Operation, Maintenance and Monitoring Report
February 2004
and
Six-Year Progress Report

NOW Corporation Site
Site 3-14-008

Work Assignment No.
D003821-29

Prepared for:

SUPERFUND STANDBY PROGRAM
New York State
Department of Environmental Conservation
625 Broadway
Albany, New York 12233

Prepared by:

Earth Tech Northeast, Inc.
40 British American Boulevard
Latham, New York 12110

40 British American Boulevard, Latham, New York 12110

April 5, 2004

Mr. Carl Hoffman
NYSDEC Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York 12233-7013

Re: NOW Corporation - Site #3-14-008
Monthly Summary Report – February 2004
and Six-Year Progress Report

Dear Mr. Hoffman:

Telephone
518.951.2200
Facsimile
518.951.2300

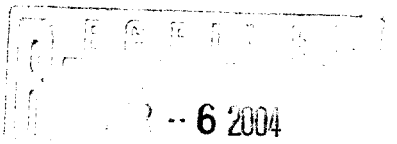
Enclosed is a monthly summary report for the operation, monitoring and maintenance (OM&M) of the remedial system at the NOW Corporation site in the Town of Clinton, New York (Figure 1). This report describes the OM&M of the soil vapor extraction (SVE) system and the groundwater pump-and-treat (P&T) system for a 27-day period (**January 30 – February 26, 2004**). Also included in this report are maps and charts, and a discussion of trends evident in the six-year record of analytical data from influent air and water samples.

The P&T and SVE systems were online and operational for all but five days of the reporting period (details below). Approximately 451,900 gallons of water were treated during the period. Discharge from the treatment system averaged approximately 16,700 gallons per day (gpd). During the prior reporting period, the average discharge was 28,300 gpd.

As of the last day of the reporting period, a total of 37,210,000 gallons of groundwater had been recovered and treated by the system since it became operational in February 1998.

Table 1 summarizes influent and effluent analytical data for water samples collected on February 11, 2004. All effluent discharge requirements were met. Table 2 summarizes the operation and maintenance data recorded on the last day of the reporting period, while Table 3 summarizes monitoring well water level data collected on the sampling date. Table 4 summarizes the SVE system air analytical data, as well as the analytical results from a sample of the air-stripper stack emissions (sample PAS). A copy of each laboratory data report (water and air) is included in this report.

Earth Tech made three site visits during the reporting period to conduct the required system inspections, maintenance, monitoring well water-level measurements, and monthly sampling. Details follow:



February 11th – Monthly sampling and bi-weekly system inspection. Technicians changed oil in the vapor blower motor; changed filters on the heat-exchanger fans; and greased the air stripper intake motor. They noted the presence of oil on the floor beneath the electrical box; upon inspection, the oil was noted to be oozing into the electrical box from the effluent pump power cord.

February 19th – Technicians responded to a system shut-down alarm received at the Latham office on February 14. The alarm was triggered by high water levels in the third settling tank in the plant building. Technicians replaced the failed effluent pump with a standby spare pump. They pumped down the settling tank, and restarted the system. The faulty pump was later brought to Gray Electric for diagnosis.

February 26th – Routine bi-weekly system inspection. Resealed minor vacuum leaks on wellheads for vapor extraction wells TW-1 and TW-2A. (The wells are actually dual-phase wells.)

Progress Report: Groundwater

The water level contour map shown in Figure 2 depicts the drawdown of the potentiometric surface by the three groundwater recovery wells tapping the impacted semi-confined aquifer underlying the Site. The figure suggests groundwater capture at distances of 100 to 200 feet from the recovery wells. The actual capture zone, however, is dependent on the location, orientation, and hydraulic conductivity of fracture zones in the vicinity of each well. The influence of a recovery well is likely to be greater in some directions than in others.

The potentiometric surface displayed in Figure 2 was used as a base map for Figure 3, which summarizes the analytical results for the most recent groundwater sampling of the Site monitoring wells. This sampling event was conducted in August 2003. The laboratory analytical report and the tabulated historical results were included in Earth Tech's July-August 2003 OM&M report. Also shown on the figure are the results of two sampling events conducted in 2003 at three nearby private water supply wells. (Earth Tech provides O&M services of whole-house water-treatment systems at two of these locations under a NYSDEC Work Assignment. As a courtesy, I have included Table 5, the historical raw-water analytical data for the nearby private wells.)

Monitoring wells MW-6D and MW-7D appear to be located in the capture zone of recovery wells TW-3 and TW-2A, respectively. The situation for MW-1 is not so clear. However, downgradient monitoring wells MW-5 and MW-9 have historically been "clean." The private well at the Garden Center (located across Route 9G from the Site) continues to be impacted by the suite of VOCs characteristic of Site groundwater. There is no water treatment system at the Garden Center.

Total (monthly) influent VOC concentrations are plotted versus time in Figures 4 through 7. Note the variable vertical scales on each figure. The first figure reflects concentrations in the total influent, whereas the next three figures depict concentrations specific to the recovery well noted on each figure. In February through September 1998, total influent was sampled at a frequency of three to five times per month. To simplify the display in Figure 4 (and to make it easily comparable to Figures 5 through 7), a single value representing the average concentration is plotted for each of those heavily sampled, early months of system operation. Several features of the four-figure series are noteworthy:

- Absence of a data point indicates that either a sampling event was missed, or that sampling was not performed because the groundwater P&T system was inoperative. Only successive data points (i.e., at monthly intervals) are joined by a line segment on the charts.
- Large fluctuations in influent groundwater quality have occurred from time to time at each recovery well.
- The concentrations of VOCs have been generally declining in two of the three recovery wells. The trend is shown by a best-fit, second-order polynomial curve through each set of data points. Well TW-1 is the exception. Six years of groundwater capture has apparently done little to remediate the impacted groundwater near TW-1.
- The decline of VOC concentrations has been greatest at TW-2A; however, the groundwater remains heavily impacted within at least portions of the capture zone of the well.
- Considering the magnitude of VOC fluctuations occasionally observed in successive sampling events, influent groundwater quality was relatively unchanged at the three recovery wells following an extended period of system downtime that ended in July 2001.

Progress Report: Soil Vapor

Figure 8 depicts historical combined influent vapor VOC concentrations collected from four wells, whereas Figures 9 through 12 display total VOCs drawn from each of the individual vapor recovery wells (TW-1, TW-2A, VE-1 and VE-2; TW-1 and TW-2A are dual-phase recovery wells). All SVE well locations are shown on Figure 1. The data on Figures 8 through 12 are plotted against a logarithmic vertical axis to better display the large historical range of VOC concentrations. With some difficulty, a downward trend in concentrations can be discerned in the data. However, since the end of a three-month sampling gap in November 2002 (event 29), concentrations in each influent vapor stream have generally been limited to a range from 20 to 200 ppbv. It is interesting to note that VOC concentrations were almost always lower in the first sampling event following SVE system downtime than they were prior to system downtime (shown as "sampling gaps" on the figures).

While comparing the figures for SVE wells VE-1 and VE-2, I noticed that the time sequence of concentrations was virtually identical. A subsequent field inspection showed that there was no vacuum at either of these wells. The situation will be investigated further when standing water in the vicinity of these two wells dries up. My technicians recall seeing excavation performed last summer in the area. Perhaps a buried vacuum line was severed. Until repair is effected, we will not be collecting air samples from the two wells.

Please feel free to contact me at (518) 951-2262 if you have any questions regarding either this report, or the operation of the treatment system.

Sincerely,

Earth Tech Northeast

Stephen R. Choiniere
Project Manager

Attachments

TABLES

Table 1
Summary of Influent and Effluent Data
Sampling Date: February 11, 2004
NOW Corporation Site
Town of Clinton, New York

Analytes/ Parameters	Total Influent	Effluent	Recovery Wells			Treatment Requirements	(units)
			TW-1	TW-2A	TW-3		
Quantity treated, per day		16,737				Monitor	gpd
pH	7.1	6.8	NA	NA	NA	6.5 to 8.5	standard units
Oil and Grease	<1.5	<1.4	NA	NA	NA	15	mg/L
Total Cyanide	<0.01	<0.01	NA	NA	NA	0.01	mg/L
TDS	**250**	**250**	NA	NA	NA	1000	mg/L
TSS	<5	<5	NA	NA	NA	50	mg/L
Aluminum, Total	<0.01	<0.01	NA	NA	NA	2	mg/L
Arsenic, Total	<0.004	<0.004	NA	NA	NA	0.05	mg/L
Barium, Total	**0.074**	**0.071**	NA	NA	NA	2	mg/L
Chromium	<0.001	<0.001	NA	NA	NA	0.1	mg/L
Copper	<0.001	**0.001**	NA	NA	NA	0.024	mg/L
Iron	**0.021**	**0.014**	NA	NA	NA	0.6	mg/L
Mercury	<0.0002	<0.0002	NA	NA	NA	0.0008	mg/L
Manganese	**0.112**	**0.078**	NA	NA	NA	0.6	mg/L
Nickel	**0.002**	**0.002**	NA	NA	NA	0.2	mg/L
Zinc	**0.002**	**0.002**	NA	NA	NA	0.15	mg/L
1,1,1-Trichloroethane	**1900**	<0.5	**6.0**	**1900**	**100**	0.8	ug/L
1,1,2-Trichloroethane	<30	<0.5	<5	<40	<0.5	5	ug/L
1,1-Dichloroethane	**300**	<0.5	**140**	**300**	**44**	5	ug/L
1,1-Dichloroethene	**70**	<0.5	**16**	**56**	**4.3**	5	ug/L
1,2-Dichloroethane	<30	<0.5	<5	<40	<0.5	5	ug/L
Benzene	<30	<0.5	<5	<40	<0.5	0.5	ug/L
Chlorobenzene	<30	<0.5	<5	<40	<0.5	5	ug/L
Chloroethane	<30	<0.5	<5	<40	**0.8**	None	ug/L
cis-1,2-Dichloroethene	<30	<0.5	**6.0**	<40	<0.5	1.4	ug/L
Ethylbenzene	<30	<0.5	<5	<40	<0.5	5	ug/L
Methyl tert-butyl ether	<20	<2	<20	<160	<2	5	ug/L
o-Xylene	<30	<0.5	<5	<40	<0.5	5	ug/L
p&m-Xylene	<30	<0.5	<5	<40	<0.5	1.6	ug/L
Tetrachloroethene	<30	<0.5	<5	<40	<0.5	1.2	ug/L
Toluene	<30	<0.5	<5	<40	<0.5	5	ug/L
trans-1,2-Dichloroethene	<30	<0.5	<5	<40	<0.5	0.6	ug/L
Trichloroethene	**500**	<0.5	**42**	**490**	**12**	10	ug/L
Vinyl Chloride	<30	<0.5	<5	<40	<0.5	5	ug/L

Notes:

1) Positive results are presented in ***bold*** *typeface. Numeric values are in units shown in far right column.*

2) Effluent concentration boxed in ***bold*** *denotes exceedance of treatment requirements.*

3) NA indicates not analyzed.

*4) "**J**" indicates an estimated concentration below the method detection limit.*

Table 2
Summary of February 2004 O&M Data

NOW Corporation Site
Town of Clinton, New York

Instrumentation/Readings:	2/26/2004	Units
TW-1		
Pumping Rate	2	GPM
Water Level Above Transducer	26.54	feet
Flow Meter Reading	1,177,300	gallons
Pump Pressure	72	psi
TW-2A		
Pumping Rate	8	GPM
Water Level Above Transducer	28.9	feet
Flow Meter Reading	2,837,800	gallons
Pump Pressure	45	psi
TW-3		
Pumping Rate	3	GPM
Water Level Above Transducer	28.74	feet
Flow Meter Reading	8,680,500	gallons
Pump Pressure	70	psi
Air Stripper		
Stripper Blower Pressure	18.5	inches H_2O
Air Temperature in Stripper	46	°F
Pressure Gauge - Left Leg	1	inches H_2O
Pressure Gauge - Right Leg	0.8	inches H_2O
Pressure/Vacuum on the Stripper	-	inches H_2O
Effluent Flow		
Total System Meter Reading	37,209,600	gallons
IW-1 Flow Meter Reading	20,238	gallons
IW-2 Flow Meter Reading	18,582	gallons
Vapor Extraction System		
Vapor Blower Vacuum	8	inches Hg
Vacuum before Filter with Dilution Air	7.5	inches Hg
Vacuum on Knock-out Pot	10.5	inches Hg
Blower Inlet Temperature	62	°F
Blower Outlet Temperature	184	°F
Pressure After Blower	55	psi
Heat Exchanger Outlet Temperature	66	°F

Note: N/A indicates data/measurement is not available.
NW - Not working

Table 3
February 2004 Groundwater Levels

NOW Corporation Site
Town of Clinton, New York

Well ID	MP Elevation	2/11/2004 Depth to Water (Ft below MP)	2/11/2004 GW Elevation
MW-1	289.50	17.34	272.16
MW-2	332.51	30.60	301.91
MW-3	312.83	30.63	282.20
MW-3S	312.51	26.52	285.99
MW-4	298.29	25.45	272.84
MW-4D	298.16	25.33	272.83
MW-5	285.48	19.47	266.01
MW-6S	287.90	23.89	264.01
MW-6D	287.25	14.82	272.43
MW-7S	292.12	31.82	260.30
MW-7D	292.54	72.86	219.68
OW-1	307.75	57.83	249.92
OW-2	305.96	71.53	234.43
OW-6	294.81	6.49	288.32
IW-1	312.46	8.83	303.63
IW-2	306.56	2.68	303.88
MW-8	283.65	N/A	N/A
MW-9	275.37	N/A	N/A
MW-10	280.92	N/A	N/A
MW-11	283.72	N/A	N/A
OW-3	307.35	N/A	N/A
OW-4	308.30	N/A	N/A
OW-5	307.41	N/A	N/A
TW-2	290.52	N/A	N/A

Note: N/A indicates groundwater level was not measured.
MP denotes measuring point.

Table 4
SVE and Groundwater Treatment System Air Sampling Data
Sampling Date: February 11, 2004

NOW Corporation Site
Town of Clinton, New York

Analyte	TW-1VE		VE-1VE		VE-2VE		TW-2AVE		ST-1		PAS		SVE-EXH		ST-4	
	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
Vinyl Chloride	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	10.0	ND	1.0	ND	1.0
Chloroethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	10.0	ND	1.0	ND	1.0
1,1-Dichloroethene	**1.8**	1.0	**1.7**	1.0	**2.0**	1.0	**2.0**	1.0	**2.2**	1.0	**23.0**	10.0	ND	1.0	ND	1.0
1,1-Dichloroethane	**9.0**	1.0	**9.1**	1.0	**9.2**	1.0	**9.9**	1.0	**12.0**	1.0	**291.0**	10.0	ND	1.0	ND	1.0
cis-1,2-Dichloroethene	**6.4**	1.0	**6.3**	1.0	**6.6**	1.0	**6.5**	1.0	**6.6**	1.0	**10.0**	10.0	ND	1.0	ND	1.0
1,1,1-Trichloroethane	**17.0**	1.0	**17.0**	1.0	**18.0**	1.0	**21.0**	1.0	**32.0**	1.0	**1490.0**	10.0	ND	1.0	ND	1.0
Benzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	10.0	ND	1.0	ND	1.0
1,2-Dichloroethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	10.0	ND	1.0	ND	1.0
Trichloroethene	**136.0**	1.0	**132.0**	1.0	**133.0**	1.0	**137.0**	1.0	**144.0**	1.0	**474.0**	10.0	ND	1.0	ND	1.0
Toluene	**9.5**	1.0	**15.0**	1.0	**10.0**	1.0	**9.8**	1.0	**6.6**	1.0	ND	10.0	**4.2**	1.0	**4.7**	1.0
1,1,2-Trichloroethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	10.0	ND	1.0	ND	1.0
Tetrachloroethene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	10.0	ND	1.0	ND	1.0
Chlorobenzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	10.0	ND	1.0	ND	1.0
Ethylbenzene	**1.6**	1.0	**1.9**	1.0	**2.4**	1.0	**1.5**	1.0	**1.1**	1.0	ND	10.0	ND	1.0	**1.1**	1.0
p&m -Xylene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	10.0	ND	1.0	ND	1.0
o-Xylene																

Notes:

1) All results are reported in ppbv.
2) Positive results are presented in ***bold*** *typeface.*
3) ND indicates Not Detected (Below RL).
4) RL = Reporting Limit

Sample IDs:

TW-1VE = Well TW-1 Dual-Phase Vapor Extraction
TW-2AVE = Well TW-2A Dual-Phase Vapor Extraction
VE-1VE = Well VE-1 Vapor Extraction
VE-2VE = Well VE-2 Vapor Extraction

ST-1 = Sampling Tap #1 (Raw; Four Vapor Extraction Wells Combined)
SVE-EXH = Intermediate Sampling Tap, Between (2) 55-gal. drum carbon adsorbers
ST-4 = Sampling Tap #4 (Final, After 2nd Carbon Adsorber)
PAS = Air-stripper stack emissions

Table 5

Now Corporation Site
Historical Raw Water Analytical Summary

Location/ COC	Well ID	22-Apr-94	21-Jun-94	6 mos. Vol. Total	28-Dec-94	6 mos. Vol. Total	28-Jun.-95	6 mos. Total	21-Dec-95	5-Jun-96	6 mos. Vol. Total
		Flow Volume Reading in Gallons									
Elliott, Violette	VIOLEL	0000	NR		system removed Jul-94 per owner request no sampling						
cis-1,2-Dichloroethene		0.9	ND								
1,1,1- Trichloroethane		4.0	5.5								
Trichloroethene		6.0	11.0								
Chloroform		ND	0.2								
1,1-Dichloroethane		ND	2.3								
Tompkins, Todd	T	NS	1,922	*17,828*	19,750	*22,410*	42,160		NR	80,860	*15,860*
1,1-Dichloroethane		NS	71.0	GAC Exchange 7-Jul-94	1.3	GAC Exchange 26-Jul-95	2.0		10.00	1	
1,1,1-Trichloroethane		NS	140.0		3.4		7.0		57.00	3	
Trichloroethene		NS	270.0		21		18.0		150.00	37	
Garden Center	GC	no flow meter	no flow meter		no flow meter		no flow meter		closed for the season		
1,4-Dichlorobenzene		NS	ND		NS		ND			ND	
1,1-Dichloroethane		NS	340.0		NS		660.0			320	
1,1- Dichloroethene		NS	19.0		NS		36.0			8	
cis1,2-dichloroethene		NS	ND		NS		ND			ND	
1,1,1-Trichloroethane		NS	140.0		NS		730.0			380	
Trichloroethene		NS	66.0		NS		140.0			120	
Chloroethane		NS	ND		NS		ND			ND	
Mills, Jan	JM										
1,1-Dichloroethane										0	*18,540*
1,1- Dichloroethene										new installation 6/20/96	
1,1,1-Trichloroethane											
Trichloroethene											

Value after / is a field duplicate result.
Concentrations in ug/l (ppb).
NS indicates no sample taken
ND indicates below detection limit
Results are shown only for detected analytes
J = estimated value
E= estimated value
D= value determined by dilution

Table 5

Now Corporation Site
Historical Raw Water Analytical Summary

Location/ COC	Well ID	16-Dec-96	6 mos. Vol. Total	June 16-97	6 mos. Vol. Total	17-Dec-97	6 mos. Vol. Total	Jul 1-98	6 mos. Vol. Total	5-Jan-99	6 mos. Vol. Total	11-Aug-99
		Flow Volume Reading in Gallons										
Tompkins, Todd	T	96,720	*21,220*	117,940	*16,060*	134,000	*21,510*	155,510	*17,490*	173000	*27,080*	200,080
1,1-Dichloroethane		ND		2		11		0.7/0.5		ND		ND
1,1,1-Trichloroethane		ND		4		59		1.3/ND		1.1		0.62
Trichloroethene		ND		28		89		14/12		12		9.7
Garden Center	GC											
1,4-Dichlorobenzene		2		<5		<5		ND		unable to		ND
1,1-Dichloroethane		190		290		750D		71		sample,		140
1,1- Dichloroethene		12		20		31		ND		closed for		7.8
cis1,2-dichloroethene		ND		ND		8		3		the season.		0.96
1,1,1-Trichloroethane		200		220		1100D		40				1.6
Trichloroethene		59		100		200D		ND				10
Chloroethane		ND		<5		<5		2				ND
Mills, Jan	JM	18,540	*21,290*	39,830	*19,780*	59,610	*21,470*	81080	*24,140*	105,220	*30,150*	135,370
1,1-Dichloroethane		ND		15		31/28		ND		ND		ND
1,1- Dichloroethene		ND		ND		ND		ND		ND		ND
1,1,1-Trichloroethane		ND		ND		ND		ND		ND		ND
Trichloroethene		ND		ND		ND		ND		ND		ND
Montague	Mon											
Trichloroethene				ND		ND		ND		4.2		0.77
1,1,1-Trichloroethane				ND		ND		ND		0.67		ND

Value after / is a field duplicate result.
Concentrations in ug/l (ppb).
NS indicates no sample taken
ND indicates below detection limit
Results are shown only for detected analytes
J = estimated value
E= estimated value
D= value determined by dilution

Table 5

Now Corporation Site
Historical Raw Water Analytical Summary

Location/ COC	Well ID	Flow Volume Reading in Gallons 11-Jan-00	6 mos. Vol. Total	26-Jul-00	6 mos. Vol. Total	10-Jan-01	6 mos. Vol. Total	18-Jul-01	6 mos. Vol. Total	29-Jan-02	6 mos. Vol. Total	23-Jul-02	6 mos. Vol. Total	27-Jan-03	6 mos. Vol. Total	2-Jul-03	6 mos. Vol. Total	16-Dec-03
Tompkins, Todd	T		*19,060*	219,140	*17,580*	236,720	*17,070*	253,790	*19,460*	273,250	*24,160*	297,410	*19,430*	316,840	*19,130*	335,970	*20,570*	356,540	*19,150*	375,690
1,1-Dichloroethane				ND		ND		6.8/7.1		0.3J/0.3J		2/2		6		ND		ND/ND		ND
1,1,1-Trichloroethane				ND		ND		2/2.1		0.6J/0.7 J		2/2		32 E		0.4 J		ND/ND		ND
Trichloroethene				1.2		3.6		22/19		6.0/6.0		51 E/52 E		130 E		5		2/2		2
cis-1,2-Dichloroethene														0.8 J		ND		ND/ND		ND
1,1-Dichloroethene														0.6 J		ND		ND/ND		ND
Methly-t-butyl ether																2		ND/ND		ND
Garden Center	GC																			
1,4-Dichlorobenzene				unable to		ND		unable to		ND		ND						ND		ND
1,1-Dichloroethane				sample,		140		sample,		140.0		120 E				unable to		140 D		15
1,1- Dichloroethene				closed for		ND		closed for		8.0		9.0		140 D		sample,		9		0.7 J
cis1,2-dichloroethene				the season.		ND		the season.		0.5 J		0.7 J		10.0		closed for		0.9 J		ND
1,1,1-Trichloroethane						ND				6.0		8.0		0.9 J		the season.		1.0		ND
Trichloroethene						ND				13.0		24.0		26 E				11.0		2.0
Chloroethane						ND				ND		0.8 J		27 E				2		ND
Methly-t-butyl ether														1				0.3 J		ND
Mills, Jan	JM	*13,290*	148660	*21,530*	170190	*15,330*	185520	*22,800*	208320	*19,340*	227660	*19,000*	246660	*18,120*	264780	*18,960*	283740	*14,520*	298260	
1,1-Dichloroethane			ND		ND/ND		3		0.4 J		0.8 J		2/1		2		0.6 J		ND/ND	
1,1- Dichloroethene			ND		ND/ND		ND		ND		ND		ND/ND		ND		ND		ND/ND	
1,1,1-Trichloroethane			ND		ND/ND		ND		ND		ND		ND/ND		ND		ND		ND/ND	
Trichloroethene			ND		ND/ND		ND								1		2		ND/ND	
Methly-t-butyl ether																				
Montague	Mon	{FORMERLY DONLON}																		
Trichloroethene															37980	*17,310*	55290	*18,210*	73500	
1,1,1-Trichloroethane											12/14*	installed 7/23/02			ND/ND		0.3 J		ND	
Methly-t-butyl ether											ND				ND/ND		ND		ND	
															3/3		0.8 J		ND	

Value after / is a field duplicate result.
Concentrations in ug/l (ppb).
NS indicates no sample taken
ND or blank indicates below detection limit
Results are shown only for detected analytes
J = estimated value
E= estimated value
D= value determined by dilution

FIGURES

Figure 4
NOW Corporation P&T System - Total Influent

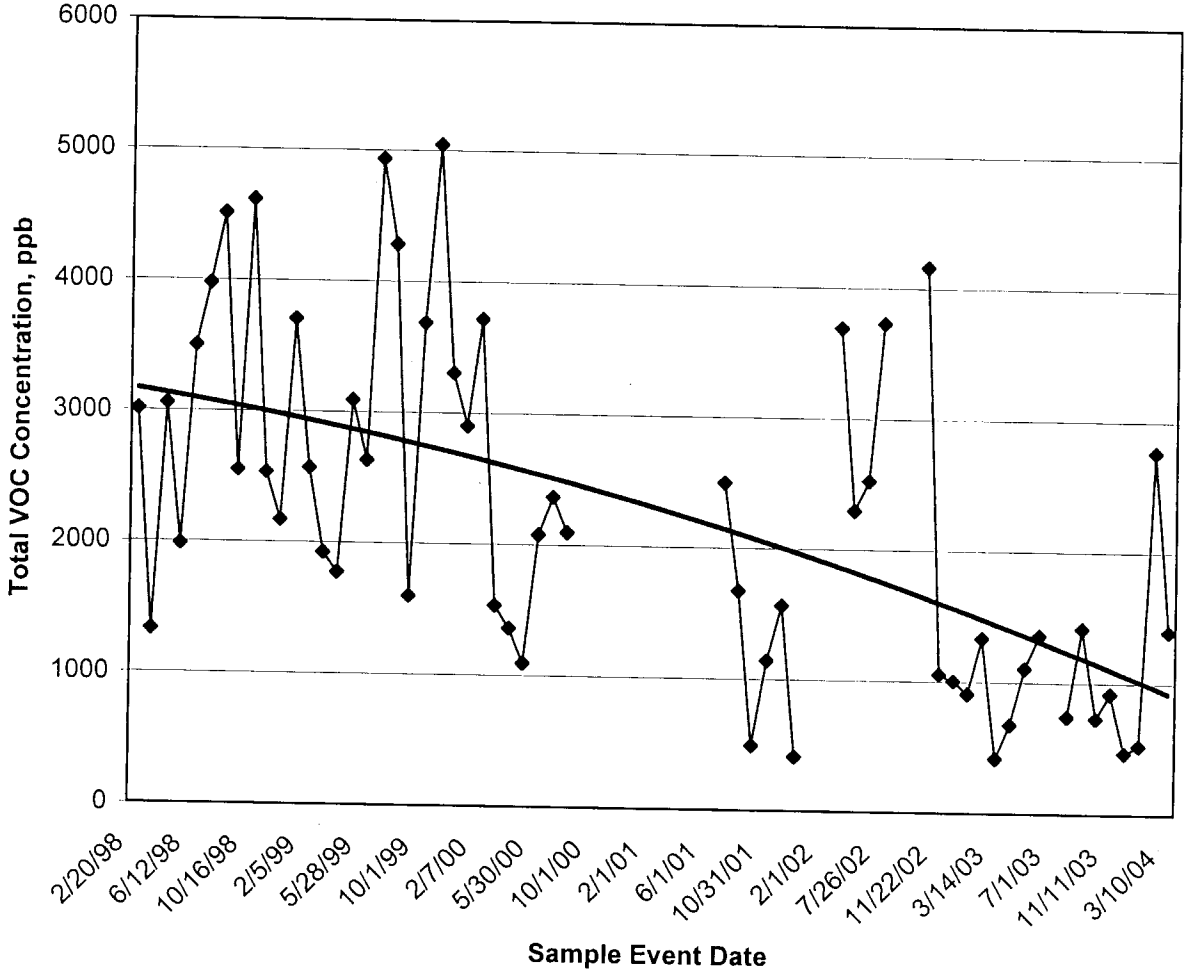


Figure 5
NOW Corporation P&T System - TW-1 Influent

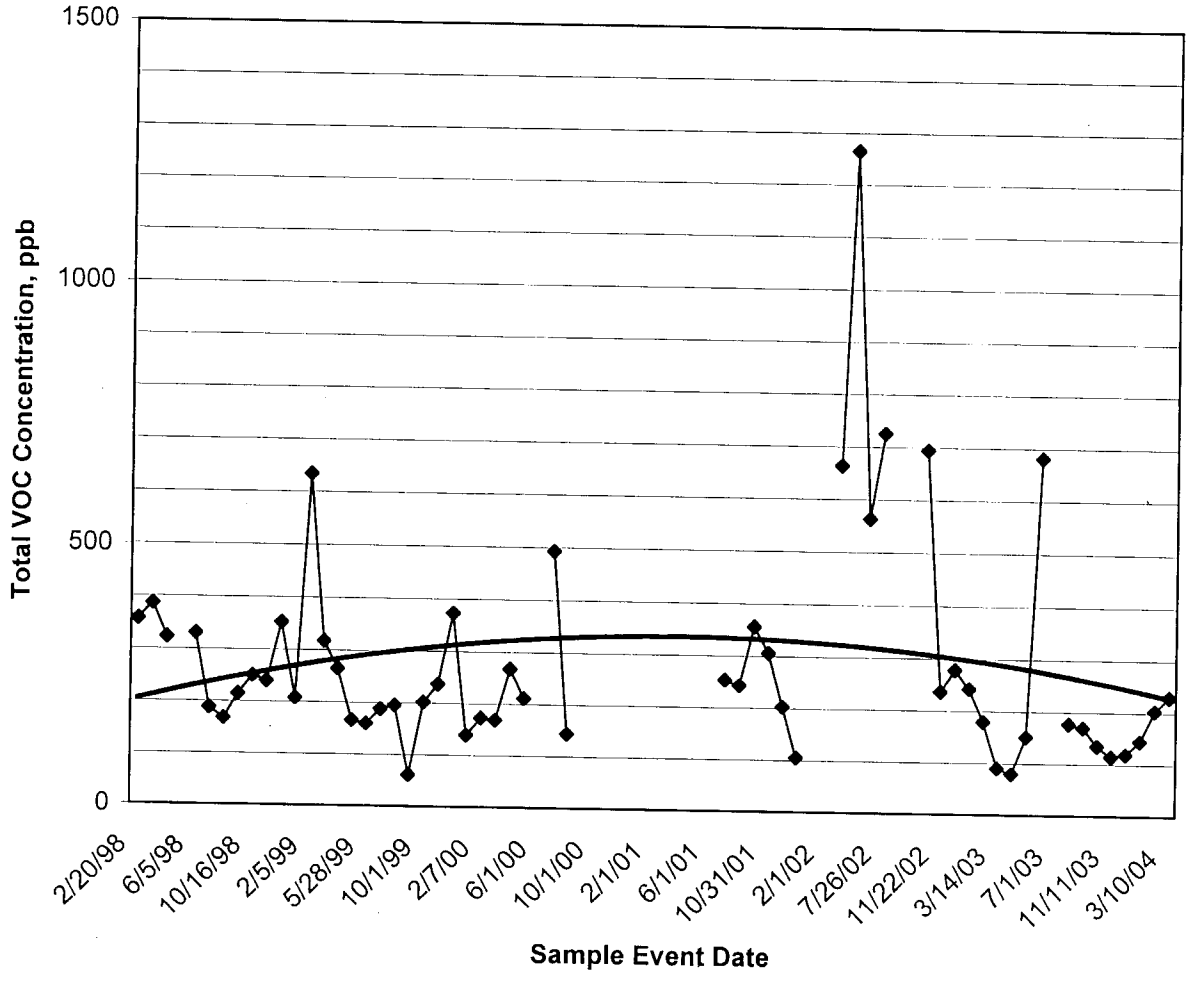


Figure 6
NOW Corporation P&T System - TW-2A Influent

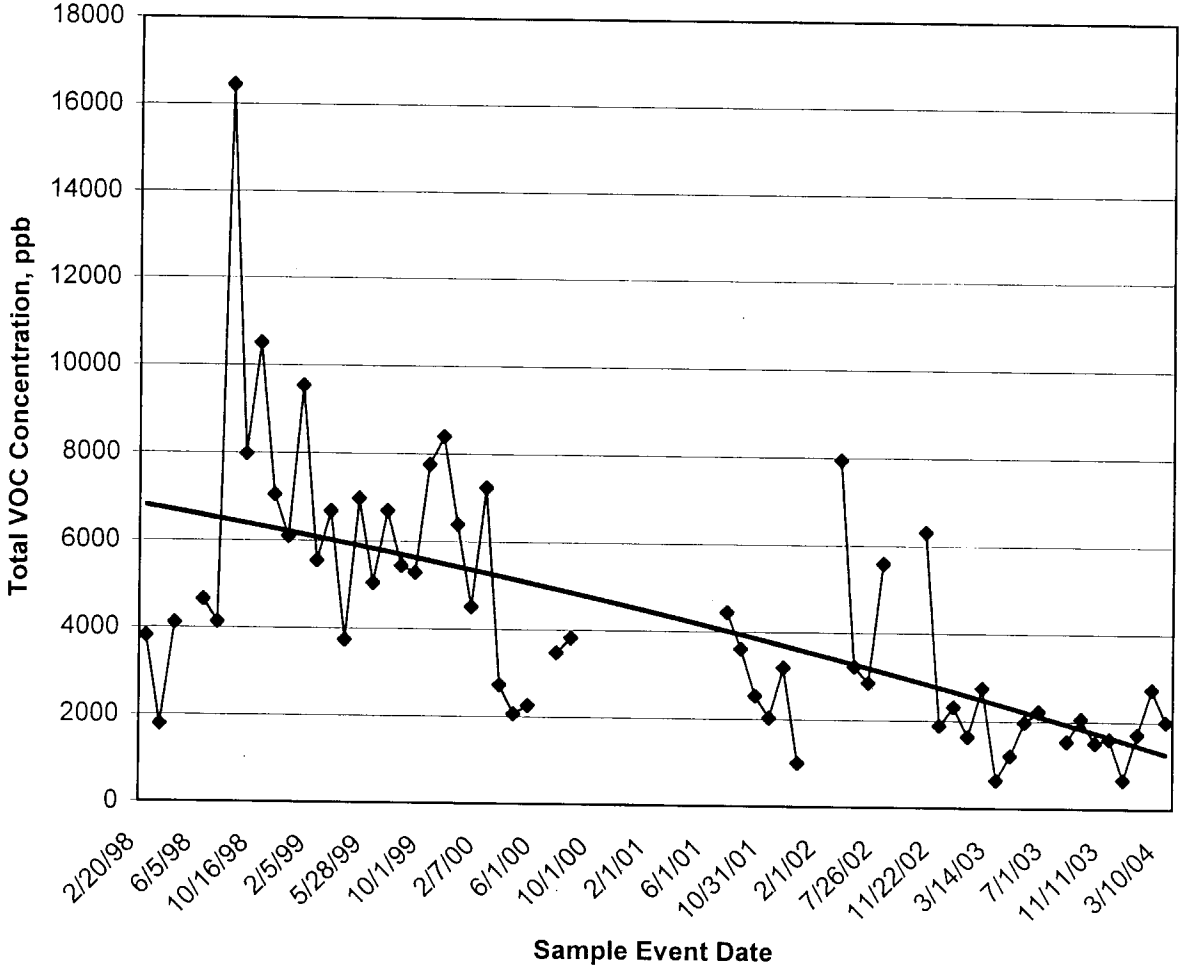


Figure 7
NOW Corporation P&T System - TW-3 Influent

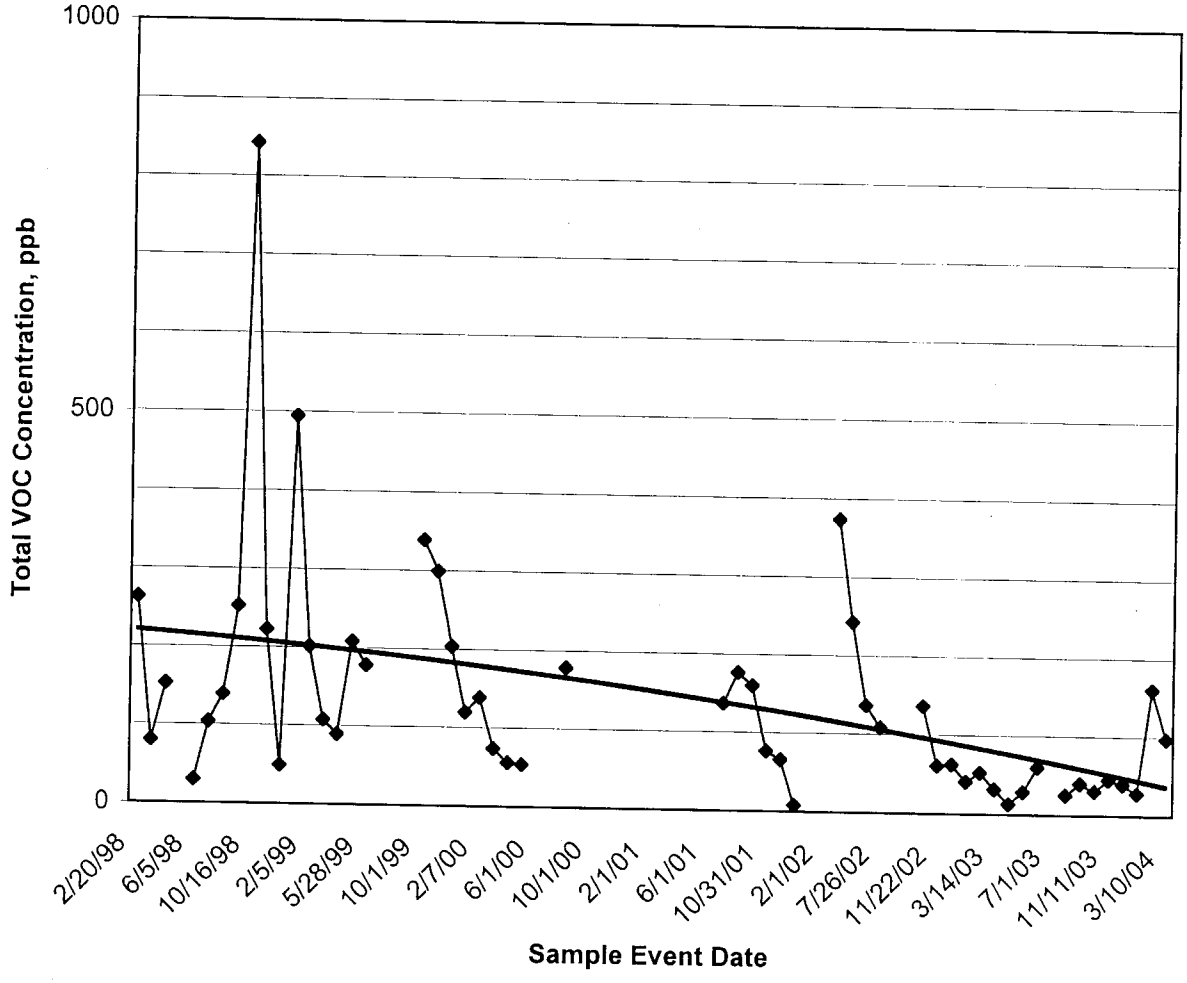


Figure 8
NOW Corporation SVE System - Total Influent
February 1998 - February 2004

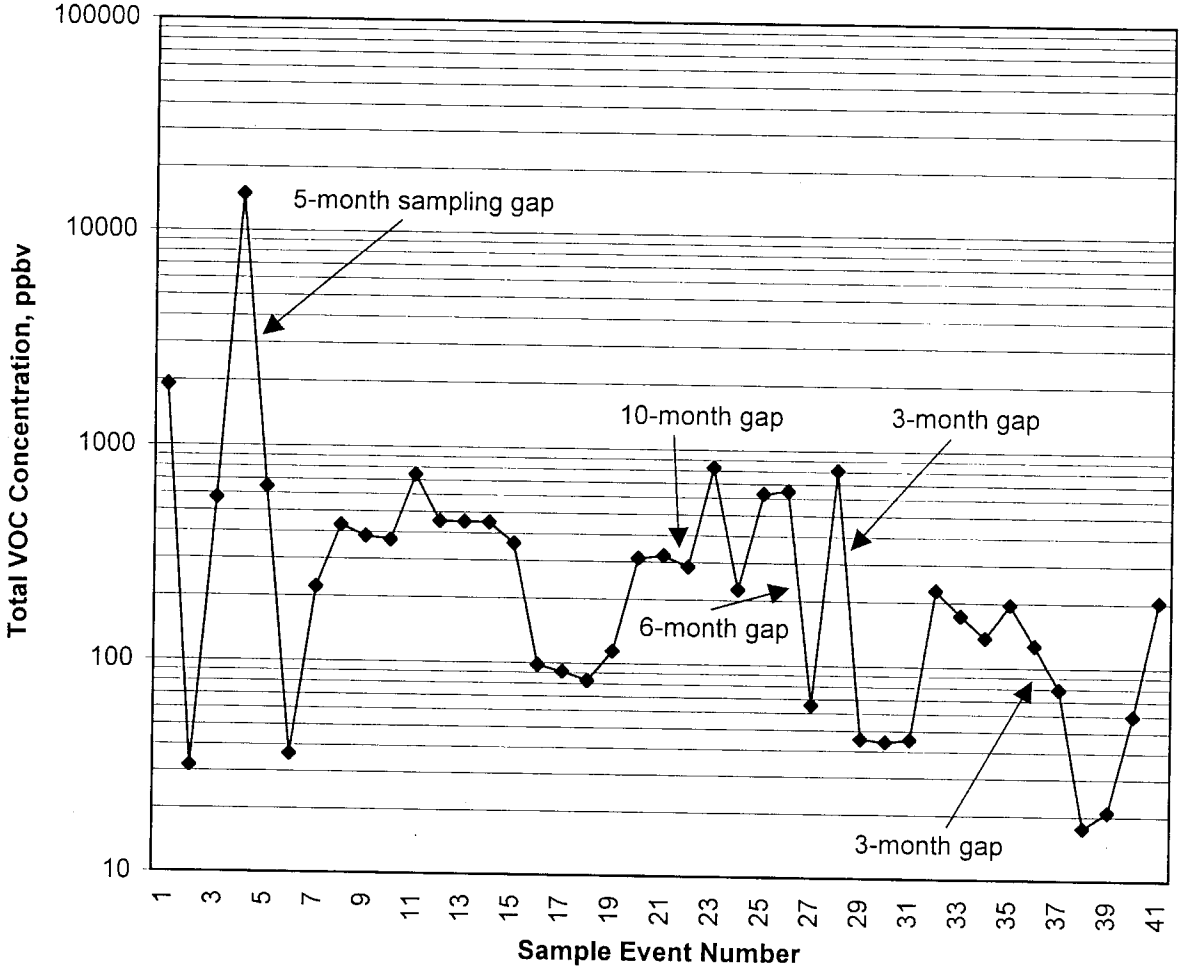


Figure 9
NOW Corporation SVE System - Well TW-1
February 1998 - February 2004

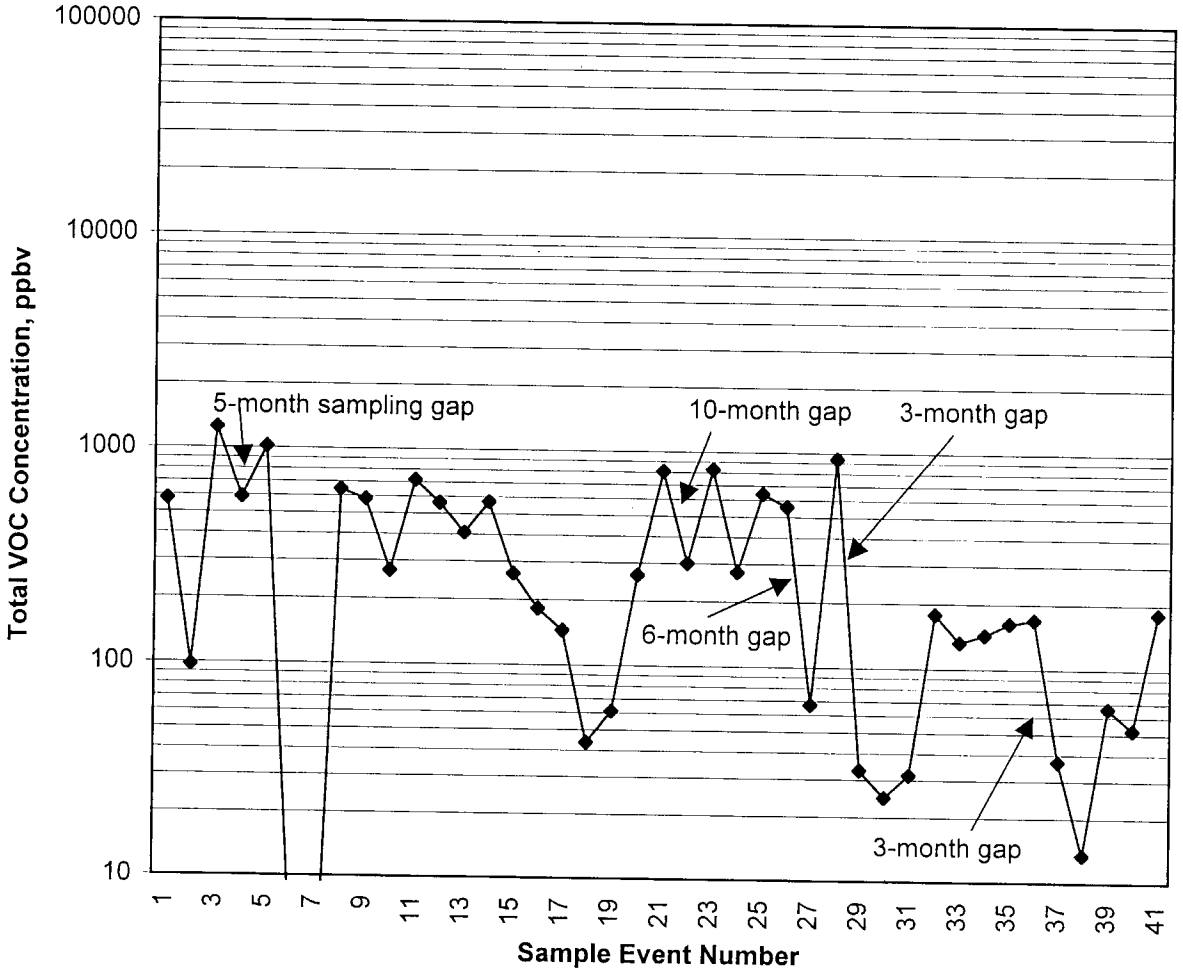


Figure 10
NOW Corporation SVE System - Well TW-2A
February 1998 - February 2004

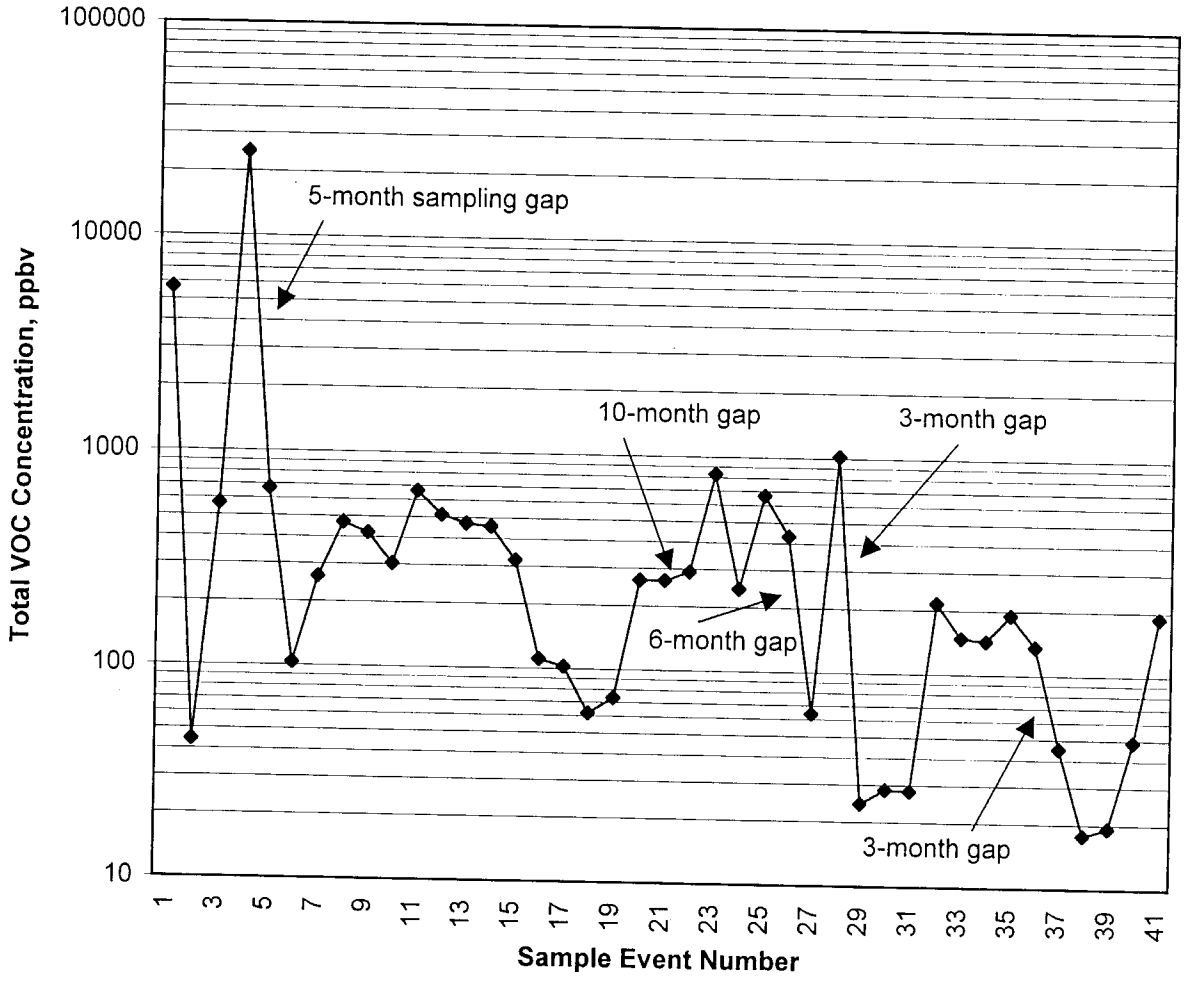


Figure 11
NOW Corporation SVE System - Well VE-1
February 1998 - February 2004

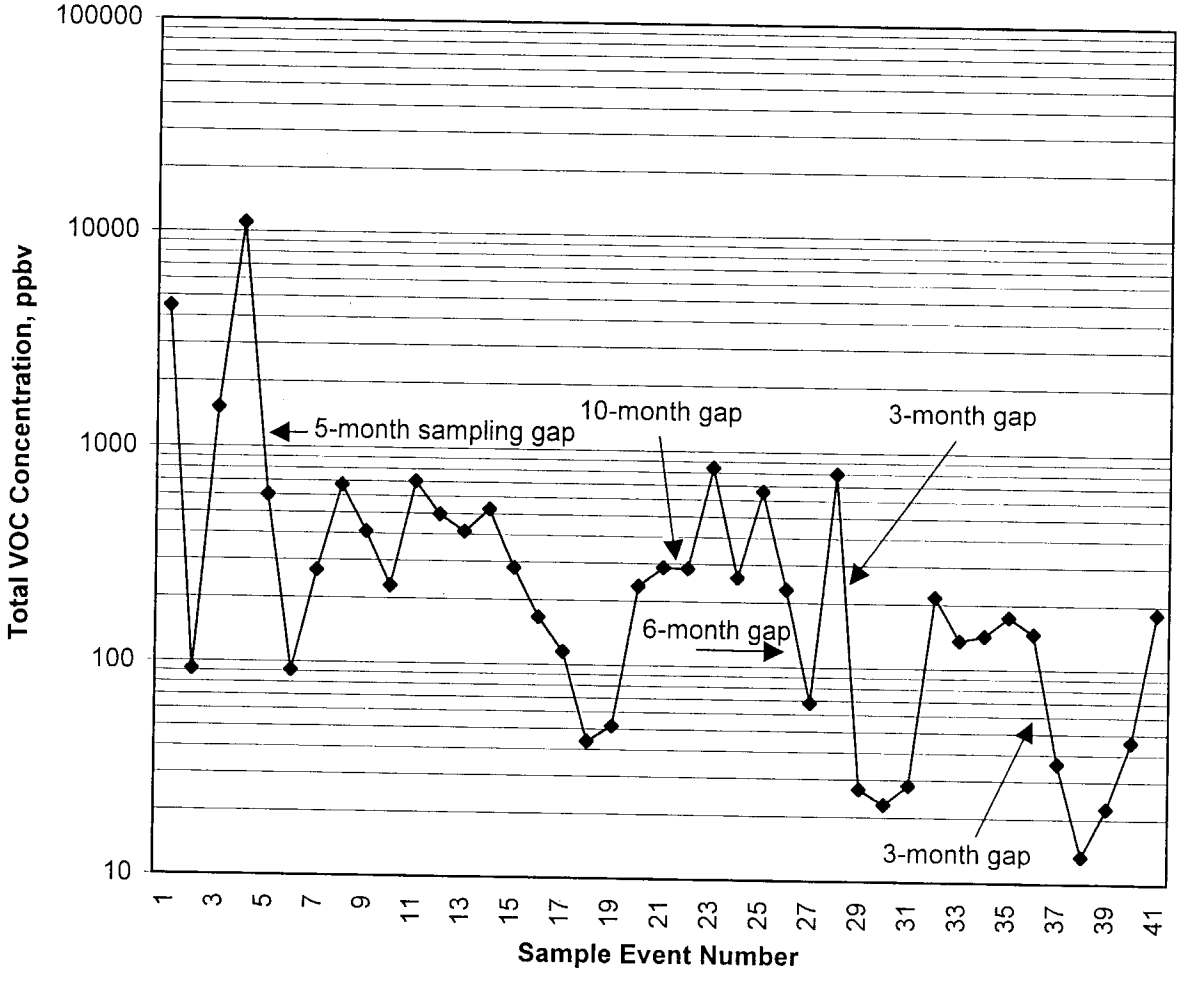
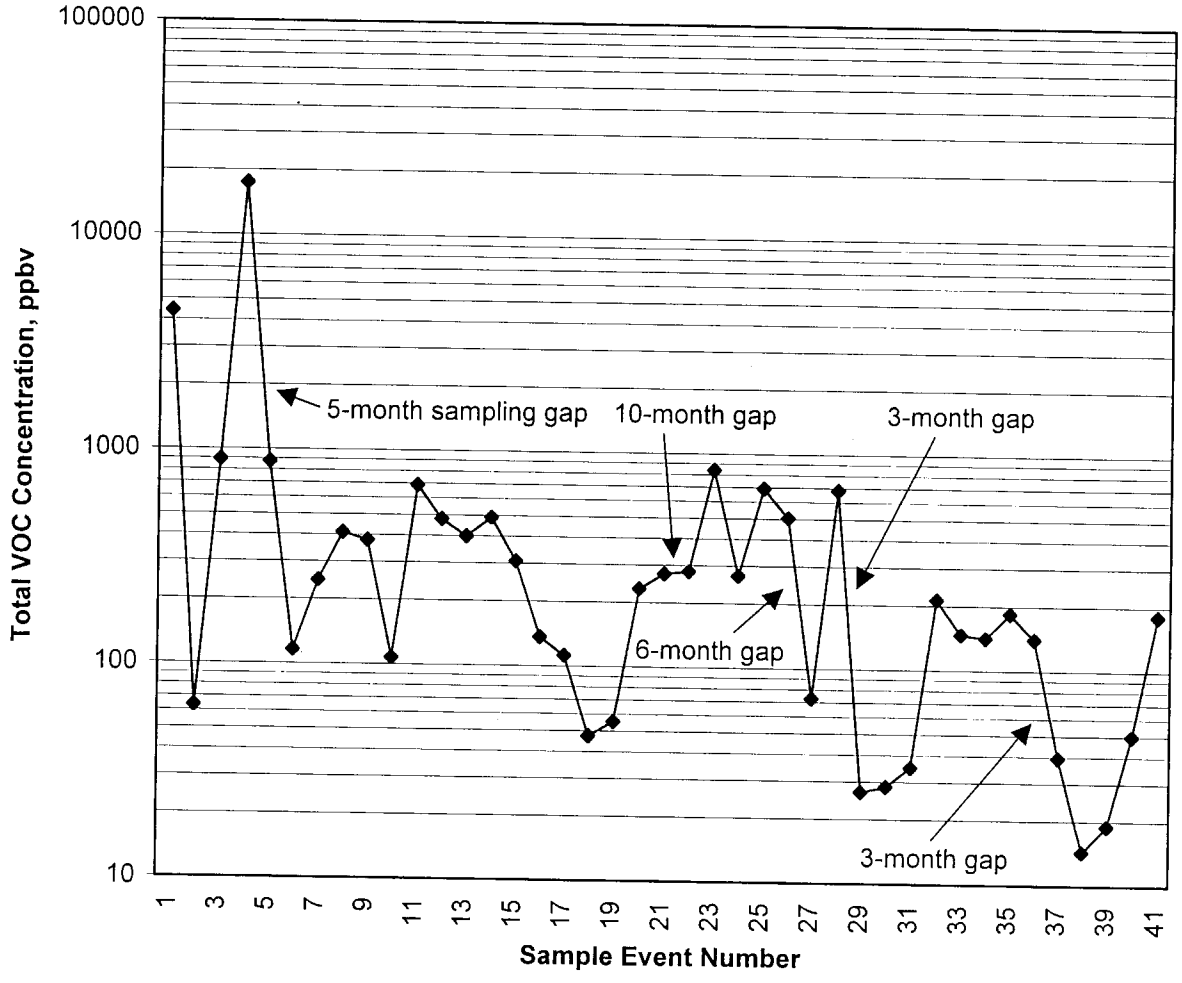


Figure 12
NOW Corporation SVE System - Well VE-2
February 1998 - February 2004



2/11/04 INFLUENT WATER ANALYTICAL REPORT

NOW Corp

PHOENIX
Environmental Laboratories, Inc.

Friday, February 20, 2004

Earthtech
40 British American Blvd
Latham NY 12110

FEB 2 [illegible] 2004

Attention: Mr Walt Howard

Sample ID#: AF37823-37828

This laboratory is in compliance with the QA/QC procedure outlined in EPA 600/4-79-019, Handbook for Analytical Quality in Water and Waste Water, March 1979, and SW846 QA/QC requirements of procedures used.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller

Phyllis Shiller
Laboratory Director

CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
NY Lab Registration #11301
RI Lab Registration #63
NH Lab Registration #213693-A,B
ME Lab Registration #CT-007
NJ Lab Registration #CT-003

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 ▪ Fax (860) 645-0823

PHOENIX
Environmental Laboratories, Inc.

Wednesday, March 03, 2004

Earthtech
40 British American Blvd
Latham NY 12110

MAR - 5 2004

Attention: Mr Steve Choiniere

Sample ID#: AF37824

This laboratory is in compliance with the QA/QC procedure outlined in EPA 600/4-79-019, Handbook for Analytical Quality in Water and Waste Water, March 1979, and SW846 QA/QC requirements of procedures used.

Enclosed are revised Analysis Report pages. Please replace and discard the original pages.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller

Phyllis Shiller
Laboratory Director

CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
NY Lab Registration #11301
RI Lab Registration #63
NH Lab Registration #213693-A,B
ME Lab Registration #CT-007
NJ Lab Registration #CT-003

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 ▪ Fax (860) 645-0823

PHOENIX

ACCREDITED IN ACCORDANCE WITH nelac

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

February 20, 2004

FOR: Attn: Mr. Steve Choiniere
Earthtech Inc
40 British American Boulevard
Latham, NY 12110

Sample Information		Custody Information		Date	Time
Matrix:	WATER	**Collected by:**	RG	02/11/04	10:50
Location Code:	RUST-ENV	**Received by:**	KJB	02/12/04	9:30
Rush Request:		**Analyzed by:**	see "By" below		
P.O.#:	5584901				

SDG I.D.: GAF37823
Phoenix I.D.: AF37823

Laboratory Data

Client ID: NOW CORP EFFLUENT

Parameter	Result	RL	Units	Date	Time	By	Reference
Aluminum	BDL	0.01	mg/L	02/16/04		EK	200.7/6010
Arsenic (Furnace)	BDL	0.004	mg/L	02/16/04		RS	206.2
Barium	0.071	0.002	mg/L	02/16/04		EK	6010/E200.7
Chromium	BDL	0.001	mg/L	02/16/04		EK	200.7/6010
Copper	0.001	0.001	mg/L	02/16/04		EK	6010/E200.7
Iron	0.014	0.002	mg/L	02/18/04		EK	6010/E200.7
Mercury	BDL	0.0002	mg/L	02/13/04		RS	7470/E245.1
Manganese	0.078	0.001	mg/L	02/16/04		EK	200.7/6010
Nickel	0.002	0.001	mg/L	02/16/04		EK	200.7/6010
Zinc	0.002	0.002	mg/L	02/16/04		EK	200.7/6010
Oil and Grease by EPA 1664	BDL	1.4	mg/L	02/17/04		SD	EPA 1664
Total Cyanide	BDL	0.01	mg/L	02/16/04		PJ	9010/335.3
Tot. Diss. Solids	250	5	mg/L	02/13/04		C/E	SM2540C
Total Suspended Solids	BDL	5	mg/L	02/13/04		CF	SM2540D
Mercury Digestion	Completed			02/13/04		DM	E245.1
Total Metals Digestion	Completed			02/12/04		AG/	
Volatiles							
1,1,1-Trichloroethane	ND	0.5	ug/L	02/12/04		RM	SW8260
1,1,2-Trichloroethane	ND	0.5	ug/L	02/12/04		RM	SW8260
1,1-Dichloroethane	ND	0.5	ug/L	02/12/04		RM	SW8260
1,1-Dichloroethene	ND	0.5	ug/L	02/12/04		RM	SW8260
1,2-Dichloroethane	ND	0.5	ug/L	02/12/04		RM	SW8260
Benzene	ND	0.5	ug/L	02/12/04		RM	SW8260
Chlorobenzene	ND	0.5	ug/L	02/12/04		RM	SW8260

Client ID: NOW CORP EFFLUENT

Phoenix I.D.: AF37823

Parameter	Result	RL	Units	Date	Time	By	Reference
Chloroethane	ND	0.5	ug/L	02/12/04		RM	SW8260
cis-1,2-Dichloroethene	ND	0.5	ug/L	02/12/04		RM	SW8260
Ethylbenzene	ND	0.5	ug/L	02/12/04		RM	SW8260
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	02/12/04		RM	SW8260
o-Xylene	ND	0.5	ug/L	02/12/04		RM	SW8260
p&m-Xylene	ND	0.5	ug/L	02/12/04		RM	SW8260
Tetrachloroethene	ND	0.5	ug/L	02/12/04		RM	SW8260
Toluene	ND	0.5	ug/L	02/12/04		RM	SW8260
trans-1,2-Dichloroethene	ND	0.5	ug/L	02/12/04		RM	SW8260
Trichloroethene	ND	0.5	ug/L	02/12/04		RM	SW8260
Vinyl chloride	ND	0.5	ug/L	02/12/04		RM	SW8260
QA/QC Surrogates							
%4-Bromofluorobenzene (Surrogate)	88		%	02/12/04		RM	SW8260

Comments: ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director
February 20, 2004

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac

Analysis Report
March 03, 2004

FOR: Attn: Mr. Steve Choiniere
Earthtech Inc
40 British American Boulevard
Latham, NY 12110

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:	RG	02/11/04	11:20
Location Code:	RUST-ENV	Received by:	KJB	02/12/04	9:30
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	5584901				

SDG I.D.: GAF37823
Phoenix I.D.: AF37824

Laboratory Data

Client ID: NOW CORP INFLUENT

Parameter	Result	RL	Units	Date	Time	By	Reference
Aluminum	BDL	0.01	mg/L	02/16/04		EK	200.7/6010
Arsenic (Furnace)	BDL	0.004	mg/L	02/16/04		RS	206.2
Barium	0.074	0.002	mg/L	02/16/04		EK	6010/E200.7
Chromium	BDL	0.001	mg/L	02/16/04		EK	200.7/6010
Copper	BDL	0.001	mg/L	02/16/04		EK	6010/E200.7
Iron	0.021	0.002	mg/L	02/18/04		EK	6010/E200.7
Mercury	BDL	0.0002	mg/L	02/13/04		RS	7470/E245.1
Manganese	0.112	0.001	mg/L	02/16/04		EK	200.7/6010
Nickel	0.002	0.001	mg/L	02/16/04		EK	200.7/6010
Zinc	0.002	0.002	mg/L	02/16/04		EK	200.7/6010
Oil and Grease by EPA 1664	BDL	1.5	mg/L	02/17/04		SD	EPA 1664
Total Cyanide	BDL	0.01	mg/L	02/16/04		PJ	9010/335.3
Tot. Diss. Solids	250	5	mg/L	02/13/04		C/E	SM2540C
Total Suspended Solids	BDL	5	mg/L	02/13/04		CF	SM2540D
Mercury Digestion	Completed			02/13/04		DM	E245.1
Total Metals Digestion	Completed			02/12/04		AG/	
Volatiles							
1,1,1-Trichloroethane	1900	30	ug/L	02/13/04		RM	SW8260
1,1,2-Trichloroethane	ND	30	ug/L	02/13/04		RM	SW8260
1,1-Dichloroethane	300	30	ug/L	02/13/04		RM	SW8260
1,1-Dichloroethene	70	30	ug/L	02/13/04		RM	SW8260
1,2-Dichloroethane	ND	30	ug/L	02/13/04		RM	SW8260
Benzene	ND	30	ug/L	02/13/04		RM	SW8260
Chlorobenzene	ND	30	ug/L	02/13/04		RM	SW8260

Client ID: NOW CORP INFLUENT

Phoenix I.D.: AF37824

Parameter	Result	RL	Units	Date	Time	By	Reference
Chloroethane	ND	30	ug/L	02/13/04		RM	SW8260
cis-1,2-Dichloroethene	ND	30	ug/L	02/13/04		RM	SW8260
Ethylbenzene	ND	30	ug/L	02/13/04		RM	SW8260
Methyl tert-butyl ether (MTBE)	ND	20	ug/L	02/13/04		RM	SW8260
o-Xylene	ND	30	ug/L	02/13/04		RM	SW8260
p&m-Xylene	ND	30	ug/L	02/13/04		RM	SW8260
Tetrachloroethene	ND	30	ug/L	02/13/04		RM	SW8260
Toluene	ND	30	ug/L	02/13/04		RM	SW8260
trans-1,2-Dichloroethene	ND	30	ug/L	02/13/04		RM	SW8260
Trichloroethene	500	30	ug/L	02/13/04		RM	SW8260
Vinyl chloride	ND	30	ug/L	02/13/04		RM	SW8260
QA/QC Surrogates							
%4-Bromofluorobenzene (Surrogate)	82		%	02/13/04		RM	SW8260

Comments: ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director
March 03, 2004

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

February 20, 2004

FOR: Attn: Mr. Steve Choiniere
Earthtech Inc
40 British American Boulevard
Latham, NY 12110

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:	RG	02/11/04	11:30
Location Code:	RUST-ENV	Received by:	KJB	02/12/04	9:30
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	5584901				

SDG I.D.: GAF37823
Phoenix I.D.: AF37825

Laboratory Data

Client ID: NOW CORP TW-1

Parameter	Result	RL	Units	Date	Time	By	Reference
Volatiles							
1,1,1-Trichloroethane	6.0	5	ug/L	02/13/04		RM	SW8260
1,1,2-Trichloroethane	ND	5	ug/L	02/13/04		RM	SW8260
1,1-Dichloroethane	140	5	ug/L	02/13/04		RM	SW8260
1,1-Dichloroethene	16	5	ug/L	02/13/04		RM	SW8260
1,2-Dichloroethane	ND	5	ug/L	02/13/04		RM	SW8260
Benzene	ND	5	ug/L	02/13/04		RM	SW8260
Chlorobenzene	ND	5	ug/L	02/13/04		RM	SW8260
Chloroethane	ND	5	ug/L	02/13/04		RM	SW8260
cis-1,2-Dichloroethene	ND	5	ug/L	02/13/04		RM	SW8260
Ethylbenzene	ND	5	ug/L	02/13/04		RM	SW8260
Methyl tert-butyl ether (MTBE)	ND	20	ug/L	02/13/04		RM	SW8260
o-Xylene	ND	5	ug/L	02/13/04		RM	SW8260
p&m-Xylene	ND	5	ug/L	02/13/04		RM	SW8260
Tetrachloroethene	ND	5	ug/L	02/13/04		RM	SW8260
Toluene	ND	5	ug/L	02/13/04		RM	SW8260
trans-1,2-Dichloroethene	ND	5	ug/L	02/13/04		RM	SW8260
Trichloroethene	42	5	ug/L	02/13/04		RM	SW8260
Vinyl chloride	ND	5	ug/L	02/13/04		RM	SW8260
QA/QC Surrogates							
%4-Bromofluorobenzene (Surrogate)	78		%	02/13/04		RM	SW8260

Comments: ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director
February 20, 2004

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report
February 20, 2004

FOR: Attn: Mr. Steve Choiniere
Earthtech Inc
40 British American Boulevard
Latham, NY 12110

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:	RG	02/11/04	11:35
Location Code:	RUST-ENV	Received by:	KJB	02/12/04	9:30
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	5584901				

SDG I.D.: GAF37823
Phoenix I.D.: AF37826

Laboratory Data

Client ID: NOW CORP TW-2A

Parameter	Result	RL	Units	Date	Time	By	Reference
Volatiles							
1,1,1-Trichloroethane	1900	40	ug/L	02/12/04		RM	SW8260
1,1,2-Trichloroethane	ND	40	ug/L	02/12/04		RM	SW8260
1,1-Dichloroethane	300	40	ug/L	02/12/04		RM	SW8260
1,1-Dichloroethene	56	40	ug/L	02/12/04		RM	SW8260
1,2-Dichloroethane	ND	40	ug/L	02/12/04		RM	SW8260
Benzene	ND	40	ug/L	02/12/04		RM	SW8260
Chlorobenzene	ND	40	ug/L	02/12/04		RM	SW8260
Chloroethane	ND	40	ug/L	02/12/04		RM	SW8260
cis-1,2-Dichloroethene	ND	40	ug/L	02/12/04		RM	SW8260
Ethylbenzene	ND	40	ug/L	02/12/04		RM	SW8260
Methyl tert-butyl ether (MTBE)	ND	160	ug/L	02/12/04		RM	SW8260
o-Xylene	ND	40	ug/L	02/12/04		RM	SW8260
p&m-Xylene	ND	40	ug/L	02/12/04		RM	SW8260
Tetrachloroethene	ND	40	ug/L	02/12/04		RM	SW8260
Toluene	ND	40	ug/L	02/12/04		RM	SW8260
trans-1,2-Dichloroethene	ND	40	ug/L	02/12/04		RM	SW8260
Trichloroethene	490	40	ug/L	02/12/04		RM	SW8260
Vinyl chloride	ND	40	ug/L	02/12/04		RM	SW8260
QA/QC Surrogates							
%4-Bromofluorobenzene (Surrogate)	83		%	02/12/04		RM	SW8260

Comments: ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director
February 20, 2004

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

March 03, 2004

FOR: Attn: Mr. Steve Choiniere
Earthtech Inc
40 British American Boulevard
Latham, NY 12110

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:	RG	02/11/04	11:40
Location Code:	RUST-ENV	Received by:	KJB	02/12/04	9:30
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	5584901				

Laboratory Data

SDG I.D.: GAF37823
Phoenix I.D.: AF37827

Client ID: NOW CORP TW-3

Parameter	Result	RL	Units	Date	Time	By	Reference
Volatiles							
1,1,1-Trichloroethane	100	0.5	ug/L	02/12/04		RM	SW8260
1,1,2-Trichloroethane	ND	0.5	ug/L	02/12/04		RM	SW8260
1,1-Dichloroethane	44	0.5	ug/L	02/12/04		RM	SW8260
1,1-Dichloroethene	4.3	0.5	ug/L	02/12/04		RM	SW8260
1,2-Dichloroethane	ND	0.5	ug/L	02/12/04		RM	SW8260
Benzene	ND	0.5	ug/L	02/12/04		RM	SW8260
Chlorobenzene	ND	0.5	ug/L	02/12/04		RM	SW8260
Chloroethane	0.8	0.5	ug/L	02/12/04		RM	SW8260
cis-1,2-Dichloroethene	ND	0.5	ug/L	02/12/04		RM	SW8260
Ethylbenzene	ND	0.5	ug/L	02/12/04		RM	SW8260
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	02/12/04		RM	SW8260
o-Xylene	ND	0.5	ug/L	02/12/04		RM	SW8260
p&m-Xylene	ND	0.5	ug/L	02/12/04		RM	SW8260
Tetrachloroethene	ND	0.5	ug/L	02/12/04		RM	SW8260
Toluene	ND	0.5	ug/L	02/12/04		RM	SW8260
trans-1,2-Dichloroethene	ND	0.5	ug/L	02/12/04		RM	SW8260
Trichloroethene	12	0.5	ug/L	02/12/04		RM	SW8260
Vinyl chloride	ND	0.5	ug/L	02/12/04		RM	SW8260
QA/QC Surrogates							
%4-Bromofluorobenzene (Surrogate)	84		%	02/12/04		RM	SW8260

Comments: ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director
March 03, 2004

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report
February 20, 2004

FOR: Attn: Mr. Steve Choiniere
Earthtech Inc
40 British American Boulevard
Latham, NY 12110

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:	RG	02/11/04	0:00
Location Code:	RUST-ENV	Received by:	KJB	02/12/04	9:30
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	5584901				

SDG I.D.: GAF37823
Phoenix I.D.: AF37828

Laboratory Data

Client ID: NOW CORP TRIP BLANK

Parameter	Result	RL	Units	Date	Time	By	Reference
Volatiles							
1,1,1-Trichloroethane	ND	0.5	ug/L	02/12/04		RM	SW8260
1,1,2-Trichloroethane	ND	0.5	ug/L	02/12/04		RM	SW8260
1,1-Dichloroethane	ND	0.5	ug/L	02/12/04		RM	SW8260
1,1-Dichloroethene	ND	0.5	ug/L	02/12/04		RM	SW8260
1,2-Dichloroethane	ND	0.5	ug/L	02/12/04		RM	SW8260
Benzene	ND	0.5	ug/L	02/12/04		RM	SW8260
Chlorobenzene	ND	0.5	ug/L	02/12/04		RM	SW8260
Chloroethane	ND	0.5	ug/L	02/12/04		RM	SW8260
cis-1,2-Dichloroethene	ND	0.5	ug/L	02/12/04		RM	SW8260
Ethylbenzene	ND	0.5	ug/L	02/12/04		RM	SW8260
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	02/12/04		RM	SW8260
o-Xylene	ND	0.5	ug/L	02/12/04		RM	SW8260
p&m-Xylene	ND	0.5	ug/L	02/12/04		RM	SW8260
Tetrachloroethene	ND	0.5	ug/L	02/12/04		RM	SW8260
Toluene	ND	0.5	ug/L	02/12/04		RM	SW8260
trans-1,2-Dichloroethene	ND	0.5	ug/L	02/12/04		RM	SW8260
Trichloroethene	ND	0.5	ug/L	02/12/04		RM	SW8260
Vinyl chloride	ND	0.5	ug/L	02/12/04		RM	SW8260
QA/QC Surrogates							
%4-Bromofluorobenzene (Surrogate)	90		%	02/12/04		RM	SW8260

Comments: ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

TRIP BLANK INCLUDED.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director
February 20, 2004

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

March 04, 2004

QA/QC Data

SDG I.D.: GAF37823

Parameter	Blank	LCS %	Dup RPD	MS Rec %	MS Dup Rec %	RPD
QA/QC Batch Sample No: AF37715 (AF37824)						
Antimony	BDL	102	NC	108		NC
QA/QC Batch Sample No: AF37715 (AF37824)						
Arsenic (Furnace)	BDL	107	NC	110		NC
QA/QC Batch Sample No: AF37715 (AF37824)						
Lead Analysis by Furnace	BDL	105	NC	89		NC
QA/QC Batch Sample No: AF37715 (AF37824)						
Mercury	BDL		NC	101	77	27.0
QA/QC Batch Sample No: AF37715 (AF37824)						
Thallium	BDL	102	NC	102		NC
QA/QC Batch Sample No: AF37883 (AF37824)						
ICP Metals - Aqueous						
Aluminum	BDL	91.6	32.3	88.2	90.6	2.7
Antimony	BDL	94.3	NC	92.3	93.8	1.6
Arsenic	BDL	94.6	NC	93.3	94.7	1.5
Barium	BDL	100	NC	98.6	100	1.4
Beryllium	BDL	96.8	NC	95.8	97.2	1.5
Boron	BDL		BDL			
Cadmium	BDL	98.6	NC	97.0	98.4	1.4
Calcium	0.04		BDL			
Chromium	BDL	97.0	NC	96.0	97.3	1.3
Cobalt	BDL	97.2	NC	95.7	97.0	1.3
Copper	BDL	97.1	NC	96.6	98.0	1.4
Iron	BDL	99.7	21.7	92.0	93.8	1.9
Lead	BDL	99.7	NC	98.1	99.4	1.3
Magnesium	BDL		BDL			
Manganese	0.001	97.8	NC	96.2	97.4	1.2
Molybdenum	BDL		BDL			
Nickel	BDL	98.1	NC	96.5	97.7	1.2
Phosphorus	BDL		BDL			
Selenium	BDL	94.8	NC	92.2	93.0	0.9
Silver	BDL	95.0	NC	93.4	94.2	0.9
Thallium	BDL	97.6	NC	95.6	97.3	1.8
Tin	BDL		BDL			

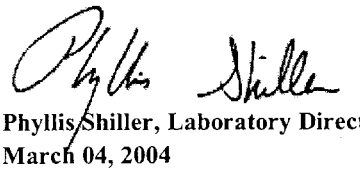
QA/QC Data

SDG I.D.: GAF37823

Parameter	Blank	LCS %	Dup RPD	MS Rec %	MS Dup Rec %	RPD
Vanadium	BDL	96.8	NC	95.9	97.3	1.4
Zinc	0.002	95.5	NC	94.1	94.6	0.5
QA/QC Batch Sample No: AF37884 (AF37824)						
Arsenic	BDL	101	NC	93		NC
QA/QC Batch Sample No: AF37884 (AF37824)						
Lead Analysis by Furnace	BDL	105	NC	96		NC

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
RPD - Relative Percent Difference
LCS - Laboratory Control Sample



Phyllis Shiller, Laboratory Director
March 04, 2004

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

March 04, 2004

QA/QC Data

SDG I.D.: GAF37823

Parameter	Blank	LCS Rec %	MS Rec %	RPD
QA/QC Batch Sample No: AF37727 (AF37824)				
Oil and Grease by EPA 1664	BDL	86		NR
QA/QC Batch Sample No: AF37778 (AF37824)				
Total Cyanide	BDL	93	89	NC
QA/QC Batch Sample No: AF37780 (AF37824)				
Total Suspended Solids	BDL	94	NR	NC
QA/QC Batch Sample No: AF38084 (AF37824)				
Tot. Diss. Solids	BDL	106.0	NR	4.7
QA/QC Batch Sample No: AF38084 (AF37824, AF37827)				
Total Suspended Solids	BDL	99	NR	NC

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

LCS - Laboratory Control Sample
MS - Matrix Spike
RPD - Relative Percent Difference
Between Sample and Sample Duplicate

Phyllis Shiller, Laboratory Director
March 04, 2004

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

March 04, 2004

QA/QC Data

SDG I.D.: GAF37823

Parameter	Blank	LCS %	MS Rec %	MS Dup Rec %	RPD
QA/QC Batch Sample No: AF38084 (AF37824, AF37827)					
Volatiles Organics					
1,1,1,2-Tetrachloroethane	ND	119			
1,1,1-Trichloroethane	ND	121			
1,1,2,2-Tetrachloroethane	ND	120			
1,1,2-Trichloroethane	ND	114			
1,1-Dichloroethane	ND	117			
1,1-Dichloroethene	ND	115	122	117	4.2
1,1-Dichloropropene	ND	112			
1,2,3-Trichlorobenzene	ND	107			
1,2,3-Trichloropropane	ND	99			
1,2,3-Trimethylbenzene	ND				
1,2,4-Trichlorobenzene	ND	103			
1,2,4-Trimethylbenzene	ND	110			
1,2-Dibromo-3-chloropropane	ND	106			
1,2-Dichlorobenzene	ND	96			
1,2-Dichloroethane	ND	116			
1,2-Dichloropropane	ND	126			
1,3,5-Trimethylbenzene	ND	108			
1,3-Dichlorobenzene	ND	101			
1,3-Dichloropropane	ND				
1,4-Dichlorobenzene	ND	99			
2,2-Dichloropropane	ND				
2-Chlorotoluene	ND	103			
4-Chlorotoluene	ND	106			
Benzene	ND	111	100	100	0.0
Bromobenzene	ND	97			
Bromochloromethane	ND	110			
Bromodichloromethane	ND	105			
Bromoform	ND	103			
Bromomethane	ND	118			
Carbon Tetrachloride	ND	106			
Chlorobenzene	ND	125	113	110	2.7
Chloroethane	ND	122			

QA/QC Data

SDG I.D.: GAF37823

Parameter	Blank	LCS %	MS Rec %	MS Dup Rec %	RPD
Chloroform	ND	115			
Chloromethane	ND				
cis-1,2-Dichloroethene	ND	116			
cis-1,3-Dichloropropene	ND	109			
Dibromochloromethane	ND	112			
Dibromoethane	ND	114			
Dibromomethane	ND	106			
Dichlorodifluoromethane	ND				
Ethylbenzene	ND				
Hexachlorobutadiene	ND	99			
Isopropylbenzene	ND	108			
m&p-Xylene	ND				
Methyl t Butyl Ether (MTBE)	ND				
Methylene Chloride	ND	117			
n-Butylbenzene	ND	129			
n-Propylbenzene	ND	109			
Naphthalene	ND	105			
o-Xylene	ND	128			
p-Isopropyltoluene	ND	116			
sec-Butylbenzene	ND	107			
Styrene	ND	128			
tert-Butylbenzene	ND	108			
Tetrachloroethene	ND	119			
Toluene	ND	113	101	102	1.0
Total Trihalomethanes (TTHM)	ND				
trans-1,2-Dichloroethene	ND	115			
trans-1,3-Dichloropropene	ND	94			
Trichloroethene	ND	98	109	91	18.0
Trichlorofluoromethane	ND	111			
Vinyl Chloride	ND				
% Bromofluorobenzene	88	104	87	87	0.0

Comment: LFB was analyzed with tis batch instead of MS/MSD

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
RPD - Relative Percent Difference
LCS - Laboratory Control Sample

Phyllis Shiller, Laboratory Director
March 04, 2004

Chain of Custody Record

EARTH TECH

A Tyco Infrastructure Services Company

Custody Seal #	Earth Tech Cooler #

Project Number	Project Name/Client
35A19.01	EARTH TECH NOW CORP

Sample Custodian: (Signature) Steve Thomas

Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	PID Reading (ppm)	Label Number	Analysis Required: EPH 8260	METALS: ZN AL AS BA CR CO FE MN NI V	TDS TSS	O+G	CYANIDE	Matrix: Sample Type (GW)	Sample Container: 40 mL	32 oz	250 mL	500 mL
1	EFF 2/04	2/1/04	10:30	X			37873	X					X	2			
2			10:35						X X							1	
3			10:40							X							1
4			10:45								X				1		
5			10:50									X				1	
6	ENF. 2/04		11:00				37874	X						2			
7			11:05						X X							1	
8			11:10							X							1
9			11:15								X				1		
10			11:20									X				1	
11	TW-1		11:30				37875	X						2			
12	TW-2A		11:35				37876	X						2			
13	TW-3		11:40				37877	X						2			
14	TRIP BLANK						37878	X						2			
15																	
16																	
17																	
18																	

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date / Time
Roger Gray	2-11-04 2:00	KD 2/12/04 9:30			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date / Time

Send Lab Results To: STEVE CHEIMERE
EARTH TECH
40 BRITISH AMERICAN BLVD.
LATHAM, N.Y. 12110

Remarks:

Federal Express Airbill No.:

Lab:

Check Delivery Method:

- ☐ Samples delivered in person
- ☐ Common carrier

Laboratory Receiving Notes:

Custody Seal Intact?

Temp. of Shipping Container:

Sample Condition:

Rev. 10/98 White Copy - Lab Yellow Copy - File Pink Copy - Client F514/Earth.Sci

2/11/04 INFLUENT AIR
ANALYTICAL REPORT

02/23/2004

Earth Tech
ATTN: Steve Choiniere
40 British American Blvd.
Latham, NY 12110

Project Reference: NOW Corp., 55849.01
Lab Number: A4021203-01/08

Enclosed are results for sample(s) received 2/12/04 by Air Technology Laboratories. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

Sample analyses were performed within method performance criteria.
All results are reported without qualifications.

Results were faxed to Steve Choiniere on 2/19/04.

ATL appreciates the opportunity to provide testing services to your company. If you have any questions regarding these results, please call me at (626) 964-4032.

Sincerely,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

Note: The cover letter is an integral part of this analytical report.

Client: EarthTech
Attn: Steve Choiniere

Client's Project: NOW CORP., 55849.01
Date Received: 02/12/04
Matrix: Air
Units: ppbv

EPA Method TO14

Lab No:		A4021203-01		A4021203-02		A4021203-03		A4021203-04		A4021203-05	
Client Sample I.D.:		TW - 1VE 2/04		VE - 1VE 2/04		VE - 2VE 2/04		TW - 2AVE 2/04		ST - 1 2/04	
Date Sampled:		02/11/04		02/11/04		02/11/04		02/11/04		02/11/04	
Date Analyzed:		02/12/04		02/12/04		02/12/04		02/12/04		02/12/04	
QC Batch No:		040212MS2A1		040212MS2A1		040212MS2A1		040212MS2A1		040212MS2A1	
Analyst Initials:		SC		SC		SC		SC		SC	
Dilution Factor:		1.0		1.0		1.0		1.0		1.0	
ANALYTE	PQL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Vinyl Chloride	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Chloroethane	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,1-Dichloroethene	1.0	1.8	1.0	1.7	1.0	2.0	1.0	2.0	1.0	2.2	1.0
1,1-Dichloroethane	1.0	9.0	1.0	9.1	1.0	9.2	1.0	9.9	1.0	12	1.0
c-1,2-Dichloroethene	1.0	6.4	1.0	6.3	1.0	6.6	1.0	6.5	1.0	6.6	1.0
1,1,1-Trichloroethane	1.0	17	1.0	17	1.0	18	1.0	21	1.0	32	1.0
Benzene	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,2-Dichloroethane	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Trichloroethene	1.0	136	1.0	132	1.0	133	1.0	137	1.0	144	1.0
Toluene	1.0	9.5	1.0	15	1.0	10	1.0	9.8	1.0	6.6	1.0
1,1,2-Trichloroethane	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Tetrachloroethene	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Chlorobenzene	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Ethylbenzene	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
p,&m-Xylene	1.0	1.6	1.0	1.9	1.0	2.4	1.0	1.5	1.0	1.1	1.0
o-Xylene	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0

PQL = Practical Quantitation Limit
ND= Not Detected (below RL)
RL = PQL X Dilution Factor

Reviewed/Approved By: _____ Date 2-19-04

Mark Johnson
Air Toxics Operations Manager

The cover letter is an integral part of this analytical report

Client: EarthTech
Attn: Steve Choiniere

Client's Project: NOW CORP., 55849.01
Date Received: 02/12/04
Matrix: Air
Units: ppbv

EPA Method TO14

Lab No:		A4021203-06		A4021203-07		A4021203-08					
Client Sample I.D.:		PAS 2/04		SVE - EXH 2/04		ST - 4 2/04					
Date Sampled:		02/11/04		02/11/04		02/11/04					
Date Analyzed:		02/12/04		02/12/04		02/12/04					
QC Batch No:		040212MS2A1		040212MS2A1		040212MS2A1					
Analyst Initials:		SC		SC		SC					
Dilution Factor:		10		1.0		1.0					
ANALYTE	PQL	Result	RL	Result	RL	Result	RL				
Vinyl Chloride	1.0	ND	10	ND	1.0	ND	1.0				
Chloroethane	1.0	ND	10	ND	1.0	ND	1.0				
1,1-Dichloroethene	1.0	23	10	ND	1.0	ND	1.0				
1,1-Dichloroethane	1.0	291	10	ND	1.0	ND	1.0				
c-1,2-Dichloroethene	1.0	10	10	ND	1.0	ND	1.0				
1,1,1-Trichloroethane	1.0	1,490	10	ND	1.0	ND	1.0				
Benzene	1.0	ND	10	ND	1.0	ND	1.0				
1,2-Dichloroethane	1.0	ND	10	ND	1.0	ND	1.0				
Trichloroethene	1.0	474	10	ND	1.0	ND	1.0				
Toluene	1.0	ND	10	4.2	1.0	4.7	1.0				
1,1,2-Trichloroethane	1.0	ND	10	ND	1.0	ND	1.0				
Tetrachloroethene	1.0	ND	10	ND	1.0	ND	1.0				
Chlorobenzene	1.0	ND	10	ND	1.0	ND	1.0				
Ethylbenzene	1.0	ND	10	ND	1.0	ND	1.0				
p,&m-Xylene	1.0	ND	10	ND	1.0	1.1	1.0				
o-Xylene	1.0	ND	10	ND	1.0	ND	1.0				

PQL = Practical Quantitation Limit
ND= Not Detected (below RL)
RL = PQL X Dilution Factor

Reviewed/Approved By: _____ Date 2-19-04

Mark Johnson
Air Toxics Operations Manager

The cover letter is an integral part of this analytical report

LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 040212MS2A1

Matrix: Air

EPA Method TO-14/TO-15

Lab No:	Method Blank		LCS		LCSD						
Date Analyzed:	02/12/04		02/12/04		02/12/04						
Data File ID:	12FEB005.D		12FEB002.D		12FEB003.D						
Analyst Initials:	SC		SC		SC						
Dilution Factor:	1.0		1.0		1.0			Limits			
ANALYTE	Result ppbv	Spike Amount	Result ppbv	% Rec	Result ppbv	% Rec	RPD	Low %Rec	High %Rec	Max. RPD	Pass/ Fail
1,1-Dichloroethene	0.0	10.0	9.1	91	9.0	90	1.5	70	130	30	Pass
Methylene Chloride	0.0	10.0	7.1	71	7.1	71	0.1	70	130	30	Pass
Trichloroethene	0.0	10.0	8.9	89	9.8	98	8.9	70	130	30	Pass
Toluene	0.0	10.0	8.4	84	8.8	88	4.7	70	130	30	Pass
1,1,2,2-Tetrachloroethane	0.0	10.0	8.3	83	8.7	87	5.2	70	130	30	Pass

RPD = Relative Percent Difference

Reviewed/Approved By: _____ **Date:** 2-19-04

Mark Johnson

Air Toxics Operations Manager

The cover letter is an integral part of this analytical report

EARTH TECH

A Tyco Infrastructure Services Company

Chain of Custody Record

Custody Seal #

Earth Tech Cooler #

Project Number: 55849.01

Project Name/Client: EARTH TECH NOW CORP.

Sample Custodian: (Signature) [signature]

Analysis Required: VOLATILE ORGANICS (ANALYTE LIST PER 2/12/98 BID LIST)

Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	PID Reading (ppm)	Label Number	VOLATILE ORGANICS	Lab ID	Matrix: Sample Type	Matrix: Sample Container
1	TW-IVE 2/04	2-11-04	12:25	N/A	N/A			X	A402I203-01	X AIR	2 TEDLAR BAGS
2	VE-IVE 2/04	↓	12:20	↓	↓			↓	02	↓	↓
3	VE-2VE 2/04	↓	12:15	↓	↓			↓	03	↓	↓
4	TW-2AVE 2/04	↓	12:10	↓	↓			↓	04	↓	↓
5	ST-1 2/04	↓	12:05	↓	↓			↓	05	↓	↓
6	PAS 2/04	↓	12:00	↓	↓			↓	06	↓	↓
7	SVE-EXH 2/04	↓	11:55	↓	↓			↓	07	↓	↓
8	ST-4 2/04	↓	11:50	↓	↓			↓	08	↓	↓
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date / Time
[signature]	2-11-04 12:40				
Fed Ex	2/12/04 0915	[signature]			2/12/04 0915

Send Lab Results To: STEVE CHOINIERE
EARTH TECH
40 BRITISH AMERICAN BLVD.
LATHAM, N.Y. 12110

Remarks: TAT: 10 BUSINESS DAYS + SEND ENOUGH BAGS BACK WITH COOLER FOR NEXT SAMP. EVENT C/O ROGER GRAY

Federal Express Airbill No.: 8455-2380-9251

Lab:

Check Delivery Method:

☐ Samples delivered in person

☒ Common carrier

Laboratory Receiving Notes:

Custody Seal Intact?

Temp. of Shipping Container:

Sample Condition:

Rev. 10/98 White Copy - Lab Yellow Copy - File Pink Copy - Client F514/Earth.Sci

LEGEND:

- RECOVERY WELL
- MONITORING WELL
- INJECTION WELL
- VAPOR EXTRACTION WELL

N

0' 50' 100'

SCALE

MW-11
MW-8
MW-5
NYS ROUTE 9G
MW-9
MW-4D
MW-1
MW-6D
TW-3
MANUFACTURING &
WAREHOUSE FACILITY
VE-2
OW-4
OW-1
IW-2
MW-7D
VE-1
TW-2A
OW-5
OW-3
TW-1
OW-2
OW-6
TW-2
IW-1
MW-10
MW-3
MW-2

FIGURE 1

NYSDEC
NOW CORPORATION
Town of Clinton - Dutchess County, N.Y.

SITE MAP

EARTH TECH
A tyco INTERNATIONAL LTD. COMPANY

Date: March 2004 Project No: 55849

PLOT DATE: 10/03

FILE NAME: 55849_Base2.dwg

MW-11	8/27/03
TCE	ND
Total VOCs	ND

MW-8	8/27/03
TCE	ND
Total VOCs	ND

MW-5	8/27/03
TCE	ND
Total VOCs	ND

MW-6S	8/27/03
TCE	25
Total VOCs	27.5

MW-6D	8/27/03
TCE	11
Total VOCs	35.4

MW-1	8/27/03
TCE	80
Total VOCs	140.3

MW-7S	8/27/03
TCE	160
Total VOCs	191.7

MW-7D	8/27/03
TCE	190
Total VOCs	229.5

MW-4S	8/27/03
TCE	ND
Total VOCs	2.2

MW-4D	8/27/03
TCE	ND
Total VOCs	ND

MW-9	8/27/03
TCE	ND
Total VOCs	ND

Private Well	7/2/03	12/16/03
TCE	11	2
Total VOCs	164.2	17.7

MW-10	8/27/03
TCE	ND
Total VOCs	ND

MW-3S/3D	8/27/03
TCE	ND
Total VOCs	ND

Private Well	7/2/03	2/11/04
TCE	2	2
Total VOCs	2	2

MW-2	8/27/03
TCE	ND
Total VOCs	ND

Private Well	7/2/03	12/16/03
TCE	0.3	ND
Total VOCs	1.1	ND

LEGEND:

- RECOVERY WELL
- MONITORING WELL
- INJECTION WELL
- VAPOR EXTRACTION WELL
- GROUNDWATER ELEVATION CONTOURS (DASHED WHERE INFERRED)
- APPROXIMATE GROUNDWATER FLOW DIRECTION

N

0' 50' 100'

SCALE

NYS ROUTE 9G

FIGURE 3

NYSDEC

NOW CORPORATION

Town of Clinton - Dutchess County, N.Y.

2003

GROUNDWATER ANALYTICAL SUMMARY

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY

Date: March 2004 Project No: 55849

PLOT DATE: 10/03

FILE NAME: 55849_Base.dwg

LEGEND:

- RECOVERY WELL
- MONITORING WELL
- INJECTION WELL
- VAPOR EXTRACTION WELL
- GROUNDWATER ELEVATION CONTOURS (DASHED WHERE INFERRED)
- APPROXIMATE GROUNDWATER FLOW DIRECTION

N

0' 50' 100'
SCALE

NYS ROUTE 9G

MW-11 263.62'
MW-8 268.61'
MW-5 268.71'
MW-9 269.94'
MW-4D 277.33'
MW-1 278.72'
MW-6D 280.16'
214'± TW-3
227'±
258.31' OW-1
234.08' MW-7D
217'± TW-2A
TW-2
OW-4
OW-5
OW-3
TW-1
OW-2
237.49'
IW-2 265.97'
IW-1 288.29'
MW-3 290.18'
MW-2 306.69'
OW-6 291.06'
268.22' MW-10
VE-1
VE-2
SILO

270 280 290 300 260 250 240 230 220

FIGURE 2
NYSDEC
NOW CORPORATION
Town of Clinton - Dutchess County, N.Y.

GROUNDWATER ELEVATION CONTOURS
September 3, 2003

EARTH TECH
A tyco INTERNATIONAL LTD. COMPANY

Date: March 2004 Project No: 55849

PLOT DATE: 10/03
FILE NAME: 55849_Base.dwg