ENGINEERING INVESTIGATIONS AT
INACTIVE HAZARDOUS WASTE SITES
IN THE STATE OF NEW YORK
PHASE II INVESTIGATION

QUEENSBURY LANDFILL

SITE NO. 557005

QUEENSBURY (T), WARREN (C)

VOLUME II

APPENDICES A - J

APRIL 1992

Performed Under

NYSDEC CONTRACT NO. D002340

NYSDEC WORK ASSIGNMENT NO. D002340-3

By

URS CONSULTANTS, INC.

282 DELAWARE AVENUE

BUFFALO, NEW YORK 14202

For

DIVISION OF HAZARDOUS WASTE REMEDIATION

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

LIST OF APPENDICES

SM/dm

QUEENSBU/35231D

APPENDIX A

GEOPHYSICAL SURVEY REPORT

RESULTS OF QUEENSBURY LANDFILL

Weston Geophysical
CORPORATION

August 23, 1990

Mr. James Lanzo
Ms. Phyllis Retke
URS Consultants, Inc.
570 Delaware Avenue
Buffalo, New York 14202-1207

Subject: Results from Geophysical Surveys at
Numerous Well Locations
Halfmoon, Queensbury, and Saratoga Springs Landfills

Dear Mr. Lanzo and Ms. Retke:

In accordance with your authorization, Weston Geophysical conducted EM-31 and magnetometry surveys during the weeks of July 16 and 23, 1990 at 17 proposed monitoring well locations at the Halfmoon, Queensbury, and Saratoga Springs landfills, New York. The purpose of this investigation was to locate possible buried objects which might impede drilling and installation of monitoring wells. The methodologies employed and results of investigations are summarized below.

LOCATION AND SURVEY CONTROL

Geophysical data were typically acquired within a 20 by 20-foot grid, with the proposed well location centered in the middle of the grid (i.e. Line 0+10, Station 0+10). EM-31 terrain conductivity or magnetometry data were collected along south- north traverses spaced 2 feet apart; data were acquired digitally at 2 foot increments.

METHODS OF INVESTIGATION

The Geonics EM-31D terrain conductivity meter measures the electrical conductivity of earth materials to depths of 15 to 20 feet. The technique utilizes the principal of electromagnetic induction to measure the strength of a secondary magnetic field generated in the presence of a conductor, such as a metallic object. "Negative" conductivity values, or "polarity reversals" may be observed in the presence of metallic objects, making them readily detectable by the EM-31. Data are recorded digitally and transferred to a portable computer in the field for immediate evaluation. An expanded discussion of the electromagnetic terrain conductivity method may be found in Appendix A.

A total-field proton precession magnetometer was used to obtain magnetic readings at selected well locations. This instrument measures the earth's total magnetic field at any one location. Ferrous metallic objects (i.e. iron or steel) are readily detectable because they cause perturbations of the earth's ambient magnetic field. Because the methodology measures the total magnetic field, it is also susceptible to magnetic and electrical (i.e. lightning) storms. Appendix B discusses the magnetometry method in greater detail.

RESULTS

Halfmoon Landfill

Magnetometry data were acquired at wells MW-1 through MW-3; because of thunderstorm activity (which influences magnetic data), an EM-31 terrain conductivity meter was used to evaluate wells MW-4 through MW-6. Both magnetic and conductivity data indicate all six wells are in metal-free areas, although MW-1 is in proximity to a metal fence which influenced the data. Table 1 summarizes these results.

Queensbury Landfill

The EM-31 terrain conductivity meter was used to evaluate all five wells at the Queensbury Landfill. Conductivity values were generally low (less than 5 millimhos per meter (mmho/m)) in areas "upgradient" (i.e. MW-1 and MW-5), while values exceeded 30 mmhos/m in "down gradient" wells. Conductivity variations noted could be due to changes in lithology, moisture content, or other non-metallic sources; anomalies associated with buried metallic objects were not detected at any of the five wells, as summarized in Table 1.

Saratoga Springs Landfill

Conductivity data were also acquired at all six wells at Saratoga Springs Landfill. High conductivities observed at well SC-6 are believed to be indicative of a groundwater plume, as the well is situated at the toe of the landfill and is surrounded by swamp and open water on all sides. Anomalies indicative of buried metal objects were not detected at Wells SC-1, SC-2, SC-4, and SC-6. Well SC-5 is also believed to be free of buried metal objects, although conductivity data appeared slightly anomalous because of the well's proximity to overhead powerlines. Some small metal objects (scrap metal) may be located in the vicinity of Well SC-3; we recommend that this well be relocated 5 feet to the east. Table 1 summarizes these results.

We will be pleased to provide any additional information that you may require. We appreciate providing our geophysical services to URS Consultants and welcome any future opportunities to serve you again.

Sincerely,

Weston Geophysical Corporation

Doria L. Kutrubes
Geophysicist

M. Blackey

Mark Blackey
Manager, Geophysical Services

DK:dmg-259-2

TABLE 1

SUMMARY OF GEOPHYSICAL WELL-CLEARING SURVEYS
HALFMOON, QUEENSBURY, AND SARATOGA SPRINGS LANDFILLS

LOCATION	WELL	SURVEY METHOD	COMMENTS
Halfmoon	SC-1	MAG	Ok- fence
Halfmoon	SC-2	MAG	Ok
Halfmoon	SC-3	MAG	Ok
Halfmoon	SC-4	EM-31	Ok
Halfmoon	SC-5	EM-31	Ok
Halfmoon	SC-6	EM-31	Ok
Queensbury	MW-1	EM-31	Ok
Queensbury	MW-2	EM-31	Ok
Queensbury	MW-3	EM-31	Ok
Queensbury	MW-4	EM-31	Ok
Queensbury	MW-5	EM-31	Ok
Saratoga Springs	SC-1	EM-31	Ok
Saratoga Springs	SC-2	EM-31	Ok
Saratoga Springs	SC-3	EM-31	Move 5' E
Saratoga Springs	SC-4	EM-31	Ok
Saratoga Springs	SC-5	EM-31	Ok- power line.
Saratoga Springs	SC-6	EM-31	Ok

APPENDIX A

ELECTROMAGNETIC TERRAIN CONDUCTIVITY METHOD OF INVESTIGATION

GENERAL CONSIDERATIONS

The electromagnetic terrain conductivity [EM] survey is a method of obtaining subsurface information through "remote" inductive electric measurements made at the surface of the earth. Although limited in application, the EM method has significant advantage in speed and definition for certain problems. The parameter measured with this technique is the apparent conductivity of the subsurface. The conductivity meter consists of receiver coil and a separate transmitter coil which induces an electrical source field [a circular eddy current loop] in the earth [Figure 1]. Each current loop generates a magnetic field proportional to the value of the current flowing within the loop. Part of the magnetic field from each current loop is intercepted by the receiver coil and converted to an output voltage which is linearly related to terrain conductivity. EM instrument readings are in millimhos per meter.

Geologic materials can be characterized by their electrical characteristics; lateral variations in conductivity values generally indicate a change in subsurface conditions. The relative conductivity of earth materials is particularly sensitive to water content and dissolved salts or ions. Accordingly, dry sands and gravels, and massive rock formations have low conductivity values; conversely, most clays and materials with a high ion content have high conductivity values.

FIELD PROCEDURE FOR DATA ACQUISITION

Weston Geophysical generally uses two common terrain conductivity meters: the Geonics EM-31 and the EM-34-3. The EM-31 has a fixed intercoil spacing of 3.7 meters and an effective depth of penetration of approximately 6 meters. The EM-34-3 has two coils which can be separated by 10, 20, or 40 meters and can be oriented in either the horizontal or vertical dipole modes. Intercoil separations increase the effective depth of investigation as shown below.

Intercoil Spacing [meters]	Depth of Investigation [meters]	
	Horizontal Dipoles	Vertical Dipoles
10	7.5	15
20	15	30
40	30	60

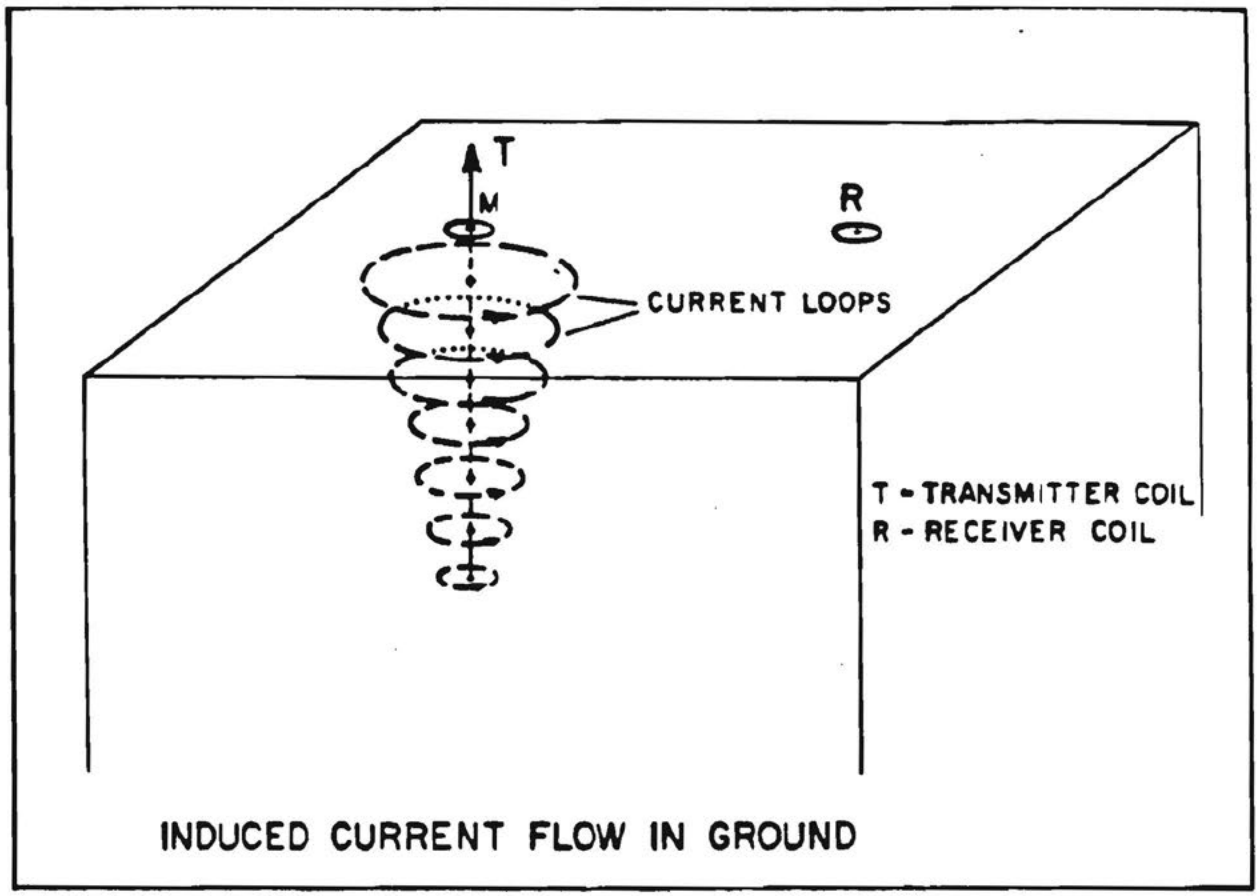
The coil orientation [horizontal or vertical] allows the EM-34-3 to respond to materials of different depths.

Conductivity measurements obtained with the EM-31 and/or the EM-34-3 can be obtained at any spacing along a survey line. EM-31 readings have the added flexibility of being recorded on a continuous chart recorder providing continuous data along a survey line.

DATA INTERPRETATION

EM data interpretation is generally subjective, that is measured EM values are contoured or profiled to identify high or low conductivity locations. Conductivity values obtained by an EM survey are relative values and depth estimates to conductive surface or bodies are best accomplished with an on-site calibration.

The EM-31 and EM-34-3 measure terrain conductivity in millimhos/meter. These values can be converted to resistivity [ohm/meters] for comparison with resistivity results by dividing the conductivity values into 1000.



Horizontal coplanar configuration (vertical dipole mode)

Figure 1

APPENDIX B

MAGNETOMETER (TOTAL FIELD) MEASUREMENTS FOR DETECTION OF BURIED METAL OBJECTS METHOD OF INVESTIGATION

INTRODUCTION

The magnetic method is a versatile, relatively inexpensive, geophysical exploration technique. Aeromagnetic surveys and deep water marine studies are commonly used as a reconnaissance tool for tracing large-scale geologic structure. Land and coastal water marine data are more useful in tracing smaller, more localized geologic structures, such as mineral and ore deposits. Land and marine surveys yield more detail and higher resolution, since the measurements are taken closer to the anomaly source. Land and shallow water magnetic data is commonly used to locate larger buried, man-made objects such as pipelines, barrels or other buried metal objects, and smaller objects such as involved in archaeological prospecting.

EARTH MAGNETISM

Magnetics is a "potential field" method. For a given magnetic field, the magnetic force in a given direction is equal to the derivative of the magnetic potential in that direction. The source of the earth's magnetic potential is its own magnetic field and the induction effect this field has on magnetic objects or bodies above and below the surface. The earth's field is a vector quantity having a unique magnitude and direction at every point on the earth's surface. This magnetic field is defined in three dimensions by angular quantities known as declination and inclination. Declination is defined as the angle between geographic north and magnetic north, and inclination is the angle between the direction of the earth's field and the horizontal [Figure 1]. The earth's magnetic field is measured in "gammas" [where 1 gamma = 10^{-5} Oersted]; the total field ranges from about 25,000 gammas near the equator to 70,000 gammas near the poles.

The earth's magnetic field is not completely stable. It undergoes long-term [secular] variations over centuries; small, daily [diurnal] variations [less than 1% of the total field magnitude]; and transient fluctuations called magnetic storms resulting from solar flare phenomena.

The earth's ambient magnetic field is modified locally by both naturally– occurring and man–made magnetic materials. Iron or steel objects act as "local" dipoles, which are generally oriented differently than the earth's external magnetic field.

The iron or steel objects represents a local perturbation in the main earth field. The net field in the vicinity of this perturbation is simply the vector sum of the induced and earth fields. Thus, the induced field is a function of the "susceptibility" of the material, or its ability to act like a magnet.

Remanent magnetization is produced in materials which have been heated above the Curie point allowing magnetic minerals in the material to become aligned with the earth's field before cooling. The remanent field direction is not always parallel to the earth's present field, and can often be completely reversed. The remanent field combines vectorially with the ambient and induced field components. The contribution of the remanent components must be considered in magnetic interpretations.

INSTRUMENTATION

At present, the most widely used magnetometer is the "proton precession" type. This device utilizes the precession of spinning protons of the hydrogen atoms in a sample of fluid [kerosene, alcohol, or water] to measure total magnetic field intensity.

Protons spinning in an atomic nucleus behave like magnetic dipoles, which are aligned [polarized] in a uniform magnetic field. The protons initially aligned themselves parallel to the earth's field. A second, much stronger magnetic field is produced approximately perpendicular to the earth's field by introducing currents through a coil of wire. The protons become temporarily aligned with this stronger secondary field. When this secondary field is removed, the protons tend to realign [precess] themselves parallel to the earth's field direction. The precessing protons will generate a small electric signal in the same coil used to polarize them with a frequency [about 2,000 Hz]

proportional to the total magnetic field intensity but independent of the coil orientation. By measuring the signal frequency, the absolute value of the total earth field intensity can be obtained to a 1 gamma accuracy. The total magnetic field value measured by the proton precession magnetometer is the net vector sum of the ambient earth's field and any local induced and/or remanent perturbations.

A total field proton precession magnetometer can be made portable and does not require orientation or leveling. There are a few limitations associated with the precession system. The precession signal can be severely degraded in the presence of large field gradients [greater than 200 gammas per foot] near 60-cycle A/C power lines. Also, the interpretation of total field data is sometimes more complicated than vertical field data which, however, is more time consuming to take.

FIELD TECHNIQUES

The field operator must avoid or note any sources of high magnetic gradients and alternating currents, such as power lines, buildings, and any large iron or steel objects. Readings are taken at a predetermined interval which depends on the nature of the survey, the accuracy required, and the gradients encountered. Base station readings, if required, are usually made several times a day to check for diurnal variations and magnetic storms.

INTERPRETATION

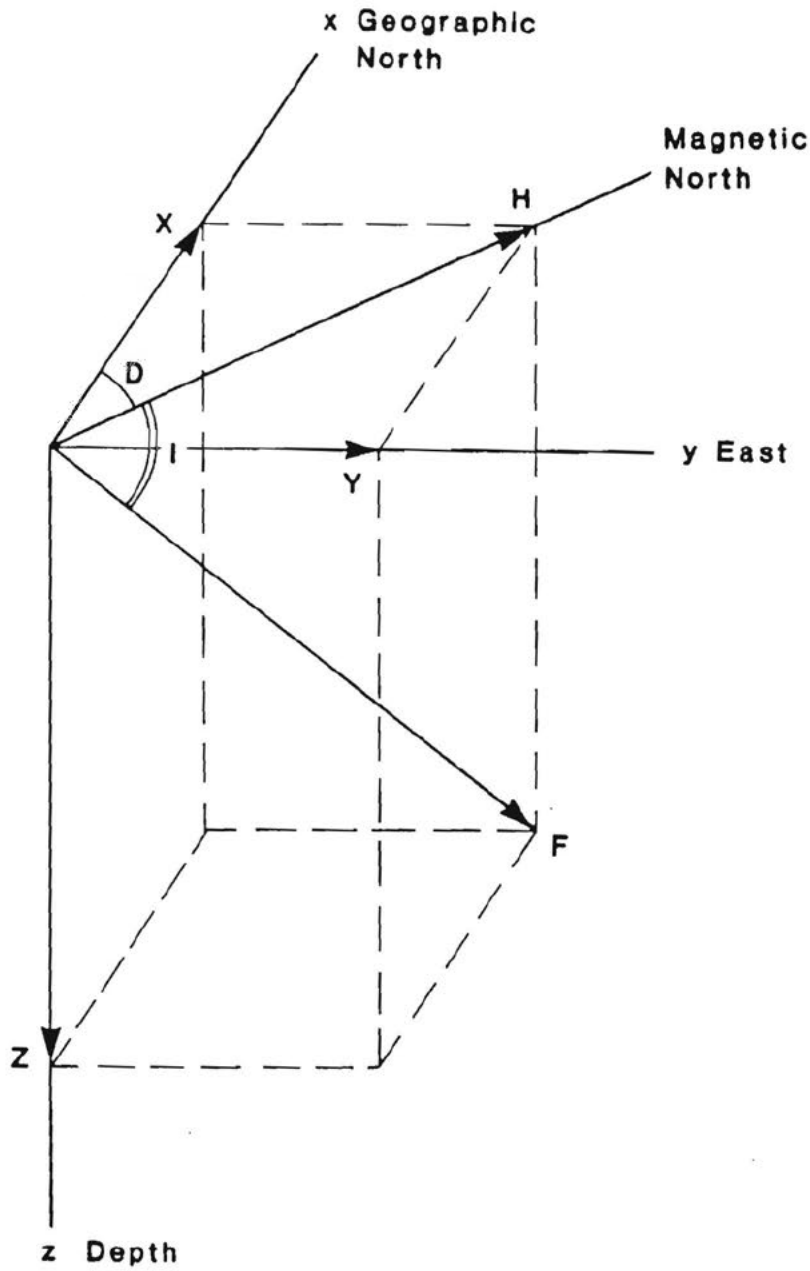
Lateral variations in susceptibility and/or remanent magnetization in crustal rocks give rise to localized anomalies in the measured total magnetic field intensity. Geologic structural features [faults, contacts, intrusions, etc.] and metal objects will cause magnetic anomalies, which can be interpreted to define the location of the causative source.

After diurnal effects and regional gradients have been removed, magnetic anomalies can be studied in detail with derivative operations and frequency filtering employed to define depth and shape.

Because it is a potential field method, there are a number of possible source configurations for any given magnetic anomaly. There is also an inherent complexity in magnetic dipole behavior. If the various magnetic field parameters [inclination, declination, and susceptibility] are well defined, and some reasonable assumptions can be made regarding the nature of the source, an accurate source model can generally be derived.

Magnetic anomalies can be analyzed both qualitatively and quantitatively. The physical dimensions of an anomaly [slope, wave-length, amplitude, etc.] often reveal enough to draw some general qualitative conclusions regarding the location and depth of the causative source.

Precise interpretation must be done quantitatively and requires prior knowledge of earth and remanent magnetic field parameters. Modeling can be performed by various approximation methods, whereby one reduces the source to a system of poles or dipoles, or assumes it to be one of several simple, geometric forms [vertical prism, horizontal slab, step, etc.]. The magnetic properties for this simplified model can be rather easily defined mathematically. Simple formulas can be derived which relate readily measurable anomaly parameters, such as slope, width, and amplitude ratios, to the general dimensions of the anomaly source, including depth to top, thickness, dip, and width normal to strike. Since these methods involve very limiting geometric assumptions, the results can be treated as good approximations only for very simplified sources.



I = Inclination

D = Declination

H = Horizontal Field Strength

F = Total Magnetic Force

ELEMENTS OF THE EARTH'S MAGNETIC FIELD

FIGURE

APPENDIX B

SOIL BORING LOGS

URS CONSULTANTS, Inc.

TEST BORING LOG
BORING NO. MW-1

PROJECT: QUEENSBURY LANDFILL PHASE II INVESTIGATION
SHEET NO. 1 OF 3
CLIENT: NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
JOB NO.: 35231.05
BORING CONTRACTOR: CONSTRUCTION DRILLING SERVICES (CDS)
BORING LOCATION: UPGRADIENT
GROUND WATER:
GROUND ELEVATION: 482.59 FT.
DATE STARTED: 10-11-90
DATE FINISHED: 10-17-90
DRILLER: JOHN COYLE, DICK MILLER
GEOLOGIST: SCOTT SWANSON
REVIEWED BY:

DATE	TIME	LEV	TYPE	TYPE	DATE	TIME	LEV	TYPE
10/16	11:00AM	157' GRD.	DRILLER'S TAPE	DIA.	11/9	4:40pm	160.76	T.O. Riser
10/26	12:55pm	160.64	Top of Riser	WT.				
11-2	4:10pm	160.68	T.O. of Riser	FALL				
11-8	3:20pm	160.74	T.O. of Riser					

CAS SAMP CORE TUBE

* POCKET PENETROMETER READING

DEPTH FT	STRATA	SAMPLE NO.	TYPE	BLOWS PER 6"	RECOVERY RQD %	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	USCS	REMARKS
								10-11-90 2:00pm COMMENCE DRILLING		
								COBBLES		DUSTY DRILLING
10										
20						GRAY WHITE		GRAVELS, ANGULAR GROUND UP COBBLES 3/16"-1/2"		
30						GRAY		BOULDER AT 30'		VERY DUSTY DISCHARGE
40						GRAY BROWN		SANDY GRAVELS @ 35' fine-coarse sand brown COBBLES		
50										
60										10-12-90 START @ 61'
70						BROWN		SAND @ 67' coarse-fine	SW	MOIST

COMMENTS TUBEX & AIR ROTARY DRILLING METHOD - SAMPLES OR CUTTINGS DESCRIBED AS DISCHARGED BY AIR AT SURFACE
TUBEX ADVANCES CASING WHILE DRILLING

PROJECT NO. 35231.05
BORING NO. MW-1

URS CONSULTANTS, Inc.

TEST BORING LOG
BORING NO. MW-1

PROJECT: QUEENSBURY LANDFILL PHASE II
SHEET NO. 2 OF 3
CLIENT: NEW YORK STATE DEPT. OF ENVIRONMENTAL CONSERVATION
JOB NO.: 35231.05

DEPTH FT	STRATA	SAMPLE NO.	TYPE	BLOWS PER 6"	RECOVERY RQD %	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	CLASS USCS	REMARKS
		NO SPLIT SPOONS				BRN WH. GRAY		SAND AND COBBLES		
80						BRN.		SAND fine-med. @ 76'	SP	MOIST LESS DUST IN DISCHARGE
90						BRN.		SANDY GRAVELS @ 86' L COBBLES		
								COARSE SANDS, SOME FINE GRAVELS	94' SP	
100						MULTI-COLOR		GRAVEL SIZE 97' LARGER MULTI-COLOR GRAVELS		DUST INCREASE DRY COBBLE ZONE
110						BRN.		@ 110' fine moist sand 2' of fine becoming coarser	SP	
								AT 112' CASING NO LONGER BEING ADVANCED - JOINT SNAPPED DOWNHOLE, PULLED ALL CASING & DRILL STRING @ 116' DUSTY AGAIN, FINE GRAVELS		AND REDRILL ON 10-15-90
120										
130								SANDY GRAVELS 1/4" - 3/8" ROUNDED	GP	SLIGHTLY MOIST
140										
150										

COMMENTS TUBEX & AIR ROTARY DRILLING METHOD - TRUCK MOUNTED TH-60 INGERSOLL-RAND RIG

PROJECT NO. 35231.05
BORING NO. MW-1

V-3205A

URS CONSULTANTS, Inc.

TEST BORING LOG
BORING NO. MW-1

PROJECT: QUEESBURY LAND FILL PHASE II INVESTIGATION
SHEET NO. 3 OF 3
CLIENT: NYSDEC
JOB NO.: 35231.05

DEPTH FT	STRATA	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	RECOVERY RQD %	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	CLASS USCS	REMARKS
160						BN.		SANDY GRAVELS	GP	
170					MULT-COLOR WHITE GREEN PINK ORANGE	BRN.		V. COARSE SAND -171' DRILL AHEAD ON 10-16-90	SP	WATER MIST OF WATER STEAM AT DISCHARGE TOOK GRAIN SIZE SAMPLE
180								TOTAL DEPTH 180' DRILLER MEASURES WATER @ 157' GRD.		

COMMENTS TUBEX & AIR ROTARY DRILLING METHOD

PROJECT NO. 35231.05
BORING NO. MW-1

3205A

URS CONSULTANTS, Inc.

TEST BORING LOG
BORING NO. MW-2

PROJECT: QUEENSBURY LANDFILL PHASE II INVESTIGATION
SHEET NO. 1 OF 2
CLIENT: NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
JOB NO.: 35231.05
BORING CONTRACTOR: CONSTRUCTION DRILLING SERVICES (CDS)
BORING LOCATION: DOWNGRADIENT OF CIBA-GEIGY FACILITY
GROUND WATER:
GROUND ELEVATION: 437.22
DATE STARTED: 10-30-90
DATE FINISHED: 11-1-90
DRILLER: JOHN COYLE
GEOLOGIST: SCOTT SWANSON
REVIEWED BY:

DATE	TIME	LEV	TYPE	TYPE	DATE	TIME	LEV	TYPE
					~~CAS.~~	~~SAMP~~	~~CORE~~	~~TUBE~~
10-31	11:14AM	115.32	GROUND	DRY	11-9	3:50PM	116.20	T. of Riser
10-31	1:00	113.5	GROUND	WET	11-15		116.13	T. of Riser
11-1	10:00AM	113.6	GROUND	FALL	11-29		116.28	T. of Riser
11-2	3:30PM	116.98	Top of Riser					

* POCKET PENETROMETER READING

DEPTH FT	STRATA	SAMPLE NO.	TYPE	BLOWS PER 6"	RECOVERY RQD %	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	USCS	REMARKS
	0					LT. BRN		MED-CS SAND SOME 1/4" PEBBLES THROUGHOUT	SP	8:37AM COMMENCE DRILLING DRY-SL. DAMP.
		NO SPLIT SPOONS								
10										
20										HNU = 0 PPM
30										
40						BROWN		FINE-MED SAND NO PEBBLES	SP	MOIST, NO DUST
50										HELPER SMELLS ODORS, HNU=0 DOWNHOLE & CUTTINGS
60						GRAY-BRN		@62' MED-CS SAND GRAY COLOR 62-67' yellow-brn fn-md Sand		
						GRAY		BOULDER		DUSTY DRY
70						yellow-Brown		fine-Md Sand, Some Pebbles	SP	MOIST

COMMENTS TUBEX & AIR ROTARY DRILLING METHOD
RIG: TRUCK-MOUNTED INGERSOLL-RAND TH-60

PROJECT NO. 35231.05
BORING NO. MW-2

URS CONSULTANTS, Inc.

TEST BORING LOG
BORING NO. MW-2

PROJECT: QUEENSBURY LANDFILL PHASE II
SHEET NO. 2 OF 2
CLIENT: NEW YORK STATE DEPT. OF ENVIRONMENTAL CONSERVATION
JOB NO.: 35231.05

DEPTH FT	STRATA	SAMPLE NO.	TYPE	BLOWS PER 6"	RECOVERY RQD %	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	CLASS USCS	REMARKS
						LT. BRN		MED-CS SAND	SP.	DUSTY, DRY
						LT. GRAY		COBBLES		
		NO		SPLIT		YELLOW BRN.		FINE SAND, LITTLE COARSE 10%	SP	MOIST GETTING DRIER
80			SPOONS							DRY
90										
100										
						- @T	107'	MOISTENING		
110						= 109/110	SOME GRAVELS	V. FINE SAND		V. MOIST
					wiper @ 115.5'	▼ SOME GRAVELS		SANDY GRAVELS 1/2"-3/4"	GP	
						GRAY		SILTY SANDY GRAVELS	GW	
120						DK GRAY BLACK		SILTY SANDS, SOME GRAVELS	SM	120-122 DUSTY DRY 10-31-90 START DRILLING @ 122 WET AGAIN
							WET	HARD DRILLING BLACK SILTY BALLS SAND		
						PULLED DRILL STRING AT 126', CHECK BIT PUT NEW REAMER ON BIT ASSEMBLY DRILLING AHEAD				
130						BLACK		SILTY, SANDY MUD		WET
						DRILLING SLOW AND NOT GAINING DEPTH				
							135'	TOTAL DEPTH		
140										
150										

3205A

COMMENTS

PROJECT NO. 35231.05
BORING NO. MW-2

URS CONSULTANTS, Inc.

TEST BORING LOG
BORING NO. MW-3 A

PROJECT: QUEENSBURY LANDFILL PHASE II INVESTIGATION
SHEET NO. 1 OF 3
CLIENT: NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
JOB NO.: 35231.05
BORING CONTRACTOR: CONSTRUCTION DRILLING SERVICES (CDS)
BORING LOCATION:
GROUND ELEVATION: NOT MEASURED
DATE STARTED: 10-17-90
DATE FINISHED: 10-22-90
DRILLER: JOHN COYLE
GEOLOGIST: SCOTT SWANSON
REVIEWED BY:

GROUND WATER:

DATE	TIME	LEV	TYPE		CAS.	SAMP	CORE	TUBE
				TYPE				
				DIA.				
				WT.				
				FALL				

* POCKET PENETROMETER READING

DEPTH FT	STRATA	SAMPLE NO.	TYPE	BLOWS PER 6"	RECOVERY RQD %	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	USCS	REMARKS
						LT. GRAY,		1ST ATTEMPT HIT FILL - BAD ODORS ABANDONED MOVED LOCATION 2nd Attempt COBBLES - ANGULAR GRAVELS 1/2"-1"		GARBAGE @ 3 1/2'
10		NO SPLIT SPOONS								
20						BRN. GRAY		at 16' V. COARSE Sandy gravels ANGULAR GRAVELS 1/4"-1/2"	GP	DRY DUSTY DISCHARGE
30							AT 31.5' SAND AND GS			WET ZONE
								fine gravels	GP	DRY, DUSTY
40						BRN		FINE SAND, FEW GRAVELS	SP	
						GRAY		COBBLES		DRY
50						BRN		FINE-MED SAND TR. FINE PEBBLES	SP	NO DUST MOIST
								FINE-MED SAND No PEBBLES		MOIST
								LIKE MASON'S SAND		Hnu = 0ppm
60								FINE-MED SAND SOME ADDED FINE PEBBLES		MOIST
70								FINE GRAVELS	GP	BECOMING DUSTY

COMMENTS THIS BORING WAS ABANDONED DUE TO CASING JOINTS SNAPPING OFF AT DEPTH PREVENTING CASING TO BE FURTHER ADVANCED WHILE DRILLING. SEE MW-3 FOR

PROJECT NO. 35231.05
BORING NO. MW-3A

URS CONSULTANTS, Inc.

TEST BORING LOG
BORING NO. MW-3A

PROJECT: QUEENSBURY LANDFILL PHASE II
SHEET NO. 2 OF 3
CLIENT: NEW YORK STATE DEPT. OF ENVIRONMENTAL CONSERVATION
JOB NO.: 35231.05

DEPTH FT	STRATA	SAMPLE NO.	TYPE	BLOWS PER 6"	RECOVERY RQD %	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	CLASS USCS	REMARKS
								FINE GRAVELS	GP	DRY $H_{mu}=0$ DOWNHOLE
						BRN.		FN-MED SAND	SP	MOIST LEL 0%
80		NO		SPLIT						@ 81
						BRN.		FINE - COARSE SAND FEW ROUNDED PEBBLES	SW	VERY DUSTY MOIST AGAIN
90		SPOONS						PULLED UP CASING AND WENT TO WINCH - BLEW OUT BOTTOM TO CHECK FOR ANY ACCUMULATING WATER - NONE		
						LT. GRAY		COBBLE		DRY, DUSTY
						BRN.		FINE SAND ALTERNATING FINE-COARSE	SW SP	MOIST
100										
						MULTI-COLORED		COARSE GRAVEL COBBLES		
110										
						BRN.		ROUNDED PEBBLES TO COARSE SAND		DRY DUSTY
120						GRY.		COBBLES AT 121' NO AIR RETURN VACUUM, CHUTE FLAT		$H_{mu}=0$ ppm LEL = 0%
130								-131' AIR CIRCULATING AGAIN COBBLES		V. DUSTY
140										
						BRN.		FINE SAND, FEW GRAVELS	SP	V. MOIST
150								FINE - MED SAND		MOIST

COMMENTS

PROJECT NO. 35231.05
BORING NO. MW-3A

3205A

URS CONSULTANTS, Inc.

TEST BORING LOG
BORING NO. MW-3A

PROJECT: QUEESBURY LANDFILL PHASE II INVESTIGATION
SHEET NO. 3 OF 3
CLIENT: NEW YORK STATE DEPT. OF ENVIRONMENTAL CONSERVATION
JOB NO.: 35231.05

DEPTH FT	STRATA	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	RECOVERY RQD %	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	CLASS USCS	REMARKS
		NO	SPLIT			LT. BRN.		FINE-MEDIUM SAND ↓	SP	MOIST
160			SPOONS							
						10-19-90		@ 165' CASING SNAPPED AT JOINT AGAIN. PULLED CASING UP RE-DRILLED to 81 FT.		
170						10-20-90		CONTINUED RE DRILLING TO 145 FT. CASING BROKE AGAIN & ABANDONED LOCATION TO BE RE-DRILLED AT A LATER DATE.		

3205A

COMMENTS

PROJECT NO. 35231.05
BORING NO. MW-3A

URS CONSULTANTS, Inc.

TEST BORING LOG
BORING NO. MW-3

PROJECT: QUEENSBURY LANDFILL PHASE II INVESTIGATION
SHEET NO. 1 OF 3
CLIENT: NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
JOB NO. : 35231.05
BORING CONTRACTOR: CONSTRUCTION DRILLING SERVICES (CDS)
BORING LOCATION:
GROUND ELEVATION: 483.18
DATE STARTED: 11-5-90
DATE FINISHED: 11-8-90
DRILLER: DICK MILLER
GEOLOGIST: SCOTT SWANSON
REVIEWED BY:

GROUND WATER:

DATE	TIME	LEV	TYPE
11-6	4:15pm	16.2'	GROUND
11-9	8:30am	16.57	T.OF RISER

	CAS.	SAMP	CORE	TUBE
TYPE				
DIA.				
WT.				
FALL				

* POCKET PENETROMETER READING

DEPTH FT	STRATA	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	RECOVERY RQD %	ODOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	USCS	REMARKS
							SEE MW-3A LOG FOR DETAILED DESCRIPTION			11:40AM START DRILLING
10		NO SPLIT SPOONS						COBBLE ZONE		
20										
30										
40								FINE-MED SAND	SP	
50										
60										
70										

COMMENTS TUBEX AIR-ROTARY DRILLING METHOD
RIG: TRUCK MOUNT INGERSOLL-RAND TH-60

PROJECT NO. 35231.05
BORING NO. MW-3

URS CONSULTANTS, Inc.

TEST BORING LOG
BORING NO. MW-3

PROJECT: QUEENSBURY LANDFILL PHASE II INVESTIGATION
SHEET NO. 3 OF 3
CLIENT: NYSDEC
JOB NO.: 35231.05

DEPTH FT	STRATA	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	RECOVERY RQD %	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	CLASS USCS	REMARKS
			NO SPLIT					FINE SAND	SP	DAMP
160			SPOONS					▼ MEASURED WATER @ 162		
								- FINE-MED SAND w/little coarse	SP	wet
								- 166 water observed Top casing		
170										
								- 1 COK GEOTECH GRAIN SIZE		SAMPLES
180										
								TOTAL DEPTH 182'		

3205A

COMMENTS

PROJECT NO. 35231.05
BORING NO. MW-3

APPENDIX D

MONITORING WELL CONSTRUCTION DETAILS

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Corning Tower The Governor Nelson A. Rockefeller Empire State Plaza Albany, New York 12237

David Axelrod M.D.
Commissioner

OFFICE OF PUBLIC HEALTH

Linda A. Randolph M.D. M.P.H.
Director

William F. Leavy
Executive Deputy Director

March 4, 1991

[redacted]

RE: Queensbury Landfill
Queensbury(T), Warren County
Site ID #557005

[redacted]

On January 28, 1991 I collected water samples at your home in the Town of Queensbury. I am pleased to report that there were no detected volatile organic compounds and for all inorganic metals analyzed, the concentrations are within the the expected background range.

The samples were submitted to the NYS Department of Health's Wadsworth Center for Laboratories and Research for analysis. I have also included an explanation sheet which may help you interpret the sample results. If you have any questions, I can be reached at (518) 458-6306.

Sincerely,

Stanley J. Kilmer

Stanley J. Kilmer
Program Research Specialist I
Bureau of Environmental Exposure
Investigation

sjk/10630690

Attachment

cc: R. Tramontano/G. Litwin, w/o att.
P. Smith, CRU, w/o att.
B. Fear, GFDO, w/o att.
D. Steenberge, DEC-Reg. 5, w/att.
M. Brand, DEC, w/att.

0597

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 910458 SAMPLE RECEIVED:91/01/28/ CHARGE: 19.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN:10 GAZETTEER CODE:5657
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: 557005 QUEENSBURY LANDFILL
DESCRIPTION:05 [redacted]
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VOL3-KET:PURGEABLES & KETONES
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 91/01/28 12: DATE PRINTED:91/02/22

ANALYSIS: VH05021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE REPORTED: 91/02/20 REPORT MAILED OUT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
2,3-DICHLOROPROPENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
2-CHLOROETHYLVINYL ETHER	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L

**** CONTINUED ON NEXT PAGE ****

COPIES SENT TO: CO(3), RO(0), LPHE(1), FED( ), INFO-P( ), INFO-L( )

RONALD TRAMONTANO, PE
BUR. ENVIRONMENTAL EXPOSURE INVESTIGAT.
NY STATE DEP'T. HEALTH SUBMITTED BY:KILMER
II UNIVERSITY PLACE
ALBANY, NY 12237 INTERAGENCY MAIL

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 910458 SAMPLE RECEIVED:91/01/28/ CHARGE: 19.00
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: 557005 QUEENSBURY LANDFILL
TIME OF SAMPLING: 91/01/28 12: DATE PRINTED:91/02/22

PARAMETER	RESULT
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
PENTACHLOROETHANE	< 0.5 MCG/L
1-CHLOROCYCLOHEXENE-1	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BIS(2-CHLOROETHYL)ETHER	< 0.5 MCG/L
1,2-DIBROMO-3-CHLOROPROPANE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
BIS(2-CHLOROISOPROPYL)ETHER	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L

ANALYSIS: 5031 AROMATIC PURGEABLES, EPA METHOD 503.1 (DES 310-22)
DATE PRINTED: 91/02/22 FINAL REPORT

PARAMETER	RESULT
BENZENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
ETHYLBENZENE	< 0.5 MCG/L
P-XYLENE	< 0.5 MCG/L
M-XYLENE	< 0.5 MCG/L
O-XYLENE	< 0.5 MCG/L
ISOPROPYLBENZENE (CUMENE)	< 0.5 MCG/L
STYRENE	< 0.5 MCG/L
P-BROMOFLUOROBENZENE	< 0.5 MCG/L
N-PROPYLBENZENE	< 0.5 MCG/L
TERT-BUTYLBENZENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
M-CHLOROTOLUENE	< 0.5 MCG/L
1,3,5-TRIMETHYLBENZENE	< 0.5 MCG/L
1,2,4-TRIMETHYLBENZENE	< 0.5 MCG/L
4-ISOPROPYLTOLUENE (P-CYMENE)	< 0.5 MCG/L
CYCLOPROPYLBENZENE	< 0.5 MCG/L
SEC-BUTYLBENZENE	< 0.5 MCG/L
N-BUTYLBENZENE	< 0.5 MCG/L
2,3-BENZOFURAN	< 0.5 MCG/L
HEXACHLOROBUTADIENE (C-46)	< 0.5 MCG/L
1,2,4-TRICHLOROBENZENE	< 0.5 MCG/L
NAPHTHALENE	< 0.5 MCG/L
1,2,3-TRICHLOROBENZENE	< 0.5 MCG/L
PH OF AROMATIC ALIQUOT	7
PH WAS NOT AS LOW AS REQUIRED BY METHOD	YES

**** CONTINUED ON NEXT PAGE ****

0599

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 3 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 910458 SAMPLE RECEIVED:91/01/28/ CHARGE: 19.00
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: 557005 QUEENSBURY LANDFILL
TIME OF SAMPLING: 91/01/28 12: DATE PRINTED:91/02/22

ANALYSIS: KET KETONES - PURGE & TRAP TECHNIQUE (DES 310-25)
DATE REPORTED: 91/02/08 REPORT MAILED OUT

PARAMETER	RESULT
2-BUTANONE (METHYL ETHYL KETONE)	< 10. MCG/L
4-METHYL-2-PENTANONE (MIBK)	< 10. MCG/L
ACETONE	< 10. MCG/L
METHYL TERT BUTYL ETHER	< 10. MCG/L

**** END OF REPORT ****

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Corning Tower The Governor Nelson A. Rockefeller Empire State Plaza Albany, New York 12237

David Axelrod, M.D.
Commissioner

OFFICE OF PUBLIC HEALTH

Linda A. Randolph, M.D., M.P.H.
Director

William F. Leavy
Executive Deputy Director

March 4, 1991

[redacted]

DIVISION OF HAZARDOUS WASTE REMEDIATION

RE: Queensbury Landfill
Queensbury(T), Warren County
Site ID #557005

[redacted]

On January 28, 1991 I collected water samples at your home in the Town of Queensbury. I am pleased to report that there were no detected volatile organic compounds and for all inorganic metals analyzed, the concentrations are within the the expected background range.

The samples were submitted to the NYS Department of Health's Wadsworth Center for Laboratories and Research for analysis. I have also included an explanation sheet which may help you interpret the sample results. If you have any questions, I can be reached at (518) 458-6306.

Sincerely,

Stanley J. Kilmer

Stanley J. Kilmer
Program Research Specialist I
Bureau of Environmental Exposure
Investigation

sjk/10630667

Attachment

cc: R. Tramontano/G. Litwin, w/o att.
P. Smith, CRU, w/o att.
B. Fear, GFDO, w/o att.
D. Steenberge, DEC-Reg. 5, w/att.
M. Brand, DEC, w/att.

0588

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 910457 SAMPLE RECEIVED:91/01/28/ CHARGE: 19.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN:10 GAZETTEER CODE:5657
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: 557005 QUEENSBURY LANDFILL
DESCRIPTION: [redacted]
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VOL3-KET:PURGEABLES & KETONES
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 91/01/28 11:45 DATE PRINTED:91/02/22

ANALYSIS: VH05021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE REPORTED: 91/02/20 REPORT MAILED OUT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
2,3-DICHLOROPROPENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
2-CHLOROETHYLVINYL ETHER	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L

**** CONTINUED ON NEXT PAGE ****

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RONALD TRAMONTANO, PE
BUR. ENVIRONMENTAL EXPOSURE INVESTIGAT.
NY STATE DEP'T. HEALTH SUBMITTED BY:KILMER
II UNIVERSITY PLACE
ALBANY, NY 12237 INTERAGENCY MAIL

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 910457 SAMPLE RECEIVED:91/01/28/ CHARGE: 19.00
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: 557005 QUEENSBURY LANDFILL
TIME OF SAMPLING: 91/01/28 11:45 DATE PRINTED:91/02/22

PARAMETER	RESULT
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
PENTACHLOROETHANE	< 0.5 MCG/L
1-CHLOROCYCLOHEXENE-1	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BIS(2-CHLOROETHYL)ETHER	< 0.5 MCG/L
1,2-DIBROMO-3-CHLOROPROPANE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
BIS(2-CHLOROISOPROPYL)ETHER	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L

ANALYSIS: 5031 AROMATIC PURGEABLES, EPA METHOD 503.1 (DES 310-22)
DATE PRINTED: 91/02/22 FINAL REPORT

PARAMETER	RESULT
BENZENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
ETHYLBENZENE	< 0.5 MCG/L
P-XYLENE	< 0.5 MCG/L
M-XYLENE	< 0.5 MCG/L
O-XYLENE	< 0.5 MCG/L
ISOPROPYLBENZENE (CUMENE)	< 0.5 MCG/L
STYRENE	< 0.5 MCG/L
P-BROMOFLUOROBENZENE	< 0.5 MCG/L
N-PROPYLBENZENE	< 0.5 MCG/L
TERT-BUTYLBENZENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
M-CHLOROTOLUENE	< 0.5 MCG/L
1,3,5-TRIMETHYLBENZENE	< 0.5 MCG/L
1,2,4-TRIMETHYLBENZENE	< 0.5 MCG/L
4-ISOPROPYLTOLUENE (P-CYMENE)	< 0.5 MCG/L
CYCLOPROPYLBENZENE	< 0.5 MCG/L
SEC-BUTYLBENZENE	< 0.5 MCG/L
N-BUTYLBENZENE	< 0.5 MCG/L
2,3-BENZOFURAN	< 0.5 MCG/L
HEXACHLOROBUTADIENE (C-46)	< 0.5 MCG/L
1,2,4-TRICHLOROBENZENE	< 0.5 MCG/L
NAPHTHALENE	< 0.5 MCG/L
1,2,3-TRICHLOROBENZENE	< 0.5 MCG/L
PH OF AROMATIC ALIQUOT	7
PH WAS NOT AS LOW AS REQUIRED BY METHOD	YES

**** CONTINUED ON NEXT PAGE ****

0590

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 3 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 910457 SAMPLE RECEIVED:91/01/28/ CHARGE: 19.00
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: 557005 QUEENSBURY LANDFILL
TIME OF SAMPLING: 91/01/28 11:45 DATE PRINTED:91/02/22

ANALYSIS: KET KETONES - PURGE & TRAP TECHNIQUE (DES 310-25)
DATE REPORTED: 91/02/08 REPORT MAILED OUT

PARAMETER	RESULT
2-BUTANONE (METHYL ETHYL KETONE)	< 10. MCG/L
4-METHYL-2-PENTANONE (MIBK)	< 10. MCG/L
ACETONE	< 10. MCG/L
METHYL TERT BUTYL ETHER	< 10. MCG/L

**** END OF REPORT ****

0209

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 911000204 SAMPLE RECEIVED:91/01/29/ CHARGE: 5.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN:10 GAZETTEER CODE:5657
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: 557005 QUEENSBURY LANDFILL
DESCRIPTION: [redacted]
REPORTING LAB: 10:LABORATORY OF INORGANIC ANALYTICAL CHEMISTRY - ALBAN
TEST PATTERN: 10-001:SAFE DRINKING WATER ACT - METALS ONLY
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 91/01/28 11:45 DATE PRINTED:91/02/26

ANALYSIS: ICP-1 ICP GROUPING 1

PARAMETER	RESULT
MERCURY	< 0.2 MCG/L
ARSENIC	< 10. MCG/L
SELENIUM	< 5. MCG/L
LEAD	< 10. MCG/L
BERYLLIUM	< 1. MCG/L
SILVER	< 10. MCG/L
BARIUM	32. MCG/L
CADMIUM	< 5. MCG/L
COBALT	< 5. MCG/L
CHROMIUM	< 5. MCG/L
COPPER	35. MCG/L
IRON	261. MCG/L
MANGANESE	6. MCG/L
NICKEL	< 5. MCG/L
STRONTIUM	291. MCG/L
TITANIUM	< 5. MCG/L
VANADIUM	< 5. MCG/L
ZINC	20. MCG/L
MOLYBDENUM	< 20. MCG/L
ANTIMONY	< 80. MCG/L
TIN	< 50. MCG/L
THALLIUM	< 80. MCG/L
ALUMINUM	< 100. MCG/L
CALCIUM	36.3 MG/L
POTASSIUM	1.2 MG/L
MAGNESIUM	15.7 MG/L
SODIUM	3.1 MG/L

**** END OF REPORT ****

COPIES SENT TO: CO(3), RO(0), LPHE(1), FED( ), INFO-P( ), INFO-L( )

RONALD TRAMONTANO, PE
BUR. ENVIRONMENTAL EXPOSURE INVESTIGAT.
NY STATE DEP'T. HEALTH SUBMITTED BY:KILMER
II UNIVERSITY PLACE
ALBANY, NY 12237 INTERAGENCY MAIL

APPENDIX G (e)

NYSDEC LEACHATE SAMPLING ANALYTICAL RESULTS (1/16/91)

1009

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 911005005 SAMPLE RECEIVED:91/01/18/11 CHARGE: 18.32
PROGRAM: 6505:DIV. SOLID WASTE - BUREAU FACILITIES MANAGEMENT
SOURCE ID: DRAINAGE BASIN:10 GAZETTEER CODE:5657
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: QUEENSBURY LANDFILL LEACHATE HOLDING POND
DESCRIPTION:DEC SAMPLE #R590-57S10-SW1
REPORTING LAB: 10:LABORATORY OF INORGANIC ANALYTICAL CHEMISTRY - ALBANY
TEST PATTERN: 10-181:DEC - BUREAU OF MUN. WASTE - II
SAMPLE TYPE: 240:LEACHATE
TIME OF SAMPLING: 91/01/16 10:30 DATE PRINTED:91/02/22

ANALYSIS: 10-181 DEC - BUREAU OF MUN. WASTE - II

PARAMETER	RESULT
NITROGEN, AMMONIA, AS N	97. MG/L
NITROGEN, NITRATE (+NO2) AS N	0.06 MG/L
C.O.D.	260. MG/L
CARBON, TOTAL ORGANIC	70. MG/L
SOLIDS, TOTAL DISSOLVED, 180 C	1730. MG/L
SULFATE AS SO4	2.3 MG/L
ALKALINITY TO PH 4.5	1530. MG/L
PHENOLS	20. MCG/L
CHLORIDE	291. MG/L
HARDNESS, TOTAL AS CACO3	762. MG/L
TURBIDITY	OPAQUE
B.O.D. 5 DAY	24. SR MG/L
COLOR, APPARENT	[NA]
CYANIDES, HYDROLYZABLE	0.004 MG/L
BORON	1.5 MG/L
SULFIDE	1.4 MG/L
NITROGEN, KJELDAHL, AS N	106. MG/L
CHROMIUM, HEXAVALENT	< 5.0 MCG/L

ANALYSIS: ICP-2 ICP GROUPING 2 - TOTAL RECOVERABLE

PARAMETER	RESULT
MERCURY	0.3 MCG/L
ARSENIC, TOTAL RECOVERABLE	< 10. MCG/L
SELENIUM, TOTAL RECOVERABLE	< 5. MCG/L
LEAD, TOTAL RECOVERABLE	< 10. MCG/L
BERYLLIUM, TOTAL RECOVERABLE	< 1. MCG/L
SILVER, TOTAL RECOVERABLE	< 10. MCG/L
BARIUM, TOTAL RECOVERABLE	298. MCG/L
CADMIUM, TOTAL RECOVERABLE	< 5. MCG/L
COBALT, TOTAL RECOVERABLE	11. MCG/L

**** CONTINUED ON NEXT PAGE ****

COPIES SENT TO: CO(1), RO( ), LPHE( ), FED( ), INFO-P( ), INFO-L( )

RICH BALDWIN
NY STATE DEP'T ENVIRON. CONSERVATION
DIV. SOLID WASTES (RM. 422) SUBMITTED BY:BERES
50 WOLF RD.
ALBANY, NY

1010

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 911005005 SAMPLE RECEIVED:91/01/18/11 CHARGE: 18.32
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: QUEENSBURY LANDFILL LEACHATE HOLDING POND
TIME OF SAMPLING: 91/01/16 10:30 DATE PRINTED:91/02/22

PARAMETER	RESULT
CHROMIUM, TOTAL RECOVERABLE	11. MCG/L
COPPER, TOTAL RECOVERABLE	6. MCG/L
IRON, TOTAL RECOVERABLE	45700. MCG/L
MANGANESE, TOTAL RECOVERABLE	654. MCG/L
NICKEL, TOTAL RECOVERABLE	29. MCG/L
STRONTIUM, TOTAL RECOVERABLE	1440. MCG/L
TITANIUM, TOTAL RECOVERABLE	24. MCG/L
VANADIUM, TOTAL RECOVERABLE	< 5. MCG/L
ZINC, TOTAL RECOVERABLE	18. MCG/L
MOLYBDENUM, TOTAL RECOVERABLE	< 20. MCG/L
ANTIMONY, TOTAL RECOVERABLE	< 80. MCG/L
TIN, TOTAL RECOVERABLE	< 50. MCG/L
THALLIUM, TOTAL RECOVERABLE	< 60. MCG/L
ALUMINUM, TOTAL RECOVERABLE	309. MCG/L
CALCIUM, TOTAL RECOVERABLE	194. MG/L
POTASSIUM, TOTAL RECOVERABLE	92.0 MG/L
MAGNESIUM, TOTAL RECOVERABLE	67.0 MG/L
SODIUM, TOTAL RECOVERABLE	230. MG/L
DIG OF H2O-RECOVERABLE METALS	DONE

FOLLOWING PARAMETERS NOT PART OF TEST PATTERN

PARAMETER	RESULT
COLOR, TRUE	100.

**** END OF REPORT ****

APPENDIX H

ANALYTICAL SAMPLE DESCRIPTIONS

SAMPLE ID	DATE SAMPLED	SAMPLE TYPE	DESCRIPTION	LOCATION
MW-1	11/30/90	Groundwater	Clear, no odor	West side of site near the intersection of Ridge and Jenkinsville Roads
MW-2	11/29/90	Groundwater	Clear, no odor	West side of site adjacent to N.E. corner of Ciba-Geigy Secure Landfill
MW-3	11/30/90	Groundwater	Clear, no odor	South of active fill area near Esker Ridge
MW-4	11/29/90	Groundwater	Clear, no odor	S.E. portion of site near Mud Pond
MW-5	11/28/90	Groundwater	Clear, no odor	North central portion of site in north part of Torrington Pit
E-1	11/28/90	Groundwater	Clear, no odor	West portion of site near Landfill Office
E-2	11/29/90	Groundwater	Clear, no odor	S.E. portion of site near Mud Pond
E-3	11/28/90	Groundwater	Clear, no odor	South central portion of Torrington Pit
L-1	11/28/90	Leachate	Orange-red color, metallic odor	S.E. portion of site near containment berm
L-2	11/29/90	Leachate	Orange-red color, metallic odor	S.E. portion of site near roadway
SW-1	11/29/90	Surface Water	Clear, no odor	S.E. portion of site, taken next to Mud Pond stream gauge
SED-1	11/29/90	Sediment	Brown-black color with organics, gravelly	S.E. portion of site, taken near Mud Pond Stream gauge

APPENDIX I

PHASE II ANALYTICAL TESTING RESULTS

ANALYTICAL DATA ASSESSMENT

FOR

PHASE II CHEMICAL ANALYSES AT QUEENSBURY LANDFILL

Performed By:

VERSAR LABORATORIES, INC.

Prepared For:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

By:

URS CONSULTANTS, INC.

JUNE 1991

INTRODUCTION: This assessment represents the best judgement of URS Consultants, Inc. (URS) concerning the useability of the chemical data produced by Versar Laboratories, Inc. a subcontractor to URS, as part of the Phase II Investigation at Queensbury Landfill site in Albany County, New York. This project is being funded by the New York State Department of Environmental Conservation (NYSDEC). The data being evaluated is from the sampling of surface waters, stream sediments, leachate and groundwater samples. All analyses performed by Versar Laboratories Inc., were subject to NYSDEC Analytical Services Protocol - September 1989.

Data documentation and chain-of-custody procedures were performed in accordance with NYSDEC Analytical Services Protocol - September 1989. Data validation and determination of useability were performed in accordance with the level of effort discussed in the transmittals between URS and the NYSDEC which stated each site would be screened for compliance with analytical holding times, surrogate and spike recovery criteria, method blank requirements, and initial and continuing calibration requirements. The primary importance of this chemical data is to allow an accurate assessment of sites and to determine if further study is required prior to reclassification and/or delisting.

CATEGORIES: The following tables summarize our assessment of data useability on a sample-by-sample and fraction-by-fraction basis. In evaluating this data, we have established three (3) categories which are,

for the most part, gradational in nature. The categories are defined as follows:

Category 1a - Data Useable - Fully useable, although some minor deviations from NYSDEC ASP criteria are possible.

Category 1b - Data Useable with Caution - Cumulative deviations from NYSDEC ASP criteria are greater than Category 1a (e.g., holding time violations, internal standard and surrogate recovery outliers, poor chromatography, calibration standards not within QC limits, etc.). However, TCL compounds were detected at or above the quantitation limit or deviations are not considered significant enough as to jeopardize the chemical representativeness of the sample results. Deviations are explained in the note section of each data useability table.

Category 2a - Rejected Fraction Due to Significant NYSDEC ASP Deviations - Did not comply with NYSDEC ASP or USEPA CLP holding time requirements or low surrogate recoveries indicate poor method efficiency resulting in low bias of analytical data. In either case no TCL compounds were detected at or above the quantitation limit.

Summary Assessment: We recommend acceptance and use of all data in Category 1a. The use of Category 1b data involves some risk in the event of a legalistic challenge based upon non-compliance with strict NYSDEC ASP criteria. However, given the purpose of the Phase II studies, we cautiously recommend the use of the data categorized as 1b. We recommend rejection of all data in Category 2a.

James Lanzo
Project Manager

Thomas Knickerbocker
QA/QC Officer

TABLE 1

QUEENSBURY LANDFILL

ANALYTICAL DATA ASSESSMENT SUMMARY
MATRIX: Groundwater, Surface Water, Stream Sediments, Leachate
SAMPLE DELIVERY GROUP: 3881/4014/4022
ASSESSMENT CATEGORIES: 1a, 1b, 2a

Sample ID	VOA	SVOA	Pest/PCB	Metals	CN	Notes
Drill Water	1b	1a	1a	1a	1a	1
Trip Blank	1b	-	-	-	-	1
HOLD BLK-11/9	2a	-	-	-	-	
E-1-GW	1a	1a	1a	1b	1a	2
E-2-GW	1a	1a	1a	1a	1a	
E-3-GW	1a	1a	1a	1b	1a	2
L-1	1a	1a	1a	1b	1a	2
L-2	1a	1a	1a	1a	1a	
MW-1-GW	1a	1a	1a	1a	1a	
MW-2-GW	1a	1a	1a	1a	1a	
MW-3-GW	1a	1a	1a	1a	1a	
MW-4-GW	1a	1a	1a	1a	1a	
MW-5-GW	1a	1a	1a	1b	1a	2
SED-1	1a	1b	1b	1b	1a	2,3,4
SED-1-MS	1a	1b	1b	1b	1a	2,3,4
SED-1-MSD	1a	1b	1b	-	-	3,4
SED-1-MSB	1a	1a	1a	-	-	
SED-1-DUP	-	-	-	1b	1a	2
TB-1	1a	-	-	-	-	
HOLD BLK-11/30	1a	-	-	-	-	
HOLD BLK-12/3	1a	-	-	-	-	
RB-MW-4	1a	1a	1a	1a	1a	
SW-1	1a	1a	1a	1a	1a	
SW-1-MS	1a	1a	1a	1a	1a	
SW-1-MSD	1a	1a	1a	-	-	
SW-1-MSB	1a	1a	1a	-	-	
SW-1-DUP	-	-	-	1a	1a	

TABLE 1 (Continued)

QUEENSBURY LANDFILL

Sample ID	VOA	SVOA	Pest/PCB	Metals	CN	Notes
TB-A	1a	-	-	-	-	
TB-B	1a	-	-	-	-	
TB-C	1a	-	-	-	-	

Abbreviation/Legend:

VOA - Target Compound List (TCL) Volatile
SVOA - TCL Semivolatiles
Pest/PCB - TCL Pesticides/PCBs
Metals - Target Analyte List (TAL) Metals
CN - Cyanide

MSB - Matrix Spike Blank
TB - Trip Blank
RB - Rinse Blank
SW - Surface Water
SED - Sediment
L - Leachate Seep
MS - Matrix Spike
MSD - Matrix Spike Duplicate
DUP - Duplicate
GW - Groundwater
E - Existing Well
MW - Monitoring Well

NOTES FOR TABLE 1

1) The volatile sample was not analyzed within NYSDEC ASP holding time requirements but, was analyzed within USEPA CLP holding time requirements.

2) The metals analysis for mercury was completed after the NYSDEC ASP holding time had been exceeded, but it was still inside the USEPA CLP analysis holding time. All other metal analyses were completed within the NYSDEC ASP holding time.

3) The semivolatile sample was not extracted within NYSDEC ASP holding times, but, the sample was extracted within USEPA CLP holding time requirements.

4) The pesticide/PCB sample was not extracted within NYSDEC ASP holding times, but, the sample was extracted within USEPA CLP holding time requirements.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DRILL_WATER

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 3881 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 36333

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V6734

Level: (low/med) LOW Date Received: 11/09/90

% Moisture: not dec. ____ Date Analyzed: 11/17/90

Column: (pack/cap) ~~CAP~~ PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DRILL_WATER

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 3881 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 36333

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V6734

Level: (low/med) LOW Date Received: 11/09/90

% Moisture: not dec. ____ Date Analyzed: 11/17/90

Column (pack/cap) ~~CAP~~ PACK Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DRILLWATER

I Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 3881A SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 36335

Sample wt/vol: 1010 (g/mL) ML Lab File ID: T5280

Level: (low/med) LOW Date Received: 11/09/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 11/13/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/12/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DRILLWATER

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 3881A SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 36335

Sample wt/vol: 1010 (g/mL) ML Lab File ID: T5280

Level: (low/med) LOW Date Received: 11/09/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 11/13/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/12/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DRILLWATER

La Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 3881A SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 36335

Sample wt/vol: 1010 (g/mL) ML Lab File ID: T5280

Level: (low/med) LOW Date Received: 11/09/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 11/13/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/12/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	2.42	7.9	J

D

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DRILLWATER

Lab Name: VERSAR, INC. Contract:

Lab Code: VERSAR Case No.: URSQUEEN SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 36336

Sample wt/vol: 1000 (g/ml) ML Lab File ID:

Level: (low/med) LOW Date Received: 11/09/90

% Moisture: not dec. dec. Date Extracted: 11/13/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 11/29/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

D

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor Epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan Sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin Ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

PE 4/30/90

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

DRILL

Lab Name: VERSAR_LABORATORIES_INC.___ Contract: 35216.03_

Lab Code: VERSAR Case No.: 3881__ SAS No.: _____ SDG No.: DRILL_

Matrix (soil/water): WATER_____ Lab Sample ID: 36337_

Level (low/med): LOW_____ Date Received: 11/09/90

% Solids: ___0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5_	Aluminum_	984	_		P_
7440-36-0_	Antimony_	30.0	U		P_
7440-38-2_	Arsenic__	3.0	U		F_
7440-39-3_	Barium___	12.2	B		P_
7440-41-7_	Beryllium	1.0	U		P_
7440-43-9-	Cadmium__	5.0	U		P_
7440-70-2_	Calcium__	8580	_		P_
7440-47-3_	Chromium_	6.0	U		P_
7440-48-4_	Cobalt___	6.0	U		P_
7440-50-8_	Copper___	5.8	B		P_
7439-89-6_	Iron_____	433	_		P_
7439-92-1_	Lead_____	2.6	B		F_
7439-95-4_	Magnesium	835	B		P_
7439-96-5_	Manganese	4.2	B		P_
7439-97-6_	Mercury__	0.20	U		CV
7440-02-0_	Nickel___	12.0	U		P_
7440-09-7_	Potassium	1010	B		P_
7782-49-2_	Selenium_	3.0	U		F_
7440-22-4_	Silver___	5.0	U		P_
7440-23-5_	Sodium___	12400	_		P_
7440-28-0_	Thallium_	3.0	U	W	F_
7440-62-2_	Vanadium_	4.0	U		P_
7440-66-6_	Zinc_____	14.4	B		P_
	Cyanide__	10.0	U		AS

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:
_THE_CYANIDE_LAB_SAMPLE_ID_NUMBER_IS_36338;_THE_EPA_SAMPLE_NUMBER_SUFFIX
_IS_"_WATER";

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QL-MW-1GW

L Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 38764

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1251

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ Date Analyzed: 12/06/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

QL-MW-1GW

L Name: VERSAR INC. Contract: _____

ab Code: VERSAR Case No.: 4022 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 38764

ample wt/vol: 5.0 (g/mL) ML Lab File ID: S1251

evel: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ Date Analyzed: 12/06/90

olumn (pack/cap) CAP Dilution Factor: 1.0

umber TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLMW1GW

I Name: VERSAR INC. Contract: _____

ab Code: VERSAR Case No.: 4022A SAS No.: _____ SDG No.: B3

Matrix: (soil/water) WATER Lab Sample ID: 38775

Sample wt/vol: 1050 (g/mL) ML Lab File ID: T5500

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/05/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/31/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	48	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	48	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	48	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLMW1GW

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022A SAS No.: _____ SDG No.: B3

Matrix: (soil/water) WATER Lab Sample ID: 38775

Sample wt/vol: 1050 (g/mL) ML Lab File ID: T5500

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/05/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/31/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	48	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	48	U
100-02-7	4-Nitrophenol	48	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	48	U
534-52-1	4,6-Dinitro-2-methylphenol	48	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	48	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	19	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

QLMW1GW

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022A SAS No.: _____ SDG No.: B3

Matrix: (soil/water) WATER Lab Sample ID: 38775

Sample wt/vol: 1050 (g/mL) ML Lab File ID: T5500

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/05/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/31/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.37	51	BJ

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLMW1GW

Lab Name: VERSAR, INC. Contract:

b Code: VERSAR Case No.: URSQUEEN SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 38785

Sample wt/vol: 1050 (g/ml) ML Lab File ID:

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. dec. Date Extracted: 12/05/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 01/05/91

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor Epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan Sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.48	U
53494-70-5	Endrin Ketone	0.10	U
5103-71-9	alpha-Chlordane	0.48	U
5103-74-2	gamma-Chlordane	0.48	U
8001-35-2	Toxaphene	0.95	U
12674-11-2	Aroclor-1016	0.48	U
11104-28-2	Aroclor-1221	0.48	U
11141-16-5	Aroclor-1232	0.48	U
53469-21-9	Aroclor-1242	0.48	U
12672-29-6	Aroclor-1248	0.48	U
11097-69-1	Aroclor-1254	0.95	U
11096-82-5	Aroclor-1260	0.95	U

ga
1/7/91

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MW-1GW

Lab Name: VERSAR LABORATORIES INC. Contract: 35216.03

Lab Code: VERSAR Case No.: 4014 SAS No.: SDG No.: E-1

Matrix (soil/water): WATER Lab Sample ID: 38795

Level (low/med): LOW Date Received: 12/01/90

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	870			P
7440-36-0	Antimony	23.0	U		P
7440-38-2	Arsenic	3.0	U		F
7440-39-3	Barium	55.4	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	118000			P
7440-47-3	Chromium	5.0	U		P
7440-48-4	Cobalt	9.8	B		P
7440-50-8	Copper	8.2	B		P
7439-89-6	Iron	3990			P
7439-92-1	Lead	6.1			F
7439-95-4	Magnesium	23200			P
7439-96-5	Manganese	103			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	13.0	U		P
7440-09-7	Potassium	503	U		P
7782-49-2	Selenium	3.0	U	WN	F
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	28300			P
7440-28-0	Thallium	10.0	U		F
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	22.1			P
	Cyanide	10.0	U		AS

Color Before: GREY Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
THE CYANIDE LAB SAMPLE ID NUMBER IS 38804; THE EPA SAMPLE NUMBER PREFIX IS "Q/L";

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QL-MW-2GW

L Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 38765

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1252

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ Date Analyzed: 12/06/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	3	JX
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

QL-MW-2GW

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 38765

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1252

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ Date Analyzed: 12/06/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLMW2GW

L Name: VERSAR INC. Contract: _____

ab Code: VERSAR Case No.: 4022A SAS No.: _____ SDG No.: B3

Matrix: (soil/water) WATER Lab Sample ID: 38776

Sample wt/vol: 1050 (g/mL) ML Lab File ID: T5501

evel: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/05/90

xtraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/31/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	48	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	48	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	48	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLMW2GW

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022A SAS No.: _____ SDG No.: B3

Matrix: (soil/water) WATER Lab Sample ID: 38776

Sample wt/vol: 1050 (g/mL) ML Lab File ID: T5501

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/05/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/31/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	48	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	48	U
100-02-7	4-Nitrophenol	48	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	48	U
534-52-1	4,6-Dinitro-2-methylphenol	48	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	48	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	19	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

QLMW2GW

L. Name: VERSAR INC. Contract: _____

ab Code: VERSAR Case No.: 4022A SAS No.: _____ SDG No.: B3

Matrix: (soil/water) WATER Lab Sample ID: 38776

ample wt/vol: 1050 (g/mL) ML Lab File ID: T5501

evel: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/05/90

xtraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/31/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.37	11	BJ
2.	UNKNOWN	3.58	21	BJ
3.	UNKNOWN	4.25	11	J
4.	UNKNOWN KETONE	4.50	9.5	J
5.	UNKNOWN	17.79	17	J
6.	UNK ORGANIC ACID ESTER	18.50	5.7	J
7.	UNKNOWN	18.64	11	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLMW2GW

Lab Name: VERSAR, INC. Contract:

Lab Code: VERSAR Case No.: URSQUEEN SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 38786

Sample wt/vol: 1050 (g/ml) ML Lab File ID:

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. dec. Date Extracted: 12/05/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 01/05/91

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor Epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan Sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.48	U
53494-70-5	Endrin Ketone	0.10	U
5103-71-9	alpha-Chlordane	0.48	U
5103-74-2	gamma-Chlordane	0.48	U
8001-35-2	Toxaphene	0.95	U
12674-11-2	Aroclor-1016	0.48	U
11104-28-2	Aroclor-1221	0.48	U
11141-16-5	Aroclor-1232	0.48	U
53469-21-9	Aroclor-1242	0.48	U
12672-29-6	Aroclor-1248	0.48	U
11097-69-1	Aroclor-1254	0.95	U
11096-82-5	Aroclor-1260	0.95	U

1/10/91

10 0029

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MW-2GW

Lab Name: VERSAR_LABORATORIES_INC.___ Contract: 35216.03_

Lab Code: VERSAR Case No.: 4014__ SAS No.: _____ SDG No.: E-1___

Matrix (soil/water): WATER_____ Lab Sample ID: 38796_

Level (low/med): LOW_____ Date Received: 12/01/90

% Solids: ___0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1720			P
7440-36-0	Antimony	23.0	U		P
7440-38-2	Arsenic	3.0	U		F
7440-39-3	Barium	240			P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	216000			P
7440-47-3	Chromium	5.0	U		P
7440-48-4	Cobalt	8.0	U		P
7440-50-8	Copper	6.6	B		P
7439-89-6	Iron	4340			P
7439-92-1	Lead	3.9		S	F
7439-95-4	Magnesium	79900			P
7439-96-5	Manganese	716			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	28.4	B		P
7440-09-7	Potassium	7220			P
7782-49-2	Selenium	30.0	U	N	F
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	110000			P
7440-28-0	Thallium	10.0	U		F
7440-62-2	Vanadium	7.3	B		P
7440-66-6	Zinc	29.7			P
	Cyanide	10.0	U		AS

Color Before: GREY_____ Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:
_THE_CYANIDE_LAB_SAMPLE_ID_NUMBER_IS_38805;_THE_EPA_SAMPLE_NUMBER_____
_PREFIX_IS_"Q/L_";_____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QL-MW-3GW

L Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 38767

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1254

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ Date Analyzed: 12/06/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	18	
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	4	J
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	15	
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

QL-MW-3GW

L Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 38767

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1254

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ Date Analyzed: 12/06/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-43-4	METHANE, DICHLOROFLUORO-	2.90	17	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLMW3GW

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022A SAS No.: _____ SDG No.: B3

Matrix: (soil/water) WATER Lab Sample ID: 38778

Sample wt/vol: 1050 (g/mL) ML Lab File ID: T5503

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/05/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/31/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	48	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	48	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	48	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLMW3GW

L Name: VERSAR INC. Contract: _____

ab Code: VERSAR Case No.: 4022A SAS No.: _____ SDG No.: B3

Matrix: (soil/water) WATER Lab Sample ID: 38778

ample wt/vol: 1050 (g/mL) ML Lab File ID: T5503

evel: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/05/90

xtraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/31/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
99-09-2	3-Nitroaniline	48	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	48	U
100-02-7	4-Nitrophenol	48	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	48	U
534-52-1	4,6-Dinitro-2-methylphenol	48	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	48	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	19	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

QLMW3GW

I Name: VERSAR INC. Contract: _____

ab Code: VERSAR Case No.: 4022A SAS No.: _____ SDG No.: B3

Matrix: (soil/water) WATER Lab Sample ID: 38778

Sample wt/vol: 1050 (g/mL) ML Lab File ID: T5503

evel: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/05/90

xtraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/31/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

umber TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.37	25	BJ
2.	UNKNOWN	3.58	28	BJ
3.	UNKNOWN	4.23	23	J
4.	UNKNOWN	4.48	9.5	J
5.	UNKNOWN	12.00	7.6	J
6.	UNKNOWN	17.79	23	J
7.	UNKNOWN	18.65	9.5	J

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLMW3GW

Lab Name: VERSAR, INC. Contract:

b Code: VERSAR Case No.: URSQUEEN SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 38788

Sample wt/vol: 1050 (g/ml) ML Lab File ID:

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. dec. Date Extracted: 12/05/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 01/05/91

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor Epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan Sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.48	U
53494-70-5	Endrin Ketone	0.10	U
5103-71-9	alpha-Chlordane	0.48	U
5103-74-2	gamma-Chlordane	0.48	U
8001-35-2	Toxaphene	0.95	U
12674-11-2	Aroclor-1016	0.48	U
11104-28-2	Aroclor-1221	0.48	U
11141-16-5	Aroclor-1232	0.48	U
53469-21-9	Aroclor-1242	0.48	U
12672-29-6	Aroclor-1248	0.48	U
11097-69-1	Aroclor-1254	0.95	U
11096-82-5	Aroclor-1260	0.95	U

1/7/91

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MW-3GW

Lab Name: VERSAR_LABORATORIES_INC.___ Contract: 35216.03_

Lab Code: VERSAR Case No.: 4014__ SAS No.: _____ SDG No.: E-1___

Matrix (soil/water): WATER_____ Lab Sample ID: 38798_

Level (low/med): LOW_____ Date Received: 12/01/90

% Solids: ___0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8280			P
7440-36-0	Antimony	23.0	U		P
7440-38-2	Arsenic	3.2	B		F
7440-39-3	Barium	206			P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	245000			P
7440-47-3	Chromium	5.0	U		P
7440-48-4	Cobalt	78.4			P
7440-50-8	Copper	59.5			P
7439-89-6	Iron	37700			P
7439-92-1	Lead	14.1			F
7439-95-4	Magnesium	96000			P
7439-96-5	Manganese	1710			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	137			P
7440-09-7	Potassium	5600			P
7782-49-2	Selenium	30.0	U	WN	F
7440-22-4	Silver	4.6	B		P
7440-23-5	Sodium	178000			P
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	31.0	B		P
7440-66-6	Zinc	83.8			P
	Cyanide	10.0	U		AS

Color Before: BROWN____ Clarity Before: OPAQUE Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:
_THE_CYANIDE_LAB_SAMPLE_ID_NUMBER_IS_38807;_THE_EPA_SAMPLE_NUMBER_____
_PREFIX_IS_"Q/L_";_____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QL-MW-4GW

L. Name: VERSAR INC. Contract: _____

ab Code: VERSAR Case No.: 4022 SAS No.: _____ SDG No.: 3

atrix: (soil/water) WATER Lab Sample ID: 38768

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: Y5174

evel: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ Date Analyzed: 12/07/90

olumn: (pack/cap) CAP Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	8	B
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

QL-MW-4GW

L Name: VERSAR INC. Contract: _____

ab Code: VERSAR Case No.: 4022 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 38768

ample wt/vol: 5.0 (g/mL) ML Lab File ID: Y5174

evel: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ Date Analyzed: 12/07/90

olumn (pack/cap) CAP Dilution Factor: 1.0

umber TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLMW4GW

L Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022A SAS No.: _____ SDG No.: B3

Matrix: (soil/water) WATER Lab Sample ID: 38779

Sample wt/vol: 1050 (g/mL) ML Lab File ID: T5504

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/05/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/31/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	48	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	48	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	48	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLMW4GW

L Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022A SAS No.: _____ SDG No.: B3

Matrix: (soil/water) WATER Lab Sample ID: 38779

Sample wt/vol: 1050 (g/mL) ML Lab File ID: T5504

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/05/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/31/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	48	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	48	U
100-02-7	4-Nitrophenol	48	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	48	U
534-52-1	4,6-Dinitro-2-methylphenol	48	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	48	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	19	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

QLMW4GW

I Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022A SAS No.: _____ SDG No.: B3

Matrix: (soil/water) WATER Lab Sample ID: 38779

Sample wt/vol: 1050 (g/mL) ML Lab File ID: T5504

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/05/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/31/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.37	42	BJ
2.	UNKNOWN	3.58	25	BJ
3.	UNKNOWN	4.48	9.5	J
4.	UNKNOWN	17.74	17	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLMW4GW

Lab Name: VERSAR, INC. Contract: _

Lab Code: VERSAR Case No.: URSQUEEN SAS No.: SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 38789

Sample wt/vol: 1050 (g/ml) ML Lab File ID: ___

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 12/05/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 01/05/91

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor Epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan Sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.48	U
53494-70-5	Endrin Ketone	0.10	U
5103-71-9	alpha-Chlordane	0.48	U
5103-74-2	gamma-Chlordane	0.48	U
8001-35-2	Toxaphene	0.95	U
12674-11-2	Aroclor-1016	0.48	U
11104-28-2	Aroclor-1221	0.48	U
11141-16-5	Aroclor-1232	0.48	U
53469-21-9	Aroclor-1242	0.48	U
12672-29-6	Aroclor-1248	0.48	U
11097-69-1	Aroclor-1254	0.95	U
11096-82-5	Aroclor-1260	0.95	U

1/10/91

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MW-4GW

Lab Name: VERSAR_LABORATORIES_INC.___ Contract: 35216.03_

Lab Code: VERSAR Case No.: 4014__ SAS No.: _____ SDG No.: E-1___

Matrix (soil/water): WATER_____ Lab Sample ID: 38799_

Level (low/med): LOW_____ Date Received: 12/01/90

% Solids: ___0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1720			P
7440-36-0	Antimony	23.0	U		P
7440-38-2	Arsenic	13.1			F
7440-39-3	Barium	407			P
7440-41-7	Beryllium	1.8	B		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	156000			P
7440-47-3	Chromium	5.0	U		P
7440-48-4	Cobalt	8.7	B		P
7440-50-8	Copper	10.1	B		P
7439-89-6	Iron	21000			P
7439-92-1	Lead	3.1			F
7439-95-4	Magnesium	34500			P
7439-96-5	Manganese	518			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	13.0	U		P
7440-09-7	Potassium	9810			P
7782-49-2	Selenium	30.0	U	N	F
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	51800			P
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	8.2	B		P
7440-66-6	Zinc	19.6	B		P
	Cyanide	10.0	U		AS

Color Before: GREY_____ Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:
_THE_CYANIDE_LAB_SAMPLE_ID_NUMBER_IS_38808;_THE_EPA_SAMPLE_NUMBER_____
_PREFIX_IS_"Q/L_";

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLMW5GW

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4014A SAS No.: _____ SDG No.: B2

Matrix: (soil/water) WATER Lab Sample ID: 38588

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1248

Level: (low/med) LOW Date Received: 11/30/90

% Moisture: not dec. ____ Date Analyzed: 12/06/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

QLMW5GW

) Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4014A SAS No.: _____ SDG No.: B2

Matrix: (soil/water) WATER Lab Sample ID: 38588

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1248

Level: (low/med) LOW Date Received: 11/30/90

% Moisture: not dec. ____ Date Analyzed: 12/06/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLMW5GW

L Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4014 SAS No.: _____ SDG No.: 2

Matrix: (soil/water) WATER Lab Sample ID: 38593

Sample wt/vol: 1050 (g/mL) ML Lab File ID: Z6890

Level: (low/med) LOW Date Received: 11/30/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/14/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	48	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	48	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	48	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLMW5GW

I Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4014 SAS No.: _____ SDG No.: 2

Matrix: (soil/water) WATER Lab Sample ID: 38593

Sample wt/vol: 1050 (g/mL) ML Lab File ID: Z6890

Level: (low/med) LOW Date Received: 11/30/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/14/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
99-09-2	3-Nitroaniline	48	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	48	U
100-02-7	4-Nitrophenol	48	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	48	U
534-52-1	4,6-Dinitro-2-methylphenol	48	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	48	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	19	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

QLMW5GW

L Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4014 SAS No.: _____ SDG No.: 2

Matrix: (soil/water) WATER Lab Sample ID: 38593

Sample wt/vol: 1050 (g/mL) ML Lab File ID: Z6890

Level: (low/med) LOW Date Received: 11/30/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/14/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.72	9.5	J
2.	UNKNOWN	11.84	9.5	J
3.	UNKNOWN	16.84	9.5	J
4.	UNKNOWN	17.99	15	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLMW5GW

Lab Name: VERSAR, INC. Contract:

Lab Code: VERSAR Case No.: URSQUEEN SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 38597

Sample wt/vol: 1050 (g/ml) ML Lab File ID:

Level: (low/med) LOW Date Received: 11/30/90

% Moisture: not dec. dec. Date Extracted: 12/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/30/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor Epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan Sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.48	U
53494-70-5	Endrin Ketone	0.10	U
5103-71-9	alpha-Chlordane	0.48	U
5103-74-2	gamma-Chlordane	0.48	U
8001-35-2	Toxaphene	0.95	U
12674-11-2	Aroclor-1016	0.48	U
11104-28-2	Aroclor-1221	0.48	U
11141-16-5	Aroclor-1232	0.48	U
53469-21-9	Aroclor-1242	0.48	U
12672-29-6	Aroclor-1248	0.48	U
11097-69-1	Aroclor-1254	0.95	U
11096-82-5	Aroclor-1260	0.95	U

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MW-5 GW

Lab Name: VERSAR_LABORATORIES_INC.___ Contract: 35216.03_

Lab Code: VERSAR Case No.: 4014__ SAS No.: _____ SDG No.: E-1___

Matrix (soil/water): WATER_____ Lab Sample ID: 38601_

Level (low/med): LOW_____ Date Received: 11/30/90

% Solids: ___0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5_	Aluminum_	599			P
7440-36-0_	Antimony_	23.0	U		P
7440-38-2_	Arsenic__	3.0	U		F
7440-39-3_	Barium___	38.0	B		P
7440-41-7_	Beryllium	4.9	B		P
7440-43-9-	Cadmium__	5.5			P
7440-70-2_	Calcium__	75300			P
7440-47-3_	Chromium_	5.0	U		P
7440-48-4_	Cobalt___	8.0	U		P
7440-50-8_	Copper___	4.9	B		P
7439-89-6_	Iron_____	1800			P
7439-92-1_	Lead_____	2.5	B	W	F
7439-95-4_	Magnesium	19200			P
7439-96-5_	Manganese	42.0			P
7439-97-6_	Mercury__	0.20	U		CV
7440-02-0_	Nickel___	13.0	U		P
7440-09-7_	Potassium	1280	B		P
7782-49-2_	Selenium_	3.0	U	WN	F
7440-22-4_	Silver___	3.0	U		P
7440-23-5_	Sodium___	14800			P
7440-28-0_	Thallium_	10.0	U		F
7440-62-2_	Vanadium_	5.0	U		P
7440-66-6_	Zinc_____	15.7	B		P
	Cyanide__	10.0	U		AS

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:
_THE_CYANIDE_LAB_SAMPLE_ID_NUMBER_IS_38605;_THE_EPA_SAMPLE_NUMBER_____
_PREFIX_IS_"Q/L_";

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLE1GW

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4014A SAS No.: _____ SDG No.: B2

Matrix: (soil/water) WATER Lab Sample ID: 38590

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1246

Level: (low/med) LOW Date Received: 11/30/90

% Moisture: not dec. ____ Date Analyzed: 12/06/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

QLE1GW

L. , Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4014A SAS No.: _____ SDG No.: B2

Matrix: (soil/water) WATER Lab Sample ID: 38590

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1246

Level: (low/med) LOW Date Received: 11/30/90

% Moisture: not dec. ____ Date Analyzed: 12/06/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLE1GW

L Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4014 SAS No.: _____ SDG No.: 2

Matrix: (soil/water) WATER Lab Sample ID: 38595

Sample wt/vol: 1050 (g/mL) ML Lab File ID: Z6892

Level: (low/med) LOW Date Received: 11/30/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/14/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	48	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	48	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	48	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLE1GW

L Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4014 SAS No.: _____ SDG No.: 2

Matrix: (soil/water) WATER Lab Sample ID: 38595

Sample wt/vol: 1050 (g/mL) ML Lab File ID: Z6892

Level: (low/med) LOW Date Received: 11/30/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/14/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	48	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	48	U
100-02-7	4-Nitrophenol	48	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	48	U
534-52-1	4,6-Dinitro-2-methylphenol	48	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	48	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	19	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

QLE1GW

L Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4014 SAS No.: _____ SDG No.: 2

Matrix: (soil/water) WATER Lab Sample ID: 38595

Sample wt/vol: 1050 (g/mL) ML Lab File ID: Z6892

Level: (low/med) LOW Date Received: 11/30/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/14/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.72	13	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLE1

Name: VERSAR, INC. Contract:

Lab Code: VERSAR Case No.: URSQUEEN SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 38599

Sample wt/vol: 1050 (g/ml) ML Lab File ID:

Level: (low/med) LOW Date Received: 11/30/90

% Moisture: not dec. dec. Date Extracted: 12/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/30/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor Epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan Sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.48	U
53494-70-5	Endrin Ketone	0.10	U
5103-71-9	alpha-Chlordane	0.48	U
5103-74-2	gamma-Chlordane	0.48	U
8001-35-2	Toxaphene	0.95	U
12674-11-2	Aroclor-1016	0.48	U
11104-28-2	Aroclor-1221	0.48	U
11141-16-5	Aroclor-1232	0.48	U
53469-21-9	Aroclor-1242	0.48	U
12672-29-6	Aroclor-1248	0.48	U
11097-69-1	Aroclor-1254	0.95	U
11096-82-5	Aroclor-1260	0.95	U

1/3/91

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

E-1 GW

Lab Name: VERSAR_LABORATORIES_INC.___ Contract: 35216.03_

Lab Code: VERSAR Case No.: 4014__ SAS No.: _____ SDG No.: E-1___

Matrix (soil/water): WATER_____ Lab Sample ID: 38603_

Level (low/med): LOW_____ Date Received: 11/30/90

% Solids: ___0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5_	Aluminum_	10.0	U		P_
7440-36-0_	Antimony_	23.0	U		P_
7440-38-2_	Arsenic__	3.0	U		F_
7440-39-3_	Barium___	477			P_
7440-41-7_	Beryllium	4.9	B		P_
7440-43-9-	Cadmium__	5.5			P_
7440-70-2_	Calcium__	33300			P_
7440-47-3_	Chromium_	5.0	U		P_
7440-48-4_	Cobalt___	8.0	U		P_
7440-50-8_	Copper___	5.3	B		P_
7439-89-6_	Iron____	149			P_
7439-92-1_	Lead____	1.0	U		F_
7439-95-4_	Magnesium	16500			P_
7439-96-5_	Manganese	13.9	B		P_
7439-97-6_	Mercury__	0.20	U		CV
7440-02-0_	Nickel___	13.0	U		P_
7440-09-7_	Potassium	503	U		P_
7782-49-2_	Selenium_	3.0	U	WN	F_
7440-22-4_	Silver___	3.0	U		P_
7440-23-5_	Sodium___	17800			P_
7440-28-0_	Thallium_	10.0	U		F_
7440-62-2_	Vanadium_	5.0	U		P_
7440-66-6_	Zinc____	108			P_
	Cyanide__	10.0	U		AS

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:
_THE_CYANIDE_LAB_SAMPLE_ID_NUMBER_IS_38607;_THE_EPA_SAMPLE_NUMBER_____
_PREFIX_IS_"Q/L_";_____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QL-E-2GW

L Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 38771

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: Y5176

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. _____ Date Analyzed: 12/07/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	9	B
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

QL-E-2GW

L Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 38771

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: Y5176

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ Date Analyzed: 12/07/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLE2GW

I Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022A SAS No.: _____ SDG No.: B3

Matrix: (soil/water) WATER Lab Sample ID: 38782

Sample wt/vol: 1050 (g/mL) ML Lab File ID: T5512

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/05/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 01/02/91

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	48	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	48	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	48	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLE2GW

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022A SAS No.: _____ SDG No.: B3

Matrix: (soil/water) WATER Lab Sample ID: 38782

Sample wt/vol: 1050 (g/mL) ML Lab File ID: T5512

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/05/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 01/02/91

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	48	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	48	U
100-02-7	4-Nitrophenol	48	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	48	U
534-52-1	4,6-Dinitro-2-methylphenol	48	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	48	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	19	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

QLE2GW

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022A SAS No.: _____ SDG No.: B3

Matrix: (soil/water) WATER Lab Sample ID: 38782

Sample wt/vol: 1050 (g/mL) ML Lab File ID: T5512

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/05/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 01/02/91

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.35	40	BJ
2.	UNKNOWN	3.57	19	BJ
3.	UNKNOWN	4.48	9.5	J
4.	UNKNOWN SILOXANE	28.92	89	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLE2GW

Lab Name: VERSAR, INC. Contract:

Lab Code: VERSAR Case No.: URSQUEEN SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 38792

Sample wt/vol: 1050 (g/ml) ML Lab File ID:

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. dec. Date Extracted: 12/05/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 01/05/91

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor Epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan Sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.48	U
53494-70-5	Endrin Ketone	0.10	U
5103-71-9	alpha-Chlordane	0.48	U
5103-74-2	gamma-Chlordane	0.48	U
8001-35-2	Toxaphene	0.95	U
12674-11-2	Aroclor-1016	0.48	U
11104-28-2	Aroclor-1221	0.48	U
11141-16-5	Aroclor-1232	0.48	U
53469-21-9	Aroclor-1242	0.48	U
12672-29-6	Aroclor-1248	0.48	U
11097-69-1	Aroclor-1254	0.95	U
11096-82-5	Aroclor-1260	0.95	U

1/10/91

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

E-2GW

Lab Name: VERSAR_LABORATORIES_INC.___ Contract: 35216.03_

Lab Code: VERSAR Case No.: 4014__ SAS No.: _____ SDG No.: E-1___

Matrix (soil/water): WATER_____ Lab Sample ID: 38802_

Level (low/med): LOW_____ Date Received: 12/01/90

% Solids: ___0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10.0	U		P
7440-36-0	Antimony	23.0	U		P
7440-38-2	Arsenic	14.4		S	F
7440-39-3	Barium	313			P
7440-41-7	Beryllium	1.9	B		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	158000			P
7440-47-3	Chromium	5.0	U		P
7440-48-4	Cobalt	8.0	U		P
7440-50-8	Copper	4.0	U		P
7439-89-6	Iron	23700			P
7439-92-1	Lead	1.0	U		F
7439-95-4	Magnesium	41500			P
7439-96-5	Manganese	574			P
7439-97-6	Mercury	0.26			CV
7440-02-0	Nickel	13.0	U		P
7440-09-7	Potassium	8160			P
7782-49-2	Selenium	15.0	U	WN	F
7440-22-4	Silver	3.2	B		P
7440-23-5	Sodium	49200			P
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P
	Cyanide	10.0	U		AS

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:
_THE_CYANIDE_LAB_SAMPLE_ID_NUMBER_IS_38811;_THE_EPA_SAMPLE_NUMBER_____
_PREFIX_IS_"Q/L_";_____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLE3GW

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4014A SAS No.: _____ SDG No.: B2

Matrix: (soil/water) WATER Lab Sample ID: 38589

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1247

Level: (low/med) LOW Date Received: 11/30/90

% Moisture: not dec. ____ Date Analyzed: 12/06/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

QLE3GW

1 , Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4014A SAS No.: _____ SDG No.: B2

Matrix: (soil/water) WATER Lab Sample ID: 38589

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1247

Level: (low/med) LOW Date Received: 11/30/90

% Moisture: not dec. ____ Date Analyzed: 12/06/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLE3GW

L Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4014 SAS No.: _____ SDG No.: 2

Matrix: (soil/water) WATER Lab Sample ID: 38594

Sample wt/vol: 1050 (g/mL) ML Lab File ID: Z6891

Level: (low/med) LOW Date Received: 11/30/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/14/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	48	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	48	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	48	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLE3GW

I Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4014 SAS No.: _____ SDG No.: 2

Matrix: (soil/water) WATER Lab Sample ID: 38594

Sample wt/vol: 1050 (g/mL) ML Lab File ID: Z6891

Level: (low/med) LOW Date Received: 11/30/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/14/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	48	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	48	U
100-02-7	4-Nitrophenol	48	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	48	U
534-52-1	4,6-Dinitro-2-methylphenol	48	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	48	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	19	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

QLE3GW

L Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4014 SAS No.: _____ SDG No.: 2

Matrix: (soil/water) WATER Lab Sample ID: 38594

Sample wt/vol: 1050 (g/mL) ML Lab File ID: Z6891

Level: (low/med) LOW Date Received: 11/30/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/14/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.72	13	J
2.	UNKNOWN	14.67	9.5	J
3.	UNKNOWN	18.02	13	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLE3GW

Lab Name: VERSAR, INC. Contract:

Lab Code: VERSAR Case No.: URSQUEEN SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 38598

Sample wt/vol: 1050 (g/ml) ML Lab File ID:

Level: (low/med) LOW Date Received: 11/30/90

Moisture: not dec. dec. Date Extracted: 12/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/30/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor Epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan Sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.48	U
53494-70-5	Endrin Ketone	0.10	U
5103-71-9	alpha-Chlordane	0.48	U
5103-74-2	gamma-Chlordane	0.48	U
8001-35-2	Toxaphene	0.95	U
12674-11-2	Aroclor-1016	0.48	U
11104-28-2	Aroclor-1221	0.48	U
11141-16-5	Aroclor-1232	0.48	U
53469-21-9	Aroclor-1242	0.48	U
12672-29-6	Aroclor-1248	0.48	U
11097-69-1	Aroclor-1254	0.95	U
11096-82-5	Aroclor-1260	0.95	U

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

E-3 GW

Lab Name: VERSAR_LABORATORIES_INC.___ Contract: 35216.03_

Lab Code: VERSAR Case No.: 4014__ SAS No.: _____ SDG No.: E-1___

Matrix (soil/water): WATER_____ Lab Sample ID: 38602_

Level (low/med): LOW_____ Date Received: 11/30/90

% Solids: ___0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5_	Aluminum_	10.0	U		P_
7440-36-0_	Antimony_	23.0	U		P_
7440-38-2_	Arsenic__	3.9	B		F_
7440-39-3_	Barium___	275			P_
7440-41-7_	Beryllium	2.8	B		P_
7440-43-9-	Cadmium__	5.0	U		P_
7440-70-2_	Calcium__	144000			P_
7440-47-3_	Chromium_	5.0	U		P_
7440-48-4_	Cobalt___	8.0	U		P_
7440-50-8_	Copper___	4.0	U		P_
7439-89-6_	Iron_____	9430			P_
7439-92-1_	Lead_____	1.0	U	W	F_
7439-95-4_	Magnesium	51100			P_
7439-96-5_	Manganese	471			P_
7439-97-6_	Mercury__	0.20	U		CV
7440-02-0_	Nickel___	17.8	B		P_
7440-09-7_	Potassium	35300			P_
7782-49-2_	Selenium_	3.0	U	WN	F_
7440-22-4_	Silver___	3.0	U		P_
7440-23-5_	Sodium___	92900			P_
7440-28-0_	Thallium_	10.0	U		F_
7440-62-2_	Vanadium_	8.8	B		P_
7440-66-6_	Zinc_____	38.0			P_
	Cyanide__	10.0	U		AS

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:
_THE_CYANIDE_LAB_SAMPLE_ID_NUMBER_IS_38606;_THE_EPA_SAMPLE_NUMBER_____
_PREFIX_IS_"Q/L_";_____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QL-SW-1

L Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 38772

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: Y5166

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ Date Analyzed: 12/06/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	8	B
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

QL-SW-1

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 38772

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: Y5166

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ Date Analyzed: 12/06/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLSW1

Lab Name: VERSAR, INC. Contract:

Lab Code: VERSAR Case No.: URSQUEEN SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 38793

Sample wt/vol: 1000 (g/ml) ML Lab File ID:

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. dec. Date Extracted: 12/05/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 01/05/91

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor Epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan Sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin Ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1/10/91

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SW-1

Lab Name: VERSAR_LABORATORIES_INC.___ Contract: 35216.03_

Lab Code: VERSAR Case No.: 4014__ SAS No.: _____ SDG No.: E-1___

Matrix (soil/water): WATER_____ Lab Sample ID: 38803_

Level (low/med): LOW_____ Date Received: 12/01/90

% Solids: ___0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5_	Aluminum_	27.8	B		P_
7440-36-0_	Antimony_	23.0	U		P_
7440-38-2_	Arsenic__	3.0	U		F_
7440-39-3_	Barium___	158	B		P_
7440-41-7_	Beryllium	4.9	B		P_
7440-43-9-	Cadmium__	5.0	U		P_
7440-70-2_	Calcium__	113000			P_
7440-47-3_	Chromium_	5.0	U		P_
7440-48-4_	Cobalt___	8.0	U		P_
7440-50-8_	Copper___	4.0	U		P_
7439-89-6_	Iron_____	3240			P_
7439-92-1_	Lead_____	1.0	U		F_
7439-95-4_	Magnesium	27200			P_
7439-96-5_	Manganese	321			P_
7439-97-6_	Mercury__	0.20	U		CV
7440-02-0_	Nickel___	13.0	U		P_
7440-09-7_	Potassium	5050			P_
7782-49-2_	Selenium_	3.0	U	WN	F_
7440-22-4_	Silver___	3.0	U		P_
7440-23-5_	Sodium___	29900			P_
7440-28-0_	Thallium_	2.0	U		F_
7440-62-2_	Vanadium_	5.0	U		P_
7440-66-6_	Zinc_____	19.8	B		P_
	Cyanide__	10.0	U		AS

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:
_THE_CYANIDE_LAB_SAMPLE_ID_NUMBER_IS_38812;_THE_EPA_SAMPLE_NUMBER_____
_PREFIX_IS_"Q/L_";_____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QL-SED-1

L Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) SOIL Lab Sample ID: 38773

Sample wt/vol: 5.0 (g/mL) G Lab File ID: U6538

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. 24 Date Analyzed: 12/06/90

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene chloride	7	U
67-64-1	Acetone	23	
75-15-0	Carbon disulfide	7	U
75-35-4	1,1-Dichloroethene	7	U
75-34-3	1,1-Dichloroethane	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	Chloroform	7	U
107-06-2	1,2-Dichloroethane	7	U
78-93-3	2-Butanone	5	J
71-55-6	1,1,1-Trichloroethane	7	U
56-23-5	Carbon tetrachloride	7	U
108-05-4	Vinyl acetate	13	U
75-27-4	Bromodichloromethane	7	U
78-87-5	1,2-Dichloropropane	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	Trichloroethene	7	U
124-48-1	Dibromochloromethane	7	U
79-00-5	1,1,2-Trichloroethane	7	U
71-43-2	Benzene	7	U
10061-02-6	Trans-1,3-dichloropropene	7	U
75-25-2	Bromoform	7	U
108-10-1	4-Methyl-2-pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	7	U
79-34-5	1,1,2,2-Tetrachloroethane	7	U
108-88-3	Toluene	7	U
108-90-7	Chlorobenzene	7	U
100-41-4	Ethylbenzene	7	U
100-42-5	Styrene	7	U
1330-20-7	Total xylenes	7	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

QL-SED-1

I Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) SOIL Lab Sample ID: 38773

Sample wt/vol: 5.0 (g/mL) G Lab File ID: U6538

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. 24 Date Analyzed: 12/06/90

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLSED1

1 Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022A SAS No.: _____ SDG No.: B3

Matrix: (soil/water) SOIL Lab Sample ID: 38784

Sample wt/vol: 30.2 (g/mL) G Lab File ID: T5518

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. 27 dec. ____ Date Extracted: 12/07/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/02/91

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	500	U
111-44-4	bis(2-Chloroethyl)ether	500	U
95-57-8	2-Chlorophenol	500	U
541-73-1	1,3-Dichlorobenzene	500	U
106-46-7	1,4-Dichlorobenzene	500	U
100-51-6	Benzyl alcohol	500	U
95-50-1	1,2-Dichlorobenzene	500	U
95-48-7	2-Methylphenol	500	U
108-60-1	bis(2-Chloroisopropyl)ether	500	U
106-44-5	4-Methylphenol	500	U
621-64-7	N-Nitroso-di-n-propylamine	500	U
67-72-1	Hexachloroethane	500	U
98-95-3	Nitrobenzene	500	U
78-59-1	Isophorone	500	U
88-75-5	2-Nitrophenol	500	U
105-67-9	2,4-Dimethylphenol	500	U
65-85-0	Benzoic Acid	2400	U
111-91-1	bis(2-Chloroethoxy)methane	500	U
120-83-2	2,4-Dichlorophenol	500	U
120-82-1	1,2,4-Trichlorobenzene	500	U
91-20-3	Naphthalene	500	U
106-47-8	4-Chloroaniline	500	U
87-68-3	Hexachlorobutadiene	500	U
59-50-7	4-Chloro-3-methylphenol	500	U
91-57-6	2-Methylnaphthalene	500	U
77-47-4	Hexachlorocyclopentadiene	500	U
88-06-2	2,4,6-Trichlorophenol	500	U
95-95-4	2,4,5-Trichlorophenol	2400	U
91-58-7	2-Chloronaphthalene	500	U
88-74-4	2-Nitroaniline	2400	U
131-11-3	Dimethylphthalate	500	U
208-96-8	Acenaphthylene	500	U
606-20-2	2,6-Dinitrotoluene	500	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLSED1

L Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022A SAS No.: _____ SDG No.: B3

Matrix: (soil/water) SOIL Lab Sample ID: 38784

Sample wt/vol: 30.2 (g/mL) G Lab File ID: T5518

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. 27 dec. ____ Date Extracted: 12/07/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/02/91

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2400	U
83-32-9	Acenaphthene	500	U
51-28-5	2,4-Dinitrophenol	2400	U
100-02-7	4-Nitrophenol	2400	U
132-64-9	Dibenzofuran	500	U
121-14-2	2,4-Dinitrotoluene	500	U
84-66-2	Diethylphthalate	500	U
7005-72-3	4-Chlorophenyl-phenylether	500	U
86-73-7	Fluorene	500	U
100-01-6	4-Nitroaniline	2400	U
534-52-1	4,6-Dinitro-2-methylphenol	2400	U
86-30-6	N-nitrosodiphenylamine (1)	500	U
101-55-3	4-Bromophenyl-phenylether	500	U
118-74-1	Hexachlorobenzene	500	U
87-86-5	Pentachlorophenol	2400	U
85-01-8	Phenanthrene	500	U
120-12-7	Anthracene	500	U
84-74-2	Di-n-butylphthalate	500	U
206-44-0	Fluoranthene	500	U
129-00-0	Pyrene	500	U
85-68-7	Butylbenzylphthalate	500	U
91-94-1	3,3'-Dichlorobenzidine	990	U
56-55-3	Benzo(a)anthracene	500	U
218-01-9	Chrysene	500	U
117-81-7	bis(2-Ethylhexyl)phthalate	500	U
117-84-0	Di-n-octyl phthalate	500	U
205-99-2	Benzo(b)fluoranthene	500	U
207-08-9	Benzo(k)fluoranthene	500	U
50-32-8	Benzo(a)pyrene	500	U
193-39-5	Indeno(1,2,3-cd)pyrene	500	U
53-70-3	Dibenz(a,h)anthracene	500	U
191-24-2	Benzo(g,h,i)perylene	500	U

(1) - Cannot be separated from Diphenylamine

200257

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

QLSED1

I Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022A SAS No.: _____ SDG No.: B3

Matrix: (soil/water) SOIL Lab Sample ID: 38784

Sample wt/vol: 30.2 (g/mL) G Lab File ID: T5518

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. 27 dec. ____ Date Extracted: 12/07/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/02/91

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.1

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.38	5700	BJ
2.	UNKNOWN	3.53	400	BJ
3.	UNKNOWN HYDROCARBON	3.62	660	BJ
4.	UNKNOWN HYDROCARBON	3.70	450	BJ
5.	UNKNOWN	4.43	1400	J
6.	UNKNOWN KETONE	4.65	1600	BJ
7.	UNKNOWN KETONE	4.77	760	J
8.	UNKNOWN	5.20	1500	J
9.	UNKNOWN	5.97	1600	J
10.	UNKNOWN	13.04	250	J
11. 10544-50-0	SULFUR, MOL. (S8)	16.17	2700	J
12.	UNKNOWN	20.70	450	J
13.	UNKNOWN	21.59	450	J
14.	UNKNOWN ALDEHYDE	22.09	400	J
15.	UNKNOWN HYDROCARBON	22.75	1000	J
16.	UNKNOWN HYDROCARBON	25.74	450	J
17.	UNKNOWN	26.84	300	J
18.	UNKNOWN	27.09	350	J
19.	UNKNOWN	29.26	300	J
20.	UNKNOWN	30.04	250	J

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLSED1DL

Lab Name: VERSAR, INC. Contract:

Lab Code: VERSAR Case No.: URSQUEEN SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 38784

Sample wt/vol: 30.18 (g/ml) G Lab File ID:

Level: (low/med) LOW Date Received: 12/01/91

% Moisture: not dec. 26.6 dec. Date Extracted: 12/07/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/09/91

GPC Cleanup: (Y/N) N pH: 7.05 Dilution Factor: 10.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) (UG/KG)	Q
319-84-6	alpha-BHC	54	U
319-85-7	beta-BHC	54	U
319-86-8	delta-BHC	54	U
58-89-9	gamma-BHC (Lindane)	54	U
76-44-8	Heptachlor	54	U
309-00-2	Aldrin	54	U
1024-57-3	Heptachlor Epoxide	54	U
959-98-8	Endosulfan I	54	U
60-57-1	Dieldrin	110	U
72-55-9	4,4'-DDE	110	U
72-20-8	Endrin	110	U
33213-65-9	Endosulfan II	110	U
72-54-8	4,4'-DDD	110	U
1031-07-8	Endosulfan Sulfate	110	U
50-29-3	4,4'-DDT	110	U
72-43-5	Methoxychlor	540	U
53494-70-5	Endrin Ketone	110	U
5103-71-9	alpha-Chlordane	540	U
5103-74-2	gamma-Chlordane	540	U
8001-35-2	Toxaphene	1100	U
12674-11-2	Aroclor-1016	540	U
11104-28-2	Aroclor-1221	540	U
11141-16-5	Aroclor-1232	540	U
53469-21-9	Aroclor-1242	540	U
12672-29-6	Aroclor-1248	540	U
11097-69-1	Aroclor-1254	1100	U
11096-82-5	Aroclor-1260	1100	U

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SED-1

Lab Name: VERSAR_LABORATORIES_INC.___ Contract: 35216.03_

Lab Code: VERSAR Case No.: 4014__ SAS No.: _____ SDG No.: E-1___

Matrix (soil/water): SOIL_____ Lab Sample ID: 38813_

Level (low/med): LOW_____ Date Received: 12/01/90

% Solids: __75.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3120			P
7440-36-0	Antimony	5.3	U	N	P
7440-38-2	Arsenic	3.7			F
7440-39-3	Barium	19.1	B		P
7440-41-7	Beryllium	0.59	B		P
7440-43-9	Cadmium	1.2	U	N	P
7440-70-2	Calcium	45100			P
7440-47-3	Chromium	2.7			P
7440-48-4	Cobalt	2.7	B		P
7440-50-8	Copper	2.7	B		P
7439-89-6	Iron	6720			P
7439-92-1	Lead	4.1		N	F
7439-95-4	Magnesium	6800		E*	P
7439-96-5	Manganese	102			P
7439-97-6	Mercury	0.13	U		CV
7440-02-0	Nickel	6.6	B		P
7440-09-7	Potassium	333	B		P
7782-49-2	Selenium	0.74	U	W	F
7440-22-4	Silver	0.83	B		P
7440-23-5	Sodium	95.1	B		P
7440-28-0	Thallium	0.50	U		F
7440-62-2	Vanadium	10.1	B		P
7440-66-6	Zinc	16.4			P
	Cyanide	0.65	U	N	AS

Color Before: BLACK____ Clarity Before: _____ Texture: COARSE

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

_THE_EPA_SAMPLE_NUMBER_PREFIX_IS_"Q/L_";

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLL1

I Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4014A SAS No.: _____ SDG No.: B2

Matrix: (soil/water) WATER Lab Sample ID: 38587

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1249

Level: (low/med) LOW Date Received: 11/30/90

% Moisture: not dec. ____ Date Analyzed: 12/06/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	6	
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	
108-90-7	Chlorobenzene	20	
100-41-4	Ethylbenzene	26	
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	56	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

QLL1

1 Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4014A SAS No.: _____ SDG No.: B2

Matrix: (soil/water) WATER Lab Sample ID: 38587

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1249

Level: (low/med) LOW Date Received: 11/30/90

% Moisture: not dec. ____ Date Analyzed: 12/06/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.22	7.0	J
2. 167-49-7	FURAN, TETRAHYDRO-	8.37	13	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLL1

L. Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4014 SAS No.: _____ SDG No.: 2

Matrix: (soil/water) WATER Lab Sample ID: 38592

Sample wt/vol: 980 (g/mL) ML Lab File ID: Z6916

Level: (low/med) LOW Date Received: 11/30/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/15/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	51	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	51	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	51	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLL1

I Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4014 SAS No.: _____ SDG No.: 2

Matrix: (soil/water) WATER Lab Sample ID: 38592

Sample wt/vol: 980 (g/mL) ML Lab File ID: Z6916

Level: (low/med) LOW Date Received: 11/30/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/15/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	51	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	51	U
100-02-7	4-Nitrophenol	51	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	51	U
534-52-1	4,6-Dinitro-2-methylphenol	51	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	51	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

QLL1

L Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4014 SAS No.: _____ SDG No.: 2

Matrix: (soil/water) WATER Lab Sample ID: 38592

Sample wt/vol: 980 (g/mL) ML Lab File ID: Z6916

Level: (low/med) LOW Date Received: 11/30/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/15/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

Number TICs found: 15

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	2.80	31	J
2.	UNKNOWN	3.43	10	J
3.	UNKNOWN SUBSTITUTED BENZENE	3.68	20	J
4.	UNKNOWN SUBSTITUTED BENZENE	4.07	24	J
5.	UNKNOWN SUBSTITUTED BENZENE	5.35	14	J
6.	UNKNOWN KETONE	7.35	20	J
7. 540-97-6	CYCLOHEXASILOXANE, DODECAMET	9.24	33	J
8.	UNKNOWN	10.32	12	J
9.	UNKNOWN SILOXANE	11.07	16	J
10. 134-62-3	BENZAMIDE, N,N-DIETHYL-3-MET	12.14	18	J
11.	UNKNOWN	13.02	16	J
12.	UNKNOWN	14.62	14	J
13.	UNKNOWN	15.20	8.2	J
14.	UNKNOWN	18.07	27	J
15.	UNKNOWN	18.80	8.2	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLL1

Lab Name: VERSAR, INC. Contract:

Lab Code: VERSAR Case No.: URSQUEEN SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 38596

Sample wt/vol: 1050 (g/ml) ML Lab File ID:

Level: (low/med) LOW Date Received: 11/30/90

% Moisture: not dec. dec. Date Extracted: 12/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/29/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor Epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan Sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.48	U
53494-70-5	Endrin Ketone	0.10	U
5103-71-9	alpha-Chlordane	0.48	U
5103-74-2	gamma-Chlordane	0.48	U
8001-35-2	Toxaphene	0.95	U
12674-11-2	Aroclor-1016	0.48	U
11104-28-2	Aroclor-1221	0.48	U
11141-16-5	Aroclor-1232	0.48	U
53469-21-9	Aroclor-1242	0.48	U
12672-29-6	Aroclor-1248	0.48	U
11097-69-1	Aroclor-1254	0.95	U
11096-82-5	Aroclor-1260	0.95	U

12/13/91

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

~~E-1~~ L-1

Lab Name: VERSAR_LABORATORIES_INC.___ Contract: 35216.03_

Lab Code: VERSAR Case No.: 4014__ SAS No.: _____ SDG No.: E-1___

Matrix (soil/water): WATER_____ Lab Sample ID: 38600_

Level (low/med): LOW_____ Date Received: 11/30/90

% Solids: ___0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	885			P
7440-36-0	Antimony	23.0	U		P
7440-38-2	Arsenic	11.9			F
7440-39-3	Barium	2030			P
7440-41-7	Beryllium	4.6	B		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	203000			P
7440-47-3	Chromium	5.0	U		P
7440-48-4	Cobalt	18.2	B		P
7440-50-8	Copper	4.3	B		P
7439-89-6	Iron	206000			P
7439-92-1	Lead	14.1			F
7439-95-4	Magnesium	60100			P
7439-96-5	Manganese	918			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	32.6	B		P
7440-09-7	Potassium	108000			P
7782-49-2	Selenium	3.0	U	WN	F
7440-22-4	Silver	28.4			P
7440-23-5	Sodium	269000			P
7440-28-0	Thallium	10.0	U		F
7440-62-2	Vanadium	13.1	B		P
7440-66-6	Zinc	68.7			P
	Cyanide	10.0	U		AS

Color Before: BROWN____ Clarity Before: CLOUDY Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:
_THE_CYANIDE_LAB_SAMPLE_ID_NUMBER_IS_38604;_THE_EPA_SAMPLE_NUMBER_____
_PREFIX_IS_"Q/L_";_____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QL-L-2

L. Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 38769

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: Y5175

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ Date Analyzed: 12/07/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	9	B
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

QL-L-2

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022 SAS No.: _____ SDG No.: 3

Matrix: (soil/water) WATER Lab Sample ID: 38769

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: Y5175

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ Date Analyzed: 12/07/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	8.13	6.0	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLL2

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022A SAS No.: _____ SDG No.: B3

Matrix: (soil/water) WATER Lab Sample ID: 38780

Sample wt/vol: 1050 (g/mL) ML Lab File ID: T5556

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/05/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 01/04/91

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	36	JX
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	48	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	48	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QLL2

I Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 4022A SAS No.: _____ SDG No.: B3

Matrix: (soil/water) WATER Lab Sample ID: 38780

Sample wt/vol: 1050 (g/mL) ML Lab File ID: T5556

Level: (low/med) LOW Date Received: 12/01/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/05/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 01/04/91

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	48	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	48	U
100-02-7	4-Nitrophenol	48	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	48	U
534-52-1	4,6-Dinitro-2-methylphenol	48	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	48	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	19	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

L-2

Lab Name: VERSAR_LABORATORIES_INC.___ Contract: 35216.03_

Lab Code: VERSAR Case No.: 4014__ SAS No.: _____ SDG No.: E-1___

Matrix (soil/water): WATER_____ Lab Sample ID: 38800_

Level (low/med): LOW_____ Date Received: 12/01/90

% Solids: ___0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6220			P
7440-36-0	Antimony	23.0	U		P
7440-38-2	Arsenic	3.7	B		F
7440-39-3	Barium	601			P
7440-41-7	Beryllium	2.4	B		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	321000			P
7440-47-3	Chromium	5.0	U		P
7440-48-4	Cobalt	27.3	B		P
7440-50-8	Copper	28.1			P
7439-89-6	Iron	58700			P
7439-92-1	Lead	17.4			F
7439-95-4	Magnesium	114000			P
7439-96-5	Manganese	1220			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	55.7			P
7440-09-7	Potassium	198000			P
7782-49-2	Selenium	30.0	U	WN	F
7440-22-4	Silver	6.5	B		P
7440-23-5	Sodium	440000			P
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	22.6	B		P
7440-66-6	Zinc	96.1			P
	Cyanide	10.0	U		AS

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:
_THE_CYANIDE_LAB_SAMPLE_ID_NUMBER_IS_38809;_THE_EPA_SAMPLE_NUMBER_____
_PREFIX_IS_"Q/L_";

APPENDIX J

ADDITIONS/CHANGES TO REGISTRY OF INACTIVE HAZARDOUS WASTE DISPOSAL SITES

47-15-23 (11/90)—9d

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS WASTE REMEDIATION

Original—BHSC
Copy—REGION
Copy—DEE
Copy—DOH
Copy—PREPARER

ADDITIONS/CHANGES TO REGISTRY OF INACTIVE HAZARDOUS WASTE DISPOSAL SITES

1. SITE NAME	2. SITE NO.	3. TOWN	4. COUNTY
Queensbury Landfill	517005	Queensbury	Warren

5. REGION	6. CLASSIFICATION	7. ACTIVITY
5	Current 2a /Proposed ____	☐ Add ☐ Reclassify ☐ Delist ☐ Modify ____

8a. DESCRIBE LOCATION OF SITE (Attach U.S.G.S. Topographic Map showing site location).

Exit 20 off I-87, north on Route 9 to Route 149 east to Ridge Road (Route 96), turn right on (South) for 1 mile on left.

b. Quadrangle Putnam Mtn. c. Site Latitude 43°23'27" Longitude 73°37'14" d. Tax Map Number ____

9a BRIEFLY DESCRIBE THE SITE (Attach site plan showing disposal/sampling locations)

The Queensbury Landfill is an active municipal landfill. A sand and gravel operation is currently ongoing in the northwest portion of the property.

b. Area approximately 50 acres c. EPA ID Number NYD000512590 d. PA/SI ☐ Yes ☐ No

e. Completed: ☒ Phase I ☒ Phase II ☐ PSA ☐ Sampling

10. BRIEFLY LIST THE TYPE AND QUANTITY OF THE HAZARDOUS WASTE AND THE DATES THAT IT WAS DISPOSED OF AT THIS SITE

An unknown quantity of paint sludge, paper sludge and alleged PCB capacitors were disposed of onsite. Dates of disposal are unknown.

11a. SUMMARIZED SAMPLING DATA ATTACHED

☐ Air ☒ Groundwater ☒ Surface Water ☐ Soil ☐ Waste ☐ EP Tox ☐ TCLP

b List contravened parameters and values

Groundwater: 1,1,1-trichloroethane, 15 ppb, Iron, 21,000 ppb, Manganese 1,710 ppb, Sodium, 178,000 ppb

12 SITE IMPACT DATA

a. Nearest surface water: Distance 400 ft. Direction South Classification A

b Nearest groundwater: Depth 30 ft. Flow Direction South-southeast ☐ Sole Source ☐ Primary ☐ Principal

c Nearest water supply: Distance 1000 ft. Direction ____ Active ☐ Yes ☐ No

d Nearest building: Distance onsite ft. Direction ____ Use landfill office trailer

e Crops or livestock on site? ☐ Yes ☒ No

f Exposed hazardous waste? ☐ Yes ☒ No

g Controlled site access? ☐ Yes ☒ No

h Documented fish or wildlife mortality? ☐ Yes ☒ No

i Impact on special status fish or wildlife resource? ☐ Yes ☒ No

j Within a State Economic Development Zone? ☐ Yes ☒ No

k For Class 2a: Code ____ Health Model Score ____

l. For Class 2. Priority Category ____

m. HRS Score Sm-24.78, Sfc-0.00, SDC=25.00

n Significant Threat ☐ Yes ____ ☐ No ☒ Potential

13. SITE OWNER'S NAME	14. ADDRESS	15. TELEPHONE NUMBER
Town of Queensbury	Bay and Haviland Rd., Queensbury, NY	518-792-5832

16 PREPARER

Phyllis Rettke/Geologist/URS Consultnats, Inc.

Name, Title and Organization

3/26/91 Date

Phyllis A Rettke Signature

17 APPROVED

Name, Title and Organization

DRILLING SUMMARY

Geologist:
Scott Swanson

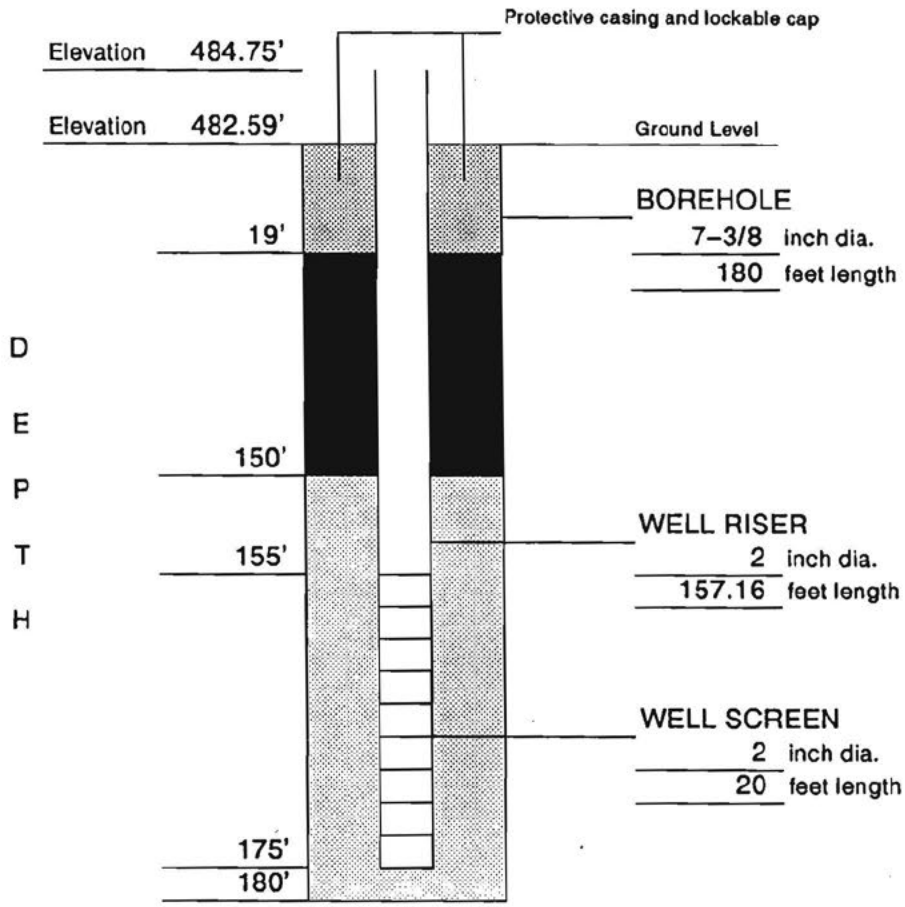
Drilling Company:
C.D.S.

Driller:
John Coyle

Date:
10/11/90–10/17/90

GEOLOGIC LOG

depth(ft.)	lithology
0–35	cobbles,boulders
35–67	gravelly,sandy cobbles
67–72	fine–coarse sand
72–76	sandy cobbles
76–86	fine–medium sand
86–94	gravelly,sandy cobbles
94–97	coarse sand
110–116	fine sand
116–160	sandy gravel
160–180	very coarse, multi-colored sands



WELL DESIGN

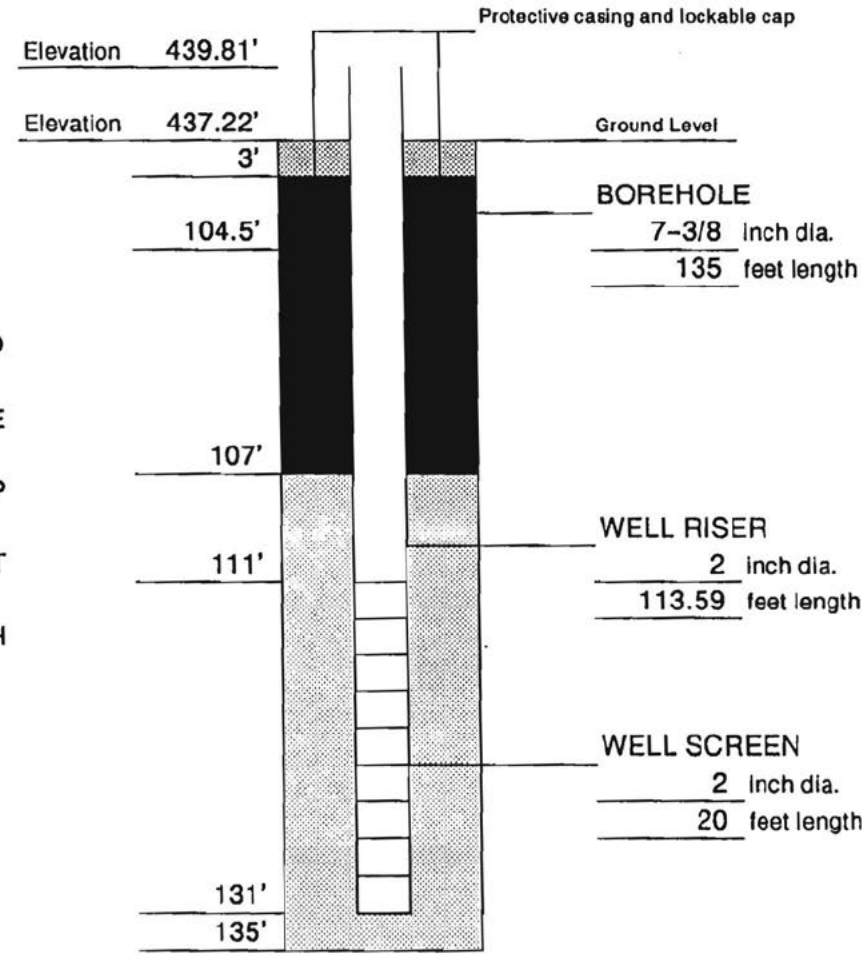
CASING MATERIAL	*SCREEN MATERIAL*	*SEAL MATERIAL*
Surface: Steel	Type: PVC	Seal #1 Type: Benseal Slurry Setting: 19–150'
Monitor: PVC	Slot Size: 0.010 inch	Seal #2 Type: Cement Grout Setting: 0–19'
FILTER MATERIAL	*ROCK CORING*	*LEGEND*
Type: #1 Silica Sand	Cored Interval:	Cement/Bentonite Grout
Setting: 150–175'	Core Diameter:	Bentonite Seal
	Reamed Diameter:	Silica Sandpack

Client: NYSDEC Phase 2	Project: Queensbury Landfill	Project Number: 35231.05
URS Consultants Inc.	Monitoring Well Constuction Details	Well Number: MW-1

DRILLING SUMMARY
Geologist: Scott Swanson
Drilling Company: C.D.S.
Driller: John Coyle
Date: 10/30/90-11/1/90

GEOLOGIC LOG

depth(ft.)	lithology
0-40	gravelly, medium-coarse sand
40-67	fine-medium sand
67-69	boulder
69-73	fine-coarse sand
73-74	cobbles
74-114	fine sand
114-118	silty,sandy, gravel
118-135	gray-black silty sand



WELL DESIGN

CASING MATERIAL	*SCREEN MATERIAL*	*SEAL MATERIAL*
Surface: Steel	Type: PVC	Seal #1 Type Bentonite Pellets Setting: 104.5-107'
Monitor: PVC	Slot Size: 0.010 inch	Seal #2 Type Benseal Slurry Setting: 3-104.5' Seal #3 Type Portland Cement Setting: 0-3'
FILTER MATERIAL	*ROCK CORING*	*LEGEND*
Type: #1 Silica Sand Setting: 107-135'	Cored Interval: Core Diameter: Reamed Diameter:	Cement/Bentonite Grout Bentonite Seal Silica Sandpack

Client: NYSDEC Phase 2	Project: Queensbury Landfill	Project Number: 35231.05
URS Consultants Inc.	Monitoring Well Constuction Details	Well Number: MW-2

DRILLING SUMMARY

Geologist:
Scott Swanson

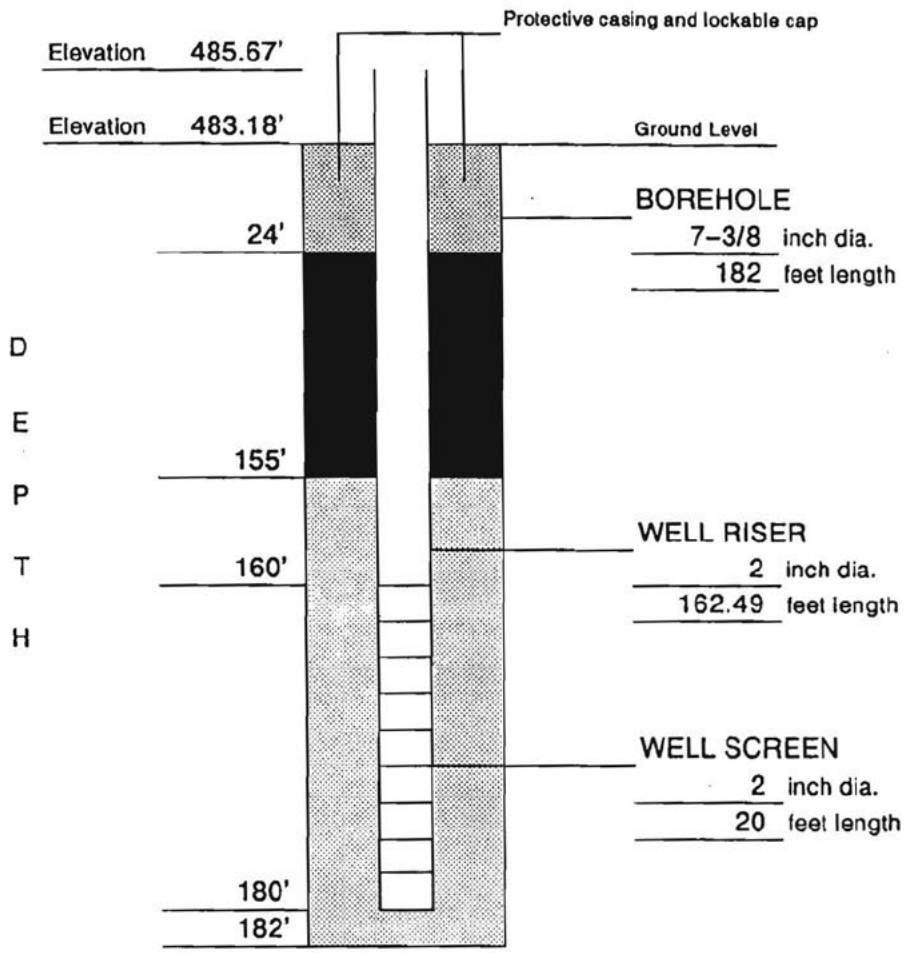
Drilling Company:
C.D.S.

Driller:
Dick Miller

Date:
11/5/90–11/8/90

GEOLOGIC LOG

depth(ft.)	lithology
0-16	cobbles
16-42	gravelly,sandy cobbles
42-70	fine-medium sand
70-73	fine gravel
73-91	fine-coarse sand
91-94	cobbles
94-101	fine sand
101-145	sandy cobbles, boulder zone
145-165	fine-medium sand
165-182	fine-medium sand with a little coarse sand



WELL DESIGN

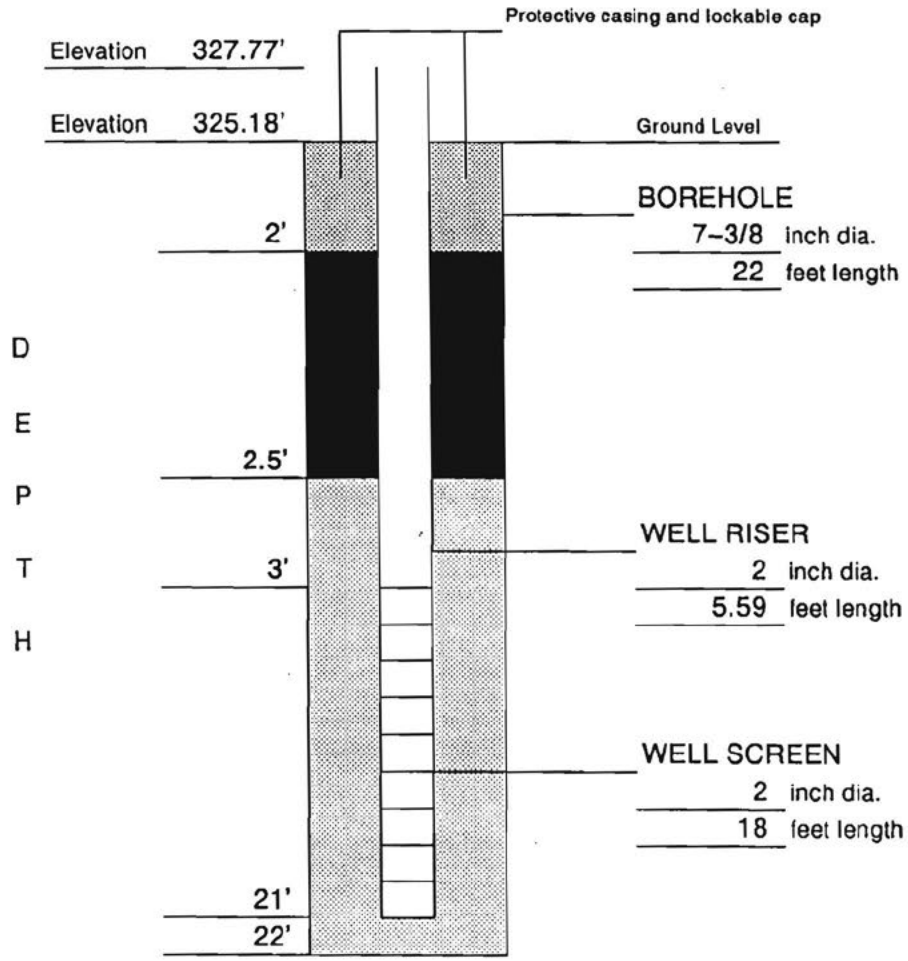
CASING MATERIAL	*SCREEN MATERIAL*	*SEAL MATERIAL*
Surface: Steel	Type: PVC	Seal #1 Type: Benseal Slurry Setting: 24-155'
Monitor: PVC	Slot Size: 0.010 inch	Seal #2 Type: Portland Cement Setting: 0-24'
FILTER MATERIAL	*ROCK CORING*	*LEGEND*
Type: #1 Silica Sand	Cored Interval:	Cement/Bentonite Grout
Setting: 155-180'	Core Diameter:	Bentonite Seal
	Reamed Diameter:	Silica Sandpack

Client: NYSDEC Phase 2	Project: Queensbury Landfill	Project Number: 35231.05
URS Consultants Inc.	Monitoring Well Constuction Details	Well Number: MW-3

DRILLING SUMMARY
Geologist: Scott Swanson
Drilling Company: C.D.S.
Driller: John Coyle
Date: 11/2/90

GEOLOGIC LOG

depth(ft.)	lithology
0-22	sandy gravel, some silt



WELL DESIGN

CASING MATERIAL	*SCREEN MATERIAL*	*SEAL MATERIAL*
Surface: Steel	Type: PVC	Seal #1 Type: Bentonite Pellets Setting: 2-2.5'
Monitor: PVC	Slot Size: 0.010 inch	Seal #2 Type: Portland Cement Setting: 0-2'
FILTER MATERIAL	*ROCK CORING*	*LEGEND*
Type: #1 Silica Sand	Cored Interval:	Cement/Bentonite Grout
Setting: 2.5-22'	Core Diameter:	Bentonite Seal
	Reamed Diameter:	Silica Sandpack

Client: NYSDEC Phase 2	Project: Queensbury Landfill	Project Number: 35231.05
U R S Consultants Inc.	Monitoring Well Constuction Details	Well Number: MW-4

DRILLING SUMMARY

Geologist: Scott Swanson

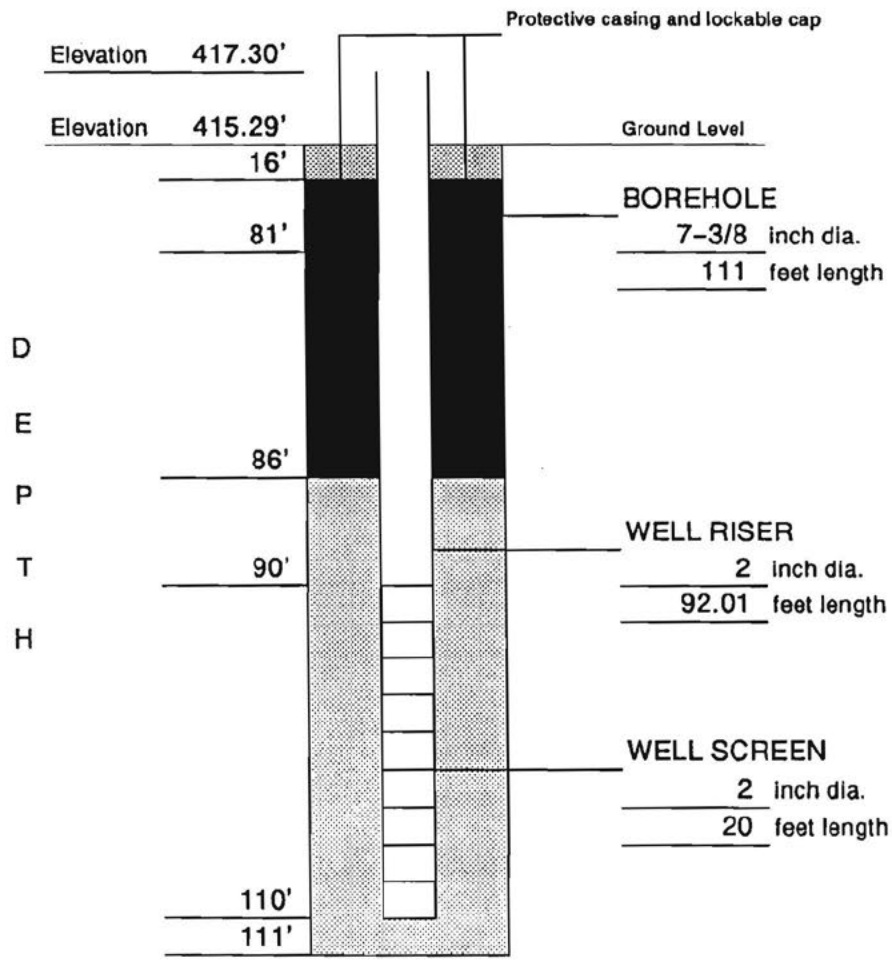
Drilling Company: C.D.S.

Driller: John Coyle

Date: 10/23/90–10/29/90

GEOLOGIC LOG

depth(ft.)	lithology
0-50	cobbles,boulders
50-92	gravelly,sandy cobbles
92-111	sandy gravel



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	SEAL MATERIAL
Surface: Steel	Type: PVC	Seal #1 Type Bentonite Pellets Setting: 81–86'
Monitor: PVC	Slot Size: 0.010 inch	Seal #2 Type Benseal Slurry Setting: 16–81' Seal #3 Type Portland Cement Setting: 0–16'

FILTER MATERIAL	ROCK CORING	LEGEND
Type: #1 Silica Sand	Cored Interval:	Cement/Bentonite Grout
Setting: 86–111'	Core Diameter:	Bentonite Seal
	Reamed Diameter:	Silica Sandpack

Client: NYSDEC Phase 2	Project: Queensbury Landfill	Project Number: 35231.05
URS Consultants Inc.	Monitoring Well Constuction Details	Well Number: MW-5

APPENDIX E

WELL DEVELOPMENT/PURGING LOGS

URS CONSULTANTS, INC.

WELL DEVELOPMENT/PURGING LOG

PROJECT TITLE: NYSDEC PHASE II QUEENSBURY LANDFILL

PROJECT NO.: 35231.05

STAFF: SCOTT SWANSON

DATE: 11-8-90

WELL NO.: MW-1

① TOTAL CASING AND SCREEN LENGTH (FT.): 177.23

② CASING INTERNAL DIAMETER (in.): 2"

③ WATER LEVEL BELOW TOP OF CASING (FT.) 160.74

④ VOLUME OF WATER IN CASING (GAL.) 2.7

WELL I.D.	VOL. GAL./FT.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

V = 0.0408 (② inches)^2 X (① - ③ inches) = 8.08 GAL. (3 casings)

[(1) RADIUS X (16.49' x 12 inches)] =

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)										
	0	8.5	24.1	AGITATE & SURGE	42.1	68.5					
pH	7.2		7.0		7.0	7.0					
Spec. Cond. (µmho)	300		300		300	300					
Turbidity (NTU)	>200		>200		23.1	12.6					
Temperature (°C)	10.7		8.5		8.0	8.0					
TIME	3:55	4:04	4:17	4:30	4:45	5:07					

RATE GAL./MIN. .75/min 1.2

COMMENTS:

EQUIPMENT USED - WATERRA HYDROLIFT INERTIAL PUMP POWERED BY : 2000 WATT GENERATOR

High-capacity 1" O.D. High-density polyethylene tubing

A-2347

URS CONSULTANTS, INC.

WELL DEVELOPMENT/PURGING LOG

PROJECT TITLE: NYSDEC PHASE II QUEENSBURY LANDFILL

PROJECT NO.: 35231-05

STAFF: SCOTT SWANSON

DATE: 11/9 & 10/90

WELL NO.: MW-2

		WELL I.D.	VOL. GAL./FT.
(1) TOTAL CASING AND SCREEN LENGTH (FT.):	133.58	1"	0.04
		2"	0.17
(2) CASING INTERNAL DIAMETER (in.):	2	3"	0.38
		4"	0.66
(3) WATER LEVEL BELOW TOP OF CASING (FT.)	116.20	5"	1.04
		6"	1.50
(4) VOLUME OF WATER IN CASING (GAL.)	2.84	8"	2.60

$V = 0.0408 (2)^2 \times ((1) - (3)) =$ 8.51 GAL. (3 casings)

RADIUS

$.0408 (1")^2 \times (17.38' \times 12 in.) =$

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)										
	11-9-90 0	21	53	11-10-90 0	14.25	39					
pH	6.8	CLOGGED VALVE	6.8	6.8	CLOGGED VALVE	6.8 CLOGGED VALVE					
Spec. Cond. (µmho)	1300		1200	1200/1300		1300	92 GALLONS TOTAL 2-DAY				
Turbidity (NTU)	>200		>200	359		178.5	WILL NEED ADD'L DEVELOPMENT				
Temperature (°C)	12.1		12.0	12.0		12.0	STEVE FRANK WILL PUMP WELL THIS WEEK				
TIME	4:09	4:30	5:03-5:35	11:10	11:29	12:01-12:34					
RATE GAL/MIN.	1		1	.75							

COMMENTS:

STANDARD 5/8" O.D. polyethylene tubing used

A-2347

URS CONSULTANTS, INC.

WELL DEVELOPMENT/PURGING LOG

PROJECT TITLE: NYSDEC PHASE II QUEENSBURY LANDFILL

PROJECT NO.: 35231.05

STAFF: STEVE FRANK

DATE: 11-15-90

WELL NO.: MW-2

① TOTAL CASING AND SCREEN LENGTH (FT.): 133.58

② CASING INTERNAL DIAMETER (in.): 2

③ WATER LEVEL BELOW TOP OF CASING (FT.) 116.13

④ VOLUME OF WATER IN CASING (GAL.) 2.85

WELL I.D.	VOL. GAL./FT.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

V = 0.0408 (D)^2 X (① - ③) = 8.54 GAL. (3 casings)

RADIUS

.0408 (1)^2 x (17.45')(12 in) =

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)											
	0	20	40	60	80	100	120	140	160	180	200	2
pH	6.54	6.85	6.97	6.64	6.68	6.78	6.95	6.98	6.85	7.11	6.99	6
Spec. Cond. (μmho)	2660	3420	3170	3430	3700	3340	3500	3320	2900	2560	2580	2
Turbidity (NTU)	>100	>100	>100	>100	>100	>100	>100	>100	>100	>100	67	6
Temperature (°C)	TEMP.		PROBE		NOT		WORKING					

COMMENTS: HYDROLIFT WATERRA PUMP USED IN PUMPING

Standard 5/8" O.D polyethylene tubing

A-2347

URS CONSULTANTS, INC.

WELL DEVELOPMENT/PURGING LOG

PROJECT TITLE: NYSDEC PHASE II QUEENSBURY LANDFILL

PROJECT NO.: 35231.05

STAFF: SCOTT SWANSON

DATE: 11-9-90

WELL NO.: MW-3

		WELL I.D.	VOL. GAL./FT.
(1) TOTAL CASING AND SCREEN LENGTH (FT.):	182.5	1"	0.04
(2) CASING INTERNAL DIAMETER (in.):	2	2"	0.17
(3) WATER LEVEL BELOW TOP OF CASING (FT.)	164.57	3"	0.38
(4) VOLUME OF WATER IN CASING (GAL.)	2.94	4"	0.66
		5"	1.04
		6"	1.50
		8"	2.60

$V = 0.0408 ((2)^2 \times ((1) - (3)) = 8.81$ GAL. (3 casings)

17.9'

RADIUS INCHES

.0408 (1) (17.5' x 12 in.)

AGITATE & SURGE

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)										
	0	24.75	43.5	59.5	64.9	67.9	89.65	122.65	179.85		
pH	7.0	7.1	7.0/7.1	7.1		7.2	7.1	7.1/7.2	7.1/7.2		
Spec. Cond. (µmho)	800	800-900	900	800/900		900/1000	800	900	1000		
Turbidity (NTU)	>200	>200	199.5	>200		>200	>200	>200	>200		
Temperature (°C)	12.0	12.2	12.4	12.4		13.8	12.0	11.7	16.0		
TIME	10:42	11:15	11:40	12:00	12:08-12:17	12:25	12:54	1:24	2:16		
RATE GAL/MIN	.75	.75	1	1	.6	.75	1.1	1.1			

COMMENTS: EQUIPMENT - WATERRA HYDROLIFT INERTIAL PUMP

POWER - 2000 WATT GENERATOR

A-2347

URS CONSULTANTS, INC.

WELL DEVELOPMENT/PURGING LOG

PROJECT TITLE: NYSDEC PHASE II QUEENSBURY LANDFILL

PROJECT NO.: 35231.05

STAFF: SCOTT SWANSON

DATE: 11-9-90

WELL NO.: MW-4

① TOTAL CASING AND SCREEN LENGTH (FT.): 23.58

② CASING INTERNAL DIAMETER (in.): 2

③ WATER LEVEL BELOW TOP OF CASING (FT.) 6.125

④ VOLUME OF WATER IN CASING (GAL.) 2.85

WELL I.D.	VOL. GAL./FT.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

RADIUS

$V = 0.0408 (②)^2 \times (① - ③) =$ 8.55 GAL. (3 casings)

$.0408 (1)^2 \quad (17.45' \times 12in)$

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)										
	0	8.8	13.2	18.7		24.2	28.6	31.9	35.2		
pH	6.9	6.8/6.9	6.8/6.9	6.8/6.9	AGITATE AND	6.9	6.9	6.8/6.9	6.8/6.9		
Spec. Cond. (µmho)	600	600	600	700	SURGE WELL	700	700	700	700		
Turbidity (NTU)	>200	241	94.5	46.2		>200	264	73.5	35.7		
Temperature (°C)	11.1	11.2	11.1	11.0		11.0	11.0	10.9	10.9		
TIME	3:03	3:11	3:15	3:20	3:24	3:25	3:29	3:32	3:35		
RATE GAL/MIN	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1		

COMMENTS:

A-2347

URS CONSULTANTS, INC.

WELL DEVELOPMENT/PURGING LOG

PROJECT TITLE: NYSDEC PHASE II QUEENSBURY LANDFILL

PROJECT NO.: 35231.05

STAFF: SCOTT SWANSON

DATE: 11-8-90

WELL NO.: MW-5

① TOTAL CASING AND SCREEN LENGTH (FT.): 112.1

② CASING INTERNAL DIAMETER (in.): 2"

③ WATER LEVEL BELOW TOP OF CASING (FT.) 93.52

④ VOLUME OF WATER IN CASING (GAL.) 3.03

WELL I.D.	VOL. GAL./FT.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$V = 0.0408 (②)^2 \times (① - ③) =$ 9.09 GAL. (3 casings)

(1) (18.58x12 in.)

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)										
	0	80	AGITATE	120							
pH	6.6	7.2	WELL & SURGE	7.2							
Spec. Cond. (μmho)	200	200		200							
Turbidity (NTU)	>200	4.2		33.6							
Temperature (°C)	9.2	9.2		8.8							
TIME	1:35	2:47		3:20							

RATE 1.2 gal / MIN. EQUIPMENT = WATERRA HYDROLIFT INERTIAL PUMP

POWER: 2000 WATT GENERATOR

COMMENTS:

A-2347

URS CONSULTANTS, INC.

WELL DEVELOPMENT / PURGING LOG

PROJECT TITLE: QUEENSBURY LANDFILL NYSDEC PHASE II

PROJECT NO.: 35231.05

STAFF: STEVE FRANK, SCOTT SWANSON

DATE: 11-30-90

WELL NO.: MW-1

① TOTAL CASING AND SCREEN LENGTH (FT.): 177.23

② CASING INTERNAL DIAMETER (in.): 2"

RADIUS: 1"

③ WATER LEVEL BELOW TOP OF CASING (FT.) 160

④ VOLUME OF WATER IN CASING (GAL.) 2.81

WELL I.D.	VOL. GAL./FT.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$V = 0.0408 (\text{RADIUS})^2 \times (① - ③) =$ 8.44 GAL. (3 casings)

$.0408 \{ (1)^2 (17.23)(12") \}$

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)										
	0	1	35								
pH		7.10	7.10								
Spec. Cond. (μmho)		1125	810								
Turbidity (NTU)		>100	38								
Temperature (°C)		10.6	8.8								
TIME	8:04 AM		9:06								
RATE	.6 gpm										

COMMENTS:

A-2347

URS CONSULTANTS, INC.

WELL DEVELOPMENT/PURGING LOG

PROJECT TITLE: QUEENSBURY LANDFILL NYSDEC PHASE II

PROJECT NO.: 35231.05

STAFF: STEVE FRANK, SCOTT SWANSON

DATE: 11-29-90

WELL NO.: MW-2

① TOTAL CASING AND SCREEN LENGTH (FT.): 133.58

② CASING INTERNAL DIAMETER (in.): 2"

③ WATER LEVEL BELOW TOP OF CASING (FT.) 116.28

④ VOLUME OF WATER IN CASING (GAL.) 2.82

WELL I.D.	VOL. GAL./FT.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$V = 0.0408 (②)^2 \times (① - ③) =$ 8.47 GAL. (3 casings)

$.0408 \{(1)^2 \ (17.3') \ (12 in.)\}$

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)										
	0	3.5	10								
pH		6.90	6.85								
Spec. Cond. (μmho)		2900	2600								
Turbidity (NTU)		80	35								
Temperature (°C)		11.8	10.6								

COMMENTS:

A-2347

URS CONSULTANTS, INC.

WELL DEVELOPMENT/PURGING LOG

PROJECT TITLE: QUEENSBURY LANDFILL NYSDEC PHASE II

PROJECT NO.: 35231.05

STAFF: STEVE FRANK, SCOTT SWANSON

DATE: 11-30-90

WELL NO.: MW-3

		WELL I.D.	VOL. GAL./FT.
(1) TOTAL CASING AND SCREEN LENGTH (FT.):	182.5	1"	0.04
		2"	0.17
(2) CASING INTERNAL DIAMETER (in.):	2	3"	0.38
RADIUS 1"		4"	0.66
(3) WATER LEVEL BELOW TOP OF CASING (FT.)	164.25	5"	1.04
		6"	1.50
(4) VOLUME OF WATER IN CASING (GAL.)	2.99	8"	2.60

RADIUS inches

$V = 0.0408 (2)^2 \times ((1) - (3)) =$ 8.94 GAL. (3 casings)

$.0408 \{(1)^2 \times (18.25' \times 12 in)\}$

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)										
	0	1	25								
pH		7.13	7.17								
Spec. Cond. (μmho)		2600	2530								
Turbidity (NTU)		>100	45								
Temperature (°C)		11.6	11.3								
RATE	.5 gpm										

COMMENTS:

A-2347

URS CONSULTANTS, INC.

WELL DEVELOPMENT/PURGING LOG

PROJECT TITLE: QUEENSBURY LANDFILL NYSDEC PHASE II

PROJECT NO.: 35231.05

STAFF: STEVE FRANK, SCOTT SWANSON

DATE: 11-29-90

WELL NO.: MW-4

① TOTAL CASING AND SCREEN LENGTH (FT.): 23.58

② CASING INTERNAL DIAMETER (in.): 2"

③ WATER LEVEL BELOW TOP OF CASING (FT.) 6.10
STREAM GUAGE = 2.24'

④ VOLUME OF WATER IN CASING (GAL.) 2.85

WELL I.D.	VOL. GAL./FT.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

CTOR
.14 = π
-u in/gal

$V = 0.0408 (②)^2 \times (① - ③) = 8.55$ GAL. (3 casings) x 3

.0408 (RADIUS)^2 (23.58 - 6.10)(12 in)

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)										
	0	2	10								
pH		6.85	6.78								
Spec. Cond. (μmho)		1450	1450								
Turbidity (NTU)		18	52								
Temperature (°C)		10.3	8.8								

COMMENTS: SAMPLED @ 8.45AM

A-2347

URS CONSULTANTS, INC.

WELL DEVELOPMENT/PURGING LOG

PROJECT TITLE: QUEENSBURY LANDFILL NYSDEC PHASE II

PROJECT NO.: 35231.05

STAFF: STEVE FRANK, SCOTT SWANSON

DATE: 11-28-90

WELL NO.: MW-5

① TOTAL CASING AND SCREEN LENGTH (FT.): 112.1

② CASING INTERNAL DIAMETER (in.): 2"

③ WATER LEVEL BELOW TOP OF CASING (FT.) 93.53

④ VOLUME OF WATER IN CASING (GAL.) 3.03

WELL I.D.	VOL. GAL./FT.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$V = 0.0408 (②)^2 \times (① - ③) =$ 9.09 GAL. (3 casings)

.0408 (RADIUS inches)^2 (18.57 x 12")

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)										
	0	.5	15								
pH		6.88	6.85								
Spec. Cond. (μmho)		1260	1240								
Turbidity (NTU)		100+	41								
Temperature (°C)		11.8	9.9								
TIME	1:48pm										

COMMENTS: SAMPLED WELL @ 2:20 PM

A-2347

URS CONSULTANTS, INC.

WELL DEVELOPMENT/PURGING LOG

PROJECT TITLE: QUEENSBURY LANDFILL NYSDEC PHASE II

PROJECT NO.: 35231.05

STAFF: STEVE FRANK, SCOTT SWANSON

DATE: 11-29-90

WELL NO.: E-2

① TOTAL CASING AND SCREEN LENGTH (FT.): 20

② CASING INTERNAL DIAMETER (in.): 2"

③ WATER LEVEL BELOW TOP OF CASING (FT.) 5.25

④ VOLUME OF WATER IN CASING (GAL.) 2.41

WELL I.D.	VOL. GAL./FT.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$V = 0.0408 (②)^2 \times (① - ③) =$ 7.22 GAL. (3 casings)

$.0408 \left[(1)^2 (20 - 5.25)(12 in.) \right]$

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)										
	0	60									
pH		6.85									
Spec. Cond. (μmho)		1708									
Turbidity (NTU)		10									
Temperature (°C)		9.8									
TIME	9:15AM	10:15									
RATE	1gpm										

COMMENTS:

A-2347

URS CONSULTANTS, INC.

WELL DEVELOPMENT/PURGING LOG

PROJECT TITLE: QUEENSBURY LANDFILL NYSDEC PHASE II

PROJECT NO.: 35231.05

STAFF: STEVE FRANK, SCOTT SWANSON

DATE: 11-28-90

WELL NO.: E-3 (TORRINGTON CONST. EXISTING WELL)

① TOTAL CASING AND SCREEN LENGTH (FT.): 135

② CASING INTERNAL DIAMETER (in.): 2"

③ WATER LEVEL BELOW TOP OF CASING (FT.) 89.73

④ VOLUME OF WATER IN CASING (GAL.) 66.5

WELL I.D.	VOL. GAL./FT.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

$V = 0.0408 (②)^2 \times (① - ③) =$ 200 GAL. (3 casings)

.0408 (radius inches)^2 inches (135-89.73)(12")

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)										
	0	1350									
pH		6.78									
Spec. Cond. (μmho)		5400									
Turbidity (NTU)		4.5									
Temperature (°C)		11.4									
TIME	2:00	3:30pm	pumped 15 gpm, Torrington rep ran submersible pump for 1 1/2 hr.								

COMMENTS: SAMPLED & LABELED Q/LE-3 GW

A-2347

APPENDIX F

HYDRAULIC CONDUCTIVITY TESTING RESULTS

BOUWER AND RICE METHOD FOR INTERPRETATION OF SLUG TESTS: FOR UNCONFINED AND LEAKY CONFINED AQUIFERS.
TO UTILIZE THIS WORKSHEET, ENTER YOUR DATA AT LOCATIONS MARKED BY AN "*".
PROGRAM CAN INCLUDE EFFECTS OF SANDPACK DEWATERING (ASSUMING WATER IS RISING WITHIN THE SANDPACK).

#	*TIME min (X)	*DEPTH TO WATER Ft.	DRAWDOWN (Y)	TIME sec (X')	LN (Y)
1	0.020	-0.10	0.100	1.2	-2.3026
2	0.023	-0.08	0.080	1.4	-2.5257
3	0.027	-0.07	0.070	1.6	-2.6593
4	0.083	-0.04	0.040	5.0	-3.2189
5	0.100	-0.02	0.020	6.0	-3.9120
6	0.133	-0.01	0.010	8.0	-4.6052
7	0.183	0.00	0.000	11.0	ERR

```
*PROJECT NAME       :QUEENSBURY LANDFILL
*PROJECT NO         :35231.05
*WELL NO            :MW-1 (SLUG OUT)
*ANALYST            :MOELLER
*DATE COLLECTED     :12/19/90
*RISER PIPE (ID):          (2 r sub c) =      2.0 in. =      0.0833 (radius in ft.)
*EFFECTIVE SCREEN DIAMETER:(2 r sub w) =      2.0 in. =      0.0833 (radius in ft.)
*EFFECTIVE SCREEN LENGTH:   (L)        =    17.00 Ft.
*MAX DRAWDOWN (IN SUBSET):  (Ymax)     =     0.10 Ft.
*STATIC WATER LEVEL:        (SWL)      =     0.00 Ft.
*DEPTH FROM SWL TO EFF. SCREEN BOTTOM:  (H)  =        17.00 Ft.
*EST. AQUIFER DEPTH (SWL TO AQUIFER BOTTOM):  (D) =            37.00 Ft.
*INCLUDE SANDPACK DEWATERING (ENTER 1 IF YES, 0 IF NO)?            0
*SANDPACK'S SPECIFIC YIELD (Sy) =            0.25
```

```
BOUWER AND RICE CURVE COEFFICIENTS:
  RATIO OF L/(r sub w) =                  204.00
    ---LOG OF L/(r sub w) =               2.3096
  FOR PARTIALLY PENETRATING WELLS--
              A =                 5.97
              B =                 1.24
  FOR FULLY PENETRATING WELLS--
              C =                 6.92

    ---EVALUATION OF LN(Re/(r sub w)):
         CONST.1 =              0.2068
         CONST.2 =              5.4806  =(MAX. OF 6.0)=      5.4806
         LN(Re/(r sub w) =                   3.71
```

```
  EFFECTIVE r sub c (for sandpack dewatering) =      0.0833
  (1/T)(LN(Yo/Yt))  (SLOPE) =           8.26E-02 sec^(-1)
```

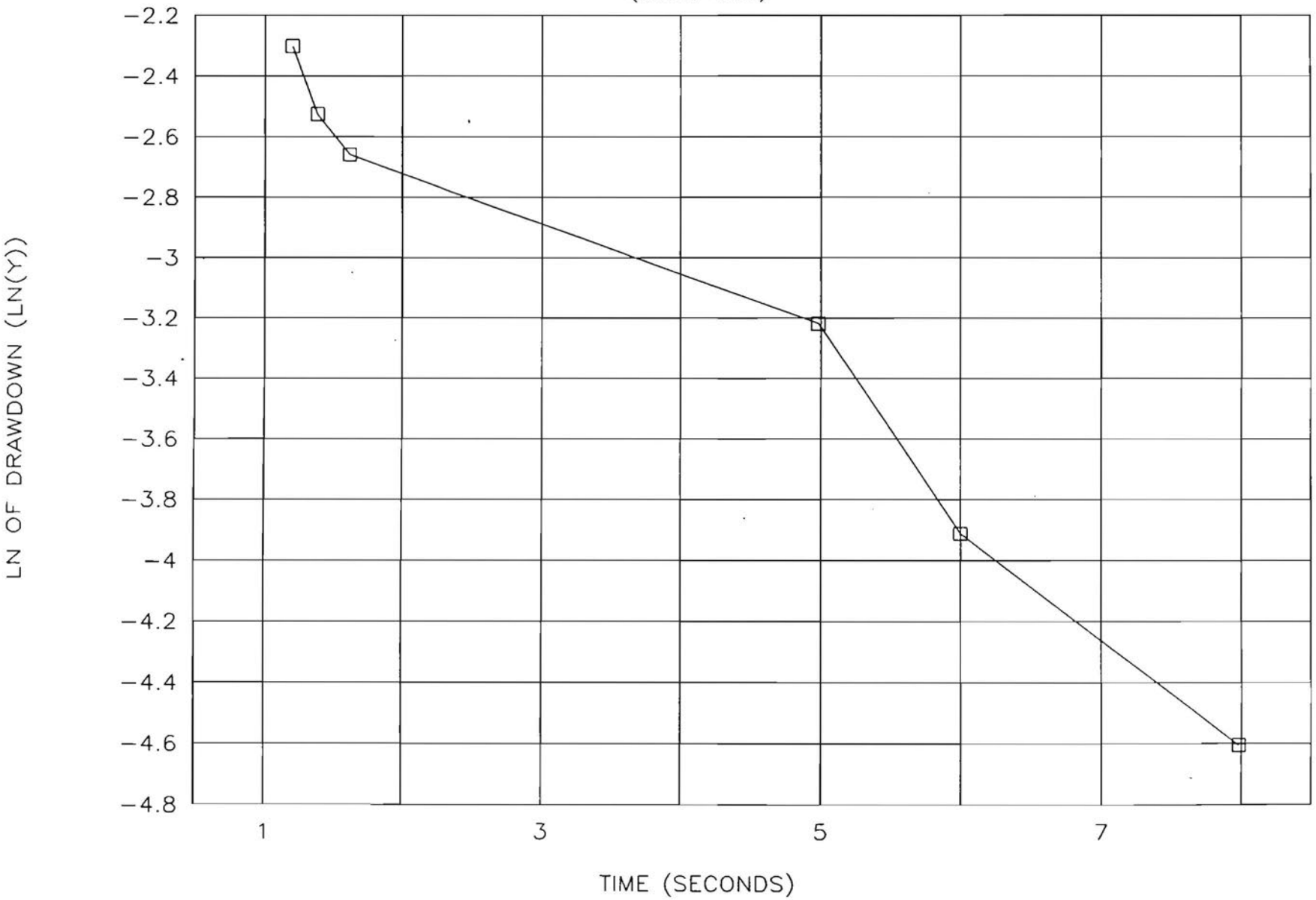
```
HYDRAULIC CONDUCTIVITY     (K)   =      6.26E-05 ft/sec      <==================
                                        1.91E-03 cm/sec      <==================
```

```
                    Regression Output:
Constant                                          -1.09
Std Err of Y Est                                1.78E-01
R Squared                                         0.9670
No. of Observations                               3.0000
Degrees of Freedom                                     1

X Coefficient(s)                        -0.45
Std Err of Coef.                      8.26E-02
```

RATE OF RECOVERY TEST: WELL MW-1

(SLUG OUT)



BOUWER AND RICE METHOD FOR INTERPRETATION OF SLUG TESTS: FOR UNCONFINED AND LEAKY CONFINED AQUIFERS.
TO UTILIZE THIS WORKSHEET, ENTER YOUR DATA AT LOCATIONS MARKED BY AN "*".
PROGRAM CAN INCLUDE EFFECTS OF SANDPACK DEWATERING (ASSUMING WATER IS RISING WITHIN THE SANDPACK).

#	*TIME min (X)	*DEPTH TO WATER Ft.	DRAWDOWN (Y)	TIME sec (X')	LN (Y)
1	0.05	-0.76	0.750	3.0	-0.2877
2	0.06	-0.69	0.680	3.6	-0.3857
3	0.08	-0.59	0.580	4.8	-0.5447
4	0.10	-0.50	0.490	6.0	-0.7133
5	0.11	-0.42	0.410	6.6	-0.8916
6	0.13	-0.37	0.360	7.8	-1.0217
7	0.15	-0.32	0.310	9.0	-1.1712
8	0.16	-0.29	0.280	9.6	-1.2730
9	0.18	-0.27	0.260	10.8	-1.3471
10	0.20	-0.24	0.230	12.0	-1.4697
11	0.21	-0.23	0.220	12.6	-1.5141
12	0.23	-0.22	0.210	13.8	-1.5606
13	0.25	-0.20	0.190	15.0	-1.6607
14	0.26	-0.19	0.180	15.6	-1.7148
15	0.28	-0.18	0.170	16.8	-1.7720
16	0.30	-0.17	0.160	18.0	-1.8326
17	0.33	-0.16	0.150	19.8	-1.8971
18	0.41	-0.13	0.120	24.6	-2.1203
19	0.50	-0.11	0.100	30.0	-2.3026
20	0.58	-0.09	0.080	34.8	-2.5257
21	0.66	-0.08	0.070	39.6	-2.6593
22	0.75	-0.07	0.060	45.0	-2.8134
23	0.91	-0.06	0.050	54.6	-2.9957
24	1.16	-0.05	0.040	69.6	-3.2189
25	1.41	-0.04	0.030	84.6	-3.5066
26	1.83	-0.03	0.020	109.8	-3.9120
27	3.00	-0.01	0.000	180.0	ERR

*PROJECT NAME :QUEENSBURY LANDFILL
*PROJECT NO :35231.05
*WELL NO :MW-2 (SLUG OUT)
*ANALYST :MOELLER
*DATE COLLECTED :12/19/90
*RISER PIPE (ID): (2 r sub c) = 2.0 in. = 0.0833 (radius in ft.)
*EFFECTIVE SCREEN DIAMETER:(2 r sub w) = 7.4 in. = 0.3073 (radius in ft.)
*EFFECTIVE SCREEN LENGTH: (L) = 19.52 Ft.
*MAX DRAWDOWN (IN SUBSET): (Ymax) = 0.75 Ft.
*STATIC WATER LEVEL: (SWL) = -0.01 Ft.
*DEPTH FROM SWL TO EFF. SCREEN BOTTOM: (H) = 19.52 Ft.
*EST. AQUIFER DEPTH (SWL TO AQUIFER BOTTOM): (D) = 39.52 Ft.
*INCLUDE SANDPACK DEWATERING (ENTER 1 IF YES, 0 IF NO)? 1
*SANDPACK'S SPECIFIC YIELD (Sy) = 0.25

BOUWER AND RICE CURVE COEFFICIENTS:
RATIO OF L/(r sub w) = 63.52
---LOG OF L/(r sub w) = 1.8029
FOR PARTIALLY PENETRATING WELLS--
A = 3.47
B = 0.53
FOR FULLY PENETRATING WELLS--
C = 3.14

---EVALUATION OF LN(Re/(r sub w)):
CONST.1 = 0.2650
CONST.2 = 4.1757 =(MAX. OF 6.0)= 4.1757
LN(Re/(r sub w) = 2.82

EFFECTIVE r sub c (for sandpack dewatering) = 0.1698
(1/T)(LN(Yo/Yt)) (SLOPE) = 5.17E-04 sec^(-1)

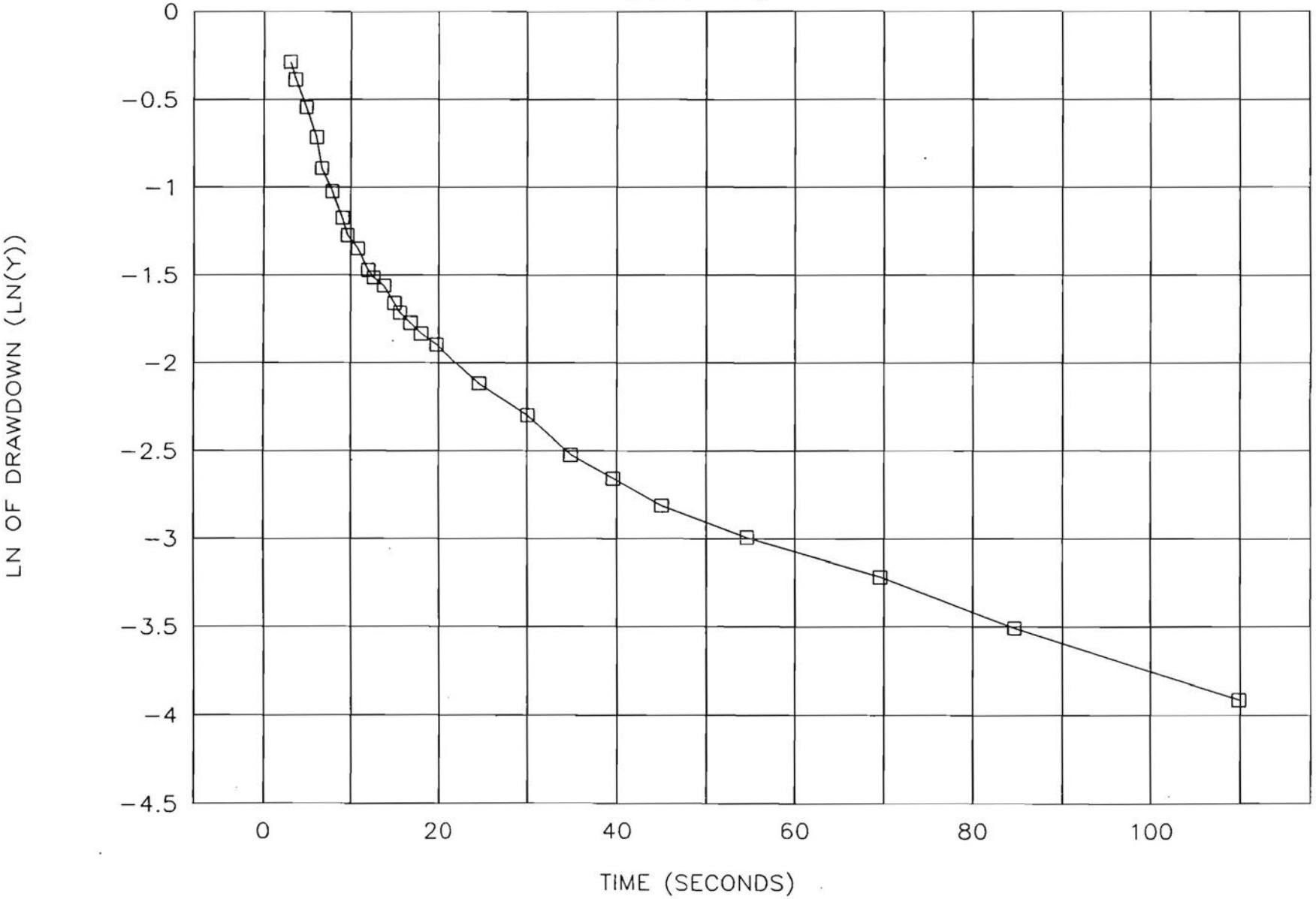
HYDRAULIC CONDUCTIVITY (K) = 1.08E-06 ft/sec <==========
3.28E-05 cm/sec <==========

Regression Output:

Constant	-2.01
Std Err of Y Est	3.07E-02
R Squared	0.9965
No. of Observations	6.0000
Degrees of Freedom	4
X Coefficient(s)	-0.02
Std Err of Coef.	5.17E-04

RATE OF RECOVERY TEST: WELL MW-2

(SLUG OUT)



BOUWER AND RICE METHOD FOR INTERPRETATION OF SLUG TESTS: FOR UNCONFINED AND LEAKY CONFINED AQUIFERS.
TO UTILIZE THIS WORKSHEET, ENTER YOUR DATA AT LOCATIONS MARKED BY AN "*".
PROGRAM CAN INCLUDE EFFECTS OF SANDPACK DEWATERING (ASSUMING WATER IS RISING WITHIN THE SANDPACK).

#	*TIME min (X)	*DEPTH TO WATER Ft.	DRAWDOWN (Y)	TIME sec (X')	LN (Y)
1	0.13	-0.12	0.120	7.8	-2.1203
2	0.15	-0.07	0.070	9.0	-2.6593
3	0.16	-0.06	0.060	9.6	-2.8134
4	0.18	-0.04	0.040	10.8	-3.2189
5	0.21	-0.03	0.030	12.6	-3.5066
6	0.25	-0.02	0.020	15.0	-3.9120
7	0.41	-0.01	0.010	24.6	-4.6052
8	0.58	0.00	0.000	34.8	ERR

*PROJECT NAME :QUEENSBURY LANDFILL
*PROJECT NO :35231.05
*WELL NO :MW-3 (SLUG OUT)
*ANALYST :MOELLER
*DATE COLLECTED :12/19/90
*RISER PIPE (ID): (2 r sub c) = 2.0 in. = 0.0833 (radius in ft.)
*EFFECTIVE SCREEN DIAMETER:(2 r sub w) = 2.0 in. = 0.0833 (radius in ft.)
*EFFECTIVE SCREEN LENGTH: (L) = 16.82 Ft.
*MAX DRAWDOWN (IN SUBSET): (Ymax) = 0.12 Ft.
*STATIC WATER LEVEL: (SWL) = 0.00 Ft.
*DEPTH FROM SWL TO EFF. SCREEN BOTTOM: (H) = 16.82 Ft.
*EST. AQUIFER DEPTH (SWL TO AQUIFER BOTTOM): (D) = 36.82 Ft.
*INCLUDE SANDPACK DEWATERING (ENTER 1 IF YES, 0 IF NO)? 0
*SANDPACK'S SPECIFIC YIELD (Sy) = 0.25

BOUWER AND RICE CURVE COEFFICIENTS:
RATIO OF L/(r sub w) = 201.84
---LOG OF L/(r sub w) = 2.3050
FOR PARTIALLY PENETRATING WELLS--
A = 5.94
B = 1.23
FOR FULLY PENETRATING WELLS--
C = 6.88

---EVALUATION OF LN(Re/(r sub w)):
CONST.1 = 0.2073
CONST.2 = 5.4806 =(MAX. OF 6.0)= 5.4806
LN(Re/(r sub w) = 3.70

EFFECTIVE r sub c (for sandpack dewatering) = 0.0833
(1/T)(LN(Yo/Yt)) (SLOPE) = 1.86E-02 sec^(-1)

HYDRAULIC CONDUCTIVITY (K) = 1.42E-05 ft/sec <==========
4.33E-04 cm/sec <==========

Regression Output:

Constant	-0.86
Std Err of Y Est	9.07E-02
R Squared	0.9763
No. of Observations	5.0000
Degrees of Freedom	3
X Coefficient(s)	-0.21
Std Err of Coef.	1.86E-02

APPENDIX G

ANALYTICAL TESTING RESULTS FROM PREVIOUS INVESTIGATIONS

ENERGY RESOURCES CO. INC

INORGANIC ANALYSIS

- Report Sheet -

Analyzed for: New York DEC

ERCO ID	CLIENT ID	Cl (mg/l)	F (mg/l)	SO_4 (mg/l)	TDS (g/l)	COND (umhos/cm)	pH	COLOR (color units)	ODOR (threshold units)	TOC (mg/l)
51-931	57S10-D01	22	<0.10	6	0.47	720	7.2	<5	140	2.0
51-932	57S10-D02	38	0.13	16	0.50	710	7.2	10	6	4.0
51-933	57S10-GWINUPS	44	0.76	15	0.37	580	7.5	<5	ND	2.0

If customer has any questions regarding analysis, refer to sample in question by its ERCO ID#.

Sample Rcvd. 7/28/81 Reported by NaL

Date Analysis Completed 8/25/81 Checked by Kale

APPENDIX G (b)

TOWN OF QUEENSBURY QUARTERLY AND ANNUAL TESTING ANALYTICAL RESULTS

File Queensbury

RECEIVED

AUG 19 1982

STATE DEPT. OF HEALTH
GLENS FALLS DISTRICT OFFICE

QUEENSBURY LANDFILL

Summary of results, quarterly testing.

1980, 1981

Office Well

	pH	Chloride, mg/l	Conductivity, us	Iron, mg/l	TOC, mg/l	TDS, mg/l
June 5, 1980	7.9	1.0	265	0.35	7	-
October 24, 1980	8.0	3.4	260	0.40	7	-
January 22, 1981	8.0	2.5	265	0.18	5	154
April 15, 1981	7.9	2.4	250	0.25	5	168
July 14, 1981	8.0	2.5	252	0.15	3	205

Well #2

June 5, 1980	7.1	15	800	14	11	-
October 24, 1980	6.9	23	700	11	25	-
January 22, 1981	7.3	126	750	7.7	60	-
April 15, 1981	7.1	20	650	13	2	-
July 14, 1981	7.1	28	650	7.0	8	-

Well #3

June 5, 1980	7.3	18	750	27	21	-
October 24, 1980	7.2	19	600	16	6	-
January 22, 1981	7.4	300	650	37	62	-
April 15, 1981	7.6	27	650	165	5	-
July 14, 1981	7.6	[illegible]	[illegible]	55	10	-

QUEENSBURY LANDFILL

Summary of results, quarterly testing.

1980, 1981

Pond

	pH	Chloride, mg/l	Conductivity, us	Iron, mg/l	TOC, mg/l	TDS, mg/l
March 21, 1980	7.2	21	700	0.90	8	-

Landfill Leachate (Manhole)

March 21, 1980	6.4	22	225	1.8	17	

Yearly Testing

	Results, mg/l					
	Office Well		Well #2		Well #3	
Parameter	7/21/80	4/15/81	7/21/80	4/15/81	7/21/80	4/1
Sulfate, as SO4	4	5	15	8	8	20
Nitrite, as N	<0.02	<0.02	<0.02	<0.02	<0.02	<0.0
Nitrate, as N	0.04	<0.02	0.18	0.04	0.15	0.
Ammonia, as N	<0.06	<0.05	<0.05	<0.06	<0.06	<0.0
TKN	0.06	0.11	0.56	0.40	0.84	4.
Total Phosphate, as P	<0.04	<0.04	<0.04	0.06	<0.04	<0.0
Phenols	<0.004	----	<0.004	----	<0.004	---
Chromium	<0.005	<0.005	0.1	<0.05	0.1	0.
Copper	<0.1	0.004	<0.1	0.020	<0.1	0.
Lead	0.01	<0.01	0.1	<0.1	0.1	0.
Mercury	<0.001	0.0015	0.0055	<0.0004	0.0042	<0.
Potassium	1.0	1.6	4.6	1.8	4.1	28
Sodium	11.5	10.5	6.0	11.0	10.2	11
Zinc	1.1	0.63	0.07	<0.05	0.06	0.
Cyanide	----	<0.003	----	0.005	----	<0.

MSD-4288-81

May 26, 1981

Subject: Analytical Results

[redacted]

Attention: [redacted]

Dear [redacted]:

The following results were obtained when your samples, received on April 15, 1981, were analyzed following procedures outlined in the 14th Edition of "Standard Methods".

Parameter	Results Well #1	Well #2	Well #3
Quarterly Testing			
pH	7.9	7.1	7.6
Total Dissolved Solids, mg/l	168		
Chloride, mg/l	2.4	20	27
TOC, mg/l	5	2	5
Conductivity, us	260	650	550
Iron, mg/l	0.25	13.0	165
Annual Testing			
Sulfate, mg/l as SO4	5	8.5	19.5
Nitrite, mg/l as N	<0.01	<0.01	<0.01
Nitrate, mg/l as N	<0.01	0.04	0.02
Ammonia, mg/l as N	<0.06	<0.06	<0.06
TKN, mg/l as N	0.11	0.40	4.6
Phosphate, mg/l as P	<0.03	0.06	<0.03
Cyanide, mg/l	<0.003	0.005	<0.003
Chromium, mg/l	<0.005	<0.05	0.28
Copper, mg/l	0.004	0.020	0.27
Lead, mg/l	<0.01	<0.1	0.2
Mercury, ug/l	1.5	<0.4	<0.4
Potassium	1.55	1.80	28.5
Sodium, mg/l	10.5	11.0	11.5
Zinc, mg/l	0.63	<0.05	0.60

Sincerely,

Alison E. Carter

Alison E. Carter, Ph.D.
Laboratory Supervisor
Measurement Services Division

Approved

M. Kawahata, Ph.D., Mgr., MSD

256-711.0

CORPORATION

MSD-4445-81

July 31, 1981

Subject: Analysis of Water

[redacted]

The following results were obtained when your samples, received on July 14, 1981, were analyzed following procedures outlined in the 14th Edition of "Standard Methods".

	Office Well	Landfill #1	Wells #2
pH	8.0	7.1	7.6
Total Dissolved Solids, mg/l	205		
Chloride, mg/l	2.5	27.8	23.8
TOC, mg/l	3	8	18
Conductivity, us	262	650	600
Iron, mg/l	0.15	7.0	55

Sincerely,

Alison E. Carter

Alison E. Carter, Ph.D.
Laboratory Supervisor
Measurement Services Division

Apprved

M. Kawahata, Ph.D.
Manager
Measurement Services Division

256-119.50

ironmentl ons
CORPORATION

PROTECTING MAN'S ENVIRONMEN

MSD-4691-81

November 25, 1981

Reference: Our quotation 7110-3-3669

Subject: Analysis of Water Samples

[redacted]

The following results were obtained when your samples received 10/19/81, were analyzed following procedures outlined in the 14th Edition of "Standard Methods".

Parameter	Landill Well #1	Landfill Well #2	Office Well
pH	7.1	7.7	8.[illegible]
Chloride, mg/l	28.3	20.7	1.[illegible]
TOC, mg/l	28	7	< 1
Conductivity, us	590	680	280
Iron, mg/l	54	22	1.2
Total dissolved solids, mg/l	-	-	163

Sincerely,

Alison E. Carter

Alison E. Carter, Ph.D.
Laboratory Supervisor
Measurement Services Division

Approved

M. Kawahata, Ph.D.
Manager
Measurement Services Division

286 - 150.00+15.00 = 165.00

Environment One CORPORATION

PROTECTING MAN'S ENVIRONMENT

MSD-4910-82

February 22, 1982

Subject: Analysis of Water Samples

[redacted]

The following results were obtained when your samples, received on January 25, 1982, were analyzed following procedures outlined in the 14th Edition of "Standard Methods".

Parameter	Results Well #2	Well #3	Office Well
pH	6.9	7.5	8.0
Total dissolved solids, mg/l			532
Iron, mg/l	22.5	105	0.65
Chloride, mg/l	54.2	59.1	3.5
TOC, mg/l	42	48	<1
Conductivity, us, 25C	900	800	278

Sincerely,

Alison E. Carter

Alison E. Carter, Ph.D.
Laboratory Supervisor
Measurement Services Division

Approved M. Kawanata

M. Kawanata, Ph.D.
Manager
Measurement Services Division

256-150.00

MAR 1 1982

APPENDIX G (c)

NYSDEC SAMPLING OF INACTIVE HAZARDOUS WASTE SITES

ANALYTICAL TESTING RESULTS

Queensbury Mudpond

CLIENT	NYS DEC
CLIENT ID	RH-084-006-001
ERCO ID	22-4652
SAMPLE RECEIVED	6/15/84
ANALYSIS COMPLETED	7/12/84
RESULTS IN	ppb (ug/l)

ERCO / ENERGY RESOURCES CO. INC.

SUMMARY OF
ORGANIC PRIORITY POLLUTANT ANALYSIS

ACID COMPOUNDS

21A	2,4,6-trichlorophenol	ND
22A	p-chloro-m-cresol	ND
24A	2-chlorophenol	ND
31A	2,4-dichlorophenol	ND
34A	2,4-dimethylphenol	ND
57A	2-nitrophenol	ND
58A	4-nitrophenol	ND
59A	2,4-dinitrophenol	ND
60A	4,6-dinitro-o-cresol	ND
64A	pentachlorophenol	ND
65A	phenol	ND

BASE/NEUTRAL COMPOUNDS

1B	acenaphthene	ND
5B	benzidine	ND
8B	1,2,4-trichlorobenzene	ND
9B	hexachlorobenzene	ND
12B	hexachloroethane	ND
18B	bis(2-chloroethyl)ether	ND
20B	2-chloronaphthalene	ND
25B	1,2-dichlorobenzene	ND
26B	1,3-dichlorobenzene	ND
27B	1,4-dichlorobenzene	ND
28B	3,3-dichlorobenzidine	ND
35B	2,4-dinitrotoluene	ND
36B	2,6-dinitrotoluene	ND
37B	1,2-diphenylhydrazine	ND
39B	fluoranthene	ND
40B	4-chlorophenyl phenyl ether	ND
41B	4-bromophenyl phenyl ether	ND

BASE/NEUTRAL COMPOUNDS

42B	bis(2-chloroisopropyl)ether	ND
43B	bis(2-chloroethoxy)methane	ND
52B	hexachlorobutadiene	ND
53B	hexachlorocyclopentadiene	ND
54B	isophorone	ND
55B	naphthalene	ND
56B	nitrobenzene	ND
61B	N-nitrosodimethylamine	ND
62B	N-nitrosodiphenylamine	ND
63B	N-nitrosodi-n-propylamine	ND
66B	bis(2-ethylhexyl)phthalate	ND
67B	butyl benzyl phthalate	ND
68B	di-n-butyl phthalate	ND
69B	di-n-octyl phthalate	ND
70B	diethyl phthalate	ND
71B	dimethyl phthalate	ND
72B	benzo(a)anthracene	ND
73B	benzo(a)pyrene	ND
74B	3,4-benzofluoranthene	ND
75B	benzo(k)fluoranthene	ND
76B	chrysene	ND
77B	acenaphthylene	ND
78B	anthracene	ND
79B	benzo(ghi)perylene	ND
80B	fluorene	ND
81B	phenanthrene	ND
82B	dibenzo(a,h)anthracene	ND
83B	indeno(1,2,3-cd)pyrene	ND
84B	pyrene	ND
129B	2,3,7,8-tetrachlorodibenzo-p-dioxin	ND

ND = None detected above the average reporting limit of 10ppb for acids and 10ppb for B/N.

NA = Not applicable.

*Trace concentrations detected below the average reporting limit.

Reported by: [illegible]
Checked by: [illegible]

Queensbury Tf.
559005

SURROGATE RECOVERIES (%):

ACID		BASE/NEUTRAL	
d_6-phenol	28	d_5-nitrobenzene	52

ORGANICS ANALYSIS DATA SHEET

ERCO / ENERGY RESOURCES CO. INC.

CLIENT NYS DEC

CLIENT I.D. RH-084-006-001

ERCO I.D. 22 - 4652

COMPOUND NAME	FRACTION	SCAN NO. OR RETENTION TIME	ESTIMATED CONCENTRATION (ug/kg)

No unknowns in Acid or B/N fraction

GOODBURY LEACHATE

CLIENT	NYS DEC
CLIENT ID	RH-084-006-002
ERCO ID	22-4663S
SAMPLE RECEIVED	6/15/84
ANALYSIS COMPLETED	
RESULTS IN	ppb (ug/l)

ERCO / ENERGY RESOURCES CO. INC.

SUMMARY OF
ORGANIC PRIORITY POLLUTANT ANALYSIS

ACID COMPOUNDS

21A	2,4,6-trichlorophenol		ND
22A	p-chloro-m-cresol	6%[a]	*3
24A	2-chlorophenol	72%[a]	36
31A	2,4-dichlorophenol		ND
34A	2,4-dimethylphenol		ND
57A	2-nitrophenol		ND
58A	4-nitrophenol	90%[a]	45
59A	2,4-dinitrophenol		ND
60A	4,6-dinitro-o-cresol		ND
64A	pentachlorophenol	6%[a]	3*
65A	phenol	370%[a]	555

BASE/NEUTRAL COMPOUNDS

1B	acenaphthene	144%[a]	72
5B	benzidine		ND
8B	1,2,4-trichlorobenzene	78%[a]	39
9B	hexachlorobenzene		ND
12B	hexachloroethane		ND
18B	bis(2-chloroethyl)ether		ND
20B	2-chloronaphthalene		ND
25B	1,2-dichlorobenzene		ND
26B	1,3-dichlorobenzene		ND
27B	1,4-dichlorobenzene	60%[a]	30
28B	3,3-dichlorobenzidine		ND
35B	2,4-dinitrotoluene	180%[a]	90
36B	2,6-dinitrotoluene		ND
37B	1,2-diphenylhydrazine		ND
39B	fluoranthene		ND
40B	4-chlorophenyl phenyl ether		ND
41B	4-bromophenyl phenyl ether		ND

BASE/NEUTRAL COMPOUNDS

42B	bis(2-chloroisopropyl)ether		ND
43B	bis(2-chloroethoxy)methane		ND
52B	hexachlorobutadiene		ND
53B	hexachlorocyclopentadiene		ND
54B	isophorone		ND
55B	naphthalene		ND
56B	nitrobenzene		ND
61B	N-nitrosodimethylamine		ND
62B	N-nitrosodiphenylamine		ND
63B	N-nitrosodi-n-propylamine	318%[a]	159
66B	bis(2-ethylhexyl)phthalate		42
67B	butyl benzyl phthalate		*
68B	di-n-butyl phthalate	98%[a]	48
69B	di-n-octyl phthalate		*
70B	diethyl phthalate		81
71B	dimethyl phthalate		ND
72B	benzo(a)anthracene		ND
73B	benzo(a)pyrene		ND
74B	3,4-benzofluoranthene		ND
75B	benzo(k)fluoranthene		ND
76B	chrysene		ND
77B	acenaphthylene		ND
78B	anthracene		ND
79B	benzo(ghi)perylene		ND
80B	fluorene		ND
81B	phenanthrene		ND
82B	dibenzo(a,h)anthracene		ND
83B	indeno(1,2,3-cd)pyrene		ND
84B	pyrene	102%[a]	51
129B	2,3,7,8-tetrachlorodibenzo-p-dioxin		ND

ND = None detected above the average reporting limit of 30ppb for acids and 30ppb for B/N.

NA = Not applicable.

*Trace concentrations detected below the average reporting limit.

[a]Recovery of matrix spiked compounds.

Reported by: KC
Checked by: [illegible]

SURROGATE RECOVERIES (%):

ACID		BASE/NEUTRAL	
** d_6-phenol	102	d_5-nitrobenzene	114

CLIENT	NYS DEC
CLIENT ID	RH-084-006-002
ERCO ID	22-4663S
SAMPLE RECEIVED	6/15/84
ANALYSIS COMPLETED	7/17/84
RESULTS IN	ppb (ug/l)

ERCO / ENERGY RESOURCES CO. INC.

SUMMARY OF
ORGANIC PRIORITY POLLUTANT ANALYSIS

COMMENTS

Recovery of several matrix spiked compounds could not be accurately determined because:

1) phenol (370%) - Phenol is present at extremely high concentration in the original unspiked sample.

2) 2,4-Dinitrotoluene (180%) - This compound was quantitated by its characteristic ion at m/z 89, which was also ions generated by the aliphatic acid background.

3) N-nitrosodi-n-propylamine - This compound was quantitated by its characteristic ion at m/z 70, which was also ions generated by the aliphatic acid background.

ORGANICS ANALYSIS DATA SHEET

ERCO / ENERGY RESOURCES CO. INC.

CLIENT NYS DEC

CLIENT I.D.

ERCO I.D. 22 - 4663S

COMPOUND NAME	FRACTION	SCAN NO. OR RETENTION TIME	ESTIMATED CONCENTRATION (ug/l)
cyclohexane	B/N	363	60
aliphatic acid isomer	B/N	476	700
aliphatic acid isomer	B/N	530	75
aliphatic acid isomer	B/N	554	40
aliphatic acid isomer	B/N	608	4900
aliphatic acid isomer	B/N	634	450
aliphatic acid isomer	B/N	688	1800
aliphatic acid isomer	B/N	763	1300
aliphatic acid isomer	B/N	777	900
aliphatic acid isomer	B/N	795	3000
aliphatic acid isomer	B/N	830	350
aliphatic acid isomer	B/N	838	600
benzene butanoic acid,2,5-dimethyl	B/N	1049	150
1H-purine-2,6-dione, 3,7-dihydro-1,3,7-trimethyl	B/N	1240	50
sulfur, mol	B/N	1368	300
4-methylphenol	B/N	604	100

ORGANICS ANALYSIS DATA SHEET

ERCO / ENERGY RESOURCES CO. INC.

CLIENT NYS DEC

CLIENT I.D.

ERCO I.D. 22 - 4663S acid

COMPOUND NAME	FRACTION	SCAN NO. OR RETENTION TIME	ESTIMATED CONCENTRATION (ug/l)
propanoic acid	acid	363	6100
3-pentanol,3-methyl	acid	370	50
pentanol, methyl isomer	acid	373	40
pentanol, methyl isomer	acid	379	60
aliphatic acid isomer	acid	390	190
aliphatic acid isomer	acid	395	90
aliphatic acid isomer	acid	419	50
aliphatic acid isomer	acid	430	40
aliphatic acid isomer	acid	439	60
aliphatic acid isomer	acid	455	60
aliphatic acid isomer	acid	458	80
aliphatic acid isomer	acid	466	100
aliphatic acid isomer	acid	468	60
aliphatic acid isomer	acid	473	30
aliphatic acid isomer	acid	479	50
aliphatic acid isomer	acid	506	12000
aliphatic acid isomer	acid	535	1800
aliphatic acid isomer	acid	539	170
aliphatic acid isomer	acid	566	4700
aliphatic acid isomer	acid	571	40
aliphatic acid isomer	acid	579	100
aliphatic acid isomer	acid	583	80
aliphatic acid isomer	acid	618	21000
aliphatic acid isomer	acid	630	5000
aliphatic acid isomer	acid	640	900
aliphatic acid isomer	acid	653	30
aliphatic acid isomer	acid	658	50
aliphatic acid isomer	acid	660	80
aliphatic acid isomer	acid	665	80
aliphatic acid isomer	acid	668	40
aliphatic acid isomer	acid	702	20000
aliphatic acid isomer	acid	709	2500
aliphatic acid isomer	acid	713	60
aliphatic acid isomer	acid	719	1300
aliphatic acid isomer	acid	736	7400
aliphatic acid isomer	acid	741	220
cyclohexane carboxylic acid	acid	753	1700
aliphatic acid isomer	acid	786	4600
aliphatic acid isomer	acid	836	140
benzenepropanoic acid	acid	909	1400
aliphatic acid isomer	acid	913	40

CLIENT	NYS DEC
CLIENT ID	RH-084-006-002
ERCO ID	22-4653
SAMPLE RECEIVED	6/15/84
ANALYSIS COMPLETED	7/17/184
RESULTS IN	ppb (ug/l)

ERCO / ENERGY RESOURCES CO. INC.

SUMMARY OF
ORGANIC PRIORITY POLLUTANT ANALYSIS

ACID COMPOUNDS

21A	2,4,6-trichlorophenol	ND
22A	p-chloro-m-cresol	ND
24A	2-chlorophenol	ND
31A	2,4-dichlorophenol	ND
34A	2,4-dimethylphenol	ND
57A	2-nitrophenol	ND
58A	4-nitrophenol	ND
59A	2,4-dinitrophenol	ND
60A	4,6-dinitro-o-cresol	ND
64A	pentachlorophenol	ND
65A	phenol ----------	370

BASE/NEUTRAL COMPOUNDS

1B	acenaphthene	ND
5B	benzidine	ND
8B	1,2,4-trichlorobenzene	ND
9B	hexachlorobenzene	ND
12B	hexachloroethane	ND
18B	bis(2-chloroethyl)ether	ND
20B	2-chloronaphthalene	ND
25B	1,2-dichlorobenzene	ND
26B	1,3-dichlorobenzene	ND
27B	1,4-dichlorobenzene	ND
28B	3,3-dichlorobenzidine	ND
35B	2,4-dinitrotoluene	ND
36B	2,6-dinitrotoluene	ND
37B	1,2-diphenylhydrazine	ND
39B	fluoranthene	ND
40B	4-chlorophenyl phenyl ether	ND
41B	4-bromophenyl phenyl ether	ND

BASE/NEUTRAL COMPOUNDS

42B	bis(2-chloroisopropyl)ether	ND
43B	bis(2-chloroethoxy)methane	ND
52B	hexachlorobutadiene	ND
53B	hexachlorocyclopentadiene	ND
54B	isophorone	ND
55B	naphthalene	ND
56B	nitrobenzene	ND
61B	N-nitrosodimethylamine	ND
62B	N-nitrosodiphenylamine	ND
63B	N-nitrosodi-n-propylamine	ND
66B	bis(2-ethylhexyl)phthalate	72
67B	butyl benzyl phthalate ---------	*
68B	di-n-butyl phthalate	ND
69B	di-n-octyl phthalate	ND
70B	diethyl phthalate ----------	48
71B	dimethyl phthalate	ND
72B	benzo(a)anthracene	ND
73B	benzo(a)pyrene	ND
74B	3,4-benzofluoranthene	ND
75B	benzo(k)fluoranthene	ND
76B	chrysene	ND
77B	acenaphthylene	ND
78B	anthracene	ND
79B	benzo(ghi)perylene	ND
80B	fluorene	ND
81B	phenanthrene	ND
82B	dibenzo(a,h)anthracene	ND
83B	indeno(1,2,3-cd)pyrene	ND
84B	pyrene	ND
129B	2,3,7,8-tetrachlorodibenzo-p-dioxin	ND

ND = None detected above the average reporting limit of 30ppb for acids and 30ppb for B/N.

NA = Not applicable.

*Trace concentrations detected below the average reporting limit.

Reported by: KC
Checked by: [illegible]

SURROGATE RECOVERIES (%):

ACID		BASE/NEUTRAL	
** d_6-phenol	60	d_5-nitrobenzene	60
** 2-fluorophenol	48	fluorobiphenyl	54

ORGANICS ANALYSIS DATA SHEET

ERCO / ENERGY RESOURCES CO. INC.

CLIENT NYS DEC

CLIENT I.D.

ERCO I.D. 22 - 4653 B/N

COMPOUND NAME	FRACTION	SCAN NO. OR RETENTION TIME	ESTIMATED CONCENTRATION (ug/l)
cyclopentanol,2-methyl	B/N	357	30
aliphatic acid isomer	B/N	438	100
aliphatic acid isomer	B/N	457	300
aliphatic acid isomer	B/N	674	700
cyclohexane carboxylic acid	B/N	697	150
aliphatic acid isomer	B/N	751	430
aliphatic acid isomer	B/N	781	1400
aliphatic acid isomer	B/N	826	450
benzene propanoic acid	B/N	877	110
benzene butanoic acid, 2,5-dimethyl	B/N	1047	70
1H-purine-2,6-dione, 3,7-dihydro-1,3,7-trimethyl	B/N	1245	50
sulfor, mol	B/N	1367	130

Gary A. Litwin, Section Chief

SAMPLE #8 - [redacted]

Analysis: Organic compounds - 502.1, 503.1, PCBs, priority pollutants and ketones. Inorganic compounds - HSL metals.
Results: trichloethene - 2. ppb, iron - 5140 ppb.

Please note attachments: 1) USGS Map locating site. 2) Area sketch of sampling locations.

sjk/03510626

Attachment

cc: R. Tramontano, w/att.
Dr. N. Kim, w/att.
P. Smith, CRU, w/att.
B. Fear, DOH, w/att.

MR. MARTIN BRANDS

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Corning Tower The Governor Nelson A. Rockefeller Empire State Plaza Albany, New York 12237

David Axelrod, M D
Commissioner

OFFICE OF PUBLIC HEALTH

Linda A Randolph, M D , M P H.
Director

William F Leavy
Executive Deputy Director

December 18, 1990

DEC 2 . 1990

[redacted]

RE: Queensbury Landfill
Queensbury(T), Warren County
Site ID #557005

[redacted]

On October 25, 1990 I collected water samples at your home in the Town of Queensbury, Warren County. The sample was submitted to the NYS Department of Health's Wadsworth Center for Laboratories and Research for analysis of volatile organic compounds and inorganic trace metals. The enclosed report gives the results of the analysis. I have also included an explanation sheet for the NYS Dept. of Health's Analytical Report.

This report indicates that for all inorganic metals analyzed, the concentrations are within the expected background range. Iron exceeds the New York State Department of Health's Drinking Water Standards (Part 5 Secondary Contaminants) of 300 ppb. This is a naturally occurring compound and there is no health significance. This is a secondary standard for aesthetic purposes and may cause turbidity, stains on plumbing fixtures, equipment and laundry.

One anomaly we would like to investigate is the detection of trichloroethene. The level detected of this organic compound is below NYS Department of Health's Drinking Water Standards. I will resample your drinking water to determine the validity of this result.

If you have any questions, I can be reached at (518) 458-6306.

Sincerely,

Stanley J. Kilmer

Stanley J. Kilmer
Program Research Specialist I
Bureau of Environmental Expsoure
Investigation

sms/03510963

Attachment

cc: R. Tramontano/G. Litwin, w/o att.
P. Smith, CRU, w/att.
B. Fear, GFDO, w/o att.
D. Steenberge, DEC, Reg.5, w/att.
~~M. Brand, DEC, w/att.~~
C. Crandall, RD #1, Box 1376
Lake Geoge, NY 12845

1227

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT(REV)

SAMPLE ID: 901002554 SAMPLE RECEIVED:90/10/26/11 CHARGE: 5.10
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: QUEENSBURY LANDFILL SITE #557005
TIME OF SAMPLING: 90/10/25 14:45 DATE PRINTED:90/12/12

REVISION DATE 90/12/10, FOLLOWING PARAMETERS ADDED AFTER SAMPLE REPORTED

FOLLOWING PARAMETERS NOT PART OF TEST PATTERN

PARAMETER	RESULT
CO PHONED MO DAY TIME	12-5 JD

**** END OF REPORT ****

1276

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903730 SAMPLE RECEIVED:90/10/25/ CHARGE: 35.50
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN:10 GAZETTEER CODE:5657
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: QUEENSBURY LANDFILL SITE #557005
[redacted]
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: AQUEOUS-1:VOLATILES,KETONES,PESTICIDES,PCB'S,PRIORITY POLLUTANT
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 90/10/25 14:45 DATE PRINTED:90/12/11

ANALYSIS: VH05021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE REPORTED: 90/11/13 REPORT MAILED OUT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
2,3-DICHLOROPROPENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	2. MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
2-CHLOROETHYLVINYL ETHER	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L

**** CONTINUED ON NEXT PAGE ****

COPIES SENT TO: CO(3), RO(0), LPHE(1), FED( ), INFO-P( ), INFO-L( )

RONALD TRAMONTANO, PE
BUR. ENVIRONMENTAL EXPOSURE INVESTIGAT.
NY STATE DEP'T. HEALTH SUBMITTED BY:KILMER
II UNIVERSITY PLACE
ALBANY, NY 12237 INTERAGENCY MAIL

1277

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903730 SAMPLE RECEIVED:90/10/25/ CHARGE: 35.50
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: QUEENSBURY LANDFILL SITE #557005
TIME OF SAMPLING: 90/10/25 14:45 DATE PRINTED:90/12/11

PARAMETER	RESULT
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
PENTACHLOROETHANE	< 0.5 MCG/L
1-CHLOROCYCLOHEXENE-1	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BIS(2-CHLOROETHYL)ETHER	< 0.5 MCG/L
1,2-DIBROMO-3-CHLOROPROPANE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
BIS(2-CHLOROISOPROPYL)ETHER	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L

ANALYSIS: 5031 AROMATIC PURGEABLES, EPA METHOD 503.1 (DES 310-22)
DATE REPORTED: 90/11/08 REPORT MAILED OUT

PARAMETER	RESULT
BENZENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
ETHYLBENZENE	< 0.5 MCG/L
P-XYLENE	< 0.5 MCG/L
M-XYLENE	< 0.5 MCG/L
O-XYLENE	< 0.5 MCG/L
ISOPROPYLBENZENE (CUMENE)	< 0.5 MCG/L
STYRENE	< 0.5 MCG/L
P-BROMOFLUOROBENZENE	< 0.5 MCG/L
N-PROPYLBENZENE	< 0.5 MCG/L
TERT-BUTYLBENZENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
M-CHLOROTOLUENE	< 0.5 MCG/L
1,3,5-TRIMETHYLBENZENE	< 0.5 MCG/L
1,2,4-TRIMETHYLBENZENE	< 0.5 MCG/L
4-ISOPROPYLTOLUENE (P-CYMENE)	< 0.5 MCG/L
CYCLOPROPYLBENZENE	< 0.5 MCG/L
SEC-BUTYLBENZENE	< 0.5 MCG/L
N-BUTYLBENZENE	< 0.5 MCG/L
2,3-BENZOFURAN	< 0.5 MCG/L
HEXACHLOROBUTADIENE (C-46)	< 0.5 MCG/L
1,2,4-TRICHLOROBENZENE	< 0.5 MCG/L
NAPHTHALENE	< 0.5 MCG/L
1,2,3-TRICHLOROBENZENE	< 0.5 MCG/L
PH OF AROMATIC ALIQUOT	2

**** CONTINUED ON NEXT PAGE ****

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903730 SAMPLE RECEIVED:90/10/25/ CHARGE: 35.50
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: QUEENSBURY LANDFILL SITE #557005
TIME OF SAMPLING: 90/10/25 14:45 DATE PRINTED:90/12/11

ANALYSIS: KET KETONES - PURGE & TRAP TECHNIQUE (DES 310-25)
DATE PRINTED: 90/12/11 FINAL REPORT

PARAMETER	RESULT
2-BUTANONE (METHYL ETHYL KETONE)	< 10. MCG/L
4-METHYL-2-PENTANONE (MIBK)	< 10. MCG/L
ACETONE	< 10. MCG/L
METHYL TERT BUTYL ETHER	< 10. MCG/L

ANALYSIS: XPEST-PCB ORGANOCHLORINE PESTICIDES & PCB'S (DES310-2)
DATE REPORTED: 90/11/27 REPORT MAILED OUT

PARAMETER	RESULT
HCH,ALPHA	< 0.04 MCG/L
HCH,BETA	< 0.04 MCG/L
HCH,GAMMA (LINDANE)	< 0.04 MCG/L
HCH,DELTA	< 0.04 MCG/L
HEPTACHLOR	< 0.05 MCG/L
ALDRIN	< 0.02 MCG/L
HEPTACHLOR EPOXIDE	< 0.05 MCG/L
ENDOSULFAN I	< 0.05 MCG/L
4,4'-DDE	< 0.05 MCG/L
DIELDRIN	< 0.02 MCG/L
ENDRIN	< 0.02 MCG/L
4,4'-DDD	< 0.05 MCG/L
ENDOSULFAN II	< 0.05 MCG/L
ENDRIN ALDEHYDE	< 0.02 MCG/L
ENDOSULFAN SULFATE	< 0.05 MCG/L
4,4'-DDT	< 0.05 MCG/L
METHOXYCHLOR	< 0.5 MCG/L
TOXAPHENE	< 1.0 MCG/L
CHLORDANE	< 0.1 MCG/L
MIREX	< 0.05 MCG/L
PCB,AROCLOR 1221	< 0.05 MCG/L
PCB,AROCLOR 1016/1242	< 0.05 MCG/L
PCB,AROCLOR 1248	< 0.05 MCG/L
PCB,AROCLOR 1254	< 0.05 MCG/L
PCB,AROCLOR 1260	< 0.05 MCG/L

ANALYSIS: GC-FID-A PRIORITY POLLUTANTS*ACIDS*GC/FID RESULTS
DATE REPORTED: 90/11/27 REPORT MAILED OUT

PARAMETER	RESULT
PHENOL	< 10. MCG/L
2-CHLOROPHENOL	< 10. MCG/L
2-NITROPHENOL	< 10. MCG/L
2,4-DIMETHYLPHENOL	< 10. MCG/L
2,4-DICHLOROPHENOL	< 10. MCG/L
4-CHLORO-3-METHYLPHENOL	< 10. MCG/L

**** CONTINUED ON NEXT PAGE ****

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903730 SAMPLE RECEIVED:90/10/25/ CHARGE: 35.50
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: QUEENSBURY LANDFILL SITE #557005
TIME OF SAMPLING: 90/10/25 14:45 DATE PRINTED:90/12/11

PARAMETER	RESULT
2,4,6-TRICHLOROPHENOL	< 10. MCG/L
2,4,5-TRICHLOROPHENOL	< 10. MCG/L
2,4-DINITROPHENOL	< 10. MCG/L
4-NITROPHENOL	< 10. MCG/L
2-METHYL-4,6-DINITROPHENOL	< 10. MCG/L
PENTACHLOROPHENOL	< 10. MCG/L

ANALYSIS: GC-FID-BN PRIORITY POLLUTANTS*BASE/NEUTRALS*GC/FID RESULTS
DATE REPORTED: 90/11/27 REPORT MAILED OUT

PARAMETER	RESULT
N-NITROSODI-N-PROPYLAMINE	< 10. MCG/L
HEXACHLOROETHANE	< 10. MCG/L
NITROBENZENE	< 10. MCG/L
ISOPHORONE	< 10. MCG/L
BIS(2-CHLOROETHOXY)METHANE	< 10. MCG/L
HEXACHLOROCYCLOPENTADIENE (C-56)	< 10. MCG/L
2-CHLORONAPHTHALENE	< 10. MCG/L
2,6-DINITROTOLUENE	< 10. MCG/L
ACENAPHTHYLENE	< 10. MCG/L
DIMETHYLPHTHALATE	< 10. MCG/L
ACENAPHTHENE	< 10. MCG/L
2,4-DINITROTOLUENE	< 10. MCG/L
DIETHYLPHTHALATE	< 10. MCG/L
FLUORENE	< 10. MCG/L
N-NITROSODIPHENYLAMINE	< 10. MCG/L
1,2-DIPHENYLHYDRAZINE	< 10. MCG/L
4-BROMOPHENYL PHENYL ETHER	< 10. MCG/L
HEXACHLOROBENZENE	< 10. MCG/L
PHENANTHRENE	< 10. MCG/L
ANTHRACENE	< 10. MCG/L
DI-N-BUTYL PHTHALATE	< 10. MCG/L
FLUORANTHENE	< 10. MCG/L
PYRENE	< 10. MCG/L
BENZIDINE	< 30. MCG/L
BUTYL BENZYL PHTHALATE	< 30. MCG/L
BENZO(A)ANTHRACENE	< 10. MCG/L
3,3'-DICHLOROBENZIDINE	< 10. MCG/L
CHRYSENE	< 10. MCG/L
BIS(2-ETHYLHEXYL)PHTHALATE	< 30. MCG/L
DI-N-OCTYL PHTHALATE	< 30. MCG/L
BENZO(B)FLUORANTHENE	< 20. MCG/L
BENZO(K)FLUORANTHENE	< 20. MCG/L
BENZO(A)PYRENE	< 20. MCG/L
INDENO(1,2,3-CD)PYRENE	< 20. MCG/L
DIBENZO(AH)ANTHRACENE	< 20. MCG/L
BENZO(GHI)PERYLENE	< 20. MCG/L

**** END OF REPORT ****

MR. MARTIN BRANDS

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Corning Tower The Governor Nelson A. Rockefeller Empire State Plaza Albany, New York 12237

David Axelrod, M.D.
Commissioner

OFFICE OF PUBLIC HEALTH

Linda A. Randolph, M.D., M.P.H.
Director

William F. Leavy
Executive Deputy Director

December 18, 1990

DEC 2 1990

[redacted]

RE: Queensbury Landfill
Queensbury(T), Warren County
Site ID #557005

[redacted]:

On October 25, 1990 I collected water samples at your home in the Town of Queensbury, Warren County. The sample was submitted to the NYS Department of Health's Wadsworth Center for Laboratories and Research for analysis of volatile organic compounds and inorganic trace metals. The enclosed report gives the results of the analysis. I have also included an explanation sheet for the NYS Dept. of Health's Analytical Report.

This report indicates that for all parameters analyzed, the concentrations are within the expected background range. Sodium exceeds the New York State Department of Health's Drinking Water Standards (Part 5 Secondary Contaminants). Although there are no designated limits, water containing more than 20 part per million of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than **270 mg/L of sodium should not be used for drinking by people on moderately restricted** sodium diets.

If you have any questions, I can be reached at (518) 458-6306.

Sincerely,

Stanley J. Kilmer

Stanley J. Kilmer
Program Research Specialist I
Bureau of Environmental Expsoure
Investigation

sms/03510903

Attachment

cc: R. Tramontano/G. Litwin, w/o att.
P. Smith, CRU, w/att.
B. Fear, GFDO, w/o att.
D. Steenberge, DEC, Reg.5, w/att.
[redacted]

1263

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903729 SAMPLE RECEIVED:90/10/25/ CHARGE: 19.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN:10 GAZETTEER CODE:5657
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: QUEENSBURY LANDFILL SITE #557005
[redacted]
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VOL3-KET:PURGEABLES & KETONES
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 90/10/25 14:30 DATE PRINTED:90/12/11

ANALYSIS: VH05021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE REPORTED: 90/11/13 REPORT MAILED OUT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
2,3-DICHLOROPROPENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
2-CHLOROETHYLVINYL ETHER	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L

**** CONTINUED ON NEXT PAGE ****

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RONALD TRAMONTANO, PE
BUR. ENVIRONMENTAL EXPOSURE INVESTIGAT.
NY STATE DEP'T. HEALTH SUBMITTED BY:KILMER
II UNIVERSITY PLACE
ALBANY, NY 12237 INTERAGENCY MAIL

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903729 SAMPLE RECEIVED:90/10/25/ CHARGE: 19.00
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: QUEENSBURY LANDFILL SITE #557005
TIME OF SAMPLING: 90/10/25 14:30 DATE PRINTED:90/12/11

PARAMETER	RESULT
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
PENTACHLOROETHANE	< 0.5 MCG/L
1-CHLOROCYCLOHEXENE-1	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BIS(2-CHLOROETHYL)ETHER	< 0.5 MCG/L
1,2-DIBROMO-3-CHLOROPROPANE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
BIS(2-CHLOROISOPROPYL)ETHER	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L

ANALYSIS: 5031 AROMATIC PURGEABLES, EPA METHOD 503.1 (DES 310-22)
DATE REPORTED: 90/11/08 REPORT MAILED OUT

PARAMETER	RESULT
BENZENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
ETHYLBENZENE	< 0.5 MCG/L
P-XYLENE	< 0.5 MCG/L
M-XYLENE	< 0.5 MCG/L
O-XYLENE	< 0.5 MCG/L
ISOPROPYLBENZENE (CUMENE)	< 0.5 MCG/L
STYRENE	< 0.5 MCG/L
P-BROMOFLUOROBENZENE	< 0.5 MCG/L
N-PROPYLBENZENE	< 0.5 MCG/L
TERT-BUTYLBENZENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
M-CHLOROTOLUENE	< 0.5 MCG/L
1,3,5-TRIMETHYLBENZENE	< 0.5 MCG/L
1,2,4-TRIMETHYLBENZENE	< 0.5 MCG/L
4-ISOPROPYLTOLUENE (P-CYMENE)	< 0.5 MCG/L
CYCLOPROPYLBENZENE	< 0.5 MCG/L
SEC-BUTYLBENZENE	< 0.5 MCG/L
N-BUTYLBENZENE	< 0.5 MCG/L
2,3-BENZOFURAN	< 0.5 MCG/L
HEXACHLOROBUTADIENE (C-46)	< 0.5 MCG/L
1,2,4-TRICHLOROBENZENE	< 0.5 MCG/L
NAPHTHALENE	< 0.5 MCG/L
1,2,3-TRICHLOROBENZENE	< 0.5 MCG/L
PH OF AROMATIC ALIQUOT	2

**** CONTINUED ON NEXT PAGE ****

1265

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903729 SAMPLE RECEIVED:90/10/25/ CHARGE: 19.00
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: QUEENSBURY LANDFILL SITE #557005
TIME OF SAMPLING: 90/10/25 14:30 DATE PRINTED:90/12/11

ANALYSIS: KET KETONES - PURGE & TRAP TECHNIQUE (DES 310-25)
DATE PRINTED: 90/12/11 FINAL REPORT

PARAMETER	RESULT
2-BUTANONE (METHYL ETHYL KETONE)	< 10. MCG/L
4-METHYL-2-PENTANONE (MIBK)	< 10. MCG/L
ACETONE	< 10. MCG/L
METHYL TERT BUTYL ETHER	< 10. MCG/L

**** END OF REPORT ****

0421

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 901002553 SAMPLE RECEIVED:90/10/26/11 CHARGE: 5.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN:10 GAZETTEER CODE:5657
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: QUEENSBURY LANDFILL SITE #557005
[redacted]
REPORTING LAB: 10:LABORATORY OF INORGANIC ANALYTICAL CHEMISTRY - ALBANY
TEST PATTERN: 10-001:SAFE DRINKING WATER ACT - METALS ONLY
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 90/10/25 14:30 DATE PRINTED:90/11/28

ANALYSIS: ICP-1 ICP GROUPING 1

PARAMETER	RESULT
MERCURY	< 0.2 MCG/L
ARSENIC	< 10. MCG/L
SELENIUM	< 5. MCG/L
LEAD	< 10. MCG/L
BERYLLIUM	< 1. MCG/L
SILVER	< 10. MCG/L
BARIUM	< 5. MCG/L
CADMIUM	< 5. MCG/L
COBALT	< 5. MCG/L
CHROMIUM	< 5. MCG/L
COPPER	< 5. MCG/L
IRON	< 10. MCG/L
MANGANESE	< 5. MCG/L
NICKEL	< 5. MCG/L
STRONTIUM	< 50. MCG/L
TITANIUM	< 5. MCG/L
VANADIUM	< 5. MCG/L
ZINC	14. MCG/L
MOLYBDENUM	< 20. MCG/L
ANTIMONY	< 80. MCG/L
TIN	< 50. MCG/L
THALLIUM	< 80. MCG/L
ALUMINUM	< 100. MCG/L
CALCIUM	0.56 MG/L
POTASSIUM	< 1. MG/L
MAGNESIUM	< 1. MG/L
SODIUM	139. MG/L

**** END OF REPORT ****

COPIES SENT TO: CO(3), RO(0), LPHE(1), FED( ), INFO-P( ), INFO-L( )

RONALD TRAMONTANO, PE
BUR. ENVIRONMENTAL EXPOSURE INVESTIGAT.
NY STATE DEP'T. HEALTH SUBMITTED BY:KILMER
II UNIVERSITY PLACE
ALBANY, NY 12237 INTERAGENCY MAIL

MR. BRANDS

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Corning Tower The Governor Nelson A. Rockefeller Empire State Plaza Albany, New York 12237

David Axelrod, M D
Commissioner

OFFICE OF PUBLIC HEALTH

Linda A Randolph M D, M P H
Director

William F Leavy
Executive Deputy Director

December 18, 1990

DEC 2 [illegible]

[redacted]

RE: Queensbury Landfill
Queenbury(T), Warren County
Site ID #557005

[redacted]

On October 25, 1990 I collected water samples at your home in the Town of Queensbury, Warren County. The sample was submitted to the NYS Department of Health's Wadsworth Center for Laboratories and Research for analysis of volatile organic compounds and inorganic trace metals. The enclosed report gives the results of the analysis. I have also included an explanation sheet for the NYS Dept. of Health's Analytical Report.

This report indicates that for all inorganic metals analyzed, the concentrations are within the expected background range. Iron exceeds the New York State Department of Health's Drinking Water Standards (Part 5 Secondary Contaminants) of 300 ppb for each metal and 500 ppb for the combination. These are naturally occurring compounds and there is no health significance. This is a secondary standard for aesthetic purposes and may cause turbidity, stains on plumbing fixtures, equipment and laundry.

One anomaly we would like to investigate is the detection of 1,1-dichloroethane. The level detected of this organic compound is below the NYS Department of Health's Drinking Water Standards. I will resample your drinking water to determine the validity of this result.

If you have any questions, I can be reached at (518) 458-6306.

Sincerely,

Stanley J. Kilmer

Stanley J. Kilmer
Program Research Specialist I
Bureau of Environmental Expsoure
Investigation

sms/03510532

Attachment

cc: R. Tramontano/G. Litwin, w/o att.
P. Smith, CRU, w/att.
B. Fear, GFDO, w/o att.
D. Steenberge, DEC, Reg.5, w/att.
[redacted] Brang, DEC, w/att.

1214

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT(REV)

SAMPLE ID: 901002549 SAMPLE RECEIVED:90/10/26/11 CHARGE: 5.10
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN:10 GAZETTEER CODE:5657
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: QUEENSBURY LANDFILL SITE #557005
[redacted]
REPORTING LAB: 10:LABORATORY OF INORGANIC ANALYTICAL CHEMISTRY - ALBAN
TEST PATTERN: 10-001:SAFE DRINKING WATER ACT - METALS ONLY
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 90/10/25 12:45 DATE PRINTED:90/12/12

ANALYSIS: ICP-1 ICP GROUPING 1

PARAMETER	RESULT
MERCURY	< 0.2 MCG/L
ARSENIC	< 10. MCG/L
SELENIUM	< 5. MCG/L
LEAD	< 10. MCG/L
BERYLLIUM	< 1. MCG/L
SILVER	< 10. MCG/L
BARIUM	216. MCG/L
CADMIUM	< 5. MCG/L
COBALT	< 5. MCG/L
CHROMIUM	< 5. MCG/L
COPPER	< 5. MCG/L
IRON	1820. MCG/L
MANGANESE	2060. MCG/L
NICKEL	8. MCG/L
STRONTIUM	526. MCG/L
TITANIUM	< 5. MCG/L
VANADIUM	< 5. MCG/L
ZINC	< 10. MCG/L
MOLYBDENUM	< 20. MCG/L
ANTIMONY	< 80. MCG/L
TIN	< 50. MCG/L
THALLIUM	< 80. MCG/L
ALUMINUM	< 100. MCG/L
CALCIUM	123. MG/L
POTASSIUM	1.8 MG/L
MAGNESIUM	39.1 MG/L
SODIUM	17.5 MG/L

**** CONTINUED ON NEXT PAGE ****

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RONALD TRAMONTANO, PE
BUR. ENVIRONMENTAL EXPOSURE INVESTIGAT.
NY STATE DEP'T. HEALTH SUBMITTED BY:KILMER
II UNIVERSITY PLACE
ALBANY, NY 12237 INTERAGENCY MAIL

1215

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT(REV)

SAMPLE ID: 901002549 SAMPLE RECEIVED:90/10/26/11 CHARGE: 5.10
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: QUEENSBURY LANDFILL SITE #557005
TIME OF SAMPLING: 90/10/25 12:45 DATE PRINTED:90/12/12

REVISION DATE 90/12/10, FOLLOWING PARAMETERS ADDED AFTER SAMPLE REPORTED

FOLLOWING PARAMETERS NOT PART OF TEST PATTERN

PARAMETER	RESULT
CO PHONED MO DAY TIME	12-5 JD

**** END OF REPORT ****

1239

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903726 SAMPLE RECEIVED:90/10/25/ CHARGE: 19.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN:10 GAZETTEER CODE:5657
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: QUEENSBURY LANDFILL, SITE #557005
DESCRIPTION: [redacted]
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VOL3-KET:PURGEABLES & KETONES
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 90/10/25 12:45 DATE PRINTED:90/12/11

ANALYSIS: VHC5021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE REPORTED: 90/11/21 REPORT MAILED OUT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	1. MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
2,3-DICHLOROPROPENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
2-CHLOROETHYLVINYL ETHER	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L

**** CONTINUED ON NEXT PAGE ****

COPIES SENT TO: CO(3), RO(0), LPHE(1), FED( ), INFO-P( ), INFO-L( )

RONALD TRAMONTANO, PE
BUR. ENVIRONMENTAL EXPOSURE INVESTIGAT.
NY STATE DEP'T. HEALTH SUBMITTED BY:KILMER
II UNIVERSITY PLACE
ALBANY, NY 12237 INTERAGENCY MAIL

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903726 SAMPLE RECEIVED:90/10/25/ CHARGE: 19.00
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: QUEENSBURY LANDFILL, SITE #557005
TIME OF SAMPLING: 90/10/25 12:45 DATE PRINTED:90/12/11

PARAMETER	RESULT
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
PENTACHLOROETHANE	< 0.5 MCG/L
1-CHLOROCYCLOHEXENE-1	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BIS(2-CHLOROETHYL)ETHER	< 0.5 MCG/L
1,2-DIBROMO-3-CHLOROPROPANE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
BIS(2-CHLOROISOPROPYL)ETHER	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L

ANALYSIS: 5031 AROMATIC PURGEABLES, EPA METHOD 503.1 (DES 310-22)
DATE REPORTED: 90/11/08 REPORT MAILED OUT

PARAMETER	RESULT
BENZENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
ETHYLBENZENE	< 0.5 MCG/L
P-XYLENE	< 0.5 MCG/L
M-XYLENE	< 0.5 MCG/L
O-XYLENE	< 0.5 MCG/L
ISOPROPYLBENZENE (CUMENE)	< 0.5 MCG/L
STYRENE	< 0.5 MCG/L
P-BROMOFLUOROBENZENE	< 0.5 MCG/L
N-PROPYLBENZENE	< 0.5 MCG/L
TERT-BUTYLBENZENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
M-CHLOROTOLUENE	< 0.5 MCG/L
1,3,5-TRIMETHYLBENZENE	< 0.5 MCG/L
1,2,4-TRIMETHYLBENZENE	< 0.5 MCG/L
4-ISOPROPYLTOLUENE (P-CYMENE)	< 0.5 MCG/L
CYCLOPROPYLBENZENE	< 0.5 MCG/L
SEC-BUTYLBENZENE	< 0.5 MCG/L
N-BUTYLBENZENE	< 0.5 MCG/L
2,3-BENZOFURAN	< 0.5 MCG/L
HEXACHLOROBUTADIENE (C-46)	< 0.5 MCG/L
1,2,4-TRICHLOROBENZENE	< 0.5 MCG/L
NAPHTHALENE	< 0.5 MCG/L
1,2,3-TRICHLOROBENZENE	< 0.5 MCG/L
PH OF AROMATIC ALIQUOT	2

**** CONTINUED ON NEXT PAGE ****

1241

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903726 SAMPLE RECEIVED:90/10/25/ CHARGE: 19.00
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: QUEENSBURY LANDFILL, SITE #557005
TIME OF SAMPLING: 90/10/25 12:45 DATE PRINTED:90/12/11

ANALYSIS: KET KETONES - PURGE & TRAP TECHNIQUE (DES 310-25)
DATE PRINTED: 90/12/11 FINAL REPORT

PARAMETER	RESULT
2-BUTANONE (METHYL ETHYL KETONE)	< 10. MCG/L
4-METHYL-2-PENTANONE (MIBK)	< 10. MCG/L
ACETONE	< 10. MCG/L
METHYL TERT BUTYL ETHER	< 10. MCG/L

**** END OF REPORT ****

MR. BRAND

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Corning Tower The Governor Nelson A. Rockefeller Empire State Plaza Albany, New York 12237

David Axelrod, M.D.
Commissioner

OFFICE OF PUBLIC HEALTH

Linda A. Randolph, M.D., M.P.H.
Director

William F. Leavy
Executive Deputy Director

December 18, 1990

DEC 2 1990

[redacted]

RE: Queensbury Landfill
Queensbury(T), Warren County
Site ID #557005

[redacted]

On October 25, 1990 I collected water samples at your home in the Town of Queensbury, Warren County. Landfill Office. The sample was submitted to the NYS Department of Health's Wadsworth Center for Laboratories and Research for analysis of volatile organic compounds and inorganic trace metals. The enclosed report gives the results of the analysis. I have also included an explanation sheet for the NYS Dept. of Health's Analytical Report.

This report indicates that for all parameters analyzed, the concentrations are within the expected background range. Iron exceeds the New York State Department of Health's Drinking Water Standards (Part 5 Secondary Contaminants) of 300 ppb. This is a naturally occurring compound and there is no health significance. This is a secondary standard for aesthetic purposes and may cause turbidity, stains on plumbing fixtures, equipment and laundry.

If you have any questions, I can be reached at (518) 458-6306.

Sincerely,

Stanley J. Kilmer

Stanley J. Kilmer
Program Research Specialist I
Bureau of Environmental Expsoure
Investigation

sms/03511009

Attachment

cc: R. Tramontano/G. Litwin, w/o att.
P. Smith, CRU, w/att.
B. Fear, FGDO, w/o att.
D. Steenberge, DEC, Reg.5, w/att.
[redacted]

1222

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT(REV)

SAMPLE ID: 901002550 SAMPLE RECEIVED:90/10/26/11 CHARGE: 5.10
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN:10 GAZETTEER CODE:5657
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: QUEENSBURY LANDFILL SITE #557005
[redacted]
REPORTING LAB: 10:LABORATORY OF INORGANIC ANALYTICAL CHEMISTRY - ALBAN
TEST PATTERN: 10-001:SAFE DRINKING WATER ACT - METALS ONLY
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 90/10/25 13:15 DATE PRINTED:90/12/12

ANALYSIS: ICP-1 ICP GROUPING 1

PARAMETER	RESULT
MERCURY	< 0.2 MCG/L
ARSENIC	< 10. MCG/L
SELENIUM	< 5. MCG/L
LEAD	< 10. MCG/L
BERYLLIUM	< 1. MCG/L
SILVER	< 10. MCG/L
BARIUM	26. MCG/L
CADMIUM	< 5. MCG/L
COBALT	< 5. MCG/L
CHROMIUM	< 5. MCG/L
COPPER	< 5. MCG/L
IRON	441. MCG/L
MANGANESE	36. MCG/L
NICKEL	< 5. MCG/L
STRONTIUM	267. MCG/L
TITANIUM	< 5. MCG/L
VANADIUM	< 5. MCG/L
ZINC	< 10. MCG/L
MOLYBDENUM	< 20. MCG/L
ANTIMONY	< 80. MCG/L
TIN	< 50. MCG/L
THALLIUM	< 60. MCG/L
ALUMINUM	< 100. MCG/L
CALCIUM	44.2 MG/L
POTASSIUM	1.0 MG/L
MAGNESIUM	16.0 MG/L
SODIUM	3.8 MG/L

**** CONTINUED ON NEXT PAGE ****

COPIES SENT TO: CO(3), RO(0), LPHE(1), FED(0), INFO-P(0), INFO-L(1)

RONALD TRAMONTANO, PE
BUR. ENVIRONMENTAL EXPOSURE INVESTIGAT.
NY STATE DEP'T. HEALTH SUBMITTED BY:KILMER
II UNIVERSITY PLACE
ALBANY, NY 12237 INTERAGENCY MAIL

1223

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT(REV)

SAMPLE ID: 901002550 SAMPLE RECEIVED:90/10/26/11 CHARGE: 5.10
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: QUEENSBURY LANDFILL SITE #557005
TIME OF SAMPLING: 90/10/25 13:15 DATE PRINTED:90/12/12

REVISION DATE 90/12/10, FOLLOWING PARAMETERS ADDED AFTER SAMPLE REPORTED

FOLLOWING PARAMETERS NOT PART OF TEST PATTERN

PARAMETER	RESULT
CO PHONED MO DAY TIME	12-5 JD

**** END OF REPORT ****

1245

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903727 SAMPLE RECEIVED:90/10/25/ CHARGE: 19.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN:10 GAZETTEER CODE:5657
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: QUEENSBURY LANDFILL, SITE #557005
DESCRIPTION: [redacted]
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VOL3-KET:PURGEABLES & KETONES
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 90/10/25 13:15 DATE PRINTED:90/12/11

ANALYSIS: VH05021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE REPORTED: 90/11/21 REPORT MAILED OUT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
2,3-DICHLOROPROPENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
2-CHLOROETHYLVINYL ETHER	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L

**** CONTINUED ON NEXT PAGE ****

COPIES SENT TO: CO(3), RO(0), LPHE(1), FED( ), INFO-P( ), INFO-L( )

RONALD TRAMONTANO, PE
BUR. ENVIRONMENTAL EXPOSURE INVESTIGAT.
NY STATE DEP'T. HEALTH SUBMITTED BY:KILMER
II UNIVERSITY PLACE
ALBANY, NY 12237 INTERAGENCY MAIL

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903727 SAMPLE RECEIVED:90/10/25/ CHARGE: 19.00
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: QUEENSBURY LANDFILL, SITE #557005
TIME OF SAMPLING: 90/10/25 13:15 DATE PRINTED:90/12/11

PARAMETER	RESULT
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
PENTACHLOROETHANE	< 0.5 MCG/L
1-CHLOROCYCLOHEXENE-1	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BIS(2-CHLOROETHYL)ETHER	< 0.5 MCG/L
1,2-DIBROMO-3-CHLOROPROPANE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
BIS(2-CHLOROISOPROPYL)ETHER	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L

ANALYSIS: 5031 AROMATIC PURGEABLES, EPA METHOD 503.1 (DES 310-22)
DATE REPORTED: 90/11/08 REPORT MAILED OUT

PARAMETER	RESULT
BENZENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
ETHYLBENZENE	< 0.5 MCG/L
P-XYLENE	< 0.5 MCG/L
M-XYLENE	< 0.5 MCG/L
O-XYLENE	< 0.5 MCG/L
ISOPROPYLBENZENE (CUMENE)	< 0.5 MCG/L
STYRENE	< 0.5 MCG/L
P-BROMOFLUOROBENZENE	< 0.5 MCG/L
N-PROPYLBENZENE	< 0.5 MCG/L
TERT-BUTYLBENZENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
M-CHLOROTOLUENE	< 0.5 MCG/L
1,3,5-TRIMETHYLBENZENE	< 0.5 MCG/L
1,2,4-TRIMETHYLBENZENE	< 0.5 MCG/L
4-ISOPROPYLTOLUENE (P-CYMENE)	< 0.5 MCG/L
CYCLOPROPYLBENZENE	< 0.5 MCG/L
SEC-BUTYLBENZENE	< 0.5 MCG/L
N-BUTYLBENZENE	< 0.5 MCG/L
2,3-BENZOFURAN	< 0.5 MCG/L
HEXACHLOROBUTADIENE (C-46)	< 0.5 MCG/L
1,2,4-TRICHLOROBENZENE	< 0.5 MCG/L
NAPHTHALENE	< 0.5 MCG/L
1,2,3-TRICHLOROBENZENE	< 0.5 MCG/L
PH OF AROMATIC ALIQUOT	2

**** CONTINUED ON NEXT PAGE ****

1247

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903727 SAMPLE RECEIVED:90/10/25/ CHARGE: 19.00
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: QUEENSBURY LANDFILL, SITE #557005
TIME OF SAMPLING: 90/10/25 13:15 DATE PRINTED:90/12/11

ANALYSIS: KET KETONES - PURGE & TRAP TECHNIQUE (DES 310-25)
DATE PRINTED: 90/12/11 FINAL REPORT

PARAMETER	RESULT
2-BUTANONE (METHYL ETHYL KETONE)	< 10. MCG/L
4-METHYL-2-PENTANONE (MIBK)	< 10. MCG/L
ACETONE	< 10. MCG/L
METHYL TERT BUTYL ETHER	< 10. MCG/L

**** END OF REPORT ****

MR. BRANDI

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Corning Tower The Governor Nelson A. Rockefeller Empire State Plaza Albany, New York 12237

David Axelrod, M D
Commissioner

OFFICE OF PUBLIC HEALTH

Linda A Randolph, M D, M P H
Director

William F Leavy
Executive Deputy Director

December 18, 1990

DEC 2

[redacted]

RE: Queensbury Landfill
Queensubry(T), Warren County
Site ID #557005

On October 25, 1990 I collected water samples at the Ridge Jeninsville Park in the Town of Queensbury, Warren County. The sample was submitted to the NYS Department of Health's Wadsworth Center for Laboratories and Research for analysis of volatile organic compounds and inorganic trace metals. The enclosed report gives the results of the analysis. I have also included an explanation sheet for the NYS Dept. of Health's Analytical Report.

This report indicates that for all parameters analyzed, the concentrations are within the expected background range. Sodium exceeds the New York State Department of Health's Drinking Water Standards (Part 5 Secondary Contaminants). Although there are no designated limits, water containing more than 20 part per million of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 (ppm) of sodium should not be used for drinking by people on moderately restricted sodium diets.

If you have any questions, I can be reached at (518) 458-6306.

Sincerely,

Stanley J. Kilmer

Stanley J. Kilmer
Program Research Specialist I
Bureau of Environmental Expsoure
Investigation

sms/03510722

Attachment

cc: R. Tramontano/G. Litwin, w/o att.
P. Smith, CRU, w/att.
B. Fear, GFDO, w/att.
D. Steenberge, DEC, Reg.5, w/att.
[redacted]

MR. BRAND

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Corning Tower The Governor Nelson A. Rockefeller Empire State Plaza Albany, New York 12237

David Axelrod, M.D.
Commissioner

OFFICE OF PUBLIC HEALTH

Linda A. Randolph, M.D., M.P.H.
Director

William F. Leavy
Executive Deputy Director

December 18, 1990

DEC -

[redacted]

RE: Queensbury Landfill
Queensbury(T), Warren County
Site ID #557005

[redacted]:

On October 25, 1990 I collected water samples at your home in the Town of Queensbury, Warren County. The sample was submitted to the NYS Department of Health's Wadsworth Center for Laboratories and Research for analysis of volatile organic compounds and inorganic trace metals. The enclosed report gives the results of the analysis. I have also included an explanation sheet for the NYS Dept. of Health's Analytical Report.

This report indicates that for all parameters analyzed, the concentrations are within the expected background range. Iron exceeds the New York State Department of Health's Drinking Water Standards (Part 5 Secondary Contaminants) of 300 ppb. This is a naturally occurring compound and there is no health significance. This is a secondary standard for aesthetic purposes and may cause turbidity, stains on plumbing fixtures, equipment and laundry.

If you have any questions, I can be reached at (518) 458-6306.

Sincerely,

Stanley J. Kilmer

Stanley J. Kilmer
Program Research Specialist I
Bureau of Environmental Expsoure
Investigation

sms/03511003

Attachment

cc: R. Tramontano/G. Litwin, w/o att.
P. Smith, CRU, w/att.
B. Fear, GFDO, w/o att.
D. Steenberge, DEC, Reg.5, w/att.
[redacted] DEC, w/att.

1210

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT(REV)

SAMPLE ID: 901002547 SAMPLE RECEIVED:90/10/26/11 CHARGE: 5.10
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN:10 GAZETTEER CODE:5657
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LATITUDE: , LONGITUDE: . Z DIRECTION:
LOCATION: QUEENSBURY LANDFILL SITE #557005
[redacted]
REPORTING LAB: 10:LABORATORY OF INORGANIC ANALYTICAL CHEMISTRY - ALBAN
TEST PATTERN: 10-001:SAFE DRINKING WATER ACT - METALS ONLY
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 90/10/25 11:30 DATE PRINTED:90/12/12

ANALYSIS: ICP-1 ICP GROUPING 1

PARAMETER	RESULT
MERCURY	< 0.2 MCG/L
ARSENIC	< 10. MCG/L
SELENIUM	< 5. MCG/L
LEAD	< 10. MCG/L
BERYLLIUM	< 1. MCG/L
SILVER	< 10. MCG/L
BARIUM	225. MCG/L
CADMIUM	< 5. MCG/L
COBALT	< 5. MCG/L
CHROMIUM	< 5. MCG/L
COPPER	< 5. MCG/L
IRON	1940. MCG/L
MANGANESE	66. MCG/L
NICKEL	< 5. MCG/L
STRONTIUM	624. MCG/L
TITANIUM	< 5. MCG/L
VANADIUM	< 5. MCG/L
ZINC	< 10. MCG/L
MOLYBDENUM	< 20. MCG/L
ANTIMONY	< 80. MCG/L
TIN	< 50. MCG/L
THALLIUM	< 80. MCG/L
ALUMINUM	< 100. MCG/L
CALCIUM	73.8 MG/L
POTASSIUM	1.8 MG/L
MAGNESIUM	37.1 MG/L
SODIUM	16.2 MG/L

**** CONTINUED ON NEXT PAGE ****

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RONALD TRAMONTANO, PE
BUR. ENVIRONMENTAL EXPOSURE INVESTIGAT.
NY STATE DEP'T. HEALTH SUBMITTED BY:KILMER
II UNIVERSITY PLACE
ALBANY, NY 12237 INTERAGENCY MAIL

1211

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT(REV)

SAMPLE ID: 901002547 SAMPLE RECEIVED:90/10/26/11 CHARGE: 5.10
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: QUEENSBURY LANDFILL SITE #557005
TIME OF SAMPLING: 90/10/25 11:30 DATE PRINTED:90/12/12

REVISION DATE 90/12/10, FOLLOWING PARAMETERS ADDED AFTER SAMPLE REPORTED

FOLLOWING PARAMETERS NOT PART OF TEST PATTERN

PARAMETER	RESULT
CO PHONED MO DAY TIME	12-5 JD

**** END OF REPORT ****

1219

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903724 SAMPLE RECEIVED:90/10/25/ CHARGE: 35.50
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN:10 GAZETTEER CODE:5657
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: QUEENSBURY LANDFILL, SITE #557005

REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: AQUEOUS-1:VOLATILES,KETONES,PESTICIDES,PCB'S,PRIORITY POLLUTANT
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 90/10/25 11:30 DATE PRINTED:90/12/11

ANALYSIS: VH05021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE REPORTED: 90/11/21 REPORT MAILED OUT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
2,3-DICHLOROPROPENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
2-CHLOROETHYLVINYL ETHER	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L

**** CONTINUED ON NEXT PAGE ****

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RONALD TRAMONTANO, PE
BUR. ENVIRONMENTAL EXPOSURE INVESTIGAT.
NY STATE DEP'T. HEALTH SUBMITTED BY:KILMER
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ALBANY, NY 12237 INTERAGENCY MAIL

1220

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903724 SAMPLE RECEIVED:90/10/25/ CHARGE: 35.50
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: QUEENSBURY LANDFILL, SITE #557005
TIME OF SAMPLING: 90/10/25 11:30 DATE PRINTED:90/12/11

PARAMETER	RESULT
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
PENTACHLOROETHANE	< 0.5 MCG/L
1-CHLOROCYCLOHEXENE-1	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BIS(2-CHLOROETHYL)ETHER	< 0.5 MCG/L
1,2-DIBROMO-3-CHLOROPROPANE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
BIS(2-CHLOROISOPROPYL)ETHER	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L

ANALYSIS: 5031 AROMATIC PURGEABLES, EPA METHOD 503.1 (DES 310-22)
DATE REPORTED: 90/11/02 REPORT MAILED OUT

PARAMETER	RESULT
BENZENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
ETHYLBENZENE	< 0.5 MCG/L
P-XYLENE	< 0.5 MCG/L
M-XYLENE	< 0.5 MCG/L
O-XYLENE	< 0.5 MCG/L
ISOPROPYLBENZENE (CUMENE)	< 0.5 MCG/L
STYRENE	< 0.5 MCG/L
P-BROMOFLUOROBENZENE	< 0.5 MCG/L
N-PROPYLBENZENE	< 0.5 MCG/L
TERT-BUTYLBENZENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
M-CHLOROTOLUENE	< 0.5 MCG/L
1,3,5-TRIMETHYLBENZENE	< 0.5 MCG/L
1,2,4-TRIMETHYLBENZENE	< 0.5 MCG/L
4-ISOPROPYLTOLUENE (P-CYMENE)	< 0.5 MCG/L
CYCLOPROPYLBENZENE	< 0.5 MCG/L
SEC-BUTYLBENZENE	< 0.5 MCG/L
N-BUTYLBENZENE	< 0.5 MCG/L
2,3-BENZOFURAN	< 0.5 MCG/L
HEXACHLOROBUTADIENE (C-46)	< 0.5 MCG/L
1,2,4-TRICHLOROBENZENE	< 0.5 MCG/L
NAPHTHALENE	< 0.5 MCG/L
1,2,3-TRICHLOROBENZENE	< 0.5 MCG/L
PH OF AROMATIC ALIQUOT	2.

**** CONTINUED ON NEXT PAGE ****

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903724 SAMPLE RECEIVED:90/10/25/ CHARGE: 35.50
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: QUEENSBURY LANDFILL, SITE #557005
TIME OF SAMPLING: 90/10/25 11:30 DATE PRINTED:90/12/11

ANALYSIS: KET KETONES - PURGE & TRAP TECHNIQUE (DES 310-25)
DATE PRINTED: 90/12/11 FINAL REPORT

PARAMETER	RESULT
2-BUTANONE (METHYL ETHYL KETONE)	< 10. MCG/L
4-METHYL-2-PENTANONE (MIBK)	< 10. MCG/L
ACETONE	< 10. MCG/L
METHYL TERT BUTYL ETHER	< 10. MCG/L

ANALYSIS: XPEST-PCB ORGANOCHLORINE PESTICIDES & PCB'S (DES310-2)
DATE REPORTED: 90/11/27 REPORT MAILED OUT

PARAMETER	RESULT
HCH,ALPHA	< 0.04 MCG/L
HCH,BETA	< 0.04 MCG/L
HCH,GAMMA (LINDANE)	< 0.04 MCG/L
HCH,DELTA	< 0.04 MCG/L
HEPTACHLOR	< 0.05 MCG/L
ALDRIN	< 0.02 MCG/L
HEPTACHLOR EPOXIDE	< 0.05 MCG/L
ENDOSULFAN I	< 0.05 MCG/L
4,4'-DDE	< 0.05 MCG/L
DIELDRIN	< 0.02 MCG/L
ENDRIN	< 0.02 MCG/L
4,4'-DDD	< 0.05 MCG/L
ENDOSULFAN II	< 0.05 MCG/L
ENDRIN ALDEHYDE	< 0.02 MCG/L
ENDOSULFAN SULFATE	< 0.05 MCG/L
4,4'-DDT	< 0.05 MCG/L
METHOXYCHLOR	< 0.5 MCG/L
TOXAPHENE	< 1.0 MCG/L
CHLORDANE	< 0.1 MCG/L
MIREX	< 0.05 MCG/L
PCB,AROCLOR 1221	< 0.05 MCG/L
PCB,AROCLOR 1016/1242	< 0.05 MCG/L
PCB,AROCLOR 1248	< 0.05 MCG/L
PCB,AROCLOR 1254	< 0.05 MCG/L
PCB,AROCLOR 1260	< 0.05 MCG/L

ANALYSIS: GC-FID-A PRIORITY POLLUTANTS*ACIDS*GC/FID RESULTS
DATE REPORTED: 90/11/27 REPORT MAILED OUT

PARAMETER	RESULT
PHENOL	< 10. MCG/L
2-CHLOROPHENOL	< 10. MCG/L
2-NITROPHENOL	< 10. MCG/L
2,4-DIMETHYLPHENOL	< 10. MCG/L
2,4-DICHLOROPHENOL	< 10. MCG/L
4-CHLORO-3-METHYLPHENOL	< 10. MCG/L

**** CONTINUED ON NEXT PAGE ****

1222

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903724 SAMPLE RECEIVED:90/10/25/ CHARGE: 35.50
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: QUEENSBURY LANDFILL, SITE #557005
TIME OF SAMPLING: 90/10/25 11:30 DATE PRINTED:90/12/11

PARAMETER	RESULT
2,4,6-TRICHLOROPHENOL	< 10. MCG/L
2,4,5-TRICHLOROPHENOL	< 10. MCG/L
2,4-DINITROPHENOL	< 10. MCG/L
4-NITROPHENOL	< 10. MCG/L
2-METHYL-4,6-DINITROPHENOL	< 10. MCG/L
PENTACHLOROPHENOL	< 10. MCG/L

ANALYSIS: GC-FID-BN PRIORITY POLLUTANTS*BASE/NEUTRALS*GC/FID RESULTS
DATE REPORTED: 90/11/27 REPORT MAILED OUT

PARAMETER	RESULT
N-NITROSODI-N-PROPYLAMINE	< 10. MCG/L
HEXACHLOROETHANE	< 10. MCG/L
NITROBENZENE	< 10. MCG/L
ISOPHORONE	< 10. MCG/L
BIS(2-CHLOROETHOXY)METHANE	< 10. MCG/L
HEXACHLOROCYCLOPENTADIENE (C-56)	< 10. MCG/L
2-CHLORONAPHTHALENE	< 10. MCG/L
2,6-DINITROTOLUENE	< 10. MCG/L
ACENAPHTHYLENE	< 10. MCG/L
DIMETHYLPHTHALATE	< 10. MCG/L
ACENAPHTHENE	< 10. MCG/L
2,4-DINITROTOLUENE	< 10. MCG/L
DIETHYLPHTHALATE	< 10. MCG/L
FLUORENE	< 10. MCG/L
N-NITROSODIPHENYLAMINE	< 10. MCG/L
1,2-DIPHENYLHYDRAZINE	< 10. MCG/L
4-BROMOPHENYL PHENYL ETHER	< 10. MCG/L
HEXACHLOROBENZENE	< 10. MCG/L
PHENANTHRENE	< 10. MCG/L
ANTHRACENE	< 10. MCG/L
DI-N-BUTYL PHTHALATE	< 10. MCG/L
FLUORANTHENE	< 10. MCG/L
PYRENE	< 10. MCG/L
BENZIDINE	< 30. MCG/L
BUTYL BENZYL PHTHALATE	< 30. MCG/L
BENZO(A)ANTHRACENE	< 10. MCG/L
3,3'-DICHLOROBENZIDINE	< 10. MCG/L
CHRYSENE	< 10. MCG/L
BIS(2-ETHYLHEXYL)PHTHALATE	< 30. MCG/L
DI-N-OCTYL PHTHALATE	< 30. MCG/L
BENZO(B)FLUORANTHENE	< 20. MCG/L
BENZO(K)FLUORANTHENE	< 20. MCG/L
BENZO(A)PYRENE	< 20. MCG/L
INDENO(1,2,3-CD)PYRENE	< 20. MCG/L
DIBENZO(AH)ANTHRACENE	< 20. MCG/L
BENZO(GHI)PERYLENE	< 20. MCG/L

**** END OF REPORT ****

MR. BRAND

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Corning Tower The Governor Nelson A. Rockefeller Empire State Plaza Albany, New York 12237

David Axelrod, M D
Commissioner

OFFICE OF PUBLIC HEALTH

Linda A Randolph, M D M P H
Director

William F Leavy
Executive Deputy Director

December 18, 1990

DEC 2 1990

[redacted]

RE: Queensbury Landfill
Queensbury(T), Warren County
Site ID #557005

[redacted]

On October 25, 1990 I collected water samples at the Town of Queensbury Landfill Office. The sample was submitted to the NYS Department of Health's Wadsworth Center for Laboratories and Research for analysis of volatile organic compounds and inorganic trace metals. The enclosed report gives the results of the analysis. I have also included an explanation sheet for the NYS Dept. of Health's Analytical Report.

This report indicates that for all inorganic metals analyzed, the concentrations are within the expected background range. Iron exceeds the New York State Department of Health's Drinking Water Standards (Part 5 Secondary Contaminants) of 300 ppb. This is a naturally occurring compound and there is no health significance. This is a secondary standard for aesthetic purposes and may cause turbidity, stains on plumbing fixtures, equipment and laundry.

One anomaly we would like to investigate is the detection of trichloroethene. The level detected of this organic compound is below NYS Department of Health's Drinking Water Standards. I will resample your drinking water to determine the validity of this result.

If you have any questions, I can be reached at (518) 458-6306.

Sincerely,

Stanley J. Kilmer

Stanley J. Kilmer
Program Research Specialist I
Bureau of Environmental Expsoure
Investigation

sms/03510488

Attachment

cc: R. Tramontano/G. Litwin, w/o att.
P. Smith, CRU, w/att.
B. Fear, GFDO, w/o att.
D. Steenberge, DEC Reg.5, w/att.
M. Brand, DEC, w/att.

1202

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT(REV)

SAMPLE ID: 901002546 SAMPLE RECEIVED:90/10/26/11 CHARGE: 5.10
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN:10 GAZETTEER CODE:5657
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: QUEENSBURY LANDFILL SITE #557005
DESCRIPTION:#1 QUEENSBURY LANDFILL OFFICE KIT TAP
REPORTING LAB: 10:LABORATORY OF INORGANIC ANALYTICAL CHEMISTRY - ALBAN
TEST PATTERN: 10-001:SAFE DRINKING WATER ACT - METALS ONLY
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 90/10/25 10:30 DATE PRINTED:90/12/12

ANALYSIS: ICP-1 ICP GROUPING 1

PARAMETER	RESULT
MERCURY	< 0.2 MCG/L
ARSENIC	< 10. MCG/L
SELENIUM	< 5. MCG/L
LEAD	< 10. MCG/L
BERYLLIUM	< 1. MCG/L
SILVER	< 10. MCG/L
BARIUM	464. MCG/L
CADMIUM	< 5. MCG/L
COBALT	< 5. MCG/L
CHROMIUM	< 5. MCG/L
COPPER	< 5. MCG/L
IRON	344. MCG/L
MANGANESE	15. MCG/L
NICKEL	< 5. MCG/L
STRONTIUM	1460. MCG/L
TITANIUM	< 5. MCG/L
VANADIUM	< 5. MCG/L
ZINC	628. MCG/L
MOLYBDENUM	< 20. MCG/L
ANTIMONY	< 80. MCG/L
TIN	< 50. MCG/L
THALLIUM	< 80. MCG/L
ALUMINUM	< 100. MCG/L
CALCIUM	36.1 MG/L
POTASSIUM	1.6 MG/L
MAGNESIUM	18.2 MG/L
SODIUM	18.4 MG/L

**** CONTINUED ON NEXT PAGE ****

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RONALD TRAMONTANO, PE
BUR. ENVIRONMENTAL EXPOSURE INVESTIGAT.
NY STATE DEP'T. HEALTH SUBMITTED BY:KILMER
II UNIVERSITY PLACE
ALBANY, NY 12237 INTERAGENCY MAIL

1203

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT(REV)

SAMPLE ID: 901002546 SAMPLE RECEIVED:90/10/26/11 CHARGE: 5.10
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: QUEENSBURY LANDFILL SITE #557005
TIME OF SAMPLING: 90/10/25 10:30 DATE PRINTED:90/12/12

REVISION DATE 90/12/10, FOLLOWING PARAMETERS ADDED AFTER SAMPLE REPORTED

FOLLOWING PARAMETERS NOT PART OF TEST PATTERN

PARAMETER	RESULT
CO PHONED MO DAY TIME	12-5 JD

**** END OF REPORT ****

1207

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903723 SAMPLE RECEIVED:90/10/25/ CHARGE: 35.50
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN:10 GAZETTEER CODE:5657
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: QUEENSBURY LANDFILL, SITE #557005
DESCRIPTION:#1, QUEENSBURY LANDFILL OFFICE, KITCHEN TAP
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: AQUEOUS-1:VOLATILES,KETONES,PESTICIDES,PCB'S,PRIORITY POLLUTANT
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 90/10/25 10:30 DATE PRINTED:90/12/11

ANALYSIS: VHC5021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE REPORTED: 90/11/21 REPORT MAILED OUT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
2,3-DICHLOROPROPENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	2. MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
2-CHLOROETHYLVINYL ETHER	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L

**** CONTINUED ON NEXT PAGE ****

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RONALD TRAMONTANO, PE
BUR. ENVIRONMENTAL EXPOSURE INVESTIGAT.
NY STATE DEP'T. HEALTH SUBMITTED BY:KILMER
II UNIVERSITY PLACE
ALBANY, NY 12237 INTERAGENCY MAIL

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903723 SAMPLE RECEIVED:90/10/25/ CHARGE: 35.50
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: QUEENSBURY LANDFILL, SITE #557005
TIME OF SAMPLING: 90/10/25 10:30 DATE PRINTED:90/12/11

PARAMETER	RESULT
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
PENTACHLOROETHANE	< 0.5 MCG/L
1-CHLOROCYCLOHEXENE-1	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BIS(2-CHLOROETHYL)ETHER	< 0.5 MCG/L
1,2-DIBROMO-3-CHLOROPROPANE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
BIS(2-CHLOROISOPROPYL)ETHER	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L

ANALYSIS: 5031 AROMATIC PURGEABLES, EPA METHOD 503.1 (DES 310-22)
DATE REPORTED: 90/11/02 REPORT MAILED OUT

PARAMETER	RESULT
BENZENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
ETHYLBENZENE	< 0.5 MCG/L
P-XYLENE	< 0.5 MCG/L
M-XYLENE	< 0.5 MCG/L
O-XYLENE	< 0.5 MCG/L
ISOPROPYLBENZENE (CUMENE)	< 0.5 MCG/L
STYRENE	< 0.5 MCG/L
P-BROMOFLUOROBENZENE	< 0.5 MCG/L
N-PROPYLBENZENE	< 0.5 MCG/L
TERT-BUTYLBENZENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
M-CHLOROTOLUENE	< 0.5 MCG/L
1,3,5-TRIMETHYLBENZENE	< 0.5 MCG/L
1,2,4-TRIMETHYLBENZENE	< 0.5 MCG/L
4-ISOPROPYLTOLUENE (P-CYMENE)	< 0.5 MCG/L
CYCLOPROPYLBENZENE	< 0.5 MCG/L
SEC-BUTYLBENZENE	< 0.5 MCG/L
N-BUTYLBENZENE	< 0.5 MCG/L
2,3-BENZOFURAN	< 0.5 MCG/L
HEXACHLOROBUTADIENE (C-46)	< 0.5 MCG/L
1,2,4-TRICHLOROBENZENE	< 0.5 MCG/L
NAPHTHALENE	< 0.5 MCG/L
1,2,3-TRICHLOROBENZENE	< 0.5 MCG/L
PH OF AROMATIC ALIQUOT	2.

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NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903723 SAMPLE RECEIVED:90/10/25/ CHARGE: 35.50
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: QUEENSBURY LANDFILL, SITE #557005
TIME OF SAMPLING: 90/10/25 10:30 DATE PRINTED:90/12/11

ANALYSIS: KET KETONES - PURGE & TRAP TECHNIQUE (DES 310-25)
DATE PRINTED: 90/12/11 FINAL REPORT

PARAMETER	RESULT
2-BUTANONE (METHYL ETHYL KETONE)	< 10. MCG/L
4-METHYL-2-PENTANONE (MIBK)	< 10. MCG/L
ACETONE	< 10. MCG/L
METHYL TERT BUTYL ETHER	< 10. MCG/L

ANALYSIS: XPEST-PCB ORGANOCHLORINE PESTICIDES & PCB'S (DES310-2)
DATE REPORTED: 90/11/27 REPORT MAILED OUT

PARAMETER	RESULT
HCH,ALPHA	< 0.04 MCG/L
HCH,BETA	< 0.04 MCG/L
HCH,GAMMA (LINDANE)	< 0.04 MCG/L
HCH,DELTA	< 0.04 MCG/L
HEPTACHLOR	< 0.05 MCG/L
ALDRIN	< 0.02 MCG/L
HEPTACHLOR EPOXIDE	< 0.05 MCG/L
ENDOSULFAN I	< 0.05 MCG/L
4,4'-DDE	< 0.05 MCG/L
DIELDRIN	< 0.02 MCG/L
ENDRIN	< 0.02 MCG/L
4,4'-DDD	< 0.05 MCG/L
ENDOSULFAN II	< 0.05 MCG/L
ENDRIN ALDEHYDE	< 0.02 MCG/L
ENDOSULFAN SULFATE	< 0.05 MCG/L
4,4'-DDT	< 0.05 MCG/L
METHOXYCHLOR	< 0.5 MCG/L
TOXAPHENE	< 1.0 MCG/L
CHLORDANE	< 0.1 MCG/L
MIREX	< 0.05 MCG/L
PCB,AROCLOR 1221	< 0.05 MCG/L
PCB,AROCLOR 1016/1242	< 0.05 MCG/L
PCB,AROCLOR 1248	< 0.05 MCG/L
PCB,AROCLOR 1254	< 0.05 MCG/L
PCB,AROCLOR 1260	< 0.05 MCG/L

ANALYSIS: GC-FID-A PRIORITY POLLUTANTS*ACIDS*GC/FID RESULTS
DATE REPORTED: 90/11/27 REPORT MAILED OUT

PARAMETER	RESULT
PHENOL	< 10. MCG/L
2-CHLOROPHENOL	< 10. MCG/L
2-NITROPHENOL	< 10. MCG/L
2,4-DIMETHYLPHENOL	< 10. MCG/L
2,4-DICHLOROPHENOL	< 10. MCG/L
4-CHLORO-3-METHYLPHENOL	< 10. MCG/L

**** CONTINUED ON NEXT PAGE ****

1210

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903723 SAMPLE RECEIVED:90/10/25/ CHARGE: 35.50
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: QUEENSBURY LANDFILL, SITE #557005
TIME OF SAMPLING: 90/10/25 10:30 DATE PRINTED:90/12/11

PARAMETER	RESULT
2,4,6-TRICHLOROPHENOL	< 10. MCG/L
2,4,5-TRICHLOROPHENOL	< 10. MCG/L
2,4-DINITROPHENOL	< 10. MCG/L
4-NITROPHENOL	< 10. MCG/L
2-METHYL-4,6-DINITROPHENOL	< 10. MCG/L
PENTACHLOROPHENOL	< 10. MCG/L

ANALYSIS: GC-FID-BN PRIORITY POLLUTANTS*BASE/NEUTRALS*GC/FID RESULTS
DATE REPORTED: 90/11/27 REPORT MAILED OUT

PARAMETER	RESULT
N-NITROSODI-N-PROPYLAMINE	< 10. MCG/L
HEXACHLOROETHANE	< 10. MCG/L
NITROBENZENE	< 10. MCG/L
ISOPHORONE	< 10. MCG/L
BIS(2-CHLOROETHOXY)METHANE	< 10. MCG/L
HEXACHLOROCYCLOPENTADIENE (C-56)	< 10. MCG/L
2-CHLORONAPHTHALENE	< 10. MCG/L
2,6-DINITROTOLUENE	< 10. MCG/L
ACENAPHTHYLENE	< 10. MCG/L
DIMETHYLPHTHALATE	< 10. MCG/L
ACENAPHTHENE	< 10. MCG/L
2,4-DINITROTOLUENE	< 10. MCG/L
DIETHYLPHTHALATE	< 10. MCG/L
FLUORENE	< 10. MCG/L
N-NITROSODIPHENYLAMINE	< 10. MCG/L
1,2-DIPHENYLHYDRAZINE	< 10. MCG/L
4-BROMOPHENYL PHENYL ETHER	< 10. MCG/L
HEXACHLOROBENZENE	< 10. MCG/L
PHENANTHRENE	< 10. MCG/L
ANTHRACENE	< 10. MCG/L
DI-N-BUTYL PHTHALATE	< 10. MCG/L
FLUORANTHENE	< 10. MCG/L
PYRENE	< 10. MCG/L
BENZIDINE	< 30. MCG/L
BUTYL BENZYL PHTHALATE	< 30. MCG/L
BENZO(A)ANTHRACENE	< 10. MCG/L
3,3'-DICHLOROBENZIDINE	< 10. MCG/L
CHRYSENE	< 10. MCG/L
BIS(2-ETHYLHEXYL)PHTHALATE	< 30. MCG/L
DI-N-OCTYL PHTHALATE	< 30. MCG/L
BENZO(B)FLUORANTHENE	< 20. MCG/L
BENZO(K)FLUORANTHENE	< 20. MCG/L
BENZO(A)PYRENE	< 20. MCG/L
INDENO(1,2,3-CD)PYRENE	< 20. MCG/L
DIBENZO(AH)ANTHRACENE	< 20. MCG/L
BENZO(GHI)PERYLENE	< 20. MCG/L

**** END OF REPORT ****

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Corning Tower The Governor Nelson A. Rockefeller Empire State Plaza Albany, New York 12237

David Axelrod, M.D.
Commissioner

OFFICE OF PUBLIC HEALTH

Linda A. Randolph, M.D., M.P.H.
Director

William F. Leavy
Executive Deputy Director

December 18, 1990

DEC

[redacted]

RE: Queensbury Landfill
Queensbury(T), Warren County
Site ID #557005

[redacted]

On October 25, 1990 I collected water samples at your home in the Town of Queensbury, Warren County. The sample was submitted to the NYS Department of Health's Wadsworth Center for Laboratories and Research for analysis of volatile organic compounds and inorganic trace metals. The enclosed report gives the results of the analysis. I have also included an explanation sheet for the NYS Dept. of Health's Analytical Report.

I am pleased to report that for all parameters analyzed, the concentrations are within the expected background range.

If you have any questions, I can be reached at (518) 458-6306.

Sincerely,

Stanley J. Kilmer

Stanley J. Kilmer
Program Research Specialist I
Bureau of Environmental Expsoure
Investigation

sms/03510658

Attachment

cc: R. Tramontano/G. Litwin, w/o att.
P. Smith, CRU, w/att.
B. Fear, GFDO, w/o att.
D. Steenberge, DEC Reg.5, w/att.
[redacted]Brand, DEC, w/att.

0410

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 901002548 SAMPLE RECEIVED:90/10/26/11 CHARGE: 5.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN:10 GAZETTEER CODE:5657
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: QUEENSBURY LANDFILL SITE #557005
[redacted]
REPORTING LAB: 10:LABORATORY OF INORGANIC ANALYTICAL CHEMISTRY - ALBANY
TEST PATTERN: 10-001:SAFE DRINKING WATER ACT - METALS ONLY
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 90/10/25 12:15 DATE PRINTED:90/11/28

ANALYSIS: ICP-1 ICP GROUPING 1

PARAMETER	RESULT
MERCURY	< 0.2 MCG/L
ARSENIC	< 10. MCG/L
SELENIUM	< 5. MCG/L
LEAD	< 10. MCG/L
BERYLLIUM	< 1. MCG/L
SILVER	< 10. MCG/L
BARIUM	35. MCG/L
CADMIUM	< 5. MCG/L
COBALT	< 5. MCG/L
CHROMIUM	< 5. MCG/L
COPPER	8. MCG/L
IRON	162. MCG/L
MANGANESE	< 5. MCG/L
NICKEL	< 5. MCG/L
STRONTIUM	265. MCG/L
TITANIUM	< 5. MCG/L
VANADIUM	< 5. MCG/L
ZINC	< 10. MCG/L
MOLYBDENUM	< 20. MCG/L
ANTIMONY	< 80. MCG/L
TIN	< 50. MCG/L
THALLIUM	< 80. MCG/L
ALUMINUM	< 100. MCG/L
CALCIUM	71.5 MG/L
POTASSIUM	1.6 MG/L
MAGNESIUM	29.7 MG/L
SODIUM	5.9 MG/L

**** END OF REPORT ****

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RONALD TRAMONTANO, PE
BUR. ENVIRONMENTAL EXPOSURE INVESTIGAT.
NY STATE DEP'T. HEALTH SUBMITTED BY:KILMER
II UNIVERSITY PLACE
ALBANY, NY 12237 INTERAGENCY MAIL

1227

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903725 SAMPLE RECEIVED:90/10/25/ CHARGE: 19.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN:10 GAZETTEER CODE:5657
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: QUEENSBURY LANDFILL, SITE #557005
DESCRIPTION: [redacted]AP
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VOL3-KET:PURGEABLES & KETONES
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 90/10/25 12:15 DATE PRINTED:90/12/11

ANALYSIS: VHC5021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE REPORTED: 90/11/21 REPORT MAILED OUT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
2,3-DICHLOROPROPENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
2-CHLOROETHYLVINYL ETHER	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L

**** CONTINUED ON NEXT PAGE ****

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RONALD TRAMONTANO, PE
BUR. ENVIRONMENTAL EXPOSURE INVESTIGAT.
NY STATE DEPT. HEALTH SUBMITTED BY:KILMER
II UNIVERSITY PLACE
ALBANY, NY 12237 INTERAGENCY MAIL

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903725 SAMPLE RECEIVED:90/10/25/ CHARGE: 19.00
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: QUEENSBURY LANDFILL, SITE #557005
TIME OF SAMPLING: 90/10/25 12:15 DATE PRINTED:90/12/11

PARAMETER	RESULT
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
PENTACHLOROETHANE	< 0.5 MCG/L
1-CHLOROCYCLOHEXENE-1	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BIS(2-CHLOROETHYL)ETHER	< 0.5 MCG/L
1,2-DIBROMO-3-CHLOROPROPANE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
BIS(2-CHLOROISOPROPYL)ETHER	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L

ANALYSIS: 5031 AROMATIC PURGEABLES, EPA METHOD 503.1 (DES 310-22)
DATE REPORTED: 90/11/08 REPORT MAILED OUT

PARAMETER	RESULT
BENZENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
ETHYLBENZENE	< 0.5 MCG/L
P-XYLENE	< 0.5 MCG/L
M-XYLENE	< 0.5 MCG/L
O-XYLENE	< 0.5 MCG/L
ISOPROPYLBENZENE (CUMENE)	< 0.5 MCG/L
STYRENE	< 0.5 MCG/L
P-BROMOFLUOROBENZENE	< 0.5 MCG/L
N-PROPYLBENZENE	< 0.5 MCG/L
TERT-BUTYLBENZENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
M-CHLOROTOLUENE	< 0.5 MCG/L
1,3,5-TRIMETHYLBENZENE	< 0.5 MCG/L
1,2,4-TRIMETHYLBENZENE	< 0.5 MCG/L
4-ISOPROPYLTOLUENE (P-CYMENE)	< 0.5 MCG/L
CYCLOPROPYLBENZENE	< 0.5 MCG/L
SEC-BUTYLBENZENE	< 0.5 MCG/L
N-BUTYLBENZENE	< 0.5 MCG/L
2,3-BENZOFURAN	< 0.5 MCG/L
HEXACHLOROBUTADIENE (C-46)	< 0.5 MCG/L
1,2,4-TRICHLOROBENZENE	< 0.5 MCG/L
NAPHTHALENE	< 0.5 MCG/L
1,2,3-TRICHLOROBENZENE	< 0.5 MCG/L
PH OF AROMATIC ALIQUOT	2

**** CONTINUED ON NEXT PAGE ****

1229 .

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 903725 SAMPLE RECEIVED:90/10/25/ CHARGE: 19.00
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: QUEENSBURY LANDFILL, SITE #557005
TIME OF SAMPLING: 90/10/25 12:15 DATE PRINTED:90/12/11

ANALYSIS: KET KETONES - PURGE & TRAP TECHNIQUE (DES 310-25)
DATE PRINTED: 90/12/11 FINAL REPORT

PARAMETER	RESULT
2-BUTANONE (METHYL ETHYL KETONE)	< 10. MCG/L
4-METHYL-2-PENTANONE (MIBK)	< 10. MCG/L
ACETONE	< 10. MCG/L
METHYL TERT BUTYL ETHER	< 10. MCG/L

**** END OF REPORT ****

STATE OF NEW YORK - DEPARTMENT OF HEALTH

INTEFOFFICE MEMORANDUM

TO: Gary A. Litwin, Section Chief
Bureau of Environmental Exposure Investigation

FROM: Stanley J. Kilmer, Program Research Specialist I
Bureau of Environmental Exposure Investigation

SUBJECT: Resample Private Drinking Water Wells
Queensbury Landfill
Queensbury (T), Warren County
Site ID #557005

DATE: March 25, 1991

This is an addition to memorandum dated December 19, 1990 concerning drinking water sampling events around the Queensbury Landfill. Please note a new site map locating the additional sampling points.

On January 28, 1991 I traveled to the Queensbury area for the purpose of resampling resident's drinking water. All samples were transported in an iced cooler with three field blanks and delivered to the NYS Dept. of Health Wadsworth Center for Laboratories and Research in Albany for Analysis.

Analytical results of drinking water samples from residential wells in the area adjacent to the landfill were mailed to homeowners on March 4, 1991. Chlorinated compounds were detected in one of the wells and the field blank at levels ranging from 1 to 2 ppb. I will resample the Town of Queensbury Landfill Office because of the detection of trichloroethene in the first sample and detection in the field blank on the second sampling event. I will resample the [redacted] because of the detection of 1,1-dichloroethane in both samples. I will also try to resample the [redacted] because of the detection trichloroethene in sample taken October 25, 1990.

SAMPLING NOTES AND LABORATORY RESULTS:

SAMPLE #1 - [redacted]

Analysis: Organic Compounds - 502.1.
Results: None detected.

SAMPLE #4 - [redacted].

Analysis: Organic compounds - 502.1.
Results: 1,1-dichloroethane - 2. ppb.

Gary A. Litwin, Section Chief

SAMPLE #9 - [redacted]

Analysis: Organic compounds - 502.1, 503.1 and ketones. Inorganic compounds - HSL metals.

Results: None detected or within background range.

SAMPLE #10 - [redacted]

Analysis: Organic compounds - 502.1, 503.1 and ketones. Inorganic compounds - HSL metals.

Results: sodium - 45.2 ppm.

SAMPLE #11 - [redacted]

Analysis: Organic compounds - 502.1, 503.1 and ketones. Inorganic compounds - HSL metals.

Results: None detected or within background range.

Please note attachment: 1) Area sketch of sampling locations.

sjk/10790416

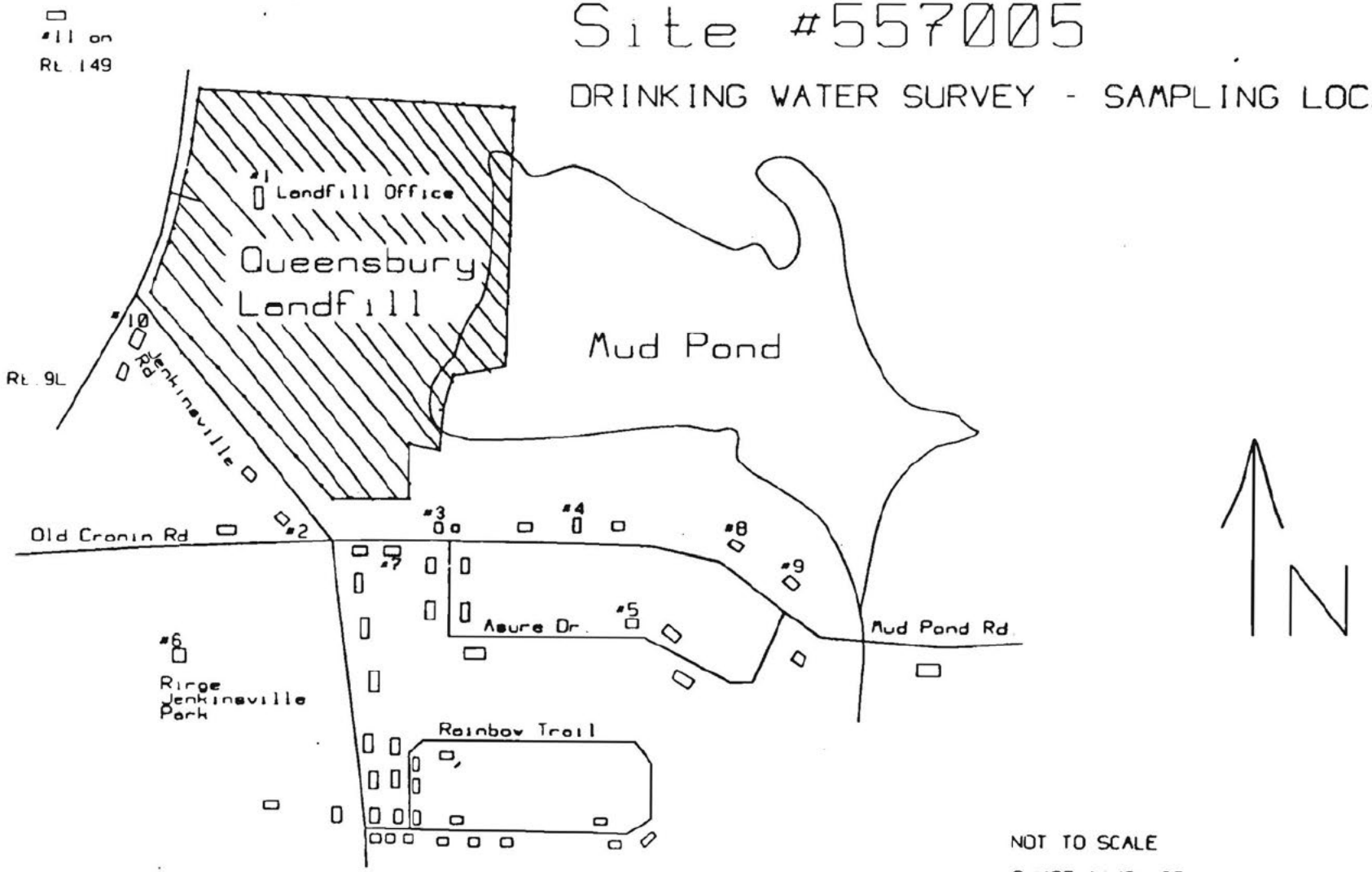
Attachment

cc: R. Tramontano, w/att.
Dr. N. Kim, w/att.
P. Smith, CRU, w/att.
B. Fear, GFDO, w/att.

QUEENSBURY LANDFILL - Warren County

Site #557005

DRINKING WATER SURVEY - SAMPLING LOCATIONS



NOT TO SCALE

SJK07-11/01/90

REV 03/12/91

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Corning Tower The Governor Nelson A. Rockefeller Empire State Plaza Albany, New York 12237

David Axelrod, M D
Commissioner

OFFICE OF PUBLIC HEALTH

Linda A Randolph M D M P H
Director

William F Leavy
Executive Deputy Director

March 4, 1991

[redacted]

RE: Queensbury Landfill
Queensbury(T), Warren County
Site ID #557005

Dear [redacted]:

On January 28, 1991 I collected water samples at your home in the Town of Queensbury. This report indicates the detection of 1,1-dichloroethane. The level detected of this organic compound is below the NYS Department of Health's Public Drinking Water Standards. We would like to further investigate the detection of this chlorinated compound. The installation of new monitoring wells at the landfill will help determine the extent of the off site contamination. Until that data is available, I will resample your drinking water.

The samples were submitted to the NYS Department of Health's Wadsworth Center for Laboratories and Research for analysis. I have also included an explanation sheet which may help you interpret the sample results. If you have any questions, I can be reached at (518) 458-6306.

Sincerely,

Stanley J. Kilmer

Stanley J. Kilmer
Program Research Specialist I
Bureau of Environmental Exposure
Investigation

sjk/10631182

Attachment

cc: R. Tramontano/G. Litwin, w/o att.
P. Smith, CRU, w/o att.
B. Fear, GFDO, w/o att.
D. Steenberge, DEC-Reg. 5, w/att.
M. Brand, DEC, w/att.

0674

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 910459 SAMPLE RECEIVED:91/01/28/ CHARGE: 8.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN:10 GAZETTEER CODE:5657
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: 557005 QUEENSBURY LANDFILL
DESCRIP[redacted]
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VHO5021:VOLATILE HALOGENATED ORGANICS
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 91/01/28 11:30 DATE PRINTED:91/02/20

ANALYSIS: VHO5021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE PRINTED: 91/02/20 FINAL REPORT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	2. MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
2,3-DICHLOROPROPENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
2-CHLOROETHYLVINYL ETHER	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L

**** CONTINUED ON NEXT PAGE ****

COPIES SENT TO: CO(3), RO(0), LPHE(1), FED( ), INFO-P( ), INFO-L( )

RONALD TRAMONTANO, PE
BUR. ENVIRONMENTAL EXPOSURE INVESTIGAT.
NY STATE DEPT. HEALTH SUBMITTED BY:KILMER
II UNIVERSITY PLACE
ALBANY, NY 12237 INTERAGENCY MAIL

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 910459 SAMPLE RECEIVED:91/01/28/ CHARGE: 8.00
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: 557005 QUEENSBURY LANDFILL
TIME OF SAMPLING: 91/01/28 11:30 DATE PRINTED:91/02/20

PARAMETER	RESULT
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
PENTACHLOROETHANE	< 0.5 MCG/L
1-CHLOROCYCLOHEXENE-1	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BIS(2-CHLOROETHYL)ETHER	< 0.5 MCG/L
1,2-DIBROMO-3-CHLOROPROPANE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
BIS(2-CHLOROISOPROPYL)ETHER	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L

**** END OF REPORT ****

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Corning Tower The Governor Nelson A. Rockefeller Empire State Plaza Albany, New York 12237

David Axelrod M.D.
Commissioner

OFFICE OF PUBLIC HEALTH

Linda A. Randolph M.D. M.P.H.
Director

William F. Leavy
Executive Deputy Director

March 4, 1991

[redacted]

RE: Queensbury Landfill
Queensbury(T), Warren County
Site ID #557005

[redacted]:

On January 28, 1991 I collected water samples at the Town of Queensbury Landfill Office. I am pleased to report that there were no detected volatile organic compounds.

The sample was submitted to the NYS Department of Health's Wadsworth Center for Laboratories and Research for analysis. I have also included an explanation sheet which may help you interpret the sample results. If you have any questions, I can be reached at (518) 458-6306.

Sincerely,

Stanley J. Kilmer

Stanley J. Kilmer
Program Research Specialist I
Bureau of Environmental Exposure
Investigation

sjk/10600761

Attachment

cc: R. Tramontano/G. Litwin, w/o att.
P. Smith, CRU, w/o att.
B. Fear, GFDO, w/o att.
D. Steenberge, DEC-Reg. 5, w/att.
M. Brand, DEC, w/att.

0680

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 910460 SAMPLE RECEIVED:91/01/28/ CHARGE: 8.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN:10 GAZETTEER CODE:5657
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: 557005 QUEENSBURY LANDFILL
DESCRIPTION:#1 QUEENSBURY LANDFILL OFFICE, [redacted]
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VHO5021:VOLATILE HALOGENATED ORGANICS
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 91/01/28 10:45 DATE PRINTED:91/02/20

ANALYSIS: VHO5021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE PRINTED: 91/02/20 FINAL REPORT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
2,3-DICHLOROPROPENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
2-CHLOROETHYLVINYL ETHER	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L

**** CONTINUED ON NEXT PAGE ****

COPIES SENT TO: CO(3), RO(0), LPHE(1), FED( ), INFO-P( ), INFO-L( )

RONALD TRAMONTANO, PE
BUR. ENVIRONMENTAL EXPOSURE INVESTIGAT.
NY STATE DEPT. HEALTH SUBMITTED BY:KILMER
II UNIVERSITY PLACE
ALBANY, NY 12237 INTERAGENCY MAIL

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 910460 SAMPLE RECEIVED:91/01/28/ CHARGE: 8.00
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: 557005 QUEENSBURY LANDFILL
TIME OF SAMPLING: 91/01/28 10:45 DATE PRINTED:91/02/20

PARAMETER	RESULT
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
PENTACHLOROETHANE	< 0.5 MCG/L
1-CHLOROCYCLOHEXENE-1	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BIS(2-CHLOROETHYL)ETHER	< 0.5 MCG/L
1,2-DIBROMO-3-CHLOROPROPANE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
BIS(2-CHLOROISOPROPYL)ETHER	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L

**** END OF REPORT ****

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Corning Tower The Governor Nelson A. Rockefeller Empire State Plaza Albany, New York 12237

David Axelrod M.D.
Commissioner

OFFICE OF PUBLIC HEALTH

Linda A. Randolph M.D. M.P.H.
Director

William F. Leavy
Executive Deputy Director

March 4, 1991

[redacted]

RE: Queensbury Landfill
Queensbury(T), Warren County
Site ID #557005

[redacted]

On January 28, 1991 I collected water samples at your store in the Town of Queensbury. I am pleased to report that there were no detected volatile organic compounds and for all inorganic metals analyzed, the concentrations are within the the expected background range. Sodium exceeds the New York State Department of Health's Public Drinking Water Standards (Part 5 Secondary Contaminants). Although there are no designated limits, water containing more than 20 part per million of sodium should not be use for drinking by people on severely restricted sodium.

The samples were submitted to the NYS Department of Health's Wadsworth Center for Laboratories and Research for analysis. I have also included an explanation sheet which may help you interpret the sample results. If you have any questions, I can be reached at (518) 458-6306.

Sincerely,

Stanley J. Kilmer

Stanley J. Kilmer
Program Research Specialist I
Bureau of Environmental Exposure
Investigation

sjk/10630876

Attachment

cc: R. Tramontano/G. Litwin, w/o att.
P. Smith, CRU, w/o att.
B. Fear, GFDO, w/o att.
D. Steenberge, DEC-Reg. 5, w/att.
M. Brand, DEC, w/att.

0395

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 910456 SAMPLE RECEIVED:91/01/28/ CHARGE: 19.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN:10 GAZETTEER CODE:5657
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: 557005 QUEENSBURY LANDFILL
DESCRIPTION:#2 [redacted]
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VOL3-KET:PURGEABLES & KETONES
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 91/01/28 11:45 DATE PRINTED:91/02/25

ANALYSIS: VHC5021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE REPORTED: 91/02/20 REPORT MAILED OUT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
2,3-DICHLOROPROPENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
2-CHLOROETHYLVINYL ETHER	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L

**** CONTINUED ON NEXT PAGE ****

COPIES SENT TO: CO(3), RO(0), LPHE(1), FED( ), INFO-P( ), INFO-L( )

RONALD TRAMONTANO, PE
BUR. ENVIRONMENTAL EXPOSURE INVESTIGAT.
NY STATE DEP'T. HEALTH SUBMITTED BY:KILMER
II UNIVERSITY PLACE
ALBANY, NY 12237 INTERAGENCY MAIL

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 910456 SAMPLE RECEIVED:91/01/28/ CHARGE: 19.00
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: 557005 QUEENSBURY LANDFILL
TIME OF SAMPLING: 91/01/28 11:45 DATE PRINTED:91/02/25

PARAMETER	RESULT
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
PENTACHLOROETHANE	< 0.5 MCG/L
1-CHLOROCYCLOHEXENE-1	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BIS(2-CHLOROETHYL)ETHER	< 0.5 MCG/L
1,2-DIBROMO-3-CHLOROPROPANE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
BIS(2-CHLOROISOPROPYL)ETHER	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L

ANALYSIS: 5031 AROMATIC PURGEABLES, EPA METHOD 503.1 (DES 310-22)
DATE PRINTED: 91/02/25 FINAL REPORT

PARAMETER	RESULT
BENZENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
ETHYLBENZENE	< 0.5 MCG/L
P-XYLENE	< 0.5 MCG/L
M-XYLENE	< 0.5 MCG/L
O-XYLENE	< 0.5 MCG/L
ISOPROPYLBENZENE (CUMENE)	< 0.5 MCG/L
STYRENE	< 0.5 MCG/L
P-BROMOFLUOROBENZENE	< 0.5 MCG/L
N-PROPYLBENZENE	< 0.5 MCG/L
TERT-BUTYLBENZENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
M-CHLOROTOLUENE	< 0.5 MCG/L
1,3,5-TRIMETHYLBENZENE	< 0.5 MCG/L
1,2,4-TRIMETHYLBENZENE	< 0.5 MCG/L
4-ISOPROPYLTOLUENE (P-CYMENE)	< 0.5 MCG/L
CYCLOPROPYLBENZENE	< 0.5 MCG/L
SEC-BUTYLBENZENE	< 0.5 MCG/L
N-BUTYLBENZENE	< 0.5 MCG/L
2,3-BENZOFURAN	< 0.5 MCG/L
HEXACHLOROBUTADIENE (C-46)	< 0.5 MCG/L
1,2,4-TRICHLOROBENZENE	< 0.5 MCG/L
NAPHTHALENE	< 0.5 MCG/L
1,2,3-TRICHLOROBENZENE	< 0.5 MCG/L
PH OF AROMATIC ALIQUOT	7
PH WAS NOT AS LOW AS REQUIRED BY METHOD	YES

**** CONTINUED ON NEXT PAGE ****

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 910456 SAMPLE RECEIVED:91/01/28/ CHARGE: 19.00
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LOCATION: 557005 QUEENSBURY LANDFILL
TIME OF SAMPLING: 91/01/28 11:45 DATE PRINTED:91/02/25

ANALYSIS: KET KETONES - PURGE & TRAP TECHNIQUE (DES 310-25)
DATE REPORTED: 91/02/08 REPORT MAILED OUT

PARAMETER	RESULT
2-BUTANONE (METHYL ETHYL KETONE)	< 10. MCG/L
4-METHYL-2-PENTANONE (MIBK)	< 10. MCG/L
ACETONE	< 10. MCG/L
METHYL TERT BUTYL ETHER	< 10. MCG/L

**** END OF REPORT ****

0213

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 911000206 SAMPLE RECEIVED:91/01/29/ CHARGE: 5.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN:10 GAZETTEER CODE:5657
POLITICAL SUBDIVISION:QUEENSBURY COUNTY:WARREN
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: 557005 QUEENSBURY LANDFILL
DESCRIPTION:#2 [redacted]
REPORTING LAB: 10:LABORATORY OF INORGANIC ANALYTICAL CHEMISTRY - ALBAN.
TEST PATTERN: 10-001:SAFE DRINKING WATER ACT - METALS ONLY
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 91/01/28 11:45 DATE PRINTED:91/02/26

ANALYSIS: ICP-1 ICP GROUPING 1

PARAMETER	RESULT
MERCURY	< 0.2 MCG/L
ARSENIC	< 10. MCG/L
SELENIUM	< 5. MCG/L
LEAD	< 10. MCG/L
BERYLLIUM	< 1. MCG/L
SILVER	< 10. MCG/L
BARIUM	174. MCG/L
CADMIUM	< 5. MCG/L
COBALT	< 5. MCG/L
CHROMIUM	< 5. MCG/L
COPPER	18. MCG/L
IRON	149. MCG/L
MANGANESE	127. MCG/L
NICKEL	< 5. MCG/L
STRONTIUM	1150. MCG/L
TITANIUM	< 5. MCG/L
VANADIUM	< 5. MCG/L
ZINC	664. MCG/L
MOLYBDENUM	< 20. MCG/L
ANTIMONY	< 80. MCG/L
TIN	< 50. MCG/L
THALLIUM	< 80. MCG/L
ALUMINUM	< 100. MCG/L
CALCIUM	38.2 MG/L
POTASSIUM	1.2 MG/L
MAGNESIUM	17.9 MG/L
SODIUM	45.2 MG/L

**** END OF REPORT ****

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