205233

SITE INVESTIGATION

ERIN CLEANERS

AKA: AHN'S CLEANERS

RIVERTON BOROUGH, BURLINGTON COUNTY

EPA ID NO.: NJD011705175

New Jersey Department of Environmental Protection
Division of Publicly Funded Site Remediation
Bureau of Site Assessment

ERIN CLEANERS
AKA: AHN'S CLEANERS
608 BROAD STREET
RIVERTON, BURLINGTON COUNTY, NEW JERSEY
EPA ID NO. NJD011705175

NARRATIVE

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ATTACHMENTS

A. NJDEP, BUREAU OF AIR POLLUTION CONTROL - REGISTRATION FOR STORAGE, TRANSFER AND USE OF TOXIC VOLATILE ORGANIC SUBSTANCES; AUGUST 26, 1980

B. UNITED STATES DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE - SOIL SURVEY OF BURLINGTON COUNTY, NEW JERSEY; OCTOBER 1971

C. SEVERN TRENT LABORATORIES - SAMPLE DATA SUMMARY PACKAGE FOR SOIL AND GROUND WATER SAMPLES; SEPTEMBER 2002

D. NJDEP, COMPLIANCE EVALUATION INSPECTION PUBLIC COMMUNITY WATER SYSTEM - NEW JERSEY AMERICAN WATER COMPANY (JUNE 1998), MERCHANTVILLE - PENNSAUKEN WATER COMMISSION (FEBRUARY 1997), MAPLE SHADE WATER DEPARTMENT (OCTOBER 1990), MOORESTOWN TOWNSHIP WATER DEPARTMENT (JUNE 1993) AND CITY OF CAMDEN (FEBRUARY 1997)

E. NEW JERSEY AMERICAN WATER COMPANY - HIGHLAND AVENUE WELLS 13 AND 27 RAW WATER DATA

F. NJDEP, BUREAU OF ENVIRONMENTAL MEASUREMENTS AND QUALITY ASSURANCE, MOBILE LABORATORY UNIT - FINAL REPORT FOR NEW JERSEY AMERICAN WATER #13 AND #27; JUNE 6, 2002

G. DELAWARE RIVER BASIN COMMISSION - DELAWARE RIVER WATER QUALITY ASSESSMENT REPORT; MARCH 1988

H. NJDEP MANIFEST REPORTS FOR ERIN CLEANERS

I. NJDEP, BUREAU OF ENVIRONMENTAL MEASUREMENTS AND QUALITY ASSURANCE MEMO RE: ANALYTICAL DATA VALIDATION REPORT; SEPTEMBER 13, 2002

J. ATLANTIC ENVIRONMENTAL CONSULTING SERVICES, L.L.C. - PRELIMINARY ASSESSMENT AND SITE INVESTIGATION REPORTS FOR BOC GASES; MARCH 1998

NARRATIVE

SITE INVESTIGATION REPORT

PART I: GENERAL INFORMATION

Site Name: Erin Cleaners
Aka: Ahn's Cleaners
Address: 608 Broad Street
Municipality: Riverton Borough **State:** New Jersey **Zip Code:** 08077
County: Burlington
EPA ID No.: NJD011705175
Block: 902 **Lot(s):** 4
Latitude: 40.011111° **Longitude:** 75.010556°
USGS Quadrangle: Frankford and Camden
Acreage: 0.32 **SIC Code:** 7216

Current Owner: Yeo S. and Mok Hwan Ahn
Mailing Address: 608 Broad Street
City: Riverton **State:** New Jersey **Zip Code:** 08077
Telephone No.: 215-887-0887

Current Operator: Erin Cleaners
Mailing Address: 608 Broad Street
City: Riverton **State:** New Jersey **Zip Code:** 08077
Telephone No.: 856-829-2320

Owner/Operator History:

NAME	OPERATOR/ OWNER	DATES	
		FROM	TO
John Metague and Frank Waters, trading as Palmyra Machine	Operator/ owner	10/5/1942	6/1/1943
Aeronautical Products Corp.	Operator/ owner	6/1/1943	10/25/1944
William J. Ilhenny and Frank E. Waters	Operator/ owner	10/25/1944	6/8/1945
Riverton Machine Inc.	Operator/ owner	6/8/1945	6/17/1946
Hunter Industries	Operator/ owner	6/17/1946	9/1/1949
Winifred Holroyd	owner	9/1/1949	9/22/1952
Erin Cleaners	Operator	9/1/1949	Present
Robert Holroyd, George Holroyd and Raymond Conover, partners trading as Erin Cleaners	Operator/ owners	9/22/1952	10/19/1981
Don Man Lee, Inc.	Operator/ owner	10/19/1981	6/28/1989
Mok Hwan Ahn and Yeo S. Ahn	Operator/ owner	6/28/1989	present

Surrounding Land Use (zoning, adjacent properties): The site is located in a mixed commercial and residential area of Riverton. Homes are located adjacent to the site.

Distance to Nearest Residence or School: 50 feet
Direction: west
Population Density (residents per square mile): 4,226

PART II: SITE OPERATIONS

Discuss all current and past operations at the site. Include a description of the buildings or structures on site and their physical condition. In addition, tabulate all areas of concern (AOC) and provide the waste source type for each AOC. Include the physical state of waste at each AOC as stored or disposed, the condition of containers and the presence or absence of secondary containment and the volume of waste stored or disposed, or the volume or area of contaminated soil or water.

Erin Cleaners has operated as a dry cleaning plant since 1949. On September 1, 1949 Erin Cleaners entered into a rental agreement with the property owner, Winifred Holroyd, for a period of eight years. The agreement stated that the renters will use and occupy the premises as a dry cleaning, dyeing, pressing and receiving plant and for no other purpose without written consent.

Dry cleaning operations are conducted in a large building on site. A retail drop-off/pick-up area is also present in the front of the building. A 1980 NJDEP, Air Pollution Control Registration form has tetrachloroethylene (PCE) listed as being used on site. During the 1980s and early 1990s, spent halogenated solvents and still bottoms of degreasers were disposed off site. Prior to 1986 no disposal records were available in the files reviewed. (Attachments A and H)

Currently one dry cleaning machine, which was installed in 1989, is utilized on site. This machine has a capacity of 80 pounds and uses 100 to 140 gallons per year of PCE. PCE is extracted by refrigeration. Waste PCE residue and spent cartridge filters are picked up every few months by Safety Kleen of Burlington, New Jersey. (Attachment A)

An old dry cleaning machine remains in the rear of the building and has not been used since 1997. The stack on the machine vented from the roof of the building. Filters were used in the machine. This machine had a capacity of 40 pounds and used approximately 65 gallons of PCE per year. (Attachment A)

During a July 30, 2002 Presampling Assessment conducted by the Bureau of Site Assessment (BSA), an old aboveground fuel oil tank was present outside the rear of the building. A neighbor who has lived at his property for approximately 40 years stated to BSA personnel that spent filter material (diatomaceous earth) was previously dumped in the rear of the facility. The neighbor stated that this area had been filled about 2 to 3 feet above ground level.

Prior to dry cleaning operations, a machine shop operated on site in the 1940s. No information concerning the operations of the machine shop were located in the files reviewed.

Sewer lines were installed in Riverton in 1953. Prior to that the facility utilized a septic system. There is no information in the records reviewed concerning the location of the former septic system.

AOC SUMMARY TABLE

AOC Name	Source Type	CERCLA Exempt	Physical State	Waste Quantity
Aboveground fuel oil tank	Tank	YES	liquid	500 gallons
Septic system	Other	NO	liquid	unknown
Soil contamination	Soil contamination	NO	liquid	250 square feet

PART III: PERMITS

A. NJPDES

Number	Date Issued	Expiration Date	Formation or Water Body Discharged To
None			

B. New Jersey Air Pollution Control Certificates

Plant ID No.: L4509
No. of Certificates: expired August 25, 2000
Equipment Permitted: two dry cleaning machines

(Attachment A)

C. BUST Registration

Registration No.: None
No. of Tanks: 0

Tank No.	Capacity (gallons)	Contents of Tank	Status

D. RCRA Status (TSD, Generator, Protective Filer, etc.)

Erin Cleaners is a generator of hazardous waste.

E. Other Permits (RCRA, NRC, etc.)

Issuing Agency	Permit Type	Permit No.	Date Issued	Expiration Date
N/A				

PART IV: SOIL EXPOSURE

Describe soil type. Include soil series, composition of the soil and permeability of the soil.

The site is underlain by the Galestown sand, 0 to 5 percent slopes (GaA). A typical profile of the surface layer is very dark grayish-brown sand about 10 inches thick. The subsurface, which is about 13 inches thick, is yellowish-brown sand. The subsoil is strong-brown loamy sand about 15 inches thick, underlain by alternating layers of dark yellowish-brown sand and strong, brown loamy sand. Permeability is moderately rapid. (Attachment B)

Tabulate and discuss contaminants identified in the soil. Include sampling date, sampling agency or company, sample locations, depth and contaminant level. Identify samples collected from a residential property, school, daycare center, workplace, terrestrial sensitive environment or resource. Describe sample locations (i.e. link each sample to an Area of Concern). Identify samples which establish background conditions, results above background and/or remediation standards, and provide the rationale for site attribution. State whether Level 1 or Level 2 contamination is present. For each sampling event, list the name, address and certification number of the lab which performed the analyses. State who conducted the quality assurance review of the data and summarize any data qualifications.

On August 6, 2002, the NJDEP, BSA collected five soil samples from the Erin Cleaners site. PCE was detected in all the samples. No other contaminants were detected in the samples. Samples were analyzed for volatile organic compounds by Severn Trent Laboratories of Colchester, Vermont (Laboratory Certification No. 85972). Data validation was performed by the NJDEP. All the results were accepted with qualification. Results and sample locations are discussed below: (Attachments C and I)

Sample No.	Sample Location	Sample depth (feet)	PCE Concentration (ppm)
S-1	In northern corner of the rear of the building, approximately 15 feet north of the building	2 to 2.5	**7.4**
S-2	Behind the building in the area of the old dry cleaning machine	1.5 to 2	**13.0**
S-3	At the edge of the rear fence line near the fuel oil tank	1.5 to 2	**5.8**
S-4	In southern corner of the rear of the building	2 to 2.5	**2.4**
S-5	Background sample; northwest corner of Block 902, Lot 3 (a residential property)	2 to 2.5	0.041
S-6	Duplicate of S-3	1.5 to 2	**5.1**

Although PCE was detected in the background sample (S-5), the concentration was significantly below the samples collected in the area of concern. Due to PCE being utilized in the on-site dry cleaning operations, attribution and an observed release of PCE at concentrations above background and the NJDEP, Impact to Ground Water Soil Cleanup Criteria (IGWSCC) of 1 ppm was documented.

Total area of surficial contamination in square feet: 250

If no soil sampling has been conducted, discuss areas of potentially contaminated soil, areas that are visibly contaminated or results from soil gas surveys.

Soil sampling was conducted on site.

Number of people occupying residences or attending school or day care on or within 200 feet of the site: 15
Number of workers on or within 200 feet of the site: 20
Number of on-site employees: 4

Identify terrestrial sensitive environments within 200 feet of observed contamination.

There are no terrestrial sensitive environments within 200 feet of observed contamination.

Determine if any commercial agriculture, silviculture, livestock production or grazing are present within 200 feet of observed contamination.

No commercial agriculture, silviculture, livestock production or grazing are present within 200 feet of observed contamination.

PART V: GROUND WATER ROUTE

A. HYDROGEOLOGY

Describe geologic formations and the aquifer(s) of concern. Include interconnections, confining layers, discontinuities, composition, hydraulic conductivity and permeability.

The site is underlain by sediments of the Pensauken Formation which is composed primarily of sand. Underlying the Pensauken is the Potomac-Raritan-Magothy (PRM) Formation. The PRM is composed predominantly of medium to coarse sand with intervening clay layers found at varying depths and thickness. The bedrock of the Wissahickon Formation underlies the PRM. The PRM is a major aquifer of the Coastal Plain system and consists of an upper, middle and lower aquifer. These layers are interconnected. (Attachment J)

Ground water pumped from the PRM is a major source of drinking water in New Jersey. Due to the withdrawal of the ground water, the potentiometric surface of the PRM has declined, and large cones of depression have formed in this surface where major ground water withdrawals occur. The presence of these cones of depression alters the ground water flow direction within the PRM by changing the hydraulic gradient and inducing flow toward the pumping area. Studies have shown that ground water within the PRM flows toward the south-southeast, which is in the direction of the cone of depression located at Camden County. It has been documented that water from the Delaware River serves to recharge the cone of depression induced by the withdrawals from the PRM. (Attachment J)

Depth to water table: 24 feet
Depth to aquifer of concern: 24 feet
Depth from lowest point of waste disposal/storage to highest seasonal level of the saturated zone of the aquifer of concern: 0 feet

Thickness and permeability of the least permeable layer between the ground surface and the aquifer of concern: 20 feet; 10^{-4}
Thickness of aquifer: 200 feet (Attachment J)
Direction of ground water flow: south-southeast (Attachment J)
Net precipitation at the site in inches: 10
Karst: No

Wellhead Protection Area within 4 miles of the site: Yes
Does a waste source overlie a Wellhead Protection Area: Yes

B. MONITORING WELL INFORMATION

Briefly discuss why the monitoring wells were installed. Tabulate and discuss contaminants identified in the monitoring wells. Include Well No., sampling date, sampling agency or company, contaminant levels and remediation standards. For each sampling event, list the name, address and certification number of the lab which performed the analyses. State who conducted the quality assurance review of the data and summarize any data qualifications.

No monitoring wells are present on site.

C. OTHER GROUND WATER SAMPLING

Discuss any other ground water sampling that has occurred. Tabulate and discuss contaminants identified in the samples. Include sampling date, sampling agency or company, contaminant levels and remediation standards. For each sampling event, list the name, address and certification number of the lab which performed the analyses. State who conducted the quality assurance review of the data and summarize any data qualifications.

On May 29, 2002 the NJDEP, BSA collected four ground water samples from two small diameter direct push points utilizing a Geoprobe, a hydraulically powered soil probing unit. The samples were collected downgradient of Erin Cleaners on Block 904, Lot 3, located along Main Street in Riverton. Samples were analyzed for volatile organic compounds by the NJDEP, Bureau of Environmental Measurements and Quality Assurance (BEMQA), Mobile Environmental Laboratory. PCE was the primary contaminant detected. The NJDEP, Ground Water Quality Standard (GWQS) for PCE is 1 ppb. No other contaminants were detected above 1 ppb. Sample results for PCE are summarized below: (Attachments F and Map 3)

Sample No.	Sample depth (feet)	PCE concentration (ppb)
GW-2A	25 - 28	**74.23**
GW-2B	38 - 40	**118.08**
GW-2C	45 - 48	**23.57**
GW-3A	25 - 28	**7.60**

On August 6, 7 and 8, 2002 the NJDEP, BSA collected nineteen ground water samples from six small diameter direct push points utilizing a Geoprobe, a hydraulically powered soil probing unit. Samples were analyzed for volatile organic compounds by Severn Trent Laboratories of Colchester, Vermont (Laboratory Certification No. 85972). Sample locations (see Sample Map) are discussed below:

Location Number	Location/AOC/Background
GW-1	Same as S-1; in northern corner of the rear of the building, approximately 15 feet north of the building
GW-2	On Block 902, Lot 3 near the rear fence line of the site
GW-3	Southeast corner of building, approximately 20 feet west of Broad Street, at edge of parking area
GW-4	On Block 902, Lot 15 in the rear of the property, approximately 20 feet south of the Erin building
GW-5	Background sample; same as S-5; northwest corner of Block 902, Lot 3
GW-6	On Block 902, Lot 15; 10 feet from the south side of the Erin building; 50 feet west of Broad Street
GW-9A	Duplicate of GW-3A

Acetone, a common laboratory contaminant, was detected in the majority of the samples, including the field blanks. No contaminants, other than acetone, were detected in GW-5, the background sample. In GW-1D, 1,1-dichloroethane was detected at 1.8 ppb and 1,1,1-trichloroethane was detected at 0.97 ppb. The NJDEP GWQS for these compounds is 70 ppb and 30 ppb, respectively. PCE was the only other contaminant detected in any of the samples. The NJDEP GWQS for PCE is 1 ppb. Data validation was performed by the NJDEP. All the results were accepted with qualification. Sample results are discussed below: (Attachments C and I)

Sample No.	Sample depth (feet)	PCE concentration (ppb)
GW-1A	24 - 28	**1.1**
GW-1B	37 - 40	**5.1**
GW-1C	44 - 48	**18**
GW-1D	49- 52	**6.9**
GW-2A	24 - 28	ND
GW-2B	32 - 36	ND
GW-2C	41 - 44	**1.1**
GW-3A	25 - 28	**40**
GW-3B	33 - 36	**37**
GW-3C	45 - 48	**1.6**
GW-4A	25 - 28	**230**
GW-4B	33 - 36	**120**
GW-4C	42 - 45	ND
GW-5A	24 - 28	ND
GW-5B	37 - 40	ND
GW-5C	45 - 48	ND
GW-6A	25 - 28	**14**
GW-6B	33 - 36	**9.8**
GW-6C	40 - 43	ND
GW-9A	Same as GW-3B	**39**

ND = Not detected

Concentrations of PCE detected in the samples are significantly above background and above the NJDEP, GWQS of 1 ppb. PCE is utilized in the dry cleaning operations conducted on site. The ground water contamination detected both on site and off site is attributable to Erin Cleaners; therefore, an observed release to ground water has been documented.

D. POTABLE WELL INFORMATION

Distance to nearest potable well: 0.8 mile
Depth of nearest potable well: 176 feet

Identify all public supply wells within 4 miles of the site:

Water Company	Distance from Site (miles)	Depth (feet)	Formation
New Jersey American Water Co. (NJAWC) - Highland Avenue (2 wells)	0.8	176 and 197	Raritan/ Magothy
NJAWC- Pomona Rd (2 wells)	1.8	196 and 281	Raritan/ Magothy
NJAWC - Stephen Dr (2 wells)	1.9	262 and 270	Raritan/ Magothy

Water Company	Distance from Site (miles)	Depth (feet)	Formation
NJAWC - New Albany Rd (2 wells)	2.5	225 and 229	Raritan/ Magothy
Moorestown Township (1 well)	2.8	405	Raritan/ Magothy
Maple Shade Township (2 wells)	3.9	126 and 280	Raritan/ Magothy
Merchantville-Pennsauken (2 wells)	2.1, 2.4	211 and 231	Raritan/ Magothy
Merchantville-Pennsauken (5 wells)	3.2	260 to 290	Raritan/ Magothy
Camden Water (5 wells)	2.8	118 to 148	Raritan/ Magothy
Camden Water (8 wells)	3.2	135 to 186	Raritan/ Magothy

(Map 5, Attachment D)

State whether ground water is blended with surface water, ground water or both prior to distribution: Ground water is blended with other ground water, but not blended with surface water prior to distribution.

Discuss private potable well use within 4 miles of the site. Include depth, formation and distance, if available.

There are no known private potable wells in use within 4 miles of the site.

Discuss the site's source of potable water.

Erin Cleaners receives its water from the New Jersey American Water Company.

Discuss information concerning the population utilizing wells that are known to be contaminated with hazardous substances which are attributable to the site. Also include any other evidence of contaminated drinking water or wells closed due to contamination. State whether Level 1 or Level 2 contamination is present.

New Jersey American Water Company (NJAWC) Wells 13 and 27 on Highland Avenue in Cinnaminson were discovered to be contaminated in January 1988 after improved analytical methods were implemented at the water company's plant. The wells may have been unknowingly contaminated prior to January 1988. The primary contaminant detected was PCE. In Well 13, PCE concentrations have decreased from a high of 240 ppb in April 1988 to 6 ppb in January 2000. In Well 27, PCE concentrations have decreased from a high of 88 ppb in January 1988 to 6.7 ppb in December 1999. The Maximum Contaminant Level (MCL) for PCE is 1 ppb. Other contaminants detected in Well 13 have included trichloroethylene up to 7 ppb, 1,1,1-trichloroethane up to 5 ppb, 1,1-dichloroethane up to 5 ppb and several other volatile organic compounds at concentrations less than 2 ppb. Trichloroethylene is a breakdown product of PCE. In Well 27 all other volatile organic compounds have been detected at less than 1.7 ppb. The MCL for

trichloroethylene is 1 ppb, for 1,1,1-trichloroethane is 30 ppb and 1,1-dichloroethane is 50 ppb. Since contaminants detected in the wells exceed an MCL and are atrributable to Erin Cleaners, Level 1 contamination is present in these wells. (Attachment E)

Water drawn from NJAWC Wells 13 and 27 goes through an air stripper unit prior to distribution. Approximately 7,600 people are served by these wells. (Attachment D)

Tabulate for each aquifer the population utilizing that aquifer for drinking purposes within 4 miles of the site. Include only those populations which utilize wells that have a potential to be impacted, not wells which are actually impacted.

Distance from site (miles)	Population/Aquifer		
	Raritan/Magothy	B	C
0 - 1/4	0		
> 1/4 - 1/2	0		
> 1/2 - 1	7,619		
> 1 - 2	15,848		
> 2 - 3	34,753		
> 3 - 4	55,020		

(Attachment D)

Identify any resource uses of ground water within 4 miles of the site (i.e., commercial livestock watering, ingredient in commercial food preparation, supply for commercial aquaculture, supply for major, or designated water recreation area, excluding drinking water use, irrigation of commercial food or commercial forage crops, unusable).

There are no ground water resource uses within 4 miles of the site.

E. LIKELIHOOD OF RELEASE

Discuss the likelihood of a release of contaminants to ground water, including any other information concerning the ground water contamination route. Identify contaminants detected or suspected and provide a rationale for attributing them to the site.

Dry cleaning operations have been conducted on site since 1949. PCE is utilized in the dry cleaning operations conducted on site. Prior to 1986 there are no records of wastes being manifested off site. In January 1988 PCE was detected in NJAWC Wells 13 and 27 at concentrations of 240 ppb and 88 ppb, respectively. Sampling in May 2002 downgradient of Erin Cleaners revealed PCE contamination up to 118 ppb off site. In August 2002 PCE was detected up to 230 ppb in ground water on site. Based on the results of soil and ground water sampling conducted by the NJDEP, contamination detected at NJAWC Wells 13 and 27 is attributable to a discharge of PCE at the Erin Cleaners site.

PART VI: SURFACE WATER ROUTE

A. SURFACE WATER

Does a migration pathway to surface water exist? Yes
Flood plain: > 500 years (Map 7)
Size of drainage area for sources at the site in acres: 0.1
2-year, 24-hour rainfall in inches: 3.5
Does contaminated ground water discharge to surface water? No (if yes, provide documentation)

Identify known or potentially contaminated surface water bodies. Follow the pathway of the surface water and indicate all adjoining bodies of water along a route of 15 stream miles.

Surface Water Body	Distance from Site (miles)	Flow (cfs)	Usage(s)
Pompeston Creek	0.2	50	None
Delaware River	0.3	1900	Fishing, boating

(Map 1, Attachment G)

Identify drinking water intakes and fisheries within 15 miles downstream (or upstream in tidal areas) of the site. For each intake or fishery identify the distance from the point of surface water entry, the name of the fishery and/or supplier and population served.

There are no drinking water intakes within 15 downstream miles of the site. The Delaware River is utilized as a fishery. (Attachment G)

Discuss surface water and/or sediment sampling conducted in relation to the site. Include surface water body, sampling date, sampling agency or company. State whether Level 1 or Level 2 contamination is present for surface water. State whether Level 2 contamination of sediments is present. For each sampling event, list the name, address and certification number of the lab which performed the analyses. State who conducted the quality assurance review of the data and summarize any data qualifications. Discuss visual observations if analytical data are not available (include date of observation).

No surface water or sediment sampling has been conducted in relation to the site.

Determine if a contaminant on site displays bioaccumulative properties. Identify all bioaccumulative substances that may impact the food chain.

PCE is not a bioaccumulative substance.

Determine if surface water is used for irrigation of commercial food or commercial forage crops, watering of commercial livestock, commercial food preparation or recreation.

Surface water is used for recreational purposes such as boating and fishing. (Attachment G)

B. SENSITIVE ENVIRONMENTS

Identify all sensitive environments, including wetlands, along the 15 stream-mile pathway from the site:

Environment Type	Surface Water Body	Flow (cfs)	Distance from Site	Wetland Frontage
Wetlands	Delaware River	1900	5 miles	7 miles

C. LIKELIHOOD OF RELEASE

Discuss the likelihood of a release of contaminant(s) to surface water, include any additional information concerning the surface water route. Identify contaminants detected and provide a rationale for attributing them to the site. Identify any intakes, fisheries and sensitive environments, listed above, that are or may be actually contaminated by hazardous substances attributed to an observed release from the site.

Although contamination was discovered within the first two feet of soil on site, it is not likely to migrate to surface water. A direct runoff pathway from the site to surface water does not exist. Numerous homes, businesses and paved areas lie between the site and surface water.

PART VII: AIR ROUTE

A. POPULATION AND SENSITIVE ENVIRONMENTS

Identify populations residing within 4 miles of the site.

Distance (miles)	Population
on site	4
> 0 - 1/4	804
> 1/4 - 1/2	1,926
> 1/2 - 1	5,301
> 1 - 2	10,242
> 2 - 3	18,143
> 3 - 4	30,475

(Map 8)

Identify sensitive environments and wetland acreage within 4 miles of the site.

Distance	Type of environment	Wetland acreage
0 - 1/4		
> 1/4 - 1/2	wetlands	10
> 1/2 - 1	wetlands	68
> 1 - 2	wetlands	208
> 2 - 3	wetlands	345
> 3 - 4	wetlands	744

(Map 6)

B. LIKELIHOOD OF RELEASE

Describe the likelihood of release of hazardous substances to air. Identify contaminants detected or suspected and provide a rationale for attributing them to the site. For an observed release, discuss the supporting analytical evidence and its significance relative to background.

In the past a release to air may have occurred on site due to the dry cleaning machine. Currently a closed-loop dry cleaning system is utilized on site.

If a release to air is observed or suspected, determine the number of people that reside within the area of air contamination.

Currently a potential release to air is not present.

If a release to air is observed, identify any sensitive environments that are located within the area of air contamination.

A release to air has not been observed.

PART VIII: REMOVAL ACTION AND/OR IEC CONDITION

Discuss conditions which constitute an Immediate Environmental Concern (IEC) or warrant EPA Removal Action consideration (improper storage of incompatible/reactive materials, leaking or unsound containers, inadequate site security, subsurface gas threat).

Soil and ground water contamination have been detected on site. The site is considered a source of the NJAWC Wells 13 and 27 contamination; therefore, the site constitutes an IEC.

PART IX: ENFORCEMENT ACTIONS

No enforcement actions have been issued against this site.

PART X: CONCLUSIONS AND RECOMMENDATIONS

Dry cleaning operations have been conducted at Erin Cleaners since 1949. PCE is and has been utilized in the dry cleaning operations conducted on site. Prior to 1986 there are no records of wastes being manifested off site.

Soil samples collected in August 2002 were contaminated with PCE at concentrations which were significantly above background and above the NJDEP Impact to Ground Water Soil Cleanup Criteria of 1 ppb.

Off-site ground water sampling in May 2002, downgradient of Erin Cleaners, revealed PCE contamination up to 118 ppb. In August 2002, PCE was detected on site at concentrations which are significantly above background and above the NJDEP GWQS of 1 ppb.

New Jersey American Water Company (NJAWC) Wells 13 and 27 on Highland Avenue in Cinnaminson were discovered to be contaminated in January 1988 after improved analytical methods were implemented at the water company's plant. The wells may have been unknowingly contaminated prior to January 1988. The primary contaminant detected was PCE. In Well 13, PCE concentrations have decreased from a high of 240 ppb in April 1988 to 6 ppb in January 2000. In Well 27, PCE concentrations have decreased from a high of 88 ppb in January 1988 to 6.7 ppb in December 1999. The Maximum Contaminant Level (MCL) for PCE is 1 ppb. Water drawn from NJAWC Wells 13 and 27 goes through an air stripper unit prior to distribution.

Based on the results of soil and ground water sampling conducted by the NJDEP, contamination detected at NJAWC Wells 13 and 27 is attributable to a discharge of PCE at the Erin Cleaners site. Consequently, the site is considered an Immediate Environmental Concern.

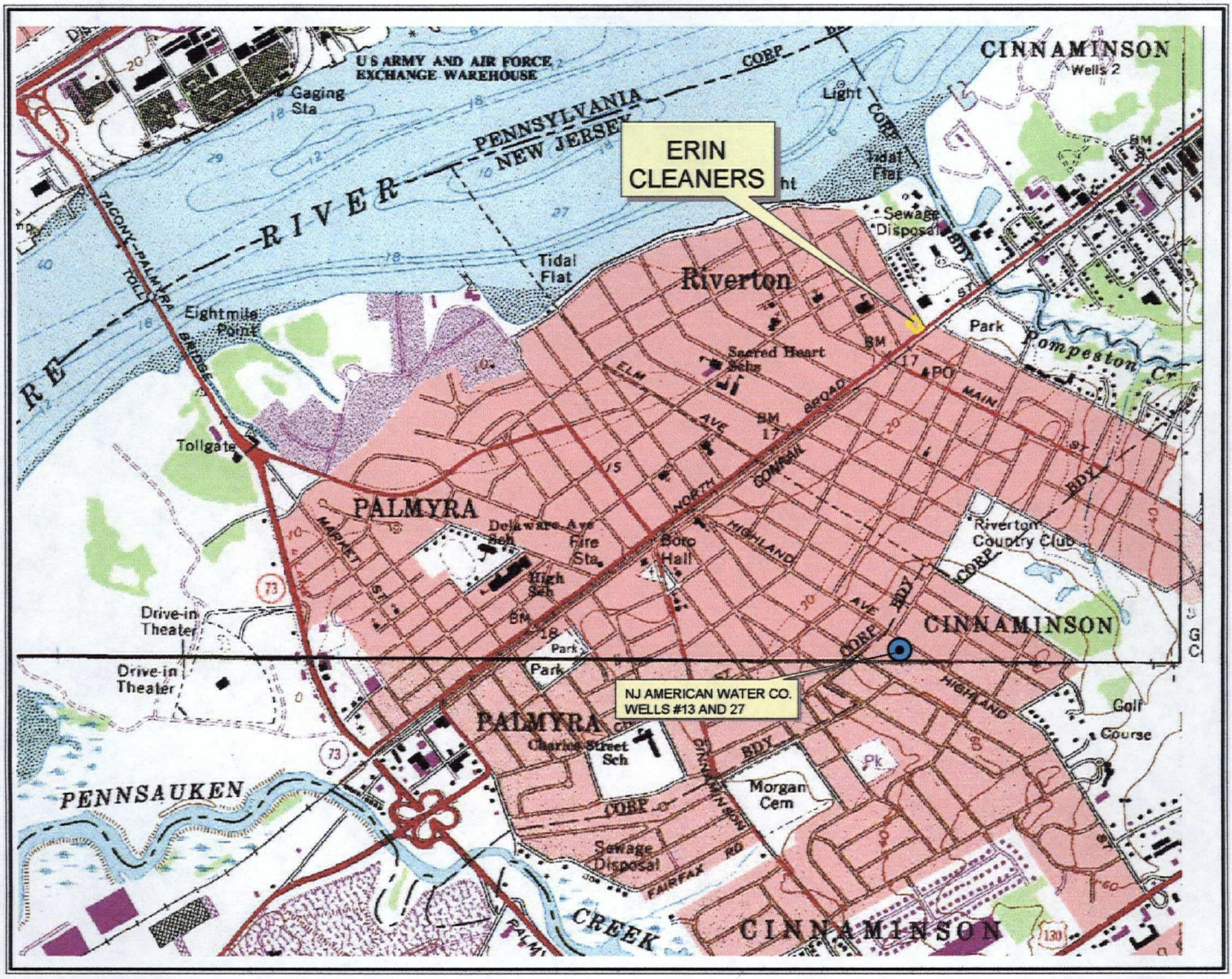
The site is assigned a higher priority for further action under CERCLA.

Submitted by: Donna J. van Veldhuisen
Title: HSMS 1
NJDEP, Division of Publicly Funded Site Remediation,
Bureau of Site Assessment
Date: September 19, 2002

PART XI: POTENTIALLY RESPONSIBLE PARTIES

NAME	OWNER/OPERATOR/ KNOWN DISCHARGER	CURRENT ADDRESS
Mok Hwan and Yeo S. Ahn	Owner/operator	608 Broad St Riverton, NJ 08077 215-887-0887
Don Man Lee Inc.	Owner/operator/known discharger	unknown
Robert Holroyd, George Holroyd, Raymond Conover	Owner/operator/known discharger	310 Cuthbert Road Westmont, NJ (last known address)

MAPS



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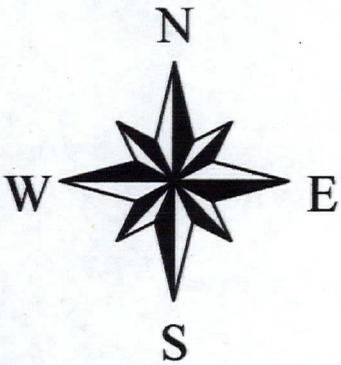
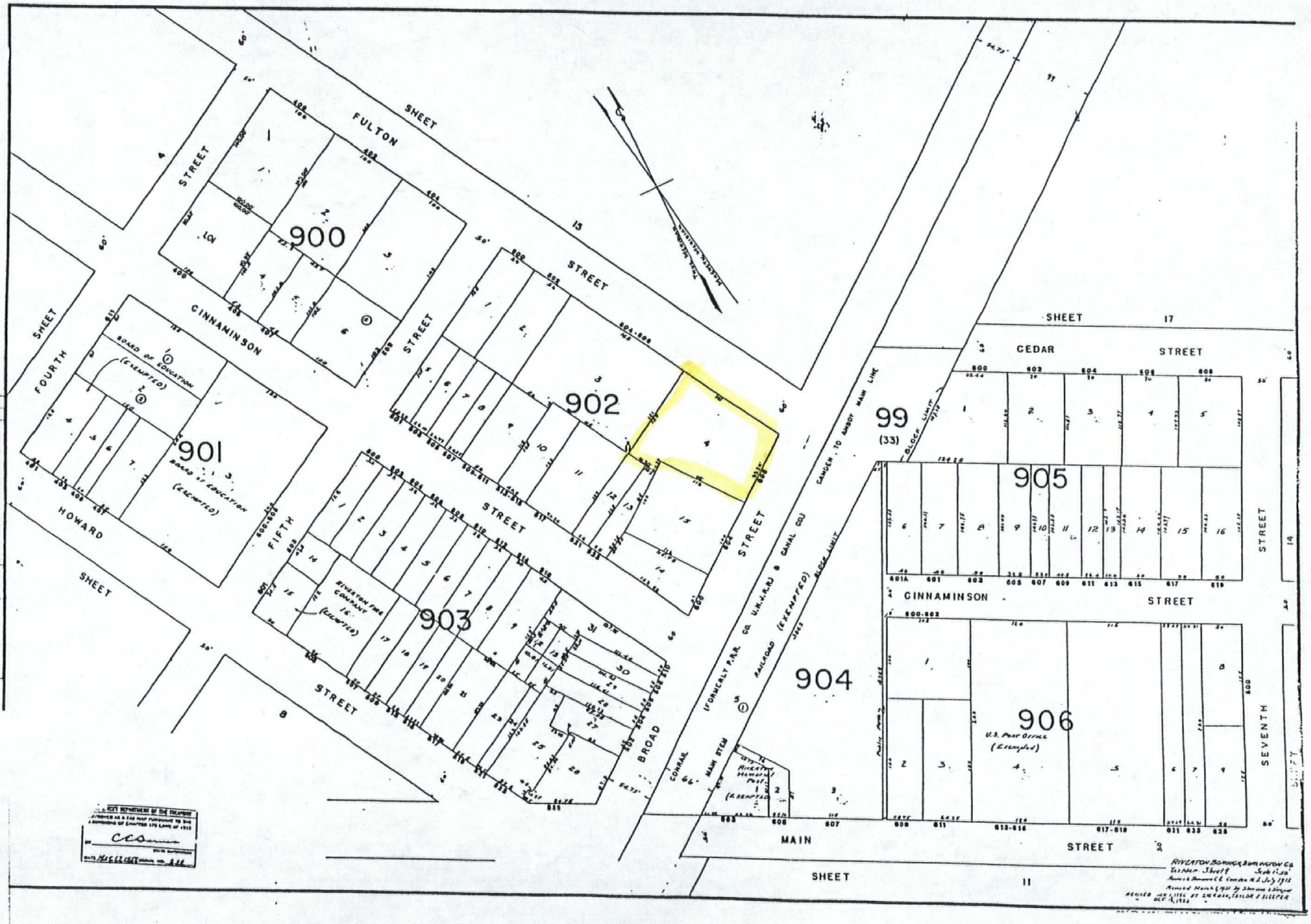


ERIN CLEANERS
608 BROAD STREET
RIVERTON BORO, BURLINGTON CO.

FRANKFORD AND CAMDEN QUADS

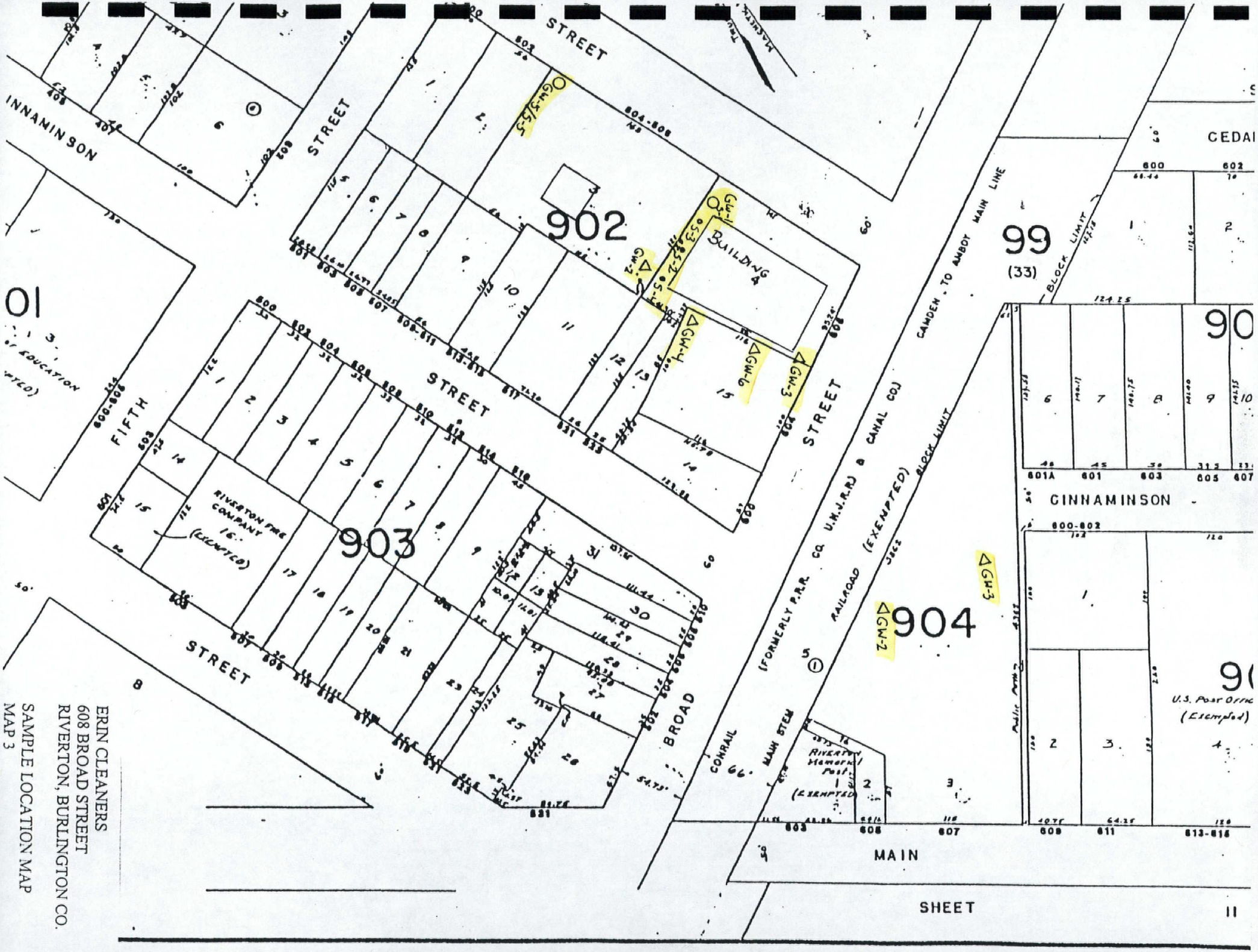
LAT: 40 , 00', 40"
LONG: 75 , 00', 38"

MAP-1



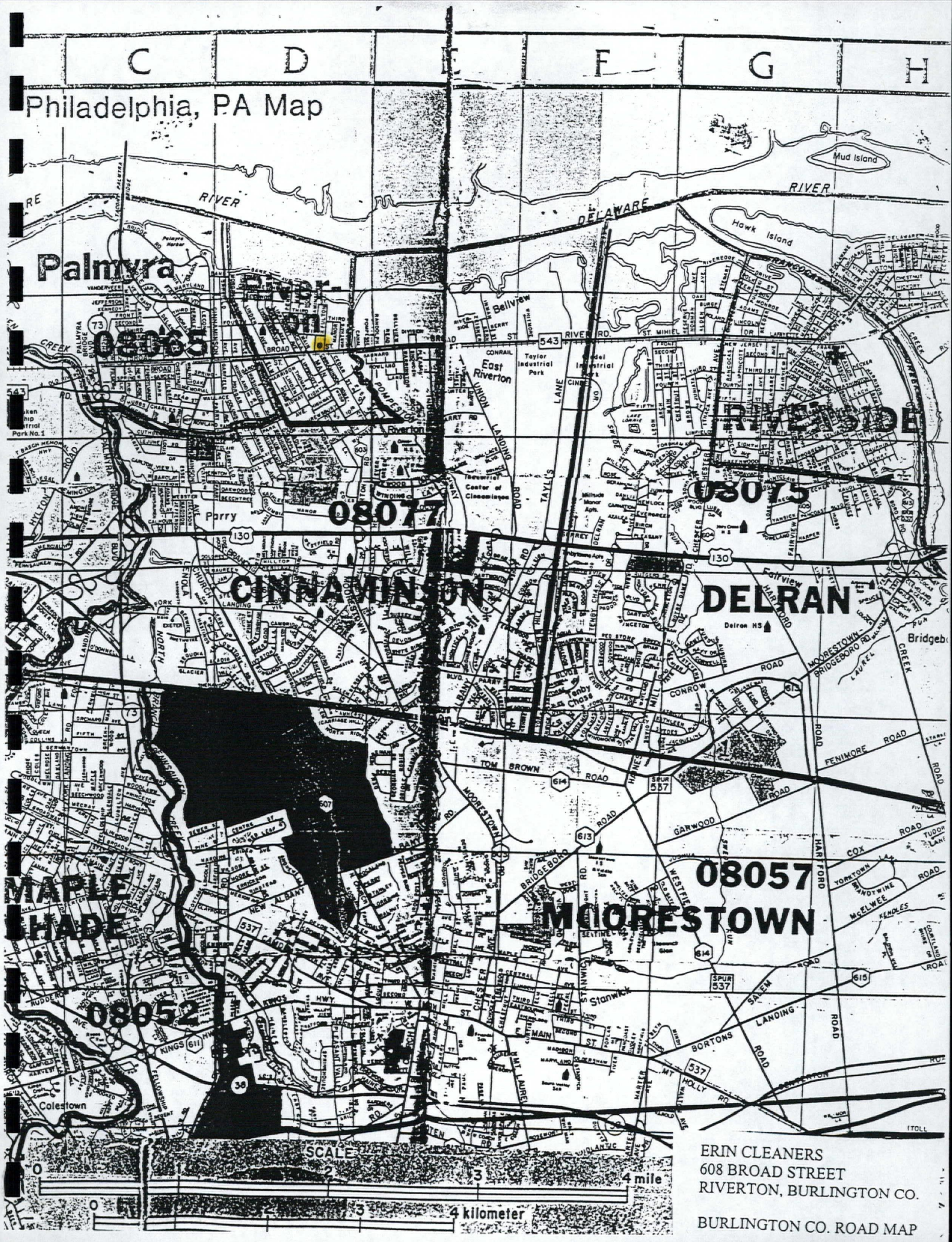
ERIN CLEANERS
608 BROAD STREET
RIVERTON, BURLINGTON CO.

RIVERTON TAX MAP
MAP 2



ERIN CLEANERS
608 BROAD STREET
RIVERTON, BURLINGTON CO.

SAMPLE LOCATION MAP
MAP 3



ERIN CLEANERS
608 BROAD STREET
RIVERTON, BURLINGTON CO.

BURLINGTON CO. ROAD MAP

SUBJECT TO REVISION

100,000 GPD WATER WITHDRAWAL POINTS ONLY AND CONTAMINATED SITES WITHIN 5.0 MILES OF:

LATITUDE 400040
LONGITUDE 750038

DRAFT

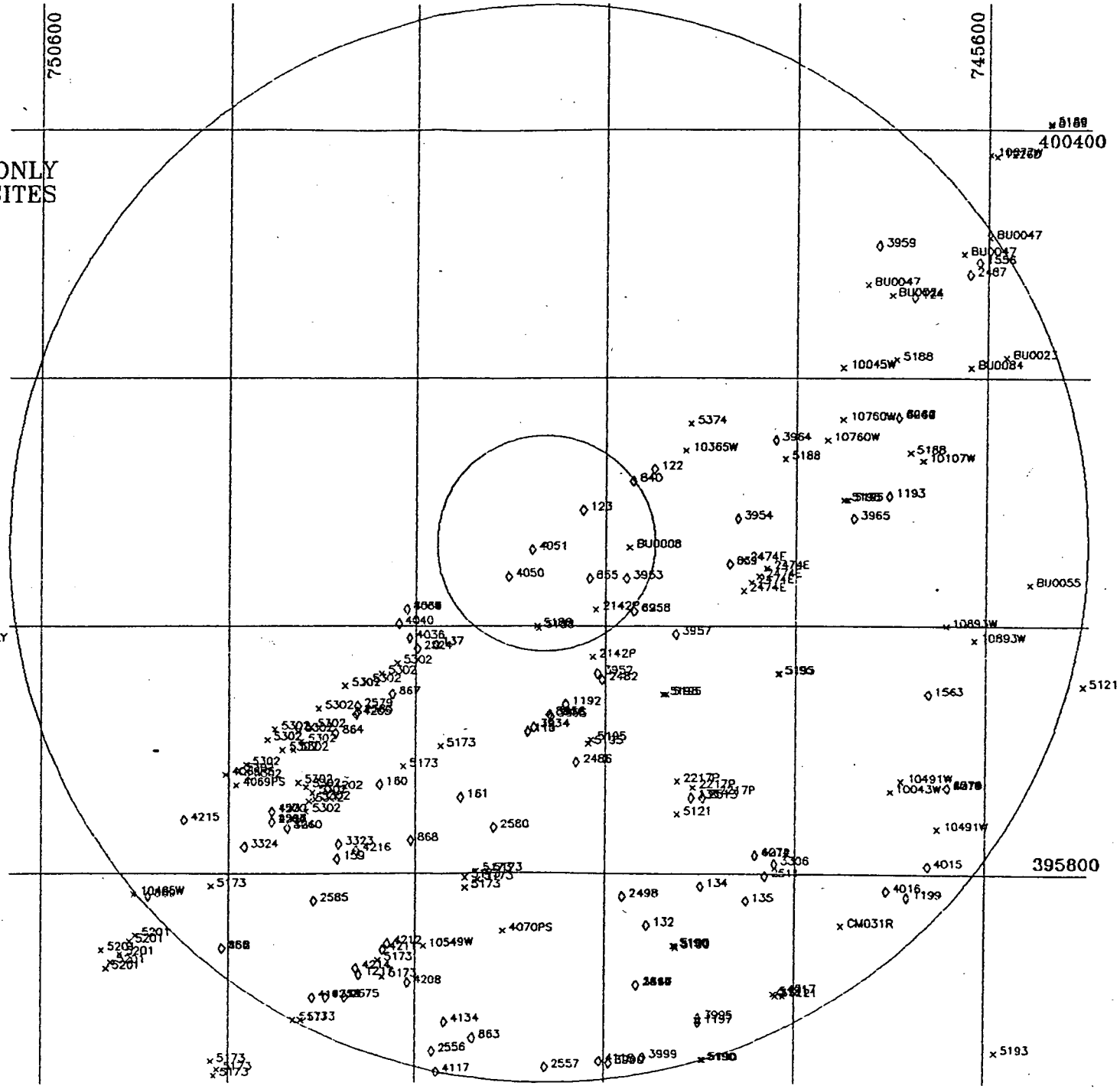
SCALE: 1:63,360
(1 Inch = 1 Mile)

× 100,000 GPD WATER WITHDRAWAL POINTS ONLY
◊ CONTAMINATED SITES
1 MILE AND 5 MILE RADII INDICATED

CONTAMINATED SITE LIST
AS OF 03/21/95

PLOT PRODUCED BY:
NJDEP
WATER SUPPLY ELEMENT
BUREAU OF WATER ALLOCATION
CN-426
TRENTON, NJ 08625

DATE: 08/15/02



MAP 5

SUBJECT TO REVISION

 PRELIMINARY SURVEY OF WATER WITHDRAWAL POINTS WITHIN 5.0 MILES OF 400040 LAT. 750038 LON. (IN ORDER BY PERMIT NUMBER) - 08/15/02

NUMBER	NAME	SOURCEID	LOCID	LAT	LON	LLACC	DISTANCE	COUNTY	MUN	DEPTH	GED1	GED2	CAPACITY
10043W	FIRST PRESBYTERIAN CHURCH	3104691	1	395840	745700	F	3.9	05	22		GKMR		
10045W	RIVERSIDE BOARD OF EDUCATION	2704523	1	400205	745730	T	3.2	05	30	85	GKMR		
10107W	HOLY CROSS HIGH SCHOOL	2715940	#2	400120	745640	T	3.6	05	10	175	GKMR		400
10363W	HOEGANAES CORP./RIVERTON PLANT	WELLPOINTS		400125	745910	U	1.5	05	08	13	GKMR		66
10465W	KOCH MATERIALS CO.	DELAWARE	RIVER	395750	750500	F	5.0	07	27		SDDEL		
10491W	MOORESTOWN FIELD CLUB	3151271	WELL 3	395822	745630	T	4.5	05	22	228	GKMR		60
	MOORESTOWN FIELD CLUB	3126455	WELL 2	395845	745653	T	4.0	05	22	254	GKMR		400
10549W	SYCAMORE RIDGE APARTMENTS	3128806	2	395725	750155	T	3.9	07	27	200	GKMR		35
	SYCAMORE RIDGE APARTMENTS	3128807	3	395725	750155	T	3.9	07	27	200	GKMR		35
10760W	WOOD-RIVER IND.	2700239	1	400140	745730	U	3.0	05	30	120	GKR		50
	WOOD-RIVER IND.	2701504	2	400130	745740	U	2.8	05	30	114	GKR		50
10877W	MASONIC CHARITY FNDTN OF N.J.	2712676	WELL 2	400348	745559	F	5.4	05	06	180	GKMR		30
10893W	WILLOW BROOK COUNTRY CLUB INC.	3149418	WELL 1	395953	745607	T	4.1	05	22	234	GKMR		70
	WILLOW BROOK COUNTRY CLUB INC.	SWEADES RUN	INTAKE 1	400000	745625	U	3.8	05	22				500
1226D	DELANCO TWP SEWERAGE AUTHORITY	WELL POINTS		400347	745535		5.5	05	09	25	GKMR		1000
2142P	RIVERTON COUNTRY CLUB	3118428	1A	400008	750006	S	0.8	05	31	119	GKMR		500
	RIVERTON COUNTRY CLUB	2704844	2	395945	750008	S	1.1	05	31	174	GKMR		500
2217P	DENTON VACUUM, INC.	3105715	1	395839	745852	T	2.8	05	22	272	GKMR		500
	DENTON VACUUM, INC.	3103673	2 RECHARGE	395845	745915	T	2.5	05	22	266	GKMR		0
	DENTON VACUUM, INC.	3103674	1 OBS.	395842	745905	T	2.6	05	22	268	GKMR		0
2474E	SANITARY LANDFILL, INC.		EW-4	400024	745823	U	2.0	05	08	280	GKMR		160
	SANITARY LANDFILL, INC.		EW-5	400028	745818	U	2.1	05	08	260	GKMR		101
	SANITARY LANDFILL, INC.		EW-6	400021	745828	U	1.9	05	08	233	GKMR		84
	SANITARY LANDFILL, INC.		EW-7	400017	745833	U	1.9	05	08	288	GKMR		82
	SANITARY LANDFILL, INC.		EW-8	400032	745833	U	1.8	05	08	248	GKMR		173
4069PS	NCG INDUSTRIES, INC.	DELAWARE RIVER	INTAKE 1	395848	750402	F	3.7	07	27	146	SDDEL		
	NCG INDUSTRIES, INC.		WELL 1	395843	750355	F	3.6	07	27	146	GKMR		150
4070PS	PENNSAUKEN, TOWNSHIP OF	S PENNSAUKN CR	INTAKE 1	395732	750104	U	3.6	07	27		SDPSN		1200
5121	MOORESTOWN TOWNSHIP	5100041	3	395701	745812	G	4.7	05	22	300	GKMR		700
	MOORESTOWN TOWNSHIP	3104663	5	395702	745813	G	4.7	05	22	290	GKMR		805
	MOORESTOWN TOWNSHIP	3104727	6	395701	745807	G	4.7	05	22	290	GKMR		700
	MOORESTOWN TOWNSHIP	3105202	7	395829	745915	G	2.8	05	22	405	GKMR		2000
	MOORESTOWN TOWNSHIP	3105387	8	395931	745458	G	5.1	05	22	332	GKMR		700
5173	MERCHANTVILLE-PENNSAUKEN WATER	3105641	BROWNING1A	395622	750409	G	5.8	07	24	152	GKMR		875
	MERCHANTVILLE-PENNSAUKEN WATER	3104642	WOODBINE 1	395649	750313	G	5.0	07	24	288	GKMR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3114563	WOODBINE 2	395649	750318	G	5.0	07	24	227	GKMR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3101417	DEL GARD 2	395754	750411	G	4.4	07	27	147	GKMR		700
	MERCHANTVILLE-PENNSAUKEN WATER	3102915	MARION 1	395718	750224	G	4.2	07	27	280	GKMR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3104641	MARION 2	395710	750221	G	4.3	07	27	262	GKMR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3104836	BROWNING2A	395625	750407	G	5.8	07	27	140	GKMR		900
	MERCHANTVILLE-PENNSAUKEN WATER	3105110	NATL HWY 1	395852	750208	G	2.4	07	27	231	GKMR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3100010	PARK AVE 1	395801	750114	G	3.1	07	27	274	GKMR		1005
	MERCHANTVILLE-PENNSAUKEN WATER	5100064	PARK AVE 2	395801	750121	G	3.1	07	27	260	GKMR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3103534	PARK AVE 3	395757	750120	G	3.2	07	27	277	GKMR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3100011	PARK AVE 5	395758	750128	G	3.2	07	27	290	GKMR		1005
	MERCHANTVILLE-PENNSAUKEN WATER	3114564	PARK AVE 6	395753	750128	G	3.3	07	27	270	GKMR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3119207	NATL HWY 2	395902	750144	G	2.1	07	27	211	GKMR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3143933	BROWNING3A	395629	750411	G	5.7	07	27	196	GKMR		1000
5188	NEW JERSEY-AMERICAN WATER CO.	2705202	FAIRVIE 30	400124	745648	G	3.5	05	10	235	GKMR		1000
	NEW JERSEY-AMERICAN WATER CO.	2703080	LEON 19	400121	745807	G	2.3	05	10	130	GKMR		700
	NEW JERSEY-AMERICAN WATER CO.	2704851	TAYLOR 29	400209	745457	G	3.6	05	30	120	GKMR		700
	NEW JERSEY-AMERICAN WATER CO.	3104576	HIGHLAND13	395959	750042	G	0.8	05	08	197	GKMR		700
	NEW JERSEY-AMERICAN WATER CO.	3104864	HIGHLAND27	400000	750043	G	0.8	05	08	176	GKMR		1000
5189	NEW JERSEY-AMERICAN WATER CO.	2700356	BEVERLY 15	400402	745521	G	6.0	05	02	57	GKMR		1000
	NEW JERSEY-AMERICAN WATER CO.	2701528	BEVERLY 16	400403	745521	G	6.0	05	02	51	GKMR		500

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	NEW JERSEY-AMERICAN WATER CO.	2701528	BEVERLY 16	400403	745521	G	5.0	05	02	51	GKMR		900		

NUMBER	NAME	SOURCEID	LOCID	LAT	LON	LLACC	DISTANCE	COUNTY	MUN	DEPTH	GED1	GED2	CAPACITY
5190	MAPLE SHADE TOWNSHIP UTILITIES	3100060	2	395725	745916	G	3.9	05	19	126	GKMR		140
	MAPLE SHADE TOWNSHIP UTILITIES	3106020	8	395724	745916	G	3.9	05	19	290	GKMR		760
	MAPLE SHADE TOWNSHIP UTILITIES	3108922	9	395630	745858	G	5.0	05	19	220	GKMR		1000
	MAPLE SHADE TOWNSHIP UTILITIES	3108923	10	395630	745859	G	5.0	05	19	523	GKMR		1500
	MAPLE SHADE TOWNSHIP UTILITIES	3112925	11	395725	745917	G	3.9	05	19	450	GKMR		1250
5193	MOUNT LAUREL TOWNSHIP MUA	3126130	7	395634	745553	G	6.3	5	24	620	GKMR		1400
5195	NEW JERSEY-AMERICAN WATER CO.	2704247	CHESTER 23	400101	745727	G	2.8	05	10	168	GKMR		1000
	NEW JERSEY-AMERICAN WATER CO.	2704680	CHESTER 24	400101	745729	G	2.8	05	10	150	GKMR		1000
	NEW JERSEY-AMERICAN WATER CO.	3104697	NEWALBAN14	395937	745810	G	2.5	05	08	-229	GKMR		1000
	NEW JERSEY-AMERICAN WATER CO.	3104733	NEWALBAN26	395937	745811	G	2.5	05	08	225	GKMR		800
	NEW JERSEY-AMERICAN WATER CO.	3103835	POMONA 10	395927	745922	G	1.8	05	08	281	GKMR		900
	NEW JERSEY-AMERICAN WATER CO.	3104276	POMONA 12	395927	745924	G	1.8	05	08	196	GKMR		700
	NEW JERSEY-AMERICAN WATER CO.	3105321	STEPHEN 28	395903	750011	G	1.9	05	08	262	GKMR		1000
	NEW JERSEY-AMERICAN WATER CO.	3105437	STEPHEN 31	395905	750009	G	1.9	05	08	270	GKMR		1000
5201	NEW JERSEY-AMERICAN WATER CO.	3103456	50	395723	750521	G	5.6	07	08	170	GKMR		700
	NEW JERSEY-AMERICAN WATER CO.	3104780	51	395721	750509	G	5.5	07	08	192	GKMR		1300
	NEW JERSEY-AMERICAN WATER CO.	3104847	52	395714	750518	G	5.7	07	08	198	GKMR		1050
	NEW JERSEY-AMERICAN WATER CO.	3118947	53	395727	750503	G	5.3	07	08	194	GKMR		1000
	NEW JERSEY-AMERICAN WATER CO.	3118944	54	395730	750459	G	5.3	07	08	195	GKMR		1000
	NEW JERSEY-AMERICAN WATER CO.	3120270	55	395717	750515	G	5.6	07	08	176	GKMR		1050
5302	CAMDEN WATER L.L.C.	5100050	MORRIS 1	395942	750212	G	1.8	07	27	107	GKMR		1600
	CAMDEN WATER L.L.C.	3100945	MORRIS 3	395933	750232	G	2.1	07	27	107	GKMR		1900
	CAMDEN WATER L.L.C.	3104252	MORRIS 4	395931	750245	G	2.3	07	27	134	GKMR		1600
	CAMDEN WATER L.L.C.	5100051	MORRIS 6	395900	750318	G	3.0	07	27	138	GKMR		1700
	CAMDEN WATER L.L.C.	5100052	MORRIS 7	395909	750315	G	2.9	07	27	125	GKMR		1680
	CAMDEN WATER L.L.C.	3100944	MORRIS 8	395911	750307	G	2.8	07	27	128	GKMR		1670
	CAMDEN WATER L.L.C.	3104251	MORRIS 10	395920	750302	G	2.6	07	27	118	GKMR		1400
	CAMDEN WATER L.L.C.	5100076	MORRIS 9	395904	750313	G	2.9	07	27	148	GKMR		1670
	CAMDEN WATER L.L.C.	3116814	MORRIS 12	395910	750330	G	3.0	07	27	122	GKMR		2030
	CAMDEN WATER L.L.C.	3115745	MORRIS 11	395900	750325	F	3.1	07	27	149	GKMR		2030
	CAMDEN WATER L.L.C.	3116813	MORRIS 13	395905	750325	G	3.2	07	27	135	GKMR		2060
	CAMDEN WATER L.L.C.	5100053	DELAIR 1	395847	750348	G	3.5	07	27	141	GKMR		1680
	CAMDEN WATER L.L.C.	5100054	DELAIR 2	395850	750353	G	3.5	07	27	146	GKMR		1830
	CAMDEN WATER L.L.C.	5100055	DELAIR 3	395853	750349	G	3.5	07	27	135	GKMR		1830
	CAMDEN WATER L.L.C.	5100056	PUCHACK 1	395844	750315	G	3.2	07	27	141	GKMR		1500
	CAMDEN WATER L.L.C.	5100057	PUCHACK 2	395842	750310	G	3.2	07	27	169	GKMR		1000
	CAMDEN WATER L.L.C.	5100058	PUCHACK 3	395839	750306	G	3.2	07	27	176	GKMR		1280
	CAMDEN WATER L.L.C.	5100059	PUCHACK 5	395835	750308	G	3.2	07	27	186	GKMR		1324
	CAMDEN WATER L.L.C.	3108526A	PUCHACK 7	395836	750304	G	3.2	07	27	180	GKMR		2260
	CAMDEN WATER L.L.C.		MORRIS 2	395937	750222	G	1.9	07	27		GMR		1000
	CAMDEN WATER L.L.C.	3105450	PUCHACK 6	395830	750310	G	3.3	07	27	220	GKMR		1250
5374	NEW JERSEY-AMERICAN WATER CO.	DELAWARE RIVER		400138	745907		1.7	05	08		SDDEL		3500
BU0008	JOHN HUNTER	POND 1	POND 1	400038	745945	F	0.8	05	08	12	SDDEL		800
BU0023	SUTTON, THOMAS	RANCOCAS	STREAM 1	400210	745548	F	4.6	05	09		SDRAN		500
	SUTTON, THOMAS	POND	RANCOCAS	400210	745548	F	4.6	05	09	10	SDRAN		500
BU0024	RUSS BROTHERS	RANCOCAS CREEK	STREAM 1	400240	745660	T	3.9	05	09		SDRAN		
BU0047	VARSACI JAMES & SONS	POND 2	POND 2	400300	745615	F	4.7	05	12	12	GKMR		500
	VARSACI JAMES & SONS	RANCOCAS CREEK	STREAM 1	400245	745715	F	3.8	05	12		SDRAN		550
	VARSACI JAMES & SONS	POND 3	POND 3	400308	745659		5.0	05		18	GKMR		550
BU0055	MORIUCHI FARMS INC	5100099	WELL 2	400020	745532	F	4.5	05	22	272	GKMR		500
BU0084	RUSS, GEORGE	RANCOCAS CREEK	STREAM 1	400205	745610	F	4.2	05	09		SDRAN		100
DM031R	CORDES, WILLIAM JR.		WELL 1	395735	745730	U	4.5	09	05	150	STOK		500

DESCRIPTION OF WATER WITHDRAWAL POINTS

The Water Withdrawal Points listing contains the following fields:

CAPACITY:	the pump capacity in gallons per minute
COUNTY:	county the withdrawal point is in
DEPTH:	depth of the well or pond
DISTANCE:	distance in miles from center of circle
GEO1:	the ground or surface water source
GEO2:	a secondary source of the water
LAT:	latitude of the withdrawal point
LLACC:	accuracy of the lat and long estimates
LOCID	the local identification of the withdrawal point, or a continuation Of the SOURCEID field for surface water
LON:	longitude of the withdrawal point
MUN:	the municipality the withdrawal point is in
NAME:	name of the permit, certificate, or registration holder
NUMBER:	Water Allocation permit, Agricultural Certification, or Registration number
SOURCEID:	the well permit number or other identifier for the water withdrawal

The listing that you have requested includes most well and surface intakes that are in the Water Allocation Permits, and representative sources from most of the Agricultural Certificates. Recognizing the fact that the list will contain errors and omissions, it is advisable to use this resource as a guide and verify all data. We try to maintain an accurate database; however, we can not yet guarantee reliability. If you spot any errors we would be very grateful to hear about them. Please call or write to us in reference to the "Radius Program" at:

NJDEP
Division of Water Resources
Bureau of Water Allocation
CN-029
Trenton, New Jersey 08625
(609) 292-2957

Thank you.

Please see the attached sheets for definitions of the codes used in the Water Withdrawal Points listing.

WATER WITHDRAWAL POINTS
REFERENCE SHEET

THE FOLLOWING CODES DENOTE THE TYPE OF WELL OR SURFACE WATER INTAKE AS LISTED ON WATER WITHDRAWAL POINTS MAPS.

1000D	- DEWATERING PERMIT OR TEMPORARY PUMPING PERMIT
2000	- INDUSTRIAL PERMITS, GOLF COURSES AND REMEDIATION PUMPING PERMITS
4000	- SURFACE DIVERSION AND SURFACE WATER INTAKES
5000	- PUBLIC WATER SUPPLY WELLS
10000	- WELLS WITH THE CAPACITY TO PUMP >100,000 GALLONS BUT DO NOT
XXOOOO	- AGRICULTURAL CERTIFICATION, FIRST TWO LETTERS ARE THE FIRST TWO LETTERS OF THE COUNTY IN WHICH THE PERMIT IS ISSUED.
P	- PRIVATE WELL
PS	- PRIVATE SURFACE INTAKE

CODES USED IN THE WATER WITHDRAWAL POINTS LISTING

This packet contains information on the database codes that the Bureau of Water Allocation uses in the Water Withdrawal Points Listing.

COUNTY:

01 – Atlantic	15 – Gloucester	29 – Ocean
03 – Bergen	17 – Hudson	31 – Passaic
05 – Burlington	19 – Hunterdon	33 – Salem
07 – Camden	21 – Mercer	35 – Somerset
09 – Cape May	23 – Middlesex	37 – Sussex
11 – Cumberland	25 – Monmouth	39 – Union
13 – Essex	27 – Morris	41 – Warren

GEO:

RECENT	
Surficial Deposits	GRS
PLEISTOCENE	
Glacial Undifferentiated	GQGU
Stratified Drift	GQSD
Terminal Moraine	GQTM
Bridgeton	GQBS
Cape May	GQCM
Holly Beach Mbr.	GQCHB
Estuarine Sand	GQES
Pennsauken	GQPS
TERTIARY	
Beacon Hill	GTBH
Cohansey	GTCH
Cohansey & Kirkwood	GTCK
Kirkwood	GTKW
Upper	GTKWU
Rio Grande	GTKRG
Lower	GTKWL
Piney Point Mbr.	GTKPP
Shark River Marl	GTSR
Manasquan Marl	GTMQ
Vincetown Sand	GTVT
Hornerstown Marl	GTHT
CRETACEOUS	
Red Bank	GKRB
Navesink	GKNS
Mount Laurel	GKML
Wenonah	GKWE
Mount Laurel & Wenonah	GKMW
Marshalltown	GKMT
Englistown	GKET
Woodbury	GKWB
Merchantville	GKMV
Magothy	GKM

Old Bridge	GKROB
Raritan	GKR
Sayreville Sand	GKRSS
Farrington	GKRF
Raritan/Magothy	GKMR
Potomac	GKP
TRIASSIC	
Brunswick Formation	GTRB
Lockatong Formation	GTRL
Stockton Formation	GTRS
Basalt	GTRBS
Diabase	GTRDB
Conglomerate	GTRCG
DEVONIAN	
Undifferentiated	GD
SILURIAN	
Bossardville Limestone	GSBD
Decker Formation	GSDK
Longwood Shale	GSLS
Poxono Island Fm	GSPI
Greenpond Conglomerate	GSGP
High Falls	GSHF
Shawangunk Fm	GSSG
ORDOVICIAN	
Martingsburg FM	GOMB
Jacksonburg FM	GOJB
Kittatinny Group	GOK
Outleaunee Fm	GOKO
Harmonyvale Mbr	GOKOH
Beaver Run Mbr	GOKOB
Epler	GOKE
Rickenbach	GOKR
CAMBRO ORDOVICIAN	
Kittatinny Fm	GCOK
CAMBRIAN	
Hardyston Quartzite	GCH
Allentown Fm	GCKA
Upper Mbr	GCKU
Limeport Mbr	GCKLP
Leithsville Fm	GCKL
Walkill Mbr	GCKLW
Hamburg Mbr	GCKLH
Califon Mbr	GCKLC
PRECAMBRIAN	
Granite	GPCGR
Gneiss	GPCGN
Undifferentiated	GPC

Franklin Lms	GPCFL

DELAWARE RIVER BASIN

Unknown or Non-specific	SD
Alloways Creek	SDALL
Alexsocken Creek	SDALE
Assiscunk Creek	SDASC
Assunpink	SDASP
Big Timber Creek	SDBIG
Blacks Creek	SDBLA
Cooper's Creek	SDCOO
Crafts Creek	SDCRA
Crosswicks Creek	SDCRO
Delaware River	SDDEL
Flat Brook	SDFLA
Hakihokake Creek	SDHAK
Harihokake Creek	SKHAR
Jacob's Creek	SDJAC
Lockatong Creek	SDLOC
Lopatcong Creek	SDLOP
Mantua Creek	SDMNT
Musconetcong River	SDMUS
Nichisakawick Creek	SDNIC
Old Man's Creek	SDOLD
Paulins Kill	SDPAU
Pennsauken Creek	SDPEN
Pequest River	SDPST
Pohatcong Creek	SDPOH
Raccoon Creek	SDRAC
Rancocas Creek	SDRAN
Salem River	SDSAL
Wickecheoke Creek	SDWIC

RARITAN RIVER BASIN

Unknown or Non-Specific	SR
Lawrence Brook	SRLAW
Lower Raritan	SRLOW
Millstone River	SRMIL
North Branch Raritan	SRNBR
South Branch Raritan	SRSBR
South River	SRSRV

PASSAIC RIVER BASIN

Unknown or Non-Specific	SP
Canoe Brook	SPCAN
Lower Mid-Passaic River	SPLMP
Lower Passaic	SPLOW
Passaic River	SPPAS
Peckman River	SPPEC
Pequannock River	SPPNK
Pompton River	SPPOM
Ramapo River	SPRAM
Rockaway River	SPROC
Saddle River	SPSAD
Upper Mid-Passaic River	SPUMP

Upper Passaic River	SPUPP
Wanaque River	SPWAN
Whippany River	SPWHI

ATLANTIC COASTAL BASIN

Unknown or Non-Specific	SC
Atlantic County Coastal	SCATL
Cape May County Coastal	SCCAP
Cedar Creek	SCCED
Great Egg Habor River	SCGRE
Manasquan River	SCMSQ
Metedeconk River	SCMET
Monmouth County Coastal	SCMON
Mullica River	SCMUL
Navesink River	SCNAV
Ocean County Coastal	SCOCE
Raritan Bay	SCRAR
Shark River	SCSHA
Shrewsbury River	SCSHR
Toms River	SCTOM
Tuckahoe River	SCTUC

HUDSON RIVER BASIN

Unknown or Non-Specific	SH
Hudson River	SHHUD
Papakating Creek	SHPAP
Pochuck Creek	SHPOC
Wallkill River	SHWAL

HACKENSACK RIVER BASIN

Unknown or Non-Specific	SK
Hackensack River	SKHAC

RAHWAY RIVER BASIN

Unknown or Non-Specific	SY
Rahway River	SYRAH

ELIZABETH RIVER BASIN

Unknown or Non-Specific	SE
Elizabeth River	SEELI

DELAWARE BAY BASIN

Unknown or Non-Specific	SB
Cohansey River	SBCOH
Maurice River	SBMAU
Stow Creek	SBSTO

LLACC:

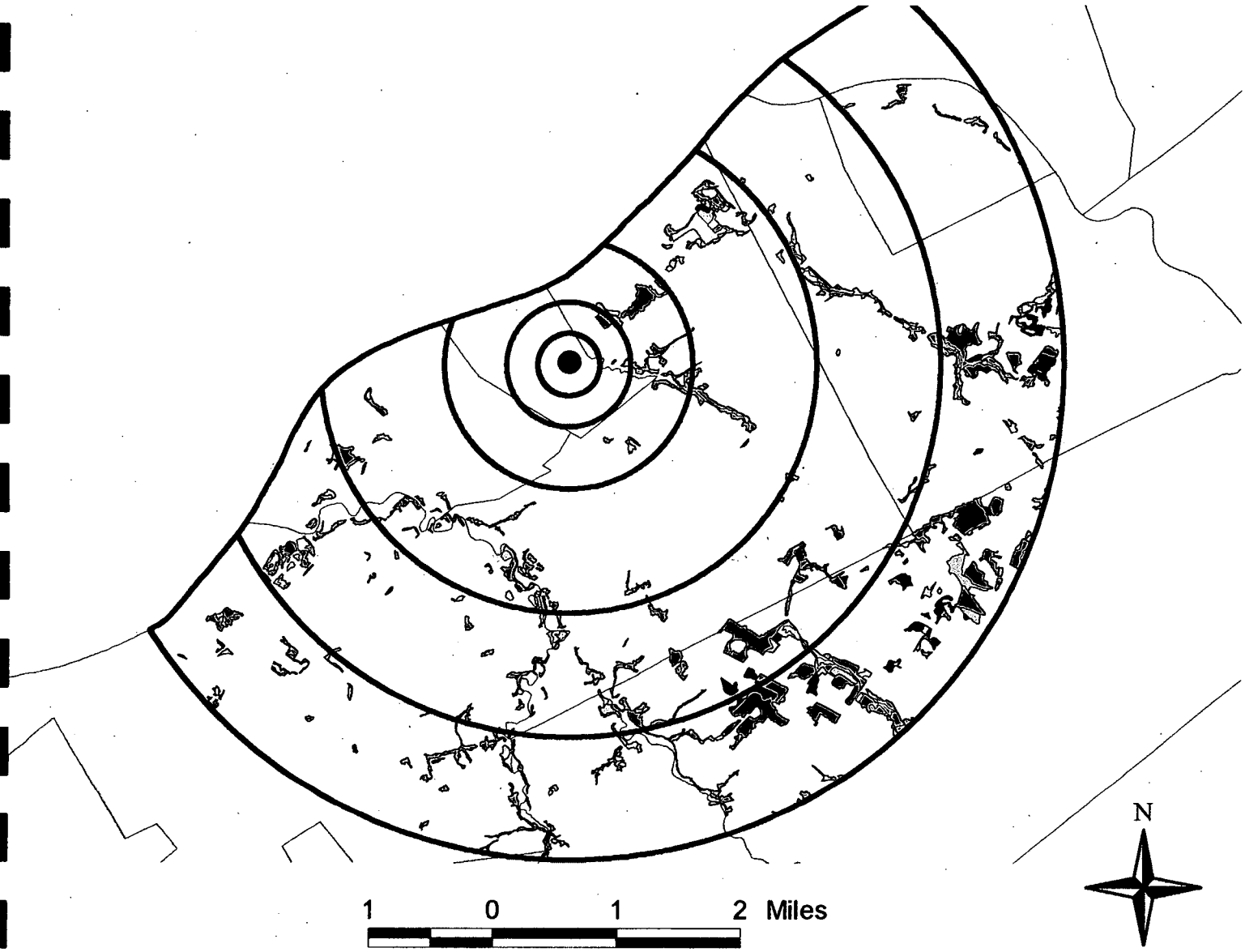
S – accurate to +- 1 second
F – accurate to +- 5 seconds
T – accurate to +- 10 seconds
M – accurate to +- 1 minute
U – accuracy unknown

WATER WITHDRAWAL POINTS
REFERENCE SHEET

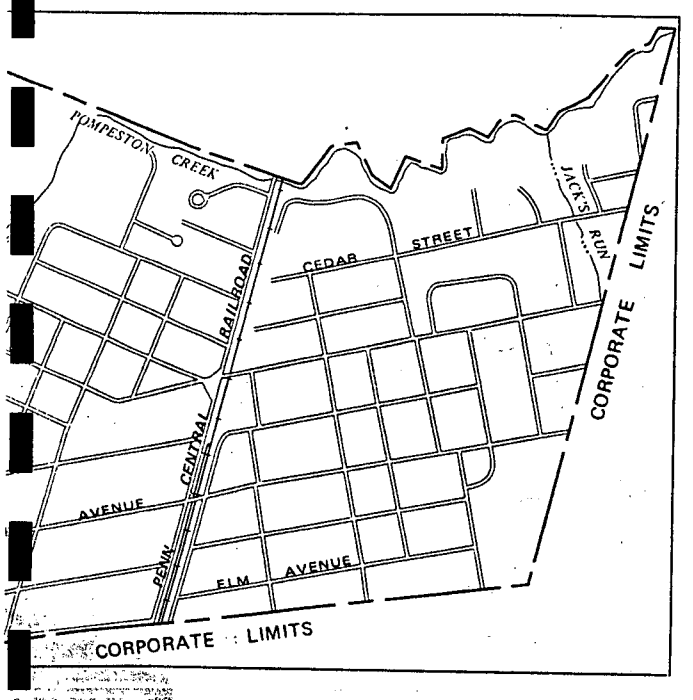
THE FOLLOWING CODES DENOTE THE TYPE OF WELL OR SURFACE WATER INTAKE AS LISTED ON WATER WITHDRAWAL POINTS MAPS.

1000D	- DEWATERING PERMIT OR TEMPORARY PUMPING PERMIT
2001	- INDUSTRIAL PERMITS, GOLF COURSES AND REMEDIATION PUMPING PERMITS
4001	- SURFACE DIVERSION AND SURFACE WATER INTAKES
5001	- PUBLIC WATER SUPPLY WELLS
10000	- WELLS WITH THE CAPACITY TO PUMP >100,000 GALLONS BUT DO NOT
XXOOOO	- AGRICULTURAL CERTIFICATION, FIRST TWO LETTERS ARE THE FIRST TWO LETTERS OF THE COUNTY IN WHICH THE PERMIT IS ISSUED.
P	- PRIVATE WELL
PS	- PRIVATE SURFACE INTAKE

MAP 6 - WETLANDS MAP
ERIN CLEANERS
RIVERTON BORO, BURLINGTON COUNTY
LATITUDE 40° 0' 40" LONGITUDE 75° 0' 38"

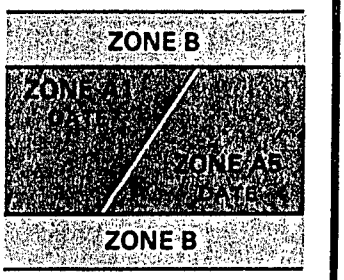


Ring 1	(0.00- 0.25)	has Wetlands Acres:	0
Ring 2	(0.25- 0.50)	has Wetlands Acres:	10
Ring 3	(0.50- 1.00)	has Wetlands Acres:	68
Ring 4	(1.00- 2.00)	has Wetlands Acres:	208
Ring 5	(2.00- 3.00)	has Wetlands Acres:	345
Ring 6	(3.00- 4.00)	has Wetlands Acres:	744



KEY TO SYMBOLS

ZONE DESIGNATIONS* WITH DATE OF IDENTIFICATION
ie., 12/2/74



Base Flood Elevation Line with elevation in feet	513
Base Flood Elevation where uniform within zone	(EL 987' MSL)
Elevation Reference Mark	RM7 x
River Mile	• M1.5

*EXPLANATION OF ZONE DESIGNATIONS

A flood insurance map displays the zone designations for a community according to areas of designated flood hazards. The zone designations used by FIA are:

Zone	Explanation
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding; flood depth 1 to 3 feet; product of flood depth (feet) and velocity (feet per second) less than 15.
A1 - A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by a flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Area between limits of 100-year flood and 500-year flood; areas of 100-year shallow flooding where depths less than 1 foot.
C	Areas outside 500-year flood.
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V0	Areas of 100-year shallow flooding with velocity; flood depth 1 to 3 feet; product of depth (feet) and velocity (feet per second) more than 15.
V1 - V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

CONSULT NFIA SERVICING COMPANY OR LOCAL INSURANCE AGENT OR BROKER TO DETERMINE IF PROPERTIES IN THIS COMMUNITY ARE ELIGIBLE FOR FLOOD INSURANCE.

INITIAL IDENTIFICATION DATE:
DECEMBER 28, 1973
DECEMBER 27, 1974

CONVERSION TO REGULAR PROGRAM:
APRIL 15, 1977

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

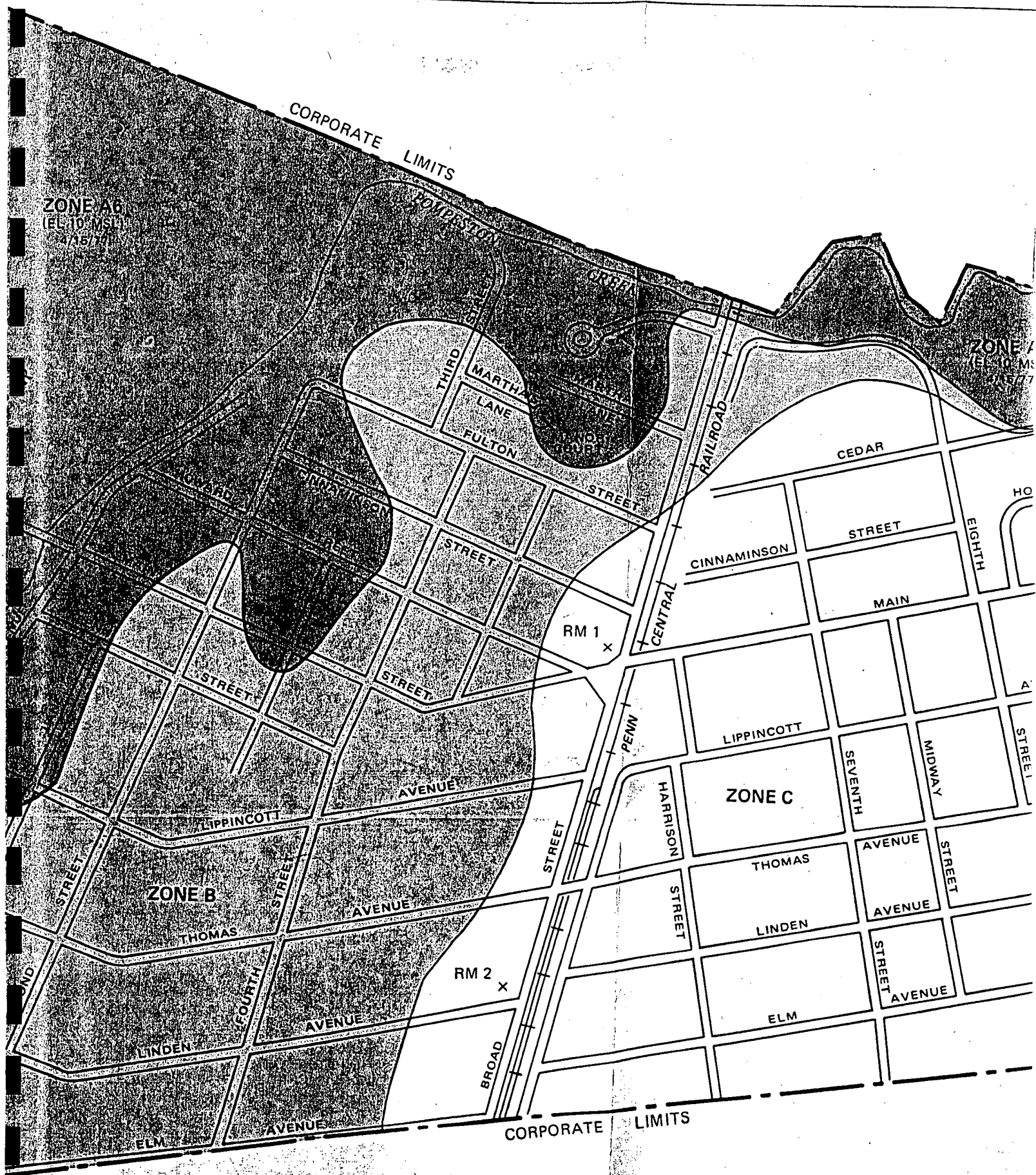
FLOOD HAZARD BOUNDARY MAP H - 01 - 02
FLOOD INSURANCE RATE MAP I - 01 - 02

MAP INDEX

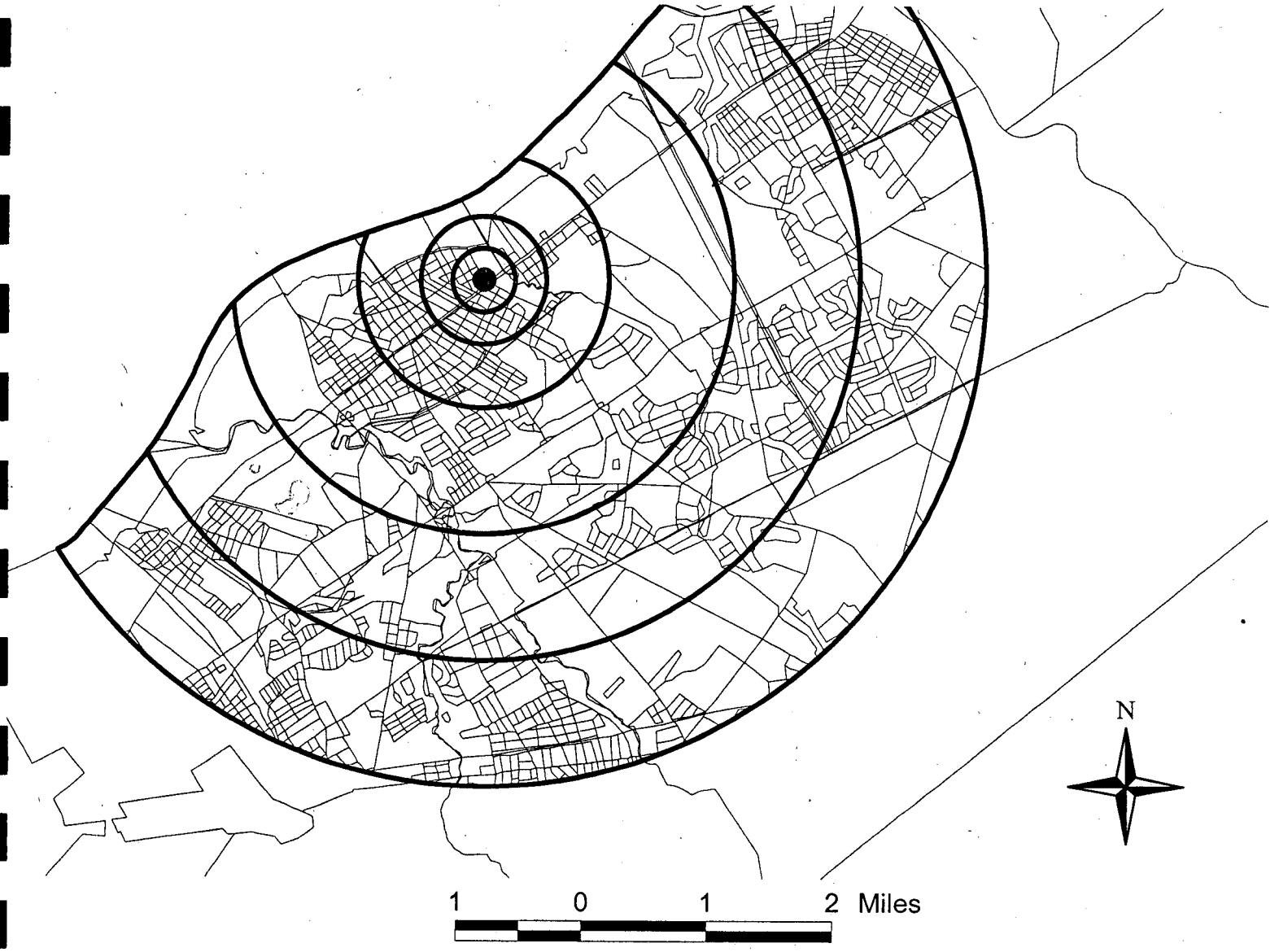
BOROUGH OF RIVERTON, NJ

(BURLINGTON CO.)

COMMUNITY NO. 340114B


CORPORATE LIMITS
ZONE A6
(EL 10' MSL)
4/16/74
POMPESTON
CREEK
THIRD
MARTHA
LANE
FULTON
STREET
RAILROAD
CEDAR
CINNAMINSON
STREET
EIGHTH
CINNAMINSON
MAIN
CENTRAL
RM 1
STREET
STREET
STREET
STREET
PENN
LIPPINCOTT
SEVENTH
MIDWAY
HARRISON
ZONE C
AVENUE
LIPPINCOTT
STREET
STREET
ZONE B
STREET
AVENUE
THOMAS
AVENUE
STREET
THOMAS
STREET
LINDEN
AVENUE
STREET
AVENUE
RM 2
FOURTH
AVENUE
LINDEN
ELM
BROAD
AVENUE
ELM
CORPORATE LIMITS

MAP 8 - POPULATION MAP
ERIN CLEANERS
RIVERTON BORO, BURLINGTON COUNTY
LATITUDE40° 0' 40" , LONGITUDE 75° 0' 38"



Ring	1	(0.00- 0.25)	has Population:	804
Ring	2	(0.25- 0.50)	has Population:	1926
Ring	3	(0.50- 1.00)	has Population:	5301
Ring	4	(1.00- 2.00)	has Population:	10242
Ring	5	(2.00- 3.00)	has Population:	18143
Ring	6	(3.00- 4.00)	has Population:	30475

*Based on 1990 Census Data.

ATTACHMENT A

Form VEM-029
2/80

Side 1

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF AIR POLLUTION CONTROL

REGISTRATION FOR
STORAGE, TRANSFER AND USE OF
TOXIC VOLATILE ORGANIC SUBSTANCES

RECEIVED
SEP 3 - 1980
N.J. STATE DEPT. OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR POLLUTION CONTROL
SOUTHERN REGION

RECEIVED
SEP - 5 1980
N.J. STATE DEPT. OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR POLLUTION CONTROL
METROPOLITAN FIELD OFFICE

TO: New Jersey Department of Environmental Protection
Bureau of Air Pollution Control
Trenton, New Jersey 08625

Read Instructions Before Completing Registration

SECTION A

1. Full Business Name: ERIN CLEANERS, INC
2. Mailing Address: 608 (No.) BROAD (Street) ST. RIVERTON (City), N.J. (State) 08077 (Zip Code)
3. Division and/or Plant Name: NOT APPLICABLE
4. Plant Location: " (No.) " (Street) (Municipality) (County)
5. Location of equipment on premises (Bldg., Dept., Area, etc.): REAR
6. Nature of Business: RETAIL DRY CLEANING
7. Plant Contact: RAYMOND F. CONOVER (Name (Print or Type)) PRES. (Title) 609-829-2320 (Telephone No.)

SECTION B

STACK INFORMATION (EQUIVALENT STACK INFORMATION)

1. Company Designation of Stack(s): DRY TO DRY CLEANING MACH (SPENCER)
2. Certificate Numbers (if any): NONE
3. a. Number of Sources Venting to this Stack: ONE (Complete a separate VEM-030 for each source.)
   b. Number of Stacks Venting Source Operation(s): ~~ONE~~ NOT APPLICABLE
4. Distance to the nearest Property Line (ft.): 93'
5. Stack Diameter (inches): 6 1/4"
6. Discharge Height Above Ground (ft.): 15'
7. Exit Temperature of Stack Gases (°F): 120°
8. Volume of Gas Discharged at Stack Conditions (A.C.F.M.): 750
9. Discharge Direction: ☐ Horizontal ☒ Up ☐ Down
10. Discharge ht. above any area of human use or occupancy within 50': OVER 50'

The information supplied on Registrations VEM-029 and VEM-030 including the data in supplements, is to the best of my knowledge true and correct.

Raymond F. Conover
Signature

AUG 26, 1980
Date

RAYMOND F. CONOVER
Name (Print or Type)

PRES
Title

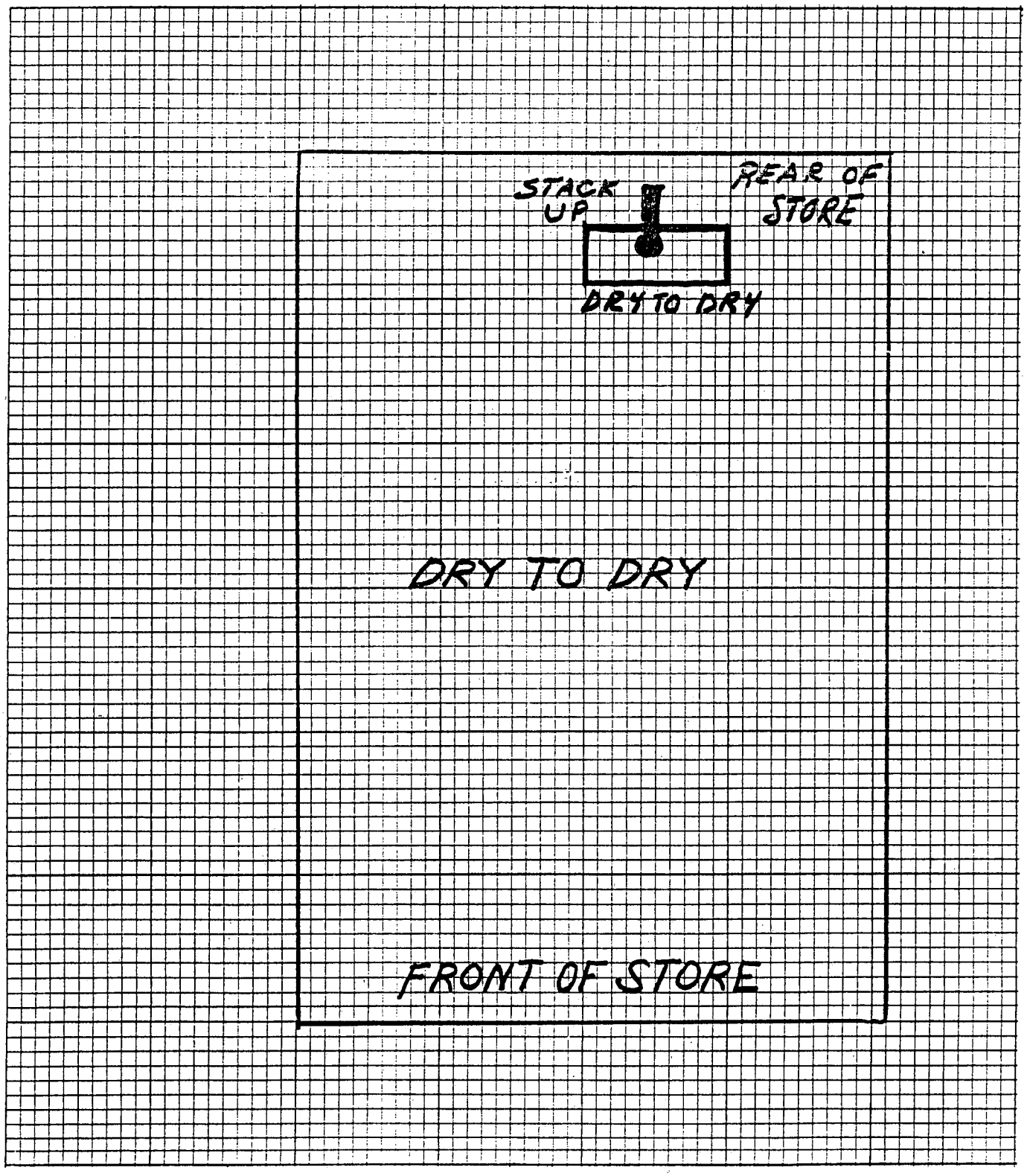
FOR ASSISTANCE CALL — (609) 292-6716

FOR DEPARTMENT USE ONLY

A'

SECTION C DIAGRAM INSTRUCTIONS - A diagram must be included showing the configuration of all stacks, control apparatus and sources related to this application. NOTE: In cases of multiple stacks, include the following information for each stack: (1) distance to nearest property line, (2) stack diameters, (3) stack height above ground, (4) exit temperature (°F) of stack gases, (5) volume rate of gases (ACFM) discharged at stack conditions, (6) the location and type of control apparatus, (7) direction of flows, and (8) maximum stack emissions.

Diagram



A2

VEM-030

Side 1

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF AIR POLLUTION CONTROL

REGISTRATION FOR

STORAGE, TRANSFER AND USE OF

TOXIC VOLATILE ORGANIC SUBSTANCES

Source Emissions And Source Data Form

(Complete this form for each source and submit with Registration Form VEM-029)

SECTION D

SOURCE INFORMATION

1. Source Description DRYCLEANING MACHINE, DRY TO DRY

2. Operating Schedule

7	1820	IN OPERATION
Hours/Day	Hours/Year	Operation Starting Date

3. % Annual Production Throughput By Quarter

20	30	20	30
Jan.-Mar.	Apr.-June	July-Sept.	Oct.-Dec.

4. Volume Of Gas Discharged From This Source (ACFM) _____ Source Discharge Temperature (°F) _____

SECTION E

CONTROL APPARATUS ON SOURCE

		Capital Cost (Dollars)	Annual Operating Cost (Dollars)	No. of Sources Connected
Primary	NONE			
Secondary				
Tertiary				

SECTION F

AIR CONTAMINANTS FROM SOURCE

CONTAMINANT NAME	Emissions w/o Control (lbs./hr.)	Emissions with Control (lbs./hr.)	How Determined
PERCHLORETHYLENE	9.643		MATERIAL BALANCE

TO INSURE PROPER COORDINATION BETWEEN VEM-029 AND VEM-030 FORMS, INSERT IDENTICAL COMPANY NAME AND DESIGNATION OF STACK FROM VEM-029, SIDE 1.

Full Business Name ERIN CLEANERS, INC

Company Designation of Stack(s) DRY TO DRY CLEANING MACH

A3

SECTION G

A. MANUFACTURING AND MATERIALS HANDLING

1. Process Description DRY TO DRY CLEANING MACHINE

2. Total Amount Materials Processed ☐ Batch 100 lb/batch; _____ hr/batch
   ☐ Continuous _____ lb/hr

3. Raw Materials

Raw Materials	% By Wt.	Raw Materials	% By Wt.
GARMENTS	95%		
PERC	5%		

B. FUEL BURNING EQUIPMENT

NOT APPLICABLE

1. Gross Heat Input (10^6 BTU/HR) _____
2. Type Heat Exchange ☐ Direct ☐ Indirect ☐ Internal Combustion Engine

	PRIMARY FUEL	SECONDARY FUEL
3. a. Type of Fuel:		
b. Heating Value (Btu/lb.):		
4. Method of Firing:		
5. % Sulfur in Fuel (Dry):		
6. % Ash Content of Fuel (Dry):		
7. Amount Burned/Yr.		

Units: Solid Fuel (Tons) Liquid Fuel (10^3 Gal.) Gaseous Fuel (10^6 Ft.^{3})

C. INCINERATION

NOT APPLICABLE

1. Type of Unit _____
2. Constituents of Waste(s) _____
3. Waste Code ☐0 ☐1 ☐2 ☐3 ☐4 ☐5 ☐6
4. Amount Burned (lbs./hr.) _____ Type of Auxil. Fuel (if any) _____

D. STORAGE FACILITY

NOT APPLICABLE

1. Tank Contents _____
2. Type of Tank or Bin _____ Height or Length (Ft.) _____
3. Capacity _____ (10^3 Ft.^{3}) ☐ Equivalent or Actual Diameter (Ft.) _____
   (10^3 Gal.) ☐

THE REMAINING QUESTIONS ARE TO BE ANSWERED ONLY FOR LIQUID STORAGE

4. Vapor Pressure at 70°F (PSIA) _____ Storage Temp. If Not Ambient (°F) _____
5. Filling Rate (Gal/Min) _____ Annual Throughput (10^3 Gal/Yr) _____
6. Method of Fill ☐ Top ☐ Bottom ☐ Submerged ☐ Other (Explain Below)
7. Color of Tank ☐ White ☐ Other Exposed to Suns Rays ☐Yes ☐No
8. Insulation Data for Insulated Tanks (Volatile Organic Substances)
   Type _____, Thickness (Inches) _____, Thermal Conductivity (BTU/HR/FT^2/°F) _____

For Department Use Only

☐☐☐☐☐ · ☐☐☐ · ☐☐☐

A4

DEQ-062
8/91

W JERSEY DEPARTMENT OF ENVIRONMENTAL PROT ON
DIVISION OF ENVIRONMENTAL QUALITY
BUREAU OF ENFORCEMENT OPERATIONS

FIELD INVESTIGATION ASSIGNMENT REPORT

PLANT ID #	INSPECTOR ASSIGNED
L4509	3

DATE ASSIGNED	DATE DUE
DATE COMPLETED	COUNTY
2-15-94	Burl

COMPANY NAME Erin Cleaner

TYPE OF ASSIGNMENT — CYCLE 5

LOCATION 608 Broad Street Riverton

☐ Complaint ☐ APEDS

AIRS CLASS : A1 ___ A2 ___ B ___ NSPS ___ NESHAPS ___ PSD ___ CMS ___

☐ Order Followup
☐ PRIORITY CODE DC

AIR GRANT (105) : YES NO PLLT: PT ___ S2 ___ CO ___ N2 ___ VO ___ TOXIC ___ OTHER ___

COMPLAINANT NAME ___ PHONE # 609-829-2320

COMPLAINANT ADDRESS ___

DATE RECEIVED ___ TIME RECEIVED ___ COMPL. LOG ___ RECORDED BY ___

ASSIGNMENT ___

PLANT CONTACT Mck Ahn

TITLE owner

TIME AT PLANT 10:00 (Military Time) TO 11:00

TOTAL ASSIGNMENT TIME\ OT ___ \ ___

STACKS INSPECTED 2 TEMPS ___

OF SOURCES INSPECTED 2 STK TEST REQ ___

SAMPLE TYPE	VIOLATIVE	SAMPLE #

SUBCHAPTER	# INSP	RPT Y/N
8	2	
16	2	
OTHER		

DEQ-012 COMPLETED FOR SUBCHAP.

COMPLAINT	TYPE	NUMBER

Time/Date at Complainant ___ / ___

Verified : ___ Yes ___ No
Sub 5 SOP followed: ___ Yes ___ No
Give details below

VIOLATION FOLLOWUP INSPECTION

Violation Log # ___

Order Dated ___

Subchapter Violated ___
Compliance Achieved ___ Yes ___ No
Give details below

COMMENTS (by code) 001

Billable Stacks: ___ (give details below)

DETAILS OF INSPECTION

~~[illegible]~~ presently using a Spencer GT100, capacity is 80 pounds and previous owner installed
also using a Spencer Spent 400, capacity is 40 pounds and installed in 1991 - extract perc by refridgeration

Safety Kleen picks up the residue and spent cartridge filters on a regular basis for proper disposal

cert # 097022 expired 9-24-95

INSPECTOR'S SIGNATURE
Kelly T Small
TITLE: Envir. Specialist
SUPERVISOR'S REVIEW
INITIALS: [illegible] DATE: 2/28/94

SEE ATTACHED FOR ADDITIONAL INFORMATION: ___ Yes X No

A5

DEQ-062
9/89

N. ERSEY DEPARTMENT OF ENVIRONMENTAL PROTECT.
DIVISION OF ENVIRONMENTAL QUALITY
BUREAU OF ENFORCEMENT OPERATIONS

FIELD INVESTIGATION ASSIGNMENT REPORT

PLANT ID #	INSPECTOR ASSIGNED
L4509	3

DATE ASSIGNED	DATE DUE
DATE COMPLETED	**COUNTY**
11-19-91	Burlington

COMPANY NAME Erin Cleaners INC

TYPE OF ASSIGNMENT CYCLE 5

LOCATION 608 Broad St Riverton

CDS CLASS : A1 ___ A2 ___ B ___ NSPS ___ NESHAPS ___ PSD ___

☐ Complaint ☐ APEDS
☐ Order Followup
☒ PRIORITY CODE OC

AIR GRANT (105) : __YES __NO PLLT: PT ___ S2 ___ CO ___ N2 ___ VO ___ TOXIC ___ OTHER ___

COMPLAINANT NAME ___ PHONE # 829-2320

COMPLAINANT ADDRESS ___

DATE RECIEVED ___ TIME RECIEVED ___ COMPL. LOG ___ RECORDED BY ___

ASSIGNMENT ___

PLANT CONTACT Mak

TITLE owner

TIME AT PLANT 9:00 TO 10:30
(Military Time)

TOTAL ASSIGNMENT TIME\ OT ___ \ ___

STACKS INSPECTED 1 TEMPS ___

OF SOURCES INSPECTED 0 STK TEST REQ ___

SAMPLE TYPE	VIOLATIVE	SAMPLE #

SUBCHAPTER	# INSP	RPT Y/N
8	0	
16	1	
17	1	
OTHER		

DEQ-012 COMPLETED FOR SUBCHAP.

COMPLAINT	TYPE	NUMBER

Time/Date at Complainant ___ / ___

Verified : __ Yes __ No

Sub 5 SOP followed: __ Yes __ No
Give details below

VIOLATION FOLLOWUP INSPECTION

Violation Log # ___

Order Dated ___

Subchapter Violated ___

Compliance Achieved __ Yes __ No
Give details below

COMMENTS (by code) 001

DETAILS OF INSPECTION

Presently using a Spencer Sprint 400 dry to dry cleaning system with a perchlorethylene

A valid permit on site - machine is a 1989 model which was installed in 1990 - machine capicity 50lb machine usage. refridgeration to extract perc. Safety Kleen picks up the Residue and used filters on regular basis

001 cert. 097072 expire 9-24-95

INSPECTOR'S SIGNATURE Kelly J Small

TITLE: Environmental Specialist

SUPERVISOR'S REVIEW
INITIALS: R DATE: 12/6/91

SEE ATTACHED FOR ADDITIONAL INFORMATION: __ Yes X No

A4

DEQ-062
8/91

N JERSEY DEPARTMENT OF ENVIRONMENTAL PROTE ON
DIVISION OF ENVIRONMENTAL QUALITY
BUREAU OF ENFORCEMENT OPERATIONS

FIELD INVESTIGATION ASSIGNMENT REPORT

PLANT ID #	INSPECTOR ASSIGNED
L4509	3

DATE ASSIGNED	DATE DUE
DATE COMPLETED	**COUNTY**
2-2-96	Burl

COMPANY NAME Erin Cleaners INC

LOCATION 608 Broad St Riverton

TYPE OF ASSIGNMENT CYCLE 5

☐ Complaint ☐ APEDS

AIRS CLASS : A1 ___ A2 ___ B ___ NSPS ___ NESHAPS ___ PSD ___ CMS ___

☐ Order Followup
☐ PRIORITY CODE DC

AIR GRANT (105) : YES NO PLLT: PT S2 CO N2 VO TOXIC OTHER

COMPLAINANT NAME ___ PHONE # 609-829-2320

COMPLAINANT ADDRESS ___

DATE RECEIVED ___ TIME RECEIVED ___ COMPL. LOG ___ RECORDED BY ___

ASSIGNMENT ___

PLANT CONTACT Mok Aho

TITLE Owner

TIME AT PLANT 13:30 TO 13:50
(Military Time)

TOTAL ASSIGNMENT TIME\ OT ___ \ ___

STACKS INSPECTED 2 TEMPS ___

OF SOURCES INSPECTED 2 STK TEST REQ ___

SAMPLE TYPE	VIOLATIVE	SAMPLE #

SUBCHAPTER	# INSP	RPT Y/N
8	2	
16		
25		
OTHER		

DEQ-012 COMPLETED FOR SUBCHAP.

COMPLAINT	TYPE	NUMBER

Time/Date at Complainant ___/___

Verified : __ Yes __ No
Sub 5 SOP followed: __ Yes __ No
Give details below

VIOLATION FOLLOWUP INSPECTION

Violation Log # ___

Order Dated ___

Subchapter Violated ___
Compliance Achieved __ Yes __ No
Give details below

COMMENTS (by code) 001

Billable Stacks: ___(give details below)

DETAILS OF INSPECTION

Cert # 123767 expired 8-25-00

presently using a Spencer GT100 and Spencer Sprint 400 dry cleaning systems. Both extract perc by refrigeration
The GT100 has a capacity of 80pound and the Sprint 400 machine capacity is 40pound
Safety Kleen picks up the used filters on a regular basis

SEE ATTACHED FOR ADDITIONAL INFORMATION: __ Yes X No

INSPECTOR'S SIGNATURE Ray Small

TITLE: Env Specialist

SUPERVISOR'S REVIEW
INITIALS: FL DATE: 2/7/96

5/33/96

A7

EFO-002 (DEQ-062)
11/93

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION & ENERGY
DIVISION OF ENFORCEMENT FIELD OPERATIONS
AIR & ENVIRONMENTAL QUALITY ENFORCEMENT

FIELD INVESTIGATION ASSIGNMENT REPORT

PLANT ID #	INSPECTOR ASSIGNED
NL	

DATE ASSIGNED	DATE DUE
DATE COMPLETED	**COUNTY**
2-20-96	Burl

L4509

COMPANY NAME Ahn's Cleaners, Inc.

LOCATION 608 Broad Street Riverton

TYPE OF ASSIGNMENT ☐ Complaint ☐ APEDS ☐ Order Followup ☐ PRIORITY CODE DC

CYCLE

CDS CLASS: A1___ A2___ B___ NSPS___ NESHAPS___ PSD___ CMS___

AIR GRANT (105): ☐ Yes ☐ No PLLT: PT___ S2___ CO___ N2___ VO___ Toxic___ Other___

COMPLAINANT NAME _____ PHONE # 609-829-2520

COMPLAINANT ADDRESS _____

DATE RECEIVED _____ TIME RECEIVED _____ COMP. LOG _____ RECORDED BY _____

ASSIGNMENT Inspect

PLANT CONTACT Paula Ahn

TITLE owner

TIME AT PLANT (Military Time) 14:00 TO 14:30

TOTAL ASSIGNMENT TIME/ OT ____ / ____

STACKS INSPECTED 1 TEMPS ____

OF SOURCES INSPECTED 1 STK TEST REQ ____

SAMPLE TYPE	VIOLATIVE	SAMPLE #

SUBCHAPTER	# INSP	RPT Y/N
8	1	
16	1	
OTHER		

EFO-007(DEQ-012)Completed for Subchap.

COMPLAINT

TYPE	NUMBER

Time/Date at Complainant ____ / ____

Verified: ☐ Yes ☐ No

Sub 5 SOP followed: ☐ Yes ☐ No

Give details below

VIOLATION FOLLOWUP INSPECTION

Violation Log # ____

Order Dated ____

Subchapter Violated ____

Compliance Achieved ☐ Yes ☐ No

Give details below

COMMENTS (by code) _____ Billable Stacks: ____ (give details below)

DETAILS OF INSPECTION

Same place as Erin Cleaners, Inc
Plant ID # L4509 - Valid permit on site
last inspection Feb 2, 1996

SEE ATTACHED FOR ADDITIONAL INFORMATION: ☐ YES ☒ NO

INSPECTOR'S SIGNATURE Kay T Small

TITLE: Env Specialist

SUPERVISOR'S REVIEW

INITIALS: FL DATE: 2/21/96

3/14/96

A8

ATTACHMENT B

SOIL SURVEY

Burlington County New Jersey

UNITED STATES DEPARTMENT OF AGRICULTURE
Soil Conservation Service
In cooperation with
NEW JERSEY AGRICULTURAL EXPERIMENT STATION

Issued October 1971

B

Freehold fine sandy loam, 5 to 10 percent slopes (FfC).—This soil has a profile similar to that described as typical for the series. Because runoff is moderate, erosion is a hazard. Erosion can be controlled by the use of contour farming, stripcropping, terraces, and cover crops. A permanent cover is needed in apple orchards. Most of this soil is farmed, but some of it is woodland. (Capability unit IIIe–5; woodland suitability group 1o1)

Freehold fine sandy loam, 10 to 15 percent slopes (FfD).—In farmed areas of this soil, runoff is rapid and the erosion hazard is severe. Erosion is controlled by seeding small grains or pasture plants or by using a cropping system that includes long periods in sod. Apple orchards can be kept in permanent sod. This soil is suited to trees and can be used as a habitat for wildlife. (Capability unit IVe–5; woodland suitability group 1o1)

Freehold fine sandy loam, 15 to 25 percent slopes (FfE).—This soil has short slopes in most places. The lower parts of the slopes contain seepy spots where ground water moving laterally has surfaced. Except that the subsoil is more variable in texture and thickness, the profile of this soil is similar to that described as typical for the series. Included with this soil in mapping are clayey and sandy areas.

Most of this soil is in trees, which grow well. A permanent cover of trees, shrubs, or grasses controls erosion and prevents severe siltation of streams. (Capability unit VIe–5; woodland suitability group 1r1)

Freehold fine sandy loam, clayey substratum, 2 to 5 percent slopes (FgB).—This soil has an underlying clayey layer at a depth of 40 to 60 inches. In most places this layer is a thick, very dark gray deposit that is a part of the Merchantville or Woodbury clay Formations. This clayey layer is so slowly permeable that water perches on it after heavy rains and also moves laterally over it.

In most places the clay is so deep that it does not greatly affect farming. In other places, however, the perched water is so close to the surface that underdrains must be constructed above the clay layer. (Capability unit IIe–5; woodland suitability group 1o1)

Freehold loamy sand, 0 to 5 percent slopes (FhB).—Except for the loamy sand surface layer, this soil has a profile similar to that described as typical for the series. This sandy surface layer is 18 inches thick. Because of it, this soil has a lower available water capacity than Freehold fine sandy loam, 0 to 2 percent slopes, and needs more frequent irrigation. Also, this soil is lower in fertility and in organic-matter content. It warms earlier in spring but is subject to soil blowing. Crops are subject to sand blasting. Included with this soil in mapping are small areas of Holmdel soil that may need drainage.

This soil is better suited to fruit and irrigated vegetables than to corn, soybeans, hay, and pasture. Crops are protected from soil blowing by windbreaks, cover crops, and wind strips. (Capability unit IIs–6; woodland suitability group 2o1)

Freehold loamy sand, 5 to 10 percent slopes (FhC).—This soil has a surface layer of loamy sand 14 inches thick. Except for this surface layer, the profile of this soil is similar to that described as typical for the series. Runoff is moderate, and water erosion is more of a hazard than soil blowing.

Most slopes are not long, but erosion control practices are needed if these soils are to be farmed every year. On the long slopes, erosion can be controlled by contour farming, cover crops, stripcropping, or terracing. Apple orchards can be kept in permanent sod. (Capability unit IIIe–6; woodland suitability group 2o1)

Freehold sandy loam, 5 to 10 percent slopes, severely eroded (FoC3).—This soil is so severely eroded that plowing mixes the more sticky subsoil with the little original surface layer that remains. Organic-matter content is very low, and runoff is rapid. The surface soil crusts as it dries, and this crusting prevents uniform seed germination. Plant growth is irregular and poorer than on uneroded soils. Included with this soil in mapping are small areas of Collington and Westphalia soils.

This soil can be kept in good tilth by frequently adding organic matter or manure and fertilizers and by using cover crops. Cropping systems should provide small grain or sod for long periods. Gullies need to be filled. (Capability unit IVe–5; woodland suitability group 1o1)

Freehold sandy loam, 10 to 15 percent slopes, severely eroded (FoD3).—This soil is so severely eroded that plowing mixes the sticky subsoil with the remaining original surface layer. Runoff is rapid. Some slopes contain seepy spots where ground water moving laterally has surfaced.

Pasture, trees, plantings for wildlife, or other permanent cover is needed to control erosion. Black locust can be planted for posts, or pines for Christmas trees. Large amounts of organic matter are needed to improve the tilth. Gullies need to be filled. (Capability unit VIe–5; woodland suitability group 1o1)

Galestown Series

The Galestown series consists of excessively drained, nearly level or gently sloping sandy soils that have a little more clay in the subsoil than in the surface layer. Galestown soils occur along the Delaware River on a terrace that ranges from 10 to 50 feet in elevation.

In a typical profile the surface layer is very dark grayish-brown sand about 10 inches thick. The subsurface layer, about 13 inches thick, is yellowish-brown sand. The subsoil is strong-brown loamy sand about 15 inches thick. Alternating layers of dark yellowish-brown sand and strong-brown loamy sand make up the underlying material.

Permeability is rapid in forested Galestown soils and moderately rapid in plowed soils. Although the available water capacity generally is low, it is somewhat higher where these soils have a clayey substratum. Only deep-rooted plants, however, benefit from this higher capacity, and nearly all crops are irrigated. The soils warm early in spring and can be worked immediately after heavy rains. In extended

B2

hot spells some crops are scalded by heat reflected from the sand.

Galestown soils are subject to soil blowing that sandblasts crops. These soils are low in organic-matter content and fertility. Added fertilizers leach readily. Unless lime is added at frequent intervals, these soils are very strongly acid.

The native vegetation is a forest consisting mostly of mixed oaks, hickory, and scattered Virginia pines. Virginia pines have seeded naturally in areas left idle, but now they grow in only a few places. Sassafras and wild cherry are common in idle areas.

These soils were formerly used for general crops, but when irrigation was introduced, farmers gradually switched to high-value vegetables. Nearly all areas are now irrigated, and the common crops are sweet corn, peaches, snap beans, and cantaloupes. On some fields two crops are grown in a year.

Because the population is concentrated along the Delaware River, a large acreage of these soils has been taken for residential, commercial, and industrial development.

Typical profile of Galestown sand, 0 to 5 percent slopes, in a cultivated field south of the National Cemetery at Beverly:

Ap—0 to 10 inches, very dark grayish-brown (10YR 3/2) sand; very weak, fine, granular structure; very friable; abrupt, smooth boundary; horizon 8 to 12 inches thick.

A2—10 to 23 inches, yellowish-brown (10YR 5/4) sand; single grain; loose; clear, smooth boundary; horizon 10 to 18 inches thick.

B2t—23 to 30 inches, strong-brown (7.5YR 4/6) loamy sand; very weak subangular blocky structure; very friable; sand grains weakly bridged; gradual, smooth boundary; horizon 7 to 13 inches thick.

B3—30 to 38 inches, strong-brown (7.5YR 4/6) loamy sand; very weak subangular blocky structure; very friable; gradual, smooth boundary; horizon 4 to 8 inches thick.

C—38 to 60 inches, dark yellowish-brown (10YR 4/6) sand containing thin layers of strong-brown (7.5YR 4/6) loamy sand; sand is single grain and loose; loamy sand is massive and friable.

Galestown soils contain varying amounts of rounded quartzose pebbles. Although in most places the amounts are small, some areas within a mile of the Delaware River have thick beds of pebbles and cobblestones 3 to 5 feet below the surface. Because of the community development in most of these areas, they have not been mapped separately.

These soils are mostly fine sand and medium sand throughout the solum, and the texture in the C horizon is about the same.

The A1 horizon is very dark and about 4 inches thick. Plowing mixes this horizon with part of the yellowish-brown A2 horizon, and an Ap horizon is formed. The Ap horizon is 3 or 4 in value and 2 or 3 in chroma. The surface layer is sand, consisting of mostly fine sand, but not enough to make a fine sand texture. The A2 horizon is 7.5YR or 10YR in hue. Thickness of the A horizon averages about 23 inches but ranges from 18 to 27 inches.

The B horizon generally is 7.5YR in hue, but it is 10YR in places. The B2t horizon is loamy sand or sand, though it normally contains 3 to 6 percent more clay than the A horizon.

In places the C horizon has clayey layers or gravel beds. In other areas it consists of material much like that of the A and B horizons, though it has slightly less clay and silt or has thin bands of clay and silt in the upper part.

Galestown soils are associated with Klej and Sassafras soils. They lack the mottling that is common in the Klej soils, and they have less clay and silt in the subsoil than th Sassafras soils. Galestown soils have a thicker surfac layer than Downer soils, and a coarser textured subsoil.

Figure 11.—Sandblasting of vegetable crops can be reduced b protecting them with narrow strips of close-growing crop The soil is Galestown sand, 0 to 5 percent slopes.

Galestown sand, 0 to 5 percent slopes (GaA).—Thi soil has the profile described as typical for the series Included with this soil in mapping are small areas o Klej and Sassafras soils and also small areas of Gales town sand, clayey substratum.

This soil is well suited to irrigated sweet corn peaches, snap beans, and cantaloupes. The effect of soi blowing can be reduced by the use of windbreaks o cover crops, or by planting narrow strips of close growing crops (fig. 11). Soluble fertilizers applied a needed compensate for losses though leaching. (Capability unit IVs–7; woodland suitability group 3s1)

Galestown sand, clayey substratum, 0 to 5 percent slopes (GcB).—The clayey substratum of this soil generally is at a depth of 40 to 60 inches, but in places it is only 30 inches from the surface. Otherwise the profile of this soil is similar to that described as typical for the series. Drainage is needed where the clayey substratum is near the surface. Except for drainage, farm use and management are the same as on Galestown sand, 0 to 5 percent slopes. (Capability unit IVs–7; woodland suitability group 3s1)

Holmdel Series

The Holmdel series consists of moderately well drained or somewhat poorly drained loamy and sandy soils. These soils contain small amounts of glauconite, for they generally formed on marine deposits that contain this mineral. They have a moderately high seasonal water table.

In a typical profile the surface layer is dark grayish-brown fine sandy loam about 10 inches thick. The subsoil, about 24 inches thick, is dark-brown mottled sandy clay loam. The underlying material is stratified

B3

BURLINGTON COUN

B4

ATTACHMENT C

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

COPY
SAMPLE DATA SUMMARY PACKAGE

SDG NO: 89186

C'

ANALYTICAL DATA PACKAGE FOR THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION TRENTON, NEW JERSEY 08625

Agency/Division:	DFPSR	**Bureau/Office:**	BEMQA
Project No.:	C3100H0P	**Contract No.:**	00-X-31543
Laboratory Name:	Severn Trent Laboratories	**Laboratory Location:**	Colchester, Vermont
SDG or Batch No.:	89186	**NJDEP Certification No.:**	VT972
Date of First Sample Receipt:	08/08/02	**Date of Last Sample Receipt:**	08/08/02

Agency Sample Number	Laboratory Sample Number	Sample Location	Date and Time of Collection
S-1	496664	S-1	08/06/2002-1018
S-2	496665	S-2	08/06/2002-1018
S-3	496666	S-3	08/06/2002-1049
S-4	496667	S-4	08/06/2002-1115
S-5	496668	S-5	08/06/2002-1548
S-5MSD	496668MD	S-5	08/06/2002-1548
S-5MS	496668MS	S-5	08/06/2002-1548
S-6	496669	S-6	08/06/2002-1211

We certify this data package to be technically and contractually compliant with the terms and conditions of the 00-X-31543 Professional Laboratory Services Contract. Non Conformance, if any, is set forth on the Non Conformance Summary Form (DEP Form A1C). Release of this data in hardcopy on an Electronic Data Transfer Diskette is authorized by the Quality Assurance Officer and the Laboratory Manager, or their approved alternatives, as verified by the signatures below.

Laboratory Manager (Typed):	Michael F. Wheeler, Ph.D.	**Date:**	9/4/02
Laboratory Manager (Signature):	Kristine Dusalon for		
Quality Assurance Officer (Typed):	Brian W. Blair	**Date:**	09/03/02
Quality Assurance Officer (Signature):			

C2

ANALYTICAL DATA PACKAGE NONCOMPLIANCE SUMMARY FOR THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION TRENTON NEW JERSEY 08625

Agency/Division DPFSR	**Bureau/Office:** BEMQA
Project Identification: C3100H0P (89186)	**Laboratory Name** Severn Trent Laboratories
Laboratory Location: Colchester, Vermont	**NJDEP Certification:** 85972

The condition of the samples and the issues identified at the time of sample log-in are detailed in the Sample Handling section of this submittal. The samples were received in "Encore" samplers, and were transferred to vials containing the prescribed preservatives. The samples were collected on August 6th and were received on August 8th. The transfer of sample volumes into the vials for analysis did occur beyond 48 hour timeframe from sample collection, but within 55 hours.

SW846 Method(s) 5035/8260B (Volatile Organics)

Samples S-1, S-2, S-3, S-4, and S-6 were analyzed by the medium level method, using the methanol preserved sample volumes. The decision was based on the results of preliminary screening, the chromatograms and quantitation reports for which are included in the Sample Preparation section of this submittal. Sample S-5 was analyzed by the low level method, using the sodium bisulfate preserved sample volumes. In analyzing the sample the laboratory did have need to resort to using that volume that was prepared from an "Encore" sampler that contained a relatively small amount of sample (0.7 grams).

The surrogates were recovered well in each of the analyses associated with the sample set, and each of the analyses exhibited good internal standard responses.

Matrix spike and matrix spike duplicate analyses were performed on sample S-5, by the low level method. The sample amounts associated with the matrix spike and matrix spike duplicate analyses approximated 2.5 grams while, as previously noted, the sample amount associated with analysis of the parent sample was 0.7 grams. The recoveries of acrolein and 1,2,4-trichlorobenzene were relatively low in both the matrix spike and the matrix spike duplicate analysis (approximating 50 percent and 70 percent respectively). In addition, the results for acetone in these analyses apparently reflected variability in the constituent concentration of this compound in the sample volumes that were analyzed.

Laboratory control samples were analyzed in duplicate in each analytical sequence. In general, the target analytes were recovered well in each of these analyses. It should be specifically noted, however, that one of the replicate laboratory control sample analyses associated with the analytical sequence that included samples S-1, S-2, S-3, S-4, and S-6 did yield recovery values that represent a failed analysis. This acquisition is identified as "NUI LCSD", and the data for this analysis has been formally included in the data set for completeness. Although the internal standard responses for this acquisition were within the control range, the responses for fluorobenzene and chlorobenzene-d5 (two of the internal standards) were significantly lower than those in each of the other acquisitions in the analytical sequence. This is a more definitive indication of an issue specific to that particular analysis. Based on the internal standard performance in each of the other analyses, and the recovery values that were derived in the laboratory control sample analysis identified as "NUI LCS", the data set for the analysis of the field samples is submitted without qualification.

Manual integration was employed in deriving the results for the volatile organics analyses. The values that

ANALYTICAL DATA PACKAGE NONCOMPLIANCE SUMMARY FOR THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION TRENTON NEW JERSEY 08625

have been derived from manual integration are qualified on the quantitation reports, and extracted ion current profiles are included in the data package.

Trace concentrations of 1,2,4-trichlorobenzene were identified in the analysis of each of the method blanks associated with the analytical work. This compound was not identified in the analysis of samples in this sample set.

The method detection limits that were derived by the laboratory for Method 8260B immediately follow this compliance summary.

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

S-1

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89186

Matrix: (soil/water) SOIL Lab Sample ID: 496664

Sample wt/vol: 3.5 (g/mL) G Lab File ID: 496664E

Level: (low/med) MED Date Received: 08/08/02

% Moisture: not dec. 5 Date Analyzed: 08/20/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 10000(uL) Soil Aliquot Volume: 100(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	750	U
74-87-3	Chloromethane	750	U
75-01-4	Vinyl Chloride	750	U
74-83-9	Bromomethane	750	U
75-00-3	Chloroethane	750	U
75-69-4	Trichlorofluoromethane	750	U
107-02-8	Acrolein	750	U
75-35-4	1,1-Dichloroethene	750	U
67-64-1	Acetone	750	U
75-15-0	Carbon Disulfide	750	U
107-05-1	Allyl Chloride	750	U
75-09-2	Methylene Chloride	750	U
107-13-1	Acrylonitrile	750	U
156-60-5	trans-1,2-Dichloroethene	750	U
540-59-0	1,2-Dichloroethene (total)	750	U
1634-04-4	Methyl-t-Butyl Ether	750	U
75-34-3	1,1-Dichloroethane	750	U
108-05-4	Vinyl Acetate	750	U
156-59-2	cis-1,2-Dichloroethene	750	U
78-93-3	2-Butanone	750	U
126-98-7	Methacrylonitrile	750	U
74-97-5	Bromochloromethane	750	U
67-66-3	Chloroform	750	U
71-55-6	1,1,1-Trichloroethane	750	U
56-23-5	Carbon Tetrachloride	750	U
78-83-1	Isobutyl Alcohol	38000	U
71-43-2	Benzene	750	U
107-06-2	1,2-Dichloroethane	750	U
79-01-6	Trichloroethene	750	U
78-87-5	1,2-Dichloropropane	750	U
80-62-6	Methyl Methacrylate	750	U
74-95-3	Dibromomethane	750	U
123-91-1	1,4-Dioxane	38000	U

C5

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

S-1

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89186

Matrix: (soil/water) SOIL Lab Sample ID: 496664

Sample wt/vol: 3.5 (g/mL) G Lab File ID: 496664E

Level: (low/med) MED Date Received: 08/08/02

% Moisture: not dec. 5 Date Analyzed: 08/20/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 10000(uL) Soil Aliquot Volume: 100(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-27-4	Bromodichloromethane	750	U
10061-01-5	cis-1,3-Dichloropropene	750	U
108-10-1	4-Methyl-2-pentanone	750	U
108-88-3	Toluene	750	U
10061-02-6	trans-1,3-Dichloropropene	750	U
97-63-2	Ethyl Methacrylate	750	U
79-00-5	1,1,2-Trichloroethane	750	U
127-18-4	Tetrachloroethene	7400	
591-78-6	2-Hexanone	750	U
124-48-1	Dibromochloromethane	750	U
106-93-4	1,2-Dibromoethane	750	U
108-90-7	Chlorobenzene	750	U
630-20-6	1,1,1,2-Tetrachloroethane	750	U
100-41-4	Ethylbenzene	750	U
1330-20-7	Xylene (m,p)	750	U
1330-20-7	Xylene (total)	750	U
95-47-6	Xylene (o)	750	U
100-42-5	Styrene	750	U
75-25-2	Bromoform	750	U
98-82-8	Isopropylbenzene	750	U
79-34-5	1,1,2,2-Tetrachloroethane	750	U
96-18-4	1,2,3-Trichloropropane	750	U
541-73-1	1,3-Dichlorobenzene	750	U
106-46-7	1,4-Dichlorobenzene	750	U
95-50-1	1,2-Dichlorobenzene	750	U
96-12-8	1,2-Dibromo-3-Chloropropane	750	U
120-82-1	1,2,4-Trichlorobenzene	750	U

C6

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

S-1

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89186

Matrix: (soil/water) SOIL Lab Sample ID: 496664

Sample wt/vol: 3.5 (g/mL) G Lab File ID: 496664E

Level: (low/med) MED Date Received: 08/08/02

% Moisture: not dec. 5 Date Analyzed: 08/20/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 10000(uL) Soil Aliquot Volume: 100(uL)

Number TICs found: 7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALKANE	19.09	4300	J
2.	UNKNOWN	19.72	5000	J
3.	UNKNOWN ALKANE	20.19	2400	J
4.	UNKNOWN	20.36	5400	J
5.	UNKNOWN	20.78	780	J
6. 128-37-0	BUTYLATED HYDROXYTOLUENE	21.53	2300	NJB
7.	UNKNOWN ALKANE	23.51	770	J
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C7

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

S-2

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89186

Matrix: (soil/water) SOIL Lab Sample ID: 496665

Sample wt/vol: 3.4 (g/mL) G Lab File ID: 496665E

Level: (low/med) MED Date Received: 08/08/02

% Moisture: not dec. 18 Date Analyzed: 08/20/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 10000(uL) Soil Aliquot Volume: 100(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	900	U
74-87-3	Chloromethane	900	U
75-01-4	Vinyl Chloride	900	U
74-83-9	Bromomethane	900	U
75-00-3	Chloroethane	900	U
75-69-4	Trichlorofluoromethane	900	U
107-02-8	Acrolein	900	U
75-35-4	1,1-Dichloroethene	900	U
67-64-1	Acetone	900	U
75-15-0	Carbon Disulfide	900	U
107-05-1	Allyl Chloride	900	U
75-09-2	Methylene Chloride	900	U
107-13-1	Acrylonitrile	900	U
156-60-5	trans-1,2-Dichloroethene	900	U
540-59-0	1,2-Dichloroethene (total)	900	U
1634-04-4	Methyl-t-Butyl Ether	900	U
75-34-3	1,1-Dichloroethane	900	U
108-05-4	Vinyl Acetate	900	U
156-59-2	cis-1,2-Dichloroethene	900	U
78-93-3	2-Butanone	900	U
126-98-7	Methacrylonitrile	900	U
74-97-5	Bromochloromethane	900	U
67-66-3	Chloroform	900	U
71-55-6	1,1,1-Trichloroethane	900	U
56-23-5	Carbon Tetrachloride	900	U
78-83-1	Isobutyl Alcohol	46000	U
71-43-2	Benzene	900	U
107-06-2	1,2-Dichloroethane	900	U
79-01-6	Trichloroethene	900	U
78-87-5	1,2-Dichloropropane	900	U
80-62-6	Methyl Methacrylate	900	U
74-95-3	Dibromomethane	900	U
123-91-1	1,4-Dioxane	46000	U

C8

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

S-2

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89186

Matrix: (soil/water) SOIL Lab Sample ID: 496665

Sample wt/vol: 3.4 (g/mL) G Lab File ID: 496665E

Level: (low/med) MED Date Received: 08/08/02

% Moisture: not dec. 18 Date Analyzed: 08/20/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 10000(uL) Soil Aliquot Volume: 100(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-27-4	Bromodichloromethane	900	U
10061-01-5	cis-1,3-Dichloropropene	900	U
108-10-1	4-Methyl-2-pentanone	900	U
108-88-3	Toluene	900	U
10061-02-6	trans-1,3-Dichloropropene	900	U
97-63-2	Ethyl Methacrylate	900	U
79-00-5	1,1,2-Trichloroethane	900	U
127-18-4	Tetrachloroethene	13000	
591-78-6	2-Hexanone	900	U
124-48-1	Dibromochloromethane	900	U
106-93-4	1,2-Dibromoethane	900	U
108-90-7	Chlorobenzene	900	U
630-20-6	1,1,1,2-Tetrachloroethane	900	U
100-41-4	Ethylbenzene	900	U
1330-20-7	Xylene (m,p)	900	U
1330-20-7	Xylene (total)	900	U
95-47-6	Xylene (o)	900	U
100-42-5	Styrene	900	U
75-25-2	Bromoform	900	U
98-82-8	Isopropylbenzene	900	U
79-34-5	1,1,2,2-Tetrachloroethane	900	U
96-18-4	1,2,3-Trichloropropane	900	U
541-73-1	1,3-Dichlorobenzene	900	U
106-46-7	1,4-Dichlorobenzene	900	U
95-50-1	1,2-Dichlorobenzene	900	U
96-12-8	1,2-Dibromo-3-Chloropropane	900	U
120-82-1	1,2,4-Trichlorobenzene	900	U

C9

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

S-2

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89186

Matrix: (soil/water) SOIL Lab Sample ID: 496665

Sample wt/vol: 3.4 (g/mL) G Lab File ID: 496665E

Level: (low/med) MED Date Received: 08/08/02

% Moisture: not dec. 18 Date Analyzed: 08/20/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 10000(uL) Soil Aliquot Volume: 100(uL)

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	17.87	4600	J
2.	UNKNOWN	19.04	6000	J
3.	UNKNOWN ALKANE	19.49	1200	J
4.	UNKNOWN ALKANE	20.17	2100	J
5.	UNKNOWN	20.36	2500	J
6.	UNKNOWN ALKANE	20.61	1500	J
7.	UNKNOWN	20.85	2200	J
8.	UNKNOWN	21.22	1400	J
9. 128-37-0	BUTYLATED HYDROXYTOLUENE	21.53	1900	NJB
10.	UNKNOWN ALKANE	23.32	980	J
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C10

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

S-3

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89186

Matrix: (soil/water) SOIL Lab Sample ID: 496666

Sample wt/vol: 4.4 (g/mL) G Lab File ID: 496666E

Level: (low/med) MED Date Received: 08/08/02

% Moisture: not dec. 4 Date Analyzed: 08/20/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 10000(uL) Soil Aliquot Volume: 100(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	590	U
74-87-3	Chloromethane	590	U
75-01-4	Vinyl Chloride	590	U
74-83-9	Bromomethane	590	U
75-00-3	Chloroethane	590	U
75-69-4	Trichlorofluoromethane	590	U
107-02-8	Acrolein	590	U
75-35-4	1,1-Dichloroethene	590	U
67-64-1	Acetone	590	U
75-15-0	Carbon Disulfide	590	U
107-05-1	Allyl Chloride	590	U
75-09-2	Methylene Chloride	590	U
107-13-1	Acrylonitrile	590	U
156-60-5	trans-1,2-Dichloroethene	590	U
540-59-0	1,2-Dichloroethene (total)	590	U
1634-04-4	Methyl-t-Butyl Ether	590	U
75-34-3	1,1-Dichloroethane	590	U
108-05-4	Vinyl Acetate	590	U
156-59-2	cis-1,2-Dichloroethene	590	U
78-93-3	2-Butanone	590	U
126-98-7	Methacrylonitrile	590	U
74-97-5	Bromochloromethane	590	U
67-66-3	Chloroform	590	U
71-55-6	1,1,1-Trichloroethane	590	U
56-23-5	Carbon Tetrachloride	590	U
78-83-1	Isobutyl Alcohol	30000	U
71-43-2	Benzene	590	U
107-06-2	1,2-Dichloroethane	590	U
79-01-6	Trichloroethene	590	U
78-87-5	1,2-Dichloropropane	590	U
80-62-6	Methyl Methacrylate	590	U
74-95-3	Dibromomethane	590	U
123-91-1	1,4-Dioxane	30000	U

C11

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

S-3

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89186

Matrix: (soil/water) SOIL Lab Sample ID: 496666

Sample wt/vol: 4.4 (g/mL) G Lab File ID: 496666E

Level: (low/med) MED Date Received: 08/08/02

% Moisture: not dec. 4 Date Analyzed: 08/20/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 10000(uL) Soil Aliquot Volume: 100(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-27-4	Bromodichloromethane	590	U
10061-01-5	cis-1,3-Dichloropropene	590	U
108-10-1	4-Methyl-2-pentanone	590	U
108-88-3	Toluene	590	U
10061-02-6	trans-1,3-Dichloropropene	590	U
97-63-2	Ethyl Methacrylate	590	U
79-00-5	1,1,2-Trichloroethane	590	U
127-18-4	Tetrachloroethene	5800	
591-78-6	2-Hexanone	590	U
124-48-1	Dibromochloromethane	590	U
106-93-4	1,2-Dibromoethane	590	U
108-90-7	Chlorobenzene	590	U
630-20-6	1,1,1,2-Tetrachloroethane	590	U
100-41-4	Ethylbenzene	590	U
1330-20-7	Xylene (m,p)	590	U
1330-20-7	Xylene (total)	590	U
95-47-6	Xylene (o)	590	U
100-42-5	Styrene	590	U
75-25-2	Bromoform	590	U
98-82-8	Isopropylbenzene	590	U
79-34-5	1,1,2,2-Tetrachloroethane	590	U
96-18-4	1,2,3-Trichloropropane	590	U
541-73-1	1,3-Dichlorobenzene	590	U
106-46-7	1,4-Dichlorobenzene	590	U
95-50-1	1,2-Dichlorobenzene	590	U
96-12-8	1,2-Dibromo-3-Chloropropane	590	U
120-82-1	1,2,4-Trichlorobenzene	590	U

C12

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

S-3

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89186

Matrix: (soil/water) SOIL Lab Sample ID: 496666

Sample wt/vol: 4.4 (g/mL) G Lab File ID: 496666E

Level: (low/med) MED Date Received: 08/08/02

% Moisture: not dec. 4 Date Analyzed: 08/20/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil-Extract Volume: 10000(uL) Soil Aliquot Volume: 100(uL)

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	19.72	2700	J
2. 128-37-0	BUTYLATED HYDROXYTOLUENE	21.50	690	NJB
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

S-4

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89186

Matrix: (soil/water) SOIL Lab Sample ID: 496667

Sample wt/vol: 2.9 (g/mL) G Lab File ID: 496667E

Level: (low/med) MED Date Received: 08/08/02

% Moisture: not dec. 6 Date Analyzed: 08/20/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 10000(uL) Soil Aliquot Volume: 100(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	900	U
74-87-3	Chloromethane	900	U
75-01-4	Vinyl Chloride	900	U
74-83-9	Bromomethane	900	U
75-00-3	Chloroethane	900	U
75-69-4	Trichlorofluoromethane	900	U
107-02-8	Acrolein	900	U
75-35-4	1,1-Dichloroethene	900	U
67-64-1	Acetone	900	U
75-15-0	Carbon Disulfide	900	U
107-05-1	Allyl Chloride	900	U
75-09-2	Methylene Chloride	900	U
107-13-1	Acrylonitrile	900	U
156-60-5	trans-1,2-Dichloroethene	900	U
540-59-0	1,2-Dichloroethene (total)	900	U
1634-04-4	Methyl-t-Butyl Ether	900	U
75-34-3	1,1-Dichloroethane	900	U
108-05-4	Vinyl Acetate	900	U
156-59-2	cis-1,2-Dichloroethene	900	U
78-93-3	2-Butanone	900	U
126-98-7	Methacrylonitrile	900	U
74-97-5	Bromochloromethane	900	U
67-66-3	Chloroform	900	U
71-55-6	1,1,1-Trichloroethane	900	U
56-23-5	Carbon Tetrachloride	900	U
78-83-1	Isobutyl Alcohol	46000	U
71-43-2	Benzene	900	U
107-06-2	1,2-Dichloroethane	900	U
79-01-6	Trichloroethene	900	U
78-87-5	1,2-Dichloropropane	900	U
80-62-6	Methyl Methacrylate	900	U
74-95-3	Dibromomethane	900	U
123-91-1	1,4-Dioxane	46000	U

C 14

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

S-4

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89186

Matrix: (soil/water) SOIL Lab Sample ID: 496667

Sample wt/vol: 2.9 (g/mL) G Lab File ID: 496667E

Level: (low/med) MED Date Received: 08/08/02

% Moisture: not dec. 6 Date Analyzed: 08/20/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 10000(uL) Soil Aliquot Volume: 100(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-27-4	Bromodichloromethane	900	U
10061-01-5	cis-1,3-Dichloropropene	900	U
108-10-1	4-Methyl-2-pentanone	900	U
108-88-3	Toluene	900	U
10061-02-6	trans-1,3-Dichloropropene	900	U
97-63-2	Ethyl Methacrylate	900	U
79-00-5	1,1,2-Trichloroethane	900	U
127-18-4	Tetrachloroethene	2400	
591-78-6	2-Hexanone	900	U
124-48-1	Dibromochloromethane	900	U
106-93-4	1,2-Dibromoethane	900	U
108-90-7	Chlorobenzene	900	U
630-20-6	1,1,1,2-Tetrachloroethane	900	U
100-41-4	Ethylbenzene	900	U
1330-20-7	Xylene (m,p)	900	U
1330-20-7	Xylene (total)	900	U
95-47-6	Xylene (o)	900	U
100-42-5	Styrene	900	U
75-25-2	Bromoform	900	U
98-82-8	Isopropylbenzene	900	U
79-34-5	1,1,2,2-Tetrachloroethane	900	U
96-18-4	1,2,3-Trichloropropane	900	U
541-73-1	1,3-Dichlorobenzene	900	U
106-46-7	1,4-Dichlorobenzene	900	U
95-50-1	1,2-Dichlorobenzene	900	U
96-12-8	1,2-Dibromo-3-Chloropropane	900	U
120-82-1	1,2,4-Trichlorobenzene	900	U

C15

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

S-4

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89186

Matrix: (soil/water) SOIL Lab Sample ID: 496667

Sample wt/vol: 2.9 (g/mL) G Lab File ID: 496667E

Level: (low/med) MED Date Received: 08/08/02

% Moisture: not dec. 6 Date Analyzed: 08/20/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 10000(uL) Soil Aliquot Volume: 100(uL)

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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C16

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

S-5

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89186

Matrix: (soil/water) SOIL Lab Sample ID: 496668

Sample wt/vol: 0.7 (g/mL) G Lab File ID: 496668I2

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. 3 Date Analyzed: 08/20/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	36	U
74-87-3	Chloromethane	36	U
75-01-4	Vinyl Chloride	36	U
74-83-9	Bromomethane	36	U
75-00-3	Chloroethane	36	U
75-69-4	Trichlorofluoromethane	36	U
107-02-8	Acrolein	36	U
75-35-4	1,1-Dichloroethene	36	U
67-64-1	Acetone	300	
75-15-0	Carbon Disulfide	36	U
107-05-1	Allyl Chloride	36	U
75-09-2	Methylene Chloride	26	BJ
107-13-1	Acrylonitrile	36	U
156-60-5	trans-1,2-Dichloroethene	36	U
540-59-0	1,2-Dichloroethene (total)	36	U
1634-04-4	Methyl-t-Butyl Ether	36	U
75-34-3	1,1-Dichloroethane	36	U
108-05-4	Vinyl Acetate	36	U
156-59-2	cis-1,2-Dichloroethene	36	U
78-93-3	2-Butanone	35	J
126-98-7	Methacrylonitrile	36	U
74-97-5	Bromochloromethane	36	U
67-66-3	Chloroform	36	U
71-55-6	1,1,1-Trichloroethane	36	U
56-23-5	Carbon Tetrachloride	36	U
78-83-1	Isobutyl Alcohol	1800	U
71-43-2	Benzene	36	U
107-06-2	1,2-Dichloroethane	36	U
79-01-6	Trichloroethene	36	U
78-87-5	1,2-Dichloropropane	36	U
80-62-6	Methyl Methacrylate	36	U
74-95-3	Dibromomethane	36	U
123-91-1	1,4-Dioxane	1800	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

S-5

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89186

Matrix: (soil/water) SOIL Lab Sample ID: 496668

Sample wt/vol: 0.7 (g/mL) G Lab File ID: 496668I2

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. 3 Date Analyzed: 08/20/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-27-4	Bromodichloromethane	36	U
10061-01-5	cis-1,3-Dichloropropene	36	U
108-10-1	4-Methyl-2-pentanone	11	J
108-88-3	Toluene	36	U
10061-02-6	trans-1,3-Dichloropropene	36	U
97-63-2	Ethyl Methacrylate	36	U
79-00-5	1,1,2-Trichloroethane	36	U
127-18-4	Tetrachloroethene	41	
591-78-6	2-Hexanone	36	U
124-48-1	Dibromochloromethane	36	U
106-93-4	1,2-Dibromoethane	36	U
108-90-7	Chlorobenzene	36	U
630-20-6	1,1,1,2-Tetrachloroethane	36	U
100-41-4	Ethylbenzene	36	U
1330-20-7	Xylene (m,p)	36	U
1330-20-7	Xylene (total)	36	U
95-47-6	Xylene (o)	36	U
100-42-5	Styrene	36	U
75-25-2	Bromoform	36	U
98-82-8	Isopropylbenzene	36	U
79-34-5	1,1,2,2-Tetrachloroethane	36	U
96-18-4	1,2,3-Trichloropropane	36	U
541-73-1	1,3-Dichlorobenzene	36	U
106-46-7	1,4-Dichlorobenzene	36	U
95-50-1	1,2-Dichlorobenzene	36	U
96-12-8	1,2-Dibromo-3-Chloropropane	36	U
120-82-1	1,2,4-Trichlorobenzene	36	U

C18

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

S-5

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89186

Matrix: (soil/water) SOIL Lab Sample ID: 496668

Sample wt/vol: 0.7 (g/mL) G Lab File ID: 496668I2

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. 3 Date Analyzed: 08/20/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN SILOXANE DERIVATIVE	18.71	43	J
2.	UNKNOWN	20.15	37	J
3. 128-37-0	BUTYLATED HYDROXYTOLUENE	21.53	200	NJB
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

S-6

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89186

Matrix: (soil/water) SOIL Lab Sample ID: 496669

Sample wt/vol: 4.9 (g/mL) G Lab File ID: 496669E

Level: (low/med) MED Date Received: 08/08/02

% Moisture: not dec. 5 Date Analyzed: 08/20/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 10000(uL) Soil Aliquot Volume: 100(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	530	U
74-87-3	Chloromethane	530	U
75-01-4	Vinyl Chloride	530	U
74-83-9	Bromomethane	530	U
75-00-3	Chloroethane	530	U
75-69-4	Trichlorofluoromethane	530	U
107-02-8	Acrolein	530	U
75-35-4	1,1-Dichloroethene	530	U
67-64-1	Acetone	530	U
75-15-0	Carbon Disulfide	530	U
107-05-1	Allyl Chloride	530	U
75-09-2	Methylene Chloride	530	U
107-13-1	Acrylonitrile	530	U
156-60-5	trans-1,2-Dichloroethene	530	U
540-59-0	1,2-Dichloroethene (total)	530	U
1634-04-4	Methyl-t-Butyl Ether	530	U
75-34-3	1,1-Dichloroethane	530	U
108-05-4	Vinyl Acetate	530	U
156-59-2	cis-1,2-Dichloroethene	530	U
78-93-3	2-Butanone	530	U
126-98-7	Methacrylonitrile	530	U
74-97-5	Bromochloromethane	530	U
67-66-3	Chloroform	530	U
71-55-6	1,1,1-Trichloroethane	530	U
56-23-5	Carbon Tetrachloride	530	U
78-83-1	Isobutyl Alcohol	27000	U
71-43-2	Benzene	530	U
107-06-2	1,2-Dichloroethane	530	U
79-01-6	Trichloroethene	530	U
78-87-5	1,2-Dichloropropane	530	U
80-62-6	Methyl Methacrylate	530	U
74-95-3	Dibromomethane	530	U
123-91-1	1,4-Dioxane	27000	U

C20

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

S-6

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89186

Matrix: (soil/water) SOIL Lab Sample ID: 496669

Sample wt/vol: 4.9 (g/mL) G Lab File ID: 496669E

Level: (low/med) MED Date Received: 08/08/02

% Moisture: not dec. 5 Date Analyzed: 08/20/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 10000(uL) Soil Aliquot Volume: 100(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-27-4	Bromodichloromethane	530	U
10061-01-5	cis-1,3-Dichloropropene	530	U
108-10-1	4-Methyl-2-pentanone	530	U
108-88-3	Toluene	530	U
10061-02-6	trans-1,3-Dichloropropene	530	U
97-63-2	Ethyl Methacrylate	530	U
79-00-5	1,1,2-Trichloroethane	530	U
127-18-4	Tetrachloroethene	5100	
591-78-6	2-Hexanone	530	U
124-48-1	Dibromochloromethane	530	U
106-93-4	1,2-Dibromoethane	530	U
108-90-7	Chlorobenzene	530	U
630-20-6	1,1,1,2-Tetrachloroethane	530	U
100-41-4	Ethylbenzene	530	U
1330-20-7	Xylene (m,p)	530	U
1330-20-7	Xylene (total)	530	U
95-47-6	Xylene (o)	530	U
100-42-5	Styrene	530	U
75-25-2	Bromoform	530	U
98-82-8	Isopropylbenzene	530	U
79-34-5	1,1,2,2-Tetrachloroethane	530	U
96-18-4	1,2,3-Trichloropropane	530	U
541-73-1	1,3-Dichlorobenzene	530	U
106-46-7	1,4-Dichlorobenzene	530	U
95-50-1	1,2-Dichlorobenzene	530	U
96-12-8	1,2-Dibromo-3-Chloropropane	530	U
120-82-1	1,2,4-Trichlorobenzene	530	U

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SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

COPY
SAMPLE DATA SUMMARY PACKAGE

SDG NO: 89210

C22

ANALYTICAL DATA PACKAGE FOR THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION TRENTON, NEW JERSEY 08625

Agency/Division:	DFPSR	**Bureau/Office:**	BEMQA
Project No.:	C3100H0P	**Contract No.:**	00-X-31543
Laboratory Name:	Severn Trent Laboratories	**Laboratory Location:**	Colchester, Vermont
SDG or Batch No.:	89210	**NJDEP Certification No.:**	VT972
Date of First Sample Receipt:	08/09/02	**Date of Last Sample Receipt:**	08/09/02

Agency Sample Number	Laboratory Sample Number	Sample Location	Date and Time of Collection
GW-6A	496795	GW-6A	08/08/2002-0922
GW-6B	496796	GW-6B	08/08/2002-0942
GW-6C	496797	GW-6C	08/08/2002-1019
FB-3	496798	FB-3	08/08/2002-0912
TB-3	496799	TB-3	08/08/2002
GW-3A	496800	GW-3A	08/07/2002-1020
GW-3B	496801	GW-3B	08/07/2002-1044
GW-3C	496802	GW-3C	08/07/2002-1122
GW-3CMSD	496802MD	GW-3C	08/07/2002-1122
GW-3CMS	496802MS	GW-3C	08/07/2002-1122
GW-4A	496803	GW-4A	08/07/2002-1414
GW-4B	496804	GW-4B	08/07/2002-1435
GW-4C	496805	GW-4C	08/07/2002-1514
GW-9A	496806	GW-9A	08/07/2002-1206
FB-2	496807	FB-2	08/07/2002-1031
TB-2	496808	TB-2	08/07/2002

We certify this data package to be technically and contractually compliant with the terms and conditions of the 00-X-31543 Professional Laboratory Services Contract. Non Conformance, if any, is set forth on the Non Conformance Summary Form (DEP Form A1C). Release of this data in hardcopy on an Electronic Data Transfer Diskette is authorized by the Quality Assurance Officer and the Laboratory Manager, or their approved alternatives, as verified by the signatures below.

Laboratory Manager (Typed):	Michael F. Wheeler, Ph.D.	**Date:**	
Laboratory Manager (Signature):	Kristine Dusablon for		9/4/02
Quality Assurance Officer (Typed):	Brian W. Blair	**Date:**	
Quality Assurance Officer (Signature):	for		09/04/02

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ANALYTICAL DATA PACKAGE NONCOMPLIANCE SUMMARY FOR THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION TRENTON NEW JERSEY 08625

Agency/Division DPFSR	**Bureau/Office:** BEMQA
Project Identification: C3100H0P (89210)	**Laboratory Name** Severn Trent Laboratories
Laboratory Location: Colchester, Vermont	**NJDEP Certification:** 85972

The condition of the samples and the issues identified at the time of sample log-in are detailed in the Sample Handling section of this submittal.

SW846 Method(s) 5030B/8260B (Volatile Organics)

Samples GW-4A and GW-4B were analyzed at a dilution in order to provide for the quantification of all target analytes within the range of calibrated instrument response. The dilutions that were made were based on the results of preliminary screening. A more concentrated analysis was not performed on these samples.

The analysis of samples GW-3B and GW-3C, as well as the matrix spike and matrix spike duplicate analyses that were performed on sample GW-3C, did yield a high recovery of 1,2-dichloroethane-d4. Sample GW-3B was reanalyzed. Although 1,2-dichloroethane-d4 was recovered well in the follow-up analysis, the recovery of 1,2-dichlorobenzene in that analysis was high (126 percent). Both sets of results for the analysis of this sample are included in this submittal. Each of the analyses associated with the sample set exhibited good internal standard responses.

Matrix spike and matrix spike duplicate analyses were performed on sample GW-3C. The recoveries of acrolein, methylene chloride, and trans-1,2-dichloroethene were relatively low in the matrix spike analysis, falling within the range of 60 to 75 percent. In addition, the derived recovery of certain compounds was elevated in each of these analyses. Certain of the high recoveries are consistent with the high recovery of 1,2-dichloroethane-d4 in these analyses, and the issues related to that occurrence. In general there was good correlation of results in the interanalysis comparison.

Laboratory control sample analyses were analyzed in duplicate in each analytical sequence. In general, the target analytes were recovered well in each of these analyses, although it should be noted that the derived recovery of certain compounds was elevated in each of these analyses.

Manual integration was employed in deriving the results for the volatile organics analyses. The values that have been derived from manual integration are qualified on the quantitation reports, and extracted ion current profiles are included in the data package.

Trace concentrations of isobutyl alcohol, 1,2-dibromo-3-chloropropane, and 1,2,4-trichlorobenzene were identified in the analysis of each of the method blanks associated with the analytical work. Trace concentrations of 1,2-dibromo-3-chloropropane and 1,2,4-trichlorobenzene were identified in the analysis of sample GW-4A. The results have been qualified to reflect the possible bank association.

The method detection limits that were derived by the laboratory for Method 8260B immediately follow this compliance summary.

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

COPY
SAMPLE DATA SUMMARY PACKAGE

SDG NO: 89189

C 25

ANALYTICAL DATA PACKAGE FOR THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION TRENTON, NEW JERSEY 08625

Agency/Division:	DFPSR	**Bureau/Office:**	BEMQA
Project No.:	C3100H0P	**Contract No.:**	00-X-31543
Laboratory Name:	Severn Trent Laboratories	**Laboratory Location:**	Colchester, Vermont
SDG or Batch No.:	89189	**NJDEP Certification No.:**	VT972
Date of First Sample Receipt:	08/08/02	**Date of Last Sample Receipt:**	08/08/02

Agency Sample Number	Laboratory Sample Number	Sample Location	Date and Time of Collection
TB-1	496670	TB-1	N/A
FB-1	496671	FB-1	08/06/2002-1150
-GW-1A	496672	GW-1A	08/06/2002-1027
GW-1B	496673	GW-1B	08/06/2002-1119
GW-1C	496674	GW-1C	08/06/2002-1154
GW-1CMSD	496674MD	GW-1C	08/06/2002-1154
GW-1CMS	496674MS	GW-1C	08/06/2002-1154
GW-1D	496675	GW-1D	08/06/2002-1229
GW-2A	496676	GW-2A	08/06/2002-1217
GW-2B	496677	GW-2B	08/06/2002-1445
GW-2C	496678	GW-2C	08/06/2002-1535
GW-5A	496679	GW-5A	08/06/2002-1607
GW-5B	496680	GW-5B	08/06/2002-1646
GW-5C	496681	GW-5C	08/06/2002-1720

We certify this data package to be technically and contractually compliant with the terms and conditions of the 00-X-31543 Professional Laboratory Services Contract. Non Conformance, if any, is set forth on the Non Conformance Summary Form (DEP Form A1C). Release of this data in hardcopy on an Electronic Data Transfer Diskette is authorized by the Quality Assurance Officer and the Laboratory Manager, or their approved alternatives, as verified by the signatures below.

Laboratory Manager (Typed):	Michael F. Wheeler, Ph.D.	**Date:**	9/4/02
Laboratory Manager (Signature):	Kristine Dieudonne for		
Quality Assurance Officer (Typed):	Brian W. Blair	**Date:**	09/04/02
Quality Assurance Officer (Signature):	for		

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ANALYTICAL DATA PACKAGE NONCOMPLIANCE SUMMARY FOR THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION TRENTON NEW JERSEY 08625

Agency/Division DPFSR	**Bureau/Office:** BEMQA
Project Identification: C3100H0P (89189)	**Laboratory Name** Severn Trent Laboratories
Laboratory Location: Colchester, Vermont	**NJDEP Certification:** 85972

The condition of the samples and the issues identified at the time of sample log-in are detailed in the Sample Handling section of this submittal.

SW846 Method(s) 5030B/8260B (Volatile Organics)

The samples in this sample set were analyzed without need for dilution.

The surrogates were recovered well in each of the analyses associated with the sample set, and each of the analyses exhibited good internal standard responses.

Matrix spike and matrix spike duplicate analyses were performed on sample GW-1C. In general, the spiked analytes were recovered well in these analyses, and there was good correlation of results in the interanalysis comparison. The exception to this was the relatively low recovery of 1,4-dioxane in the matrix spike analysis (52 percent) that did result in a high relative percent difference value in the interanalysis comparison. Laboratory control samples were analyzed in duplicate in each analytical sequence. The target analytes were recovered well in each of these analyses, with good correlation of results in the interanalysis comparisons.

Manual integration was employed in deriving the results for the volatile organics analyses. The values that have been derived from manual integration are qualified on the quantitation reports, and extracted ion current profiles are included in the data package.

A trace concentration of 1,2,4-trichlorobenzene was identified in the analysis of method "VBLKT9". A trace concentration of 1,2,4-trichlorobenzene was also identified in the analysis of sample GW-1D, and the result has been qualified to reflect the possible blank association. Trace concentrations of isobutyl alcohol and 1,2,4-trichlorobenzene, and an elevated concentration of 1,4-dioxane were identified in the analysis of method blank "VBLKU5". These compounds were not identified in the analysis of associated field samples.

The presence of isobutyl alcohol and 1,4-dioxane was identified in the analysis of sample GW-1D, and the presence of 1,4-dioxane was identified in the analysis of sample GW2-A. These analyses occurred immediately after the matrix spike and matrix spike duplicate analyses that were performed on sample GW-1C. Given the observed carryover of these compounds from the laboratory control sample analyses that preceded the analysis of method blank "VBLKU5", it is likely that their presence in the analysis of samples GW-1D and GW-2A is the result of carryover from the preceding matrix spike and matrix spike duplicate analyses. The laboratory has qualified the results for isobutyl alcohol and 1,4-dioxane in the analysis of samples GW-1D and GW-2A with an "X" qualifier to identify their presence as potentially being artifacts of the analytical process.

The method detection limits that were derived by the laboratory for Method 8260B immediately follow this compliance summary.

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

FB-1

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496671

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496671

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

FB-1

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496671

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496671

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

FB-1

Lab Name: STL BURLINGTON Contract: 00X31543

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496671

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496671

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

FB-2

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496807

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496807

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/18/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	23	
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

FB-2

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496807

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496807

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/18/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

C32

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

FB-2

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496807

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496807

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/18/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil-Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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C33

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

FB-3

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496798

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496798

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U

C34

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

FB-3

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496798

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496798

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil-Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

C35

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

FB-3

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496798

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496798

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	21.16	6.9	J
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

TB-1

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496670

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496670

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

TB-1

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496670

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496670

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

TB-1

Lab Name: STL BURLINGTON Contract: 00X31543

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496670

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496670

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

TB-2

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496808

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496808

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/18/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

TB-2

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496808

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496808

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/18/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

TB-2

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496808

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496808

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/18/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

TB-3

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496799

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496799

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U

C43

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

TB-3

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496799

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496799

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

TB-3

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496799

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496799

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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C 45

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-1A

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496672

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496672

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	24	
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U

C 46

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-1A

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496672

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496672

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	1.1	J
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

C47

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

GW-1A

Lab Name: STL BURLINGTON Contract: 00X31543

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496672

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496672

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	2.53	8.0	J
2.					
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C48

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-1B

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496673

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496673

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	31	
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	2.2	J
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U

C49

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-1B

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496673

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496673

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.1	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

C50

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

GW-1B

Lab Name: STL BURLINGTON Contract: 00X31543

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496673

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496673

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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C51

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-1C

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496674

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496674

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	1.2	J
67-64-1	Acetone	7.2	
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	3.4	J
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	1.6	J
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U

C52

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-1C

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496674

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496674

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	18	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

C53

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

GW-1C

Lab Name: STL BURLINGTON Contract: 00X31543

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496674

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496674

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	2.56	6.3	J
2.				
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C54

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-1D

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496675

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496675

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	3.5	J
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	1.8	J
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	0.97	J
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	230	JX
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	850	X

C 53

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-1D

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496675

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496675

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	6.9	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	1.2	JB

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

GW-1D

Lab Name: STL BURLINGTON Contract: 00X31543

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496675

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496675

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 128-37-0	BUTYLATED HYDROXYTOLUENE	21.55	210	NJB
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C57

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-2A

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496676

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496676

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	6.0	
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	120	JX

C58

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-2A

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496676

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496676

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

C59

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

GW-2A

Lab Name: STL BURLINGTON Contract: 00X31543

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496676

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496676

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	2.56	6.1	J
2.					
3.					
4.					
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C60

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-2B

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496677

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496677

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	11	
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U

C61

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-2B

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496677

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496677

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

C62

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

GW-2B

Lab Name: STL BURLINGTON Contract: 00X31543

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496677

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496677

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	2.54	18	J
2.	UNKNOWN	3.01	9.4	J
3. 128-37-0	BUTYLATED HYDROXYTOLUENE	21.54	5.7	NJB
4.				
5.				
6.				
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C63

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-2C

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496678

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496678

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	4.2	J
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U

C64

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-2C

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496678

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496678

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	1.1	J
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

C65

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

GW-2C

Lab Name: STL BURLINGTON Contract: 00X31543

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496678

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496678

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 128-37-0	BUTYLATED HYDROXYTOLUENE	21.53	56	NJB
2.				
3.				
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C66

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-3A

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496800

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496800

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	6.0	
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U

C67

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-3A

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496800

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496800

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	40	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

C68

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

GW-3A

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496800

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496800

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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C69

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-3B

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496801

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496801

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	17	
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U

C70

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-3B

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496801

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496801

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	37	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

C71

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

GW-3B

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496801

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496801

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-3BRE

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496801R1

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496801I2

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/18/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	9.0	
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U

C73

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-3BRE

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496801R1

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496801I2

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/18/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	35	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

C74

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

GW-3BRE

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496801R1

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496801I2

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/18/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 5

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN NAPHTHALENE DERIVATI	19.38	12	J
2.	UNKNOWN NAPHTHALENE DERIVATI	19.87	21	J
3.	UNKNOWN	20.72	5.8	J
4.	UNKNOWN NAPHTHALENE DERIVATI	20.95	14	J
5.	UNKNOWN NAPHTHALENE DERIVATI	21.21	6.1	J
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C75

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-3C

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496802

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496802

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	20	
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U

C76

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-3C

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496802

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496802

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	1.6	J
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

C77

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

GW-3C

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496802

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496802

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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C78

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-4A

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496803

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496803D

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/17/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 2.8

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	14	U
74-87-3	Chloromethane	14	U
75-01-4	Vinyl Chloride	14	U
74-83-9	Bromomethane	14	U
75-00-3	Chloroethane	14	U
75-69-4	Trichlorofluoromethane	14	U
107-02-8	Acrolein	14	U
75-35-4	1,1-Dichloroethene	14	U
67-64-1	Acetone	16	
75-15-0	Carbon Disulfide	14	U
107-05-1	Allyl Chloride	14	U
75-09-2	Methylene Chloride	14	U
107-13-1	Acrylonitrile	14	U
156-60-5	trans-1,2-Dichloroethene	14	U
540-59-0	1,2-Dichloroethene (total)	14	U
1634-04-4	Methyl-t-Butyl Ether	14	U
75-34-3	1,1-Dichloroethane	14	U
108-05-4	Vinyl Acetate	14	U
156-59-2	cis-1,2-Dichloroethene	14	U
78-93-3	2-Butanone	14	U
126-98-7	Methacrylonitrile	14	U
74-97-5	Bromochloromethane	14	U
67-66-3	Chloroform	14	U
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
78-83-1	Isobutyl Alcohol	700	U
71-43-2	Benzene	14	U
107-06-2	1,2-Dichloroethane	14	U
79-01-6	Trichloroethene	14	U
78-87-5	1,2-Dichloropropane	14	U
80-62-6	Methyl Methacrylate	14	U
74-95-3	Dibromomethane	14	U
123-91-1	1,4-Dioxane	700	U

C79

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-4A

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496803

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496803D

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/17/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 2.8

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
108-10-1	4-Methyl-2-pentanone	14	U
108-88-3	Toluene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
97-63-2	Ethyl Methacrylate	14	U
79-00-5	1,1,2-Trichloroethane	14	U
127-18-4	Tetrachloroethene	230	
591-78-6	2-Hexanone	14	U
124-48-1	Dibromochloromethane	14	U
106-93-4	1,2-Dibromoethane	14	U
108-90-7	Chlorobenzene	14	U
630-20-6	1,1,1,2-Tetrachloroethane	14	U
100-41-4	Ethylbenzene	14	U
1330-20-7	Xylene (m,p)	14	U
1330-20-7	Xylene (total)	14	U
95-47-6	Xylene (o)	14	U
100-42-5	Styrene	14	U
75-25-2	Bromoform	14	U
98-82-8	Isopropylbenzene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
96-18-4	1,2,3-Trichloropropane	14	U
541-73-1	1,3-Dichlorobenzene	14	U
106-46-7	1,4-Dichlorobenzene	14	U
95-50-1	1,2-Dichlorobenzene	14	U
96-12-8	1,2-Dibromo-3-Chloropropane	4.7	JB
120-82-1	1,2,4-Trichlorobenzene	4.5	JB

C 80

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

GW-4A

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496803

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496803D

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/17/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 2.8

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 128-37-0	BUTYLATED HYDROXYTOLUENE	21.48	240	NJB
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C81

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-4B

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496804

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496804D

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/17/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.5

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	7.5	U
74-87-3	Chloromethane	7.5	U
75-01-4	Vinyl Chloride	7.5	U
74-83-9	Bromomethane	7.5	U
75-00-3	Chloroethane	7.5	U
75-69-4	Trichlorofluoromethane	7.5	U
107-02-8	Acrolein	7.5	U
75-35-4	1,1-Dichloroethene	7.5	U
67-64-1	Acetone	7.5	U
75-15-0	Carbon Disulfide	7.5	U
107-05-1	Allyl Chloride	7.5	U
75-09-2	Methylene Chloride	7.5	U
107-13-1	Acrylonitrile	7.5	U
156-60-5	trans-1,2-Dichloroethene	7.5	U
540-59-0	1,2-Dichloroethene (total)	7.5	U
1634-04-4	Methyl-t-Butyl Ether	7.5	U
75-34-3	1,1-Dichloroethane	7.5	U
108-05-4	Vinyl Acetate	7.5	U
156-59-2	cis-1,2-Dichloroethene	7.5	U
78-93-3	2-Butanone	7.5	U
126-98-7	Methacrylonitrile	7.5	U
74-97-5	Bromochloromethane	7.5	U
67-66-3	Chloroform	7.5	U
71-55-6	1,1,1-Trichloroethane	7.5	U
56-23-5	Carbon Tetrachloride	7.5	U
78-83-1	Isobutyl Alcohol	380	U
71-43-2	Benzene	7.5	U
107-06-2	1,2-Dichloroethane	7.5	U
79-01-6	Trichloroethene	7.5	U
78-87-5	1,2-Dichloropropane	7.5	U
80-62-6	Methyl Methacrylate	7.5	U
74-95-3	Dibromomethane	7.5	U
123-91-1	1,4-Dioxane	380	U

C82

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-4B

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496804

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496804D

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/17/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.5

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	7.5	U
10061-01-5	cis-1,3-Dichloropropene	7.5	U
108-10-1	4-Methyl-2-pentanone	7.5	U
108-88-3	Toluene	7.5	U
10061-02-6	trans-1,3-Dichloropropene	7.5	U
97-63-2	Ethyl Methacrylate	7.5	U
79-00-5	1,1,2-Trichloroethane	7.5	U
127-18-4	Tetrachloroethene	120	
591-78-6	2-Hexanone	7.5	U
124-48-1	Dibromochloromethane	7.5	U
106-93-4	1,2-Dibromoethane	7.5	U
108-90-7	Chlorobenzene	7.5	U
630-20-6	1,1,1,2-Tetrachloroethane	7.5	U
100-41-4	Ethylbenzene	7.5	U
1330-20-7	Xylene (m,p)	7.5	U
1330-20-7	Xylene (total)	7.5	U
95-47-6	Xylene (o)	7.5	U
100-42-5	Styrene	7.5	U
75-25-2	Bromoform	7.5	U
98-82-8	Isopropylbenzene	7.5	U
79-34-5	1,1,2,2-Tetrachloroethane	7.5	U
96-18-4	1,2,3-Trichloropropane	7.5	U
541-73-1	1,3-Dichlorobenzene	7.5	U
106-46-7	1,4-Dichlorobenzene	7.5	U
95-50-1	1,2-Dichlorobenzene	7.5	U
96-12-8	1,2-Dibromo-3-Chloropropane	7.5	U
120-82-1	1,2,4-Trichlorobenzene	7.5	U

C83

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

GW-4B

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496804

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496804D

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/17/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.5

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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C84

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-4C

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496805

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496805I2

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/18/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	6.1	
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U

C85

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-4C

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496805

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496805I2

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/18/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil-Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

C86

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

GW-4C

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496805

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496805I2

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/18/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 128-37-0	BUTYLATED HYDROXYTOLUENE	21.49	11	NJB
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C87

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-5A

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496679

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496679

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	20	
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U

C88

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-5A

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496679

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496679

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

C89

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

GW-5A

Lab Name: STL BURLINGTON Contract: 00X31543

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496679

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496679

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 128-37-0	BUTYLATED HYDROXYTOLUENE	21.54	18	NJB
2.				
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C 90

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-5B

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496680

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496680

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil-Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	140	
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U

C91

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-5B

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496680

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496680

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

C92

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

GW-5B

Lab Name: STL BURLINGTON Contract: 00X31543

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496680

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496680

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	2.58	7.8	J
2. 128-37-0	BUTYLATED HYDROXYTOLUENE	21.55	8.2	NJB
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-5C

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496681

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496681

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	17	
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U

C94

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-5C

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496681

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496681

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

C95

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

GW-5C

Lab Name: STL BURLINGTON Contract: 00X31543

Lab Code: STLVT Case No.: C3100H0P SAS No.: SDG No.: 89189

Matrix: (soil/water) WATER Lab Sample ID: 496681

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496681

Level: (low/med) LOW Date Received: 08/08/02

% Moisture: not dec. _____ Date Analyzed: 08/12/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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C 96

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-6A

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496795

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496795

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil-Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	12	
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U

C97

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-6A

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496795

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496795

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil-Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	14	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

C98

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

GW-6A

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496795

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496795

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil-Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN NAPHTHALENE DERIVATI	19.40	11	J
2.	UNKNOWN NAPHTHALENE DERIVATI	19.87	17	J
3.	UNKNOWN NAPHTHALENE DERIVATI	20.95	11	J
4. 128-37-0	BUTYLATED HYDROXYTOLUENE	21.48	5.0	NJB
5.				
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-6B

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496796

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496796

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil-Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	6.3	
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U

C100

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-6B

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496796

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496796

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil-Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	9.8	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

C101

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

GW-6B

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496796

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496796

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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C102

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-6C

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496797

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496797

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	26	
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U

C103

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-6C

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496797

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496797

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil-Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

C104

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

GW-6C

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496797

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496797

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/16/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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C105

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-9A

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496806

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496806I2

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/18/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil-Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	16	
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl Acetate	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U

C106

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

NJDEP5 SAMPLE NO.

GW-9A

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496806

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496806I2

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/18/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	39	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

C107

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJDEP5 SAMPLE NO.

GW-9A

Lab Name: STL BURLINGTON Contract: 20034

Lab Code: STLVT Case No.: C3100HOP SAS No.: SDG No.: 89210

Matrix: (soil/water) WATER Lab Sample ID: 496806

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 496806I2

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/18/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 128-37-0	BUTYLATED HYDROXYTOLUENE	21.49	6.9	NJB
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ATTACHMENT D

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMPLIANCE EVALUATION INSPECTION
PUBLIC COMMUNITY WATER SYSTEM

PW ID #: 0327001 — GENERAL INFORMATION — DATE: June 2, 3, 4, 5 & 9 1998

PURVEYOR: New Jersey - American Water Company TYPE: GW & SW CLASS: 6

LOCATION ADDRESS: 213 Carriage Lane, Delran, N.J. 08075

MAILING ADDRESS: 515 Grove Street, Haddon Heights, N.J. 08035 MUNICIPALITY: See page 3 COUNTY: Burlington & Camden

ADMINISTRATOR/MANAGER: Art Shearman PHONE NUMBER(S): 547-1700

LICENSED OPERATOR (S) Ken Christy LICENSE(S) HELD: W: 4 T: 4
PHONE #: 764-4906 SYSTEM REQUIREMENT(S): W: 4 T: 4

EMERGENCY #: 547-1700 CONTACT: On Duty Operator

COMMENTS/DEFICIENCIES

[X] SOURCE/TREATMENT: pages 11-20 of attached report. Any deficiencies are noted on pages 28-32

[X] STORAGE/DISTRIBUTION: pages 5-9 of attached report. Any deficiencies are noted on pages 28-32. Permitted diversion exceedances are on page 2.

[X] INTERCONNECTION/AUXILIARY POWER: pages 7-10 of attached report. Any deficiencies are noted on pages 28-32.

[X] MONITORING/REPORTING/MCL/PUBLIC NOTICE: pages 21-27 of attached report. Violations concerning non-submittal have already been sent to the Bureau of Safe Drinking Water.

GENERAL COMMENTS:

OVERALL RATING: ACCEPTABLE [ ] CONDITIONALLY ACCEPTABLE [ ] UNACCEPTABLE [X]

INSPECTOR: Robert W. Swanson FACILITY REPRESENTATIVE: Ken Christy & William C. Packer

TITLE: Environmental Compliance Investigator I TITLE: Water Quality Superintendent, Production Superintendent

SIGNATURE: Robert W. Swanson ORGANIZATION: New Jersey - American Water Company

D

Plant Delivered Water 1997

System	Minimum	Maximum	Average
Western System	31.106 MGD February 1997	59.835 MGD July 1997	40.1 MGD

Note 1 : The Murray Avenue Recovery Well # 66 was overwithdrawn by 22.006 MG in 1997. System Delivery to the well in 1997 was 150.573 MG and well withdraws for 1997 were 172.579 MG.

Note 2 : Permit diversion exceedances are as follows :

Permit #	Pemitted Diversion	System Delivery	Exceedance
5197	888.377 MGY	943.4 MGY *	55.024 MGY
5202	915.071 MGY	1028.7 MGY *	113.629 MGY
5200	1543.145 MGY	2088.1 MGY **	544.955 MGY

* Figure rounded to nearest 100,000 gallons

** Figure rounded to nearest 100,000 gallons & includes all permitted aquifers.

Current / Recent Water Use Restrictions: None

Bulk Purchases 1997

Maple Shade	0.024 MGD
Pemberton	0.015 MGD

Bulk Sales 1997

Audubon Park	0.105 MGD
Borough of Berlin	0.021 MGD
Mt. Laurel (Church Road)	0.390 MGD
Deptford	0.906 MGD
Evesham Twp.	0.755 MGD
Consumers (G.S. Water)	0.0016 MGD
Haddon Twp.	0.292 MGD
Haddonfield	0.443 MGD
Mt. Laurel (Horizon Way)	0.553 MGD
Maple Shade	0.117 MGD
Moorestown	0.413 MGD
Mt. Ephraim	0.439 MGD
West Deptford	0.302 MGD
Woodbury	0.253 MGD
Woodbury Hts.	0.037 MGD

D2

Permitted Diversion Amount

Burlington System	1754.7 MGM	20938.2 MGY* Estimated
Camden System	193.75 MGM	1533 MGY
Haddon System	1506.55 MGM	12973.25 MGY

Municipalities Served

Burlington County
Beverly City
Burlington Township
Cinnaminson Township
Delanco Township
Delran Township
Edgewater Park Township
Maple Shade Township
Moorestown Township
Mt.Laurel Township
Palmyra Borough
Riverside Township
Riverton Borough

Camden County
Audubon Borough
Audubon Park Borough
Barrington Borough
Bellmawr Borough
Camden City
Cherry Hill Township
Clementon Borough
Gibbsboro Borough
Gloucester Township
Haddon Heights Borough
Haddon Township
Haddonfield Borough
Hi-Nella Borough
Laurel Springs Borough
Lawnside Borough
Lindenwold Borough
Magnolia Borough
Mt. Ephraim Borough
Oaklyn Borough
Pennsauken Township
Runnemede Borough
Somerdale Borough
Stratford Borough
Voorhees Township
West Collingswood Heights

Total Service Connections: 135,613
% Metered: 100%
% Unaccounted Water: 0
Total Estimated Population Served: 304,772

D3

New Construction (Project Numbers): W-11-95-5186. Construct a interconnection and master chamber between the Westville Water Department and the Deptford Township MUA to supply Westville with water from the Tri-County Water Supply Project through the Deptford Township MUA. W-02-98-5703. Constuct interconnections for Westville and National Park to the Gloucester County Pipeline.

Distribution Mains: Sizing: 2" (Minimum) to: 54" (Maximum)
Pressure: 50 psi (Minimum) to 100 psi (Maximum)

Hydrants/Flushing Program: Yes Cross Connection Program Plan: No
(Twice a Year & As Needed)

Distribution Booster Pumps - Burlington County

Station / Location	Pressures
River Road Booster Taylors Lane & River Road, Cinnaminson	50 - 80 psi
Taylors Lane Booster Taylors Lane, Cinnaminson	50 - 80 psi
Church Road Booster Church Road, Mt. Laurel	50 - 80 psi

Distribution Booster Pumps - Camden County

Station / Location	Pressures
30th St. Booster 30th & Saunders St., Camden	50 - 80 psi
Fellowship Road Booster Fellowship Road, Cherry Hill	50 - 80 psi
Hutton Hill Booster Kresson Road, Cherry Hill	50 - 80 psi
Gibbsboro Booster Gibbsboro Road & Lucas Blvd., Gibbsboro	50 - 80 psi
Station Avenue Booster Station Avenue, Haddon Heights	50 - 80 psi
Evesham Booster Evergreen Road, Runnemede	50 - 80 psi

D4

Distribution Booster Pumps - Camden County - (Continued)

Station / Location	Pressures
Irish Hill Booster E. Clements Bridge Road, Runnemede	50 - 80 psi
Voorhees Booster E.Evesham Road / Golfview Drive, Voorhees	50 - 80 psi

Laboratory Information

1. New Jersey American Water Company
   123 Carriage Lane
   Delran, New Jersey 08075
   Certification #03037

2. American Water Works - Belleville Laboratory
   1151 South Illinois Street
   Belleville, Illinois 62220
   Certification #54457

3. Val Associates Laboratory Inc.
   Seven Deer Tree Professional Center
   600 Deer Road
   Cherry Hill, New Jersey 08034
   Certification #04174

4. Better Environmental Protection Labs Inc.
   Rowland & Pompess Avenues
   Cinnaminson, New Jersey 08077
   Certification #03644

Storage Information

Burlington County

Location	Type	Capacity (MG)
Pomona Road, Cinnaminson Twp.	Elevated Tank	0.60
Highland Ave., Cinnaminson Twp.	Standpipe	0.40
Highland Ave., Cinnaminson Twp.	Standpipe	0.18
River Road, Cinnaminson Twp.	Ground Tank	1.25
Taylors Lane, Cinnaminson Twp.	Ground Tank	2.35
Haines Mill Road, Delran Twp.	Elevated Tank	1.00
Roosevelt Ave., Edgewater Park Twp.	Elevated Tank	0.75
Hancock Street, Riverside Twp.	Elevated Tank	0.50
Total Storage Burlington		7.03 MG

D5

Storage Information

Camden City

Location	Type	Capacity (MG)
Cleveland Avenue, Camden City	Ground Tank	0.89
30th & Saunder Streets, Camden City	Stand Pipe	0.61
Total Storage Camden City		1.50

Camden County (Haddon System)

Browning Lane Station, Browning Lane, Cherry Hill	Ground Level Yard Tank	0.25
Columbia Lakes Station Oak Avenue, Cherry Hill	Ground Level Yard Tank	0.25
Gibbsboro Station Linden Avenue, Gibbsboro	Ground Level Yard Tank	0.25
Kingston Station Renaldo Terrace, Cherry Hill	Ground Level Yard Tank	0.25
Laurel Springs Station Grand Avenue, Laurel Springs	Ground Level Yard Tank	0.25
Magnolia Station Walnut Avenue, Magnolia	Ground Level Yard Tank	0.25
Old Orchard Station Route 70, Cherry Hill	Ground Level Yard Tank	0.25
Ellisburg Station Jefferson Avenue, Cherry Hill	Ground Level Yard Tank	0.25
Otter Brook Station	Ground Level Yard Tank	0.25
Hartner & Elm Avenues, Somerdale	Elevated Tank	0.60
West Atlantic Avenue & Old Warwick Rd. Hi-Nella	Elevated Tank	0.50
Atlantic Avenue, Oaklyn	Elevated Tank	0.60
Kings Highway & Chapel Avenue Cherry Hill	Elevated Tank	1.0
Marlton Road Gibbsboro / Marlton Road, Voorhees	Elevated Tank	1.5

D6

Location	Type	Capacity (MG)
Camden County (Haddon System) (Continued)		
Kresson Road & NJ TP, Cherry Hill	Elevated Tank	2.0
Evesham Road & Evergreen Avenue Runnemede	Standpipe	2.0
Fellowship Road, Cherry Hill	Standpipe	2.0
Hutton Hill, Cherry Hill	Standpipe	2.5
Route 561 & Lucas Blvd., Gibbsboro	Standpipe	0.4
Station & Mansfield Avenues, Haddon Heights	Standpipes	0.57
Clements Bridge Road, Runnemede	Standpipe	0.47
Evesham Road, Voorhees	Standpipe	1.60
Total Storage Haddon System		17.99

Emergency Interconnections

Burlington County System

Purveyor	Location	Pipe Size	Metered
Maple Shade	Coles Avenue	6"	Y
Moorestown MUA	N. Church Street & Moorestown Township Line	6"	Y
Pemberton Twp.	Cooper Street	6"	N

Emergency Interconnections

Camden System

Purveyor	Location	Pipe Size	Metered
Camden City Water Dept.	River Road & 27th Street	12"	N
"	River Road & 19th Street	8"	N

D7

Emergency Interconnections

Camden System (Continued)

Purveyor	Location	Pipe Size	Metered
Camden City Water Dept.	River Road & Federal St.	12"	N
"	Reeves & River Avenues	12"	Y
Merchantville - Pennsauken Water Commission	Federal St. & 39th St.	8"	N

Emergency Interconnections

Haddon System

Purveyor	Location	Pipe Size	Metered
Merchantville - Pennsauken Water Commission	Wynwood St. & Haddonfield Road	12"	N
Mt. Laurel MUA	Fellowship Road & Route 73	8"	Y
Mt. Laurel MUA	Horizon Way	12"	Y
Mt. Laurel MUA	Church Road	10"	Y
Haddonfield Municipal Water System	Kings Highway and Ellis St.	10"	N
Haddonfield Municipal Water System	Kings Highway and Hopkins Road	10"	N
Mt. Ephraim Water Dept.	Kings Highway & St. Martins Avenue	12"	Y
Clementon Municipal Water System	Blackwood & Clementon Rd. & Naylor Drive	6"	N
Clementon Municipal Water System	White Horse Pike & New Freedom Road	6"	N

D8

Emergency Interconnections

Haddon System (Continued)

Purveyor	Location	Pipe Size	Metered
Consumers Water Company	Chews Landing Road and Craig Drive	12"	Y
Consumers Water Company	Hidor Lane & Camerson Court	12"	N
Berlin Municipal Water System	Route 73 & Lafayette Avenue	16"	Y
Evesham MUA	Marlowe Road & Township Boundary	10"	Y

Auxiliary Power

Burlington System

Location	Type	Capacity
Front St. & Broad Street Beverly City	Diesel Generator 125 KW	0.94 MGD
New Albany Road Cinnaminson Twp.	Diesel Generator 125 KW	2.52 MGD
River Road Cinnaminson Twp.	Diesel Generator 125 KW	Booster Station
Taylors Lane Cinnaminson Twp.	Diesel Generator 1250 KW	Booster Station
Steven Drive, Cinnaminson Twp.	Diesel Generator 230 KW	2.88 MGD
Chester Drive, Delran Twp.	Diesel Generator 125 KW	2.30 MGD
Highland Avenue, Cinnaminson Twp.	Diesel Generator 220 KW	2.30 MGD
Cooper Street, Edgewater Park	Diesel Generator 90 KW	1.00 MGD
Carriage Lane, Delran	2 Diesel Generators 2000 KW	Treatment Plant
Taylors Lane	Diesel Generator 1250 KW	
Total Capacity Burlington		11.94 MGD

Auxiliary Power

Camden System

Location	Type		Capacity
Cleveland Ave., Camden City	2 Diesel Generators	725 KW & 250 KW	8.1 MGD

Haddon System

Location	Type		Capacity
Linden Ave., Gibbsboro	Diesel Generator	600 KW	5.2 MGD
West Atlantic Ave., Haddon Heights	Diesel Generator	275 KW	2.8 MGD
Route 70 East Cherry Hill	Diesel Generator	400 KW	3.9 MGD
Floodgate Road, Glendora (Otterbrook Station)	Diesel Generator	230 KW	2.8 MGD
Evesham Road, Voorhees	Natural Gas Generator	150 KW	1.5 MGD
Cherry Hill Booster (Fellowship Road)	Electric Generator	3.0 KVA	Booster Station
Church Road Chlorination Station, Cherry Hill	Natural Gas Generator		Chlorination Station
Gibbsboro Booster	Diesel Generator	100 KW	Booster Station
Hutton Hill Booster	Diesel Generator	3.5 KW	Lighting and Heating
Total Capacity Haddon System			16.2 MGD

D10

Sources & Treatment

Tri-County Treatment Plant - Carriage Lane, Delran

Facility ID: 02

Sources: Delaware River 40 MGD

Treatment: Pre-oxidation and disinfection (ozone) primary coagulation (ferric chloride), pH Adjustment (lime), coagulation (Cat-Floc Polymer), manganese removal (potassium permanganate), disinfection (Gas Chlorination), particulate removal (Static Mixers), coagulation (Solids Blanket Polymer), particulate removal (Superpulsators), particulate removal (carbon filters), post-chlorination (Sodium Hypochlorite), post pH adjustment (Sodium Hydroxide), post corrosion control (Zinc Orthophosphate).

If Needed: Septic Adjustment (Copper Sulfate) Organic Removal [in case of oil spill] (Powder Activated Carbon)

Recycling of backwash water from filters goes to 2 clarifiers, water from the clarifiers comes back to the plant to be recycled and the sludge from the clarifiers goes to a gravity thickener building. Final disposal of sludge goes to Maryland.

Sources & Treatment

Beverly Station: Broad & Front Streets, Beverly City

Facility ID: 01

Sources:		
	well #15	0.86 MGD
	well #16	0.25 MGD
		1.11 MGD

Treatment: Pre-disinfection (Sodium Hypochlorite), Organics Removal (Air stripper), pH adjustment (Sodium Hydroxide), corrosion control (Zinc Orthophosphate), Iron & manganese sequestration (Tetrapotassium Pyrophosphate), Post disinfection (Sodium hypochlorite).

Sources & Treatment

New Albany Road Station: New Albany Road, Cinnaminson Twp.

Facility ID: 03 (Not Point of Entry tied in with Pomona Road Station)

Sources:	well #14	1.44 MGD
	well #26	1.08 MGD
		2.52 MGD

Treatment: Same as Pomona Road Station

Sources & Treatment

Pomona Road Station: Pomona Road, Cinnaminson Twp.

Facility ID: 03

Sources:	well #10	1.00 MGD
	well #12	1.00 MGD
		2.00 MGD

Treatment: Disinfection (Sodium Hypochlorite), Ph adjustment (Sodium Hydroxide), Iron & Manganese sequestration (Tetrapotassium Pyrophosphate), Volatile Organics Removal (6 Granular Activated Carbon Units).

Sources & Treatment

Steven Drive Station: Stephen Drive, Cinnaminson Twp.

Facility ID: 04

Sources:	well #28	1.44 MGD
	well #31	1.44 MGD
		2.88 MGD

Treatment: Disinfection (Sodium Hypochlorite) pH adjustment (Sodium Hydroxide), Iron & Manganese sequestration (Tetrapotassium Pyrophosphate).

D12

Sources & Treatment

Chester Avenue Station: Chester Avenue, Delran Twp.
(Not in Operation)

Facility ID: 05

Sources:

well #23	1.30 MGD
well #24	1.00 MGD
	2.30 MGD

Treatment: Disinfection (Gas Chlorination), pH adjustment (Sodium Hydroxide), Iron & Manganese sequestration (Tetrapotassium Pyrophosphate). Volatile Organics Removal (4 Granular Activated Carbon Units).

Sources & Treatment

Fairview Street Station: Fairview Street, Delran Twp
(Not in Operation)

Facility ID: 06

Sources: well #30 1.44 MGD

Treatment: Disinfection (Sodium Hypochlorite), pH adjustment (Sodium Hydroxide), Iron & Manganese sequestration (Tetrapotassium Pyrophosphate).

Sources & Treatment

Leon Avenue Station: Leon Avenue, Delran Twp. (Operated as Needed)

Facility ID: 07

Sources: well #19 1.00 MGD

Treatment: Disinfection (Sodium Hypochlorite), pH Adjustment (Sodium Hydroxide), Iron & manganese sequestration (Tetrapotassium Pyrophosphate).

Sources & Treatment

Cooper Street Station: Cooper Street, Edgewater Park

Facility ID: 01 (not point of entry tied in with Beverly Station)

Sources: well #32

Treatment: Pre-disinfection (Sodium Hypochlorite), Organics Removal (Air stripper), pH adjustment (Sodium Hydroxide), corrosion control (Orthophosphate), Iron & manganese sequestration (Tetrapotassium Pyrophosphate), Post disinfection (Sodium hypochlorite).

D13

Sources & Treatment

Ivy Road Station: Ivy Road, Edgewater Park (Operated as Needed)

Facility ID: 09

Sources: well #22 0.86 MGD

Treatment: Disinfection (Sodium Hypochlorite), pH Adjustment (Sodium Hydroxide), Iron & Manganese Sequestration (Tetrapotassium Pyrophosphate).

Sources & Treatment

Highland Avenue Station: Highland Avenue, Cinnaminson Twp.

Facility ID: 10

Sources: well #13 1.15 MGD
1.15 MGD
2.30 MGD

Treatment: Disinfection (Sodium Hypochlorite), pH Adjustment (Sodium Hydroxide), Iron & Manganese Sequestration (Tetrapotassium Pyrophosphate), Volatile Organics Removal (4 Granular Activated Carbon Units).

Sources & Treatment

Ashland Station: Atlantic Avenue, Cherry Hill
(Station used in summer months as needed.)

Facility ID: 18

Sources: well #17 1.00 MGD
well #32 1.00 MGD
2.00 MGD

Treatment: Disinfection (Gas Chlorination),
Iron Sequestration (Tetrapotassium Pyrophosphate).

D14

Sources & Treatment

Browning Lane Station: Browning Lane, Cherry Hill

Facility ID: 19

Sources:

well #44	2.00 MGD
well #45	1.80 MGD
well #46	2.00 MGD
well #65	1.00 MGD
	6.80 MGD

Treatment: Pre & Post Disinfection (Sodium Hypochlorite), Iron Removal (4 Pressure Sand Filters), Recycling of filter backwash is through a clarifier & settled filter sludge is hauled to the Tri-County Treatment Plant.

Sources & Treatment

Columbia Lakes Station: Oak Avenue, Cherry Hill (Station used only as needed.)

Facility ID: 20

Sources:

well #22	1.50 MGD	
well #24	1.30 MGD	*Not in Use
well #31	1.50 MGD	
	3.00 MGD	

Treatment: Disinfection (Sodium Hypochlorite), pH adjustment (Sodium Hydroxide), Iron Removal (6 Pressure Sand Filters), Recycling of filter backwash is through settling tank and the settled filter sludge goes to sanitary sewer.

Sources & Treatment

Egbert Station: Sylvan Drive & Dallas Avenue, Haddon Heights (Station not in operation - only used as needed during summer months.)

Facility ID: 21

Sources:

well #18	1.00 MGD
well #35	1.20 MGD
	2.20 MGD

Treatment: Disinfection (Sodium Hypochlorite), Iron Removal (aeration [not in operation]), (2 Pressure Sand Filters), Iron Sequestration (Tetrapotassium Pyrophosphate), Recycling of filter backwash through Settling Tank & settled filter sludge is hauled to the Tri-County Treatment Plant.

D15

Sources & Treatment

Ellisburg Station: Jefferson Avenue, Cherry Hill
(Station used only as needed during summer months.)

Facility ID: 22

Sources:

well #13	1.40 MGD
well #16	1.70 MGD
well #23	1.70 MGD
	4.80 MGD

Treatment: Disinfection (Gas Chlorination), pH Adjustment (Sodium Hydroxide), Iron Removal (6 Pressure Sand Filters), Recycling of backwash is through clarifier & the settled filter sludge goes to sanitary sewer.

Sources & Treatment

Elm Tree Station: Thomas Road, Voorhees Twp.
(Station has been out of service since September 1996.)

Facility ID: 23

Sources: well #26 0.40 MGD

Treatment: Iron Removal (Tetrapotassium Pyrophosphate), Disinfection (Sodium Hypochlorite).

Note: 2000 gallon pressure tank out of service.

Sources & Treatment

Gibbsboro Station: Linden Avenue, Gibbsboro

Facility ID: #24

Sources:

well #41	1.10 MGD
well #42	2.00 MGD
well #43	2.00 MGD
well #56	0.50 MGD
well #56	0.50 MGD
	6.10 MGD

Treatment: Disinfection (Sodium Hypochlorite), Iron Sequestration (Tetrapotassium Pyrophosphate), Iron Removal (4 Pressure Sand Filters), Recycling of backwash is through clarifier & the settled filter sludge goes to the Tri-County Treatment Plant.

D16

Sources & Treatment

Haddon Heights Station: West Atlantic Avenue, Haddon Heights

Facility ID: 25

Sources:	well #14	1.20 MGD
	well #15	1.20 MGD
	well #20	1.00 MGD
	well #30	1.20 MGD
	well #63	1.44 MGD
		6.04 MGD

Treatment: Pre & Post Disinfection (Sodium Hypochlorite), pH Adjustment (Sodium Hydroxide), Iron & Manganese Sequestration (Tetrapotassium Pyrophosphate), Iron Removal (4 Pressure Sand Filters), Recycling of filter backwash is through a clarifier & settled filter sludge is hauled to the Tri-County Treatment Plant.

Sources & Treatment

Kingston Station: Renaldo Terrace, Cherry Hill
(Station is operated as needed during summer months.)

Facility ID: 26

Sources:	well #25	1.50 MGD
	well #59	1.20 MGD
	well #62	0.70 MGD
		3.40 MGD

Treatment: Disinfection (Sodium Hypochlorite), pH Adjustment (Sodium Hydroxide), Iron Removal (6 Pressure Sand Filters), Recycling of filter backwash is through a settling tank and settled filter sludge goes to sanitary sewer.

D17

Sources & Treatment

Laurel Springs Station: Grand Avenue, Laurel Springs
(Station is operated as needed during summer months.)

Facility ID: 27

Sources:		
	well #1	0.40 MGD
	well #4	0.40 MGD
	well #8	0.40 MGD
	well #10	0.50 MGD
	well #13	0.90 MGD
	well #15	0.90 MGD
	well #60	0.60 MGD
	well #61	0.60 MGD
		4.70 MGD

Treatment: Disinfection (Gas chlorination), Iron Sequestration (Tetrapotassium Pyrophosphate).

Sources & Treatment

Magnolia Station: Walnut Avenue, Magnolia

Facility ID: 28

Sources:		
	well #33	1.50 MGD
	well #64	1.50 MGD
		3.00 MGD

Treatment: Disinfection (Sodium Hypochlorite), Iron & Manganese Sequestration (Tetrapotassium Pyrophosphate), Iron Removal (4 Pressure Sand Filters; 1 is used as a contact tank), Recycling of backwash is through a settling tank & settled filter sludge goes to the Tri-County Treatment Plant.

Sources & Treatment

Old Orchard Station: Route 70 East, Cherry Hill

Facility ID: 29

Sources:		
	well #36	1.00 MGD
	well #37	1.50 MGD
	well #38	2.00 MGD
	well #58	1.20 MGD
		5.70 MGD

Treatment: Disinfection (Sodium Hypochlorite), Corrosion Control (Tetrapotassium Pyrophosphate), Iron Removal (4 Pressure Sand Filters), Recycling of backwash goes through clarifier & settled sludge is hauled to Tri-County Treatment Plant.

D18

Sources & Treatment

Otter Brook Station: Floodgate Road, Glendora

Facility ID: 30

Sources: well #29 1.50 MGD
well #34 1.50 MGD
well #39 2.00 MGD
5.00 MGD

Treatment: Pre & Post Disinfection (Sodium Hypochlorite), Iron Sequestration (Tetrapotassium Pyrophosphate), Iron Removal (4 Pressure Sand Filters), Recycling of back wash goes through settling tank and settled filter sludge goes to Tri-County Treatment Plant.

Sources & Treatment

Runnemede Station: St. Clair Road, Runnemede
(Station is operated as needed during summer months.)

Facility ID: 31

Sources: well #7 0.50 MGD Not in use
well #19 0.80 MGD
0.80 MGD

Treatment: Disinfection (Sodium Hypochlorite), Iron Sequestration (Tetrapotassium Pyrophosphate)

Sources & Treatment

Somerdale Station: Hartner & Elm Avenues, Somerdale

Facility ID: 32

Sources: well #14 0.70 MGD

Treatment: Disinfection (Sodium Hypochlorite), Iron Sequestration (Tetrapotassium Pyrophosphate)

Sources & Treatment

Voorhees Station: Evesham Road, Voorhees

Facility ID: 33

Sources: well #21 1.40 MGD

Treatment: Disinfection (Gas Chlorination), Iron Sequestration (Tetrapotassium Pyrophosphate)

Sources & Treatment

Murray Avenue Aquifier Storage: Murray Avenue, Cherry Hill

Facility ID: 34

Sources: Recovery well no. 66 1.73 MGD

Treatment: Disinfection (Sodium Hypochlorite, pH Adjustment (Sodium Hydroxide).

Sources & Treatment

Church Road Chlorination Station: Church Road, Cherry Hill

Facility ID: None

Sources: None

Treatment: Disinfection (Sodium Hypochlorite)

Sources & Treatment

Camden City Treatment Plant: Cleveland Avenue, Camden City

Facility ID: 54

Sources:

well #50	1.00 MGD
well #51	0.43 MGD
well #52	1.71 MGD
well #53	1.50 MGD
well #54	1.50 MGD
well #55	1.50 MGD
	7.64 MGD

Treatment: Pre & Post Disinfection (Sodium Hypochlorite), Iron & Organics Removal (Aeration Slat Tray / Forced Draft/In), Iron Removal (Potassium Permangate), Iron & Manganese Removal (8 Filters Green Sand & Anthracite), Corrosion Control (Zinc Orthophosphate), pH Adjustment (Caustic Soda), Organics Removal (Aeration, Packed Tower).

D20

Distribution System Monitoring Requirements

Western System PW 0327001 (Combined March 1997)

Microbiological:

Monthly Samples Required: 150 Samples Taken: 156 - 212

Disinfectant Residuals Measurements:

Required Per Month: 150 Taken Per Month: 165 - 212

Lead & Copper:

Samples Required: 50 Samples Taken: Due 1998

System is on Reduced Monitoring once every 3 years.

Radiological:

Sample Frequency: Pending BSDW Review

Trihalomethanes:

Samples Required: Quarterly Sample Date: 4/21/97, 8/27/97, 11/13/97 & 2/12/98.

Asbestos:

Next cycle pending BSDW Review. Previous test 6/10/94.

Iron & Manganese: (Surface Plant)

Compliance Period: Annually
Samples Required: 5
Samples Taken: The 5 required samples for the system were taken 10/6, 10/13, 10/14 & 11/13/97.

Nitrate & Nitrite: (Surface Plant)

Sample Frequency: Quarterly (Surface water)
Sample Date: 5/27, 8/26, 11/18/97 & 2/24/98.

Secondaries: (Surface Plant)

Sampling required: SW - Annually; GW - Every 3 Years
Compliance Period: 96 - 98
Surface Water tested 10/9/97

D21

Distribution System Monitoring Requirements

Western System PW 0327001 (Combined March 1997) (Continued)

Volatile Organic Chemicals: (Surface Plant)

Compliance Period: 1997	Samples Required	Sample Dates
Delaware River Regional / Water Treatment Plant	Quarterly	5/20/97, 8/26/97, 11/18/97 & 2/24/98.

Inorganics: (Surface Plant)

Sampling Required: SW Annually; GW - Every 3 Years
Compliance Period: 1997 Sample Date: 4/15/97

SOC's / Pesticide:

Sample Frequency: Pending BSDW Review

Surface Water Treatment Rule:

Turbidity: Required # per month, every 4 hours # taken per month, every 4 hours.

Disinfectant Residuals: Every 4 hours

D 27

Distribution System Monitoring Requirements

Burlington System PW0327001

Nitrate & Nitrite:	Sample Date
Beverly Station	7/22/97
Pomona Road Station	7/8/97
Steven Drive Station	7/22/97
Chester Avenue Station	Not in Operation
Fairview Street Station	Not in Operation
Leon Avenue Station	7/22/97
Ivy Road Station	7/29/97
Highland Avenue Station	7/22/97

Secondaries:
Sampling Required: Every 3 Years
Compliance Period: 96 - 98 (Due 1998)

	Sample Date
Beverly Station	9/19/95
Pomona Road Station	9/19/95
Steven Drive Station	9/19/95
Chester Avenue Station	8/24/95
Fairview Street Station	8/21/95
Leon Avenue Station	10/23/95
Ivy Road Station	9/19/95
Highland Avenue Station	9/19/95

Volatile Organic Chemicals:

Compliance Period: 96 - 98	Samples Required	Sample Dates
Beverly Station	Quarterly	3/25/97, 4/3/97 7/3/97, 10/22/97 1/28/98
Pomona Road Station	Quarterly	Closed, 6/6/97, 7/8/97, 10/10/97, 1/30/98
Steven Drive Station	Due 1996	9/3/96
Chester Avenue Station	Not In Operation	
Fairview Street Station	Not In Operation	
Leon Avenue Station	Due 1996	10/4/96
Ivy Road Station	Due 1996	4/18/96
Highland Avenue Station	Quarterly	1/27/97, 4/22/97, 7/16/97, 10/10/97, 2/27/98

D23

Distribution System Monitoring Requirements

Burlington System PW0327001 (Continued)

Inorganics:

Compliance Record: 1996 - 1998	Sample Date
Beverly Station	11/27/96
Pomona Road Station	6/27/96
Steven Drive Station	8/14/96
Chester Avenue Station	Not In Operation
Fairfiew Street Station	Not In Operation
Leon Avenue Station	1/10/96
Ivy Road Station	9/30/96
Highland Avenue Station	1/10/96
Delaware Region Water Plant	11/21/96

SOCs/Pesticide:

Compliance Period: 1993 / 1995

Waiver: 6/30/95: Highland Avenue pending screening samples to be done by the BSDW.

Distribution System Monitoring Requirements

Haddon System PW 0418001

Nitrate & Nitrite:	Sample Date
Ashland	7/22/97
Browning Lane	6/10/97
Columbia Lakes	Not In Operation
Egbert	7/22/97
Ellisburg	Not In Operation
Elm Tree	Not In Operation
Gibbsboro	6/10/97
Haddon Heights	6/10/97
Kingston	7/22/97
Laurel Springs	6/10/97
Magnolia	6/10/97
Old Orchard	6/10/97
Otter Brook	6/10/97
Runnemede	7/8/97
Somerdale	7/8/97
Voorhees	Not In Operation
Murray Ave. Aquifer Storage	6/10/97

Secondaries:

Sampling Required: Every 3 Years
Compliance Period: 96 - 98 (Due 1998)

Station	Sampling Date
Ashland	10/23/95
Browning Lane	10/23/95
Columbia Lakes	8/24/95
Egbert	Not In Operation
Ellisburg	8/24/95
Elm Tree	10/23/95
Gibbsboro	10/23/95
Haddon Heights	9/19/95
Kingston	8/24/95
Laurel Springs	8/24/95
Magnolia	10/23/95
Old Orchard	10/23/95
Otter Book	10/23/95
Runnemede	8/24/95
Somerdale	8/24/95
Voorhees	8/24/95
Murray Ave. Aquifer Storage	8/24/95

D25

Distribution System Monitoring Requirements
Haddon System PW 0418001 (Continued)

Volatile Organic Chemicals:

Compliance Period: 1996

Station	Samples Required	Sample Dates
Ashland	Due 1996	4/8/96
Browning Lane	Due 1996	3/4/96
Columbia Lakes	Not In Operation	
Egbert	Not In Operation	
Ellisburg	Not In Operation	
Elm Tree	Due 1996	4/29/96
Gibbsboro	Due 1996	3/13/96
Haddon Heights	Due 1996	1/3/96
Kingston	Due 1996	5/21/96
Laurel Springs	Due 1996	6/25/96
Magnolia	Due 1996	6/25/96
Old Orchard	Due 1996	4/1/96
Otter Brook	Due 1996	1/10/96
Runnemede	Due 1996	6/25/96
Somerdale	Due 1996	6/25/96
Voorhees	Not In Operation	
Murray Ave. Aquifer Storage	Quarterly For 1996	Closed, 6/25/96 8/28/96 & Closed

Inorganics:
Compliance Period: 1996

Station	Sample Date
Ashland	4/8/96
Browning Lane	10/7/96
Columbia Lakes	Not In Operation
Egbert	Not In Operation
Ellisburg	Not In Operation
Elm Tree	4/29/96
Gibbsboro	3/13/96
Haddon Heights	1/3/96
Kingston	8/8/96
Laurel Springs	10/29/96
Magnolia	4/9/96
Old Orchard	10/7/96
Otter Brook	1/10/96
Runnemede	6/25/96
Somerdale	20/23/96
Voorhees	Not In Operation
Murray Ave. Aquifer Storage	6/28/96

SOCs / Pesticide:
Compliance Period: 93 - 95
Waiver Issued: 6/30/95

D26

Distribution System Monitoring Requirements

Camden System PW 0408002

Nitrate & Nitrite:

Samples Required: Quarterly Sample Dates: System Closed Since 10/96.

Secondaries:
Sampling Required: If System is Reopened.
Compliance Period: 96 - 98
Sample Date: 9/19/95

Volatile Organic Chemicals:
Compliance Period: 96 - 98
Samples Required: Quarterly
Sample Dates: 2/1/96, 5/2/96, 9/12/96 & System Closed

Inorganics:

Compliance Period: 96 - 98 Sample Date: 1/4/96

SOC's / Pesticide:

Compliance Period: 93/95 Waiver Pending 8/15/95.
Screening samples to be taken by BSDW

Note: If the Camden System is reopened, contact the BSDW and request for sampling requirements needed to reopen the system.

General Comments

Burlington System

Stephen Drive Station :

Well 31 needs a new lock. There was 6" of water in chemical vault. No sump pump.

Pomona Road Station :

There was 4' of water in the altitude valve vault. Sump pump was not working. There was 6" of water in well 12's metering vault. Well 12 needs a lock.

New Albany Road Station:

Well 14 was missing casing vent screens.

Taylors Lane Booster Station :

Both directional vaults had 4' of water in them.

There was 2' of water in the altitude valve vault next to the Elevated Tank on Hancock Street, Riverside Twp. No sump pump.

Beverly Station :

Wells 15 & 16 casing vent screens & 3 locks each. There was 3' of water in the vault near well 15. There was 2' of water in the treatment vault near the aerator.

Ivy Road Station :

Well 22 needs casing vent screens. The metering vault had 5' of water in it.

Tri-County Treatment Plant :

Pump # 2 at the Raw Water Station had a leaky seal. There was 2' of water in the reservoir raw water vault. There was 1' of water in clarifier # 2 sludge vault. In the potassium permanganate room the eye wash was filled with nuts & bolts.

Those stations which are not in use or used infrequently are in very poor condition, improved maintenance is required throughout the ground water system but particularly at those stations.

D28

General Comments

Haddon System

Ashland Station:

There was no eye wash and the exhaust fan was not operational in the gas chlorine room. This station is not in operation; however, before placing the station on line the above items should be provided for.

Browning Lane Station:

The vault next to well #44 had 3′ of water in it. The vault next to well #65 had 3" of water in it; nether unit had a sump pump. There was a dug out area next to the Ground Tank and Clarifier. There was 2′ of water in it and it was 2′ square. The area & leaking pipe should be repaired.

Columbia Lakes Station:

The vault next to the yard tank had 6" of water in it and no sump pump. The chemical & metering vaults next to well #22 had 7′ of water in them and it could not be determined if either vault had a sump pump.

Egbert Station:

There was 3′ of water in well #18′s metering vault.

Ellisburg Station:

The rear gate near the sludge room needs a lock. The sand filter room needs repairs. The ground tank ladder stand needs to be rewelded. The overflow pipe needs a screen. The caustic treatment tank and pump at the station are in poor condition. The Chlorine room needs repairs. There is a dug out area at the fences entrance gate that needs to be filled in.

Elm Tree Station:

Well 23 needs casing vent screens.

Gibbsboro Station:

The chemical injection vault had 3′ of water in it and the vault to the yard tank had 4′ of water in it; neither vault had a sump pump. There was 8′ of water in the metering vault for well 42.

The Gibbsboro booster had 2′ of water in the altitude vault & the altitude valve was leaking. The sump pump was not working.

D29

General Comments

Haddon System (Continued)

Haddon Heights Station:

Wells 14 & 63 need casing vent screens. The room containing well 63 was extremely hot the room needs an exhaust fan. There was 1' of water in well 20's metering vault the vault doesn't have a sump pump. The bleach room needs an exhaust fan. There was 6" of water in the metering vaults for wells 14 & 30. Well 15 has a leaking seal.

Hutton Hill Booster:

The ladder on the standpipe needs to be rewelded.

Kingston Station:

The metering vault and treatment vault for well #25 had water in them at depths of 2' and 6" respectively. The metering vault and chemical injection vault for well #62 had water in them at depths of 2' and 8'. None of the vaults had sump pumps. The metering vault for well #59 had 2' of water in it and the sump pump was not working.

Laurel Springs Station:

Wells 60 & 61 need casing vent screens. Both the metering & treatment vaults for wells 1 had 2' of water in them. Neither of the sump pumps were working. The metering & treatment vaults for well #13 had 2' & 6' of water in respectively. The tank level vault had 1' of water in it and no sump. Well #13 needs panel lock.

Magnolia Station:

The ground tank needs painting & the screen on the overflow pipe needs repair.

Murray Avenue Recovery Well:

Well 66 needs casing vent screens.

Old Orchard Station:

The chlorine injection vault had 6" of water in it. The metering vault for well 58 had 3' of water in it and the sump pump wasn't working. The diesel tank vault had 4" of water in it.

D30

General Comments

Haddon System (Continued)

Otterbrook Station:

The chain link fence near wells 29 & 39 needs to be repaired. A plate protector on the ground level tank needs repair.

Runnemede Station:

Well 19 has a leaking seal.

Voorhees Station:

Well 33 needs casing vent screens.

Those stations which are not in use or used infrequently are in very poor condition, improved maintenance is required throughout the ground water system but particularly at those stations.

The Tri-County Blow-Off vault at Hutton Hill and Booster vault at Fellowship Road, Cherry Hill were inaccessible during the inspection.

There was no overflow pipe on the standpipe on Clements Bridge Road, Runnemede nor on the small standpipe located on Station & Mansfield Avenues, Haddon Heights.

The area in back of the Clements Bridge Road standpipe was dug out underneath the fence and the fence barbed wire was off its holders. The fenced in area needs repairs.

General Comments

Camden System

The building containing well #54 on 34th Streets & Cleveland Avenue needs an outside lamp and exhaust fan.

The building containing well #53 on Cleveland Avenue & Bergen Street had the overhead fluorescent lamp hanging down from the ceiling.

The overflow pipe on the 30th Street needs a protective screen.

The building containing well #55 the ceiling was falling down.

The 2 vaults near the aeration tanks had 8′ of water in them.

The diesel tank vault had 2′ of water in it and no sump pump.

The flow vault for well #52 had 1′ of water in it and the sump pump was not working.

There were missing screens on casing vents, wells 53, 54 & 55.

DMC

ENTERED 9/3/97

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMPLIANCE EVALUATION INSPECTION
PUBLIC COMMUNITY WATER SYSTEM

SEP 0 2 1997
Water Supply Element
Safe Drinking Water Bur.

PW ID #: 04 24 001 GENERAL INFORMATION DATE: February 19, 1997

PURVEYOR: Merchantville-Pennsauken Water Commission TYPE: GROUNDWATER CLASS: 6
LOCATION ADDRESS: 20 West Maple Avenue
MAILING ADDRESS: 20 West Mapel Avenue MUNICIPALITY: Merchantville COUNTY: Camden

ADMINISTRATOR/MANAGER: Bernhart Kofoet PHONE NUMBER(S): (609) 663 - 0043

LICENSED OPERATOR (S) Leo Holland LICENSE(S) HELD: W: 4 T: 3
PHONE #: (609) 663 - 0043 SYSTEM REQUIREMENT(S): W: 4 T: 3

EMERGENCY #: (609) 663 - 0043 CONTACT: Leo Holland, Jeff Whalen

COMMENTS/DEFICIENCIES

[ ] SOURCE/TREATMENT: NONE

[ ] STORAGE/DISTRIBUTION: NONE

[ ] INTERCONNECTION/AUXILIARY POWER: NONE

[ ] MONITORING/REPORTING/MCL/PUBLIC NOTICE: NONE

GENERAL COMMENTS:

OVERALL RATING: ACCEPTABLE [XX] CONDITIONALLY ACCEPTABLE [ ] UNACCEPTABLE [ ]

INSPECTOR: LEWIS G. KLAUDI, M.A. FACILITY REPRESENTATIVE: LEO HOLLAND, JEFF WH

TITLE: SENIOR ENVIRONMENTAL SPECIALIST TITLE: SUPERINTENDENT, LICENSED OPERATOR

SIGNATURE: ORGANIZATION: MERCHANTVILLE-PENNSAUKEN WATER

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COMPLIANCE EVALUATION INSPECTION
PUBLIC COMMUNITY WATER SYSTEM

POINT OF ENTRY INFORMATION

PWID #: 04 24 001

DATE: FEBRUARY 19, 1997

BULK PURCHASE INTERCONNECTION(S) (if applicable)

PURVEYOR	LOCATION	SIZE	CAPACITY	PUMP STATION (Y/N)
NONE				

SURFACE WATER SOURCES (if applicable)

SURFACE WATER ID#: ____

PLANT	CAPACITY (MGD)	LOCATION	TREATMENT/CHEMICAL ADDITION (list in Order)
NONE			

GROUNDWATER SOURCES (if applicable)

POINT OF ENTRY ID#: 01

WELL#	CAPACITY (MGD)	LOCATION	TREATMENT/CHEMICAL ADDITION (list in order)
1	0.93	PARK AVENUE WTP	PACKED COLUMN AERATION (PCA) SEDIMENTATION, FILTRATION, SEQUESTRATION, AND SODIUM HYPOCHLORITE DISINFECTION
2	0.90		
3	0.84		
4A	1.20		
5	1.26		

POINT OF ENTRY ID#: 02

WELL#	CAPACITY (MGD)	LOCATION	TREATMENT/CHEMICAL ADDITION (list in order)
1	1.45	MARION AVENUE WTP	PCA, PH ADJUSTMENT (NAOH), INHIBITOR, SODIUM HYPOCHLORITE DISINFECTION
2	1.46		

D3

COMPLIANCE EVALUATION INSPECTION
PUBLIC COMMUNITY WATER SYSTEM

POINT OF ENTRY INFORMATION

PW ID #: 04 24 001
(GROUND WATER SOURCES)

DATE: FEBRUARY 19, 199

POINT OF ENTRY ID#: 3

WELL#	CAPACITY (MGD)	LOCATION	TREATMENT/CHEMICAL ADDITION: (list in order)
1	1.45	WOODBINE AVENUE	PCA, pH (LIME) ADJUSTMENT SEQUESTRATION, SODIUM HYPOCHLORITE DISINFECTION
2	1.20		

POINT OF ENTRY ID#: 4

WELL#	CAPACITY (MGD)	LOCATION	TREATMENT/CHEMICAL ADDITION (list in order)
1	1.01	BROWNING ROAD	PCA, pH (LIME) ADJUSTMENT, FILTRATION, INHIBITOR, SODIU HYPOCHLORITE DISINFECTION
2	1.01		

POINT OF ENTRY ID#: 5

WELL#	CAPACITY (MGD)	LOCATION	TREATMENT/CHEMICAL ADDITIO (list in order)
1A	*	DELAWARE GARDEN	DIFFUSED AERATION, pH ADJUS FILTRATION, SODIUM HYPOCHLORITE DISINFECTION
2	0.83		

* = FOR STATE/FEDERAL USE ONLY (NOT USED BY MPWC
NOTE: PLANT IS OUT OF SERVICE

POINT OF ENTRY ID#: 6

WELL#	CAPACITY (MGD)	LOCATION	TREATMENT/CHEMICAL ADDITIO (list in order)
1	0.76	HATIONAL HIGHWAY	PCA, pH ADJUSTMENT, SODIUM HYPOCHLORITE DISINFECTION
2	1.31		

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COMPLIANCE EVALUATION INSPECTION
PUBLIC COMMUNITY WATER SYSTEM

DELIVERY INFORMATION

DATE: FEBRUARY 19, 1997

PW ID #: 04 24 001

PLANT DELIVERED WATER (MGD, month, year) MIN: 5.0 MGD, 01/96 MAX: 6.5 MGD, 05/96 ANNUAL AVERAGE: 5.6 MGD

CURRENT/RECENT WATER USE RESTRICTIONS: NONE

BULK PURCHASES (Prov., ID#, MGD): NONE

BULK SALES (Customer, ID#, MGD): MAPLE SHADE, # 03 19 001, 57.9 MGD (ONE DAY)

PERMITTED DIVERSION AMOUNT (MGM-MGY): # 5173 (335 MGM / 2331.937 MGY)

MUNICIPALITY(IES) SERVED: MERCHANTVILLE - 1,183; PENNSAUKEN - 11, 081; CHERRY HILL - 2083 AND CAMDEN - 253

TOTAL SERVICE CONNECTIONS: 14,600 | %METERED: 100 | % UNACCOUNTED WATER: 6.5

TOTAL ESTIMATED POPULATION SERVED: 50,000

NEW CONSTRUCTION (Project Numbers): W-11-95-5185- CONVERSION TO SODIUM HYPOCHLORITE DISINFECTION; W-10-95-5180 SEQUESTION BY SODIUM PHOSPHATE; W-05-95-5127 RECYCLING OF BACKWASH WATER

DISTRIBUTION MAINS: Sizing: 6 INCH (min) to: 16 INCH (max)
Pressure: 50 PSI (min) to: 75 PSI (max)

HYDRANTS/FLUSHING PROGRAM: YES CROSS CONNECTION PROGRAM PLAN: YES

DISTRIBUTION BOOSTER PUMPS:

location(s)	Pressure(s)
PARK AVENUE TREATMENT FACILITY -01	50/75 PSI

LABORATORY INFORMATION

LABORATORY NAME: P & P LABORATORIES, INC. CERT.#: 04479

ADDRESS: 2025 WOODLYNNE AVENUE, WOODYLNNE, NEW JERSEY 08107

LABORATORY NAME: CERT.#:

ADDRESS:

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF ENFORCEMENT FIELD OPERATIONS

COMPLIANCE EVALUATION INSPECTION
PUBLIC COMMUNITY WATER SUPPLY

PW-ID #: 0424001

DELIVERY INFORMATION

PLANT DELIVERED WATER (MGD,month,year) Max:7.986 MGD 6/94 Min: 5.42 MGD 3/94 Annual Average:6.201 MGD

CURRENT/RECENT WATER RESTRICTIONS: NONE

BULK PURCHASES (Provider, ID#, MGD): NONE

BULK SALES (Customer, ID#, MGD): MAPLE SHADE WATER CO. - 18 MG

OF SERVICES: 14,600 | % METERED: 99.3 | % UNACCOUNTED FOR: 6.5

MUNICIPALITIES SERVED (Est. services in each): MERCHANTVILLE - 1183, CHERRY HILL - 2083, PENNSAUKEN - 11,081 AND CAMDEN - 253

TOTAL EST. POP. SERVICED WINTER: 50,000 SUMMER: 50,000

NEW CONSTRUCTION (Project Numbers): BROWNING ROAD WTP - W-08-93-4855

DISTRIBUTION MAINS: Sizing: 4 INCH (min) to: 16 INCH (max)
Pressures: 50 PSI (min) to: 75 PSI (max)
Hydrants/Flushing Program: YES - 2 PER YEAR

MONITORING & REPORTING

PARAMETER(S)	FREQUENCY REQUIRED	FREQUENCY PERFORMED
ASBESTOS	ONE SAMPLE PER CYCLE	WAIVER GRANTED 7/1994
COLIFORM/CURR.YEAR	50 SAMPLES PER MONTH	55 SAMPLES PER MONTH
INORGANICS	ONE BETWEEN 1/93 - 12/95	COMPLETE 6/94 ALL POE
SECONDARIES	ONE BETWEEN 1/93 - 12/95	COMPLETE 6/94 ALL POE
LEAD/COPPER	REDUCED TO 30 PER YEAR	COMPLETED 7/27/94
NITRATE/NITRITE	ANNUALLY/ONE 1/93 TO 12/95	COM. ALL POE 93/94
RADIONUCLIDES	4 QUARTERS EVERY 4 YEARS	IN PROCESS
SOCs/PCSs/PESTIC.	4 QUARTERS BY 12/31/95	WAIVER PENDING
TRIHALOMETHANES	QUARTERLY PER YEAR	ALL POE QUARTERLY YR
TURBIDITY	NOT APPLICABLE	NOT APPLICABLE
VOCs	QUARTERLY PER YEAR	ALL POE TWICE A MONTH

NAME OF LABORATORY: P & P LABORATORY, INC. CERT.#: 04479

ADDRESS: 2025 WOODLYNNE AVENUE, WOODLYNNE, NEW JERSEY 08107

COMPLIANCE EVALUATION

SOURCE DEFICIENCIES: NONE

TREATMENT DEFICIENCIES: NONE

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Form DWR-143
7/88

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
ENFORCEMENT & REGULATORY SERVICES

COMPLIANCE EVALUATION INSPECTION
PUBLIC COMMUNITY WATER SUPPLY

DATE October 3, 1990

GENERAL INFORMATION

PURVEYOR/ FACILITY: Maple Shade Water Department

PW-ID #: 0319001

FILE LOCATION: Maple Shade Twp./Burlington

MAILING ADDRESS: P.O. Box 9 Maple Shade, N.J. 08052

REQUIRED LICENSES: T-1, W-2

ADMIN.: George Haeuber

BUSINESS TELEPHONE # Admin.: 609-448-7450 John Byrne 609-779-9610

Licensed Operators: T-4 John Byrne W-4

FACILITY DESCRIPTION

SOURCES: descriptions, locations, capacities(mgd): Well #2 - 0.144 mgd, Main Street (backup we
Well #8 - 2.160 mgd, Main Street Well #11 - 1.008 mgd, Main Street
Well #9 - 1.650 mgd, Kings Highway Well #10 - 1.940 mgd, Kings
Highway

Est Tot Eff Cap: 6.902 mgd

TREATMENT: source, type, capacities(mgd): Ion exchange filtration, aeration, gas
chlorination, pH adjustment (lime)
Note: Same treatment for each of the two (2) plants

Est Tot Eff Cap: 6.902 mgd

FINISHED WATER STORAGE: descriptions, locations, capacities(mg): Elevated storage tank
Route 73 + Fellowship Road - 1.00 mg, Standpipe - Cedar
Street - 0.250 mg

Est Tot Cap: 1.250 mg

EMERGENCY INTERCONNECTIONS: descriptions, available gallonage(mgd): Pennsauken-Merchantville
Water Authority (1) 6", (1) 8", (1) 12" main
Moorestown Water Department (1) 8" main

Est Tot Avail:

AUXILIARY POWER: location, type, capabilities: Two (2) diesel powered generators
One (1) each at Main Street and Kings Highway plants
Each generator can supply power to one well and one high rate
service pump

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NJDEP - DIVISION OF WATER RESOURCES
PUBLIC COMMUNITY WATER SUPPLY INSPECTION

Page

DELIVERY INFORMATION

PLANT DELIVERED WATER (mgd.month.year) Note - Figures below do not include August 1989 Max 2.01 mgd, July, 1989 Min 1.67, Nov, 1989 Annual Average 1.939 mgd (1989)

BULK PURCHASES (provider,mgd) NONE

BULK SALES (customer, mgd) N.J. Water Co - Cinnaminson Twp - 0.050 mgd

% METERED 100%

NUMBER OF SERVICES 4,250

MUNICIPALITIES SERVED (est. services in each) Maple Shade Township

TOTAL ESTIMATED POPULATION SERVICED 21,000

CURRENT/RECENT WATER RESTRICTIONS NONE

NEW CONSTRUCTION (Project Numbers) 2 strip malls currently being built, each will have a storage tank

DISTRIBUTION MAINS: Sizing 4" (min) to 12" (max)
Pressures 45 psi (min) to 65 psi (max)
Hydrants/Flushing Program 325 / Spring and Fall

MONITORING & REPORTING

Sample Location Distribution

PARAMETER(S)	FREQUENCY REQUIRED	FREQUENCY PERFORMED
A-280	2x per year	2x per year 1/90 8/90
Coliform	27 per month	28 per month
Inorganics	1x every 3 years	1x every 3 years-1/90
Nitrate	1x every 3 years	1x every 3 years-1/90
Trihalomethanes	Quarterly	Quarterly
Organics	NR	1-90
Turbidity	NR	
Secondary	1x every 3 years	1x every 3 years- 1/90
Radiological	4 Qtrs every 4 years	currently testing
VOCs	begin in 1988	Special Organics not submitted

- Not submitted/ 2nd + 3rd Qtr

NAME OF LABORATORY Intech Biolabs, Inc CERTIFICATION # 12427

ADDRESS 158 Tices Lane, East Brunswick, N.J. 08816 (201) 257-10

COMPLIANCE EVALUATION

SOURCE DEFICIENCIES NONE

TREATMENT DEFICIENCIES NONE

ENFORCEMENT & REGULATORY SERVICES

COMPLIANCE EVALUATION INSPECTION
PUBLIC COMMUNITY WATER SUPPLY

DATE 6/10/93

GENERAL INFORMATION

PURVEYOR/ FACILITY: Moorestown Twp. Water Department

FILE LOCATION: Dept. of Public Works, Moorestown — PW-ID # 0322001

MAILING ADDRESS: Dept. of Public Works, 601 East Third Street, Moorestown

ADMIN.: Jack Lallier, Director of Public Works — REQUIRED LICENSES T-3 W-3

BUSINESS TELEPHONE # Admin.: (609) 235-3520 — Licensed Operators: T-4 Kenneth Jolly W-4

FACILITY DESCRIPTION

SOURCES: descriptions, locations, capacities(mgd): Kings Highway Well #3-1.16mgd; Well #5-1.16mgd; Well #6-1.63mgd; North Church Street WTP-Well #7-1.44mgd; Hartford Road-Well #4-1.16mgd; Well #8-1.26mgd

Est Tot Eff Cap: 7.81 mgd

TREATMENT: source, type, capacities(mgd): Kings Highway WTP-Wells #3,5+6; Aeration, pH adjustment (lime); sedimentation (gravity), Filtration, chlorination (gas). North Church Street WTP-Well #7; Aeration, pH adjustment (lime), chlorination (gas). Hartford Road WTP-Wells #4+8, aeration, filtering, pH adj, chlorination

Est Tot Eff Cap: 5.5 mgd

FINISHED WATER STORAGE: descriptions, locations, capacities(mg): Elevated Storage Tank-West Field Road 1.0mg; Elevated Storage Tank-North Church Street-1.5mg;

Est Tot Cap: 2.5 mg

EMERGENCY INTERCONNECTIONS: descriptions, available gallonage(mgd): North Church Street-8" main-New Jersey Water Company; Kings Highway + Lenola Road-8" main-Maple Shade Water Dept; Centerton Road + Young Ave-6" main-Mt. Laurel MUA; East Gate Drive + Nixon Drive-8"-Mt Laurel MUA; Lenola Road + East Gate Drive 8"-Maple Shade MUA

Est Tot Avail: On Demand

AUXILIARY POWER: location, type, capabilities: Facility is in the process of replacing all of its alternate power sources. Upgrade should be complete by the end of 1993.

NJDEP - DIVISION OF WATER RESOURCES
PUBLIC COMMUNITY WATER SUPPLY INSPECTION

DELIVERY INFORMATION

PLANT DELIVERED WATER (mgd,month,year) Max 3.351 July 92 Min 1.740 NOV 92 Annual Average 2.481 Avg.

BULK PURCHASES (provider,mgd) None

BULK SALES (customer, mgd) None

NUMBER OF SERVICES 5,851 % METERED 100%

MUNICIPALITIES SERVED (est. services in each) Moores Town Township

TOTAL ESTIMATED POPULATION SERVICED 16,300

CURRENT/RECENT WATER RESTRICTIONS Odd/Even Lawn Watering During Summer Months

NEW CONSTRUCTION (Project Numbers) None

DISTRIBUTION MAINS: Sizing 4" (min) to 12" (max)
Pressures 35 (min) to 60 (max)
Hydrants/Flushing Program 529/2x year

MONITORING & REPORTING

PARAMETER(S)	FREQUENCY REQUIRED	FREQUENCY PERFORMED
A-280	2 times per year	2x per year 1/93, 10/92, 4/92
Coliform	15 per month	15 per month
Inorganics	1 every 3 years	6/91 Due in 94
Nitrate	1 every 3 years	6/93 Due in 96
Trihalomethanes	Quarterly	Quarterly 4/93, 1/93, 10/92, 7/92, 4/92, 1/92, 10/91, 7/91
Organics	NR	
Turbidity	NR	
Secondary Regs	1 every 3 years	5/91 Due in 94
Special Organics	1 every 5 years	Due 93
Radiological		Due 95

NAME OF LABORATORY QC Labs Inc. CERTIFICATION # 27166

ADDRESS P.O. Box 514 Southampton PA 18966

COMPLIANCE EVALUATION

SOURCE DEFICIENCIES None

TREATMENT DEFICIENCIES The Kings Highway WTP has a overflow pipe from the supernatant tanks that discharges onto the ground and could potentially enter Strawberry Lake. - Facility is directed to remove or cap pipe.

D4

ENTERED

SEP 0 2 1997

Water Supply Element
Safe Drinking Water Bur.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMPLIANCE EVALUATION INSPECTION
PUBLIC COMMUNITY WATER SYSTEM

DATE: 2-6-97

PW ID #: 0408001

GENERAL INFORMATION

PURVEYOR: CITY OF CAMDEN
TYPE: GROUNDWATER
CLASS: W-4 T-2

LOCATION ADDRESS: CITY OF CAMDEN

MAILING ADDRESS: CITY HALL ROOM 419A
MUNICIPALITY: CAMDEN
COUNTY: CAMDEN

ADMINISTRATOR/MANAGER: ROBERT GIBSON
PHONE NUMBER(S): 757-7350

LICENSED OPERATOR: ROBERT GIBSON
PHONE #: 757-7350
LICENSE(S) HELD: W4 T3
SYSTEM REQUIREMENT(S): W4 T2

EMERGENCY #: 757-7680
CONTACT: MICHAEL STEPHENS

COMMENTS/DEFICIENCIES

[ ] SOURCE/TREATMENT: THERE IS NO POST CHLORINATION AT MORRIS DELAIR WATER TREATMENT AS REQUIRED BY N.J.A.C. 7:10.11.16.

[ ] STORAGE/DISTRIBUTION: STANDPIPE IN WHITMAN PARK NOT IN USE.

[ ] INTERCONNECTION/AUXILIARY POWER:

[ ] MONITORING/REPORTING/MCL/PUBLIC NOTICE: MCL VIOLATIONS AT PUCHACK: CHROMIUM (.21 UGL) 8/96, TCE (4.68 UGL) 2/96, TCE (1.95 UGL) 5/96, TCE (7.3 UGL) 8/96, NON-SUBMITTAL OF VOC'S FOR THE THE 7/96 MONITORING PERIOD. PARKSIDE WTP: 1, 2 -DICHLOROETHANE (4.54 UGL) 2/96, TCE (1.62 UG/L) 8/96, AND TCE (6.78 UG/L).

GENERAL COMMENTS: In numerous well houses it was noted that pipes were rusted & leaking, well Packing was leaking.

OVERALL RATING: ACCEPTABLE [ ] CONDITIONALLY ACCEPTABLE [ ] UNACCEPTABLE [X]

INSPECTOR: SANDRA CAWLEY
FACILITY REPRESENTATIVE: MICHAEL STEPHENS

TITLE: SENIOR ENVIRONMENT SPECIALIST
TITLE: ASSISTANT WATER SUPERINTENDENT

SIGNATURE:
ORGANIZATION: CITY OF CAMDEN

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State of New Jersey
Department of Environmental Protection
Southern Bureau of Water Compliance & Enforcement
One Port Center, 2 Riverside Drive, Suite 201
City of Camden, New Jersey 08103

Christine Todd Whitman
Governor

Robert C. Shinn, Jr.
Commissioner

CERTIFIED MAIL
RETURNED RECEIPT REQUESTED

APR 16 1997

Robert E. Gibbson, Commissioner
City of Camden, Department of Utilities
City Hall Room 419
Camden, New Jersey 08101-5120

RE: Compliance Evaluation Inspection
City of Camden Water Department
PW ID No. 0408001
City of Camden, Camden County

Dear Commissioner Gibbson:

A Compliance Evaluation Inspection of your facility was conducted on February 6, 1997.

Your facility received a rating of "UNACCEPTABLE" due to the following deficiencies:

1. The facility fails to meet the New Jersey Safe Drinking Water Act maximum contaminant levels for volatile organic compounds in water distributed by the Parkside and Puchack Water Treatment Plant at point of entry into the water distribution system.

Note: Since the Parkside Water Treatment Plant has been removed from service in accordance with the April 26, 1995 Amended Administrative Consent Order, no response is necessary to this deficiency.

2. The potable water treatment plant at Morris Delair does not have post chlorination as required by N.J.A.C. 7-10.11.6.

3. During the inspection, it was noted that Puchack Well #1 was off line from January 17, 1997 to February 5, 1997 without Department approval. As a condition of the June 17, 1993 Administrative Consent Order, the City must pump Puchack Well #1 continuously until a VOC/Chromium treatment system is installed and operational at the Puchack Treatment Plant.

4. Piping, sampling valves in numerous well houses were leaking, and rusted

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and various wells were leaking because of inadequate well packing. These housekeeping issues should be addressed immediately. A follow up visit within the next two months will be conducted by a representative of this office to ascertain Camden's corrective measures.

Since the deficiencies cited are presently, or could in the future, adversely affect the quantity and/or quality of water you provide to your customers, you are DIRECTED to institute measures to correct the deficiencies. A written report concerning specific details of the remedial measures to be instituted, as well as an implementation timetable, must be submitted to this Bureau within fifteen (15) calendar days of the date of this correspondence.

Failure to comply with the above will result in the initiation of enforcement action by this Department. Compliance with this Directive shall in no way construed, however, to indicate any exemption on your part from possible penalties for violations indicated by the Compliance Evaluation Inspection, as stated above.

Please direct all correspondence and inquiries to me at (609) 968-2640, or by letter to this Bureau at the letterhead address.

Very truly yours,

Sandra Cawley
Senior Environmental Specialist

Enclosure
c: Douglas McKenna - USEPA Region II
Bureau of Safe Drinking Water
Camden County Health Department
Michael Stephens, Assistant Water Superintendent - City of Camden

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COMPLIANCE EVALUATION INSPECTION
PUBLIC COMMUNITY WATER SYSTEM

PW ID #: PW0408001

DATE: 2-6-97

STORAGE INFORMATION

LOCATION	TYPE	CAPACITY(MG)
NORTH CAMDEN	ELEVATED TANK	5.0 MG
LOCUST AVENUE	ELEVATED TANK	2.0 MG
WHITMAN PARK	STANDPIPE	.51 MG OUT OF SERVICE

TOTAL CAPACITY(MG): 7.0 MG

EMERGENCY INTERCONNECTIONS

PURVEYOR	LOCATION	CAPACITY(MGD)
GLOUCESTER CITY (2)	COLLINGS AVE and Broadway	UNKNOWN
NJ AMERICAN WATER	RIVER ROAD	UNKNOWN
COLLINGSWOOD BORO	HADDON AVE	UNKNOWN

TOTAL CAPACITY(MGD):UNKNOWN

AUXILIARY POWER

LOCATION	TYPE	CAPACITY(MGD)
PUCHACK PLANT	DIESEL 565KW	UNKNOWN
MORRIS DELAIR PLANT	DIESEL 755 KW	UNKNOWN

TOTAL CAPACITY(MGD):UNKNOWN

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COMPLIANCE EVALUATION INSPECTION
PUBLIC COMMUNITY WATER SYSTEM

POINT OF ENTRY INFORMATION

PWID # 0408001

DATE: 2-6-97

BULK PURCHASE INTERCONNECTION(S) (if applicable)

PURVEYOR	LOCATION	SIZE	CAPACITY	PUMP STATION (Y/N)
NONE				

SURFACE WATER SOURCES (if applicable)

SURFACE WATER ID#:____

PLANT	CAPACITY(MGD)	LOCATION	TREATMENT/CHEMICAL ADDITION (list in Order)
NON APPLICABLE			

GROUNDWATER SOURCES(if applicable)

POINT OF ENTRY ID#:____

WELL#	CAPACITY(MGD)	LOCATION	TREATMENT/CHEMICAL ADDITION (list in order)
SEE ATTACHED SHEET			

POINT OF ENTRY ID#:____

WELL#	CAPACITY(MGD)	LOCATION	TREATMENT/CHEMICAL ADDITION (list in order)
SEE ATTACHED SHEET			

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Facility ID #: 01 Morris Delair Water Treatment Plant

Well #	Capacity in 1996/Present mgd	Age of the Well
Morris Well 1	1.08 / 0.68 Out of Service	53
Morris Well 3	1.30 / 1.15	42
Morris Well 4	1.94 / 1.72	36
Morris Well 6	.289 / .47	65
Morris Well 7	1.38 / 1.52	65
Morris Well 8	.60 / .87	44
Morris Well 9	.76 / Out of Service	65
Morris Well 10	1.38 / 1.8	36
Morris Well 11	1.01 / .789	18
Morris Well 12	.79 / 1.0	16
Morris Well 13	1.73 / 1.15	17
Delair Well 1	1.58 / 1.6	67
Delair Well 2	1.08 / .80	67
Delair Well 3	.86 / .94	67

Facility ID #: 02 Puchack Water Treatment Plant

Well #	Capacity in 1996/Present mgd	Age of the Well
Puchack Well 1	1.73 / 1.53	73
Puchack Well 2	2.07 (out of service)	73
Puchack Well 3	1.84 (out of service)	58
Puchack Well 5	unknown (out of service)	59
Puchack Well 6	Unknown Out of Service	27

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Puchack Well 7	1.85 (out of service)	22

Facility ID #: 03 Parkside Water Treatment Plant

Well #	Capacity in 1996/Present mgd	Age of the Well
Parkside Well 13	1.12 (Emergency Only)	44
Parkside Well 17	.22 / 0.42	43
Parkside Well 18	1.44 / 1.52	21

Facility ID #: 11 City Well 11

Well #	Capacity in 1996/Present mgd	Age of the Well
11	.82 (Out of Service)	55

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COMPLIANCE EVALUATION INSPECTION
PUBLIC COMMUNITY WATER SYSTEM

DELIVERY INFORMATION

DATE: 2-6-97

PW ID # 0408001

PLANT DELIVERED WATER
(MGD,month,year) MIN: 13.0 MGD 12/96 MAX: 16.7 MGD 7/96

ANNUAL
AVERAGE: 15.1 MGD

CURRENT/RECENT WATER USE RESTRICTIONS: NONE

BULK PURCHASES (Prov., ID#, MGD): NONE

BULK SALES (Customer, ID#, MGD): NONE

PERMITTED DIVERSION AMOUNT (MGM-MGY): 664 mgm

MUNICIPALITY(IES)SERVED: CITY OF CAMDEN

TOTAL SERVICE CONNECTIONS: 14,000 | %METERED: 96% | % UNACCOUNTED WATER: UNKNOWN

TOTAL ESTIMATED POPULATION SERVED: 50,000

NEW CONSTRUCTION (Project Numbers): UPGRADES AND ADDITIONAL TREATMENT BEING INSTALLED AT PARKSIDE WATER TREATMENT PLANT, Permit Pending

DISTRIBUTION MAINS: Sizing: 4 INCH (min) to: 36 INCH (max)
Pressure: 30 PSI (min) to: 54 PSI (max)

HYDRANTS/FLUSHING PROGRAM: YES CROSS CONNECTION PROGRAM PLAN: YES

DISTRIBUTION BOOSTER PUMPS:

location(s)	Pressure(s)
N. CAMDEN BOOSTER PUMPS	35 -60 PSI

LABORATORY INFORMATION

LABORATORY NAME: OC LABORATORY CERT.#: 77166

ADDRESS: SOUTHAMPTON, PA

LABORATORY NAME: CITY OF CAMDEN CERT.#: 04127

ADDRESS: MORRIS DELAIR PLANT

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ATTACHMENT E

VOCHIGH NEW JERSEY-AMERICAN WATER COMPANY
WESTERN DIVISION - HIGHLAND #13 WELL

		#13 CF	CCL4	11DCEA	11DCE	t12DECA	(MC) DCME	MTBE	MEK	PCE	111TCEA	TCE	Toulene
(EPA/NJDEPE)		(-/100)		(2)	(7/2)	(-/10)	(3)			(-/1)	(200/26)	(5/1)	(1000)
JAN 88	8												
MAR 88													
APR 88										240			
APR 88													
MAY 88										169			
JUN 88	8									114			
JUN 88										158			
JUL 88										113			
AUG 88										116			
AUG 88										115			
SEPT 88										105			
SEPT 88										130			
OCT 88										93		0.5	
OCT 88										87		0.5	
NOV 88										73			
NOV 88										78			
DEC 88										83		0.6	
DEC 88										53		0.5	
JAN 89	9									52			
FEB 89										39			
FEB 89										44			
MAR 89	NM									74		1	
APR 89										87		1	
APR 89										80	1	1	
APR 89													
MAY 89										70		1	
MAY 89										62		1	
JUN 89	9									47			
JUN 89										47		0.5	
JUL 89										55			
JUL 89										55		0.7	
AUG 89										52		1	

WESTERN DIVISION - HIGHLAND #13 WELL

	#13 CF	CCL4	11DCEA	11DCE	t12DECA	DCME	MTBE	MEK	PCE	111TCEA	TCE
AUG 89									51		1
SEPT 89									53		
SEPT 89									64		
OCT 89									44	1	2
OCT 89											
OCT 89									46	0.9	2
NOV 89									32		1
NOV 89									32		0.8
DEC 89											
JAN 90	0										
FEB 90											
MAR 90											
APR 90											
MAY 90											
MAY 90	NM										
JUN 90											
JUN 90									57		3
JUL 90											
AUG 90									49	0.6	
AUG 90											
SEPT 90											
OCT 90											
OCT 90											
NOV 90											
NOV 90											
DEC 90											
DEC 90											
JAN 91	1										
JAN 91											
FEB 91											
FEB 91											
MAR 91									21		4
MAR 91									37		2

E2

WESTERN DIVISION - HIGHLAND #13 WELL

		#13 CF	CCL4	11DCEA	11DCE	t12DECA	DCME	MTBE	MEK	PCE	111TCEA	TCE
APR 91										36		3
APR 91										7		
MAY 91										27	2	3
MAY 91										35		2
JUN 91										31		2
JUN 91										58		1
JULY 91										39	3	
JULY 91										42	1	3
AUG 91										40	0.5	4
AUG 91										34	1	3
AUG 91										34	1	3
SEPT 91										36	1	3
SEPT 91										36	1	45
OCT 91										33		
OCT 91	NM									29		5
OCT 91		0.6								29	3	5
NOV 91		0.6								29	3	5
NOV 91		0.5		0.6						26	2	6
DEC 91		0.5								28	0.8	0.4
DEC 91		0.5								23	1	6
JAN 92	2	0.5								20	1	5
JAN 92		0.5								22	1	5
JAN 92		0.5								22	2	6
FEB 92		0.5		0.5	0.5					26	1	5
FEB 92		< 0.5	<	0.5	< 0.5					21	2	5
MAR 92												
MAR 92												
MAR 92		< 0.5	<	0.5	< 0.5					26	2	7
MAR 92		< 0.5	<	0.5	< 0.5					30	2	5
APR 92		< 0.5		0.8	< 0.5					31	3.1	6
APR 92		< 0.5		1	< 0.5					34 <	0.5	6
MAY 92		< 0.5	<	0.5	< 0.5					29	2	5.5
MAY 92		< 0.5		0.8	< 0.5					26 <	0.5	6

F3

WESTERN DIVISION - HIGHLAND #13 WELL

		#13 CF	CCL4	11DCEA	11DCE	t12DECA	(DCME)	MTBE	MEK	PCE	111TCEA	TCE
JUNE 92	2	< 0.5		0.7	< 0.5					24	< 0.5	6
JUNE 92		< 0.5		5	< 0.5					30	< 0.5	5
JULY 92		< 0.5		0.7	< 0.5					32	1.9	4
JULY 92												
AUG 92		< 0.5		0.8	< 0.5					25	2.1	4.3
AUG 92		< 0.5		0.9	0.5					23	2.4	5
SEPT 92		< 0.5		1	0.5					24	2.9	4.9
SEPT 92		< 0.5		1.2	< 0.5					23	3.3	6.4
OCT 92		< 0.5		1.7	0.6					19	5	6
OCT 92												
NOV 92												
NOV 92		< 0.5	2	0.9	0.8					14	< 0.5	7.5
DEC 92		< 0.5	< 0.5	1.5	< 0.5					15	3.3	7.5
DEC 92		< 0.5	< 0.5	1.1	< 0.5					13	< 0.5	7
JAN 93	3	< 0.5	< 0.5	0.5	< 0.5					1.4	< 0.5	0.5
JAN 93		< 0.5	< 0.5	0.6	< 0.5					1.3	2	7.1
FEB 93												
FEB 93												
MAR 93												
MAR 93												
MAR 93												
MAY 93	NM	0.5	< 0.5	1.4	0.6					25.5	2.6	0.5
MAY 93		< 0.5	< 0.5	2.4	< 0.5					25	2.7	5.4
JUNE 93		< 0.5	< 0.5	1.6	< 0.5					13	1.9	3.4
JUNE 93		< 0.5	< 0.5	1.7	< 0.5					25	1.7	2.7
JULY 93		< 0.5	< 0.5	< 0.5	0.6	0.6				35	1.9	3.8
JULY 93		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5				30	2.2	4.1
AUG 93		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5				26	1.9	3
AUG 93												
SEPT 93		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5				33.8	2.4	3.9
SEPT 93												
OCT 93		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5				25	3.6	6.7
OCT 93		< 0.5	< 0.5	2.4	1	< 0.5				22.4	3.4	8.6

E4

WESTERN DIVISION - HIGHLAND #13 WELL

		#13 CF	CCL4	11DCEA	11DCE	t12DECA	DCME	MTBE	MEK	PCE	111TCEA	TCE
OCT 93		OFF										
NOV 93		OFF										
NOV 93		OFF										
DEC 93		OFF										
DEC 93		OFF										
JAN 94	4	< 0.5	< 0.5	1.9	0.6	< 0.5				11.1	2.5	5.1
JAN 94		< 0.5	< 0.5	2	0.6	< 0.5				12	2.5	4
FEB 94		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5				11.2	0.7	6.5
FEB 94		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5				16	2	3.4
MAR 94		< 0.5	< 0.5	1.5	0.5	< 0.5				12.2	2.3	5.3
MAR 94		< 0.5	< 0.5	1.1	< 0.5	< 0.5				6.6	1.2	5.8
MAR 94		< 0.5	< 0.5	1.7	< 0.5	< 0.5				6.7	2.1	5.1
APR 94		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5			<	0.5	0.5	1
APR 94		< 0.5	< 0.5	1.3	< 0.5	< 0.5				18.3	1.8	2.3
MAY 94		< 0.5	< 0.5	1.5	< 0.5	< 0.5				19	2.1	2.5
MAY 94		< 0.5	< 0.5	1	< 0.5	< 0.5				23	1.2	1.7
JUN 94		< 0.5	< 0.5	0.9	< 0.5	< 0.5				26	1.5	1.3
JUN 94		< 0.5	< 0.5	0.5	< 0.5	< 0.5				24.7	1.6	1.4
JUL 94		< 0.5	< 0.5	0.5	< 0.5	< 0.5				0.8	1.5	< 0.5
JUL 94		< 0.5	< 0.5	1.1	< 0.5	< 0.5				25	1.8	1.3
AUG 94		< 0.5	< 0.5	0.9	< 0.5	< 0.5				26	2.2	2
AUG 94												
SEPT 94												
OCT 94		< 0.5	< 0.5	1.8	0.7	< 0.5				23	2.4	2.5
NOV 94		< 0.5	< 0.5	1.6	0.6	< 0.5				28	2.1	1.7
NOV 94		< 0.5	< 0.5	2	0.7	< 0.5				22	2.4	2.2
DEC 94												
	OFF LINE FOR GAC REMOVAL/REPLACEMENT AND VESSEL REPAIR 12/8/94											
APR 95	5	< 0.5	< 0.5	2.6	1.2	< 0.5				5.4	2.4	2.4
APR 95												
MAY 95	I/S 3/13/94											
MAY 95				0.7						26	1	0.9

WESTERN DIVISION - HIGHLAND #13 WELL

	#13 CF	CCL4	11DCEA	11DCE	t12DECA	DCME	MTBE	MEK	PCE	111TCEA	TCE
JUN 95	< 0.5	< 0.5	1	<	0.5				25	1.1	1
JUN 95	< 0.5	< 0.5	1.1	< 0.5	< 0.5				28	0.8	1
JUL 95	< 0.5	< 0.5	1.2	< 0.5	< 0.5				28	1.1	1
JUL 95											
AUG 95	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5				9.4	< 0.5	< 0.5
AUG 95	< 0.5	< 0.5	1.4	< 0.5	< 0.5				30	1.1	1.1
AUG 95	< 0.5	< 0.5	1.3	< 0.5	< 0.5				30	1	1.2
SEPT 95											
OCT 95											
OCT 95	< 0.5	< 0.5	2	< 0.5	< 0.5				23	1.1	1.3
OCT 95											
NOV 95											
NOV 95											
DEC 95	< 0.5	< 0.5	2.1	< 0.5	< 0.5				23	1.4	1.4
DEC 95	< 0.5	< 0.5	1.7	< 0.5	< 0.5				21	1.1	1.2
JAN 96	< 0.5	< 0.5	2.4	< 0.5	< 0.5				20	1.5	1.5
JAN 96											
FEB 96											
FEB 96											
MAR 96											
MAR 96											
APR 96	< 0.5	< 0.5	1.9	< 0.5	< 0.5				24	1.7	1.6
APR 96	< 0.5	< 0.5	1.7	< 0.5	< 0.5				25	1.5	1.7
MAY 96	< 0.5	< 0.5	1.2	< 0.5	< 0.5				19	1.1	1
MAY 96											
JUNE 96			1.4						22	1.2	1.6
JUNE 96			1.3						17	1	1
JULY 96											4.8
JULY 96			1.6						19	1.3	1.4
JULY 96			0.8						16		0.5
AUG 96			1.4						18	0.9	1.2
AUG 96			1.5						21	1.1	1.5
SEPT 96			1.4						14	0.9	0.9

T6

WESTERN DIVISION - HIGHLAND #13 WELL

	#13 CF	CCL4	11DCEA	11DCE	t12DECA	DCME	MTBE	MEK	PCE	111TCEA	TCE
SEPT 96			1.6						13	1.1	0.8
OCT 96			1.7						18	1.1	1.4
OCT 96			1.7						1.8	1.1	1.7
NOV 96											
NOV 96											
DEC 96											
DEC 96			1.9						10	1.2	0.9
DEC 96			1.9						14	1.2	1.6
JAN 97	1.4		1.7						12	1	1.5
JAN 97	< 0.5	<	0.5						14.8	< 0.5	1.8
FEB 97	< 0.5		2.1						21	1.3	2.4
FEB 97			2.4				0.6		21	1.3	2.9
3/97	< 0.5		2						14	1	2.6
3/97			1.8						12	1	1.4
4/97											
4/97			1.3						4.3	0.7	3.2
5/97			2						13.7	1	1.9
5/97			1.9						16	0.8	2.2
6/97			1.7						13	0.8	1.5
6/97			1.7						16	0.8	2.2
7/97			1.7						16.9	0.7	2.7
7/97			1.7						18	0.7	2.9
7/97			1.7						15	0.7	2.5
8/97			1.9						16	0.8	2.9
8/97			2.3						14	2.3	2.3
9/97											
10/97			1.7						13.8	0.6	2.2
10/97			1						11.5	< 0.5	2
11/97			1						10		1.6
12/97			2.4						15.9	0.9	4.6
12/97											
12/97			2.4						17.7	0.8	4.4
1/98			2.4				1.4		12.9	0.9	4.7

WESTERN DIVISION - HIGHLAND #13 WELL

	#13 CF	CCL4	11DCEA	11DCE	t12DECA	DCME	MTBE	MEK	PCE	111TCEA	TCE	
1/98												
2/98												
2/98			2.1						11.1	0.8	3.8	
5/98	NM		1.4						20.7		1.6	
6/98												
6/98												
7/98			1.6						12.6	0.6	3.1	
7/98			1.5						14	0.6	2.5	
7/98			1.5						17.2	0.5	2.4	
8/98												
8/98			1.5						17.9	0.5	2.5	
9/98			1.3						12.1		2.1	
9/98			1.5						14.1	0.5	2.7	
10/98			1.6					1.6	15	0.5	3.5	
11/98			1.8						15.4	0.6	3.7	
11/98							0.5		10.6		0.9	
12/98			1.7						17.7	0.5	3.7	
1/99	0.5		1.7						11	0.5	3	
2/99			1.5						6.4		2.5	
2/99	0.5		2.7						8.8	0.7	4.5	
3/99	0.5		2.1						9.6	0.7	4.1	
3/99			1.6						19.7		3	
4/99			2.5						10.6	0.7		
4/99	0.5		2.6						16.1	0.7	4	
5/99			1.8						15.3	0.5	2.8	
5/99	0.5		1.5						11.3	0.6	2.6	
6/99			1.2						12		2.4	
7/99			1.2				0.5		11.2		2.1	
7/99			1.1				0.5		11.1		2.2	
8/99	0.5		1.3				0.6		13.5	0.5	2.8	
8/99	0.5		1.3				0.5		10.6	0.5	2.8	
8/99			0.9				0.5		11.2		1.9	
8/99	No data-not acceptable											
9/99	0.5		1.5			0.5	0.5		9.2		2.6	
10/99							0.5		10		4.3	
10/99	0.5						1		6			0.8

F-8

WESTERN DIVISION - HIGHLAND #13 WELL

	#13 CF	CCL4	11DCEA	11DCE	t12DECA	DCME	MTBE	MEK	PCE	111TCEA	TCE	
12/99	0.5		1.8				0.6		9.8		5.9	0.7
1/00			1.3						5.8		2.7	
AVERAGE	0.38	0.4	1.2724	0.4304	0.3564	0.0294	0.275	0.0941	28.57	1.22583	2.893	
MAX	1.4	2	5	1.2	0.6	0.5	1.4	1.6	240	5	45	
MIN	0	0	0	0	0	0	0	0	0	0	0	

E9

VOCHIGH27 NEW JERSEY-AMERICAN WATER COMPANY
WESTERN DIVISION - HIGHLAND AVE.

#27 176' TOTAL 31' STRAINER

		CF	PCE	11DCEA	111TCEA	MTBE	MEK	TCE	(MC) DCME	Toluene
(EPA/NJDEPE)		(-/100)	(-/1)	(2)	(200/26)				(3)	(1000)
JAN 88	8		88							
MAR 88			76							
APR 88			40							
APR 88			53							
MAY 88			58							
JUN 88	8		27							
JUN 88			29							
JUL 88			27							
AUG 88			41							
AUG 88			35							
SEPT 88			30							
SEPT 88			33							
OCT 88			26							
OCT 88										
NOV 88			25							
NOV 88			27							
DEC 88			25							
DEC 88			23							
JAN 89	9		25							
FEB 89			18							
FEB 89			18							
MAR 89	NM		26						CHANGED CARBON	
APR 89			33		1					
APR 89			28							
APR 89										
MAY 89			17							
MAY 89			38							
JUN 89	9		16							
JUN 89			14						BACKFLOW INSTALL	
JUL 89			15							

E10

WESTERN DIVISION - HIGHLAND AVE.

		#27 CF	PCE	11DCEA	111TCEA	MTBE	MEK	TCE	
(EPA/NJDEPE)		(-/100)	(-/1)	(2)	(200/26)				
JUL 89			21						
AUG 89			19						
AUG 89			24						
SEPT 89			21						
SEPT 89			20						
OCT 89			26		0.9				
OCT 89									
OCT 89			8						
NOV 89			15						
NOV 89			15						
DEC 89			34						
JAN 90	0		30		0.5				
FEB 90			39		0.5				
MAR 90			29		0.5				O/S 3/28/90
APR 90									
MAY 90			14						
MAY 90	NM		36						New Media 5/8/90
JUN 90			31						
JUN 90			37						
JUL 90			27						
AUG 90			28						
AUG 90			26						
SEPT 90			29						
OCT 90			27						
OCT 90			27						
NOV 90			29		0.5				
NOV 90			27		0.5				
DEC 90			24		0.5				
DEC 90			23		0.5				
JAN 91	1		30						
JAN 91			24		0.7				

WESTERN DIVISION - HIGHLAND AVE.

		#27 CF	PCE	11DCEA	111TCEA	MTBE	MEK	TCE	
(EPA/NJDEPE)		(-/100)	(-/1)	(2)	(200/26)				
FEB 91			25						
FEB 91			23						
MAR 91									
MAR 91			7						
APR 91			21						
APR 91			11						
MAY 91			21		1				
MAY 91			16						
JUN 91			13						
JUN 91			31						
JULY 91			24						
JULY 91			21						
AUG 91			26						
AUG 91			17						
AUG 91			27						
SEPT 91			20						
SEPT 91			26						
OCT 91			25						
OCT 91	NM		25		1				New Media 10/18/91
OCT 91			24						
NOV 91			24		0.5				
NOV 91			25		0.8				
DEC 91			25		0.5				
DEC 91			26		0.5				
JAN 92	2		21		0.6				
JAN 92			25		0.5				
JAN 92			26		0.5				
FEB 92			22		0.5				
FEB 92			23		0.5			1	
MAR 92									before prelube reloca
MAR 92									after prelube relocate

E12

WESTERN DIVISION - HIGHLAND AVE.

		#27 CF	PCE	11DCEA	111TCEA	MTBE	MEK	TCE	
(EPA/NJDEPE)		(-/100)	(-/1)	(2)	(200/26)				
MAR 92			**25**		0.5			< 0.5	
MAR 92			**22**	<	0.5			< 0.5	
APR 92			**22**	<	0.5			< 0.5	
APR 92			**21**		0.7			< 0.5	
MAY 92			**21**	<	0.5			< 0.5	
MAY 92			**19**	<	0.5			< 0.5	
JUNE 92	2		**18**		0.5			< 0.5	
JUNE 92			**23**	<	0.5			< 0.5	
JULY 92			**19**	<	0.5			< 0.5	
JULY 92			**16**	<	0.5			< 0.5	
AUG 92			**19**		0.7			< 0.5	
AUG 92			**19**		0.5			< 0.5	
SEPT 92			**19**	<	0.5			< 0.5	
SEPT 92			**22.7**		1			< 0.5	
OCT 92			**19**		1.2			< 0.5	
OCT 92			**22**	<	0.5			< 0.5	
NOV 92			**20**		0.9			< 0.5	
NOV 92			**18**	<	0.5			< 0.5	
DEC 92			**17**		0.9			< 0.5	
DEC 92			**17**	<	0.5			< 0.5	
JAN 93	3		**9.4**		1.2			0.5	
JAN 93			**20**		1.1			< 0.5	
FEB 93			**20**		0.9			< 0.5	
FEB 93			**20.1**		0.8			< 0.5	
MAR 93			**19**		0.7			< 0.5	
MAR 93			**21**		0.8			< 0.5	
MAR 93			**19**		0.9			< 0.5	
MAY 93	NM	0.5	**9.5**		0.5			< 0.5	New Media 5/8/93
MAY 93		0.5	**10**		0.7			< 0.5	
JUNE 93		< 0.5	**13**	<	0.5			< 0.5	
JUNE 93		< 0.5	**11.1**	<	0.5			< 0.5	

F-13

WESTERN DIVISION - HIGHLAND AVE.

		#27 CF	PCE	11DCEA	111TCEA	MTBE	MEK	TCE	
(EPA/NJDEPE)		(-/100)	(-/1)	(2)	(200/26)				
JULY 93		< 0.5	**13**		< 0.5			< 0.5	
JULY 93		< 0.5	**11**		< 0.5			< 0.5	
AUG 93		< 0.5	**11**		< 0.5			< 0.5	
AUG 93		< 0.5	< 0.5		< 0.5			< 0.5	
SEPT 93		< 0.5	**15.2**		< 0.5			< 0.5	
SEPT 93		< 0.5	**16**		< 0.5			< 0.5	
OCT 93		< 0.5	**20**		< 0.5			< 0.5	
OCT 93		< 0.5	**20.3**		< 0.5			< 0.5	
OCT 93		< 0.5	**10.4**		< 0.5			< 0.5	
NOV 93		< 0.5	**9.8**		< 0.5			< 0.5	
NOV 93		< 0.5	**17**		0.6			< 0.5	
DEC 93		< 0.5	**1.3**		< 0.5			< 0.5	
DEC 93		< 0.5	**14**		0.5			< 0.5	
JAN 94	4	< 0.5	**11.4**		< 0.5			< 0.5	
JAN 94		< 0.5	**17**		< 0.5			< 0.5	
FEB 94		< 0.5	**13**		< 0.5			< 0.5	
FEB 94		< 0.5	**9.6**		< 0.5			< 0.5	
MAR 94		< 0.5	**9.7**		< 0.5			< 0.5	
MAR 94		< 0.5	**8**		< 0.5			< 0.5	
MAR 94		< 0.5	**7.7**		< 0.5			< 0.5	
APR 94		< 0.5	**8.5**		< 0.5			1.4	Suspected mislabeled
APR 94		< 0.5	**8.4**		< 0.5			< 0.5	
MAY 94		< 0.5	**8.7**		< 0.5			< 0.5	
MAY 94		< 0.5	0.8		< 0.5			< 0.5	
JUN 94		1.1	**1.4**		< 0.5			< 0.5	
JUN 94		< 0.5	**6.2**		< 0.5			< 0.5	
JUL 94		< 0.5	**2.3**		1.7			1.2	
JUL 94		< 0.5	**5.7**		< 0.5			< 0.5	
AUG 94		< 0.5	**11**		< 0.5			< 0.5	
AUG 94		< 0.5	**9**		< 0.5			< 0.5	
SEPT 94		< 0.5	**7.1**		< 0.5			< 0.5	

214

WESTERN DIVISION - HIGHLAND AVE.

		#27 CF	PCE	11DCEA	111TCEA	MTBE	MEK	TCE
(EPA/NJDEPE)		(-/100)	(-/1)	(2)	(200/26)			
OCT 94		< 0.5	**14**	<	0.5			< 0.5
NOV 94		< 0.5	**4.2**	<	0.5			< 0.5
NOV 94		< 0.5	**12**	<	0.5			< 0.5
DEC 94		< 0.5	**10.3**	<	0.5			< 0.5
	OFF LINE FOR GAC REMOVAL/REPLACEMENT AND VESSEL REPAIR 12/8/94							
APR 95	5	< 0.5	**11.6**	<	0.5			< 0.5
APR 95		< 0.5	**15.4**	<	0.5			< 0.5
MAY 95	I/S 3/13/94	< 0.5	**21**	<	0.5			< 0.5
MAY 95								
JUN 95		< 0.5	0.5	<	0.5			< 0.5
JUN 95		< 0.5	**5.5**	<	0.5			< 0.5
JUL 95		< 0.5	**6.6**	<	0.5			< 0.5
JUL 95		< 0.5	< 0.5	<	0.5			< 0.5
AUG 95		< 0.5	< 0.5	<	0.5			< 0.5
AUG 95		< 0.5	**7.4**	<	0.5			< 0.5
AUG 95		< 0.5	**4.7**	<	0.5			< 0.5
SEPT 95		< 0.5	**11**	<	0.5			1
OCT 95		< 0.5	**1.2**		0.6			< 0.5
OCT 95		< 0.5	**8.9**	<	0.5			< 0.5
OCT 95		< 0.5	**7.3**	<	0.5			< 0.5
NOV 95		< 0.5	**9.2**	<	0.5			< 0.5
NOV 95		< 0.5	**9.3**	<	0.5			< 0.5
DEC 95		< 0.5	**7.7**	<	0.5			< 0.5
DEC 95		< 0.5	**11**	<	0.5			< 0.5
JAN 96		< 0.5	**8.8**	<	0.5			< 0.5
JAN 96		< 0.5	**9.2**	<	0.5			< 0.5
FEB 96		< 0.5	**10**	<	0.5			< 0.5
FEB 96		< 0.5	**8.6**	<	0.5			< 0.5
MAR 96		< 0.5	**9**	<	0.5			< 0.5
MAR 96		0.5	**19**	<	0.5			< 0.5

F15

WESTERN DIVISION - HIGHLAND AVE.

	#27 CF	PCE	11DCEA	111TCEA	MTBE	MEK	TCE
(EPA/NJDEPE)	(-/100)	(-/1)	(2)	(200/26)			
APR 96	< 0.5	**3.2**		< 0.5			< 0.5
APR 96	< 0.5	**9**		< 0.5			< 0.5
MAY 96	< 0.5	**8.1**		< 0.5			< 0.5
MAY 96	< 0.5	**4.4**		< 0.5			< 0.5
JUNE 96	< 0.5	**6.8**		< 0.5			< 0.5
JUNE 96		**4.2**					
JULY 96							
JULY 96		**7.2**					
JULY 96		**5.6**					
AUG 96		**5.1**					
AUG 96		0.7					
SEPT 96		**5**					
SEPT 96		**4.5**					
OCT 96		**6.9**					
OCT 96		**7**					
NOV 96		**8**					
NOV 96		**3.7**					
DEC 96	0.5	**5.9**					
DEC 96	< 0.5	**4.8**					
DEC 96		**6.7**					
JAN 97	2	**5.2**					
JAN 97	< 0.5	**4.5**					
FEB 97	< 0.5	**7.1**					
FEB 97		**8.7**			0.7		
3/97	< 0.5	< 0.5					
3/97		**4.8**					
4/97		**5.3**					
4/97							
5/97	< 0.5						
5/97		**5**					
6/97		**4.8**					

F16

WESTERN DIVISION - HIGHLAND AVE.

		#27 CF	PCE	11DCEA	111TCEA	MTBE	MEK	TCE
(EPA/NJDEPE)		(-/100)	(-/1)	(2)	(200/26)			
6/97			5.1					
7/97			5.5					
7/97			5.3					
7/97			6.2					
8/97			6					
8/97			6					
9/97								
10/97								
10/97								
11/97		< 0.5	7.9	<	0.5	0.5	<	0.5
12/97		< 0.5	< 9.6	<	0.5	< 0.5	0.6	< 0.5
12/97			10.5					
12/97			9.7					
1/98			9.2			0.5		
1/98			7.3					
2/98			8.4		<	0.5	1.3	
2/98			2.8			0.6	< 0.5	
5/98	NM		3.8					
6/98			6.6				0.6	
6/98			8.1					
7/98			5.8			0.5		
7/98			5.1			0.5		
7/98			5.2					
8/98			6.8				1	
8/98			6.5					
9/98			5					
9/98			6					
10/98			8			0.6	1.7	
10/98		0.6	7			0.7		
11/98			8.1					
12/98			9.7			0.7		

E7

VOCHIGH2 NEW JERSEY-AMERICAN WATER COMPANY
WESTERN DIVISION - HIGHLAND AVE.

	#27 CF	PCE	11DCEA	111TCEA	MTBE	MEK	TCE
(EPA/NJDEPE)	(-/100)	(-/1)	(2)	(200/26)			
12/98		**5**			0.7		
1/99		**5.5**					
1/99		**6.2**					
2/99		**5.9**					
2/99		**2.4**					
3/99		**7.9**					
3/99		**5.3**					
4/99		**9**					
4/99		**10.6**					
4/99		**9.6**					
5/99		**6.2**					
5/99		**4.9**					
6/99		**3.7**					
6/99		**3.4**					
7/99		**3.3**			0.9		
7/99		**3.4**			0.9		
8/99		**4.2**			1		
8/99		**5.1**			0.9		
8/99	No data-not acceptable						
9/99		**4.8**			0.9		
10/99		**6.1**			0.9		
10/99		**5.7**			1	0.7	
10/99	0.5	**1**	**0.5**		0.9		
11/99	0.5	**5.6**			0.9		
11/99	0.5	**6.6**			0.9		
12/99	0.5	**7.6**			1		0.9
12/99	0.5	**6.7**			1		
1/00	< 0.5	< 0.5					

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VOCHIGH2 NEW JERSEY-AMERICAN WATER COMPANY
WESTERN DIVISION - HIGHLAND AVE.

	#27 CF	PCE	11DCEA	111TCEA	MTBE	MEK	TCE	
(EPA/NJDEPE)	(-/100)	(-/1)	(2)	(200/26)				
AVERAGE	0.37	13.62	0.02	0.47	0.43	0.24	0.44	0.70
MAX	2.00	88.00	0.50	1.70	1.00	1.70	0.44	0.70
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.70

F8

ATTACHMENT F

Donna

NJDEP MOBILE ENVIRONMENTAL LABORATORY

FINAL REPORT

NEW JERSEY AMERICAN WATER
#13 and #27

CINNAMINSON, BURLINGTON COUNTY, NJ

SAMPLES RECEIVED: 29 MAY 2002

REPORT ISSUED: 6 JUNE 2002

JOBCODE: C080H90P

ANALYZED BY

KENNETH GLASSER
MOBILE LABORATORY PROGRAM MANAGER

F

1.0 INTRODUCTION

On 29 May 2002, aqueous samples collected from the New Jersey American Water #13 and #27 were delivered to the NJDEP Mobile Laboratory for analysis. The samples were analyzed for EPA 524 Volatile Organic Compounds by Purge And Trap Capillary Column Gas Chromatography Mass Spectrometry (GC/MS). Results are presented in the Analytical Results Reports, attached.

2.0 PROCEDURES

2.1 Field Sampling Procedures

A field sampling team led by Ms. Donna van Veldhuisen, BSA, collected aqueous samples in 40ml glass VOA vials. Sampling was conducted in accordance with the procedures specified in the NJDEPE Field Sampling Procedures Manual, May 1992 edition. Samples were preserved with HCl and stored at 4°C until analysis.

2.2 Analytical Method

Samples were analyzed by the following method:
Mobile Lab Method 524 - Measurement of Purgeable VOCs In Water by Capillary Column GC/MS.

3.0 REPORTING

3.1 Internal Standards and Surrogate Spikes

Internal Standards (ISTD) and System Monitoring Compounds (SMC) have been added to the sample to check instrument performance and the analytical technique. They are not indicative of sample contamination. Continuing Calibration Standards were analyzed to verify GC/MS tune integrity.

3.2 Sample Dilutions

Compounds tagged with an "E" have exceeded the calibration range and should be evaluated using a diluted sample result, if supplied. Diluted sample results have been corrected using the dilution factor.

3.3 Nonconformance Summary

None reported.

Please direct questions or comments to Kenneth Glasser or Corey Lakin at the NJDEP Mobile Environmental Laboratory, Windsor Industrial Park, Building 12, Windsor, NJ, 08561. Phone: 609-371-3981 Fax: 609-371-3986.

F2

NJDEP MOBILE LABORATORY ANALYTICAL RESULTS REPORT

LAB METHOD 524: Measurement Of Purgeable VOCS In Water By Capillary Column GC/MS

24-28

Site Name: N.J.A.W.
Date Received: 5/29/02
Date Analyzed: 05/31/02 03:13
ID: AGILENT TECHNOLOGIES,5973N,0,3.01.57

Field Sample Name: GW-2A
Lab Data File Name: 53002-28.D
Sample Matrix: Aqueous Dilution=1/ 1
GC Column: VOCOL 60 m, 0.25mm ID, 1 um film

#	Compound Name	Concentration PPB	*		Ret Time Minutes	Quantitation Response	Quant m/z	Qual m/z	MDL
1)	fluorobenzene	14.00		*ISTD	17.34	4.48E+06	96.00	69.95	0.4
2)	dichlorodifluoromethane	ND					85.05	87.05	0.4
3)	chloromethane	ND					50.00	52.00	0.4
4)	vinyl chloride	ND					62.05	64.05	0.4
5)	bromomethane	ND					94.05	96.05	0.4
6)	chloroethane	ND					64.05	66.05	0.4
7)	trichlorofluoromethane	ND					100.95	102.95	0.4
8)	1,1 dichloroethene	ND					95.95	61.00	0.4
9)	methylene chloride	ND					83.95	49.00	0.4
10)	trans-1,2-dichloroethene	ND					95.95	61.00	0.4
11)	1,1 dichloroethane	ND					63.00	65.00	0.4
12)	2,2 dichloropropane	ND					77.00	96.95	0.4
13)	cis-1,2-dichloroethene	ND					95.95	97.95	0.4
14)	chloroform	ND					82.95	84.95	0.4
15)	bromochloromethane	ND					127.95	129.95	0.4
16)	1,1,1 trichloroethane	ND					96.95	99.00	0.4
17)	1,1 dichloropropene	ND					75.00	109.95	0.4
18)	carbon tetrachloride	ND					116.95	118.95	0.4
19)	benzene	ND					77.00	78.00	0.4
20)	1,2 dichloroethane	ND					62.00	98.05	0.4
21)	trichloroethene	0.30	J		18.45	1.69E+04	95.00	130.00	0.4
22)	1,2 dichloropropane	ND					63.00	76.00	0.4
23)	bromodichloromethane	ND					82.95	84.95	0.4
24)	dibromomethane	ND					93.00	95.00	0.4
25)	cis-1,3-dichloropropene	ND					75.00	109.95	0.4
26)	toluene	ND					92.00	91.00	0.4
27)	trans-1,3-dichloropropene	ND					75.00	109.95	0.4
28)	1,1,2 trichloroethane	ND					83.00	85.00	0.4
29)	1,3 dichloropropane	ND					76.00	78.00	0.4
30)	tetrachloroethene	74.23	E		24.34	4.53E+06	165.90	128.95	0.4
31)	dibromochloromethane	ND					129.00	127.00	0.4
32)	1,2 dibromoethane	ND					106.95	108.95	0.4
33)	ethylbenzene	ND					106.00	91.00	0.4
34)	chlorobenzene	ND					112.05	77.00	0.4
35)	1,1,1,2 tetrachloroethane	ND					130.95	132.95	0.4
36)	m,p-xylene	ND					106.15	91.05	0.4
37)	o-xylene	ND					106.15	91.15	0.4

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#	Compound Name	Concentration PPB	*	Ret Time Minutes	Quantitation Response	Quant m/z	Qual m/z	MDL	SMC %Recov
38)	styrene	ND				104.05	78.10	0.4	
39)	isopropylbenzene	ND				120.00	105.00	0.4	
40)	bromoform	ND				172.90	174.90	0.4	
41)	1,1,2,2 tetrachloroethane	ND				82.95	84.95	0.4	
42)	4-bromofluorobenzene	11.77	*SMC	31.22	1.17E+06	95.00	173.95	0.4	84.1
43)	1,2,3 trichloropropane	ND				110.00	112.00	0.4	
44)	n-propylbenzene	ND				120.00	91.00	0.4	
45)	bromobenzene	ND				155.95	157.95	0.4	
46)	1,3,5 trimethylbenzene	ND				120.00	105.00	0.4	
47)	2-chlorotoluene	ND				91.05	126.05	0.4	
48)	4-chlorotoluene	ND				91.15	126.05	0.4	
49)	tert-butylbenzene	ND				119.15	91.15	0.4	
50)	1,2,4 trimethylbenzene	ND				120.00	105.00	0.4	
51)	sec-butylbenzene	ND				134.00	105.00	0.4	
52)	4-isopropyltoluene	ND				134.00	119.00	0.4	
53)	1,3 dichlorobenzene	ND				145.95	147.95	0.4	
54)	1,4 dichlorobenzene	ND				145.95	147.95	0.4	
55)	n-butylbenzene	ND				134.00	91.00	0.4	
56)	1,4-dichlorobenzene-d4	11.25	*SMC	36.80	9.92E+05	151.90	149.90	0.4	80.4
57)	1,2 dichlorobenzene	ND				145.95	147.95	0.4	
58)	1,2-dibromo-3-chloropropane	ND				75.00	154.95	5.0	
59)	1,2,4 trichlorobenzene	ND				180.00	182.00	0.4	
60)	hexachlorobutadiene	ND				224.90	226.90	0.4	
61)	naphthalene	ND				128.05	0.00	0.4	
62)	1,2,3 trichlorobenzene	ND				180.00	182.00	0.4	
63)	MTBE	ND				73.10	57.05	2.0	

GC/MS Operator CWL

Mobile Laboratory Manager

* LEGEND:

"J" = <MDL
"ND" = NOT DETECTED
"B" = DETECTED IN BOTH SAMPLE & TRIP BLANK
"ISTD" = INTERNAL STANDARD
"SMC" = SYSTEM MONITORING COMPOUND

"E" = CONCENTRATION OF SPECIFIC COMPOUND EXCEEDED CALIBRATION RANGE UPPER LIMIT.
USE INDIVIDUAL RESULTS FROM DILUTED SAMPLES WHEN AVAILABLE.

F4

NJDEP MOBILE LABORATORY ANALYTICAL RESULTS REPORT

LAB METHOD 524: Measurement Of Purgeable VOCS In Water By Capillary Column GC/MS

Site Name: N.J.A.W.
Date Received: 5/29/02
Date Analyzed: 05/31/02 21:23
ID: AGILENT TECHNOLOGIES,5973N,0,3.01.57

Field Sample Name: 2A 1/10
Lab Data File Name: 53102-19.D
Sample Matrix: Aqueous Dilution=1/ 10
GC Column: VOCOL 60 m, 0.25mm ID, 1 um film

#	Compound Name	Concentration PPB	*	Ret Time Minutes	Quantitation Response	Quant m/z	Qual m/z	MDL
1)	fluorobenzene	14.00	*ISTD	17.34	4.24E+06	96.00	69.95	0.4
2)	dichlorodifluoromethane	ND				85.05	87.05	4.0
3)	chloromethane	ND				50.00	52.00	4.0
4)	vinyl chloride	ND				62.05	64.05	4.0
5)	bromomethane	ND				94.05	96.05	4.0
6)	chloroethane	ND				64.05	66.05	4.0
7)	trichlorofluoromethane	ND				100.95	102.95	4.0
8)	1,1 dichloroethene	ND				95.95	61.00	4.0
9)	methylene chloride	ND				83.95	49.00	4.0
10)	trans-1,2-dichloroethene	ND				95.95	61.00	4.0
11)	1,1 dichloroethane	ND				63.00	65.00	4.0
12)	2,2 dichloropropane	ND				77.00	96.95	4.0
13)	cis-1,2-dichloroethene	ND				95.95	97.95	4.0
14)	chloroform	ND				82.95	84.95	4.0
15)	bromochloromethane	ND				127.95	129.95	4.0
16)	1,1,1 trichloroethane	ND				96.95	99.00	4.0
17)	1,1 dichloropropene	ND				75.00	109.95	4.0
18)	carbon tetrachloride	ND				116.95	118.95	4.0
19)	benzene	ND				77.00	78.00	4.0
20)	1,2 dichloroethane	ND				62.00	98.05	4.0
21)	trichloroethene	ND				95.00	130.00	4.0
22)	1,2 dichloropropane	ND				63.00	76.00	4.0
23)	bromodichloromethane	ND				82.95	84.95	4.0
24)	dibromomethane	ND				93.00	95.00	4.0
25)	cis-1,3-dichloropropene	ND				75.00	109.95	4.0
26)	toluene	ND				92.00	91.00	4.0
27)	trans-1,3-dichloropropene	ND				75.00	109.95	4.0
28)	1,1,2 trichloroethane	ND				83.00	85.00	4.0
29)	1,3 dichloropropane	ND				76.00	78.00	4.0
30)	tetrachloroethene	67.54		24.35	4.10E+05	165.90	128.95	4.0
31)	dibromochloromethane	ND				129.00	127.00	4.0
32)	1,2 dibromoethane	ND				106.95	108.95	4.0
33)	ethylbenzene	ND				106.00	91.00	4.0
34)	chlorobenzene	ND				112.05	77.00	4.0
35)	1,1,1,2 tetrachloroethane	ND				130.95	132.95	4.0
36)	m,p-xylene	ND				106.15	91.05	4.0
37)	o-xylene	ND				106.15	91.15	4.0

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#	Compound Name	Concentration PPB	*	Ret Time Minutes	Quantitation Response	Quant m/z	Qual m/z	MDL	SMC %Recov
38)	styrene	ND				104.05	78.10	4.0	
39)	isopropylbenzene	ND				120.00	105.00	4.0	
40)	bromoform	ND				172.90	174.90	4.0	
41)	1,1,2,2 tetrachloroethane	ND				82.95	84.95	4.0	
42)	4-bromofluorobenzene	12.74	*SMC	31.23	1.24E+06	95.00	173.95	0.4	91.0
43)	1,2,3 trichloropropane	ND				110.00	112.00	4.0	
44)	n-propylbenzene	ND				120.00	91.00	4.0	
45)	bromobenzene	ND				155.95	157.95	4.0	
46)	1,3,5 trimethylbenzene	ND				120.00	105.00	4.0	
47)	2-chlorotoluene	ND				91.05	126.05	4.0	
48)	4-chlorotoluene	ND				91.15	126.05	4.0	
49)	tert-butylbenzene	ND				119.15	91.15	4.0	
50)	1,2,4 trimethylbenzene	ND				120.00	105.00	4.0	
51)	sec-butylbenzene	ND				134.00	105.00	4.0	
52)	4-isopropyltoluene	ND				134.00	119.00	4.0	
53)	1,3 dichlorobenzene	ND				145.95	147.95	4.0	
54)	1,4 dichlorobenzene	ND				145.95	147.95	4.0	
55)	n-butylbenzene	ND				134.00	91.00	4.0	
56)	1,4-dichlorobenzene-d4	12.27	*SMC	36.81	1.15E+06	151.90	149.90	0.4	87.7
57)	1,2 dichlorobenzene	ND				145.95	147.95	4.0	
58)	1,2-dibromo-3-chloropropane	ND				75.00	154.95	50.0	
59)	1,2,4 trichlorobenzene	ND				180.00	182.00	4.0	
60)	hexachlorobutadiene	ND				224.90	226.90	4.0	
61)	naphthalene	ND				128.05	0.00	4.0	
62)	1,2,3 trichlorobenzene	ND				180.00	182.00	4.0	
63)	MTBE	ND				73.10	57.05	20.0	

GC/MS Operator CWL

Mobile Laboratory Manager

* LEGEND:

"J" = <MDL
"ND" = NOT DETECTED
"B" = DETECTED IN BOTH SAMPLE & TRIP BLANK
"ISTD" = INTERNAL STANDARD
"SMC" = SYSTEM MONITORING COMPOUND

"E" = CONCENTRATION OF SPECIFIC COMPOUND EXCEEDED CALIBRATION RANGE UPPER LIMIT.
USE INDIVIDUAL RESULTS FROM DILUTED SAMPLES WHEN AVAILABLE.

F6

NJDEP MOBILE LABORATORY ANALYTICAL RESULTS REPORT

LAB METHOD 524: Measurement Of Purgeable VOCS In Water By Capillary Column GC/MS

38-40'

Site Name: N.J.A.W.
Date Received: 5/29/02
Date Analyzed: 05/31/02 04:12
ID: AGILENT TECHNOLOGIES,5973N,0,3.01.57

Field Sample Name: GW-2B
Lab Data File Name: 53002-29.D
Sample Matrix: Aqueous Dilution=1/ 1
GC Column: VOCOL 60 m, 0.25mm ID, 1 um film

#	Compound Name	Concentration PPB	*	Ret Time Minutes	Quantitation Response	Quant m/z	Qual m/z	MDL
1)	fluorobenzene	14.00	*ISTD	17.34	4.47E+06	96.00	69.95	0.4
2)	dichlorodifluoromethane	ND				85.05	87.05	0.4
3)	chloromethane	ND				50.00	52.00	0.4
4)	vinyl chloride	ND				62.05	64.05	0.4
5)	bromomethane	ND				94.05	96.05	0.4
6)	chloroethane	ND				64.05	66.05	0.4
7)	trichlorofluoromethane	ND				100.95	102.95	0.4
8)	1,1 dichloroethene	ND				95.95	61.00	0.4
9)	methylene chloride	ND				83.95	49.00	0.4
10)	trans-1,2-dichloroethene	ND				95.95	61.00	0.4
11)	1,1 dichloroethane	ND				63.00	65.00	0.4
12)	2,2 dichloropropane	ND				77.00	96.95	0.4
13)	cis-1,2-dichloroethene	ND				95.95	97.95	0.4
14)	chloroform	ND				82.95	84.95	0.4
15)	bromochloromethane	ND				127.95	129.95	0.4
16)	1,1,1 trichloroethane	ND				96.95	99.00	0.4
17)	1,1 dichloropropene	ND				75.00	109.95	0.4
18)	carbon tetrachloride	ND				116.95	118.95	0.4
19)	benzene	ND				77.00	78.00	0.4
20)	1,2 dichloroethane	ND				62.00	98.05	0.4
21)	trichloroethene	ND				95.00	130.00	0.4
22)	1,2 dichloropropane	ND				63.00	76.00	0.4
23)	bromodichloromethane	ND				82.95	84.95	0.4
24)	dibromomethane	ND				93.00	95.00	0.4
25)	cis-1,3-dichloropropene	ND				75.00	109.95	0.4
26)	toluene	0.23	J	22.27	3.08E+04	92.00	91.00	0.4
27)	trans-1,3-dichloropropene	ND				75.00	109.95	0.4
28)	1,1,2 trichloroethane	ND				83.00	85.00	0.4
29)	1,3 dichloropropane	ND				76.00	78.00	0.4
30)	tetrachloroethene	118.08	E	24.35	7.19E+06	165.90	128.95	0.4
31)	dibromochloromethane	ND				129.00	127.00	0.4
32)	1,2 dibromoethane	ND				106.95	108.95	0.4
33)	ethylbenzene	ND				106.00	91.00	0.4
34)	chlorobenzene	ND				112.05	77.00	0.4
35)	1,1,1,2 tetrachloroethane	ND				130.95	132.95	0.4
36)	m,p-xylene	ND				106.15	91.05	0.4
37)	o-xylene	ND				106.15	91.15	0.4

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#	Compound Name	Concentration PPB	*	Ret Time Minutes	Quantitation Response	Quant m/z	Qual m/z	MDL	SMC %Recov
38)	styrene	ND				104.05	78.10	0.4	
39)	isopropylbenzene	ND				120.00	105.00	0.4	
40)	bromoform	ND				172.90	174.90	0.4	
41)	1,1,2,2 tetrachloroethane	ND				82.95	84.95	0.4	
42)	4-bromofluorobenzene	11.77	*SMC	31.23	1.17E+06	95.00	173.95	0.4	84.1
43)	1,2,3 trichloropropane	ND				110.00	112.00	0.4	
44)	n-propylbenzene	ND				120.00	91.00	0.4	
45)	bromobenzene	ND				155.95	157.95	0.4	
46)	1,3,5 trimethylbenzene	ND				120.00	105.00	0.4	
47)	2-chlorotoluene	ND				91.05	126.05	0.4	
48)	4-chlorotoluene	ND				91.15	126.05	0.4	
49)	tert-butylbenzene	ND				119.15	91.15	0.4	
50)	1,2,4 trimethylbenzene	ND				120.00	105.00	0.4	
51)	sec-butylbenzene	ND				134.00	105.00	0.4	
52)	4-isopropyltoluene	ND				134.00	119.00	0.4	
53)	1,3 dichlorobenzene	ND				145.95	147.95	0.4	
54)	1,4 dichlorobenzene	ND				145.95	147.95	0.4	
55)	n-butylbenzene	ND				134.00	91.00	0.4	
56)	1,4-dichlorobenzene-d4	11.33	*SMC	36.80	9.96E+05	151.90	149.90	0.4	80.9
57)	1,2 dichlorobenzene	ND				145.95	147.95	0.4	
58)	1,2-dibromo-3-chloropropane	ND				75.00	154.95	5.0	
59)	1,2,4 trichlorobenzene	ND				180.00	182.00	0.4	
60)	hexachlorobutadiene	ND				224.90	226.90	0.4	
61)	naphthalene	ND				128.05	0.00	0.4	
62)	1,2,3 trichlorobenzene	ND				180.00	182.00	0.4	
63)	MTBE	ND				73.10	57.05	2.0	

GC/MS Operator CWL

Mobile Laboratory Manager

* LEGEND:

"J" = <MDL
"ND" = NOT DETECTED
"B" = DETECTED IN BOTH SAMPLE & TRIP BLANK
"ISTD" = INTERNAL STANDARD
"SMC" = SYSTEM MONITORING COMPOUND

"E" = CONCENTRATION OF SPECIFIC COMPOUND EXCEEDED CALIBRATION RANGE UPPER LIMIT.
USE INDIVIDUAL RESULTS FROM DILUTED SAMPLES WHEN AVAILABLE.

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NJDEP MOBILE LABORATORY ANALYTICAL RESULTS REPORT

LAB METHOD 524: Measurement Of Purgeable VOCS In Water By Capillary Column GC/MS

Site Name: N.J.A.W.
Date Received: 5/29/02
Date Analyzed: 05/31/02 22:22
ID: AGILENT TECHNOLOGIES,5973N,0,3.01.57

Field Sample Name: 2B 1/10
Lab Data File Name: 53102-20.D
Sample Matrix: Aqueous Dilution=1/ 10
GC Column: VOCOL 60 m, 0.25mm ID, 1 um film

#	Compound Name	Concentration PPB	*	Ret Time Minutes	Quantitation Response	Quant m/z	Qual m/z	MDL
1)	fluorobenzene	14.00	*ISTD	17.34	4.24E+06	96.00	69.95	0.4
2)	dichlorodifluoromethane	ND				85.05	87.05	4.0
3)	chloromethane	ND				50.00	52.00	4.0
4)	vinyl chloride	ND				62.05	64.05	4.0
5)	bromomethane	ND				94.05	96.05	4.0
6)	chloroethane	ND				64.05	66.05	4.0
7)	trichlorofluoromethane	ND				100.95	102.95	4.0
8)	1,1 dichloroethene	ND				95.95	61.00	4.0
9)	methylene chloride	ND				83.95	49.00	4.0
10)	trans-1,2-dichloroethene	ND				95.95	61.00	4.0
11)	1,1 dichloroethane	ND				63.00	65.00	4.0
12)	2,2 dichloropropane	ND				77.00	96.95	4.0
13)	cis-1,2-dichloroethene	ND				95.95	97.95	4.0
14)	chloroform	ND				82.95	84.95	4.0
15)	bromochloromethane	ND				127.95	129.95	4.0
16)	1,1,1 trichloroethane	ND				96.95	99.00	4.0
17)	1,1 dichloropropene	ND				75.00	109.95	4.0
18)	carbon tetrachloride	ND				116.95	118.95	4.0
19)	benzene	ND				77.00	78.00	4.0
20)	1,2 dichloroethane	ND				62.00	98.05	4.0
21)	trichloroethene	ND				95.00	130.00	4.0
22)	1,2 dichloropropane	ND				63.00	76.00	4.0
23)	bromodichloromethane	ND				82.95	84.95	4.0
24)	dibromomethane	ND				93.00	95.00	4.0
25)	cis-1,3-dichloropropene	ND				75.00	109.95	4.0
26)	toluene	ND				92.00	91.00	4.0
27)	trans-1,3-dichloropropene	ND				75.00	109.95	4.0
28)	1,1,2 trichloroethane	ND				83.00	85.00	4.0
29)	1,3 dichloropropane	ND				76.00	78.00	4.0
30)	tetrachloroethene	106.89		24.34	6.49E+05	165.90	128.95	4.0
31)	dibromochloromethane	ND				129.00	127.00	4.0
32)	1,2 dibromoethane	ND				106.95	108.95	4.0
33)	ethylbenzene	ND				106.00	91.00	4.0
34)	chlorobenzene	ND				112.05	77.00	4.0
35)	1,1,1,2 tetrachloroethane	ND				130.95	132.95	4.0
36)	m,p-xylene	ND				106.15	91.05	4.0
37)	o-xylene	ND				106.15	91.15	4.0

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#	Compound Name	Concentration PPB	*	Ret Time Minutes	Quantitation Response	Quant m/z	Qual m/z	MDL	SMC %Recov
38)	styrene	ND				104.05	78.10	4.0	
39)	isopropylbenzene	ND				120.00	105.00	4.0	
40)	bromoform	ND				172.90	174.90	4.0	
41)	1,1,2,2 tetrachloroethane	ND				82.95	84.95	4.0	
42)	4-bromofluorobenzene	12.17	*SMC	31.23	1.18E+06	95.00	173.95	0.4	86.9
43)	1,2,3 trichloropropane	ND				110.00	112.00	4.0	
44)	n-propylbenzene	ND				120.00	91.00	4.0	
45)	bromobenzene	ND				155.95	157.95	4.0	
46)	1,3,5 trimethylbenzene	ND				120.00	105.00	4.0	
47)	2-chlorotoluene	ND				91.05	126.05	4.0	
48)	4-chlorotoluene	ND				91.15	126.05	4.0	
49)	tert-butylbenzene	ND				119.15	91.15	4.0	
50)	1,2,4 trimethylbenzene	ND				120.00	105.00	4.0	
51)	sec-butylbenzene	ND				134.00	105.00	4.0	
52)	4-isopropyltoluene	ND				134.00	119.00	4.0	
53)	1,3 dichlorobenzene	ND				145.95	147.95	4.0	
54)	1,4 dichlorobenzene	ND				145.95	147.95	4.0	
55)	n-butylbenzene	ND				134.00	91.00	4.0	
56)	1,4-dichlorobenzene-d4	11.44	*SMC	36.81	1.07E+06	151.90	149.90	0.4	81.7
57)	1,2 dichlorobenzene	ND				145.95	147.95	4.0	
58)	1,2-dibromo-3-chloropropane	ND				75.00	154.95	50.0	
59)	1,2,4 trichlorobenzene	ND				180.00	182.00	4.0	
60)	hexachlorobutadiene	ND				224.90	226.90	4.0	
61)	naphthalene	ND				128.05	0.00	4.0	
62)	1,2,3 trichlorobenzene	ND				180.00	182.00	4.0	
63)	MTBE	ND				73.10	57.05	20.0	

GC/MS Operator CWL

Mobile Laboratory Manager

* LEGEND:

"J" = <MDL
"ND" = NOT DETECTED
"B" = DETECTED IN BOTH SAMPLE & TRIP BLANK
"ISTD" = INTERNAL STANDARD
"SMC" = SYSTEM MONITORING COMPOUND

"E" = CONCENTRATION OF SPECIFIC COMPOUND EXCEEDED CALIBRATION RANGE UPPER LIMIT.
USE INDIVIDUAL RESULTS FROM DILUTED SAMPLES WHEN AVAILABLE.

NJDEP MOBILE LABORATORY ANALYTICAL RESULTS REPORT

LAB METHOD 524: Measurement Of Purgeable VOCS In Water By Capillary Column GC/MS

Site Name: N.J.A.W.
Date Received: 5/29/02
Date Analyzed: 05/31/02 05:12
ID: AGILENT TECHNOLOGIES,5973N,0,3.01.57

Field Sample Name: GW-2C
Lab Data File Name: 53002-30.D
Sample Matrix: Aqueous Dilution=1/ 1
GC Column: VOCOL 60 m, 0.25mm ID, 1 um film

#	Compound Name	Concentration PPB	*	Ret Time Minutes	Quantitation Response	Quant m/z	Qual m/z	MDL
1)	fluorobenzene	14.00	*ISTD	17.34	4.43E+06	96.00	69.95	0.4
2)	dichlorodifluoromethane	ND				85.05	87.05	0.4
3)	chloromethane	ND				50.00	52.00	0.4
4)	vinyl chloride	ND				62.05	64.05	0.4
5)	bromomethane	ND				94.05	96.05	0.4
6)	chloroethane	ND				64.05	66.05	0.4
7)	trichlorofluoromethane	ND				100.95	102.95	0.4
8)	1,1 dichloroethene	ND				95.95	61.00	0.4
9)	methylene chloride	ND				83.95	49.00	0.4
10)	trans-1,2-dichloroethene	ND				95.95	61.00	0.4
11)	1,1 dichloroethane	ND				63.00	65.00	0.4
12)	2,2 dichloropropane	ND				77.00	96.95	0.4
13)	cis-1,2-dichloroethene	ND				95.95	97.95	0.4
14)	chloroform	ND				82.95	84.95	0.4
15)	bromochloromethane	ND				127.95	129.95	0.4
16)	1,1,1 trichloroethane	ND				96.95	99.00	0.4
17)	1,1 dichloropropene	ND				75.00	109.95	0.4
18)	carbon tetrachloride	ND				116.95	118.95	0.4
19)	benzene	ND				77.00	78.00	0.4
20)	1,2 dichloroethane	ND				62.00	98.05	0.4
21)	trichloroethene	ND				95.00	130.00	0.4
22)	1,2 dichloropropane	ND				63.00	76.00	0.4
23)	bromodichloromethane	ND				82.95	84.95	0.4
24)	dibromomethane	ND				93.00	95.00	0.4
25)	cis-1,3-dichloropropene	ND				75.00	109.95	0.4
26)	toluene	ND				92.00	91.00	0.4
27)	trans-1,3-dichloropropene	ND				75.00	109.95	0.4
28)	1,1,2 trichloroethane	ND				83.00	85.00	0.4
29)	1,3 dichloropropane	ND				76.00	78.00	0.4
30)	tetrachloroethene	23.57		24.34	1.42E+06	165.90	128.95	0.4
31)	dibromochloromethane	ND				129.00	127.00	0.4
32)	1,2 dibromoethane	ND				106.95	108.95	0.4
33)	ethylbenzene	ND				106.00	91.00	0.4
34)	chlorobenzene	ND				112.05	77.00	0.4
35)	1,1,1,2 tetrachloroethane	ND				130.95	132.95	0.4
36)	m,p-xylene	ND				106.15	91.05	0.4
37)	o-xylene	ND				106.15	91.15	0.4

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#	Compound Name	Concentration PPB	*	Ret Time Minutes	Quantitation Response	Quant m/z	Qual m/z	MDL	SMC %Recov
38)	styrene	ND				104.05	78.10	0.4	
39)	isopropylbenzene	ND				120.00	105.00	0.4	
40)	bromoform	ND				172.90	174.90	0.4	
41)	1,1,2,2 tetrachloroethane	ND				82.95	84.95	0.4	
42)	4-bromofluorobenzene	11.74	*SMC	31.23	1.16E+06	95.00	173.95	0.4	83.8
43)	1,2,3 trichloropropane	ND				110.00	112.00	0.4	
44)	n-propylbenzene	ND				120.00	91.00	0.4	
45)	bromobenzene	ND				155.95	157.95	0.4	
46)	1,3,5 trimethylbenzene	ND				120.00	105.00	0.4	
47)	2-chlorotoluene	ND				91.05	126.05	0.4	
48)	4-chlorotoluene	ND				91.15	126.05	0.4	
49)	tert-butylbenzene	ND				119.15	91.15	0.4	
50)	1,2,4 trimethylbenzene	ND				120.00	105.00	0.4	
51)	sec-butylbenzene	ND				134.00	105.00	0.4	
52)	4-isopropyltoluene	ND				134.00	119.00	0.4	
53)	1,3 dichlorobenzene	ND				145.95	147.95	0.4	
54)	1,4 dichlorobenzene	ND				145.95	147.95	0.4	
55)	n-butylbenzene	ND				134.00	91.00	0.4	
56)	1,4-dichlorobenzene-d4	11.19	*SMC	36.80	9.76E+05	151.90	149.90	0.4	79.9
57)	1,2 dichlorobenzene	ND				145.95	147.95	0.4	
58)	1,2-dibromo-3-chloropropane	ND				75.00	154.95	5.0	
59)	1,2,4 trichlorobenzene	ND				180.00	182.00	0.4	
60)	hexachlorobutadiene	ND				224.90	226.90	0.4	
61)	naphthalene	ND				128.05	0.00	0.4	
62)	1,2,3 trichlorobenzene	ND				180.00	182.00	0.4	
63)	MTBE	ND				73.10	57.05	2.0	

GC/MS Operator CWL

Mobile Laboratory Manager

* LEGEND:

"J" = <MDL
"ND" = NOT DETECTED
"B" = DETECTED IN BOTH SAMPLE & TRIP BLANK
"ISTD" = INTERNAL STANDARD
"SMC" = SYSTEM MONITORING COMPOUND

"E" = CONCENTRATION OF SPECIFIC COMPOUND EXCEEDED CALIBRATION RANGE UPPER LIMIT.
USE INDIVIDUAL RESULTS FROM DILUTED SAMPLES WHEN AVAILABLE.

NJDEP MOBILE LABORATORY ANALYTICAL RESULTS REPORT

LAB METHOD 524: Measurement Of Purgeable VOCS In Water By Capillary Column GC/MS

Site Name: N.J.A.W.
Date Received: 5/29/02
Date Analyzed: 05/31/02 06:11
ID: AGILENT TECHNOLOGIES,5973N,0,3.01.57

Field Sample Name: GW-3A
Lab Data File Name: 53002-31.D
Sample Matrix: Aqueous Dilution=1/ 1
GC Column: VOCOL 60 m, 0.25mm ID, 1 um film

#	Compound Name	Concentration PPB	*	Ret Time Minutes	Quantitation Response	Quant m/z	Qual m/z	MDL
1)	fluorobenzene	14.00	*ISTD	17.34	4.36E+06	96.00	69.95	0.4
2)	dichlorodifluoromethane	ND				85.05	87.05	0.4
3)	chloromethane	ND				50.00	52.00	0.4
4)	vinyl chloride	ND				62.05	64.05	0.4
5)	bromomethane	ND				94.05	96.05	0.4
6)	chloroethane	ND				64.05	66.05	0.4
7)	trichlorofluoromethane	ND				100.95	102.95	0.4
8)	1,1 dichloroethene	ND				95.95	61.00	0.4
9)	methylene chloride	ND				83.95	49.00	0.4
10)	trans-1,2-dichloroethene	ND				95.95	61.00	0.4
11)	1,1 dichloroethane	ND				63.00	65.00	0.4
12)	2,2 dichloropropane	ND				77.00	96.95	0.4
13)	cis-1,2-dichloroethene	ND				95.95	97.95	0.4
14)	chloroform	ND				82.95	84.95	0.4
15)	bromochloromethane	ND				127.95	129.95	0.4
16)	1,1,1 trichloroethane	ND				96.95	99.00	0.4
17)	1,1 dichloropropene	ND				75.00	109.95	0.4
18)	carbon tetrachloride	ND				116.95	118.95	0.4
19)	benzene	ND				77.00	78.00	0.4
20)	1,2 dichloroethane	ND				62.00	98.05	0.4
21)	trichloroethene	ND				95.00	130.00	0.4
22)	1,2 dichloropropane	ND				63.00	76.00	0.4
23)	bromodichloromethane	ND				82.95	84.95	0.4
24)	dibromomethane	ND				93.00	95.00	0.4
25)	cis-1,3-dichloropropene	ND				75.00	109.95	0.4
26)	toluene	ND				92.00	91.00	0.4
27)	trans-1,3-dichloropropene	ND				75.00	109.95	0.4
28)	1,1,2 trichloroethane	ND				83.00	85.00	0.4
29)	1,3 dichloropropane	ND				76.00	78.00	0.4
30)	tetrachloroethene	7.60		24.35	4.51E+05	165.90	128.95	0.4
31)	dibromochloromethane	ND				129.00	127.00	0.4
32)	1,2 dibromoethane	ND				106.95	108.95	0.4
33)	ethylbenzene	ND				106.00	91.00	0.4
34)	chlorobenzene	ND				112.05	77.00	0.4
35)	1,1,1,2 tetrachloroethane	ND				130.95	132.95	0.4
36)	m,p-xylene	ND				106.15	91.05	0.4
37)	o-xylene	ND				106.15	91.15	0.4

#	Compound Name	Concentration PPB	*	Ret Time Minutes	Quantitation Response	Quant m/z	Qual m/z	MDL	SMC %Recov
38)	styrene	ND				104.05	78.10	0.4	
39)	isopropylbenzene	ND				120.00	105.00	0.4	
40)	bromoform	ND				172.90	174.90	0.4	
41)	1,1,2,2 tetrachloroethane	ND				82.95	84.95	0.4	
42)	4-bromofluorobenzene	11.82	*SMC	31.22	1.14E+06	95.00	173.95	0.4	84.5
43)	1,2,3 trichloropropane	ND				110.00	112.00	0.4	
44)	n-propylbenzene	ND				120.00	91.00	0.4	
45)	bromobenzene	ND				155.95	157.95	0.4	
46)	1,3,5 trimethylbenzene	ND				120.00	105.00	0.4	
47)	2-chlorotoluene	ND				91.05	126.05	0.4	
48)	4-chlorotoluene	ND				91.15	126.05	0.4	
49)	tert-butylbenzene	ND				119.15	91.15	0.4	
50)	1,2,4 trimethylbenzene	ND				120.00	105.00	0.4	
51)	sec-butylbenzene	ND				134.00	105.00	0.4	
52)	4-isopropyltoluene	ND				134.00	119.00	0.4	
53)	1,3 dichlorobenzene	ND				145.95	147.95	0.4	
54)	1,4 dichlorobenzene	ND				145.95	147.95	0.4	
55)	n-butylbenzene	ND				134.00	91.00	0.4	
56)	1,4-dichlorobenzene-d4	11.37	*SMC	36.80	9.75E+05	151.90	149.90	0.4	81.2
57)	1,2 dichlorobenzene	ND				145.95	147.95	0.4	
58)	1,2-dibromo-3-chloropropane	ND				75.00	154.95	5.0	
59)	1,2,4 trichlorobenzene	ND				180.00	182.00	0.4	
60)	hexachlorobutadiene	ND				224.90	226.90	0.4	
61)	naphthalene	ND				128.05	0.00	0.4	
62)	1,2,3 trichlorobenzene	ND				180.00	182.00	0.4	
63)	MTBE	ND				73.10	57.05	2.0	

GC/MS Operator CWL

Mobile Laboratory Manager

* LEGEND:

"J" = <MDL
"ND" = NOT DETECTED
"B" = DETECTED IN BOTH SAMPLE & TRIP BLANK
"ISTD" = INTERNAL STANDARD
"SMC" = SYSTEM MONITORING COMPOUND

"E" = CONCENTRATION OF SPECIFIC COMPOUND EXCEEDED CALIBRATION RANGE UPPER LIMIT.
USE INDIVIDUAL RESULTS FROM DILUTED SAMPLES WHEN AVAILABLE.

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NJDEP MOBILE LABORATORY ANALYTICAL RESULTS REPORT

LAB METHOD 524: Measurement Of Purgeable VOCS In Water By Capillary Column GC/MS

Site Name: N.J.A.W.
Date Received: 5/29/02
Date Analyzed: 06/ 1/02 01:21
ID: AGILENT TECHNOLOGIES,5973N,0,3.01.57

Field Sample Name: TB-1
Lab Data File Name: 53102-23.D
Sample Matrix: Aqueous Dilution=1/ 1
GC Column: VOCOL 60 m, 0.25mm ID, 1 um film

#	Compound Name	Concentration PPB	*	Ret Time Minutes	Quantitation Response	Quant m/z	Qual m/z	MDL
1)	fluorobenzene	14.00	*ISTD	17.35	4.17E+06	96.00	69.95	0.4
2)	dichlorodifluoromethane	ND				85.05	87.05	0.4
3)	chloromethane	ND				50.00	52.00	0.4
4)	vinyl chloride	ND				62.05	64.05	0.4
5)	bromomethane	ND				94.05	96.05	0.4
6)	chloroethane	ND				64.05	66.05	0.4
7)	trichlorofluoromethane	ND				100.95	102.95	0.4
8)	1,1 dichloroethene	ND				95.95	61.00	0.4
9)	methylene chloride	ND				83.95	49.00	0.4
10)	trans-1,2-dichloroethene	ND				95.95	61.00	0.4
11)	1,1 dichloroethane	ND				63.00	65.00	0.4
12)	2,2 dichloropropane	ND				77.00	96.95	0.4
13)	cis-1,2-dichloroethene	ND				95.95	97.95	0.4
14)	chloroform	ND				82.95	84.95	0.4
15)	bromochloromethane	ND				127.95	129.95	0.4
16)	1,1,1 trichloroethane	ND				96.95	99.00	0.4
17)	1,1 dichloropropene	ND				75.00	109.95	0.4
18)	carbon tetrachloride	ND				116.95	118.95	0.4
19)	benzene	ND				77.00	78.00	0.4
20)	1,2 dichloroethane	ND				62.00	98.05	0.4
21)	trichloroethene	ND				95.00	130.00	0.4
22)	1,2 dichloropropane	ND				63.00	76.00	0.4
23)	bromodichloromethane	ND				82.95	84.95	0.4
24)	dibromomethane	ND				93.00	95.00	0.4
25)	cis-1,3-dichloropropene	ND				75.00	109.95	0.4
26)	toluene	ND				92.00	91.00	0.4
27)	trans-1,3-dichloropropene	ND				75.00	109.95	0.4
28)	1,1,2 trichloroethane	ND				83.00	85.00	0.4
29)	1,3 dichloropropane	ND				76.00	78.00	0.4
30)	tetrachloroethene	ND				165.90	128.95	0.4
31)	dibromochloromethane	ND				129.00	127.00	0.4
32)	1,2 dibromoethane	ND				106.95	108.95	0.4
33)	ethylbenzene	ND				106.00	91.00	0.4
34)	chlorobenzene	ND				112.05	77.00	0.4
35)	1,1,1,2 tetrachloroethane	ND				130.95	132.95	0.4
36)	m,p-xylene	ND				106.15	91.05	0.4
37)	o-xylene	ND				106.15	91.15	0.4

F15

#	Compound Name	Concentration PPB	*	Ret Time Minutes	Quantitation Response	Quant m/z	Qual m/z	MDL	SMC %Recov
38)	styrene	ND				104.05	78.10	0.4	
39)	isopropylbenzene	ND				120.00	105.00	0.4	
40)	bromoform	ND				172.90	174.90	0.4	
41)	1,1,2,2 tetrachloroethane	ND				82.95	84.95	0.4	
42)	4-bromofluorobenzene	10.95	*SMC	31.23	1.05E+06	95.00	173.95	0.4	78.2
43)	1,2,3 trichloropropane	ND				110.00	112.00	0.4	
44)	n-propylbenzene	ND				120.00	91.00	0.4	
45)	bromobenzene	ND				155.95	157.95	0.4	
46)	1,3,5 trimethylbenzene	ND				120.00	105.00	0.4	
47)	2-chlorotoluene	ND				91.05	126.05	0.4	
48)	4-chlorotoluene	ND				91.15	126.05	0.4	
49)	tert-butylbenzene	ND				119.15	91.15	0.4	
50)	1,2,4 trimethylbenzene	ND				120.00	105.00	0.4	
51)	sec-butylbenzene	ND				134.00	105.00	0.4	
52)	4-isopropyltoluene	ND				134.00	119.00	0.4	
53)	1,3 dichlorobenzene	ND				145.95	147.95	0.4	
54)	1,4 dichlorobenzene	ND				145.95	147.95	0.4	
55)	n-butylbenzene	ND				134.00	91.00	0.4	
56)	1,4-dichlorobenzene-d4	9.99	*SMC	36.81	9.16E+05	151.90	149.90	0.4	71.3
57)	1,2 dichlorobenzene	ND				145.95	147.95	0.4	
58)	1,2-dibromo-3-chloropropane	ND				75.00	154.95	5.0	
59)	1,2,4 trichlorobenzene	ND				180.00	182.00	0.4	
60)	hexachlorobutadiene	ND				224.90	226.90	0.4	
61)	naphthalene	ND				128.05	0.00	0.4	
62)	1,2,3 trichlorobenzene	ND				180.00	182.00	0.4	
63)	MTBE	ND				73.10	57.05	2.0	

GC/MS Operator CWL

Mobile Laboratory Manager

* LEGEND:

"J" = <MDL
"ND" = NOT DETECTED
"B" = DETECTED IN BOTH SAMPLE & TRIP BLANK
"ISTD" = INTERNAL STANDARD
"SMC" = SYSTEM MONITORING COMPOUND

"E" = CONCENTRATION OF SPECIFIC COMPOUND EXCEEDED CALIBRATION RANGE UPPER LIMIT.
USE INDIVIDUAL RESULTS FROM DILUTED SAMPLES WHEN AVAILABLE.

NJDEP MOBILE LABORATORY ANALYTICAL RESULTS REPORT

LAB METHOD 524: Measurement Of Purgeable VOCS In Water By Capillary Column GC/MS

Site Name: N.J.A.W.
Date Received: 5/29/02
Date Analyzed: 06/ 1/02 02:20
ID: AGILENT TECHNOLOGIES,5973N,0,3.01.57

Field Sample Name: TB-2
Lab Data File Name: 53102-24.D
Sample Matrix: Aqueous Dilution=1/ 1
GC Column: VOCOL 60 m, 0.25mm ID, 1 um film

#	Compound Name	Concentration PPB	*	Ret Time Minutes	Quantitation Response	Quant m/z	Qual m/z	MDL
1)	fluorobenzene	14.00	*ISTD	17.34	4.14E+06	96.00	69.95	0.4
2)	dichlorodifluoromethane	ND				85.05	87.05	0.4
3)	chloromethane	ND				50.00	52.00	0.4
4)	vinyl chloride	ND				62.05	64.05	0.4
5)	bromomethane	ND				94.05	96.05	0.4
6)	chloroethane	ND				64.05	66.05	0.4
7)	trichlorofluoromethane	ND				100.95	102.95	0.4
8)	1,1 dichloroethene	ND				95.95	61.00	0.4
9)	methylene chloride	ND				83.95	49.00	0.4
10)	trans-1,2-dichloroethene	ND				95.95	61.00	0.4
11)	1,1 dichloroethane	ND				63.00	65.00	0.4
12)	2,2 dichloropropane	ND				77.00	96.95	0.4
13)	cis-1,2-dichloroethene	ND				95.95	97.95	0.4
14)	chloroform	ND				82.95	84.95	0.4
15)	bromochloromethane	ND				127.95	129.95	0.4
16)	1,1,1 trichloroethane	ND				96.95	99.00	0.4
17)	1,1 dichloropropene	ND				75.00	109.95	0.4
18)	carbon tetrachloride	ND				116.95	118.95	0.4
19)	benzene	ND				77.00	78.00	0.4
20)	1,2 dichloroethane	ND				62.00	98.05	0.4
21)	trichloroethene	ND				95.00	130.00	0.4
22)	1,2 dichloropropane	ND				63.00	76.00	0.4
23)	bromodichloromethane	ND				82.95	84.95	0.4
24)	dibromomethane	ND				93.00	95.00	0.4
25)	cis-1,3-dichloropropene	ND				75.00	109.95	0.4
26)	toluene	ND				92.00	91.00	0.4
27)	trans-1,3-dichloropropene	ND				75.00	109.95	0.4
28)	1,1,2 trichloroethane	ND				83.00	85.00	0.4
29)	1,3 dichloropropane	ND				76.00	78.00	0.4
30)	tetrachloroethene	ND				165.90	128.95	0.4
31)	dibromochloromethane	ND				129.00	127.00	0.4
32)	1,2 dibromoethane	ND				106.95	108.95	0.4
33)	ethylbenzene	ND				106.00	91.00	0.4
34)	chlorobenzene	ND				112.05	77.00	0.4
35)	1,1,1,2 tetrachloroethane	ND				130.95	132.95	0.4
36)	m,p-xylene	ND				106.15	91.05	0.4
37)	o-xylene	ND				106.15	91.15	0.4

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#	Compound Name	Concentration PPB	*	Ret Time Minutes	Quantitation Response	Quant m/z	Qual m/z	MDL	SMC %Recov
38)	styrene	ND				104.05	78.10	0.4	
39)	isopropylbenzene	ND				120.00	105.00	0.4	
40)	bromoform	ND				172.90	174.90	0.4	
41)	1,1,2,2 tetrachloroethane	ND				82.95	84.95	0.4	
42)	4-bromofluorobenzene	11.05	*SMC	31.24	1.05E+06	95.00	173.95	0.4	79.0
43)	1,2,3 trichloropropane	ND				110.00	112.00	0.4	
44)	n-propylbenzene	ND				120.00	91.00	0.4	
45)	bromobenzene	ND				155.95	157.95	0.4	
46)	1,3,5 trimethylbenzene	ND				120.00	105.00	0.4	
47)	2-chlorotoluene	ND				91.05	126.05	0.4	
48)	4-chlorotoluene	ND				91.15	126.05	0.4	
49)	tert-butylbenzene	ND				119.15	91.15	0.4	
50)	1,2,4 trimethylbenzene	ND				120.00	105.00	0.4	
51)	sec-butylbenzene	ND				134.00	105.00	0.4	
52)	4-isopropyltoluene	ND				134.00	119.00	0.4	
53)	1,3 dichlorobenzene	ND				145.95	147.95	0.4	
54)	1,4 dichlorobenzene	ND				145.95	147.95	0.4	
55)	n-butylbenzene	ND				134.00	91.00	0.4	
56)	1,4-dichlorobenzene-d4	10.12	*SMC	36.81	9.22E+05	151.90	149.90	0.4	72.3
57)	1,2 dichlorobenzene	ND				145.95	147.95	0.4	
58)	1,2-dibromo-3-chloropropane	ND				75.00	154.95	5.0	
59)	1,2,4 trichlorobenzene	ND				180.00	182.00	0.4	
60)	hexachlorobutadiene	ND				224.90	226.90	0.4	
61)	naphthalene	ND				128.05	0.00	0.4	
62)	1,2,3 trichlorobenzene	ND				180.00	182.00	0.4	
63)	MTBE	ND				73.10	57.05	2.0	

GC/MS Operator CWL

Mobile Laboratory Manager

* LEGEND:

"J" = <MDL
"ND" = NOT DETECTED
"B" = DETECTED IN BOTH SAMPLE & TRIP BLANK
"ISTD" = INTERNAL STANDARD
"SMC" = SYSTEM MONITORING COMPOUND

"E" = CONCENTRATION OF SPECIFIC COMPOUND EXCEEDED CALIBRATION RANGE UPPER LIMIT.
USE INDIVIDUAL RESULTS FROM DILUTED SAMPLES WHEN AVAILABLE.

NJDEP MOBILE LABORATORY ANALYTICAL RESULTS REPORT

LAB METHOD 524: Measurement Of Purgeable VOCS In Water By Capillary Column GC/MS

Site Name: N.J.A.W.
Date Received: 5/29/02
Date Analyzed: 05/31/02 23:22
ID: AGILENT TECHNOLOGIES,5973N,0,3.01.57

Field Sample Name: FB-1
Lab Data File Name: 53102-21.D
Sample Matrix: Aqueous Dilution=1/ 1
GC Column: VOCOL 60 m, 0.25mm ID, 1 um film

#	Compound Name	Concentration PPB	*	Ret Time Minutes	Quantitation Response	Quant m/z	Qual m/z	MDL
1)	fluorobenzene	14.00	*ISTD	17.34	4.16E+06	96.00	69.95	0.4
2)	dichlorodifluoromethane	ND				85.05	87.05	0.4
3)	chloromethane	ND				50.00	52.00	0.4
4)	vinyl chloride	ND				62.05	64.05	0.4
5)	bromomethane	ND				94.05	96.05	0.4
6)	chloroethane	ND				64.05	66.05	0.4
7)	trichlorofluoromethane	ND				100.95	102.95	0.4
8)	1,1 dichloroethene	ND				95.95	61.00	0.4
9)	methylene chloride	ND				83.95	49.00	0.4
10)	trans-1,2-dichloroethene	ND				95.95	61.00	0.4
11)	1,1 dichloroethane	ND				63.00	65.00	0.4
12)	2,2 dichloropropane	ND				77.00	96.95	0.4
13)	cis-1,2-dichloroethene	ND				95.95	97.95	0.4
14)	chloroform	ND				82.95	84.95	0.4
15)	bromochloromethane	ND				127.95	129.95	0.4
16)	1,1,1 trichloroethane	ND				96.95	99.00	0.4
17)	1,1 dichloropropene	ND				75.00	109.95	0.4
18)	carbon tetrachloride	ND				116.95	118.95	0.4
19)	benzene	ND				77.00	78.00	0.4
20)	1,2 dichloroethane	ND				62.00	98.05	0.4
21)	trichloroethene	ND				95.00	130.00	0.4
22)	1,2 dichloropropane	ND				63.00	76.00	0.4
23)	bromodichloromethane	ND				82.95	84.95	0.4
24)	dibromomethane	ND				93.00	95.00	0.4
25)	cis-1,3-dichloropropene	ND				75.00	109.95	0.4
26)	toluene	ND				92.00	91.00	0.4
27)	trans-1,3-dichloropropene	ND				75.00	109.95	0.4
28)	1,1,2 trichloroethane	ND				83.00	85.00	0.4
29)	1,3 dichloropropane	ND				76.00	78.00	0.4
30)	tetrachloroethene	ND				165.90	128.95	0.4
31)	dibromochloromethane	ND				129.00	127.00	0.4
32)	1,2 dibromoethane	ND				106.95	108.95	0.4
33)	ethylbenzene	ND				106.00	91.00	0.4
34)	chlorobenzene	ND				112.05	77.00	0.4
35)	1,1,1,2 tetrachloroethane	ND				130.95	132.95	0.4
36)	m,p-xylene	ND				106.15	91.05	0.4
37)	o-xylene	ND				106.15	91.15	0.4

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#	Compound Name	Concentration PPB	*	Ret Time Minutes	Quantitation Response	Quant m/z	Qual m/z	MDL	SMC %Recov
38)	styrene	ND				104.05	78.10	0.4	
39)	isopropylbenzene	ND				120.00	105.00	0.4	
40)	bromoform	ND				172.90	174.90	0.4	
41)	1,1,2,2 tetrachloroethane	ND				82.95	84.95	0.4	
42)	4-bromofluorobenzene	11.40	*SMC	31.23	1.09E+06	95.00	173.95	0.4	81.4
43)	1,2,3 trichloropropane	ND				110.00	112.00	0.4	
44)	n-propylbenzene	ND				120.00	91.00	0.4	
45)	bromobenzene	ND				155.95	157.95	0.4	
46)	1,3,5 trimethylbenzene	ND				120.00	105.00	0.4	
47)	2-chlorotoluene	ND				91.05	126.05	0.4	
48)	4-chlorotoluene	ND				91.15	126.05	0.4	
49)	tert-butylbenzene	ND				119.15	91.15	0.4	
50)	1,2,4 trimethylbenzene	ND				120.00	105.00	0.4	
51)	sec-butylbenzene	ND				134.00	105.00	0.4	
52)	4-isopropyltoluene	ND				134.00	119.00	0.4	
53)	1,3 dichlorobenzene	ND				145.95	147.95	0.4	
54)	1,4 dichlorobenzene	ND				145.95	147.95	0.4	
55)	n-butylbenzene	ND				134.00	91.00	0.4	
56)	1,4-dichlorobenzene-d4	10.59	*SMC	36.81	9.69E+05	151.90	149.90	0.4	75.7
57)	1,2 dichlorobenzene	ND				145.95	147.95	0.4	
58)	1,2-dibromo-3-chloropropane	ND				75.00	154.95	5.0	
59)	1,2,4 trichlorobenzene	ND				180.00	182.00	0.4	
60)	hexachlorobutadiene	ND				224.90	226.90	0.4	
61)	naphthalene	ND				128.05	0.00	0.4	
62)	1,2,3 trichlorobenzene	ND				180.00	182.00	0.4	
63)	MTBE	ND				73.10	57.05	2.0	

GC/MS Operator CWL

Mobile Laboratory Manager

* LEGEND:

"J" = <MDL
"ND" = NOT DETECTED
"B" = DETECTED IN BOTH SAMPLE & TRIP BLANK
"ISTD" = INTERNAL STANDARD
"SMC" = SYSTEM MONITORING COMPOUND

"E" = CONCENTRATION OF SPECIFIC COMPOUND EXCEEDED CALIBRATION RANGE UPPER LIMIT.
USE INDIVIDUAL RESULTS FROM DILUTED SAMPLES WHEN AVAILABLE.

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NJDEP MOBILE LABORATORY ANALYTICAL RESULTS REPORT

LAB METHOD 524: Measurement Of Purgeable VOCS In Water By Capillary Column GC/MS

Site Name: N.J.A.W.
Date Received: 5/29/02
Date Analyzed: 06/ 1/02 12:21
ID: AGILENT TECHNOLOGIES,5973N,0,3.01.57

Field Sample Name: FB-2
Lab Data File Name: 53102-22.D
Sample Matrix: Aqueous Dilution=1/ 1
GC Column: VOCOL 60 m, 0.25mm ID, 1 um film

# - Compound Name	Concentration PPB	*	Ret Time Minutes	Quantitation Response	Quant m/z	Qual m/z	MDL
1) fluorobenzene	14.00	*ISTD	17.35	4.06E+06	96.00	69.95	0.4
2) dichlorodifluoromethane	ND				85.05	87.05	0.4
3) chloromethane	ND				50.00	52.00	0.4
4) vinyl chloride	ND				62.05	64.05	0.4
5) bromomethane	ND				94.05	96.05	0.4
6) chloroethane	ND				64.05	66.05	0.4
7) trichlorofluoromethane	ND				100.95	102.95	0.4
8) 1,1 dichloroethene	ND				95.95	61.00	0.4
9) methylene chloride	ND				83.95	49.00	0.4
10) trans-1,2-dichloroethene	ND				95.95	61.00	0.4
11) 1,1 dichloroethane	ND				63.00	65.00	0.4
12) 2,2 dichloropropane	ND				77.00	96.95	0.4
13) cis-1,2-dichloroethene	ND				95.95	97.95	0.4
14) chloroform	ND				82.95	84.95	0.4
15) bromochloromethane	ND				127.95	129.95	0.4
16) 1,1,1 trichloroethane	ND				96.95	99.00	0.4
17) 1,1 dichloropropene	ND				75.00	109.95	0.4
18) carbon tetrachloride	ND				116.95	118.95	0.4
19) benzene	ND				77.00	78.00	0.4
20) 1,2 dichloroethane	ND				62.00	98.05	0.4
21) trichloroethene	ND				95.00	130.00	0.4
22) 1,2 dichloropropane	ND				63.00	76.00	0.4
23) bromodichloromethane	ND				82.95	84.95	0.4
24) dibromomethane	ND				93.00	95.00	0.4
25) cis-1,3-dichloropropene	ND				75.00	109.95	0.4
26) toluene	ND				92.00	91.00	0.4
27) trans-1,3-dichloropropene	ND				75.00	109.95	0.4
28) 1,1,2 trichloroethane	ND				83.00	85.00	0.4
29) 1,3 dichloropropane	ND				76.00	78.00	0.4
30) tetrachloroethene	ND				165.90	128.95	0.4
31) dibromochloromethane	ND				129.00	127.00	0.4
32) 1,2 dibromoethane	ND				106.95	108.95	0.4
33) ethylbenzene	ND				106.00	91.00	0.4
34) chlorobenzene	ND				112.05	77.00	0.4
35) 1,1,1,2 tetrachloroethane	ND				130.95	132.95	0.4
36) m,p-xylene	ND				106.15	91.05	0.4
37) o-xylene	ND				106.15	91.15	0.4

F2

#	Compound Name	Concentration PPB	*	Ret Time Minutes	Quantitation Response	Quant m/z	Qual m/z	MDL	SMC %Recov
38)	styrene	ND				104.05	78.10	0.4	
39)	isopropylbenzene	ND				120.00	105.00	0.4	
40)	bromoform	ND				172.90	174.90	0.4	
41)	1,1,2,2 tetrachloroethane	ND				82.95	84.95	0.4	
42)	4-bromofluorobenzene	10.99	*SMC	31.23	1.02E+06	95.00	173.95	0.4	78.5
43)	1,2,3 trichloropropane	ND				110.00	112.00	0.4	
44)	n-propylbenzene	ND				120.00	91.00	0.4	
45)	bromobenzene	ND				155.95	157.95	0.4	
46)	1,3,5 trimethylbenzene	ND				120.00	105.00	0.4	
47)	2-chlorotoluene	ND				91.05	126.05	0.4	
48)	4-chlorotoluene	ND				91.15	126.05	0.4	
49)	tert-butylbenzene	ND				119.15	91.15	0.4	
50)	1,2,4 trimethylbenzene	ND				120.00	105.00	0.4	
51)	sec-butylbenzene	ND				134.00	105.00	0.4	
52)	4-isopropyltoluene	ND				134.00	119.00	0.4	
53)	1,3 dichlorobenzene	ND				145.95	147.95	0.4	
54)	1,4 dichlorobenzene	ND				145.95	147.95	0.4	
55)	n-butylbenzene	ND				134.00	91.00	0.4	
56)	1,4-dichlorobenzene-d4	10.09	*SMC	36.81	9.00E+05	151.90	149.90	0.4	72.1
57)	1,2 dichlorobenzene	ND				145.95	147.95	0.4	
58)	1,2-dibromo-3-chloropropane	ND				75.00	154.95	5.0	
59)	1,2,4 trichlorobenzene	ND				180.00	182.00	0.4	
60)	hexachlorobutadiene	ND				224.90	226.90	0.4	
61)	naphthalene	ND				128.05	0.00	0.4	
62)	1,2,3 trichlorobenzene	ND				180.00	182.00	0.4	
63)	MTBE	ND				73.10	57.05	2.0	

GC/MS Operator CWL

Mobile Laboratory Manager

* LEGEND:

"J" = <MDL
"ND" = NOT DETECTED
"B" = DETECTED IN BOTH SAMPLE & TRIP BLANK
"ISTD" = INTERNAL STANDARD
"SMC" = SYSTEM MONITORING COMPOUND

"E" = CONCENTRATION OF SPECIFIC COMPOUND EXCEEDED CALIBRATION RANGE UPPER LIMIT.
USE INDIVIDUAL RESULTS FROM DILUTED SAMPLES WHEN AVAILABLE.

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ATTACHMENT G

39.

DELAWARE RIVER
WATER QUALITY ASSESSMENT

1986-87 305(b) Report

Delaware River Basin Commission
West Trenton, New Jersey

March 1988

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EXECUTIVE SUMMARY

Delaware River Water Quality Assessment
1986-87 305(b) Report

Delaware River and Bay comprise part of the boundary of four states: Delaware, New Jersey, New York and Pennsylvania. From Hancock, New York to the mouth of the Delaware Bay the Delaware River flows 330 miles, draining 0.4 percent of the U.S. land area. Almost 10 percent of the nation's population rely on the waters of the Delaware River Basin for potable and industrial water.

The non-tidal Delaware extending from Hancock, New York to Trenton, New Jersey is one of the Nation's premier recreational rivers. Thirty-nine percent of the non-tidal Delaware has been included in the National Wild and Scenic Rivers System and over one-half million visitors use the non-tidal river for fishing, boating, canoeing and swimming each year.

The Delaware Estuary extending from Trenton, New Jersey to Liston Point, Delaware flows through the Nation's fifth largest urban area: the Philadelphia-Camden metropolitan area. Including Trenton, New Jersey and Wilmington, Delaware, this area is one of the world's greatest concentrations of heavy industry, the second largest U.S. oil refining-petrochemical center and the world's largest freshwater port. Historically this section of the Delaware has also been one of the nation's most grossly polluted rivers. Water quality in 1986-87, however, reflects substantial water quality improvements as the result of water pollution control efforts extending back 40 years.

The 782 square mile Delaware Bay is 48 miles long and from 4 to 20 miles wide. The Bay is biologically productive and the home of commercially important fin and shell fish. Recreation and navigation are important as well.

Summary of Conditions

The water quality of the Delaware River, the Delaware Bay and the interstate portion of the West Branch Delaware River was assessed for the 1986-87 period. From the total river miles assessed (339 miles), it appears that:

- 49% had <u>excellent</u> water quality
- 32% had <u>good</u> water quality
- 7% had <u>good to fair</u> water quality
- 3% had <u>fair</u> water quality
- 5% had <u>fair to poor</u> water quality
- 4% had <u>poor</u> water quality
- 88% met the federal <u>fishable</u> goal
- 89% met the federal <u>swimmable</u> goal
- 11% did not support <u>designated uses</u>
- 9% were severely impaired by <u>point sources</u>
- 9% were severely impaired by <u>non-point sources</u>
- 13% had known or potential problem <u>toxics</u>

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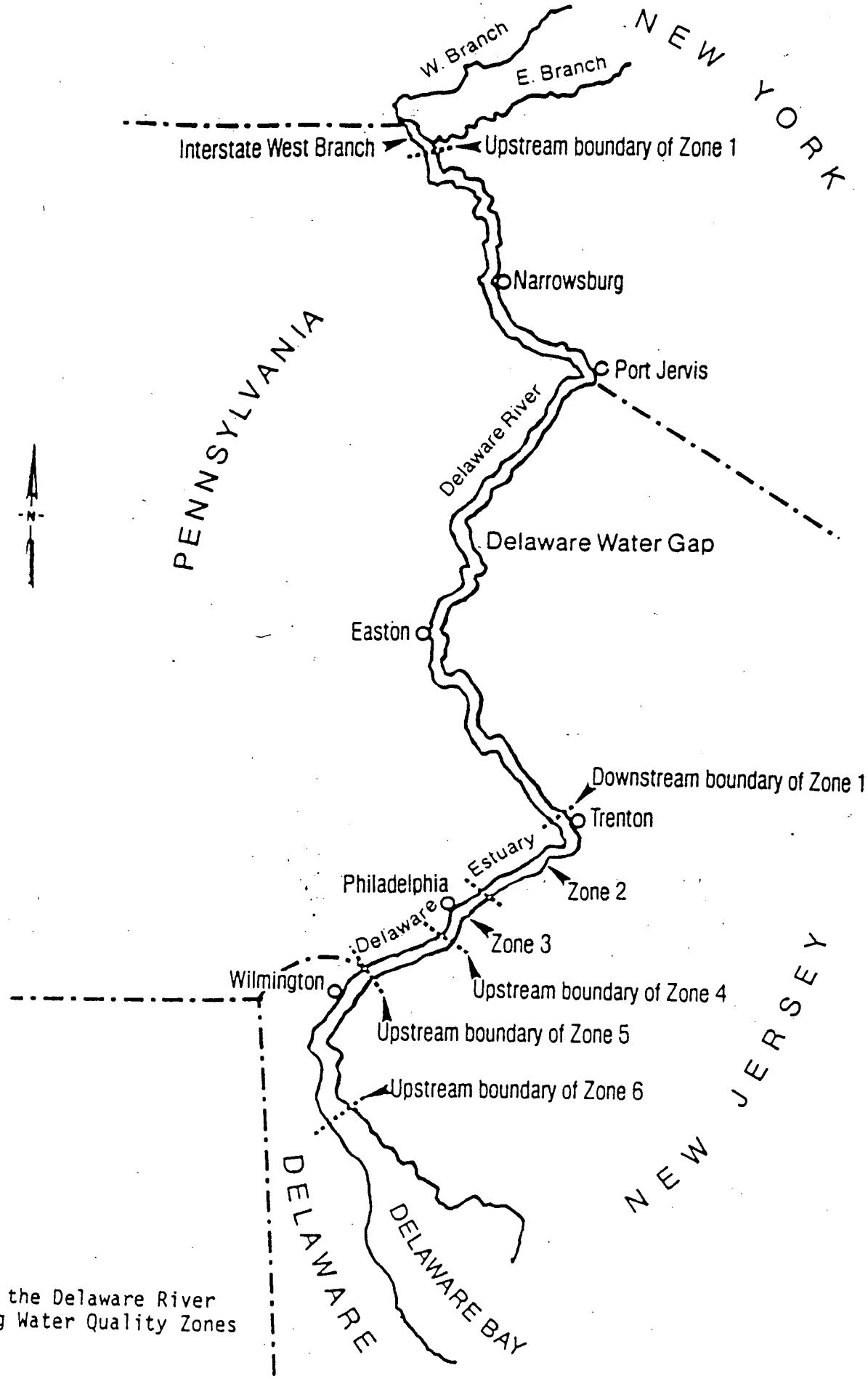
The following table presents a reach by reach assessment of water quality. The terms excellent, good, fair and poor refer to the degree of standards violation (areal extent and frequency) plus the amount of effluent disposed in the zone.

Reach by Reach Assessment

River Reach	States	No. of Miles	General Water Quality	Meets Swimmable Goal	Meets Fishable Goal	Supports Designated Uses
West Branch Delaware	NY,PA	9	Good	yes	yes	yes
Zone 1: Hancock to Port Jervis	NY,PA	74	Excellent	yes	yes	yes
Zone 1: Port Jervis to Delaware Water Gap	PA,NJ	46	Excellent	yes	yes	yes
Zone 1: Delaware Water Gap to Trenton	PA,NJ	77	Good	yes(65 mi) no(12 mi)	yes	yes(65 mi) no(12 mi)
Zone 2: Trenton to Northeast Philadelphia	PA,NJ	25	Good to Fair	yes	yes	yes
Zone 3: Philadelphia-Camden Area	PA, NJ	13	Poor	no	no	no
Zone 4: Schuylkill R. to Marcus Hook, PA	PA, NJ	16	Poor to Fair	yes(5 mi) no(11 mi)	no	yes(5 mi) no(11 mi)
Upper Zone 5: Marcus Hook to New Castle, DE	NJ,DE	11	Fair	yes	no	yes
Lower Zone 5: New Castle to Delaware Bay	NJ,DE	20	Good	yes	yes	yes
Zone 6: Delaware Bay	NJ,DE	48	Good	yes	yes	yes

Water pollution control in the Delaware River is the joint responsibility of the federal government, the four Delaware River Basin states and the Delaware River Basin Commission. The Commission conducts monitoring, regulatory and other water quality management programs as part of its basinwide responsibilities.

During 1986 and 1987, the DRBC conducted a use attainability study of the Delaware Estuary which included special studies of sediment oxygen demand, toxics, fish health, combined sewers, bacterial quality and others. Final recommendations, directed at the attainment of the federal fishable and swimmable water quality goals in the Delaware Estuary are expected in Spring, 1988. The 1986-87 305(b) report reflects the data gathered as part of the use attainability study. Conducted in 1987 as well were special studies in the non-tidal river including sediment toxics. New efforts of the commission include seasonal disinfection studies, a scenic rivers water quality planning effort, an interstate toxics program and others.



Map of the Delaware River
Showing Water Quality Zones

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ATTACHMENT H

NJ MANIFESTED WASTE

COUNTY	STREET-CITY	GEN-EPA-ID	COMPANY-NAME	YEAR	TONS
BURL	RIVERTON	NJD002386621	AIRCO INDUSTRIAL GASES	84	4735
		NJD002386621		85	2115
		NJD002386621		86	11135
		NJD002386621		87	13738
		NJD002386621		88	2490
		NJD002326775	DEL VAL INK & COLOR INC	83	7370
		NJD002326775		84	6250
		NJD002326775		85	5300
		NJD002326775		86	8815
		NJD002326775		87	10611
		NJD002326775		88	4755
		NJD011705175	ERIN CLEANERS	86	670
		NJD011705175		87	1665
		NJD011705175		88	1620
		NJD011705175		81	231
		NJD001519107	HOEGANAES CORPORATION	82	264
		NJD001519107		83	2028
		NJD001519107		84	3903
		NJD001519107		85	413861
		NJD001519107		86	972623
		NJD001519107		87	940322
		NJD001519107		88	1200899
		NJD002352029	NATIONL CASEIN OF NEW JERSEY	87	1800
		NJD002297240	PATTON DIV. OF ALFORD	81	4830
		NJD002297240		83	1975
		NJD986568095	SPEC-FAB COMPANY	88	385
		NJD002373520	TRIPLE G COATINGS INC	85	275
		NJD002373520		86	479
		NJD002373520		87	440
		NJD002373520		88	506
	ROEBLING	NJD982188005	EMPIRE-DETROIT STEEL	87	58
		NJD000692244	M.A. POLYMERS	82	1520
		NJD990743833	ROEBLING STEEL	81	1200
		NJD099976623	SWECO INC.	86	160
		NJD099976623		87	1000
	SHAMONG TWP	NJD980649164	NEW JERSEY BELL MAC-248	85	1764
	SPRINGFIELD	NJD982188047	RT 545&537/TANK REMOVAL PROJ	87	4700
	TABERNACLE	NJD982281271	RENAISSANCE STRIPPING	88	880
		NJD981491780	THE BODY CLINIC	87	30
		NJD981491780		88	32
	TAVERNCLE	NJD981874282	JOANS CLEANERS INC	88	420
	VINCENTOWN	NJD002345437	CEDAR CREEK SALES & SERVICE	87	28
		NJD002482198	HARRY SHAW MODELMAKER INC	86	100
		NJD002482198		87	315
		NJD002482198		88	449
		NJD093729291	KEYSTONE LAWN SPRAY INC	87	30
		NJT350011391	NOBLE OIL CO.	81	1500
		NJT350011391		82	121330
		NJD000768101	SAFETY-KLEEN CORP. 2-139104	83	1013037
		NJD000768101		84	1175598
		NJD000768101		85	472863

WASTE MANIFESTED - NEW JERSEY GENERATORS - 01/01/89 - 12/31/89

COUNTY: BURLINGTON

GENERATOR	WASTE	WASTE NAME	QUANTITY SHIPPED
NJD982737348 - CONTINUED			
ED GROVATT AUTO BODY 1602 RT 130 & COOPER ST BURLINGTON , NJ NJD982737348			
	F005	NONHL SOLV & STLBTM	1,042.50
		TOTAL	1,042.50
ELECTRO PAINTERS INC 1829 UNDERWOOD BLVD U10 DELRAN , NJ NJD981131667			
	F003	NON HAL SOLV & STLBTM	3,210.90
		TOTAL	3,210.90
ELECTRONICS PARTS SPECIALTY COLES AVE LUMBERTON , NJ NJD002361665			
	F005	NONHL SOLV & STLBTM	2,043.30
	F007	PLAT SOLU OF ELECTRPLT OPERTN	129,687.00
		TOTAL	131,730.30
EMULSION MARKETING, INC INDUSTRIAL BLVD HAINESPORT , NJ NJD986566081			
	X725	OIL SPILL CLEANUP MATERIAL	18,200.00
		TOTAL	18,200.00
ERIN CLEANERS 608 BROAD STREET RIVERTON , NJ NJD011705175			
	F002	SPT HAL SOLV&STLBTM OF DEGREAS	4,440.00
		TOTAL	4,440.00
ES INDUSTRIES 8 SOUTH MAPLE AVENUE MARLTON , NJ NJD044519486			
	F003	NON HAL SOLV & STLBTM	1,834.80
		TOTAL	1,834.80
EXXON #36618 RTS 206 & 68 COLUMBUS , NJ NJD982792715			
	X722	WAST OIL/BTM RES/COMM TANK CLN	14,178.00
	X725	OIL SPILL CLEANUP MATERIAL	1,516,320.00
		TOTAL	1,530,498.00

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WASTE MANIFESTED - NEW JERSEY GENERATORS - 01/01/90 - 12/31/90

OUNTY: BURLINGTON

GENERATOR	WASTE	WASTE NAME	QUANTITY SHIPPED
JD011705175 - CONTINUED			
RIN CLEANERS 08 BROAD STREET IVERTON , NJ JD011705175			
	F002	SPT HAL SOLV&STLBTM OF DEGREAS	2,685.00
		TOTAL	2,685.00
S INDUSTRIES SOUTH MAPLE AVENUE ARLTON , NJ JD044519486			
	F003	NON HAL SOLV & STLBTM	1,834.80
		TOTAL	1,834.80
XXON SERVICE STATION T 70 & OLD MARLTON PK ARLTON , NJ JD981182520			
	D001	CHARACTERISTIC OF IGNITABILITY	487.00
		TOTAL	487.00
XXON STATION #3-6208 OOKS TOWN RD. RIGHTSTOWN , NJ JD986595445			
	D001	CHARACTERISTIC OF IGNITABILITY	7,139.04
		TOTAL	7,139.04
BOGAN CO. PARK ST. ORDENTOWN , NJ JD986577104			
	D001	CHARACTERISTIC OF IGNITABILITY	1,042.50
		TOTAL	1,042.50
ARKAS AUTO BODY 202 ROUTE 130 N URLINGTON , NJ JD011136504			
	F005	NONHL SOLV & STLBTM	1,834.80
		TOTAL	1,834.80
C KERBECK AND SONS T 73 ALMYRA , NJ JD011588381			
	D001	CHARACTERISTIC OF IGNITABILITY	3,354.00
	F002	SPT HAL SOLV&STLBTM OF DEGREAS	180.00
	F005	NONHL SOLV & STLBTM	583.80
		TOTAL	4,117.80

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WASTE MANIFESTED - NEW JERSEY GENERATORS - 01/01/91 - 12/31/91

COUNTY. BURLINGTON

GENERATOR	WASTE	WASTE NAME	QUANTITY SHIPPED
NJD982727661 - CONTINUED			
	X722	WAST OIL/BTM RES/COMM TANK CLN	542.10
	X725	OIL SPILL CLEANUP MATERIAL	49,400.00
		TOTAL	63,234.30
ELECTRO PAINTERS INC 1829 UNDERWOOD BLVD U10 DELRAN , NJ NJD081131667			
	F003	NON HAL SOLV & STLBTM	917.40
		TOTAL	917.40
ELECTRONICS PARTS SPECIALTY COLES AVE LUMBERTON , NJ NJD002361665			
	D006	CADMIUM	25,854.00
	F003	NON HAL SOLV & STLBTM	2,877.30
	F007	PLAT SOLU OF ELECTRPLT OPERTN	45,995.10
		TOTAL	74,726.40
ERTH CLEANERS 608 BROAD STREET RIVERTON , NJ NJD011705175			
	F002	SPT HAL SOLV&STLBTM OF DEGREAS	2,775.00
		TOTAL	2,775.00
ES INDUSTRIES 8 SOUTH MAPLE AVENUE MARLTON , NJ NJD044519486			
	F003	NON HAL SOLV & STLBTM	3,878.10
		TOTAL	3,878.10
EVESHAM BOARD OF EDUCATION SO MAPLE & OAK AVE MARLTON , NJ NJD986609097			
	D001	CHARACTERISTIC OF IGNITABILITY	458.70
	X910	CHEMICAL PROCESS-SOLID,NOS	400.00
		TOTAL	858.70
EVESHAM MUNICIPAL UTILITES ELMWOOD RD STP SITE MARLTON , NJ NJD980652356			
	D018	BENZENE	300.00
		TOTAL	300.00

WASTE MANIFESTED - NEW JERSEY GENERATORS - 01/01/92 - 12/31/92

COUNTY: BURLINGTON

GENERATOR	WASTE	WASTE NAME	QUANTITY SHIPPED
NJD981131667 - CONTINUED			
ELECTRO PAINTERS INC			
1829 UNDERWOOD BLVD U10			
DELRAN , NJ			
NJD981131667			
	F003	NON HAL SOLV & STLBTM	458.70
		TOTAL	458.70
ELECTRONICS PARTS SPECIALTY			
COLES AVE			
LUMBERTON , NJ			
NJD002361665			
	D001	CHARACTERISTIC OF IGNITABILITY	1,976.10
	D003	CHARACTERISTIC OF REACTIVITY	2,100.00
	D006	CADMIUM	1,850.00
	F007	PLAT SOLU OF ELECTRPLT OPERTN	29,120.00
		TOTAL	34,576.10
ENGAR MACHINE CO. INC			
RD 19 NO ELMWOOD ROAD			
MARLTON , NJ			
NJD002385714			
	X722	WAST OIL/BTM RES/COMM TANK CLN	9,174.00
		TOTAL	9,174.00
EPA-BRIDGEPORT RENTAL & OIL			
RT 130 & CEDAR SWAMP RD			
BRIDGEPORT , NJ			
NJD053292652			
	X751	PCB-CONTAMINATED SOLIDS	28,156.09
		TOTAL	28,156.09
EQUIPMENT SUPPLY CO			
1603 RT 130			
BURLINGTON , NJ			
NJD986622413			
	D001	CHARACTERISTIC OF IGNITABILITY	430.00
	D006	CADMIUM	180.00
	F005	NONHL SOLV & STLBTM	765.00
	X721	OIL WASTE FROM GAS STATIONS	3,961.50
		TOTAL	5,336.50
ERIN CLEANERS			
608 BROAD STREET			
RIVERTON , NJ			
NJD011705175			
	F002	SPT HAL SOLV&STLBTM OF DEGREAS	2,935.00
		TOTAL	2,935.00

I-9

ATTACHMENT I

State of New Jersey

James E. McGreevey
Governor

Department of Environmental Protection

Bradley M. Campbell
Commissioner

MEMORANDUM

SEP 13 2002

TO: Frank Sorce
Bureau of Site Assessment

THROUGH: Greg Toffoli, Section Chief for GT 9/13/02
Joseph Sanguiliano JS 9/13/02
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

FROM: Linda M. Appel LA 9/13/02
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

SUBJECT: Analytical data validation of the August 6, 2002 soil sampling event conducted at **ERIN CLEANERS** (SDG #89186). Analyses performed by Severn Trent Laboratories-Vermont.

Samples Reviewed

Field ID	Lab ID	Matrix	Collection Date
S-1	496664	Non-aqueous	08/06/2002
S-2	496665	Non-aqueous	08/06/2002
S-3	496666	Non-aqueous	08/06/2002
S-4	496667	Non-aqueous	08/06/2002
S-5	496668	Non-aqueous	08/06/2002
S-6	496669	Non-aqueous	08/06/2002

The Quality Assurance Section, Bureau of Environmental Measurements and Quality Assurance, Division of Publicly Funded Site Remediation has reviewed the above-mentioned soil samples for Volatile Organics. The analytical data for this site was submitted in the Regulatory Format. The deliverables are specified in the Technical Requirements for Site Remediation N.J.A.C. 7:26E. Please refer to the detailed data validation report and the Target and Non-target Analyte Data Summary for additional information. Specific comments are provided below.

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VOLATILE ORGANICS

The Volatile Organics analyses were performed according to USEPA SW846 Methods 5035 and 8260B. The data are acceptable with the qualifications noted below and on the Target and Non-target Analyte Data Summary. Please note the following:

1. All reported concentrations, both positive and non-detect, are considered estimated and qualified because the soil samples (collected in EnCore sampling devices) were not prepared within 48 hours of collection. The preparation method, USEPA SW846 Method 5035, states that the soil samples should be transferred to the soil sample vials as soon as possible or analyzed within 48 hours. In this instance, the soil samples were transferred to the vials but the 48 hour time limit was not met.

2. In the Laboratory Fortified Matrix/Laboratory Fortified Matrix Duplicate (LFM/LFMD) analyses of sample 496668, the percent recoveries of four target analytes were less than the laboratory's lower percent recovery requirements. Therefore, in sample 496668, the affected analyte concentration is considered estimated and qualified "J" or "UJ", accordingly. Reported positive concentrations may be biased low and the possibilities of false negatives exist for the non-detects. Please refer to the Target and Non-target Analyte Data Summary for the affected analytes.

3. Tetrachloroethene is qualified in all samples due to unacceptable percent recoveries in the associated Laboratory Fortified Blank (LFB) analyses. The reported concentrations for Tetrachloroethene are considered estimated and qualified "J".

If you have any questions regarding this review, please contact this office at 633-0752.

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TARGET and NON-TARGET ANALYTE DATA SUMMARY

SITE NAME: ERIN CLEANERS

SAMPLING DATE: 8/6/2002

LAB NAME: SEVERN TRENT-VERMONT

SAMPLE MATRIX: SOIL

FIELD ID	LAB ID	VOLATILE ORGANICS by USEPA SW846 Method 8260B	METHOD BLANK CONC.*	LAB REPORT CONC.*	QA REPORT CONC.*	QA DECISION	FOOT NOTES
S-1	496664	Tetrachloroethene	500 U	7400	7400 J	Qualify	1,5
		All reported non-detects.		U	UJ	Qualify	1
		7 TICs were reported.					
		RT 21.53	4100 J	2300 JB	2300 JB	Negate	4
		The remaining non-target data are acceptable				Qualify	9
S-2	496665	Tetrachloroethene	500 U	13000	13000 J	Qualify	1,5
		All reported non-detects.		U	UJ	Qualify	1
		10 TICs were reported.					
		RT 21.53	4100 J	1900 JB	1900 JB	Negate	4
		The remaining non-target data are acceptable				Qualify	9
S-3	496666	Tetrachloroethene	500 U	5800	5800 J	Qualify	1,5
		All reported non-detects.		U	UJ	Qualify	1
		2 TICs were reported.					
		RT 21.50	4100 J	690 JB	690 JB	Negate	4
		The remaining non-target data is acceptable				Qualify	9
S-4	496667	Tetrachloroethene	500 U	2400	2400 J	Qualify	1,5
		All reported non-detects.		U	UJ	Qualify	1
		0 TICs were reported.					
S-5	496668	Acetone	5.0 U	300	300 J	Qualify	1,7,10
		Methylene Chloride	0.99 J	26 JB	26 JB	Qualify	1,3,7
		2-Butanone	5.0 U	35 J	35 J	Qualify	1,8
		4-Methyl-2-pentanone	5.0 U	11 J	11 J	Qualify	1,8
		Tetrachloroethene	5.0 U	41	41 J	Qualify	1,6
		Acrolein	5.0 U	36 U	36 UJ	Qualify	1,7
		1,2,4-Trichlorobenzene	1.3 J	36 U	36 UJ	Qualify	1,7
		All reported non-detects.		U	UJ	Qualify	1
		3 TICs were reported.					
		RT 21.53	300 J	200 JB	200 JB	Negate	2
		The remaining non-target data are acceptable				Qualify	9
S-6	496669	Tetrachloroethene	500 U	5100	5100 J	Qualify	1,5
		All reported non-detects.		U	UJ	Qualify	1
		0 TICs were reported.					

* All concentrations are reported in ug/Kg

I-3

FOOTNOTES:

1. All reported concentrations, both positive and non-detect, are considered estimated and qualified because the soil samples (collected in EnCore sampling devices) were not prepared within 48 hours of collection.

2. The value reported in the sample (before the correction for dilution, if applicable) is less than or equal to three (3) times the value in the associated method blank. It is the policy of NJDEP-DPFSR to negate the reported value due to probable contamination unrelated to the actual sample.

3. The value reported in the sample (before the correction for dilution, if applicable) is greater than or equal to three (3) times the value in the associated method blank. It is the policy of NJDEP-DPFSR to qualify the reported value due to probable contamination unrelated to the actual sample.

4. The value reported in the sample (before the correction for dilution, if applicable) is less than or equal to three (3) times the value in the associated methanol blank. It is the policy of NJDEP-DPFSR to negate the reported value due to probable contamination unrelated to the actual sample.

5. In the associated Laboratory Fortified Blank (LFB), the percent recovery of Tetrachloroethene was below than the laboratory's QC limits of 71%-107%. Therefore, the reported concentration for Tetrachloroethene is considered estimated and qualified "J" and may be biased low.

6. In the associated Laboratory Fortified Blank (LFB) analysis, the percent recovery of Tetrachloroethene was greater than the laboratory's upper percent recovery requirement of 71%-107%. Therefore, the reported concentration for this analyte is considered estimated and qualified "J" and may be biased high.

7. In the Laboratory Fortified Matrix (LFM) analysis of this sample, the percent recovery for this analyte was less than the laboratory's lower percent recovery requirement. Therefore, the reported concentration is considered estimated and qualified "J" or "UJ", accordingly. Reported positive concentrations may be biased low and the possibilities of false negatives exist for the non-detects.

8. The reported concentration is quantitatively qualified because the concentration (before the correction for dilution, if applicable) is below the MDL.

9. The non-target compound is qualified "J" and considered quantitatively to be an estimated value because relative response factors are not calculated for non-target compounds.

10. The reported concentration is quantitatively qualified due to calibration deficiencies.

MEMORANDUM

TO: Frank Sorce
Bureau of Site Assessment

THROUGH: Greg Toffoli, Section Chief
Joseph Sanguiliano
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

FROM: Linda M. Appel
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

SUBJECT: Analytical data validation of the August 7-8, 2002 groundwater sampling events conducted at **ERIN CLEANERS** (SDG #89210). Analyses performed by Severn Trent Laboratories-Vermont.

Samples Reviewed

Field ID	Lab ID	Matrix	Collection Date
GW-6A	496795	Aqueous	08/08/2002
GW-6B	496796	Aqueous	08/08/2002
GW-6C	496797	Aqueous	08/08/2002
FB-3	496798	Aqueous	08/08/2002
TB-3	496799	Aqueous	08/08/2002
GW-3A	496800	Aqueous	08/07/2002
GW-3B	496801	Aqueous	08/07/2002
GW-3C	496802	Aqueous	08/07/2002
GW-4A	496803	Aqueous	08/07/2002
GW-4B	496804	Aqueous	08/07/2002
GW-4C	496805	Aqueous	08/07/2002
GW-9A	496806	Aqueous	08/07/2002
FB-2	496807	Aqueous	08/07/2002
TB-2	496808	Aqueous	08/07/2002

I5

The Quality Assurance Section, Bureau of Environmental Measurements and Quality Assurance, Division of Publicly Funded Site Remediation has reviewed the above-mentioned groundwater samples and Field and Trip Blanks for Volatile Organics. The analytical data for this site was submitted in the Regulatory Format. The deliverables are specified in the Technical Requirements for Site Remediation N.J.A.C. 7:26E. Please refer to the detailed data validation report and the Target and Non-target Analyte Data Summary for additional information. Specific comments are provided below.

VOLATILE ORGANICS

The Volatile Organics analyses were performed according to USEPA SW846 Methods 5030 and 8260B. The data are acceptable with the qualifications noted below and on the Target and Non-target Analyte Data Summary. Please note the following:

1. In the Laboratory Fortified Matrix (LFM) analysis of sample 496802, the percent recoveries of Methylene Chloride and trans-1,2-Dichloroethene were less than the laboratory's lower percent recovery requirements. Therefore, in sample 496802, the reported non-detected concentrations for these two analytes are considered estimated and qualified "UJ" because the possibility of a false negatives exist.

2. Other target analytes are qualified due to outliers in the following QC parameters: %RSD for Initial Calibration, %D for Continuing Calibration and high surrogate recovery. The affected analytes are qualified "J". Please refer to the Target and Non-target Analyte Data Summary for the affected analytes.

3. Note that samples 796803 and 796804 were analyzed at a dilution due to the high levels of Tetrachloroethene. An undiluted analysis was not provided. The end-user is alerted that contamination could exist below the elevated detection limits for these two samples.

If you have any questions regarding this review, please contact this office at 633-0752.

I6

MEMORANDUM

TO: Frank Sorce
Bureau of Site Assessment

THROUGH: Greg Toffoli, Section Chief
Joseph Sanguiliano
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

FROM: Linda M. Appel
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

SUBJECT: Analytical data validation of the August 6, 2002 groundwater sampling event conducted at **ERIN CLEANERS** (SDG #89189). Analyses performed by Severn Trent Laboratories-Vermont.

Samples Reviewed

Field ID	Lab ID	Matrix	Collection Date
TB-1	496670	Aqueous	Not Given
FB-1	496671	Aqueous	08/06/2002
GW-1A	496672	Aqueous	08/06/2002
GW-1B	496673	Aqueous	08/06/2002
GW-1C	496674	Aqueous	08/06/2002
GW-1D	496675	Aqueous	08/06/2002
GW-2A	496676	Aqueous	08/06/2002
GW-2B	496677	Aqueous	08/06/2002
GW-2C	496678	Aqueous	08/06/2002
GW-5A	496679	Aqueous	08/06/2002
GW-5B	496680	Aqueous	08/06/2002
GW-5C	496681	Aqueous	08/06/2002

I7

The Quality Assurance Section, Bureau of Environmental Measurements and Quality Assurance, Division of Publicly Funded Site Remediation has reviewed the above-mentioned groundwater samples and Field and Trip Blanks for Volatile Organics. The analytical data for this site was submitted in the Regulatory Format. The deliverables are specified in the Technical Requirements for Site Remediation N.J.A.C. 7:26E. Please refer to the detailed data validation report and the Target and Non-target Analyte Data Summary for additional information. Specific comments are provided below.

VOLATILE ORGANICS

The Volatile Organics analyses were performed according to USEPA SW846 Methods 5030 and 8260B. The data are acceptable with the qualifications noted below and on the Target and Non-target Analyte Data Summary. Please note the following:

1. In the Laboratory Fortified Matrix (LFM) analysis of sample 496674, the percent recovery of 1,4-Dioxane was less than the laboratory's lower percent recovery requirements. Therefore, in sample 496674, the reported non-detected concentration for 1,4-Dioxane is considered estimated and qualified "UJ" because the possibility of a false negative exists.

2. In the Laboratory Fortified Matrix/Laboratory Fortified Matrix Duplicate analyses of sample 496674, the relative percent difference (RPD) of 1,4-Dioxane was greater than the laboratory's percent recovery requirement. Therefore, all reported positive concentrations for 1,4-Dioxane are considered estimated and qualified "J".

3. Tetrachloroethene is qualified in sample 496678 due to the percent recovery in the associated Laboratory Fortified Blank (LFB) analyses. The reported concentration for Tetrachloroethene in sample 496678 is considered estimated and qualified "J" and may be biased high.

4. In the case narrative, the laboratory states that the presence of Isobutyl alcohol and 1,4-Dioxane in sample 496675 and 1,4-Dioxane in sample 496676 is most likely due to carryover from the preceding matrix spike and matrix spike duplicate analyses. The laboratory placed an "X" qualifier (next to the analyte concentration) on the sample summary form to note this. QAS qualified these two analytes on the Target and Non-target Analyte Data Summary.

5. The Chain of Custody form found on page 14 of the analytical data package, indicates that sample GW-8A was collected and submitted to the laboratory for Volatile Organics analysis. The laboratory noted that all three sample vials for GW-8A were received broken and the sample was not logged in.

If you have any questions regarding this review, please contact this office at 633-0752.

I-8

FOOTNOTES:

1. The value reported in the sample is less than or equal to three (3) times the value in the associated method blank. It is the policy of NJDEP-DPFSR to negate the reported value due to probable contamination unrelated to the actual sample.

2. The value reported in the sample is less than or equal to three (3) times the value in the associated field blank. It is the policy of NJDEP-DPFSR to negate the reported value due to probable contamination unrelated to the actual sample.

3. The value reported is greater than three (3) times the value in the field blank and is considered "real". However, the reported value must be quantitatively qualified "J" due to field blank contamination.

4. The reported concentration is quantitatively qualified due to initial and/or continuing calibration deficiencies.

5. The reported concentration is quantitatively qualified due to continuing calibration deficiencies with an associated surrogate compound.

6. The reported concentration is quantitatively qualified because the concentration is below the MDL.

7. The reported concentration is qualified due to high surrogate recovery in the sample analysis.

8. The reported concentration was determined from a dilution analysis.

9. The non-target compound is qualified "J" and considered quantitatively to be an estimated value because relative response factors are not calculated for non-target compounds.

10. In the Laboratory Fortified Matrix (LFM) analysis of sample 496802, the percent recovery of this analyte was less than the laboratory's lower percent recovery requirements. Therefore, the reported non-detected concentration is considered estimated and qualified "UJ".

FOOTNOTES:

1. All reported concentrations, both positive and non-detect, are considered estimated and qualified because the soil samples (collected in EnCore sampling devices) were not prepared within 48 hours of collection.

2. The value reported in the sample (before the correction for dilution, if applicable) is less than or equal to three (3) times the value in the associated method blank. It is the policy of NJDEP-DPFSR to negate the reported value due to probable contamination unrelated to the actual sample.

3. The value reported in the sample (before the correction for dilution, if applicable) is greater than or equal to three (3) times the value in the associated method blank. It is the policy of NJDEP-DPFSR to qualify the reported value due to probable contamination unrelated to the actual sample.

4. The value reported in the sample (before the correction for dilution, if applicable) is less than or equal to three (3) times the value in the associated methanol blank. It is the policy of NJDEP-DPFSR to negate the reported value due to probable contamination unrelated to the actual sample.

5. In the associated Laboratory Fortified Blank (LFB), the percent recovery of Tetrachloroethene was below than the laboratory's QC limits of 71%-107%. Therefore, the reported concentration for Tetrachloroethene is considered estimated and qualified "J" and may be biased low.

6. In the associated Laboratory Fortified Blank (LFB) analysis, the percent recovery of Tetrachloroethene was greater than the laboratory's upper percent recovery requirement of 71%-107%. Therefore, the reported concentration for this analyte is considered estimated and qualified "J" and may be biased high.

7. In the Laboratory Fortified Matrix (LFM) analysis of this sample, the percent recovery for this analyte was less than the laboratory's lower percent recovery requirement. Therefore, the reported concentration is considered estimated and qualified "J" or "UJ", accordingly. Reported positive concentrations may be biased low and the possibilities of false negatives exist for the non-detects.

8. The reported concentration is quantitatively qualified because the concentration (before the correction for dilution, if applicable) is below the MDL.

9. The non-target compound is qualified "J" and considered quantitatively to be an estimated value because relative response factors are not calculated for non-target compounds.

10. The reported concentration is quantitatively qualified due to calibration deficiencies.

I10

TARGET and NON-TARGET ANALYTE DATA SUMMARY

SITE NAME: ERIN CLEANERS

SAMPLING DATE: 8/7-8/8/2002

LAB NAME: SEVERN TRENT-VERMONT

SAMPLE MATRIX: Groundwater

FIELD ID	LAB ID	VOLATILE ORGANICS by USEPA SW846 Method 8260B	METHOD BLANK CONC.*	LAB REPORT CONC.*	QA REPORT CONC.*	QA DECISION	FOOT NOTES
GW-6A	496795	Acetone	5.0 U	12	12 J	Negate	2
		Tetrachloroethene	5.0 U	14	14 J	Qualify	7
		4 TICs were reported.					
		RT 21.48	100 J	5.0 JB	5.0 JB	Negate	1
		The remaining non-target data are acceptable.				Qualify	9
GW-6B	496796	Acetone	5.0 U	6.3	6.3 J	Negate	2
		Tetrachloroethene	5.0 U	9.8	9.8		
		0 TICs were reported.					
GW-6C	496797	Acetone	5.0 U	26	26 J	Qualify	3,4
		0 TICs were reported.					
FB-3	496798	Acetone	5.0 U	5.0	5.0 J	Qualify	4
		1 TIC reported @ RT 21.16				Qualify	9
		The non-target data is acceptable.					
TB-1	496799	Target analytes were not detected.					
		0 TICs were reported.					
GW-3A	496800	Acetone	5.0 U	6.0	6.0 J	Negate	2
		Tetrachloroethene	5.0 U	40	40		
		0 TICs were reported.					
GW-3B	496801	Acetone	5.0 U	17.0	17 J	Negate	2
		Tetrachloroethene	5.0 U	37	37 J	Qualify	7
		0 TICs were reported.					
GW-3C	496802	Acetone	5.0 U	20.0	20 J	Negate	2
		Tetrachloroethene	5.0 U	1.6 J	1.6 J	Qualify	6,7
		Methylene Chloride	5.0 U	5.0 U	5.0 UJ	Qualify	10
		trans-1,2-Dichloroethene	5.0 U	5.0 U	5.0 UJ	Qualify	10
		0 TICs were reported.					

* All concentrations are reported in ug/L

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TARGET and NON-TARGET ANALYTE DATA SUMMARY

SITE NAME: ERIN CLEANERS

SAMPLING DATE: 8/7-8/8/2002

LAB NAME: SEVERN TRENT-VERMONT

SAMPLE MATRIX: Groundwater

FIELD ID	LAB ID	VOLATILE ORGANICS by USEPA SW846 Method 8260B	METHOD BLANK CONC.*	LAB REPORT CONC.*	QA REPORT CONC.*	QA DECISION	FOOT NOTES
GW-4A	496803	Acetone	5.0 U	16	16 J	Negate	2
		Tetrachloroethene	5.0 U	230	230		8
		1,2-Dibromo-3-chloropropane	1.8 J	4.7 JB	4.7 JB	Negate	1
		1,2,4-Trichlorobenzene	1.9 J	4.5 JB	4.5 JB	Negate	1
		1 TIC reported @ RT 21.48	100 J	240 JB	240 JB	Negate	1
		0 TICs remaining.					
GW-4B	496804	Tetrachloroethene	5.0 U	120	120		8
		0 TICs were reported.					
GW-4C	496805	Acetone	5.0 U	6.1	6.1 J	Negate	2
		1 TIC reported @ RT 21.49	130 J	11 JB	11 JB	Negate	1
		0 TICs remaining.					
GW-9A	496806	Acetone	5.0 U	16.0	16 J	Negate	2
		Tetrachloroethene	5.0 U	39	39 J	Qualify	4,5
		1 TIC reported @ RT 21.49	130 J	6.9 JB	6.9 JB	Negate	1
		0 TICs remaining.					
FB-2	496807	Acetone	5.0 U	23	23 J	Qualify	4,5
		0 TICs were reported.					
TB-2	496808	Target analytes were not detected.					
		0 TICs were reported.					

* All concentrations are reported in ug/L

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TARGET and NON-TARGET ANALYTE DATA SUMMARY

SITE NAME: ERIN CLEANERS

SAMPLING DATE: 8/6/2002

LAB NAME: SEVERN TRENT-VERMONT

SAMPLE MATRIX: Groundwater

FIELD ID	LAB ID	VOLATILE ORGANICS by USEPA SW846 Method 8260B	METHOD BLANK CONC.*	LAB REPORT CONC.*	QA REPORT CONC.*	QA DECISION	FOOT NOTES
TB-1	496670	Target analytes were not detected.					
		0 TICs were reported.					
FB-1	496671	Target analytes were not detected.					
		0 TICs were reported.					
GW-1A	496672	Acetone	5.0 U	24	24 J	Qualify	7
		Tetrachloroethene	5.0 U	1.1 J	1.1 J	Qualify	6
		1 TIC reported @ RT 2.53.				Qualify	8
		The non-target data is acceptable.					
GW-1B	496673	Acetone	5.0 U	31	31 J	Qualify	7
		1,1-Dichloroethane	5.0 U	2.2 J	2.2 J	Qualify	6
		Tetrachloroethene	5.0 U	5.1	5.1		
		0 TICs were reported.					
GW-1C	496674	1,1-Dichloroethene	5.0 U	1.2 J	1.2 J	Qualify	6
		Acetone	5.0 U	7.2	7.2 J	Qualify	7
		1,1-Dichloroethane	5.0 U	3.4 J	3.4 J	Qualify	6
		1,1,1-Trichloroethane	5.0 U	1.6 J	1.6 J	Qualify	6
		Tetrachloroethene	5.0 U	18	18		
		1,4-Dioxane	250 U	250 U	250 UJ	Qualify	2
		1 TIC reported @ RT 2.56.				Qualify	8
		The non-target data is acceptable.					
GW-1D	496675	Acetone	5.0 U	3.5 J	3.5 J	Qualify	6,7
		1,1-Dichloroethane	5.0 U	1.8 J	1.8 J	Qualify	6
		1,1,1-Trichloroethane	5.0 U	0.97 J	0.97 J	Qualify	6
		Isobutyl Alcohol	250 U	230 JX	230 J	Qualify	5,6
		1,4-Dioxane	250 U	850 X	850 J	Qualify	3,5
		Tetrachloroethene	5.0 U	6.9	6.9		
		1,2,4-Trichlorobenzene	1.8 J	1.2 JB	1.2 JB	Negate	1
		1 TIC reported @ RT 21.55.	220 J	210 JB	210 JB	Negate	1
		0 TICs remaining.					

* All concentrations are reported in ug/L

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TARGET and NON-TARGET ANALYTE DATA SUMMARY

SITE NAME: ERIN CLEANERS

SAMPLING DATE: 8/6/2002

LAB NAME: SEVERN TRENT-VERMONT

SAMPLE MATRIX: Groundwater

FIELD ID	LAB ID	VOLATILE ORGANICS by USEPA SW846 Method 8260B	METHOD BLANK CONC.*	LAB REPORT CONC.*	QA REPORT CONC.*	QA DECISION	FOOT NOTES
GW-2A	496676	Acetone	5.0 U	6.0	6.0 J	Qualify	7
		1,4-Dioxane	250 U	120 JX	120 J	Qualify	3,5
		1 TIC reported @ RT 2.56.				Qualify	8
		The non-target data is acceptable.					
GW-2B	496677	Acetone	5.0 U	11	11 J	Qualify	7
		3 TICs were reported.					
		RT 21.54	220 J	5.7 JB	5.7 JB	Negate	1
		The remaining non-target data are acceptable.				Qualify	8
GW-2C	496678	Acetone	5.0 U	4.2 J	4.2 J	Qualify	6,7
		Tetrachloroethene	5.0 U	1.1 J	1.1 J	Qualify	4,6
		1 TIC reported @ RT 21.53.	240 J	56 JB	56 JB	Negate	1
		0 TICs remaining.					
GW-5A	496679	Acetone	5.0 U	20	20 J	Qualify	7
		1 TIC reported @ RT 21.54.	240 J	18 JB	18 JB	Negate	1
		0 TICs remaining.					
GW-5B	496680	Acetone	5.0 U	140	140 J	Qualify	7
		2 TICs were reported.					
		RT 21.55	240 J	8.2 JB	8.2 JB	Negate	1
		The remaining non-target data is acceptable.				Qualify	8
GW-5C	496681	Acetone	5.0 U	17	17 J	Qualify	7
		0 TICs were reported.					

* All concentrations are reported in ug/L

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TARGET and NON-TARGET ANALYTE DATA SUMMARY

SITE NAME: ERIN CLEANERS

SAMPLING DATE: 8/6/2002

LAB NAME: SEVERN TRENT-VERMONT

SAMPLE MATRIX: SOIL

FIELD ID	LAB ID	VOLATILE ORGANICS by USEPA SW846 Method 8260B	METHOD BLANK CONC.*	LAB REPORT CONC.*	QA REPORT CONC.*	QA DECISION	FOOT NOTES
S-1	496664	Tetrachloroethene	500 U	7400	7400 J	Qualify	1,5
		All reported non-detects.		U	UJ	Qualify	1
		7 TICs were reported.					
		RT 21.53	4100 J	2300 JB	2300 JB	Negate	4
		The remaining non-target data are acceptable				Qualify	9
S-2	496665	Tetrachloroethene	500 U	13000	13000 J	Qualify	1,5
		All reported non-detects.		U	UJ	Qualify	1
		10 TICs were reported.					
		RT 21.53	4100 J	1900 JB	1900 JB	Negate	4
		The remaining non-target data are acceptable				Qualify	9
S-3	496666	Tetrachloroethene	500 U	5800	5800 J	Qualify	1,5
		All reported non-detects.		U	UJ	Qualify	1
		2 TICs were reported.					
		RT 21.50	4100 J	690 JB	690 JB	Negate	4
		The remaining non-target data is acceptable				Qualify	9
S-4	496667	Tetrachloroethene	500 U	2400	2400 J	Qualify	1,5
		All reported non-detects.		U	UJ	Qualify	1
		0 TICs were reported.					
S-5	496668	Acetone	5.0 U	300	300 J	Qualify	1,7,10
		Methylene Chloride	0.99 J	26 JB	26 JB	Qualify	1,3,7
		2-Butanone	5.0 U	35 J	35 J	Qualify	1,8
		4-Methyl-2-pentanone	5.0 U	11 J	11 J	Qualify	1,8
		Tetrachloroethene	5.0 U	41	41 J	Qualify	1,6
		Acrolein	5.0 U	36 U	36 UJ	Qualify	1,7
		1,2,4-Trichlorobenzene	1.3 J	36 U	36 UJ	Qualify	1,7
		All reported non-detects.		U	UJ	Qualify	1
		3 TICs were reported.					
		RT 21.53	300 J	200 JB	200 JB	Negate	2
		The remaining non-target data are acceptable				Qualify	9
S-6	496669	Tetrachloroethene	500 U	5100	5100 J	Qualify	1,5
		All reported non-detects.		U	UJ	Qualify	1
		0 TICs were reported.					

* All concentrations are reported in ug/Kg

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ATTACHMENT J

BOC GASES

DRAFT

Preliminary Assessment and Site Investigation Reports BOC Gases Riverton Facility Riverton, New Jersey

Prepared for:

BOC Gases
100 Mountain Avenue
Murray Hill, New Jersey 07974

Prepared by:

ATLANTIC
Environmental Consulting Services, L.L.C.
20 Cottonwood Lane
Warren, New Jersey 07059

March 1998

10010.04/002

A-1

Landfill (manmade) and the Meredith Paving property. The natural land surface varies from about 20 feet above mean sea level (MSL) along River Road to about 80 feet above MSL at Union Landing Road. Most of the BOC property lies at 20 feet above MSL.

2.2.4 Geology

Regional Geology

The study area is located within the Coastal Plain physiographic province of New Jersey. This province is characterized by layers of southeasterly dipping unconsolidated sediments, which thicken from the Delaware River toward the Atlantic Ocean. These unconsolidated sediments are composed of sand, gravel, silt and clay.

The Coastal Plain sediments are underlain by bedrock formations of Paleozoic and Pre-Cambrian ages. The bedrock consists primarily of crystalline schist, basalt and gneiss with local occurrences of sandstone and shale.

Site Geology

The Riverton Site is immediately underlain by sediments of the Pennsauken Formation, which is located on bedrock of the Wissahickon Formation. The Pennsauken Formation is composed predominantly of sand, whereas the Wissahickon Formation consists of highly weathered schist (saprolite), weathered schist and competent schist.

The Pennsauken is present beneath the BOC, AFG and Hoeganaes Corporation properties. The PRM underlies the area south of the Riverton site, occurring beneath the southern portion of AFG, the Northwest and Southeast SLI Landfills and the areas south of these landfills. Saprolitic bedrock forms a ridge beneath the southern portion of the AFG property, which traverses the site in an east-west direction. This bedrock ridge significantly influences the direction of groundwater flow. The significance of the bedrock ridge and its relationship to the site's hydrogeology is discussed in detail in Section 2.2.5 Hydrogeology.

The stratigraphic information obtained during numerous subsurface investigations was reviewed (e.g., Geraghty & Miller, 1983 and 1985; CDM, 1989; GeoSyntech, 1992; Golder, 1994; and Rust, 1996) to assess the site geology. Based on this review, the Pennsauken consists mainly of sand, with minor amounts of gravel and silt, whereas the PRM is composed predominantly of medium to coarse sands with intervening clay layers found at varying depths and thickness. The saprolite and weathered schist are encountered at elevations ranging from +25 feet mean sea level (msl) (beneath the Pennsauken) to -200 feet msl (beneath the PRM).

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Geologic cross sections were prepared using data from the aforementioned subsurface investigations to visualize the subsurface nature of the site and to assist in determining potential pathways for contamination migration. The location of these cross sections (A-A', B-B', C-C' and D-D') are shown in Figure 2-2. Cross sections A-A', B-B', C-C', D-D', E-E', F-F' and G-G' (Figures 2-3 through 2-9, respectively) are representative of the Pennsauken and PRM geology and show that these formations are predominantly comprised of sand. Further, these cross sections verify the general absence of clay layers within the Pennsauken and the intermittent presence of clay layers within the PRM. However, the clay layers within the PRM are not continuous, are localized in extent and are surrounded by sand and/or gravel deposits.

The cross sections in Figures 2-3 through 2-9 show that the localized clay lenses are surrounded by sand and gravel which transmit groundwater more readily than the clay lenses. Groundwater flows almost exclusively within these sand and gravel sediments, with virtually no groundwater flow occurring within the clay lenses. Accordingly, the presence of these clay lenses within the PRM does not significantly alter the PRM's area-wide southerly groundwater flow direction. Based on the geology of the PRM shown in Figures 2-3 through 2-9, the presence of the clay lenses does not funnel groundwater in a direction different from the area-wide southerly groundwater flow direction.

The Site geology as shown in the geologic cross sections (Figures 2-3 through 2-9) corroborates the findings of previous investigations. Geraghty & Miller (1985) concluded that the clay within the PRM is not continuous and is absent in areas beneath the SLI landfills. GeoSyntech (1992) concluded that the Pennsauken consisted of sand and gravel (no clay layers) and that the SLI landfills were underlain by a shallow and a deep clay layer which were not continuous. Golder (1994) concluded that the Pennsauken rarely contained clay layers, but they identified three major clay layers within the PRM (20 clay, 0 clay and -10 clay), which were named based on the mean sea level elevation at which each clay was detected. Golder also stated that these three clay layers were not continuous within the PRM. RUST (1996) identified three clay layers within the PRM (30 foot clay, 20 foot clay and 0 foot clay) which they concluded were not continuous and were not areally extensive.

2.2.5 Hydrogeology

Regional Hydrogeology

The Site is located within outcrops of the Pennsauken and PRM Formations, which are part of the New Jersey Coastal Plain Aquifer System. As a hydrogeologic unit, the Pennsauken is considered part of the Kirkwood-Cohansey aquifer system (Rosman et al.,

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1988), although it is not used as a major aquifer in the vicinity of the Site. The PRM is a major aquifer of the Coastal Plain system. It consists of three aquifers (upper, middle and lower) which have generally been combined and described as a single aquifer because each unit is lithologically indistinguishable from the other (Gill and Farlekas, 1976; Zapecza, 1984). Additionally, Barksdale et al. (1958) considered each of the PRM's three aquifers to be interconnected on a regional scale, although each aquifer may be separated from the other on a local scale.

Groundwater pumped from the PRM aquifer provides a major source of water for public supply in New Jersey. Due to the withdrawal of this groundwater, the potentiometric surface of the PRM has declined, and large cones of depression have formed in this surface where major groundwater withdrawals occur. The presence of these cones of depression alters the groundwater flow direction within the PRM by changing the hydraulic gradient and inducing flow toward the pumping area. A large cone of depression has formed in the PRM aquifer beneath Camden County, where water levels in the PRM declined up to 17 feet from 1983 to 1988 (Rosman et al., 1988).

Groundwater within the PRM aquifer flows toward the south-southeast, which is in the direction of the cone of depression located at Camden County. Previous investigations by Perkins Jordan, Inc. (1983), the United States Geological Survey (USGS) (1983 and 1988) and GeoSyntech (1991) also concluded that regional groundwater flow with the PRM was toward the south-southeast. GeoSyntech (1991) documented that water from the Delaware River serves to recharge the cone of depression induced by the withdrawals from the PRM. The groundwater flow direction (see Figure 2-10) within the Pennsauken/saturated PRM was evaluated by creating groundwater contour maps. Only water level data from wells that were screened discretely within the Pennsauken/saturated PRM formation were used. The groundwater elevation data were Kriged to generate contours of equipotential lines.

Site Hydrogeology

The Wissahickon bedrock, the PRM aquifer and the Pennsauken aquifer are the three main hydrogeologic units of interest in the area. The east-west trending saprolitic bedrock ridge, located beneath the southern portion of the AFG property, is a major hydrogeologic feature at the site which influences groundwater flow direction and contamination migration pathways. This ridge serves as a low permeability boundary and separates radial flow in the Pennsauken aquifer on the north side of the ridge (toward the Delaware River), from the south-southeast flow in the PRM aquifer on the south side of the ridge (toward the Camden County cone of depression). Clay layers within the unsaturated PRM create perched groundwater conditions, and groundwater from these perched areas infiltrates to the saturated PRM.

J-4

As demonstrated by the findings of prior investigations and as shown in the geologic cross-sections (Figures 2-3 through 2-9), the Pennsauken Formation underlying the Property does not contain clay layers or perched groundwater conditions. This means that if there is contamination beneath BOC's property, it will migrate downward until it reaches the water table within the Pennsauken. The groundwater beneath the Property is not hydraulically connected to the perched water zones beneath the SLI Landfills. Groundwater from BOC flows south within the Pennsauken Formation (to the west of the SLI Landfills) where it discharges to the PRM Formation. Once groundwater from BOC enters the PRM Formation, it continues flowing west of the study area in a southerly direction toward the vicinity of Wallace Boulevard and Industrial Highway.

PRM Hydrogeology

The PRM aquifer is a semi-confined to locally unconfined, undifferentiated aquifer, which overlies bedrock south of the site and has a gentle hydraulic gradient to the south. This gradient is consistent with regional observations of groundwater flow in this aquifer (Perkins Jordan, 1983; USGS, 1983 and 1988; GeoSyntech, 1991) and indicates that the cone of depression present beneath Camden County influences this flow. The PRM is recharged by precipitation and by groundwater from the Pennsauken that flows to the east and west of the bedrock ridge.

The geologic information and cross sections (Figures 2-3 through 2-9) discussed in Section 2.2.4 were evaluated to determine whether a preferential pathway existed that would channel groundwater within the PRM in a direction differing from the area-wide groundwater flow direction. There are no data demonstrating that the geology of the saturated PRM and/or the presence of the clay layers within the unsaturated PRM act as conduits which preferentially funnel groundwater along flow paths differing from the southerly flow direction of the PRM aquifer in the vicinity of the site.

2.2.6 Environmental Resources

The New Jersey American Water Company derives a portion of its water supply from the PRM aquifer in the general vicinity of the site. The NJAWC and the Riverside Country Club operate several groundwater pumping wells in the Cinnaminson area. NJAWC pumping wells were identified at three locations: Leon Avenue (Well 19, also referred to as Well 5 - 146), Pomona Road (Wells 10 and 12, i.e., 5 - 125), and New Albany Road (Wells 23 and 24, i.e., 5 - 127). The pumping rates for these wells are seasonal, varying from non-operation up to 700 gpm. Additionally, the Riverside Country Club has two wells that are pumped for water to irrigate their golf course. Thus the condition of the aquifer is a significant consideration.

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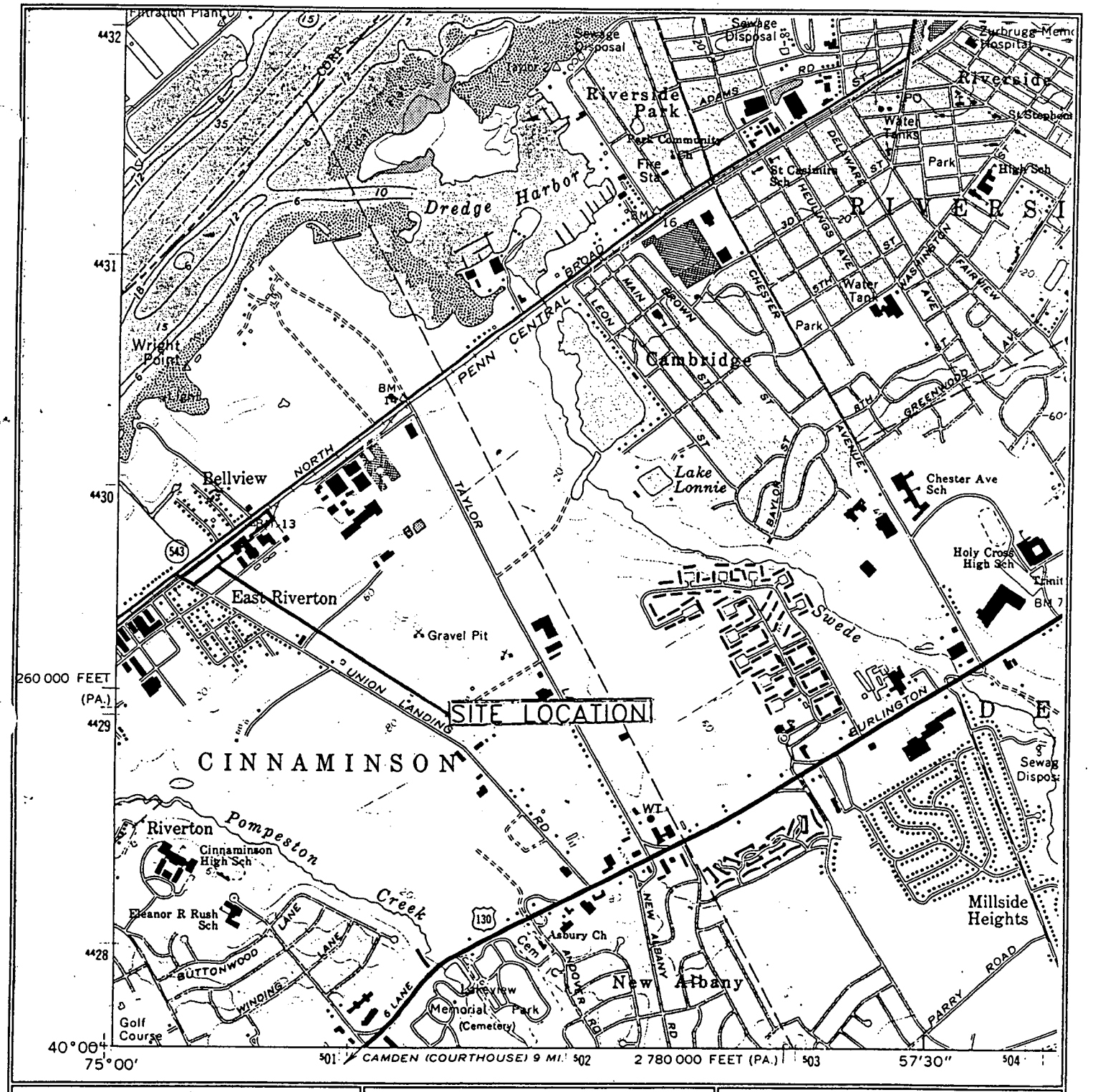

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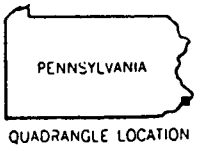
RIVERTON, NEW JERSEY
7.5 MINUTE BEVERLY QUADRANGLE
BURLINGTON COUNTY, NJ



QUADRANGLE LOCATION

SCALE 1:24000

FIGURE 2-1
SITE LOCATION MAP
BOC GASES
RIVERTON FACILITIES
RIVER & UNION LANDING ROADS
RIVERTON, NEW JERSEY

ATLANTIC
ENVIRONMENTAL CONSULTING SERVICES, L.L.C.

PROJECT NUMBER: 10010.04/002

PREPARED BY: CC

REVIEWED BY: TRH DATE: 3/2/98

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