/NA	Solid	8270D	423289
LCS 480-423289/2-A	Lab Control Sample	Total/NA	Solid	8270D	423289

GC Semi VOA

Prep Batch: 423422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138451-1	SED-4	Total/NA	Solid	3550C	
MB 480-423422/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-423422/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-138451-1 MS	SED-4	Total/NA	Solid	3550C	
480-138451-1 MSD	SED-4	Total/NA	Solid	3550C	

Prep Batch: 423645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138451-1	SED-4	Total/NA	Solid	8151A	
MB 480-423645/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 480-423645/2-A	Lab Control Sample	Total/NA	Solid	8151A	

Analysis Batch: 423684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138451-1	SED-4	Total/NA	Solid	8081B	423422
MB 480-423422/1-A	Method Blank	Total/NA	Solid	8081B	423422

TestAmerica Buffalo

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

GC Semi VOA (Continued)

Analysis Batch: 423684 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-423422/2-A	Lab Control Sample	Total/NA	Solid	8081B	423422
480-138451-1 MS	SED-4	Total/NA	Solid	8081B	423422
480-138451-1 MSD	SED-4	Total/NA	Solid	8081B	423422

Prep Batch: 423784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138451-1	SED-4	Total/NA	Solid	3550C	
MB 480-423784/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-423784/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 424101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138451-1	SED-4	Total/NA	Solid	8082A	423784
MB 480-423784/1-A	Method Blank	Total/NA	Solid	8082A	423784
LCS 480-423784/2-A	Lab Control Sample	Total/NA	Solid	8082A	423784

Analysis Batch: 424224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138451-1	SED-4	Total/NA	Solid	8151A	423645
MB 480-423645/1-A	Method Blank	Total/NA	Solid	8151A	423645
LCS 480-423645/2-A	Lab Control Sample	Total/NA	Solid	8151A	423645

Metals

Prep Batch: 423380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138451-1	SED-4	Total/NA	Solid	3050B	
MB 480-423380/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-423380/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 423908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138451-1	SED-4	Total/NA	Solid	6010C	423380
MB 480-423380/1-A	Method Blank	Total/NA	Solid	6010C	423380
LCSSRM 480-423380/2-A	Lab Control Sample	Total/NA	Solid	6010C	423380

Prep Batch: 425357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138451-1	SED-4	Total/NA	Solid	7471B	
MB 480-425357/1-A	Method Blank	Total/NA	Solid	7471B	
LCDSRM 480-425357/3-A ^10	Lab Control Sample Dup	Total/NA	Solid	7471B	
LCSSRM 480-425357/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 425588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138451-1	SED-4	Total/NA	Solid	7471B	425357
MB 480-425357/1-A	Method Blank	Total/NA	Solid	7471B	425357
LCDSRM 480-425357/3-A ^10	Lab Control Sample Dup	Total/NA	Solid	7471B	425357
LCSSRM 480-425357/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	425357

TestAmerica Buffalo

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

General Chemistry

Analysis Batch: 423182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138451-1	SED-4	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

Client Sample ID: SED-4

Date Collected: 07/05/18 12:00

Date Received: 07/06/18 02:30

Lab Sample ID: 480-138451-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	423182	07/06/18 07:12	CSW	TAL BUF

Client Sample ID: SED-4

Date Collected: 07/05/18 12:00

Date Received: 07/06/18 02:30

Lab Sample ID: 480-138451-1

Matrix: Solid

Percent Solids: 69.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			423653	07/10/18 07:42	AMM	TAL BUF
Total/NA	Analysis	8260C		1	423654	07/10/18 18:47	AEM	TAL BUF
Total/NA	Prep	3550C			423289	07/06/18 14:09	ATG	TAL BUF
Total/NA	Analysis	8270D		1	424165	07/12/18 20:28	PJQ	TAL BUF
Total/NA	Prep	3550C			423422	07/09/18 07:37	SMP	TAL BUF
Total/NA	Analysis	8081B		2	423684	07/10/18 15:45	BEK	TAL BUF
Total/NA	Prep	3550C			423784	07/10/18 14:36	ATG	TAL BUF
Total/NA	Analysis	8082A		1	424101	07/12/18 16:51	W1T	TAL BUF
Total/NA	Prep	8151A			423645	07/10/18 06:38	SMP	TAL BUF
Total/NA	Analysis	8151A		1	424224	07/13/18 23:14	BEK	TAL BUF
Total/NA	Prep	3050B			423380	07/10/18 09:45	JAK	TAL BUF
Total/NA	Analysis	6010C		1	423908	07/10/18 22:37	S1P	TAL BUF
Total/NA	Prep	7471B			425357	07/20/18 11:20	BMB	TAL BUF
Total/NA	Analysis	7471B		1	425588	07/20/18 12:57	BMB	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8081B	Organochlorine Pesticides (GC)	SW846	TAL BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
8151A	Herbicides (GC)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
3050B	Preparation, Metals	SW846	TAL BUF
3550C	Ultrasonic Extraction	SW846	TAL BUF
5035A_L	Closed System Purge and Trap	SW846	TAL BUF
7471B	Preparation, Mercury	SW846	TAL BUF
8151A	Extraction (Herbicides)	SW846	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Oregon Road Site - Olean, NY

TestAmerica Job ID: 480-138451-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-138451-1	SED-4	Solid	07/05/18 12:00	07/06/18 02:30

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TestAmerica Buffalo

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Information

Company: Benchmark Env. Eng. & Science, PLLC
Address: 2558 Hamburg Turnpike Suite 300
City: Lackawanna
State, Zip: NY, 14218
Phone: 716-856-0599(Tel)
Email: miesakowski@benchmarkturnkey.com
Project Name: Oregon Road Site - Olean, NY (sed)
Site: Oregon Road Site

Sampler: Nick Santoro
Lab PM: Fischer, Brian J
Phone: 716-713-3937
E-Mail: brian.fischer@testamericainc.com

COC No: 480-114944-26600.1
Page: Page 1 of 1
Job #:

Due Date Requested:

TAT Requested (days):

City:

State, Zip:

Phone:

Email:

Project Name:

Site:

PO #:

Purchase Order Requested

WO #:

Project #:

SSOW#:

Analysis Requested:

Preservation Codes:

A - HCL

B - NaOH

C - Zn Acetate

D - Nitric Acid

E - NaHSO4

F - MeOH

G - Amchlor

H - Ascorbic Acid

I - Ice

J - DI Water

K - EDTA

L - EDA

Other:

M - Hexane

N - None

O - AsNaO2

P - Na2OAS

Q - Na2SO3

R - Na2SO3

S - H2SO4

T - TSP Dodecahydrate

U - Acetone

V - MCAA

W - pH 4-5

Z - other (specify)

Total Number of Containers

Special Instructions/Note:

Sample Identification

Sample Date

Sample Time

Sample Type

Sample Preservation Code:

Matrix

Field Filtered Sample (Yes or No)

Perform MS/MSD (Yes or No)

8260C - (MOD) TCL list OLM04.2

6010C, 7471B, 8270D

8081B, 8082A, 8151A

+TICS

+TICS

6010C, 7471B, 8270D

8081B, 8082A, 8151A

6010C, 7471B, 8270D

8081B, 8082A, 8151A

6010C, 7471B, 8270D

8081B, 8082A, 8151A

Possible Hazard Identification

Non-Hazard

Flammable

Skin Irritant

Poison B

Unknown

Radiological

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

Empty Kit Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Custody Seals Intact:

Δ Yes Δ No

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

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Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Special Instructions/QC Requirements:

Special Instructions/QC Requirements:

Special Instructions/QC Requirements:

Special Instructions/QC Requirements:

Special Instructions/QC Requirements:

Special Instructions/QC Requirements:

Special Instructions/QC Requirements:

Special Instructions/QC Requirements:

Special Instructions/QC Requirements:

Special Instructions/QC Requirements:

Special Instructions/QC Requirements:

Cooler Temperature(s) °C and Other Remarks:

Cooler Temperature(s) °C and Other Remarks:

Cooler Temperature(s) °C and Other Remarks:

Cooler Temperature(s) °C and Other Remarks:

Cooler Temperature(s) °C and Other Remarks:

Cooler Temperature(s) °C and Other Remarks:

Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-138451-1

Login Number: 138451

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	BENCHMARK
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	