BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

March 27, 2009

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
First Quarter 2009 Groundwater Monitoring

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 February 2009 groundwater monitoring event at the Seneca Market Site in Watkins Glen, New York (Site; see Figure 1).

This groundwater monitoring event included sampling and analysis of MW-1SR, MW-3SR, MW-7S, MW-10S and MW-21S as well as groundwater gauging of MW-4S and MW-9S. 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 (attached) summarizes the analytical and field results from the February 2009 groundwater monitoring event as well as historic groundwater monitoring events completed by Benchmark and the NYSDEC.

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-3SR, MW-7S, MW10S or MW-21S. Furthermore, concentrations of chlorinated VOCs in MW-1SR have significantly decreased over time. Of particular significance, MW-3SR, located in the area of VOC source soil removal by Seneca Market, has decreased from 6,203 micrograms per liter (ug/L) total chlorinated VOCs in June 2000 to 4 ug/L total chlorinated VOCs in February 2009. The

results of the February 2009 sampling event also confirm that biodegradation of VOCs in groundwater is occurring. This is evidenced by the overall reduction in concentrations of chlorinated VOCs, the presence of tetrachloroethene (PCE) breakdown products, including trichloroethene (TCE), cis-1,2-DCE and vinyl chloride, and the presence of end-product dissolved gases, include carbon dioxide and methane.

Concentrations of petroleum VOCs, including, benzene, toluene, xylene and methyl tert butyl ether (MtBE), in MW-7S and MtBE in MW-3SR 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-21S, MW-4S and MW-9S were surveyed on February 27, 2009 and static groundwater elevations were recorded. Table 2 shows the relative groundwater elevations and Figure 1 includes estimated groundwater flow direction. The groundwater flow is generally consistent with historic groundwater gauging data.

The second quarterly groundwater sampling event for 2009 will be completed in May 2009. 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)

TABLE

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 1
SUMMARY OF GROUNDWATER MONITORING RESULTS
First Quarter 2009 (02-27-09)

SENECA MARKET I, LLC SITE
WATKINS GLEN, NEW YORK

Parameter [1]	Sample Location																								GWQS[6]
	MW-1S R				MW-3S R							MW-7S							MW-10S					MW-21S		
	1/1/93[2]	4/1/93[2]	11/21/08	02/27/09	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	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	1/1/93[2]	4/1/93[2]	11/21/08	11/21/08 Blind Duplicate	02/27/09	11/21/08	02/27/09	
TCL Volatile Organic Compounds (VOCs) - ug/L																									
Acetone	ND	ND	1.4 J	ND	R	R	ND	24	ND	ND	ND	R	ND	ND	ND	ND	ND	ND	20	R	ND	ND	ND	1.8 J	ND	**50**
Benzene	ND	ND	ND	ND	ND	R	ND	2	ND	ND	ND	6 J	R	7	11	ND	4.7	27	ND	R	ND	ND	ND	ND	ND	**1**
Bromomethane (Methyl bromide)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 BJ	ND	ND	ND	0.33 BJ	ND	ND	ND	ND	**5**
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	ND	ND	ND	**50**
Carbon disulfide	ND	ND	0.2 J	ND	ND	ND	ND	29	ND	ND	ND	ND	ND	ND	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	8.8	21	ND	ND	ND	ND	ND	ND	ND	**--**
1,1-Dichloroethene	ND	ND	0.2 J	ND	ND	ND	1	13	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5**
cis-1,2-Dichloroethene	NA	NA	91	75	NA	NA	NA	NA	NA	13	3	NA	NA	NA	NA	NA	4.1	3.5	NA	NA	ND	ND	ND	0.21 J	ND	**5**
trans-1,2-Dichloroethene	NA	NA	0.71 J	ND	NA	NA	NA	NA	NA	0.24 J	ND	NA	NA	NA	NA	NA	ND	ND	NA	NA	ND	ND	ND	ND	ND	**5**
Total 1,2-Dichloroethene	43	40	NA	ND	770	87	1900	5500	2200	NA	ND	ND	3 J	6	36	6	NA	ND	ND	ND	NA	NA	ND	ND	ND	**5**
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6 J	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	ND	ND	ND	ND	1.4	6.9	ND	ND	ND	ND	ND	ND	ND	**--**
Methylene chloride	R	ND	ND	ND	R	ND	ND	ND	ND	ND	ND	R	R	ND	ND	ND	ND	ND	ND	3 J	ND	ND	ND	ND	ND	**5**
4-methyl-2-pentanone (MIBK)	9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**--**
Methyl tert butyl ether (MTBE)	ND	ND	1.8	1.6	ND	ND	ND	ND	ND	4.6	5.1	ND	ND	ND	ND	ND	4.5	3.7	ND	ND	ND	ND	ND	0.55 J	ND	**10**
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	**930**
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4 J	ND	ND	ND	ND	ND	**5**
Tetrachloroethene	410	360	88	70	88	8	77	83	ND	24	ND	ND	ND	ND	5	6	ND	ND	6 J	R	3.2	3.2	4	ND	ND	**5**
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	0.69 J	5.7	ND	0.8 J	ND	ND	ND	ND	ND	**5**
Trichloroethene	22 J	26	21	17	190	20	83	200	14	7.7	ND	ND	ND	ND	4	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5**
Vinyl chloride	ND	ND	1.5	1.7	38 J	ND	17	420	390	2.6	1.2	ND	ND	1	3	ND	1.3	1.1	ND	ND	ND	ND	ND	0.23 J	ND	**2**
m+p Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	3.3	ND	ND	ND	ND	ND	ND	ND	**5**
Total Xylene	ND	ND	ND	ND	ND	ND	ND	6	ND	ND	ND	ND	2 J	ND	ND	ND	ND	3.3	ND	2 J	ND	ND	ND	ND	ND	**5**
Total VOCs	484	426	206	165	1086	115	2078	6277	2608	52	9	26	11	14	61	14	26	76	26	20	4	3	4	3	0	
Total Chlorinated VOCs	475	426	202	164	1086	115	2077	6203	2604	48	4	0	3	7	48	14	5	5	6	4	3	3	4	0	0	
Water Quality Parameters (mg/L)																										
Iron- Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**300**
Manganese- Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.94	5.49	NA	NA	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	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**10**
Sulfate	NA	NA	NA	NA	NA	NA	NA	NA	NA	18.3	17.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**250**
Sulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**50**
Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	454	430	NA	NA	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	66	63	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**--**
Ethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**--**
Ethylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0008 J	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**--**
Methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.051	0.049	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**--**
Total Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	334	333	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**--**
Total Organic Carbon	NA	NA	NA	NA	NA	NA	6	36.6	23.9	4.26	2.6	NA	NA	9.5	8	12.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	**--**
Field Measurements (units as indicated)																										
pH (units)			7.00	7.03						7.08	6.96						7.15	7.13			7.02	7.02	7.01	7.25	6.78	**6.5 - 8.5**
Temperature (˚C)			11.4	11.5						11.7	10.8						11	10.6			11.5	11.5	12	11.9	7.5	**--**
Specific Conductance (uS)			2000	1663						2016	2000						2966	3252			1538	1538	1421	1140	1510	**--**
Turbidity (NTU)			214	311						9.04	20.4						100	50.2			88.1	88.1	28.2	5.35	8.81	**--**
ORP (mV)			58	51						41	24						-87	-117			27	27	15	-99	-99	**--**
DO (ppm)			1.53	1.45						1.38	1.3						1.47	2.27			1.35	1.35	2.15	1.04	1.18	**--**

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

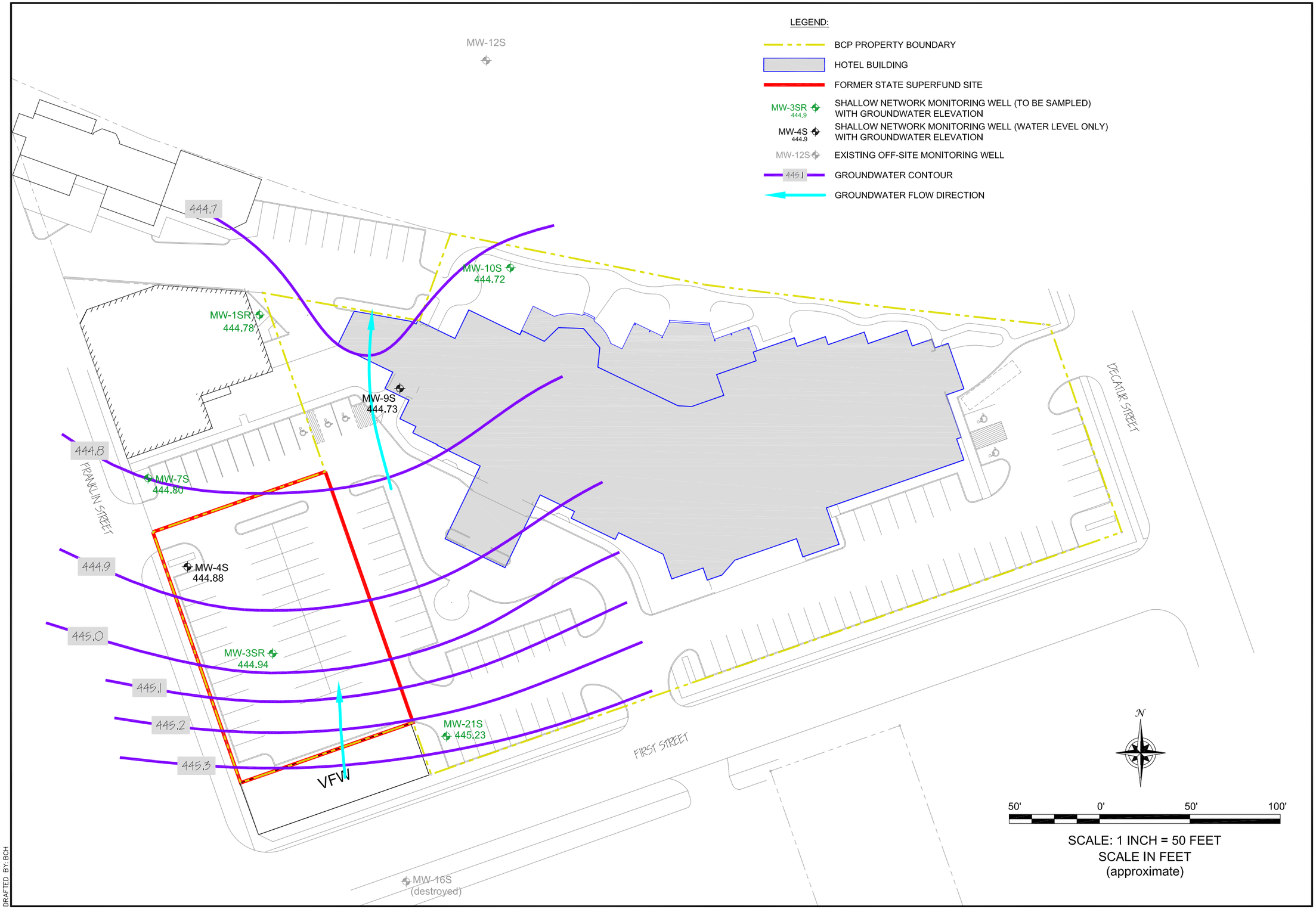
Definitions:
ND = Parameter not detected above laboratory detection limit.
NA = Sample not analyzed for parameter.

R = Data rejected.

FIGURE

BENCHMARK

F:\CAD\Benchmark\Krog\Seneca Harbor Hotel - Watkins Glen\GROUNDWATER MONITORING\2008\Figure 1; LTGWM Network & Iso Map (rev March 2009).dwg



DATE: MARCH 2009
DRAFTED BY: BCH

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
726 EXCHANGE STREET
SUITE 624
BUFFALO, NEW YORK 14210
(716) 856-0599

JOB NO.: 0092-002-200

LTGWM NETWORK & ISOPOTENTIAL MAP FIRST QUARTER 2009 (02-27-09)

LONG-TERM GROUNDWATER MONITORING PROGRAM

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

PREPARED FOR
SENECA MARKET I, LLC

FIGURE 1

ATTACHMENT 1

LABORATORY ANALYTICAL DATA
FEBRUARY 2009 SAMPLING EVENT

BENCHMARK

1 Mustard Street, Suite 250 Rochester, NY 14609-6925 (585) 288-5380 (585) 288-8475 fax

Columbia Analytical Services INC.
An Employee - Owned Company

March 25, 2009

Service Request No: R0901117

Mr. Michael Lesakowski
Benchmark Environmental Engineering
726 Exchange Street
Suite 624
Buffalo, NY 14210

Laboratory Results for: Seneca Market

Dear Mr. Lesakowski:

Enclosed are the results of the sample(s) submitted to our laboratory on February 27, 2009. For your reference, these analyses have been assigned our service request number **R0901117**.

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.

For

Janice Jaeger
Client Services Manager

CASE NARRATIVE

COMPANY: Benchmark Environmental Engineering
Seneca Market
SUBMISSION #: R0901117

Benchmark samples were collected on 2/27/09 and received at CAS on 2/27/09 in good condition with the exception of the sample receipt temperature. Samples were received at 10°C, outside of the acceptable range of 1°C – 6°C. Also, the sample for Metabolic Acids was received with inadequate chemical preservation. The sample was preserved upon lab receipt.

INORGANICS

One water sample was analyzed for a site specific list of inorganics. Please see attached data pages for method numbers. All soluble Metals were field filtered and preserved.

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

No analytical or QC problems were encountered.

VOLATILE ORGANICS

Six water samples were analyzed for a site specific list of Volatiles by Method 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 QC limits.

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

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

All samples were analyzed within required holding times.

No analytical or QC problems were encountered.

RSK 175

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

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

Site specific QC was not requested. 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.

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

Site specific QC was not requested. All Blank Spike/Blank Spike Duplicate recoveries were within limits. All RPD's 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 analytical or QC problems were encountered.

CARBON DIOXIDE

One water sample was subcontracted to CAS-Simi Valley for Carbon Dioxide analysis. Their complete data package has been included.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Client: Benchmark Environmental Engineering
Project: Seneca Market

Service Request: R0901117

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R0901117-001	MW-21S	2/27/09	09:59
R0901117-002	MW-7S	2/27/09	11:51
R0901117-003	MW-1SR	2/27/09	13:13
R0901117-004	MW-10S	2/27/09	13:55
R0901117-005	MW-3SR	2/27/09	10:44
R0901117-006	MW-3SR SOLUBLE	2/27/09	10:44
R0901117-007	TRIP BLANK	2/27/09	

Columbia Analytical Services™

REPORT QUALIFIERS

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. The flag is used either when estimating a concentation for tentatively identified compounds, or when the concentration is less than the reporting limit and greater than the MDL (concentrations are not verified within the initial calibration range).

For DoD reports, the J-flag may also be used to indicate that the concentration between two columns for pesticides/Aroclors is greater than 40% difference.

B - Indicates this compound was also detected in the associated method blank at a concentration that may have contributed to the sample result.

B- Metals - Indicates an estimated value. The concentration is less than the reporting limit and greater than the MDL (concentrations are not verified within the initial calibration range).

E - Indicates that the sample concentration had exceeded the calibration range for that specific analysis.

D - Indicates the sample concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range.

* - Indicates that a quality control parameter has exceeded laboratory limits.

X - See Case Narrative for discussion.

P - This flag is used for a pesticide/Aroclor target concentration when there is a greater than 40% (25% for CLP) difference for detected concentrations between the two GC columns.

For DoD reports, the J-flag is used instead of "P".

N - Inorganics- Indicates the matrix spike recovery was outside laboratory limits.

N- Organics- Indicates presumptive evidence of a compound (reported as a tentatively identified compound) based on the mass spectral library search.

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.

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

Sample Name: MW-21S
Lab Code: R0901117-001

Service Request: R0901117
Date Collected: 2/27/09 0959
Date Received: 2/27/09

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	3/10/09 20:16		146949	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
1,1,2-Trichloroethane	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
1,2,4-Trichlorobenzene	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
1,2-Dibromo-3-chloropropane (DBCP)	2.0	U	2.0	1	NA	3/10/09 20:16		146949	
1,2-Dibromoethane	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
1,2-Dichlorobenzene	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
1,2-Dichloroethane	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
1,2-Dichloropropane	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
1,3-Dichlorobenzene	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
1,4-Dichlorobenzene	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
2-Butanone (MEK)	5.0	U	5.0	1	NA	3/10/09 20:16		146949	
2-Hexanone	5.0	U	5.0	1	NA	3/10/09 20:16		146949	
4-Methyl-2-pentanone	5.0	U	5.0	1	NA	3/10/09 20:16		146949	
Acetone	5.0	U	5.0	1	NA	3/10/09 20:16		146949	
Benzene	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
Bromodichloromethane	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
Bromoform	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
Bromomethane	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
Carbon Disulfide	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
Carbon Tetrachloride	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
Chlorobenzene	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
Chloroethane	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
Chloroform	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
Chloromethane	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
Cyclohexane	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
Dibromochloromethane	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
Dichlorodifluoromethane (CFC 12)	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
Dichloromethane	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
Ethylbenzene	1.0	U	1.0	1	NA	3/10/09 20:16		146949	

Comments:

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

Sample Name: MW-21S
Lab Code: R0901117-001

Service Request: R0901117
Date Collected: 2/27/09 0959
Date Received: 2/27/09

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
Isopropylbenzene (Cumene)	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
Methyl Acetate	2.0	U	2.0	1	NA	3/10/09 20:16		146949	
Methyl tert-Butyl Ether	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
Methylcyclohexane	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
Styrene	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
Tetrachloroethene (PCE)	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
Toluene	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
Trichloroethene (TCE)	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
Vinyl Chloride	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
cis-1,2-Dichloroethene	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
cis-1,3-Dichloropropene	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
m,p-Xylenes	2.0	U	2.0	1	NA	3/10/09 20:16		146949	
o-Xylene	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
trans-1,2-Dichloroethene	1.0	U	1.0	1	NA	3/10/09 20:16		146949	
trans-1,3-Dichloropropene	1.0	U	1.0	1	NA	3/10/09 20:16		146949	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	108	80-123	3/10/09 20:16		
Dibromofluoromethane	112	89-115	3/10/09 20:16		
Toluene-d8	113	88-124	3/10/09 20:16		

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Sample Name: MW-7S
Lab Code: R0901117-002

Service Request: R0901117
Date Collected: 2/27/09 1151
Date Received: 2/27/09

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	3/10/09 20:45		146949	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
1,1,2-Trichloroethane	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
1,2,4-Trichlorobenzene	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
1,2-Dibromo-3-chloropropane (DBCP)	2.0	U	2.0	1	NA	3/10/09 20:45		146949	
1,2-Dibromoethane	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
1,2-Dichlorobenzene	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
1,2-Dichloroethane	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
1,2-Dichloropropane	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
1,3-Dichlorobenzene	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
1,4-Dichlorobenzene	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
2-Butanone (MEK)	5.0	U	5.0	1	NA	3/10/09 20:45		146949	
2-Hexanone	5.0	U	5.0	1	NA	3/10/09 20:45		146949	
4-Methyl-2-pentanone	5.0	U	5.0	1	NA	3/10/09 20:45		146949	
Acetone	5.0	U	5.0	1	NA	3/10/09 20:45		146949	
Benzene	**27**		1.0	1	NA	3/10/09 20:45		146949	
Bromodichloromethane	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
Bromoform	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
Bromomethane	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
Carbon Disulfide	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
Carbon Tetrachloride	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
Chlorobenzene	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
Chloroethane	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
Chloroform	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
Chloromethane	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
Cyclohexane	**21**		1.0	1	NA	3/10/09 20:45		146949	
Dibromochloromethane	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
Dichlorodifluoromethane (CFC 12)	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
Dichloromethane	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
Ethylbenzene	1.0	U	1.0	1	NA	3/10/09 20:45		146949	

Comments:

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

Sample Name: MW-7S
Lab Code: R0901117-002

Service Request: R0901117
Date Collected: 2/27/09 1151
Date Received: 2/27/09

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
Isopropylbenzene (Cumene)	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
Methyl Acetate	2.0	U	2.0	1	NA	3/10/09 20:45		146949	
Methyl tert-Butyl Ether	**3.7**		1.0	1	NA	3/10/09 20:45		146949	
Methylcyclohexane	**6.9**		1.0	1	NA	3/10/09 20:45		146949	
Styrene	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
Tetrachloroethene (PCE)	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
Toluene	**5.7**		1.0	1	NA	3/10/09 20:45		146949	
Trichloroethene (TCE)	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
Vinyl Chloride	**1.1**		1.0	1	NA	3/10/09 20:45		146949	
cis-1,2-Dichloroethene	**3.5**		1.0	1	NA	3/10/09 20:45		146949	
cis-1,3-Dichloropropene	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
m,p-Xylenes	**3.3**		2.0	1	NA	3/10/09 20:45		146949	
o-Xylene	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
trans-1,2-Dichloroethene	1.0	U	1.0	1	NA	3/10/09 20:45		146949	
trans-1,3-Dichloropropene	1.0	U	1.0	1	NA	3/10/09 20:45		146949	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	108	80-123	3/10/09 20:45		
Dibromofluoromethane	110	89-115	3/10/09 20:45		
Toluene-d8	111	88-124	3/10/09 20:45		

Comments:

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

Sample Name: MW-1SR
Lab Code: R0901117-003

Service Request: R0901117
Date Collected: 2/27/09 1313
Date Received: 2/27/09

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	3/10/09 21:15		146949	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
1,1,2-Trichloroethane	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
1,2,4-Trichlorobenzene	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
1,2-Dibromo-3-chloropropane (DBCP)	2.0	U	2.0	1	NA	3/10/09 21:15		146949	
1,2-Dibromoethane	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
1,2-Dichlorobenzene	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
1,2-Dichloroethane	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
1,2-Dichloropropane	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
1,3-Dichlorobenzene	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
1,4-Dichlorobenzene	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
2-Butanone (MEK)	5.0	U	5.0	1	NA	3/10/09 21:15		146949	
2-Hexanone	5.0	U	5.0	1	NA	3/10/09 21:15		146949	
4-Methyl-2-pentanone	5.0	U	5.0	1	NA	3/10/09 21:15		146949	
Acetone	5.0	U	5.0	1	NA	3/10/09 21:15		146949	
Benzene	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
Bromodichloromethane	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
Bromoform	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
Bromomethane	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
Carbon Disulfide	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
Carbon Tetrachloride	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
Chlorobenzene	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
Chloroethane	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
Chloroform	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
Chloromethane	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
Cyclohexane	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
Dibromochloromethane	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
Dichlorodifluoromethane (CFC 12)	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
Dichloromethane	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
Ethylbenzene	1.0	U	1.0	1	NA	3/10/09 21:15		146949	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Sample Name: MW-1SR
Lab Code: R0901117-003

Service Request: R0901117
Date Collected: 2/27/09 1313
Date Received: 2/27/09

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
Isopropylbenzene (Cumene)	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
Methyl Acetate	2.0	U	2.0	1	NA	3/10/09 21:15		146949	
Methyl tert-Butyl Ether	**1.6**		1.0	1	NA	3/10/09 21:15		146949	
Methylcyclohexane	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
Styrene	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
Tetrachloroethene (PCE)	**70**		1.0	1	NA	3/10/09 21:15		146949	
Toluene	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
Trichloroethene (TCE)	**17**		1.0	1	NA	3/10/09 21:15		146949	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
Vinyl Chloride	**1.7**		1.0	1	NA	3/10/09 21:15		146949	
cis-1,2-Dichloroethene	**75**		1.0	1	NA	3/10/09 21:15		146949	
cis-1,3-Dichloropropene	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
m,p-Xylenes	2.0	U	2.0	1	NA	3/10/09 21:15		146949	
o-Xylene	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
trans-1,2-Dichloroethene	1.0	U	1.0	1	NA	3/10/09 21:15		146949	
trans-1,3-Dichloropropene	1.0	U	1.0	1	NA	3/10/09 21:15		146949	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	107	80-123	3/10/09 21:15		
Dibromofluoromethane	109	89-115	3/10/09 21:15		
Toluene-d8	110	88-124	3/10/09 21:15		

Comments:

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

Sample Name: MW-10S
Lab Code: R0901117-004

Service Request: R0901117
Date Collected: 2/27/09 1355
Date Received: 2/27/09

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	3/10/09 21:45		146949	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
1,1,2-Trichloroethane	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
1,2,4-Trichlorobenzene	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
1,2-Dibromo-3-chloropropane (DBCP)	2.0	U	2.0	1	NA	3/10/09 21:45		146949	
1,2-Dibromoethane	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
1,2-Dichlorobenzene	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
1,2-Dichloroethane	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
1,2-Dichloropropane	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
1,3-Dichlorobenzene	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
1,4-Dichlorobenzene	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
2-Butanone (MEK)	5.0	U	5.0	1	NA	3/10/09 21:45		146949	
2-Hexanone	5.0	U	5.0	1	NA	3/10/09 21:45		146949	
4-Methyl-2-pentanone	5.0	U	5.0	1	NA	3/10/09 21:45		146949	
Acetone	5.0	U	5.0	1	NA	3/10/09 21:45		146949	
Benzene	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
Bromodichloromethane	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
Bromoform	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
Bromomethane	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
Carbon Disulfide	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
Carbon Tetrachloride	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
Chlorobenzene	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
Chloroethane	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
Chloroform	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
Chloromethane	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
Cyclohexane	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
Dibromochloromethane	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
Dichlorodifluoromethane (CFC 12)	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
Dichloromethane	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
Ethylbenzene	1.0	U	1.0	1	NA	3/10/09 21:45		146949	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Sample Name: MW-10S
Lab Code: R0901117-004

Service Request: R0901117
Date Collected: 2/27/09 1355
Date Received: 2/27/09

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
Isopropylbenzene (Cumene)	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
Methyl Acetate	2.0	U	2.0	1	NA	3/10/09 21:45		146949	
Methyl tert-Butyl Ether	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
Methylcyclohexane	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
Styrene	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
Tetrachloroethene (PCE)	**4.0**		1.0	1	NA	3/10/09 21:45		146949	
Toluene	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
Trichloroethene (TCE)	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
Vinyl Chloride	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
cis-1,2-Dichloroethene	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
cis-1,3-Dichloropropene	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
m,p-Xylenes	2.0	U	2.0	1	NA	3/10/09 21:45		146949	
o-Xylene	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
trans-1,2-Dichloroethene	1.0	U	1.0	1	NA	3/10/09 21:45		146949	
trans-1,3-Dichloropropene	1.0	U	1.0	1	NA	3/10/09 21:45		146949	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	107	80-123	3/10/09 21:45		
Dibromofluoromethane	110	89-115	3/10/09 21:45		
Toluene-d8	111	88-124	3/10/09 21:45		

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R0901117
Date Collected: 2/27/09 1044
Date Received: 2/27/09

Sample Name: MW-3SR
Lab Code: R0901117-005

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	14	1	NA	3/6/09 11:37
Carbon, Total Organic (TOC)	415.1	**2.6**		mg/L	1.0	1	NA	3/6/09 13:40
Chloride	9056	**430**		mg/L	20	100	NA	3/3/09 23:29
Nitrate as Nitrogen	9056	0.50	U	mg/L	0.50	10	NA	2/28/09 12:07
Sulfate	9056	**17.1**		mg/L	2.0	10	NA	2/28/09 12:07
Sulfide, Total	376.1	1.0	U	mg/L	1.0	1	NA	3/6/09 09:00

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R0901117
Date Collected: 2/27/09 1044
Date Received: 2/27/09

Sample Name: MW-3SR SOLUBLE
Lab Code: R0901117-006

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	3/ 3/09	3/12/09 14:26
Manganese, Dissolved	6010B	**5490**		µg/L	10	1	3/ 3/09	3/12/09 14:26

Comments:

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

Sample Name: MW-3SR
Lab Code: R0901117-005

Service Request: R0901117
Date Collected: 2/27/09 1044
Date Received: 2/27/09

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	3/10/09 22:15		146949	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
1,1,2-Trichloroethane	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
1,2,4-Trichlorobenzene	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
1,2-Dibromo-3-chloropropane (DBCP)	2.0	U	2.0	1	NA	3/10/09 22:15		146949	
1,2-Dibromoethane	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
1,2-Dichlorobenzene	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
1,2-Dichloroethane	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
1,2-Dichloropropane	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
1,3-Dichlorobenzene	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
1,4-Dichlorobenzene	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
2-Butanone (MEK)	5.0	U	5.0	1	NA	3/10/09 22:15		146949	
2-Hexanone	5.0	U	5.0	1	NA	3/10/09 22:15		146949	
4-Methyl-2-pentanone	5.0	U	5.0	1	NA	3/10/09 22:15		146949	
Acetone	5.0	U	5.0	1	NA	3/10/09 22:15		146949	
Benzene	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
Bromodichloromethane	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
Bromoform	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
Bromomethane	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
Carbon Disulfide	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
Carbon Tetrachloride	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
Chlorobenzene	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
Chloroethane	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
Chloroform	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
Chloromethane	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
Cyclohexane	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
Dibromochloromethane	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
Dichlorodifluoromethane (CFC 12)	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
Dichloromethane	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
Ethylbenzene	1.0	U	1.0	1	NA	3/10/09 22:15		146949	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Sample Name: MW-3SR
Lab Code: R0901117-005

Service Request: R0901117
Date Collected: 2/27/09 1044
Date Received: 2/27/09

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
Isopropylbenzene (Cumene)	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
Methyl Acetate	2.0	U	2.0	1	NA	3/10/09 22:15		146949	
Methyl tert-Butyl Ether	**5.1**		1.0	1	NA	3/10/09 22:15		146949	
Methylcyclohexane	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
Styrene	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
Tetrachloroethene (PCE)	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
Toluene	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
Trichloroethene (TCE)	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
Vinyl Chloride	**1.2**		1.0	1	NA	3/10/09 22:15		146949	
cis-1,2-Dichloroethene	**3.0**		1.0	1	NA	3/10/09 22:15		146949	
cis-1,3-Dichloropropene	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
m,p-Xylenes	2.0	U	2.0	1	NA	3/10/09 22:15		146949	
o-Xylene	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
trans-1,2-Dichloroethene	1.0	U	1.0	1	NA	3/10/09 22:15		146949	
trans-1,3-Dichloropropene	1.0	U	1.0	1	NA	3/10/09 22:15		146949	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	108	80-123	3/10/09 22:15		
Dibromofluoromethane	109	89-115	3/10/09 22:15		
Toluene-d8	111	88-124	3/10/09 22:15		

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Sample Name: MW-3SR
Lab Code: R0901117-005

Service Request: R0901117
Date Collected: 2/27/09 1044
Date Received: 2/27/09

Units: µg/L
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	3/10/09 10:31		145638	
Ethene	1.0	U	1.0	1	NA	3/10/09 10:31		145638	
Methane	**49**		2.0	1	NA	3/10/09 10:31		145638	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Sample Name: MW-3SR
Lab Code: R0901117-005

Service Request: R0901117
Date Collected: 2/27/09 1044
Date Received: 2/27/09

Units: mg/L
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	3/17/09 11:06		146477	
Acetic Acid	1.0	U	1.0	1	NA	3/17/09 11:06		146477	
Butanoic Acid (Butyric Acid)	2.0	U	2.0	1	NA	3/17/09 11:06		146477	
Lactic Acid	1.0	U	1.0	1	NA	3/17/09 11:06		146477	
Propionic Acid	1.0	U	1.0	1	NA	3/17/09 11:06		146477	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R0901117
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: R0901117-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	3/6/09 11:37
Carbon, Total Organic (TOC)	415.1	1.0	U	mg/L	1.0	1	NA	3/6/09 11:38
Chloride	9056	0.20	U	mg/L	0.20	1	NA	3/3/09 22:15
Nitrate as Nitrogen	9056	0.050	U	mg/L	0.050	1	NA	2/28/09 11:38
Sulfate	9056	0.20	U	mg/L	0.20	1	NA	2/28/09 11:38
Sulfide, Total	376.1	1.0	U	mg/L	1.0	1	NA	3/6/09 09:00

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0901117
Project:	Seneca Market	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R0901117-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	3/ 3/09	3/12/09 14:19
Manganese, Dissolved	6010B	10	U	µg/L	10	1	3/ 3/09	3/12/09 14:19

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0901117
Project:	Seneca Market	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ0901835-01	**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	3/10/09 14:48		146949	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
1,1,2-Trichloroethane	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
1,2,4-Trichlorobenzene	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
1,2-Dibromo-3-chloropropane (DBCP)	2.0	U	2.0	1	NA	3/10/09 14:48		146949	
1,2-Dibromoethane	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
1,2-Dichlorobenzene	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
1,2-Dichloroethane	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
1,2-Dichloropropane	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
1,3-Dichlorobenzene	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
1,4-Dichlorobenzene	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
2-Butanone (MEK)	5.0	U	5.0	1	NA	3/10/09 14:48		146949	
2-Hexanone	5.0	U	5.0	1	NA	3/10/09 14:48		146949	
4-Methyl-2-pentanone	5.0	U	5.0	1	NA	3/10/09 14:48		146949	
Acetone	5.0	U	5.0	1	NA	3/10/09 14:48		146949	
Benzene	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
Bromodichloromethane	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
Bromoform	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
Bromomethane	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
Carbon Disulfide	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
Carbon Tetrachloride	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
Chlorobenzene	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
Chloroethane	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
Chloroform	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
Chloromethane	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
Cyclohexane	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
Dibromochloromethane	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
Dichlorodifluoromethane (CFC 12)	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
Dichloromethane	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
Ethylbenzene	1.0	U	1.0	1	NA	3/10/09 14:48		146949	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Benchmark Environmental Engineering	**Service Request:**	R0901117
Project:	Seneca Market	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ0901835-01	**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	3/10/09 14:48		146949	
Methyl Acetate	2.0	U	2.0	1	NA	3/10/09 14:48		146949	
Methyl tert-Butyl Ether	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
Methylcyclohexane	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
Styrene	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
Tetrachloroethene (PCE)	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
Toluene	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
Trichloroethene (TCE)	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
Vinyl Chloride	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
cis-1,2-Dichloroethene	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
cis-1,3-Dichloropropene	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
m,p-Xylenes	2.0	U	2.0	1	NA	3/10/09 14:48		146949	
o-Xylene	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
trans-1,2-Dichloroethene	1.0	U	1.0	1	NA	3/10/09 14:48		146949	
trans-1,3-Dichloropropene	1.0	U	1.0	1	NA	3/10/09 14:48		146949	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	104	80-123	3/10/09 14:48		
Dibromofluoromethane	107	89-115	3/10/09 14:48		
Toluene-d8	109	88-124	3/10/09 14:48		

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Sample Name: Method Blank
Lab Code: RQ0901517-01

Service Request: R0901117
Date Collected: NA
Date Received: NA

Units: µg/L
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	3/10/09 09:56		145638	
Ethene	1.0	U	1.0	1	NA	3/10/09 09:56		145638	
Methane	2.0	U	2.0	1	NA	3/10/09 09:56		145638	

Comments:

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

Sample Name: Method Blank
Lab Code: RQ0901707-01

Service Request: R0901117
Date Collected: NA
Date Received: NA

Units: mg/L
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	3/17/09 09:28		146477	
Acetic Acid	1.0	U	1.0	1	NA	3/17/09 09:28		146477	
Butanoic Acid (Butyric Acid)	2.0	U	2.0	1	NA	3/17/09 09:28		146477	
Lactic Acid	1.0	U	1.0	1	NA	3/17/09 09:28		146477	
Propionic Acid	1.0	U	1.0	1	NA	3/17/09 09:28		146477	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: R0901117
Date Analyzed: 2/28/09 - 3/6/09

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R0901117-LCS Result	Expected	% Rec	% Rec Limits
Carbon, Total Organic (TOC)	415.1	**9.46**	10.0	94	87 - 120
Chloride	9056	**1.98**	2.00	99	90 - 110
Sulfate	9056	**1.97**	2.00	98	90 - 110
Sulfide, Total	376.1	**5.30**	5.4	99	61 - 140
Alkalinity as CaCO3, Total	SM 2320 B	**19.0**	20.0	95	93 - 111
Nitrate as Nitrogen	9056	**0.927**	1.00	93	90 - 110

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: R0901117
Date Analyzed: 3/12/09

Lab Control Sample Summary
Inorganic Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R0901117-LCS Result	Expected	% Rec	% Rec Limits
Iron, Dissolved	6010B	**1000**	1000	100	80 - 120
Manganese, Dissolved	6010B	**484**	500	97	80 - 120

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: R0901117
Date Analyzed: 3/10/09

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Units: µg/L
Basis: NA

Analysis Lot: 146949

Analyte Name	Lab Control Sample RQ0901835-02 Result	Expected	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	**18.2**	20.0	91	70 - 130
1,1,2,2-Tetrachloroethane	**19.9**	20.0	100	70 - 130
1,1,2-Trichloroethane	**18.2**	20.0	91	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	**19.2**	20.0	96	70 - 130
1,1-Dichloroethane (1,1-DCA)	**19.8**	20.0	99	70 - 130
1,1-Dichloroethene (1,1-DCE)	**18.9**	20.0	94	70 - 130
1,2,4-Trichlorobenzene	**18.8**	20.0	94	70 - 130
1,2-Dibromo-3-chloropropane (DBCP)	**17.5**	20.0	87	50 - 150
1,2-Dibromoethane	**17.9**	20.0	90	70 - 130
1,2-Dichlorobenzene	**18.5**	20.0	93	70 - 130
1,2-Dichloroethane	**18.1**	20.0	91	70 - 130
1,2-Dichloropropane	**20.1**	20.0	101	70 - 130
1,3-Dichlorobenzene	**18.2**	20.0	91	70 - 130
1,4-Dichlorobenzene	**18.0**	20.0	90	70 - 130
2-Butanone (MEK)	**21.0**	20.0	105	50 - 150
2-Hexanone	**19.0**	20.0	95	70 - 130
4-Methyl-2-pentanone	**19.8**	20.0	99	70 - 130
Acetone	**22.0**	20.0	110	50 - 150
Benzene	**19.0**	20.0	95	70 - 130
Bromodichloromethane	**19.1**	20.0	96	70 - 130
Bromoform	**16.7**	20.0	84	70 - 130
Bromomethane	**19.8**	20.0	99	50 - 150
Carbon Disulfide	**20.6**	20.0	103	70 - 130
Carbon Tetrachloride	**16.8**	20.0	84	70 - 130
Chlorobenzene	**17.6**	20.0	88	70 - 130
Chloroethane	**20.1**	20.0	100	70 - 130
Chloroform	**19.3**	20.0	96	70 - 130
Chloromethane	**20.5**	20.0	102	70 - 130
Cyclohexane	**23.4**	20.0	117	50 - 150
Dibromochloromethane	**17.7**	20.0	89	70 - 130
Dichlorodifluoromethane (CFC 12)	**16.1**	20.0	80	70 - 130
Dichloromethane	**19.2**	20.0	96	70 - 130
Ethylbenzene	**18.2**	20.0	91	70 - 130
Isopropylbenzene (Cumene)	**18.7**	20.0	93	70 - 130
Methyl Acetate	**23.4**	20.0	117	50 - 150
Methyl tert-Butyl Ether	**19.5**	20.0	98	70 - 130
Methylcyclohexane	**25.1**	20.0	125	50 - 150

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: R0901117
Date Analyzed: 3/10/09

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Units: µg/L
Basis: NA

Analysis Lot: 146949

Analyte Name	Lab Control Sample RQ0901835-02 Result	Expected	% Rec	% Rec Limits
Styrene	**18.5**	20.0	92	70 - 130
Tetrachloroethene (PCE)	**17.1**	20.0	85	70 - 130
Toluene	**18.1**	20.0	91	70 - 130
Trichloroethene (TCE)	**16.9**	20.0	84	70 - 130
Trichlorofluoromethane (CFC 11)	**17.9**	20.0	90	70 - 130
Vinyl Chloride	**19.7**	20.0	98	70 - 130
cis-1,2-Dichloroethene	**19.7**	20.0	98	70 - 130
cis-1,3-Dichloropropene	**19.1**	20.0	96	70 - 130
m,p-Xylenes	**37.4**	40.0	94	70 - 130
o-Xylene	**18.9**	20.0	94	70 - 130
trans-1,2-Dichloroethene	**18.9**	20.0	94	70 - 130
trans-1,3-Dichloropropene	**18.4**	20.0	92	70 - 130

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: R0901117
Date Analyzed: 3/10/09

Lab Control Sample Summary
Dissolved Gases by GC/FID

Analytical Method: RSK 175

Units: µg/L
Basis: NA

Analysis Lot: 145638

Analyte Name	Lab Control Sample RQ0901517-02 Result	Expected	% Rec	% Rec Limits
Ethane	**120**	144	83	50 - 150
Ethene	**122**	134	91	50 - 150
Methane	**70.7**	76	93	50 - 150

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: R0901117
Date Analyzed: 3/17/09

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: 146477

	Lab Control Sample RQ0901707-02			Duplicate Lab Control Sample RQ0901707-03			% Rec		RPD
Analyte Name	**Result**	**Expected**	**% Rec**	**Result**	**Expected**	**% Rec**	**Limits**	**RPD**	**Limit**
Pyruvic Acid	**1.16**	1.01	115	**1.16**	1.01	115	50 - 150	0	30
Acetic Acid	**9.61**	10	96	**9.67**	10	97	50 - 150	1	30
Butanoic Acid (Butyric Acid)	**9.56**	10	96	**9.10**	10	91	50 - 150	5	30
Lactic Acid	**9.99**	10	100	**10.1**	10	101	50 - 150	1	30
Propionic Acid	**9.78**	10	98	**9.66**	10	97	50 - 150	1	30

Comments:

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

Columbia Analytical Services, Inc.
An Employee - Owned Company
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 _____

SR #

CAS Contact

Project Name: Seneca Markets	Project Number:
Project Manager: Mike Lesakowski	Report CC:
Company/Address: Benchmark Eng 726 Exchange st suite 624 Buffalo NY 14210	
Phone #: (716) 856-0599	FAX#: (716) 856-0583
Sampler's Signature:	Sampler's Printed Name: Tom Bernhardt

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

PRESERVATIVE: 1 | 2 | 1 | 1 | 5 | 0 | 0 | 0 | 0

NUMBER OF CONTAINERS

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	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	CO2	NO3, SO4, Cl	Alkalinity	metabolic acids *	REMARKS/ ALTERNATE DESCRIPTION
MW-21S		2/27/09	959	GW	3														
MW-7S		2/27/09	1151	GW	3														* please preserve * In Lab
MW-15R		2/27/09	1313	GW	3														
MW-10S		2/27/09	1355	GW	3														
MW-35R		2/27/09	1049	GW	3						2	3	3	1	1	1	1	1	

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 Soluble Iron & Manganese

metabolic Acids – lactic, pyruvic, 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 Data
_____ V. Specialized Forms / Custom Report
Edata _____ Yes _____ No

INVOICE INFORMATION
PO#
BILL TO:
SUBMISSION #: Roghill

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

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature: Rachel Jones	Signature	Signature	Signature	Signature
Printed Name: Tom Bernhardt	Printed Name: Rachel Jones	Printed Name	Printed Name	Printed Name	Printed Name
Firm: Benchmark	Firm: CAS	Firm	Firm	Firm	Firm
Date/Time: 2/27/09	Date/Time: 2/27/09 1715	Date/Time	Date/Time	Date/Time	Date/Time

SCOC-1102-08

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

Cooler Receipt And Preservation Check Form

Project/Client Benchmark Submission Number R09-1117

Cooler received on 2/27/09 by: JR 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:	10°				
	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: 2/27/09 @ 1720

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: _____

PC Secondary Review: JMM 2/27/09

Cooler Breakdown: Date: 3/2/09 by: _____

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			WC85218F	10/13
≤2	HNO_3	✓		?	
≤2	H_2SO_4			WC85240C	1/10
Residual Chlorine (-)	For TCN and Phenol			If present, contact PM to add ascorbic acid	
	$Na_2S_2O_3$	-	-		
	Zn Aceta	-	-	WC85211B	9/09
	HCl	*	*	080911	1/10

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: 012609-2D, 055075, 8-330-rx, 9-294-003

Other Comments:

- ice on top: bottles also at 10°C

Phosphoric acid added to the Metabolic Acid lot WC85242B

PC Secondary Review: JMM 3/10/09

*significant air bubbles are greater than 5-6 mm

2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services, Inc.
An Employee - Owned Company

LABORATORY REPORT

March 12, 2009

Michael Lesakowski
Benchmark Environmental Engineering
726 Exchange Street Suite 624
Buffalo, NY 14210

RE: Seneca Market

Dear Michael:

Enclosed are the results of the samples submitted to our laboratory on February 27, 2009. For your reference, these analyses have been assigned our service request number R0901117.

All analyses were performed in accordance with our laboratory's quality assurance program. 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. 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

Kate Aguilera
Project Manager

2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

Client:	Benchmark Environmental Engineering	CAS Project No:	R0901117
Project:	Seneca Market	New York Lab ID:	11221

CASE NARRATIVE

The samples were received intact under chain of custody on February 27, 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 samples at the time of sample receipt.

Carbon Dioxide Analysis

The samples were 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
R0901117-005	MW-3SR		Water	2/27/09	1044	2/27/09	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: 03/15/09

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# R0901117

Bill to

Relinquished By: Holly Tennant 3/2/09 1800

Received By: [signature] 3/3/09 1405

Airbill Number: _____

Columbia Analytical Services, Inc.
Sample Acceptance Check Form

Client: Benchmark Environmental Engineering Work order: R0901117

Project: Seneca Market

Sample(s) received on: 3/3/09 Date opened: 3/3/09 by: LKUKITA

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 3 °C Blank Temperature _____ °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
R0901117-005.08	500ml Plastic NP		6			

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: R0901117

Carbon Dioxide

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

Date(s) Collected: 2/27/09
Date Received: 2/27/09
Date Analyzed: 3/9/09

Client Sample ID	CAS Sample ID	Injection Volume ml(s)	Result µg/L	MRL µg/L	Data Qualifier
MW-3SR	R0901117-005	0.10	**63,000**	1,000	
Method Control Sample	P090309-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: 3/12/09

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: R0901117
CAS Sample ID: P090309-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: 3/09/09
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	22,900	19,900	21,800	**87**	**95**	50-150	9	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: 3/12/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY DUPLICATE SUMMARY RESULTS

Client: **Benchmark Environmental Engineering**
Client Sample ID: **MW-3SR**
Client Project ID: **Seneca Market**

CAS Project ID: R0901117
CAS Sample ID: R0901117-005DUP

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

Date Collected: 2/27/09
Date Received: 2/27/09
Date Analyzed: 3/9/09
Volume(s) Analyzed: 0.10 ml(s)

CAS #	Compound	Sample Result ug/L	Duplicate Sample Result ug/L	Average	% RPD	RPD Limit	Data Qualifier
124-38-9	**Carbon Dioxide**	**63,400**	**67,500**	65450	6	30	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

Verified By: LO Date: 3/12/09