BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

February 18, 2010

Ms. Charlotte Theobald
NY State Department of Environmental Conservation
Division of Environmental Remediation, Region 8
6274 East Avon-Lima Road
Avon, New York 14414-9519

Re: Site No. C849004
Seneca Market I, LLC Site
Watkins Glen, New York
Third and Fourth Quarter 2009 Groundwater Monitoring Report

Dear Ms. Theobald:

On behalf of our client, Seneca Market I, LLC (Seneca Market), Benchmark Environmental Engineering & Science, PLLC (Benchmark) is herein transmitting the results from the September 2009 and December 2009 groundwater monitoring events at the Seneca Market Site in Watkins Glen, New York (Site; see Figure 1).

These groundwater monitoring events included sampling and analysis of MW-1SR, MW-3SR, MW-7S and MW-10S, MW-21s. Groundwater gauging of MW-4S and MW-9S was also completed. Groundwater samples from each of the sampled wells were analyzed for target compound list (TCL) volatile organic compounds (VOCs). The groundwater sample collected from MW-3SR was also analyzed for dissolved iron and manganese, nitrate, sulfate, sulfide, chloride, alkalinity, total organic carbon, metabolic acids and dissolved gases. Field parameters including pH, oxidation-reduction potential (ORP), dissolved oxygen (DO), temperature, turbidity, and specific conductance were also measured in each of the sampled monitoring wells. Table 1 summarizes the analytical and field results from the September and December 2009 groundwater monitoring events as well as historic groundwater monitoring events completed by Benchmark and the NYSDEC, laboratory analytical packages for the September and December 2009 groundwater monitoring events are in attachment 1.

As shown on Table 1, chlorinated VOCs were not detected above NYSDEC Class GA groundwater quality standards (GWQS) as listed in NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) (1.1.1) in MW-10S or MW-21S. Minor concentrations of cis-1,2-Dichloroethene were detected above NYSDEC Class GA groundwater quality standards (GWQS) in MW-3SR. However, MW-3SR is located in the area of VOC source soil removal by Seneca Market and has decreased from 6,203 micrograms per liter (ug/L) total chlorinated VOCs in June 2000 to less than 15 ug/L total chlorinated VOCs in December 2009. The results of the September and December 2009 sampling event also confirm that biodegradation of VOCs in groundwater is occurring. This is evidenced by the relative low concentrations of chlorinated VOCs, the presence of tetrachloroethene (PCE) breakdown products, including trichloroethene (TCE), cis-1,2-DCE and vinyl chloride, the presence of methane and carbon dioxide, low oxidation-reduction potential (ORP) and low dissolved oxygen (DO).

Concentrations of petroleum VOCs, including, benzene and xylene, in MW-7S and MtBE in MW-3SR, MW-1SR may be the result of on-Site migration of petroleum VOCs from the adjacent and up-gradient NYSDEC petroleum spill site (Spill No. 0651369) located at the corner of North Franklin Street and Division Street. We understand that environmental investigation and/or remediation is on-going at that site.

Monitoring well elevations of MW-1SR, MW-3SR, MW-7S, MW-10S, MW-4S and MW-9S and static groundwater elevations were recorded. Table 2 shows the relative groundwater elevations and Figure 1 includes estimated groundwater flow direction for the fourth quarter 2009 event. The groundwater flow is generally consistent with historic groundwater gauging data.

Benchmark has completed the first year of quarterly groundwater monitoring for the Seneca Market I site. Based on previously completed source removal, strong evidence of continued biodegradation as a result of the HRC® application and continued natural attenuation, quarterly monitoring of the site is no longer necessary and sampling frequency should be performed on a semi-annual basis. Continued monitoring of water quality parameters at MW-3SR is longer necessary. We request future groundwater analysis be limited to target compound list (TCL) volatile organic compounds via method 8260B.

Furthermore, we request that future groundwater sampling methods be changed from low-flow sampling to the use of passive diffusion bags (PDBs). The PDB sampler is a semi-permeable, low-density polyethylene membrane designed to allow VOCs to flow into the PDB until equilibrium is reached between the formation and the PDB. Attached is a copy of Benchmark field operating procedures for passive diffusion bag sampling (See Attachment 2).

Please contact us with any questions or comments.

Sincerely,
Benchmark Environmental Engineering & Science, PLLC

Michael Lesakowski
Project Manager

Att.

c: P. Sheedy (Seneca Market I, LLC)

TABLES

TABLE 1
SUMMARY OF GROUNDWATER MONITORING RESULTS
Third Quarter (9/23) and Fourth Quarter (12/14) 2009

SENECA MARKET I, LLC SITE
WATKINS GLEN, NEW YORK

Sample Location (part 1: MW-1S R and MW-3S R)

Parameter [1]	MW-1S R							MW-3S R									
	1/1/93[2]	4/1/93[2]	11/21/08	02/27/09	05/20/09	09/23/09	12/14/09	1/1/93[2]	4/1/93[2]	3/16/00[3]	6/23/00[4]	10/20/00[5]	11/21/08	02/27/09	05/20/09	09/23/09	12/14/09
TCL Volatile Organic Compounds (VOCs) - ug/L																	
Acetone	ND	ND	1.4 J	ND	ND	ND	ND	R	R	ND	24	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	R	ND	2	ND	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	29	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane (Methyl chloride)	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	1	13	4	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	NA	NA	91	75	72	71	79	NA	NA	NA	NA	NA	13	3	1.8	1.7	7.3
trans-1,2-Dichloroethene	NA	NA	0.71 J	ND	ND	ND	ND	NA	NA	NA	NA	NA	0.24 J	ND	ND	ND	ND
Total 1,2-Dichloroethene	43	40	NA	NA	NA	NA	NA	770	87	1900	5500	2200	NA	NA	NA	NA	NA
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene (Cumene)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	R	ND	ND	ND	ND	ND	ND	R	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone (MIBK)	9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert butyl ether (MTBE)	ND	ND	1.8	1.6	2	1.7	1.7	ND	ND	ND	ND	ND	4.6	5.1	4.7	4	4.3
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	410	360	88	70	87	83	87	88	8	77	83	ND	24	ND	ND	ND	4.2
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	22 J	26	21	17	21	20	20	190	20	83	200	14	7.7	ND	ND	ND	1.8
Vinyl chloride	ND	ND	1.5	1.7	1.4	1.7	1.8	38 J	ND	17	420	390	2.6	1.2	ND	ND	ND
o-Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4
m+p Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	1.4
Total VOCs	484.0	426.0	205.8	165.3	183.4	178.5	189.5	1086.0	115.0	2078.0	6277.0	2608.0	52.1	9.3	7.0	5.7	19.0
Total Chlorinated VOCs	475.0	426.0	202.2	163.7	181.4	175.7	187.8	1086.0	115.0	2077.0	6203.0	2604.0	47.5	4.2	2.0	1.7	13.3
Water Quality Parameters (mg/L)																	
Iron- Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND
Manganese- Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.94	5.49	5.6	4.91	ND
Nitrate, mg/L-N	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND
Sulfate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	18.3	17.1	17	16.7	ND
Sulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND
Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	454	430	544	415	ND
Carbon Dioxide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	66	63	ND	52	67
Ethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND
Ethylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0008 J	ND	ND	ND	ND
Methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.051	0.049	0.13	0.074	0.074
Total Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	334	333	314	338	ND
Total Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA	NA	6	36.6	23.9	4.26	2.6	3.5	3.5	ND
Field Measurements (units as indicated)																	
pH (units)			7.00	7.03	6.86	6.60	6.71						7.08	6.96	6.94	6.70	6.90
Temperature (˚C)			11.4	11.5	17.2	18.6	11.9						11.7	10.8	14.2	19.6	13.2
Specific Conductance (uS)			2000	1663	1994	2107	2113						2016	2000	1987	2028	2097
Turbidity (NTU)			214	311	39.9	7.02	18.8						9.04	20.4	7.62	5.26	22
ORP (mV)			58	51	63	42	42						41	24	15	0	- 51
DO (ppm)			1.53	1.45	1.61	1.38	1.7						1.38	1.3	1.48	1.33	1.79

Sample Location (part 2: MW-7S)

Parameter [1]	MW-7S									
	1/1/93[2]	4/1/93[2]	3/16/00[3]	6/23/00[4]	10/20/00[5]	11/21/08	02/27/09	05/20/09	09/23/09	12/14/10
TCL Volatile Organic Compounds (VOCs) - ug/L										
Acetone	R	ND	ND	ND	ND	ND	ND	34	41	35
Benzene	6 J	R	7	11	ND	4.7	27	14	8.2	6.5
Bromomethane (Methyl bromide)	ND	ND	ND	ND	ND	0.2 BJ	ND	ND	ND	ND
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane (Methyl chloride)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	ND	ND	ND	ND	ND	8.8	21	12	11	12
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	NA	NA	NA	NA	NA	4.1	3.5	3	7.5	2.7
trans-1,2-Dichloroethene	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND
Total 1,2-Dichloroethene	ND	3 J	6	36	6	NA	NA	NA	NA	NA
Ethylbenzene	ND	6 J	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene (Cumene)	ND	ND	ND	ND	ND	ND	ND	1.4	1.7	1.3
Methylcyclohexane	ND	ND	ND	ND	ND	1.4	6.9	4.4	5	5.1
Methylene chloride	R	R	ND	ND	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone (MIBK)	20	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert butyl ether (MTBE)	ND	ND	ND	ND	ND	4.5	3.7	1.6	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	5	6	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	2	ND	0.69 J	5.7	5.7	ND	ND
Trichloroethene	ND	ND	ND	4	2	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	1	3	ND	1.3	1.1	ND	2.1	1.1
o-Xylenes	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND
m+p Xylene	ND	ND	ND	ND	ND	0.3 J	3.3	8.3	5.8	3.8
Total Xylene	ND	2 J	ND	ND	ND	0.3 J	3.3	8.3	5.8	3.8
Total VOCs	26.0	11.0	14.0	61.0	14.0	26.0	72.2	86.3	82.3	67.5
Total Chlorinated VOCs	0.0	3.0	7.0	48.0	14.0	5.4	4.6	3.0	9.6	3.8
Water Quality Parameters (mg/L)										
Iron- Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese- Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate, mg/L-N	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Dioxide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	NA	NA	9.5	8	12.4	NA	NA	NA	NA	NA
Field Measurements (units as indicated)										
pH (units)						7.15	7.13	7.01	6.77	6.84
Temperature (˚C)						11	10.6	15.3	17.6	13.2
Specific Conductance (uS)						2966	3252	4081	3416	3227
Turbidity (NTU)						100	50.2	8.3	4.38	15.3
ORP (mV)						-87	-117	-139	- 140	- 113
DO (ppm)						1.47	2.27	1.36	0.97	1.3

Sample Location (part 3: MW-10S, MW-21S and GWQS)

Parameter [1]	MW-10S								MW-21S				GWQS[6]
	1/1/93[2]	4/1/93[2]	11/21/08	11/21/08 Blind Duplicate	02/27/09	05/20/09	09/23/09	12/14/09	11/21/08	02/27/09	09/23/09	12/14/09	
TCL Volatile Organic Compounds (VOCs) - ug/L													
Acetone	20	R	ND	ND	ND	ND	ND	ND	1.8 J	ND	ND	ND	**50**
Benzene	ND	R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1**
Bromomethane (Methyl bromide)	ND	ND	0.33 BJ	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5**
2-Butanone (MEK)	ND	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**50**
Carbon disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**--**
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5**
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5**
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**7**
Chloromethane (Methyl chloride)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	**5**
Cyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**--**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5**
cis-1,2-Dichloroethene	NA	NA	ND	ND	ND	ND	ND	ND	0.21 J	ND	ND	ND	**5**
trans-1,2-Dichloroethene	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5**
Total 1,2-Dichloroethene	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**5**
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5**
Isopropylbenzene (Cumene)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5**
Methylcyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**--**
Methylene chloride	ND	3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5**
4-methyl-2-pentanone (MIBK)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**--**
Methyl tert butyl ether (MTBE)	ND	ND	ND	ND	ND	ND	ND	ND	0.55 J	ND	ND	ND	**10**
Styrene	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5**
1,1,2,2-Tetrachloroethane	ND	4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5**
Tetrachloroethene	6 J	R	3.2	3.2	4	2.5	2.5	3.7	ND	ND	ND	ND	**5**
Toluene	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5**
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5**
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	1	ND	**2**
o-Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5**
m+p Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5**
Total Xylene	ND	2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5**
Total VOCs	26.0	20.4	3.5	3.2	4.0	3.0	2.5	3.7	2.8	0.0	2.6	0.0	
Total Chlorinated VOCs	6.0	4.0	3.2	3.2	4.0	3.0	2.5	3.7	0.4	0.0	1.0	0.0	
Water Quality Parameters (mg/L)													
Iron- Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**300**
Manganese- Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**300**
Nitrate, mg/L-N	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**10**
Sulfate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**250**
Sulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**50**
Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2.50E+08**
Carbon Dioxide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**--**
Ethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**--**
Ethylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**--**
Methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**--**
Total Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**--**
Total Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**--**
Field Measurements (units as indicated)													
pH (units)			7.02	7.02	7.01	6.98	6.74	6.60	7.25	6.78	6.70	6.87	**6.5 - 8.5**
Temperature (˚C)			11.5	11.5	12	16.1	19.7	12.8	11.9	7.5	22.7	12.3	**--**
Specific Conductance (uS)			1538	1538	1421	1153	1348	1569	1140	1510	1429	1440	**--**
Turbidity (NTU)			88.1	88.1	28.2	25	7.8	9.83	5.35	8.81	1.53	1.7	**--**
ORP (mV)			27	27	15	1	13	22	-99	-99	-132	98	**--**
DO (ppm)			1.35	1.35	2.15	3.56	2.2	1.66	1.04	1.18	1.14	1.54	**--**

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. Results are from the 1993 RI/FS report prepared by URS.
3. Pre-injection groundwater sampling results from the 2001 URS report "Evaluation of Site Remediation by In-Situ Oxidation."
4. Between injection groundwater sampling results from the 2001 URS report "Evaluation of Site Remediation by In-Situ Oxidation."
5. Post-injection groundwater sampling results from the 2001 URS report "Evaluation of Site Remediation by In-Situ Oxidation."
6. Class "GA" Groundwater Quality Standards for NYSDEC Divisions of Water TOGS 1.1.1

Definitions:
ND = Parameter not detected above laboratory detection limit.
NA = Sample not analyzed for parameter.
"--" = No GWQS available.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
R = Data rejected.
Excedeeds GWQS

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 2

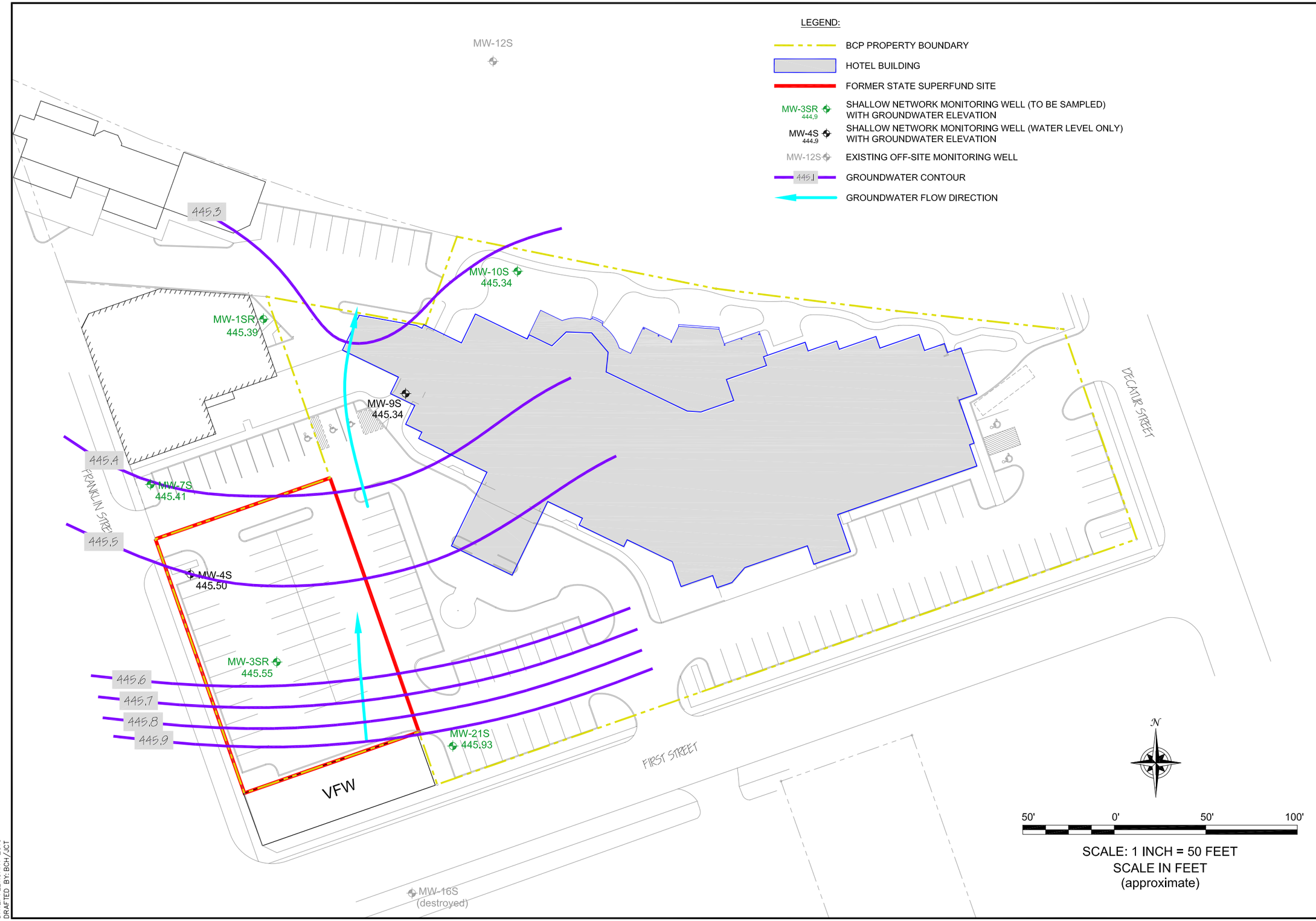
SUMMARY OF GROUNDWATER ELEVATIONS
FOURTH QUARTER 2009 (12/14/09)

Seneca Market I, LLC Site
Watkins Glen, New York

Location	TOR Elevation (fmsl)	DTW (fbTOR)	Groundwater Elevation (fmsl)
MW-1SR	451.39	6.00	445.39
MW-3SR	451.89	6.34	445.55
MW-4S	450.68	5.18	445.50
MW-7S	450.85	5.44	445.41
MW-9S	453.57	8.23	445.34
MW-10S	452.01	6.67	445.34
MW-21S	453.09	7.16	445.93

Notes:
1. DTW = depth to water, measured in feet below top of riser
2. fmsl = feet above mean sea level
3. fbTOR = feet below top of riser
4. TOR = Top of Riser; elevations surveyed on 02-27-2009

FIGURES



BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
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JOB NO.: 0092-002-200

LTGWM NETWORK & ISOPOTENTIAL MAP FOURTH QUARTER 2009 (12-14-09)

LONG-TERM GROUNDWATER MONITORING PROGRAM

SENECA MARKET I, LLC SITE
WATKINS GLEN, NEW YORK
SITE NO. C849004

PREPARED FOR
SENECA MARKET I, LLC

DATE: FEBRUARY 2010
DRAFTED BY: BCH/JCT

FIGURE 1

ATTACHMENT 1

LABORATORY ANALYTICAL DATA
SEPTEMBER AND DECEMBER 2009
SAMPLING EVENT

BENCHMARK

Columbia Analytical Services, Inc. 1 Mustard Street, Suite 250, Rochester, NY 14609-6925 | 585.288.5380 | www.caslab.com

October 13, 2009 Service Request No: R0905428

Mr. Michael Lesakowski
Benchmark Environmental Engineering
2558 Hamburg Turnpike
Suite 300
Lackawanna, NY 14218

Laboratory Results for: Seneca Market

Dear Mr. Lesakowski:

Enclosed are the results of the sample(s) submitted to our laboratory on September 23, 2009. For your reference, these analyses have been assigned our service request number **R0905428**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 135. You may also contact me via email at JJaeger@caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Janice Jaeger
Client Services Manager

CASE NARRATIVE

This report contains analytical results for the following samples:
Service Request Number: R0905428

Lab ID	Client ID
R0905428-001	MW-21S
R0905428-002	MW-7S
R0905428-003	MW-1SR
R0905428-004	MW-10S
R0905428-005	MW-3SR
R0905428-006	MW-3SR DISSOLVED
R0905472-010	Batch QC
R0905472-018	Batch QC

All samples were received in good condition unless otherwise noted on the cooler receipt and preservation check form located at the end of this report.

All samples were preserved in accordance with approved analytical methods.

All samples have been analyzed by the approved methods cited on the analytical results pages.

All holding times and associated QC were within limits.

No analytical or QC problems were encountered.

All sampling activities performed by CAS personnel have been in accordance with "CAS Field Procedures and Measurements Manual" or by client specifications.

Samples have been subcontracted to the following laboratory(ies). The subcontractor's analytical report is attached:

Columbia Analytical Services, Inc. - SIMIVALLE
Simi Valley, CA

Columbia Analytical Services

REPORT QUALIFIERS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Pesticide/Aroclors: Concentration >40% (25% for CLP) difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).
X	See Case Narrative for discussion.

ACCREDITED IN ACCORDANCE WITH nelac

CAS/Rochester Lab ID # for State Certifications[1]

NELAP Accredited
Delaware Accredited
Connecticut ID # PH0556
Florida ID # E87674
Illinois ID #200047
Maine ID #NY0032
Nebraska Accredited
Navy Facilities Engineering Service Center Approved
Nevada ID # NY-00032
New Jersey ID # NY004
New York ID # 10145
New Hampshire ID # 294100 A/B
Pennsylvania ID# 68-786
Rhode Island ID # 158
West Virginia ID # 292

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to the certifications section at www.caslab.com.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0905428
Project:	Seneca Market	**Date Collected:**	9/23/09 1325
Sample Matrix:	Water	**Date Received:**	9/23/09
Sample Name:	MW-21S	**Units:**	µg/L
Lab Code:	R0905428-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
1,1,2-Trichloroethane	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
1,2,4-Trichlorobenzene	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
1,2-Dibromo-3-chloropropane (DBCP)	2.0	U	2.0	1	NA	9/30/09 19:18		172647	
1,2-Dibromoethane	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
1,2-Dichlorobenzene	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
1,2-Dichloroethane	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
1,2-Dichloropropane	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
1,3-Dichlorobenzene	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
1,4-Dichlorobenzene	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
2-Butanone (MEK)	5.0	U	5.0	1	NA	9/30/09 19:18		172647	
2-Hexanone	5.0	U	5.0	1	NA	9/30/09 19:18		172647	
4-Methyl-2-pentanone	5.0	U	5.0	1	NA	9/30/09 19:18		172647	
Acetone	5.0	U	5.0	1	NA	9/30/09 19:18		172647	
Benzene	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
Bromodichloromethane	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
Bromoform	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
Bromomethane	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
Carbon Disulfide	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
Carbon Tetrachloride	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
Chlorobenzene	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
Chloroethane	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
Chloroform	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
Chloromethane	1.6		1.0	1	NA	9/30/09 19:18		172647	
Cyclohexane	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
Dibromochloromethane	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
Dichlorodifluoromethane (CFC 12)	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
Dichloromethane	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
Ethylbenzene	1.0	U	1.0	1	NA	9/30/09 19:18		172647	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0905428
Project:	Seneca Market	**Date Collected:**	9/23/09 1325
Sample Matrix:	Water	**Date Received:**	9/23/09
Sample Name:	MW-21S	**Units:**	µg/L
Lab Code:	R0905428-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Isopropylbenzene (Cumene)	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
Methyl Acetate	2.0	U	2.0	1	NA	9/30/09 19:18		172647	
Methyl tert-Butyl Ether	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
Methylcyclohexane	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
Styrene	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
Tetrachloroethene (PCE)	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
Toluene	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
Trichloroethene (TCE)	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
Vinyl Chloride	**1.0**		1.0	1	NA	9/30/09 19:18		172647	
cis-1,2-Dichloroethene	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
cis-1,3-Dichloropropene	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
m,p-Xylenes	2.0	U	2.0	1	NA	9/30/09 19:18		172647	
o-Xylene	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
trans-1,2-Dichloroethene	1.0	U	1.0	1	NA	9/30/09 19:18		172647	
trans-1,3-Dichloropropene	1.0	U	1.0	1	NA	9/30/09 19:18		172647	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	101	85-122	9/30/09 19:18		
Dibromofluoromethane	109	89-119	9/30/09 19:18		
Toluene-d8	104	87-121	9/30/09 19:18		

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0905428
Project:	Seneca Market	**Date Collected:**	9/23/09 1250
Sample Matrix:	Water	**Date Received:**	9/23/09
Sample Name:	MW-7S	**Units:**	µg/L
Lab Code:	R0905428-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
1,1,2-Trichloroethane	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
1,2,4-Trichlorobenzene	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
1,2-Dibromo-3-chloropropane (DBCP)	2.0	U	2.0	1	NA	9/30/09 19:49		172647	
1,2-Dibromoethane	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
1,2-Dichlorobenzene	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
1,2-Dichloroethane	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
1,2-Dichloropropane	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
1,3-Dichlorobenzene	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
1,4-Dichlorobenzene	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
2-Butanone (MEK)	5.0	U	5.0	1	NA	9/30/09 19:49		172647	
2-Hexanone	5.0	U	5.0	1	NA	9/30/09 19:49		172647	
4-Methyl-2-pentanone	5.0	U	5.0	1	NA	9/30/09 19:49		172647	
Acetone	**41**		5.0	1	NA	9/30/09 19:49		172647	
Benzene	**8.2**		1.0	1	NA	9/30/09 19:49		172647	
Bromodichloromethane	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
Bromoform	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
Bromomethane	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
Carbon Disulfide	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
Carbon Tetrachloride	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
Chlorobenzene	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
Chloroethane	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
Chloroform	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
Chloromethane	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
Cyclohexane	**11**		1.0	1	NA	9/30/09 19:49		172647	
Dibromochloromethane	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
Dichlorodifluoromethane (CFC 12)	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
Dichloromethane	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
Ethylbenzene	1.0	U	1.0	1	NA	9/30/09 19:49		172647	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0905428
Project:	Seneca Market	**Date Collected:**	9/23/09 1250
Sample Matrix:	Water	**Date Received:**	9/23/09
Sample Name:	MW-7S	**Units:**	µg/L
Lab Code:	R0905428-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Isopropylbenzene (Cumene)	**1.7**		1.0	1	NA	9/30/09 19:49		172647	
Methyl Acetate	2.0	U	2.0	1	NA	9/30/09 19:49		172647	
Methyl tert-Butyl Ether	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
Methylcyclohexane	**5.0**		1.0	1	NA	9/30/09 19:49		172647	
Styrene	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
Tetrachloroethene (PCE)	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
Toluene	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
Trichloroethene (TCE)	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
Vinyl Chloride	**2.1**		1.0	1	NA	9/30/09 19:49		172647	
cis-1,2-Dichloroethene	**7.5**		1.0	1	NA	9/30/09 19:49		172647	
cis-1,3-Dichloropropene	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
m,p-Xylenes	**5.8**		2.0	1	NA	9/30/09 19:49		172647	
o-Xylene	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
trans-1,2-Dichloroethene	1.0	U	1.0	1	NA	9/30/09 19:49		172647	
trans-1,3-Dichloropropene	1.0	U	1.0	1	NA	9/30/09 19:49		172647	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	104	85-122	9/30/09 19:49		
Dibromofluoromethane	108	89-119	9/30/09 19:49		
Toluene-d8	103	87-121	9/30/09 19:49		

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0905428
Project:	Seneca Market	**Date Collected:**	9/23/09 1222
Sample Matrix:	Water	**Date Received:**	9/23/09
Sample Name:	MW-1SR	**Units:**	µg/L
Lab Code:	R0905428-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
1,1,2-Trichloroethane	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
1,2,4-Trichlorobenzene	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
1,2-Dibromo-3-chloropropane (DBCP)	2.0	U	2.0	1	NA	9/30/09 20:20		172647	
1,2-Dibromoethane	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
1,2-Dichlorobenzene	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
1,2-Dichloroethane	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
1,2-Dichloropropane	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
1,3-Dichlorobenzene	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
1,4-Dichlorobenzene	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
2-Butanone (MEK)	5.0	U	5.0	1	NA	9/30/09 20:20		172647	
2-Hexanone	5.0	U	5.0	1	NA	9/30/09 20:20		172647	
4-Methyl-2-pentanone	5.0	U	5.0	1	NA	9/30/09 20:20		172647	
Acetone	5.0	U	5.0	1	NA	9/30/09 20:20		172647	
Benzene	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
Bromodichloromethane	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
Bromoform	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
Bromomethane	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
Carbon Disulfide	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
Carbon Tetrachloride	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
Chlorobenzene	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
Chloroethane	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
Chloroform	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
Chloromethane	1.1		1.0	1	NA	9/30/09 20:20		172647	
Cyclohexane	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
Dibromochloromethane	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
Dichlorodifluoromethane (CFC 12)	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
Dichloromethane	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
Ethylbenzene	1.0	U	1.0	1	NA	9/30/09 20:20		172647	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0905428
Project:	Seneca Market	**Date Collected:**	9/23/09 1222
Sample Matrix:	Water	**Date Received:**	9/23/09
Sample Name:	MW-1SR	**Units:**	µg/L
Lab Code:	R0905428-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Isopropylbenzene (Cumene)	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
Methyl Acetate	2.0	U	2.0	1	NA	9/30/09 20:20		172647	
Methyl tert-Butyl Ether	**1.7**		1.0	1	NA	9/30/09 20:20		172647	
Methylcyclohexane	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
Styrene	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
Tetrachloroethene (PCE)	**83**		1.0	1	NA	9/30/09 20:20		172647	
Toluene	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
Trichloroethene (TCE)	**20**		1.0	1	NA	9/30/09 20:20		172647	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
Vinyl Chloride	**1.7**		1.0	1	NA	9/30/09 20:20		172647	
cis-1,2-Dichloroethene	**71**		1.0	1	NA	9/30/09 20:20		172647	
cis-1,3-Dichloropropene	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
m,p-Xylenes	2.0	U	2.0	1	NA	9/30/09 20:20		172647	
o-Xylene	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
trans-1,2-Dichloroethene	1.0	U	1.0	1	NA	9/30/09 20:20		172647	
trans-1,3-Dichloropropene	1.0	U	1.0	1	NA	9/30/09 20:20		172647	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	102	85-122	9/30/09 20:20		
Dibromofluoromethane	110	89-119	9/30/09 20:20		
Toluene-d8	105	87-121	9/30/09 20:20		

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0905428
Project:	Seneca Market	**Date Collected:**	9/23/09 1157
Sample Matrix:	Water	**Date Received:**	9/23/09
Sample Name:	MW-10S	**Units:**	µg/L
Lab Code:	R0905428-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
1,1,2-Trichloroethane	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
1,2,4-Trichlorobenzene	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
1,2-Dibromo-3-chloropropane (DBCP)	2.0	U	2.0	1	NA	9/30/09 20:51		172647	
1,2-Dibromoethane	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
1,2-Dichlorobenzene	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
1,2-Dichloroethane	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
1,2-Dichloropropane	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
1,3-Dichlorobenzene	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
1,4-Dichlorobenzene	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
2-Butanone (MEK)	5.0	U	5.0	1	NA	9/30/09 20:51		172647	
2-Hexanone	5.0	U	5.0	1	NA	9/30/09 20:51		172647	
4-Methyl-2-pentanone	5.0	U	5.0	1	NA	9/30/09 20:51		172647	
Acetone	5.0	U	5.0	1	NA	9/30/09 20:51		172647	
Benzene	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
Bromodichloromethane	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
Bromoform	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
Bromomethane	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
Carbon Disulfide	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
Carbon Tetrachloride	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
Chlorobenzene	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
Chloroethane	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
Chloroform	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
Chloromethane	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
Cyclohexane	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
Dibromochloromethane	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
Dichlorodifluoromethane (CFC 12)	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
Dichloromethane	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
Ethylbenzene	1.0	U	1.0	1	NA	9/30/09 20:51		172647	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0905428
Project:	Seneca Market	**Date Collected:**	9/23/09 1157
Sample Matrix:	Water	**Date Received:**	9/23/09
Sample Name:	MW-10S	**Units:**	µg/L
Lab Code:	R0905428-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Isopropylbenzene (Cumene)	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
Methyl Acetate	2.0	U	2.0	1	NA	9/30/09 20:51		172647	
Methyl tert-Butyl Ether	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
Methylcyclohexane	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
Styrene	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
Tetrachloroethene (PCE)	**2.5**		1.0	1	NA	9/30/09 20:51		172647	
Toluene	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
Trichloroethene (TCE)	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
Vinyl Chloride	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
cis-1,2-Dichloroethene	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
cis-1,3-Dichloropropene	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
m,p-Xylenes	2.0	U	2.0	1	NA	9/30/09 20:51		172647	
o-Xylene	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
trans-1,2-Dichloroethene	1.0	U	1.0	1	NA	9/30/09 20:51		172647	
trans-1,3-Dichloropropene	1.0	U	1.0	1	NA	9/30/09 20:51		172647	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	103	85-122	9/30/09 20:51		
Dibromofluoromethane	108	89-119	9/30/09 20:51		
Toluene-d8	104	87-121	9/30/09 20:51		

Comments:

Client:	Benchmark Environmental Engineering	**Service Request:**	R0905428
Project:	Seneca Market	**Date Collected:**	9/23/09 1351
Sample Matrix:	Water	**Date Received:**	9/23/09
Sample Name:	MW-3SR		
Lab Code:	R0905428-005	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Alkalinity as CaCO3, Total	SM 2320 B	**338**		mg/L	2.0	1	NA	10/5/09 09:45
Carbon, Total Organic (TOC)	SM20 5310 C	**3.5**		mg/L	1.0	1	NA	10/5/09 15:45
Chloride	9056	**415**		mg/L	20	100	NA	10/8/09 10:24
Nitrate as Nitrogen	9056	0.50	U	mg/L	0.50	10	NA	9/24/09 14:28
Sulfate	9056	**16.7**		mg/L	2.0	10	NA	9/24/09 14:28
Sulfide, Total	SM 4500-S2- F	0.97	U	mg/L	0.97	1	NA	9/29/09 11:00

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0905428
Project:	Seneca Market	**Date Collected:**	9/23/09 1351
Sample Matrix:	Water	**Date Received:**	9/23/09
Sample Name:	MW-3SR	**Units:**	µg/L
Lab Code:	R0905428-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
1,1,2-Trichloroethane	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
1,2,4-Trichlorobenzene	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
1,2-Dibromo-3-chloropropane (DBCP)	2.0	U	2.0	1	NA	9/30/09 21:22		172647	
1,2-Dibromoethane	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
1,2-Dichlorobenzene	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
1,2-Dichloroethane	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
1,2-Dichloropropane	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
1,3-Dichlorobenzene	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
1,4-Dichlorobenzene	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
2-Butanone (MEK)	5.0	U	5.0	1	NA	9/30/09 21:22		172647	
2-Hexanone	5.0	U	5.0	1	NA	9/30/09 21:22		172647	
4-Methyl-2-pentanone	5.0	U	5.0	1	NA	9/30/09 21:22		172647	
Acetone	5.0	U	5.0	1	NA	9/30/09 21:22		172647	
Benzene	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
Bromodichloromethane	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
Bromoform	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
Bromomethane	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
Carbon Disulfide	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
Carbon Tetrachloride	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
Chlorobenzene	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
Chloroethane	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
Chloroform	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
Chloromethane	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
Cyclohexane	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
Dibromochloromethane	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
Dichlorodifluoromethane (CFC 12)	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
Dichloromethane	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
Ethylbenzene	1.0	U	1.0	1	NA	9/30/09 21:22		172647	

Comments:

Client:	Benchmark Environmental Engineering	**Service Request:**	R0905428
Project:	Seneca Market	**Date Collected:**	9/23/09 1351
Sample Matrix:	Water	**Date Received:**	9/23/09
Sample Name:	MW-3SR	**Units:**	µg/L
Lab Code:	R0905428-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Isopropylbenzene (Cumene)	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
Methyl Acetate	2.0	U	2.0	1	NA	9/30/09 21:22		172647	
Methyl tert-Butyl Ether	**4.0**		1.0	1	NA	9/30/09 21:22		172647	
Methylcyclohexane	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
Styrene	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
Tetrachloroethene (PCE)	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
Toluene	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
Trichloroethene (TCE)	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
Vinyl Chloride	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
cis-1,2-Dichloroethene	**1.7**		1.0	1	NA	9/30/09 21:22		172647	
cis-1,3-Dichloropropene	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
m,p-Xylenes	2.0	U	2.0	1	NA	9/30/09 21:22		172647	
o-Xylene	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
trans-1,2-Dichloroethene	1.0	U	1.0	1	NA	9/30/09 21:22		172647	
trans-1,3-Dichloropropene	1.0	U	1.0	1	NA	9/30/09 21:22		172647	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	103	85-122	9/30/09 21:22		
Dibromofluoromethane	109	89-119	9/30/09 21:22		
Toluene-d8	106	87-121	9/30/09 21:22		

Comments:

Client:	Benchmark Environmental Engineering	**Service Request:**	R0905428
Project:	Seneca Market	**Date Collected:**	9/23/09 1351
Sample Matrix:	Water	**Date Received:**	9/23/09
Sample Name:	MW-3SR	**Units:**	µg/L
Lab Code:	R0905428-005	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Ethane	1.0	U	1.0	1	NA	9/25/09 12:47		172020	
Ethene	1.0	U	1.0	1	NA	9/25/09 12:47		172020	
Methane	74		2.0	1	NA	9/25/09 12:47		172020	

Comments:

Client:	Benchmark Environmental Engineering	**Service Request:**	R0905428
Project:	Seneca Market	**Date Collected:**	9/23/09 1351
Sample Matrix:	Water	**Date Received:**	9/23/09
Sample Name:	MW-3SR	**Units:**	mg/L
Lab Code:	R0905428-005	**Basis:**	NA

Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC)

Analytical Method: Organic Acids

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Pyruvic Acid	0.50	U	0.50	1	NA	10/7/09 11:18		173434	
Acetic Acid	1.0	U	1.0	1	NA	10/7/09 11:18		173434	
Butanoic Acid (Butyric Acid)	2.0	U	2.0	1	NA	10/7/09 11:18		173434	
Lactic Acid	1.0	U	1.0	1	NA	10/7/09 11:18		173434	
Propionic Acid	1.0	U	1.0	1	NA	10/7/09 11:18		173434	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0905428
Project:	Seneca Market	**Date Collected:**	9/23/09 1351
Sample Matrix:	Water	**Date Received:**	9/23/09
Sample Name:	MW-3SR DISSOLVED		
Lab Code:	R0905428-006	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Iron, Dissolved	6010B	100	U	µg/L	100	1	9/29/09	10/6/09 14:40
Manganese, Dissolved	6010B	**4910**		µg/L	10	1	9/29/09	10/8/09 09:33

Comments:

Client:	Benchmark Environmental Engineering	**Service Request:**	R0905428
Project:	Seneca Market	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R0905428-MB	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Alkalinity as CaCO3, Total	SM 2320 B	2.0	U	mg/L	2.0	1	NA	10/5/09 09:45
Carbon, Total Organic (TOC)	SM20 5310 C	1.0	U	mg/L	1.0	1	NA	10/5/09 14:50
Chloride	9056	0.20	U	mg/L	0.20	1	NA	10/8/09 09:09
Nitrate as Nitrogen	9056	0.050	U	mg/L	0.050	1	NA	9/24/09 10:16
Sulfate	9056	0.20	U	mg/L	0.20	1	NA	9/24/09 10:16
Sulfide, Total	SM 4500-S2- F	1.0	U	mg/L	1.0	1	NA	9/29/09 11:00

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0905428
Project:	Seneca Market	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R0905428-MB	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Iron, Dissolved	6010B	100	U	µg/L	100	1	9/29/09	10/8/09 09:03
Manganese, Dissolved	6010B	10	U	µg/L	10	1	9/29/09	10/8/09 09:03

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0905428
Project:	Seneca Market	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ0909318-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
1,1,2-Trichloroethane	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
1,2,4-Trichlorobenzene	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
1,2-Dibromo-3-chloropropane (DBCP)	2.0	U	2.0	1	NA	9/30/09 12:56		172647	
1,2-Dibromoethane	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
1,2-Dichlorobenzene	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
1,2-Dichloroethane	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
1,2-Dichloropropane	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
1,3-Dichlorobenzene	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
1,4-Dichlorobenzene	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
2-Butanone (MEK)	5.0	U	5.0	1	NA	9/30/09 12:56		172647	
2-Hexanone	5.0	U	5.0	1	NA	9/30/09 12:56		172647	
4-Methyl-2-pentanone	5.0	U	5.0	1	NA	9/30/09 12:56		172647	
Acetone	5.0	U	5.0	1	NA	9/30/09 12:56		172647	
Benzene	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
Bromodichloromethane	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
Bromoform	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
Bromomethane	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
Carbon Disulfide	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
Carbon Tetrachloride	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
Chlorobenzene	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
Chloroethane	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
Chloroform	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
Chloromethane	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
Cyclohexane	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
Dibromochloromethane	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
Dichlorodifluoromethane (CFC 12)	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
Dichloromethane	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
Ethylbenzene	1.0	U	1.0	1	NA	9/30/09 12:56		172647	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0905428
Project:	Seneca Market	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ0909318-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Isopropylbenzene (Cumene)	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
Methyl Acetate	2.0	U	2.0	1	NA	9/30/09 12:56		172647	
Methyl tert-Butyl Ether	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
Methylcyclohexane	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
Styrene	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
Tetrachloroethene (PCE)	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
Toluene	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
Trichloroethene (TCE)	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
Vinyl Chloride	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
cis-1,2-Dichloroethene	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
cis-1,3-Dichloropropene	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
m,p-Xylenes	2.0	U	2.0	1	NA	9/30/09 12:56		172647	
o-Xylene	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
trans-1,2-Dichloroethene	1.0	U	1.0	1	NA	9/30/09 12:56		172647	
trans-1,3-Dichloropropene	1.0	U	1.0	1	NA	9/30/09 12:56		172647	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	101	85-122	9/30/09 12:56		
Dibromofluoromethane	106	89-119	9/30/09 12:56		
Toluene-d8	104	87-121	9/30/09 12:56		

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0905428
Project:	Seneca Market	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ0909150-01	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Ethane	1.0	U	1.0	1	NA	9/25/09 12:07		172020	
Ethene	1.0	U	1.0	1	NA	9/25/09 12:07		172020	
Methane	2.0	U	2.0	1	NA	9/25/09 12:07		172020	

Comments:

Client:	Benchmark Environmental Engineering	**Service Request:**	R0905428
Project:	Seneca Market	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	mg/L
Lab Code:	RQ0909549-01	**Basis:**	NA

Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC)

Analytical Method: Organic Acids

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Pyruvic Acid	0.50	U	0.50	1	NA	10/7/09 09:43		173434	
Acetic Acid	1.0	U	1.0	1	NA	10/7/09 09:43		173434	
Butanoic Acid (Butyric Acid)	2.0	U	2.0	1	NA	10/7/09 09:43		173434	
Lactic Acid	1.0	U	1.0	1	NA	10/7/09 09:43		173434	
Propionic Acid	1.0	U	1.0	1	NA	10/7/09 09:43		173434	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Benchmark Environmental Engineering
Project: Seneca Market
Sample Matrix: Water

Service Request: R0905428
Date Analyzed: 9/29/09

Lab Control Sample Summary
Sulfide, Iodometric 20th Ed.

Units: mg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R0905428-LCS1 Result	Expected	% Rec	Duplicate Lab Control Sample R0905428-DLCS1 Result	Expected	% Rec	% Rec Limits	RPD	RPD Limit
Sulfide, Total	SM 4500-S2- F	**3.69**	3.5	104	**3.64**	3.5	103	56 - 138	1	20

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Benchmark Environmental Engineering
Project: Seneca Market
Sample Matrix: Water

Service Request: R0905428
Date Analyzed: 9/24/09 - 10/ 8/09

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R0905428-LCS2 Result	Expected	% Rec	% Rec Limits
Carbon, Total Organic (TOC)	SM20 5310 C	**9.55**	10.0	95	86 - 117
Chloride	9056	**1.93**	2.00	96	90 - 110
Sulfate	9056	**2.03**	2.00	102	90 - 110
Alkalinity as CaCO3, Total	SM 2320 B	**19.0**	20.0	95	90 - 108
Nitrate as Nitrogen	9056	**0.950**	1.00	95	90 - 110

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Benchmark Environmental Engineering
Project: Seneca Market
Sample Matrix: Water

Service Request: R0905428
Date Analyzed: 10/ 8/09

Lab Control Sample Summary
Inorganic Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R0905428-LCS Result	Expected	% Rec	% Rec Limits
Iron, Dissolved	6010B	**1020**	1000	102	80 - 120
Manganese, Dissolved	6010B	**502**	500	100	80 - 120

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Benchmark Environmental Engineering
Project: Seneca Market
Sample Matrix: Water

Service Request: R0905428
Date Analyzed: 9/30/09

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Units: µg/L
Basis: NA

Analysis Lot: 172647

Analyte Name	Lab Control Sample RQ0909318-04 Result	Expected	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	**23.3**	20.0	116	70 - 130
1,1,2,2-Tetrachloroethane	**21.4**	20.0	107	70 - 130
1,1,2-Trichloroethane	**21.4**	20.0	107	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	**23.1**	20.0	115	70 - 130
1,1-Dichloroethane (1,1-DCA)	**20.9**	20.0	104	70 - 130
1,1-Dichloroethene (1,1-DCE)	**22.9**	20.0	114	70 - 130
1,2,4-Trichlorobenzene	**21.6**	20.0	108	70 - 130
1,2-Dibromo-3-chloropropane (DBCP)	**20.6**	20.0	103	50 - 150
1,2-Dibromoethane	**21.0**	20.0	105	70 - 130
1,2-Dichlorobenzene	**21.6**	20.0	108	70 - 130
1,2-Dichloroethane	**21.3**	20.0	106	70 - 130
1,2-Dichloropropane	**21.7**	20.0	108	70 - 130
1,3-Dichlorobenzene	**21.7**	20.0	108	70 - 130
1,4-Dichlorobenzene	**21.4**	20.0	107	70 - 130
2-Butanone (MEK)	**19.3**	20.0	96	50 - 150
2-Hexanone	**20.9**	20.0	105	70 - 130
4-Methyl-2-pentanone	**21.3**	20.0	107	70 - 130
Acetone	**22.1**	20.0	110	50 - 150
Benzene	**20.7**	20.0	104	70 - 130
Bromodichloromethane	**21.7**	20.0	109	70 - 130
Bromoform	**22.9**	20.0	115	70 - 130
Bromomethane	**13.9**	20.0	70	50 - 150
Carbon Disulfide	**18.6**	20.0	93	70 - 130
Carbon Tetrachloride	**23.1**	20.0	115	70 - 130
Chlorobenzene	**21.7**	20.0	108	70 - 130
Chloroethane	**20.7**	20.0	103	70 - 130
Chloroform	**21.2**	20.0	106	70 - 130
Chloromethane	**20.9**	20.0	105	70 - 130
Cyclohexane	**20.9**	20.0	104	50 - 150
Dibromochloromethane	**22.0**	20.0	110	70 - 130
Dichlorodifluoromethane (CFC 12)	**21.8**	20.0	109	70 - 130
Dichloromethane	**20.3**	20.0	102	70 - 130
Ethylbenzene	**21.8**	20.0	109	70 - 130
Isopropylbenzene (Cumene)	**23.3**	20.0	117	70 - 130
Methyl Acetate	**26.2**	20.0	131	50 - 150
Methyl tert-Butyl Ether	**21.7**	20.0	109	70 - 130

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Benchmark Environmental Engineering
Project: Seneca Market
Sample Matrix: Water

Service Request: R0905428
Date Analyzed: 9/30/09

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Units: µg/L
Basis: NA

Analysis Lot: 172647

Analyte Name	Lab Control Sample RQ0909318-04 Result	Expected	% Rec	% Rec Limits
Methylcyclohexane	**20.2**	20.0	101	50 - 150
Styrene	**22.4**	20.0	112	70 - 130
Tetrachloroethene (PCE)	**22.4**	20.0	112	70 - 130
Toluene	**21.5**	20.0	107	70 - 130
Trichloroethene (TCE)	**21.0**	20.0	105	70 - 130
Trichlorofluoromethane (CFC 11)	**23.7**	20.0	119	70 - 130
Vinyl Chloride	**23.0**	20.0	115	70 - 130
cis-1,2-Dichloroethene	**20.6**	20.0	103	70 - 130
cis-1,3-Dichloropropene	**22.3**	20.0	111	70 - 130
m,p-Xylenes	**45.7**	40.0	114	70 - 130
o-Xylene	**22.4**	20.0	112	70 - 130
trans-1,2-Dichloroethene	**21.0**	20.0	105	70 - 130
trans-1,3-Dichloropropene	**23.0**	20.0	115	70 - 130

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Benchmark Environmental Engineering
Project: Seneca Market
Sample Matrix: Water

Service Request: R0905428
Date Analyzed: 9/25/09

Lab Control Sample Summary
Dissolved Gases by GC/FID

Analytical Method: RSK 175

Units: µg/L
Basis: NA

Analysis Lot: 172020

Analyte Name	Lab Control Sample RQ0909150-02 Result	Expected	% Rec	Duplicate Lab Control Sample RQ0909150-03 Result	Expected	% Rec	% Rec Limits	RPD	RPD Limit
Ethane	**24.4**	26.1	94	**24.4**	26.1	94	57 - 150	0	30
Ethene	**23.5**	24.3	97	**23.7**	24.3	98	52 - 149	1	30
Methane	**24.7**	26.3	94	**24.6**	26.3	94	44 - 157	0	30

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Benchmark Environmental Engineering
Project: Seneca Market
Sample Matrix: Water

Service Request: R0905428
Date Analyzed: 10/ 7/09

Lab Control Sample Summary
Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC)

Analytical Method: Organic Acids

Units: mg/L
Basis: NA

Analysis Lot: 173434

Analyte Name	Lab Control Sample RQ0909549-02 Result	Expected	% Rec	Duplicate Lab Control Sample RQ0909549-03 Result	Expected	% Rec	% Rec Limits	RPD	RPD Limit
Pyruvic Acid	**1.10**	1.01	109	**1.19**	1.01	117	70 - 130	8	30
Acetic Acid	**10.0**	11.1	90	**10.4**	11.1	93	70 - 135	4	30
Butanoic Acid (Butyric Acid)	**9.39**	10.2	92	**9.72**	10.2	95	82 - 118	3	30
Lactic Acid	**11.2**	11.1	100	**11.5**	11.1	103	70 - 117	3	30
Propionic Acid	**10.3**	10.1	102	**10.3**	10.1	102	80 - 125	0	30

Comments:

Columbia Analytical Services™ CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

SR #

CAS Contact

www.caslab.com One Mustard St., Suite 250 • Rochester, NY 14609-0859(585) 288-5380 • 800-695-7222 x11 • FAX (585) 288-8475 PAGE _____ OF _____

Project Name: Seneca Markets	Project Number: 0092-002-200
Project Manager: Mike Lesakowski	Report CC:
Company/Address: Benchmark Eng 2558 Hamburg Turnpike Suite 300 Buffalo NY 14218	
Phone #: (716) 856-0599	FAX#: (716) 856-0583
Sampler's Signature: Paul W Werth	Sampler's Printed Name: Paul W Werthman

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE: 1 2 1 1 5 0 0 0 0

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOA's ☐ 8260 ☐ 624 ☐ CLP	GC/MS SVOA's ☐ 8270 ☐ 625 ☐ CLP	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES ☐ 8081 ☐ 608 ☐ CLP	PCB's ☐ 8082 ☐ 608 ☐ CLP	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	TOC	RSK	Sulfide	CO_2	NO_3, SO_4, Cl	Alkalinity	metabolic acids*	REMARKS/ ALTERNATE DESCRIPTION
MW-21s		9-23-09	1325	GW	3															
MW-7s			1250	GW	3															
MW-15r			1222	GW	3															
MW-10s			11:57	GW	3															
MW-35r			1351	GW	3							X	3	3	1	1	1	1	1	

SPECIAL INSTRUCTIONS/COMMENTS
Metals soluable Iron + Manganese (Field Filtered)

Metabolic Acids- lactic, pyravic, acetic propionic and butyric

See QAPP ☐

TURNAROUND REQUIREMENTS
_____ **RUSH** (SURCHARGES APPLY)
_____ 24 hr _____ 48 hr _____ 5 day
X **STANDARD**
REQUESTED FAX DATE
_____
REQUESTED REPORT DATE
_____

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Ra
____ V. Specialized Forms / Custom Re
Edata ____ Yes ____ No

INVOICE INFORMATION
PO#
BILL TO:

R0905428
Benchmark Environmental Engineering
Seneca Market

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: Paul W Werth	Signature: Matth Carr	Signature	Signature	Signature	Signature
Printed Name: Paul W Werthman	Printed Name: Matthew Carver	Printed Name	Printed Name	Printed Name	Printed Name
Firm: Benchmark	Firm: CAS	Firm	Firm	Firm	Firm
Date/Time: 9-23-09	Date/Time: 9/23/09 1720	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

SCOC-1102-08

Cooler Receipt And Preservation Check Form

Project/Client Benchmark Submission Number _____.

Cooler received on 9-23-09 by: MZ **COURIER:** CAS UPS FEDEX VELOCITY (CLIENT)

1.	Were custody seals on outside of cooler?	YES	(NO)			
2.	Were custody papers properly filled out (ink, signed, etc.)?	(YES)	NO			
3.	Did all bottles arrive in good condition (unbroken)?	(YES)	NO			
4.	Did any VOA vials have significant* air bubbles?	YES	(NO)	N/A		
5.	Were **Ice** or **Ice packs** present?	(YES)	NO			
6.	Where did the bottles originate?	(CAS/ROC)	CLIENT			
7.	Temperature of cooler(s) upon receipt:	17°	____	____	____	____
	Is the temperature within 0° - 6° C?:	Yes	Yes	Yes	Yes	Yes
	If No, Explain Below	(No)	No	No	No	No

Date/Time Temperatures Taken: 9-23-09 @ 17:25

Thermometer ID: 161 / IR GUN#2 (IR GUN#3) Reading From (Temp Blank) / Sample Bottle

If out of Temperature, note packing/ice condition, Client Approval to Run Samples: 4hr rule

PC Secondary Review: JMH 10 9/23/09 9/24/09

Cooler Breakdown: Date : _____ by: MRP

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	(YES)	NO
2.	Did all bottle labels and tags agree with custody papers?	(YES)	NO
3.	Were correct containers used for the tests indicated?	(YES)	NO
4.	Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated		(N/A)

Explain any discrepancies: _____

pH	Reagent	YES	NO	Lot Received	Exp
≥12	NaOH				
≤2	HNO_3				
≤2	H_2SO_4				
Residual Chlorine (-)	For TCN and Phenol			If present, contact PM to add ascorbic acid	
	$Na_2S_2O_3$	-	-		
	Zn Aceta	-	-		
	HCl	*	*		

Sample ID	Vol. Added	Lot Added	Final pH

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: _____

Bottle lot numbers: _____

Other Comments:

PC Secondary Review: JMH 10/12/09 *significant air bubbles are greater than 5-6 mm

Columbia Analytical Services™ 2655 Park Center Drive, Suite A | Simi Valley, CA 93065 | 805.526.7161 | 805.526.7270 fax | www.caslab.com

LABORATORY REPORT

October 9, 2009

Michael Lesakowski
Benchmark Environmental Engineering
2558 Hamburg Turnpike Suite 300
Lackawanna, NY 14218

RE: Seneca Market

Dear Michael:

Enclosed are the results of the sample submitted to our laboratory on September 23, 2009. For your reference, these analyses have been assigned our service request number R0905428.

All analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein. Your report contains _____ pages.

Columbia Analytical Services, Inc. is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA20007; The American Industrial Hygiene Association, Laboratory #101661; Department of the Navy (NFESC); Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-09-TX; Minnesota Department of Health, Certificate No. 11495AA. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

Columbia Analytical Services, Inc.

Kate Aguilera
Project Manager

Columbia Analytical Services™ 2655 Park Center Drive, Suite A | Simi Valley, CA 93065 | 805.526.7161 | 805.526.7270 fax | www.caslab.com

Client:	Benchmark Environmental Engineering	CAS Project No:	R0905428
Project:	Seneca Market	New York Lab ID:	11221

CASE NARRATIVE

The sample was received intact under chain of custody on September 23, 2009 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt..

Carbon Dioxide Analysis

The sample was analyzed for carbon dioxide using a gas chromatograph equipped with a thermal conductivity detector (TCD). A known amount of liquid was displaced by injecting 8.0 milliliters of helium creating a headspace in the sample vial. Each sample vial was agitated using a sonic disrupter for fifteen minutes and then allowed to equilibrate for at least four hours. A volume of the headspace was withdrawn using a gas-tight syringe and analyzed using a manual injection technique. The amount of dissolved gas (carbon dioxide) in the original sample was calculated using Henry's Law. This method was performed with guidance from RSK 175.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for utilization of less than the complete report.

Intra-Network Chain of Custody

1 Mustard Street, Suite 250 • Rochester, NY 14609 • 585-288-5380 • FAX 585-288-8475

CAS Contact: Janice Jaeger

Project Name: Seneca Market
Project Number:
Project Manager: Michael Lesakowski
Company: Benchmark Environmental Engineering

Lab Code	Client Sample ID	# of Cont.	Matrix	Sample Date	Sample Time	Date Received	Send To	CO2 RSK 175
R0905428-005	MW-3SR	1	Water	9/23/09	1351	9/23/09	SIMIVALLEY	II

Special Instructions/Comments

Turnaround Requirements

____RUSH (Surcharges Apply)

PLEASE CIRCLE WORK DAYS

1 2 3 4 5

X STANDARD

Requested FAX Date: _____

Requested Report Date: 10/08/09

Report Requirements

___ I. Results Only

X II. Results + QC Summaries

___ III. Results + QC and Calibration Summaries

___ IV. Data Validation Report with Raw Data

PQL/MDL/J N

EDD N

Invoice Information

PO# R0905428

Bill to

Relinquished By: [signature] 10-1-09 @ 18:00

Received By: [illegible] 10/2/09 1030

Airbill Number: _____

Columbia Analytical Services, Inc.
Sample Acceptance Check Form

Client: Benchmark Environmental Engineering Work order: R0905428

Project: Seneca Market

Sample(s) received on: 10/2/09 Date opened: 10/2/09 by: MZAMORA

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by CAS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Was a **chain-of-custody** provided?	☒	☐	☐
5	Was the **chain-of-custody** properly completed?	☒	☐	☐
6	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
7	Was **sample volume** received adequate for analysis?	☒	☐	☐
8	Are samples within specified holding times?	☒	☐	☐
9	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☒	☐	☐
	Cooler Temperature _____ °C Blank Temperature 3 °C			
10	Was a **trip blank** received?	☐	☒	☐
	Trip blank supplied by CAS: _____			
11	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
12	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☒	☐	☐
	Is there a client indication that the submitted samples are **pH** preserved?	☒	☐	☐
	Were **VOA vials** checked for presence/absence of air bubbles?	☒	☐	☐
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☒	☐	☐
13	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
14	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
R0905428-005.04	40ml VOA HCL				A	
R0905428-005.05	40ml VOA HCL				A	
R0905428-005.16	40ml VOA HCL				P	
R0905428-005.17	40mL VOA NP		6		A	
R0905428-005.18	40mL VOA NP				A	

Explain any discrepancies: (include lab sample ID numbers):

*Required pH: Phenols/COD/NH3/TOC/TOX/NO3+NO2/TKN/T.PHOS, H2SO4 (pH<2); Metals, HNO3 (pH<2); CN (NaOH or NaOH/Asc Acid) (pH>12); Diss. Sulfide, NaOH (pH>12); T. Sulfide, NaOH/ZnAc (pH>12); RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Benchmark Environmental Engineering**
Client Project ID: **Seneca Market** CAS Project ID: R0905428

Carbon Dioxide

Test Code: RSK 175
Instrument ID: HP5890A/GC10/TCD
Analyst: Wade Henton
Matrix: Water
Test Notes:

Date(s) Collected: 9/23/09
Date Received: 9/23/09
Date Analyzed: 10/6/09

Client Sample ID	CAS Sample ID	Injection Volume ml(s)	Result µg/L	MRL µg/L	Data Qualifier
MW-3SR	R0905428-005	0.10	**52,000**	1,000	
Method Control Sample	P091006-MB	0.10	ND	1,000	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Re Date: 10/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Benchmark Environmental Engineering**
Client Sample ID: **Duplicate Lab Control Sample** CAS Project ID: R0905428
Client Project ID: **Seneca Market** CAS Sample ID: P091006-DLCS

Test Code: RSK 175 Date Collected: NA
Instrument ID: HP5890A/GC10/TCD Date Received: NA
Analyst: Wade Henton Date Analyzed: 10/06/09
Matrix: Water Volume(s) Analyzed: NA ml(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS ug/L	Result, LCS ug/L	Result, DLCS ug/L	% Recovery LCS	% Recovery DLCS	CAS Acceptance Limits	RPD	RPD Limit	Data Qualifier
124-38-9	Carbon Dioxide	23,000	17,700	15,900	77	69	50-150	11	30	

, = The concentration shown includes a substration of the Method Control Sample value, even if the result is less than the MRL.

Verified By: _____ Date: 10/8/09

Columbia Analytical Services™ 1 Mustard Street, Suite 250, Rochester, NY 14609-6925 | 585.288.5380 | www.caslab.com

December 31, 2009 Service Request No: R0907065

Mr. Michael Lesakowski
Benchmark Environmental Engineering
2558 Hamburg Turnpike
Suite 300
Lackawanna, NY 14218

Laboratory Results for: Seneca Market

Dear Mr. Lesakowski:

Enclosed are the results of the sample(s) submitted to our laboratory on December 14, 2009. For your reference, these analyses have been assigned our service request number **R0907065**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 135. You may also contact me via email at JJaeger@caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Janice Jaeger
Client Services Manager

CASE NARRATIVE

COMPANY: Benchmark Environmental Engineering
Seneca Market
SERVICE REQUEST #: R0907065

Benchmark samples were collected on 12/14/09 and received at CAS on 12/14/09 in good condition. The Trip blank was received in vials that were possibly contaminated with Chloromethane by the manufacturer.

INORGANICS

One water sample was analyzed for a site specific list of inorganics. Please see attached data pages for method numbers.

Site specific QC was not requested for these samples. All Blank spike recoveries were within limits.

The Laboratory blanks associated with these analyses were free of contamination.

No other analytical or QC problems were encountered.

VOLATILE ORGANICS

Six water samples were analyzed for a site specific list of Volatiles by Methods 5030/8260B from SW-846.

All the initial and continuing calibration criteria were met for all analytes.

All internal standard areas were within QC limits.

All surrogate standard recoveries were within limits.

Site specific QC was not requested for these samples. All Reference spike recoveries were within limits except Carbon disulfide was outside limits high on the 12/21/09 LCS and has been flagged with an "*". No data was affected.

The Laboratory blanks associated with these samples were free of contamination.

All samples were analyzed within required holding times.

No other analytical or QC problems were encountered.

RSK-175

One water soil sample was analyzed for Methane, Ethane and Ethene by modified method RSK-175.

All the initial and continuing calibration criteria were met for all analytes.

Site specific QC was not requested for these samples. All Blank spike recoveries were within limits.

The Laboratory Blanks associated with these analyses were free of contamination.

All samples were analyzed within holding times.

No other analytical or QC problems were encountered.

METABOLIC ACIDS

One water sample was analyzed for a site specific list of Metabolic Acids by HPLC.

All the initial and continuing calibration criteria.

Site specific QC was not requested for these samples. All Blank spike/Blank spike duplicate recoveries were within limits

The Laboratory Blanks associated with these analyses were free of contamination.

All samples were extracted and analyzed within required holding times.

No other analytical or QC problems were encountered.

CARBON DIOXIDE

One water sample was subcontracted to CAS-Simi Valley in California. Their complete report has been included.

CASE NARRATIVE

This report contains analytical results for the following samples:
Service Request Number: R0907065

Lab ID	Client ID
R0907065-001	MW-10S
R0907065-002	MW-1SR
R0907065-003	MW-7S
R0907065-004	MW-21S
R0907065-005	MW-3SR
R0907065-006	TRIP BLANK

Samples have been subcontracted to the following laboratory(ies). The subcontractor's analytical report is attached:

Columbia Analytical Services, Inc. - SIMIVALLE
Simi Valley, CA

Columbia Analytical Services

REPORT QUALIFIERS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Pesticide/Aroclors: Concentration >40% (25% for CLP) difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).
X	See Case Narrative for discussion.

ACCREDITED IN ACCORDANCE WITH nelac

CAS/Rochester Lab ID # for State Certifications[1]

NELAP Accredited
Delaware Accredited
Connecticut ID # PH0556
Florida ID # E87674
Illinois ID #200047
Maine ID #NY0032
Nebraska Accredited
Navy Facilities Engineering Service Center Approved
Nevada ID # NY-00032
New Jersey ID # NY004
New York ID # 10145
New Hampshire ID # 294100 A/B
Pennsylvania ID# 68-786
Rhode Island ID # 158
West Virginia ID # 292

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to the certifications section at www.caslab.com.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0907065
Project:	Seneca Market	**Date Collected:**	12/14/09 1040
Sample Matrix:	Water	**Date Received:**	12/14/09
Sample Name:	MW-10S	**Units:**	µg/L
Lab Code:	R0907065-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
1,1,2-Trichloroethane	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
1,2,4-Trichlorobenzene	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
1,2-Dibromo-3-chloropropane (DBCP)	2.0	U	2.0	1	NA	12/21/09 16:24		183841	
1,2-Dibromoethane	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
1,2-Dichlorobenzene	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
1,2-Dichloroethane	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
1,2-Dichloropropane	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
1,3-Dichlorobenzene	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
1,4-Dichlorobenzene	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
2-Butanone (MEK)	5.0	U	5.0	1	NA	12/21/09 16:24		183841	
2-Hexanone	5.0	U	5.0	1	NA	12/21/09 16:24		183841	
4-Methyl-2-pentanone	5.0	U	5.0	1	NA	12/21/09 16:24		183841	
Acetone	5.0	U	5.0	1	NA	12/21/09 16:24		183841	
Benzene	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
Bromodichloromethane	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
Bromoform	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
Bromomethane	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
Carbon Disulfide	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
Carbon Tetrachloride	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
Chlorobenzene	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
Chloroethane	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
Chloroform	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
Chloromethane	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
Cyclohexane	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
Dibromochloromethane	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
Dichlorodifluoromethane (CFC 12)	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
Dichloromethane	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
Ethylbenzene	1.0	U	1.0	1	NA	12/21/09 16:24		183841	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0907065
Project:	Seneca Market	**Date Collected:**	12/14/09 1040
Sample Matrix:	Water	**Date Received:**	12/14/09
Sample Name:	MW-10S	**Units:**	µg/L
Lab Code:	R0907065-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Isopropylbenzene (Cumene)	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
Methyl Acetate	2.0	U	2.0	1	NA	12/21/09 16:24		183841	
Methyl tert-Butyl Ether	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
Methylcyclohexane	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
Styrene	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
Tetrachloroethene (PCE)	**3.7**		1.0	1	NA	12/21/09 16:24		183841	
Toluene	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
Trichloroethene (TCE)	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
Vinyl Chloride	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
cis-1,2-Dichloroethene	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
cis-1,3-Dichloropropene	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
m,p-Xylenes	2.0	U	2.0	1	NA	12/21/09 16:24		183841	
o-Xylene	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
trans-1,2-Dichloroethene	1.0	U	1.0	1	NA	12/21/09 16:24		183841	
trans-1,3-Dichloropropene	1.0	U	1.0	1	NA	12/21/09 16:24		183841	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	105	85-122	12/21/09 16:24		
Dibromofluoromethane	107	89-119	12/21/09 16:24		
Toluene-d8	109	87-121	12/21/09 16:24		

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0907065
Project:	Seneca Market	**Date Collected:**	12/14/09 1056
Sample Matrix:	Water	**Date Received:**	12/14/09
Sample Name:	MW-1SR	**Units:**	µg/L
Lab Code:	R0907065-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
1,1,2-Trichloroethane	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
1,2,4-Trichlorobenzene	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
1,2-Dibromo-3-chloropropane (DBCP)	2.0	U	2.0	1	NA	12/21/09 16:57		183841	
1,2-Dibromoethane	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
1,2-Dichlorobenzene	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
1,2-Dichloroethane	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
1,2-Dichloropropane	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
1,3-Dichlorobenzene	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
1,4-Dichlorobenzene	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
2-Butanone (MEK)	5.0	U	5.0	1	NA	12/21/09 16:57		183841	
2-Hexanone	5.0	U	5.0	1	NA	12/21/09 16:57		183841	
4-Methyl-2-pentanone	5.0	U	5.0	1	NA	12/21/09 16:57		183841	
Acetone	5.0	U	5.0	1	NA	12/21/09 16:57		183841	
Benzene	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
Bromodichloromethane	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
Bromoform	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
Bromomethane	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
Carbon Disulfide	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
Carbon Tetrachloride	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
Chlorobenzene	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
Chloroethane	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
Chloroform	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
Chloromethane	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
Cyclohexane	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
Dibromochloromethane	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
Dichlorodifluoromethane (CFC 12)	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
Dichloromethane	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
Ethylbenzene	1.0	U	1.0	1	NA	12/21/09 16:57		183841	

Comments:

Client:	Benchmark Environmental Engineering	**Service Request:**	R0907065
Project:	Seneca Market	**Date Collected:**	12/14/09 1056
Sample Matrix:	Water	**Date Received:**	12/14/09
Sample Name:	MW-1SR	**Units:**	µg/L
Lab Code:	R0907065-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Isopropylbenzene (Cumene)	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
Methyl Acetate	2.0	U	2.0	1	NA	12/21/09 16:57		183841	
Methyl tert-Butyl Ether	**1.7**		1.0	1	NA	12/21/09 16:57		183841	
Methylcyclohexane	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
Styrene	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
Tetrachloroethene (PCE)	**87**		1.0	1	NA	12/21/09 16:57		183841	
Toluene	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
Trichloroethene (TCE)	**20**		1.0	1	NA	12/21/09 16:57		183841	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
Vinyl Chloride	**1.8**		1.0	1	NA	12/21/09 16:57		183841	
cis-1,2-Dichloroethene	**79**		1.0	1	NA	12/21/09 16:57		183841	
cis-1,3-Dichloropropene	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
m,p-Xylenes	2.0	U	2.0	1	NA	12/21/09 16:57		183841	
o-Xylene	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
trans-1,2-Dichloroethene	1.0	U	1.0	1	NA	12/21/09 16:57		183841	
trans-1,3-Dichloropropene	1.0	U	1.0	1	NA	12/21/09 16:57		183841	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	107	85-122	12/21/09 16:57		
Dibromofluoromethane	109	89-119	12/21/09 16:57		
Toluene-d8	111	87-121	12/21/09 16:57		

Comments:

Client:	Benchmark Environmental Engineering	**Service Request:**	R0907065
Project:	Seneca Market	**Date Collected:**	12/14/09 1123
Sample Matrix:	Water	**Date Received:**	12/14/09
Sample Name:	MW-7S	**Units:**	µg/L
Lab Code:	R0907065-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
1,1,2-Trichloroethane	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
1,2,4-Trichlorobenzene	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
1,2-Dibromo-3-chloropropane (DBCP)	2.0	U	2.0	1	NA	12/21/09 17:29		183841	
1,2-Dibromoethane	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
1,2-Dichlorobenzene	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
1,2-Dichloroethane	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
1,2-Dichloropropane	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
1,3-Dichlorobenzene	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
1,4-Dichlorobenzene	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
2-Butanone (MEK)	5.0	U	5.0	1	NA	12/21/09 17:29		183841	
2-Hexanone	5.0	U	5.0	1	NA	12/21/09 17:29		183841	
4-Methyl-2-pentanone	5.0	U	5.0	1	NA	12/21/09 17:29		183841	
Acetone	**35**		5.0	1	NA	12/21/09 17:29		183841	
Benzene	**6.5**		1.0	1	NA	12/21/09 17:29		183841	
Bromodichloromethane	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
Bromoform	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
Bromomethane	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
Carbon Disulfide	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
Carbon Tetrachloride	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
Chlorobenzene	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
Chloroethane	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
Chloroform	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
Chloromethane	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
Cyclohexane	**12**		1.0	1	NA	12/21/09 17:29		183841	
Dibromochloromethane	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
Dichlorodifluoromethane (CFC 12)	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
Dichloromethane	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
Ethylbenzene	1.0	U	1.0	1	NA	12/21/09 17:29		183841	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0907065
Project:	Seneca Market	**Date Collected:**	12/14/09 1123
Sample Matrix:	Water	**Date Received:**	12/14/09
Sample Name:	MW-7S	**Units:**	µg/L
Lab Code:	R0907065-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Isopropylbenzene (Cumene)	**1.3**		1.0	1	NA	12/21/09 17:29		183841	
Methyl Acetate	2.0	U	2.0	1	NA	12/21/09 17:29		183841	
Methyl tert-Butyl Ether	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
Methylcyclohexane	**5.1**		1.0	1	NA	12/21/09 17:29		183841	
Styrene	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
Tetrachloroethene (PCE)	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
Toluene	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
Trichloroethene (TCE)	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
Vinyl Chloride	**1.1**		1.0	1	NA	12/21/09 17:29		183841	
cis-1,2-Dichloroethene	**2.7**		1.0	1	NA	12/21/09 17:29		183841	
cis-1,3-Dichloropropene	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
m,p-Xylenes	**3.8**		2.0	1	NA	12/21/09 17:29		183841	
o-Xylene	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
trans-1,2-Dichloroethene	1.0	U	1.0	1	NA	12/21/09 17:29		183841	
trans-1,3-Dichloropropene	1.0	U	1.0	1	NA	12/21/09 17:29		183841	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	106	85-122	12/21/09 17:29		
Dibromofluoromethane	107	89-119	12/21/09 17:29		
Toluene-d8	107	87-121	12/21/09 17:29		

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0907065
Project:	Seneca Market	**Date Collected:**	12/14/09 1150
Sample Matrix:	Water	**Date Received:**	12/14/09
Sample Name:	MW-21S	**Units:**	µg/L
Lab Code:	R0907065-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
1,1,2-Trichloroethane	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
1,2,4-Trichlorobenzene	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
1,2-Dibromo-3-chloropropane (DBCP)	2.0	U	2.0	1	NA	12/21/09 18:01		183841	
1,2-Dibromoethane	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
1,2-Dichlorobenzene	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
1,2-Dichloroethane	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
1,2-Dichloropropane	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
1,3-Dichlorobenzene	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
1,4-Dichlorobenzene	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
2-Butanone (MEK)	5.0	U	5.0	1	NA	12/21/09 18:01		183841	
2-Hexanone	5.0	U	5.0	1	NA	12/21/09 18:01		183841	
4-Methyl-2-pentanone	5.0	U	5.0	1	NA	12/21/09 18:01		183841	
Acetone	5.0	U	5.0	1	NA	12/21/09 18:01		183841	
Benzene	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
Bromodichloromethane	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
Bromoform	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
Bromomethane	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
Carbon Disulfide	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
Carbon Tetrachloride	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
Chlorobenzene	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
Chloroethane	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
Chloroform	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
Chloromethane	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
Cyclohexane	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
Dibromochloromethane	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
Dichlorodifluoromethane (CFC 12)	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
Dichloromethane	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
Ethylbenzene	1.0	U	1.0	1	NA	12/21/09 18:01		183841	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0907065
Project:	Seneca Market	**Date Collected:**	12/14/09 1150
Sample Matrix:	Water	**Date Received:**	12/14/09
Sample Name:	MW-21S	**Units:**	µg/L
Lab Code:	R0907065-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Isopropylbenzene (Cumene)	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
Methyl Acetate	2.0	U	2.0	1	NA	12/21/09 18:01		183841	
Methyl tert-Butyl Ether	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
Methylcyclohexane	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
Styrene	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
Tetrachloroethene (PCE)	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
Toluene	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
Trichloroethene (TCE)	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
Vinyl Chloride	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
cis-1,2-Dichloroethene	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
cis-1,3-Dichloropropene	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
m,p-Xylenes	2.0	U	2.0	1	NA	12/21/09 18:01		183841	
o-Xylene	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
trans-1,2-Dichloroethene	1.0	U	1.0	1	NA	12/21/09 18:01		183841	
trans-1,3-Dichloropropene	1.0	U	1.0	1	NA	12/21/09 18:01		183841	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	106	85-122	12/21/09 18:01		
Dibromofluoromethane	108	89-119	12/21/09 18:01		
Toluene-d8	105	87-121	12/21/09 18:01		

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0907065
Project:	Seneca Market	**Date Collected:**	12/14/09 1218
Sample Matrix:	Water	**Date Received:**	12/14/09
Sample Name:	MW-3SR		
Lab Code:	R0907065-005	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Alkalinity as CaCO3, Total	SM 2320 B	**333**		mg/L	2.0	1	NA	12/22/09 09:27
Carbon, Total Organic (TOC)	SM20 5310 C	**3.6**		mg/L	1.0	1	NA	12/18/09 00:57
Chloride	9056	**420**		mg/L	20	100	NA	12/15/09 21:12
Nitrate as Nitrogen	9056	0.50	U	mg/L	0.50	10	NA	12/15/09 12:01
Sulfate	9056	**15.8**		mg/L	2.0	10	NA	12/15/09 12:01
Sulfide, Total	SM 4500-S2- F	0.96	U	mg/L	0.96	1	NA	12/15/09 08:30

Comments:

Client:	Benchmark Environmental Engineering	**Service Request:**	R0907065
Project:	Seneca Market	**Date Collected:**	12/14/09 1218
Sample Matrix:	Water	**Date Received:**	12/14/09
Sample Name:	MW-3SR		
Lab Code:	R0907065-005	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Iron, Dissolved	6010B	100	U	µg/L	100	1	12/15/09	12/18/09 01:07
Manganese, Dissolved	6010B	**4490**		µg/L	10	1	12/15/09	12/18/09 01:07

Comments:

Client:	Benchmark Environmental Engineering	**Service Request:**	R0907065
Project:	Seneca Market	**Date Collected:**	12/14/09 1218
Sample Matrix:	Water	**Date Received:**	12/14/09
Sample Name:	MW-3SR	**Units:**	µg/L
Lab Code:	R0907065-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
1,1,2-Trichloroethane	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
1,2,4-Trichlorobenzene	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
1,2-Dibromo-3-chloropropane (DBCP)	2.0	U	2.0	1	NA	12/21/09 18:33		183841	
1,2-Dibromoethane	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
1,2-Dichlorobenzene	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
1,2-Dichloroethane	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
1,2-Dichloropropane	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
1,3-Dichlorobenzene	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
1,4-Dichlorobenzene	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
2-Butanone (MEK)	5.0	U	5.0	1	NA	12/21/09 18:33		183841	
2-Hexanone	5.0	U	5.0	1	NA	12/21/09 18:33		183841	
4-Methyl-2-pentanone	5.0	U	5.0	1	NA	12/21/09 18:33		183841	
Acetone	5.0	U	5.0	1	NA	12/21/09 18:33		183841	
Benzene	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
Bromodichloromethane	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
Bromoform	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
Bromomethane	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
Carbon Disulfide	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
Carbon Tetrachloride	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
Chlorobenzene	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
Chloroethane	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
Chloroform	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
Chloromethane	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
Cyclohexane	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
Dibromochloromethane	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
Dichlorodifluoromethane (CFC 12)	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
Dichloromethane	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
Ethylbenzene	1.0	U	1.0	1	NA	12/21/09 18:33		183841	

Comments:

Client:	Benchmark Environmental Engineering	**Service Request:**	R0907065
Project:	Seneca Market	**Date Collected:**	12/14/09 1218
Sample Matrix:	Water	**Date Received:**	12/14/09
Sample Name:	MW-3SR	**Units:**	µg/L
Lab Code:	R0907065-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Isopropylbenzene (Cumene)	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
Methyl Acetate	2.0	U	2.0	1	NA	12/21/09 18:33		183841	
Methyl tert-Butyl Ether	**4.3**		1.0	1	NA	12/21/09 18:33		183841	
Methylcyclohexane	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
Styrene	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
Tetrachloroethene (PCE)	**4.2**		1.0	1	NA	12/21/09 18:33		183841	
Toluene	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
Trichloroethene (TCE)	**1.8**		1.0	1	NA	12/21/09 18:33		183841	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
Vinyl Chloride	**1.4**		1.0	1	NA	12/21/09 18:33		183841	
cis-1,2-Dichloroethene	**7.3**		1.0	1	NA	12/21/09 18:33		183841	
cis-1,3-Dichloropropene	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
m,p-Xylenes	2.0	U	2.0	1	NA	12/21/09 18:33		183841	
o-Xylene	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
trans-1,2-Dichloroethene	1.0	U	1.0	1	NA	12/21/09 18:33		183841	
trans-1,3-Dichloropropene	1.0	U	1.0	1	NA	12/21/09 18:33		183841	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	106	85-122	12/21/09 18:33		
Dibromofluoromethane	107	89-119	12/21/09 18:33		
Toluene-d8	111	87-121	12/21/09 18:33		

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0907065
Project:	Seneca Market	**Date Collected:**	12/14/09 1218
Sample Matrix:	Water	**Date Received:**	12/14/09
Sample Name:	MW-3SR	**Units:**	µg/L
Lab Code:	R0907065-005	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Ethane	1.0	U	1.0	1	NA	12/15/09 11:41		183240	
Ethene	1.0	U	1.0	1	NA	12/15/09 11:41		183240	
Methane	74		2.0	1	NA	12/15/09 11:41		183240	

Comments:

Client:	Benchmark Environmental Engineering	**Service Request:**	R0907065
Project:	Seneca Market	**Date Collected:**	12/14/09 1218
Sample Matrix:	Water	**Date Received:**	12/14/09
Sample Name:	MW-3SR	**Units:**	mg/L
Lab Code:	R0907065-005	**Basis:**	NA

Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC)

Analytical Method: Organic Acids

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Pyruvic Acid	0.50	U	0.50	1	NA	12/15/09 13:42		183159	
Acetic Acid	1.0	U	1.0	1	NA	12/15/09 13:42		183159	
Butanoic Acid (Butyric Acid)	2.0	U	2.0	1	NA	12/15/09 13:42		183159	
Lactic Acid	1.0	U	1.0	1	NA	12/15/09 13:42		183159	
Propionic Acid	1.0	U	1.0	1	NA	12/15/09 13:42		183159	

Comments:

Client: Benchmark Environmental Engineering
Project: Seneca Market
Sample Matrix: Water

Service Request: R0907065
Date Collected: 12/14/09
Date Received: 12/14/09

Sample Name: TRIP BLANK
Lab Code: R0907065-006

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
1,1,2-Trichloroethane	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
1,2,4-Trichlorobenzene	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
1,2-Dibromo-3-chloropropane (DBCP)	2.0	U	2.0	1	NA	12/21/09 19:05		183841	
1,2-Dibromoethane	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
1,2-Dichlorobenzene	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
1,2-Dichloroethane	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
1,2-Dichloropropane	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
1,3-Dichlorobenzene	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
1,4-Dichlorobenzene	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
2-Butanone (MEK)	5.0	U	5.0	1	NA	12/21/09 19:05		183841	
2-Hexanone	5.0	U	5.0	1	NA	12/21/09 19:05		183841	
4-Methyl-2-pentanone	5.0	U	5.0	1	NA	12/21/09 19:05		183841	
Acetone	5.0	U	5.0	1	NA	12/21/09 19:05		183841	
Benzene	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
Bromodichloromethane	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
Bromoform	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
Bromomethane	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
Carbon Disulfide	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
Carbon Tetrachloride	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
Chlorobenzene	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
Chloroethane	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
Chloroform	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
Chloromethane	**2.4**		1.0	1	NA	12/21/09 19:05		183841	
Cyclohexane	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
Dibromochloromethane	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
Dichlorodifluoromethane (CFC 12)	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
Dichloromethane	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
Ethylbenzene	1.0	U	1.0	1	NA	12/21/09 19:05		183841	

Comments:

Client:	Benchmark Environmental Engineering	**Service Request:**	R0907065
Project:	Seneca Market	**Date Collected:**	12/14/09
Sample Matrix:	Water	**Date Received:**	12/14/09
Sample Name:	TRIP BLANK	**Units:**	µg/L
Lab Code:	R0907065-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Isopropylbenzene (Cumene)	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
Methyl Acetate	2.0	U	2.0	1	NA	12/21/09 19:05		183841	
Methyl tert-Butyl Ether	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
Methylcyclohexane	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
Styrene	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
Tetrachloroethene (PCE)	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
Toluene	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
Trichloroethene (TCE)	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
Vinyl Chloride	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
cis-1,2-Dichloroethene	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
cis-1,3-Dichloropropene	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
m,p-Xylenes	2.0	U	2.0	1	NA	12/21/09 19:05		183841	
o-Xylene	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
trans-1,2-Dichloroethene	1.0	U	1.0	1	NA	12/21/09 19:05		183841	
trans-1,3-Dichloropropene	1.0	U	1.0	1	NA	12/21/09 19:05		183841	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	107	85-122	12/21/09 19:05		
Dibromofluoromethane	108	89-119	12/21/09 19:05		
Toluene-d8	111	87-121	12/21/09 19:05		

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0907065
Project:	Seneca Market	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R0907065-MB	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Alkalinity as CaCO3, Total	SM 2320 B	2.0	U	mg/L	2.0	1	NA	12/22/09 09:27
Carbon, Total Organic (TOC)	SM20 5310 C	1.0	U	mg/L	1.0	1	NA	12/17/09 16:17
Chloride	9056	0.20	U	mg/L	0.20	1	NA	12/15/09 17:47
Nitrate as Nitrogen	9056	0.050	U	mg/L	0.050	1	NA	12/15/09 11:29
Sulfate	9056	0.20	U	mg/L	0.20	1	NA	12/15/09 11:29
Sulfide, Total	SM 4500-S2- F	1.0	U	mg/L	1.0	1	NA	12/15/09 08:30

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0907065
Project:	Seneca Market	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R0907065-MB	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Iron, Dissolved	6010B	100	U	µg/L	100	1	12/15/09	12/17/09 21:54
Manganese, Dissolved	6010B	10	U	µg/L	10	1	12/15/09	12/17/09 21:54

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0907065
Project:	Seneca Market	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ0912583-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
1,1,2-Trichloroethane	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
1,2,4-Trichlorobenzene	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
1,2-Dibromo-3-chloropropane (DBCP)	2.0	U	2.0	1	NA	12/21/09 13:37		183841	
1,2-Dibromoethane	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
1,2-Dichlorobenzene	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
1,2-Dichloroethane	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
1,2-Dichloropropane	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
1,3-Dichlorobenzene	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
1,4-Dichlorobenzene	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
2-Butanone (MEK)	5.0	U	5.0	1	NA	12/21/09 13:37		183841	
2-Hexanone	5.0	U	5.0	1	NA	12/21/09 13:37		183841	
4-Methyl-2-pentanone	5.0	U	5.0	1	NA	12/21/09 13:37		183841	
Acetone	5.0	U	5.0	1	NA	12/21/09 13:37		183841	
Benzene	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
Bromodichloromethane	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
Bromoform	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
Bromomethane	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
Carbon Disulfide	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
Carbon Tetrachloride	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
Chlorobenzene	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
Chloroethane	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
Chloroform	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
Chloromethane	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
Cyclohexane	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
Dibromochloromethane	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
Dichlorodifluoromethane (CFC 12)	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
Dichloromethane	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
Ethylbenzene	1.0	U	1.0	1	NA	12/21/09 13:37		183841	

Comments:

Client:	Benchmark Environmental Engineering	**Service Request:**	R0907065
Project:	Seneca Market	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ0912583-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Isopropylbenzene (Cumene)	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
Methyl Acetate	2.0	U	2.0	1	NA	12/21/09 13:37		183841	
Methyl tert-Butyl Ether	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
Methylcyclohexane	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
Styrene	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
Tetrachloroethene (PCE)	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
Toluene	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
Trichloroethene (TCE)	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
Vinyl Chloride	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
cis-1,2-Dichloroethene	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
cis-1,3-Dichloropropene	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
m,p-Xylenes	2.0	U	2.0	1	NA	12/21/09 13:37		183841	
o-Xylene	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
trans-1,2-Dichloroethene	1.0	U	1.0	1	NA	12/21/09 13:37		183841	
trans-1,3-Dichloropropene	1.0	U	1.0	1	NA	12/21/09 13:37		183841	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	106	85-122	12/21/09 13:37		
Dibromofluoromethane	108	89-119	12/21/09 13:37		
Toluene-d8	110	87-121	12/21/09 13:37		

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0907065
Project:	Seneca Market	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ0912439-01	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Ethane	1.0	U	1.0	1	NA	12/15/09 08:27		183240	
Ethene	1.0	U	1.0	1	NA	12/15/09 08:27		183240	
Methane	2.0	U	2.0	1	NA	12/15/09 08:27		183240	

Comments:

Client:	Benchmark Environmental Engineering	**Service Request:**	R0907065
Project:	Seneca Market	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	mg/L
Lab Code:	RQ0912430-01	**Basis:**	NA

Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC)

Analytical Method: Organic Acids

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Pyruvic Acid	0.50	U	0.50	1	NA	12/15/09 11:52		183159	
Acetic Acid	1.0	U	1.0	1	NA	12/15/09 11:52		183159	
Butanoic Acid (Butyric Acid)	2.0	U	2.0	1	NA	12/15/09 11:52		183159	
Lactic Acid	1.0	U	1.0	1	NA	12/15/09 11:52		183159	
Propionic Acid	1.0	U	1.0	1	NA	12/15/09 11:52		183159	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Benchmark Environmental Engineering
Project: Seneca Market
Sample Matrix: Water

Service Request: R0907065
Date Analyzed: 12/15/09

Lab Control Sample Summary
Sulfide, Iodometric 20th Ed.

Units: mg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R0907065-LCS1 Result	Expected	% Rec	Duplicate Lab Control Sample R0907065-DLCS1 Result	Expected	% Rec	% Rec Limits	RPD	RPD Limit
Sulfide, Total	SM 4500-S2- F	**4.33**	4.5	97	**4.30**	4.5	96	56 - 138	1	20

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Benchmark Environmental Engineering
Project: Seneca Market
Sample Matrix: Water

Service Request: R0907065
Date Analyzed: 12/15/09 - 12/22/09

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R0907065-LCS2 Result	Expected	% Rec	% Rec Limits
Carbon, Total Organic (TOC)	SM20 5310 C	**9.96**	10.0	100	86 - 117
Chloride	9056	**1.87**	2.00	94	90 - 110
Sulfate	9056	**1.95**	2.00	98	90 - 110
Alkalinity as CaCO3, Total	SM 2320 B	**18.0**	20.0	90	90 - 108
Nitrate as Nitrogen	9056	**0.952**	1.00	95	90 - 110

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Benchmark Environmental Engineering
Project: Seneca Market
Sample Matrix: Water

Service Request: R0907065
Date Analyzed: 12/17/09

Lab Control Sample Summary
Inorganic Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R0907065-LCS Result	Expected	% Rec	% Rec Limits
Iron, Dissolved	6010B	**972**	1000	97	80 - 120
Manganese, Dissolved	6010B	**482**	500	96	80 - 120

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Benchmark Environmental Engineering
Project: Seneca Market
Sample Matrix: Water

Service Request: R0907065
Date Analyzed: 12/21/09

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Units: µg/L
Basis: NA

Analysis Lot: 183841

Analyte Name	Lab Control Sample RQ0912583-02 Result	Expected	% Rec		% Rec Limits
1,1,1-Trichloroethane (TCA)	**19.9**	20.0	100		70 - 130
1,1,2,2-Tetrachloroethane	**22.1**	20.0	111		70 - 130
1,1,2-Trichloroethane	**21.1**	20.0	106		70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	**21.4**	20.0	107		70 - 130
1,1-Dichloroethane (1,1-DCA)	**20.2**	20.0	101		70 - 130
1,1-Dichloroethene (1,1-DCE)	**19.2**	20.0	96		70 - 130
1,2,4-Trichlorobenzene	**20.7**	20.0	103		70 - 130
1,2-Dibromo-3-chloropropane (DBCP)	**20.3**	20.0	101		50 - 150
1,2-Dibromoethane	**22.4**	20.0	112		70 - 130
1,2-Dichlorobenzene	**20.8**	20.0	104		70 - 130
1,2-Dichloroethane	**21.0**	20.0	105		70 - 130
1,2-Dichloropropane	**20.6**	20.0	103		70 - 130
1,3-Dichlorobenzene	**20.1**	20.0	101		70 - 130
1,4-Dichlorobenzene	**19.7**	20.0	99		70 - 130
2-Butanone (MEK)	**21.7**	20.0	108		50 - 150
2-Hexanone	**21.3**	20.0	106		70 - 130
4-Methyl-2-pentanone	**22.5**	20.0	113		70 - 130
Acetone	**22.5**	20.0	113		50 - 150
Benzene	**19.1**	20.0	95		70 - 130
Bromodichloromethane	**20.8**	20.0	104		70 - 130
Bromoform	**25.1**	20.0	125		70 - 130
Bromomethane	**21.2**	20.0	106		50 - 150
Carbon Disulfide	**29.5**	20.0	148	*	70 - 130
Carbon Tetrachloride	**19.8**	20.0	99		70 - 130
Chlorobenzene	**19.8**	20.0	99		70 - 130
Chloroethane	**19.7**	20.0	99		70 - 130
Chloroform	**20.0**	20.0	100		70 - 130
Chloromethane	**20.0**	20.0	100		70 - 130
Cyclohexane	**19.8**	20.0	99		50 - 150
Dibromochloromethane	**23.4**	20.0	117		70 - 130
Dichlorodifluoromethane (CFC 12)	**21.2**	20.0	106		70 - 130
Dichloromethane	**20.7**	20.0	103		70 - 130
Ethylbenzene	**19.6**	20.0	98		70 - 130
Isopropylbenzene (Cumene)	**20.4**	20.0	102		70 - 130
Methyl Acetate	**21.4**	20.0	107		50 - 150
Methyl tert-Butyl Ether	**22.6**	20.0	113		70 - 130

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Benchmark Environmental Engineering
Project: Seneca Market
Sample Matrix: Water

Service Request: R0907065
Date Analyzed: 12/21/09

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Units: µg/L
Basis: NA

Analysis Lot: 183841

Analyte Name	Lab Control Sample RQ0912583-02 Result	Expected	% Rec	% Rec Limits
Methylcyclohexane	**19.6**	20.0	98	50 - 150
Styrene	**20.5**	20.0	103	70 - 130
Tetrachloroethene (PCE)	**18.9**	20.0	94	70 - 130
Toluene	**19.6**	20.0	98	70 - 130
Trichloroethene (TCE)	**19.0**	20.0	95	70 - 130
Trichlorofluoromethane (CFC 11)	**20.7**	20.0	103	70 - 130
Vinyl Chloride	**20.7**	20.0	103	70 - 130
cis-1,2-Dichloroethene	**19.7**	20.0	99	70 - 130
cis-1,3-Dichloropropene	**20.9**	20.0	104	70 - 130
m,p-Xylenes	**40.6**	40.0	101	70 - 130
o-Xylene	**20.3**	20.0	102	70 - 130
trans-1,2-Dichloroethene	**19.2**	20.0	96	70 - 130
trans-1,3-Dichloropropene	**19.6**	20.0	98	70 - 130

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Benchmark Environmental Engineering
Project: Seneca Market
Sample Matrix: Water

Service Request: R0907065
Date Analyzed: 12/15/09

Lab Control Sample Summary
Dissolved Gases by GC/FID

Analytical Method: RSK 175

Units: µg/L
Basis: NA

Analysis Lot: 183240

Analyte Name	Lab Control Sample RQ0912439-02 Result	Expected	% Rec	% Rec Limits
Ethane	**23.1**	26.1	88	57 - 150
Ethene	**21.2**	24.3	87	52 - 149
Methane	**23.0**	26.3	88	44 - 157

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Benchmark Environmental Engineering
Project: Seneca Market
Sample Matrix: Water

Service Request: R0907065
Date Analyzed: 12/15/09

Lab Control Sample Summary
Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC)

Analytical Method: Organic Acids

Units: mg/L
Basis: NA

Analysis Lot: 183159

	Lab Control Sample RQ0912430-02			Duplicate Lab Control Sample RQ0912430-03			% Rec		RPD
Analyte Name	**Result**	**Expected**	**% Rec**	**Result**	**Expected**	**% Rec**	**Limits**	**RPD**	**Limit**
Pyruvic Acid	**1.11**	1.01	110	**1.12**	1.01	111	70 - 130	1	30
Acetic Acid	**10.0**	11.1	90	**10.1**	11.1	91	70 - 135	1	30
Butanoic Acid (Butyric Acid)	**8.59**	10.2	84	**8.71**	10.2	85	82 - 118	1	30
Lactic Acid	**11.3**	11.1	102	**11.5**	11.1	103	70 - 117	1	30
Propionic Acid	**10.4**	10.1	103	**10.4**	10.1	103	80 - 125	0	30

Comments:

Columbia Analytical Services™ CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

SR #

CAS Contact

www.caslab.com One Mustard St., Suite 250 • Rochester, NY 14609-0859(585) 288-5380 • 800-695-7222 x11 • FAX (585) 288-8475 PAGE 1 OF 1

Project Name: Seneca Markets GWM	Project Number: 8092-002-200
Project Manager: Mike Lesakowski	Report CC:
Company/Address: Benchmark Environmental, 2558 Hamburg Turnpike Suite 300	
Phone #: (716) 856-0599	FAX#: (716) 856-0583
Sampler's Signature: Paul W Werthman	Sampler's Printed Name: Paul W Werthman

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1 2 1 1 5 0 0 0 0

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOA's ☒ 8260 ☐ 624 ☐ CLP	GC/MS SVOA's ☐ 8270 ☐ 625 ☐ CLP	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES ☐ 8081 ☐ 608 ☐ CLP	PCB's ☐ 8082 ☐ 608 ☐ CLP	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	TOC	CO2	RSK	Alk	Soluble Fe	NO3, SO4, Cl	Metabolic Acids	REMARKS/ ALTERNATE DESCRIPTION
MW-10S		12/14	10:40	GW		3														
MW-15R			10:56	GW		3														
MW-7S			11:23	GW		3														
MW-21S			11:50	GW		3														
MW-33R			12:18	GW		3					*	1	3	3	3	1	1	1	1	
Trip Blank																				

Preservative Key: 0. NONE 1. HCL 2. HNO_3 3. H_2SO_4 4. NaOH 5. Zn. Acetate 6. MeOH 7. $NaHSO_4$ 8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS

Metals Soluable Iron + Manganese (field filtered)

Metabolic Acids - lactic, pyravic, acetic propionic and butyric

See QAPP ☐

TURNAROUND REQUIREMENTS

____ RUSH (SURCHARGES APPLY)

____ 24 hr ____ 48 hr ____ 5 day

X STANDARD

REQUESTED FAX DATE

REQUESTED REPORT DATE

REPORT REQUIREMENTS

____ I. Results Only

____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)

____ III. Results + QC and Calibration Summaries

____ IV. Data Validation Report with Raw

____ V. Specialized Forms / Custom Re

Edata ____ Yes ____ No

INVOICE INFORMATION

PO#

BILL TO:

R0907065
Benchmark Environmental Engineering
Seneca Market

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: Paul W Werthman	Signature: [illegible]	Signature	Signature	Signature	Signature
Printed Name: Paul W Werthman	Printed Name: CAS	Printed Name	Printed Name	Printed Name	Printed Name
Firm: Benchmark	Firm: 12/14/09 / 1549	Firm	Firm	Firm	Firm
Date/Time: 12-14-09	Date/Time	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

SCOC-1102-08

Cooler Receipt And Preservation Check Form

Project/Client Benchmark Submission Number R907065

Cooler received on 12/4/09 by: DSW **COURIER:** CAS UPS FEDEX VELOCITY ~~CLIENT~~

1.	Were custody seals on outside of cooler?	YES	NO			
2.	Were custody papers properly filled out (ink, signed, etc.)?	YES	NO			
3.	Did all bottles arrive in good condition (unbroken)?	YES	NO			
4.	Did any VOA vials have significant* air bubbles?	YES	NO	N/A		
5.	Were **Ice** or **Ice packs** present?	YES	NO			
6.	Where did the bottles originate?	CAS/ROC, CLIENT				
7.	Temperature of cooler(s) upon receipt:	6°				
	Is the temperature within 0° - 6° C?:	Yes	Yes	Yes	Yes	Yes
	If No, Explain Below	No	No	No	No	No

Date/Time Temperatures Taken: 12/4/09 / 1600

Thermometer ID: IR GUN#3 / IR GUN#4 Reading From: Temp Blank / Sample Bottle

If out of Temperature, note packing/ice condition. Client Approval to Run Samples: _____

PC Secondary Review: JMS 12/4/09

Cooler Breakdown: Date: 12/4/09 by: DSW

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	YES	NO
2.	Did all bottle labels and tags agree with custody papers?	YES	NO
3.	Were correct containers used for the tests indicated?	YES	NO
4.	Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated		N/A

Explain any discrepancies: _____

pH	Reagent	YES	NO	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3	✓		BDB26985	11/10				
≤2	H_2SO_4			WC926943	10/10				
Residual Chlorine (-)	For TCN and Phenol			If present, contact PM to add ascorbic acid					
	$Na_2S_2O_3$	-	-						
	Zn Aceta	-	-	WC926045	08/10				
	HCl	*	*	H02401	11/10				

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 038646, 092809-WM, 9-253-001, 10909-255

Other Comments: 12/4/09 DSW
MW-33-35R, and trip blank were in the contaminated VOA vial lot.

PC Secondary Review: JMS 12/29/09 *significant air bubbles are greater than 5-6 mm

Columbia Analytical Services™ 2655 Park Center Drive, Suite A | Simi Valley, CA 93065 | 805.526.7161 | 805.526.7270 fax | www.caslab.com

LABORATORY REPORT

December 22, 2009

Michael Lesakowski
Benchmark Environmental Engineering
2558 Hamburg Turnpike Suite 300
Lackawanna, NY 14218

RE: Seneca Market

Dear Michael:

Enclosed are the results of the sample submitted to our laboratory on December 14, 2009. For your reference, these analyses have been assigned our service request number R0907065.

All analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein. Your report contains _____ pages.

Columbia Analytical Services, Inc. is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA20007; The American Industrial Hygiene Association, Laboratory #101661; Department of the Navy (NFESC); Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-09-TX; Minnesota Department of Health, Certificate No. 11495AA. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

Columbia Analytical Services, Inc.

Kate Aguilera
Project Manager

Columbia Analytical Services™ 2655 Park Center Drive, Suite A | Simi Valley, CA 93065 | 805.526.7161 | 805.526.7270 fax | www.caslab.com

Client:	Benchmark Environmental Engineering	CAS Project No:	R0907065
Project:	Seneca Market	New York Lab ID:	11221

CASE NARRATIVE

The sample was received intact under chain of custody on December 14, 2009 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Carbon Dioxide Analysis

The sample was analyzed for carbon dioxide using a gas chromatograph equipped with a thermal conductivity detector (TCD). A known amount of liquid was displaced by injecting 8.0 milliliters of helium creating a headspace in the sample vial. Each sample vial was agitated using a sonic disrupter for fifteen minutes and then allowed to equilibrate for at least four hours. A volume of the headspace was withdrawn using a gas-tight syringe and analyzed using a manual injection technique. The amount of dissolved gases (carbon dioxide and oxygen/argon) in the original sample was calculated using Henry's Law. This method was performed with guidance from RSK 175.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for utilization of less than the complete report.

Client: Benchmark Environmental Engineering
Project: Seneca Market

Service Request: R0907065

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R0907065-001	MW-10S	12/14/09	10:40
R0907065-002	MW-1SR	12/14/09	10:56
R0907065-003	MW-7S	12/14/09	11:23
R0907065-004	MW-21S	12/14/09	11:50
R0907065-005	MW-3SR	12/14/09	12:18
R0907065-006	TRIP BLANK	12/14/09	

Intra-Network Chain of Custody

1 Mustard Street, Suite 250 • Rochester, NY 14609 • 585-288-5380 • FAX 585-288-8475

CAS Contact: Janice Jaeger

Project Name: Seneca Market
Project Number:
Project Manager: Michael Lesakowski
Company: Benchmark Environmental Engineering

Lab Code	Client Sample ID	# of Cont.	Matrix	Sample Date	Sample Time	Date Received	Send To	CO2 RSK 175
R0907065-005	MW-3SR	3	Water	12/14/09	1218	12/14/09	SIMIVALLEY	II

Special Instructions/Comments

Turnaround Requirements
____ **RUSH** (Surcharges Apply)
PLEASE CIRCLE WORK DAYS
1 2 3 4 5
____ **STANDARD**
Requested FAX Date: _____
Requested Report Date: 12/28/09

Report Requirements
____ I. Results Only
____ II. Results + QC Summaries
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
PQL/MDL/J N
EDD N

Invoice Information
PO# R0907065
Bill to
40

Relinquished By: [signature] 12/14/09 1800 Received By: [signature] 12/15/09 1200 Airbill Number: _____

Columbia Analytical Services, Inc.
Sample Acceptance Check Form

Client: Benchmark Environmental Engineering Work order: R0907065

Project: Seneca Market

Sample(s) received on: 12/15/2009 Date opened: 12/15/2009 by: MZAMORA

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by CAS?**	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Was a **chain-of-custody** provided?	☒	☐	☐
5	Was the **chain-of-custody** properly completed?	☒	☐	☐
6	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
7	Was **sample volume** received adequate for analysis?	☒	☐	☐
8	Are samples within specified holding times?	☒	☐	☐
9	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☒	☐	☐
	Cooler Temperature _____ °C Blank Temperature 4 °C			
10	Was a **trip blank** received?	☐	☒	☐
	Trip blank supplied by CAS: _____			
11	Were **custody seals** on outside of cooler/Box?	☒	☐	☐
	Location of seal(s)? Front of cooler, covering opening. Sealing Lid?	☒	☐	☐
	Were signature and date included?	☒	☐	☐
	Were seals intact?	☒	☐	☐
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
12	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
13	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
14	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
R0907065-005.14	40mL VOA NP		6		A	
R0907065-005.15	40mL VOA NP				A	
R0907065-005.16	40mL VOA NP				A	

Explain any discrepancies: (include lab sample ID numbers): _____

*Required pH: Phenols/COD/NH3/TOC/TOX/NO3+NO2/TKN/T.PHOS, H2SO4 (pH<2); Metals, HNO3 (pH<2); CN (NaOH or NaOH/Asc Acid) (pH>12); Diss. Sulfide, NaOH (pH>12); T. Sulfide, NaOH/ZnAc (pH>12) RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Benchmark Environmental Engineering**
Client Project ID: **Seneca Market**

CAS Project ID: R0907065

Carbon Dioxide

Test Code: RSK 175
Instrument ID: HP5890A/GC10/TCD
Analyst: Wade Henton
Matrix: Water
Test Notes:

Date(s) Collected: 12/14/09
Date Received: 12/14/09
Date Analyzed: 12/16/09

Client Sample ID	CAS Sample ID	Injection Volume ml(s)	Result µg/L	MRL µg/L	Data Qualifier
MW-3SR	R0907065-005	0.10	**67,000**	1,000	
Method Control Sample	P091216-MB	0.10	ND	1,000	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 12/18/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Benchmark Environmental Engineering**
Client Sample ID: **Duplicate Lab Control Sample**
Client Project ID: **Seneca Market**

CAS Project ID: R0907065
CAS Sample ID: P091216-DLCS

Test Code: RSK 175
Instrument ID: HP5890A/GC10/TCD
Analyst: Wade Henton
Matrix: Water
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 12/16/09
Volume(s) Analyzed: NA ml(s)

CAS #	Compound	Spike Amount LCS / DLCS ug/L	Result$_1$ LCS ug/L	Result$_1$ DLCS ug/L	% Recovery LCS	% Recovery DLCS	CAS Acceptance Limits	RPD	RPD Limit	Data Qualifier
124-38-9	Carbon Dioxide	23,000	22,400	20,000	**97**	**87**	50-150	11	30	

$_1$ = The concentration shown includes a substration of the Method Control Sample value, even if the result is less than the MRL.

Verified By: _____ Date: 12/18/09

ATTACHMENT 2

PASSIVE DIFFUSION BAG FIELD OPERATING PROCEDURE

FOP 081.0

GROUNDWATER SAMPLE COLLECTION PROCEDURES FOR PASSIVE DIFFUSION BAG SAMPLERS

PURPOSE

This procedure describes the methods for collecting volatile organic compound (VOC) groundwater samples from monitoring wells and domestic supply wells using passive diffusion bag samplers (PDBs). The PDB sampler is a semi-permeable low-density polyethylene membrane designed to allow VOCs to flow into the bag until equilibrium is maintained between the VOCs in the formation and in the PDB.

STORAGE & HANDLING INFORMATION

The bags will be pre-filled by an NYSDOH-ELAP Certified laboratory with 220 mL of certified laboratory grade (analyte free & deionized) water. Keep bags stored in the shipping pouch, in a dry clean volatile free area to prevent accidental contamination. Do not keep bags in the storage area for longer then two weeks. If additional storage time is required, contact the laboratory for Mylar pouches. Handle each PDB separately with clean nitrile gloves. Always change gloves before handling a new PDB. Avoid handling bags bare-handed.

INSTALLATION

Prior to placement of the PDB into the monitoring well, record bag serial/identification numbers and sample location. Each bag will be equipped with a stainless steel weight and harness line (stainless steel or 3/16 inch twisted polypropylene rope) that will be firmly attached to the protective casing of the monitoring well. Calculate the approximate amount of line needed so the PDB can be suspended at the center of the well screen interval (if using 3/16 inch twisted polypropylene rope take into account any stretching that might occur over

time). After the correct amount of line is calculated, slowly lower the PDB into monitoring well to prevent the PDB from getting caught or hung up in the well casing. After installation note the time and date, carefully lock the monitoring well and proceed to the next location. Laboratory tests have demonstrated that two weeks is the minimum time that is needed for most VOCs in the groundwater formation to reach equilibrium with the analyte free, deionized water in the diffusion bag. After this initial equilibrium period has occurred there is no specific recovery time, thus when the next round of scheduled sampling is needed PDBs from the previous round can be recovered and be replaced by a new PDB.

RECOVERY

After the minimum two week equilibrium period has passed, return to the monitoring well, and carefully unlock well. Note time, date and well ID. Don a new pair of disposable nitrile gloves, and slowly begin to remove PDB; the line should be carefully spooled together and placed in a clean plastic bag large enough to contain all of the retrieval line. The line should not be allowed to contact the ground surface. Upon retrieval of PDB and harness, inspect bag carefully damage, and check serial number or bag ID against previously recorded numbers. The PDB can be opened by removing the threaded screw cap. If PDBs have no threaded screw cap, a pair of scissors can be used to cut a forty-five degree angle at corner of bag. If this type of bag has been supplied, make sure scissors are thoroughly pre-cleaned with Alconox and distilled water between sample locations.

Once bag has been opened, the laboratory supplied 40 ml HCL pre - preserved vial must be filled immediately. PDBs should not be allowed to come into contact with other PDBs, as cross contamination can occur between bags. The vials must be held at a slight

angle and filled slowly so little to no aeration of the groundwater can occur. Vials must be filled with zero headspace (no air bubbles) in the sample. To ensure this, after the vial has been filled, twist cap on tightly; turn vial upside down and lightly tap. If no air bubbles are visible, proceed with filling the next vial. After each vial bottle for that specific monitoring well have been filled, take remaining groundwater (if any) and record groundwater quality for pH, temperature, conductivity and ORP (oxidation reduction potential).

Following sampling, the empty PDBs can be disposed of as solid waste. If additional sampling events are being performed at the site, the PDBs for the next round of sampling can be placed into the well following the same procedures described above.

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

GROUNDWATER WELL
PDB COLLECTION & RECOVERY LOG
(PASSIVE DIFFUSION BAG)

Project Name:	WELL NUMBER:
Project Number:	Sample Matrix: Water
Client:	Weather:

WELL DATA:

Casing Diameter (inches):	Casing Material:
Screened interval (fbTOR):	Screen Material:
Static Water Level (fbTOR):	Bottom Depth (fbTOR):
Elevation Top of Well Riser (fmsl):	Ground Surface Elevation (fmsl): 500.86
Elevation Top of Screen (fmsl):	Stick-up (feet):

PDB DATA:

Depth of PDB in well (fbTOR):	Is PDB harness and line dedicated to sample location?	yes	no
Condition of Well:	Is PDB located at center of screen?	yes	no
Field Personnel:			

Installation:

Date of PDB placement:	
Time of PDB placement:	

Retrieval:

Date of PDB retrieval:	
Time of PDB retrieval:	
Condition of PDB:	

If PDB contains visible sediment, check PDB integrity and re-sample.

COMMENTS:

PREPARED BY: