report.V00175.2006-06-12.GWSW MonResults.pdf

The RETEC Group, Inc.
1001 W. Seneca Street, Suite 204
Ithaca, NY 14850-3342

DSS?55

Scan —

RETEC

(607) 277-5716 Phone
(607) 277-9057 Fax
www.retec.com

May 25, 2006

RECEIVED
JUN 12 2006
NYSDEC REG 9
FOIL
✓REL __UNREL

Mr. Charles Burke
National Fuel Gas Distribution Corporation
Building 11
365 Mineral Springs Road
Buffalo, NY 14210

RE: Groundwater and Surface Water Monitoring Results April 2006 Mineral Springs Road MGP Site

Dear Charlie:

This report provides the results of a groundwater and surface water sampling event completed by The RETEC Group, Inc. (RETEC) on April 25 and 26, 2006, at the Mineral Springs Road former MGP site in West Seneca (and Buffalo), New York.

The work at the Mineral Springs site is being conducted under a NYSDEC Voluntary Cleanup Agreement (number B9-0538-98-08) as described in the Remedial Design, dated February 10, 1999, and the Final Engineering Report, Volume II – Operations and Maintenance Plan, dated May 2002.

Summary

A total of 13 groundwater samples and 2 surface water samples were collected and analyzed. A total of 15 depth-to-water measurements were taken. Sampling locations are shown in the attached figure. Analytical results are summarized in the attached table.

Concentrations of BTEX and PAH compounds were below NYSDEC standard or guidance values in the two surface water samples, and in two of the five onsite groundwater samples.

Total cyanide concentrations exceeded the NYSDEC groundwater standard in eight of the groundwater samples analyzed. Free cyanide was detected in two of the wells sampled. Total cyanide and free cyanide were detected in the two surface water samples at concentrations below the NYSDEC standards.

The cover of monitoring well MW-21was found to be broken, apparently by a snow plow. The top of the riser pipe, containing the plug, was broken off, leaving the well open. The well had accumulated about 1 foot of material in the bottom. The well was sampled, and then covered with a temporary steel plate.

Groundwater Elevations

Depth-to-water measurements were taken at 14 monitoring wells and at surface water sampling point SW-01. The measurements were used to construct the groundwater contours shown in the attached figure.

At the time of the sampling, groundwater flowed onto the site from the southeast, then flowed to the northwest towards Calais Street and Mineral Springs Road. Onsite groundwater also appears to discharge to the Class D Stream, which in turn discharges to the Calais Street storm sewer and the municipal wastewater treatment system. These results are consistent with previous sampling events conducted at the site.

Sampling and Analysis

A total of 13 monitoring wells were purged and sampled by a RETEC geologist. Two surface water samples were also collected. Sampling locations are shown on the attached figure.

Severn Trent Laboratories (STL) of Pittsburgh, PA, performed the analyses of the groundwater and surface water samples for hydrocarbon COI. STL is currently certified to perform the requested analyses under the NYSDOH Environmental Laboratory Approval Program. The samples were analyzed for Manufactured Gas Plant (MGP) indicators using the following methods:

BTEX	Method SW846 8260B
PAHs	Method SW846 8270C

Samples were also sent to Clarkson University of Potsdam, NY (Clarkson) for cyanide analysis using the following methods:

Cyanide (free)	Method ASTM D4282-89
Cyanide (total)	Method SW864 9012A

All sampling and analyses were conducted according to RETEC's Standard Operating Procedures as provided in the project Quality Assurance Plan of June 11, 1999. Additionally, the cyanide samples were protected from light during collection to prevent the dissociation of metal-cyanide compounds, which would artificially elevate free cyanide results. The cyanide samples were also treated with lead carbonate and filtered to remove potential sulfide interferences.

Analytical Results and Conclusions

The results of the laboratory analyses are summarized in the attached table. The laboratory reports and the chain-of-custody forms are attached as well. The locations, sampling objectives, and a discussion of the analytical results for each of the specific areas of interest at the site are provided in the following sections.

Upgradient Site Perimeter

Well MW-17 is located in the southeast corner of the site and monitors upgradient groundwater quality. The results of the analyses indicate that no BTEX or PAH compounds were detected in concentrations greater than the method detection limits. Total cyanide was detected at a concentration of 263 µg/L. Free cyanide was detected at 5.3 µg/L.

Downgradient Site Perimeter

Wells MW-20 and MW-21 are located downgradient of the western boundary of the site on Calais Street. Wells MW-13, MW-14, MW-22 and MW-23 are located just inside the northern property boundary near Mineral Springs Road. These six "sentinel" wells monitor groundwater quality downgradient of the site. The groundwater samples from these six wells were analyzed for total and free cyanide.

Five of the wells were found to contain total cyanide in concentrations above the NYSDEC groundwater standard of 200 µg/L. Concentrations ranged from 61 µg/L at MW-13 to 587 µg/L at MW-22. These concentrations are generally consistent with previous results. Free cyanide was not detected in any of the sentinel wells above method detection limits.

Onsite Purifier Residuals Impacted Areas

Wells MW-12 and MW-16 monitor groundwater quality at locations of known subsurface deposits of purifier box residuals. These deposits were remediated by capping. Samples from these two wells were analyzed for total and free cyanide.

Total cyanide concentrations were 440 µg/L at MW-12 and 266 µg/L at MW-16. Free cyanide was detected in MW-12 at a concentration of 2.6 µg/L, but not detected in MW-16.

Onsite Hydrocarbon NAPL Impacted Areas

Wells MW-7, MW-10, MW-11A, and MW-19 monitor onsite groundwater quality downgradient of subsurface soil impacted with hydrocarbon NAPL. Samples from these wells were analyzed for BTEX and PAHs.

BTEX and PAHs were not detected at MW-10, except a low concentration of naphthalene. Consistent with previous results, BTEX and PAH compounds were detected above the groundwater standards in MW-7, MW-11A, and MW-19.

Surface Water

Two surface water samples were collected during this sampling event. Sample SW-01 was collected at the Calais Street storm sewer inlet. Sample SW-02 was collected from the Eastern Drainage Ditch near the Class D Stream. These surface sampling locations monitor the effectiveness of the Eastern Drainage Ditch Cap and also monitor the concentrations of COI in surface water at its most downgradient location at the Mineral Springs site.

BTEX and PAHs were not detected in either surface water sample, except a low concentration of naphthalene at SW-01. Total and free cyanide were not detected above the NYSDEC standards in either surface water sample.

QA/QC Samples

Quality control samples were collected during the sampling event to meet the requirements of the project QAP.

An equipment blank (EB) was prepared using organic free water supplied by the laboratory that was run over and through a sample collection bailer and through peristaltic pump tubing. No cyanide, BTEX, or PAH compounds were detected in the equipment blank.

A trip blank (TB) sample was prepared by the laboratory and was stored in the sample cooler throughout the sampling event and during transportation back to the laboratory. The trip blank was analyzed for BTEX and no compounds were detected in concentrations greater than the method detection limits.

Sample "MW-7B" was collected as a duplicate from MW-7 and submitted for analysis of BTEX and PAHs. The duplicate results were within the acceptable range.

Sample "MW-160" was collected as a duplicate from MW-16 and submitted to Clarkson for the analysis of total and free cyanide. The duplicate results were within the acceptable range.

DNAPL Recovery Test Well (RTW-1)

During this groundwater sampling event, the Recovery System was operated to purge RTW-1 of DNAPL that had accumulated since the July 2005 sampling event. Approximately ½ gallon of water was pumped out. The water contained only trace amounts (blebs) of NAPL.

If you have any questions or comments, please do not hesitate to call me at (607) 277-5716.

Sincerely,
The RETEC Group, Inc.

Mark Hofferbert, P.E.
Project Engineer

encl: Groundwater Contours (figure)
Laboratory Results Summary (table)
Laboratory Reports

cc: T. Alexander - NFG
D. Flynn - Phillips, Lytle
D. Szymanski - NYSDEC
C. O'Connor - NYSDOH (w. figure/table only)
G. Bailey - NYSDEC (w. figure/table only)
G. Litwin - NYSDOH (w. figure/table only)
File: NFGD3-14852-300

Groundwater and Surface Water Monitoring Results
Mineral Springs Road MGP Site

April 2006

PARAMETER	GROUNDWATER SAMPLES															SURFACE WATER			QA / QC			
Sample ID :	MW-07	MW-10	MW-11A	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	MW-19	MW-20	MW-21	MW-22	MW-23	*Groundwater*	SW-01	SW-02	*Class D Stream*	TB	EB	MW-07 Dup	MW-16 Dup
Sample Date :	04/25/06	04/25/06	04/25/06	04/26/06	04/26/06	04/26/06	04/26/06	04/26/06	04/25/06	04/26/06	04/25/06	04/26/06	04/26/06	04/26/06	*Standard* (1)	04/26/06	04/25/06	*Standard* (1)	04/25/06	04/25/06	04/25/06	04/26/06
BTEX (µg/L)																						
Benzene	2900	nd	67	---	---	---	---	---	nd	5800	---	---	---	---	1	nd	nd	10	nd	nd	2000	---
Toluene	1100	nd	0.56 J	---	---	---	---	---	nd	nd	---	---	---	---	5	nd	nd	6000	nd	nd	750	---
Ethylbenzene	3100	nd	2.5	---	---	---	---	---	nd	260	---	---	---	---	5	nd	nd	150 *	nd	nd	2100	---
Xylene (sum of isomers)	1800	nd	8.1	---	---	---	---	---	nd	730 J	---	---	---	---	5 (each)	nd	nd	590 *	nd	nd	1200	---
PAHs (µg/L)																						
Naphthalene	3000	43	2.9 J	---	---	---	---	---	nd	2800	---	---	---	---	10 *	32	nd	110 *	---	nd	3000	---
Acenaphthylene	nd	nd	5.1 J	---	---	---	---	---	nd	nd	---	---	---	---	NL *	nd	nd	NL	---	nd	nd	---
Acenaphthene	120 E	nd	nd	---	---	---	---	---	nd	nd	---	---	---	---	20 *	nd	nd	48 *	---	nd	120 E	---
Fluorene	32	nd	1.5 J	---	---	---	---	---	nd	nd	---	---	---	---	50 *	nd	nd	4.8 *	---	nd	31	---
Phenanthrene	33	nd	nd	---	---	---	---	---	nd	nd	---	---	---	---	50 *	nd	nd	45 *	---	nd	32	---
Anthracene	5.4 J	nd	nd	---	---	---	---	---	nd	nd	---	---	---	---	50 *	nd	nd	35 *	---	nd	3.7 J	---
Fluoranthene	nd	nd	nd	---	---	---	---	---	nd	nd	---	---	---	---	50 *	nd	nd	NL	---	nd	nd	---
Pyrene	nd	nd	nd	---	---	---	---	---	nd	nd	---	---	---	---	50 *	nd	nd	42 *	---	nd	nd	---
Benzo(a)Anthracene	nd	nd	nd	---	---	---	---	---	nd	nd	---	---	---	---	0.002 *	nd	nd	0.23 *	---	nd	nd	---
Chrysene	nd	nd	nd	---	---	---	---	---	nd	nd	---	---	---	---	0.002 *	nd	nd	NL	---	nd	nd	---
Benzo(b)Fluoranthene	nd	nd	nd	---	---	---	---	---	nd	nd	---	---	---	---	0.002 *	nd	nd	NL	---	nd	nd	---
Benzo(k)Fluoranthene	nd	nd	nd	---	---	---	---	---	nd	nd	---	---	---	---	0.002 *	nd	nd	NL	---	nd	nd	---
Benzo(a)Pyrene	nd	nd	nd	---	---	---	---	---	nd	nd	---	---	---	---	ND	nd	nd	0.0012 *	---	nd	nd	---
Indeno(1,2,3-cd)Pyrene	nd	nd	nd	---	---	---	---	---	nd	nd	---	---	---	---	0.002 *	nd	nd	NL	---	nd	nd	---
Dibenzo(a,h)Anthracene	0.47 J	nd	nd	---	---	---	---	---	nd	nd	---	---	---	---	NL	nd	nd	NL	---	nd	nd	---
Benzo(g,h,i)Perylene	nd	nd	nd	---	---	---	---	---	nd	nd	---	---	---	---	NL	nd	nd	NL	---	nd	nd	---
2-Methylnaphthalene	350 J	3.8 J	nd	---	---	---	---	---	nd	5.5 J	---	---	---	---	NL	nd	nd	NL	---	nd	310 J	---
CYANIDE (µg/L)																						
Cyanide, total	---	---	---	440	61	305	---	266	263	---	429	404	587	267	200	4	3	9000	---	nd	---	285
Cyanide, free	---	---	---	2.6	nd	nd	---	nd	5.2	---	nd	nd	nd	nd	NL	2.3	2.3	22	---	nd	---	nd
Water Elevation (feet)	581.90	581.15	582.38	580.96	579.42	577.99	580.54	582.14	582.14	581.42	576.60	577.28	580.69	578.19	NL	581.6	Approx. 581.7	---	---	---	---	---

Notes:

NL Not listed

nd Not detected above method detection limit

--- Not analyzed for

J, E Indicates laboratory estimated value

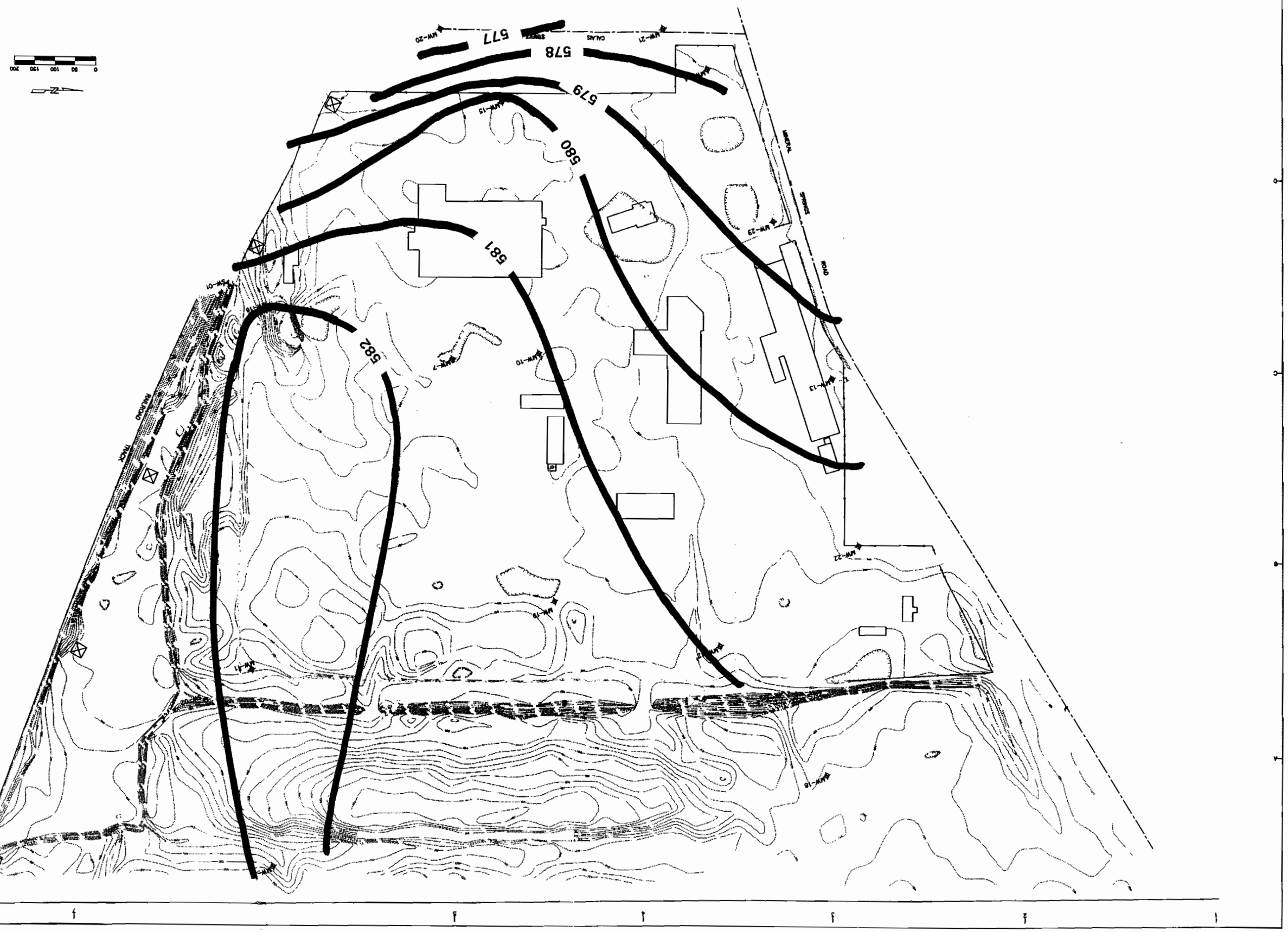
(1) NYSDEC Division of Water Technical and Operational Guidance Series (1.1.1), Ambient Water Quality Standards and Guidance Values - 6 NYCRR 700 - revised June 1998.

* Groundwater or Surface Water Guidance Value (no Standard value listed). Concentrations exceeding NYSDEC regulatory standard or guidance value.

RETEC

NATIONAL FUEL GAS
MINERAL SPRINGS ROAD SITE

APRIL 2006 GROUNDWATER CONTOURS



Clarkson
UNIVERSITY

RECEIVED
JUN 12 2006
NYSDEC REG 9
FOIL
__REL __UNREL

DEPARTMENT OF
CIVIL AND ENVIRONMENTAL ENGINEERING

May 5, 2006

Mark Hofferbert
The RETEC Group, Inc.
1001 W. Seneca St., Suite 204
Ithaca, NY 14850-3342

Re: Project Number NFGD3-14852 groundwater samples analyzed by Eleanor Hopke, Clarkson University

Dear Mr. Hofferbert:

Thirteen groundwater samples were received from The RETEC Group, Inc. on April 26, 2006 The samples arrived cold (4°C) in brown plastic bottles, two 250-ml bottles for each sample. The Chain of Custody Record indicated that the samples were treated with lead carbonate and filtered in the field. pH's of the samples were about 14. Requested analyses were Total Cyanide and Free Cyanide by Microdiffusion.

The duplicate sample containers were composited before analysis. Laboratory spikes, laboratory duplicates, check standards and calibration standard repeats were analyzed along with the samples.

The following methods were used to analyze the samples:

Total Cyanide – APHA *Standard Methods* 4500-CN^- C. "Total Cyanide after Distillation" and APHA *Standard Methods* 4500-CN^- E., "Colorimetric Method."

Free Cyanide - *ASTM* D4282-95. "Standard Test Method for Determination of Free Cyanide in Water and Wastewater by Microdiffusion." using lower concentration standards to better bracket the sample concentrations, and substituting APHA 4500-CN^- D. to standardize the stock cyanide standard. Additional buffer was added to lower the pH of the soil extraction liquids adequately for the analysis.

For Diffusible and Total Cyanide, the stock cyanide standard was calibrated using *Standard Methods*, 4500-CN^- D., "Titrimetric Method."

The analytical results follow:

Groundwater Samples
TOTAL CYANIDE and FREE CYANIDE
Results in µg CN^-/L

ID	TOTAL CN	FREE CYANIDE
MW-12	440	2.6
MW-13	61	<2.3
MW-14	305	<2.3
MW-16	266	<2.3
MW-17	263	5.2
MW-20	429	<2.3
MW-21	404	<2.3
MW-22	587	<2.3
MW-23	267	<2.3
MW-160	285	<2.3
SW-01	4	2.3
SW-02	3	2.3
EB 042506	<3	<2.3
LAB DUPLICATE	260, 271	<2.3, <2.3
	MW-16	MW-23
LAB SPIKE	101.0%	92.7%
	MW-14	MW-13
REAGENT BLANK	<3	<2.3
CHECK STANDARD	97.7%	99.2%
CALIBRATION CHECK	102.2%	97.3%

I will be very glad to answer any questions or give further information about the analyses. Thank you for the opportunity to analyze them for you.

Sincerely,

Eleanor Hopke

Eleanor Hopke
Research Technician
Tel: 315-268-3772
e-mail: hopkeef@clarkson.edu

SEVERN TRENT STL®

STL Pittsburgh
301 Alpha Drive
Pittsburgh, PA 15238

Tel: 412 963 7058 Fax: 412 963 2468
www.stl-inc.com

ANALYTICAL REPORT

PROJECT NO. NFGD3-14852-300

Retec-Mineral Springs

Lot #: C6D280314

Jim Edwards

The RETEC Group Inc

SEVERN TRENT LABORATORIES, INC.

Dave Dunlap
Project Manager

May 19, 2006

The RETEC Group, Inc.

Client Sample ID: MW-7

GC/MS Volatiles

Lot-Sample #...:	C6D280314-001	Work Order #...:	H4C421AA	Matrix.....:	WATER
Date Sampled...:	04/25/06	Date Received..:	04/28/06	MS Run #.....:	6123027
Prep Date.....:	05/03/06	Analysis Date..:	05/03/06		
Prep Batch #...:	6123038				
Dilution Factor:	150	Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	2900	150	ug/L
Ethylbenzene	3100	150	ug/L
Toluene	1100	150	ug/L
Xylenes (total)	1800	450	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	98	(71 - 118)
1,2-Dichloroethane-d4	98	(64 - 135)
4-Bromofluorobenzene	94	(70 - 118)
Dibromofluoromethane	110	(64 - 128)

The RETEC Group, Inc.

Client Sample ID: MW-7

GC/MS Semivolatiles

Lot-Sample #...: C6D280314-001	Work Order #...: H4C421AC	Matrix.....: WATER	
Date Sampled...: 04/25/06	Date Received..: 04/28/06	MS Run #.....: 6122049	
Prep Date.....: 05/02/06	Analysis Date..: 05/16/06		
Prep Batch #...: 6122076			
Dilution Factor: 0.96	Method.....: SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Methylnaphthalene	**210 E**	**9.6**	**ug/L**
Naphthalene	**440 E**	**9.6**	**ug/L**
Acenaphthylene	ND	9.6	ug/L
Acenaphthene	**120 E**	**9.6**	**ug/L**
Fluorene	**32**	**9.6**	**ug/L**
Phenanthrene	**33**	**9.6**	**ug/L**
Anthracene	**5.4 J**	**9.6**	**ug/L**
Fluoranthene	ND	9.6	ug/L
Pyrene	ND	9.6	ug/L
Benzo(a)anthracene	ND	9.6	ug/L
Chrysene	ND	9.6	ug/L
Benzo(b)fluoranthene	ND	9.6	ug/L
Benzo(k)fluoranthene	ND	9.6	ug/L
Benzo(a)pyrene	ND	9.6	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.6	ug/L
Dibenzo(a,h)anthracene	**0.47 J**	**9.6**	**ug/L**
Benzo(ghi)perylene	ND	9.6	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	90	(19 - 138)
2-Fluorobiphenyl	78	(35 - 115)
2-Fluorophenol	70	(10 - 118)
Nitrobenzene-d5	114	(39 - 115)
Phenol-d5	76	(18 - 115)
Terphenyl-d14	54	(17 - 129)

NOTE(S):

E Estimated result. Result concentration exceeds the calibration range.

J Estimated result. Result is less than RL.

The RETEC Group, Inc.

Client Sample ID: MW-7

GC/MS Semivolatiles

Lot-Sample #...: C6D280314-001	Work Order #...: H4C422AC	Matrix.....: WATER
Date Sampled...: 04/25/06	Date Received..: 04/28/06	MS Run #.....: 6122049
Prep Date.....: 05/02/06	Analysis Date..: 05/18/06	
Prep Batch #...: 6122076		
Dilution Factor: 38.4	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Methylnaphthalene	**350 J**	**380**	**ug/L**
Naphthalene	**3000**	**380**	**ug/L**
Acenaphthylene	ND	380	ug/L
Acenaphthene	ND	380	ug/L
Fluorene	ND	380	ug/L
Phenanthrene	ND	380	ug/L
Anthracene	ND	380	ug/L
Fluoranthene	ND	380	ug/L
Pyrene	ND	380	ug/L
Benzo(a)anthracene	ND	380	ug/L
Chrysene	ND	380	ug/L
Benzo(b)fluoranthene	ND	380	ug/L
Benzo(k)fluoranthene	ND	380	ug/L
Benzo(a)pyrene	ND	380	ug/L
Indeno(1,2,3-cd)pyrene	ND	380	ug/L
Dibenzo(a,h)anthracene	ND	380	ug/L
Benzo(ghi)perylene	ND	380	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	NC,DIL	(19 - 138)
2-Fluorobiphenyl	NC,DIL	(35 - 115)
2-Fluorophenol	NC,DIL	(10 - 118)
Nitrobenzene-d5	NC,DIL	(39 - 115)
Phenol-d5	NC,DIL	(18 - 115)
Terphenyl-d14	NC,DIL	(17 - 129)

NOTE(S):

NC The recovery and/or RPD were not calculated.

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

J Estimated result. Result is less than RL.

The RETEC Group, Inc.

Client Sample ID: MW-10

GC/MS Volatiles

Lot-Sample #...: C6D280314-002	Work Order #...: H4C481AA	Matrix.....: WATER
Date Sampled...: 04/25/06	Date Received..: 04/28/06	MS Run #.....: 6123027
Prep Date.....: 05/03/06	Analysis Date..: 05/03/06	
Prep Batch #...: 6123038		
Dilution Factor: 1	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	94	(71 - 118)
1,2-Dichloroethane-d4	89	(64 - 135)
4-Bromofluorobenzene	86	(70 - 118)
Dibromofluoromethane	102	(64 - 128)

The RETEC Group, Inc.

Client Sample ID: MW-10

GC/MS Semivolatiles

Lot-Sample #...: C6D280314-002	Work Order #...: H4C481AC	Matrix.....: WATER
Date Sampled...: 04/25/06	Date Received..: 04/28/06	MS Run #.....: 6122049
Prep Date.....: 05/02/06	Analysis Date..: 05/16/06	
Prep Batch #...: 6122076		
Dilution Factor: 1.06	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Methylnaphthalene	**3.8 J**	**11**	**ug/L**
Naphthalene	**43**	**11**	**ug/L**
Acenaphthylene	ND	11	ug/L
Acenaphthene	ND	11	ug/L
Fluorene	ND	11	ug/L
Phenanthrene	ND	11	ug/L
Anthracene	ND	11	ug/L
Fluoranthene	ND	11	ug/L
Pyrene	ND	11	ug/L
Benzo(a)anthracene	ND	11	ug/L
Chrysene	ND	11	ug/L
Benzo(b)fluoranthene	ND	11	ug/L
Benzo(k)fluoranthene	ND	11	ug/L
Benzo(a)pyrene	ND	11	ug/L
Indeno(1,2,3-cd)pyrene	ND	11	ug/L
Dibenzo(a,h)anthracene	ND	11	ug/L
Benzo(ghi)perylene	ND	11	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	84	(19 - 138)
2-Fluorobiphenyl	78	(35 - 115)
2-Fluorophenol	69	(10 - 118)
Nitrobenzene-d5	77	(39 - 115)
Phenol-d5	76	(18 - 115)
Terphenyl-d14	82	(17 - 129)

NOTE(S):

J Estimated result. Result is less than RL.

The RETEC Group, Inc.

Client Sample ID: MW-11A

GC/MS Volatiles

Lot-Sample #...: C6D280314-003	Work Order #...: H4C5A1AA	Matrix.....: WATER	
Date Sampled...: 04/25/06	Date Received..: 04/28/06	MS Run #.....: 6124259	
Prep Date.....: 05/04/06	Analysis Date..: 05/04/06		
Prep Batch #...: 6124362			
Dilution Factor: 2	Method.....: SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	67	2.0	ug/L
Ethylbenzene	2.5	2.0	ug/L
Toluene	0.56 J	2.0	ug/L
Xylenes (total)	8.1	6.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	96	(71 - 118)
1,2-Dichloroethane-d4	102	(64 - 135)
4-Bromofluorobenzene	109	(70 - 118)
Dibromofluoromethane	100	(64 - 128)

NOTE(S):

J Estimated result. Result is less than RL.

The RETEC Group, Inc.

Client Sample ID: MW-11A

GC/MS Semivolatiles

Lot-Sample #...: C6D280314-003	Work Order #...: H4C5A1AC	Matrix.....: WATER	
Date Sampled...: 04/25/06	Date Received..: 04/28/06	MS Run #.....: 6122049	
Prep Date.....: 05/02/06	Analysis Date..: 05/16/06		
Prep Batch #...: 6122076			
Dilution Factor: 0.94	Method.....: SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Methylnaphthalene	ND	9.4	ug/L
Naphthalene	**2.9 J**	**9.4**	**ug/L**
Acenaphthylene	**5.1 J**	**9.4**	**ug/L**
Acenaphthene	ND	9.4	ug/L
Fluorene	**1.5 J**	**9.4**	**ug/L**
Phenanthrene	ND	9.4	ug/L
Anthracene	ND	9.4	ug/L
Fluoranthene	ND	9.4	ug/L
Pyrene	ND	9.4	ug/L
Benzo(a)anthracene	ND	9.4	ug/L
Chrysene	ND	9.4	ug/L
Benzo(b)fluoranthene	ND	9.4	ug/L
Benzo(k)fluoranthene	ND	9.4	ug/L
Benzo(a)pyrene	ND	9.4	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.4	ug/L
Dibenzo(a,h)anthracene	ND	9.4	ug/L
Benzo(ghi)perylene	ND	9.4	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	72	(19 - 138)
2-Fluorobiphenyl	69	(35 - 115)
2-Fluorophenol	65	(10 - 118)
Nitrobenzene-d5	70	(39 - 115)
Phenol-d5	66	(18 - 115)
Terphenyl-d14	40	(17 - 129)

NOTE(S):

J Estimated result. Result is less than RL.

The RETEC Group, Inc.

Client Sample ID: MW-17

GC/MS Volatiles

Lot-Sample #...: C6D280314-004	Work Order #...: H4C5C1AA	Matrix.....: WATER
Date Sampled...: 04/25/06	Date Received..: 04/28/06	MS Run #.....: 6123027
Prep Date.....: 05/03/06	Analysis Date..: 05/03/06	
Prep Batch #...: 6123038		
Dilution Factor: 1	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	91	(71 - 118)
1,2-Dichloroethane-d4	84	(64 - 135)
4-Bromofluorobenzene	83	(70 - 118)
Dibromofluoromethane	93	(64 - 128)

The RETEC Group, Inc.

Client Sample ID: MW-17

GC/MS Semivolatiles

Lot-Sample #...: C6D280314-004	Work Order #...: H4C5C1AC	Matrix.....: WATER
Date Sampled...: 04/25/06	Date Received..: 04/28/06	MS Run #.....: 6122049
Prep Date.....: 05/02/06	Analysis Date..: 05/16/06	
Prep Batch #...: 6122076		
Dilution Factor: 0.97	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Methylnaphthalene	ND	9.7	ug/L
Naphthalene	ND	9.7	ug/L
Acenaphthylene	ND	9.7	ug/L
Acenaphthene	ND	9.7	ug/L
Fluorene	ND	9.7	ug/L
Phenanthrene	ND	9.7	ug/L
Anthracene	ND	9.7	ug/L
Fluoranthene	ND	9.7	ug/L
Pyrene	ND	9.7	ug/L
Benzo(a)anthracene	ND	9.7	ug/L
Chrysene	ND	9.7	ug/L
Benzo(b)fluoranthene	ND	9.7	ug/L
Benzo(k)fluoranthene	ND	9.7	ug/L
Benzo(a)pyrene	ND	9.7	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.7	ug/L
Dibenzo(a,h)anthracene	ND	9.7	ug/L
Benzo(ghi)perylene	ND	9.7	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	78	(19 - 138)
2-Fluorobiphenyl	72	(35 - 115)
2-Fluorophenol	66	(10 - 118)
Nitrobenzene-d5	72	(39 - 115)
Phenol-d5	70	(18 - 115)
Terphenyl-d14	46	(17 - 129)

The RETEC Group, Inc.

Client Sample ID: MW-19

GC/MS Volatiles

Lot-Sample #...: C6D280314-005	Work Order #...: H4C5D1AA	Matrix.....: WATER
Date Sampled...: 04/26/06	Date Received..: 04/28/06	MS Run #.....: 6124259
Prep Date.....: 05/04/06	Analysis Date..: 05/04/06	
Prep Batch #...: 6124362		
Dilution Factor: 250	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	5800	250	ug/L
Ethylbenzene	260	250	ug/L
Toluene	ND	250	ug/L
Xylenes (total)	730 J	750	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	91	(71 - 118)
1,2-Dichloroethane-d4	102	(64 - 135)
4-Bromofluorobenzene	108	(70 - 118)
Dibromofluoromethane	97	(64 - 128)

NOTE(S):

J Estimated result. Result is less than RL.

The RETEC Group, Inc.

Client Sample ID: MW-19

GC/MS Semivolatiles

Lot-Sample #...: C6D280314-005	Work Order #...: H4C5D1AC	Matrix.....: WATER
Date Sampled...: 04/26/06	Date Received..: 04/28/06	MS Run #.....: 6122049
Prep Date.....: 05/02/06	Analysis Date..: 05/16/06	
Prep Batch #...: 6122076		
Dilution Factor: 1	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Methylnaphthalene	**5.5 J**	**10**	**ug/L**
Naphthalene	**400 E**	**10**	**ug/L**
Acenaphthylene	ND	10	ug/L
Acenaphthene	ND	10	ug/L
Fluorene	ND	10	ug/L
Phenanthrene	ND	10	ug/L
Anthracene	ND	10	ug/L
Fluoranthene	ND	10	ug/L
Pyrene	ND	10	ug/L
Benzo(a)anthracene	ND	10	ug/L
Chrysene	ND	10	ug/L
Benzo(b)fluoranthene	ND	10	ug/L
Benzo(k)fluoranthene	ND	10	ug/L
Benzo(a)pyrene	ND	10	ug/L
Indeno(1,2,3-cd)pyrene	ND	10	ug/L
Dibenzo(a,h)anthracene	ND	10	ug/L
Benzo(ghi)perylene	ND	10	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	84	(19 - 138)
2-Fluorobiphenyl	77	(35 - 115)
2-Fluorophenol	72	(10 - 118)
Nitrobenzene-d5	105	(39 - 115)
Phenol-d5	79	(18 - 115)
Terphenyl-d14	43	(17 - 129)

NOTE(S):

J Estimated result. Result is less than RL.

E Estimated result. Result concentration exceeds the calibration range.

The RETEC Group, Inc.

Client Sample ID: MW-19

GC/MS Semivolatiles

Lot-Sample #...: C6D280314-005	Work Order #...: H4C5D2AC	Matrix.....: WATER
Date Sampled...: 04/26/06	Date Received..: 04/28/06	MS Run #.....: 6122049
Prep Date.....: 05/02/06	Analysis Date..: 05/18/06	
Prep Batch #...: 6122076		
Dilution Factor: 40	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Methylnaphthalene	ND	400	ug/L
Naphthalene	**2800**	**400**	**ug/L**
Acenaphthylene	ND	400	ug/L
Acenaphthene	ND	400	ug/L
Fluorene	ND	400	ug/L
Phenanthrene	ND	400	ug/L
Anthracene	ND	400	ug/L
Fluoranthene	ND	400	ug/L
Pyrene	ND	400	ug/L
Benzo(a)anthracene	ND	400	ug/L
Chrysene	ND	400	ug/L
Benzo(b)fluoranthene	ND	400	ug/L
Benzo(k)fluoranthene	ND	400	ug/L
Benzo(a)pyrene	ND	400	ug/L
Indeno(1,2,3-cd)pyrene	ND	400	ug/L
Dibenzo(a,h)anthracene	ND	400	ug/L
Benzo(ghi)perylene	ND	400	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	NC,DIL	(19 - 138)
2-Fluorobiphenyl	NC,DIL	(35 - 115)
2-Fluorophenol	NC,DIL	(10 - 118)
Nitrobenzene-d5	NC,DIL	(39 - 115)
Phenol-d5	NC,DIL	(18 - 115)
Terphenyl-d14	NC,DIL	(17 - 129)

NOTE(S):

NC The recovery and/or RPD were not calculated.

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

The RETEC Group, Inc.

Client Sample ID: SW-01

GC/MS Volatiles

Lot-Sample #...: C6D280314-006	Work Order #...: H4C5E1AA	Matrix.....: WATER
Date Sampled...: 04/26/06	Date Received..: 04/28/06	MS Run #.....: 6124259
Prep Date.....: 05/04/06	Analysis Date..: 05/04/06	
Prep Batch #...: 6124362		
Dilution Factor: 1	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	90	(71 - 118)
1,2-Dichloroethane-d4	99	(64 - 135)
4-Bromofluorobenzene	104	(70 - 118)
Dibromofluoromethane	97	(64 - 128)

The RETEC Group, Inc.

Client Sample ID: SW-01

GC/MS Semivolatiles

Lot-Sample #...: C6D280314-006	Work Order #...: H4C5E1AC	Matrix.....: WATER
Date Sampled...: 04/26/06	Date Received..: 04/28/06	MS Run #.....: 6122049
Prep Date.....: 05/02/06	Analysis Date..: 05/16/06	
Prep Batch #...: 6122076		
Dilution Factor: 0.99	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Methylnaphthalene	ND	9.9	ug/L
Naphthalene	**32**	**9.9**	**ug/L**
Acenaphthylene	ND	9.9	ug/L
Acenaphthene	ND	9.9	ug/L
Fluorene	ND	9.9	ug/L
Phenanthrene	ND	9.9	ug/L
Anthracene	ND	9.9	ug/L
Fluoranthene	ND	9.9	ug/L
Pyrene	ND	9.9	ug/L
Benzo(a)anthracene	ND	9.9	ug/L
Chrysene	ND	9.9	ug/L
Benzo(b)fluoranthene	ND	9.9	ug/L
Benzo(k)fluoranthene	ND	9.9	ug/L
Benzo(a)pyrene	ND	9.9	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.9	ug/L
Dibenzo(a,h)anthracene	ND	9.9	ug/L
Benzo(ghi)perylene	ND	9.9	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	78	(19 - 138)
2-Fluorobiphenyl	73	(35 - 115)
2-Fluorophenol	67	(10 - 118)
Nitrobenzene-d5	73	(39 - 115)
Phenol-d5	73	(18 - 115)
Terphenyl-d14	49	(17 - 129)

The RETEC Group, Inc.

Client Sample ID: SW-02

GC/MS Volatiles

Lot-Sample #...: C6D280314-007	Work Order #...: H4C5F1AA	Matrix.....: WATER
Date Sampled...: 04/25/06	Date Received..: 04/28/06	MS Run #.....: 6124259
Prep Date.....: 05/04/06	Analysis Date..: 05/04/06	
Prep Batch #...: 6124362		
Dilution Factor: 1	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	90	(71 - 118)
1,2-Dichloroethane-d4	103	(64 - 135)
4-Bromofluorobenzene	104	(70 - 118)
Dibromofluoromethane	98	(64 - 128)

The RETEC Group, Inc.

Client Sample ID: SW-02

GC/MS Semivolatiles

Lot-Sample #...: C6D280314-007	Work Order #...: H4C5F1AC	Matrix.....: WATER
Date Sampled...: 04/25/06	Date Received..: 04/28/06	MS Run #.....: 6122049
Prep Date.....: 05/02/06	Analysis Date..: 05/16/06	
Prep Batch #...: 6122076		
Dilution Factor: 1.11	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Methylnaphthalene	ND	11	ug/L
Naphthalene	ND	11	ug/L
Acenaphthylene	ND	11	ug/L
Acenaphthene	ND	11	ug/L
Fluorene	ND	11	ug/L
Phenanthrene	ND	11	ug/L
Anthracene	ND	11	ug/L
Fluoranthene	ND	11	ug/L
Pyrene	ND	11	ug/L
Benzo(a)anthracene	ND	11	ug/L
Chrysene	ND	11	ug/L
Benzo(b)fluoranthene	ND	11	ug/L
Benzo(k)fluoranthene	ND	11	ug/L
Benzo(a)pyrene	ND	11	ug/L
Indeno(1,2,3-cd)pyrene	ND	11	ug/L
Dibenzo(a,h)anthracene	ND	11	ug/L
Benzo(ghi)perylene	ND	11	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	81	(19 - 138)
2-Fluorobiphenyl	79	(35 - 115)
2-Fluorophenol	75	(10 - 118)
Nitrobenzene-d5	80	(39 - 115)
Phenol-d5	79	(18 - 115)
Terphenyl-d14	60	(17 - 129)

The RETEC Group, Inc.

Client Sample ID: EB-042506

GC/MS Volatiles

Lot-Sample #...: C6D280314-008	Work Order #...: H4C5G1AA	Matrix.....: WATER
Date Sampled...: 04/25/06	Date Received..: 04/28/06	MS Run #.....: 6124259
Prep Date.....: 05/04/06	Analysis Date..: 05/04/06	
Prep Batch #...: 6124362		
Dilution Factor: 1	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	90	(71 - 118)
1,2-Dichloroethane-d4	111	(64 - 135)
4-Bromofluorobenzene	110	(70 - 118)
Dibromofluoromethane	107	(64 - 128)

The RETEC Group, Inc.

Client Sample ID: EB-042506

GC/MS Semivolatiles

Lot-Sample #...: C6D280314-008	Work Order #...: H4C5G1AC	Matrix.....: WATER
Date Sampled...: 04/25/06	Date Received..: 04/28/06	MS Run #.....: 6122049
Prep Date.....: 05/02/06	Analysis Date..: 05/16/06	
Prep Batch #...: 6122076		
Dilution Factor: 0.94	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Methylnaphthalene	ND	9.4	ug/L
Naphthalene	ND	9.4	ug/L
Acenaphthylene	ND	9.4	ug/L
Acenaphthene	ND	9.4	ug/L
Fluorene	ND	9.4	ug/L
Phenanthrene	ND	9.4	ug/L
Anthracene	ND	9.4	ug/L
Fluoranthene	ND	9.4	ug/L
Pyrene	ND	9.4	ug/L
Benzo(a)anthracene	ND	9.4	ug/L
Chrysene	ND	9.4	ug/L
Benzo(b)fluoranthene	ND	9.4	ug/L
Benzo(k)fluoranthene	ND	9.4	ug/L
Benzo(a)pyrene	ND	9.4	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.4	ug/L
Dibenzo(a,h)anthracene	ND	9.4	ug/L
Benzo(ghi)perylene	ND	9.4	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	83	(19 - 138)
2-Fluorobiphenyl	76	(35 - 115)
2-Fluorophenol	76	(10 - 118)
Nitrobenzene-d5	78	(39 - 115)
Phenol-d5	80	(18 - 115)
Terphenyl-d14	77	(17 - 129)

The RETEC Group, Inc.

Client Sample ID: TB-042506

GC/MS Volatiles

Lot-Sample #...: C6D280314-009	Work Order #...: H4C5H1AA	Matrix.....: WATER
Date Sampled...: 04/25/06	Date Received..: 04/28/06	MS Run #.....: 6123027
Prep Date.....: 05/03/06	Analysis Date..: 05/03/06	
Prep Batch #...: 6123038		
Dilution Factor: 1	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	97	(71 - 118)
1,2-Dichloroethane-d4	96	(64 - 135)
4-Bromofluorobenzene	92	(70 - 118)
Dibromofluoromethane	110	(64 - 128)

The RETEC Group, Inc.

Client Sample ID: MW-7B

GC/MS Volatiles

Lot-Sample #...: C6D280314-010	Work Order #...: H4C5K1AA	Matrix.....: WATER	
Date Sampled...: 04/25/06	Date Received..: 04/28/06	MS Run #.....: 6128126	
Prep Date.....: 05/08/06	Analysis Date..: 05/08/06		
Prep Batch #...: 6128253			
Dilution Factor: 100	Method.....: SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	2000	100	ug/L
Ethylbenzene	2100	100	ug/L
Toluene	750	100	ug/L
Xylenes (total)	1200	300	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	82	(71 - 118)
1,2-Dichloroethane-d4	96	(64 - 135)
4-Bromofluorobenzene	92	(70 - 118)
Dibromofluoromethane	93	(64 - 128)

The RETEC Group, Inc.

Client Sample ID: MW-7B

GC/MS Semivolatiles

Lot-Sample #...: C6D280314-010	Work Order #...: H4C5K1AC	Matrix.....: WATER
Date Sampled...: 04/25/06	Date Received..: 04/28/06	MS Run #.....: 6122049
Prep Date.....: 05/02/06	Analysis Date..: 05/16/06	
Prep Batch #...: 6122076		
Dilution Factor: 1.08	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Methylnaphthalene	220 E	11	ug/L
Naphthalene	450 E	11	ug/L
Acenaphthylene	ND	11	ug/L
Acenaphthene	120 E	11	ug/L
Fluorene	31	11	ug/L
Phenanthrene	32	11	ug/L
Anthracene	3.7 J	11	ug/L
Fluoranthene	ND	11	ug/L
Pyrene	ND	11	ug/L
Benzo(a)anthracene	ND	11	ug/L
Chrysene	ND	11	ug/L
Benzo(b)fluoranthene	ND	11	ug/L
Benzo(k)fluoranthene	ND	11	ug/L
Benzo(a)pyrene	ND	11	ug/L
Indeno(1,2,3-cd)pyrene	ND	11	ug/L
Dibenzo(a,h)anthracene	ND	11	ug/L
Benzo(ghi)perylene	ND	11	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	92	(19 - 138)
2-Fluorobiphenyl	83	(35 - 115)
2-Fluorophenol	73	(10 - 118)
Nitrobenzene-d5	113	(39 - 115)
Phenol-d5	82	(18 - 115)
Terphenyl-d14	60	(17 - 129)

NOTE(S):

E Estimated result. Result concentration exceeds the calibration range.

J Estimated result. Result is less than RL.

The RETEC Group, Inc.

Client Sample ID: MW-7B

GC/MS Semivolatiles

Lot-Sample #...: C6D280314-010	**Work Order #...:** H4C5K2AC	**Matrix.....:** WATER
Date Sampled...: 04/25/06	**Date Received..:** 04/28/06	**MS Run #.....:** 6122049
Prep Date.....: 05/02/06	**Analysis Date..:** 05/18/06	
Prep Batch #...: 6122076		
Dilution Factor: 43.2	**Method.....:** SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Methylnaphthalene	**310 J**	**430**	**ug/L**
Naphthalene	**3000**	**430**	**ug/L**
Acenaphthylene	ND	430	ug/L
Acenaphthene	ND	430	ug/L
Fluorene	ND	430	ug/L
Phenanthrene	ND	430	ug/L
Anthracene	ND	430	ug/L
Fluoranthene	ND	430	ug/L
Pyrene	ND	430	ug/L
Benzo(a)anthracene	ND	430	ug/L
Chrysene	ND	430	ug/L
Benzo(b)fluoranthene	ND	430	ug/L
Benzo(k)fluoranthene	ND	430	ug/L
Benzo(a)pyrene	ND	430	ug/L
Indeno(1,2,3-cd)pyrene	ND	430	ug/L
Dibenzo(a,h)anthracene	ND	430	ug/L
Benzo(ghi)perylene	ND	430	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	NC,DIL	(19 - 138)
2-Fluorobiphenyl	NC,DIL	(35 - 115)
2-Fluorophenol	NC,DIL	(10 - 118)
Nitrobenzene-d5	NC,DIL	(39 - 115)
Phenol-d5	NC,DIL	(18 - 115)
Terphenyl-d14	NC,DIL	(17 - 129)

NOTE(S):

NC The recovery and/or RPD were not calculated.

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

J Estimated result. Result is less than RL.

Chain of Custody Record

№ 0032

The RETEC Group, Inc.
1001 W. Seneca Street, Suite 204 • Ithaca, NY 14850-3342
(607) 277-5716 Phone • (607) 277-9057 Fax
www.retec.com

RETEC

Project Name: Mineral Springs	Project Number: NFGD 3-14852
Send Report To: Mark Hefferbert	Sampler (Print Name): Jesse Lloyd
Address: Above Address	Sampler (Print Name):
	Shipment Method: FedEx
	Airbill Number: Clarkson Univ.
Phone:	Laboratory Receiving:
Fax:	

Page ____ of ____

Purchase Order #: _____

Field Sample ID	Sample Date	Sample Time	Sample Matrix	Number of Containers	Analysis Requested: Total Cn	Analysis Requested: Free Cn	Comments, Special Instructions, etc.	Lab Sample ID (to be completed by lab)
MW-12	4-26-06	1402	Aq	2	X	X	All sample were treated with lead carbonate & filtered in the Field	
MW-13	4-26-06	0922						
MW-14	4-26-06	1537						
MW-16	4-26-06	1026						
MW-17	4-25-06	1520						
MW-20	4-25-06	1138					Standard TAT	
MW-21	4-26-06	1734						
MW-22	4-26-06	1312						
MW-23	4-26-06	1626						
MW-160	4-26-06							
SW-01	4-26-06	1434						
SW-02	4-25-06	1650						
EB-042506	4-26-06	1540						

Relinquished by: (Signature) Jesse Lloyd	Received by: (Signature)	Date: 4-27-06	Time: 1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Sample Custodian Remarks (Completed By Laboratory):

QA/QC Level	Turnaround	Sample Receipt
Level I ☐	Routine ☑	Containers Received?
Level II ☐	24-Hour ☐	COC Seals Present?
Level III ☐	1 Week ☐	COC Seals Intact?
Other ☐	Other ____	Received Containers Intact?
		Temperature?

White: Lab Copy Yellow: PM Copy Pink: Field Copy Gold: PM/QA/

Chain of Custody Record

SEVERN TRENT **STL**

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client	Project Manager	Date	Chain of Custody Number
Retec	Mark HoFFerbert	4-27-06	229184
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
1001 W Seneca St Suite 204	607.277.5716		
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Ithaca / NY / 14850		Eleanor Hopke	
Project Name and Location (State)	**Carrier/Waybill Number**		
Mineral Springs / NY	FedEx		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 8260 BTEX	8270 PAHs	Special Instructions/ Conditions of Receipt
MW-7	4-25-06	1355		↓			2			3			↓	↓	
MW-10	4-25-06	1300													
MW-11A	4-25-06	1712													
MW-17	4-25-06	1520													
MW-19	4-26-06	1143													
SW-01	4-26-06	1434													
SW-02	4-25-06	1650													
EB-042506	4-25-06	1540					↓								
TB-042506	4-25-06	1600								2					
MW-7B	4-25-06	1358		↓			2			3			↓	X	

Possible Hazard Identification

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

Sample Disposal

☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

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

Turn Around Time Required

☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other Standard TAT

QC Requirements (Specify)

1. Relinquished By	Date	Time	1. Received By	Date	Time
Jesse Floyd	4-27-06	1600			
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy