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GEI Consultants, Inc.

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**HAZARDOUS MATERIALS INVESTIGATION  
SAXTONS RIVER, VERMONT**

Submitted to  
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Vermont Agency of Natural Resources

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Project 90379  
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## EXECUTIVE SUMMARY

GEI Consultants, Inc. (GEI) entered into contractual agreement with the State of Vermont Agency of Natural Resources (ANR) on October 12, 1990 to conduct a hazardous materials investigation in the Village of Saxtons River, Vermont. The purpose of this investigation is to collect information relative to the following: location and chemical composition of the source of the non-petroleum contaminant plume; identity and concentration of the chemicals causing the contamination; lateral and vertical extent of the non-petroleum constituent contaminant plume based on ground water sampling points; direction in which the contamination is spreading and its estimated rate of movement; identity and location of potential receptors, both environmental and human.

The scope of the investigation included Background Research (Contract Task 1), preparing a Site Safety Plan (Contract Task 2), a Preliminary On-Site Investigation (Contract Task 3), an On-Site Investigation (Contract Task 4), collecting elevation and water level measurements (Contract Task 5), and preparing a Final Technical Report (Contract Task 6). The Preliminary On-Site Investigation included site history research, bedrock mapping, aerial photograph analysis, and geophysical surveys.

Based on the results of the Preliminary On-Site Investigation, three potential source areas of non-petroleum ground water contamination were identified:

- The Tenney Hardware Store (Lot 67), a former Texaco Service Station which may have used solvents in the degreasing and cleaning of engine parts and vehicle parts.
- The Pizza, Paul and Mary restaurant (Lot 69), formerly a laundromat containing one dry cleaning machine which may have used perchloroethylene (Perc), one of the chemicals detected in ground water samples collected in the Village of Saxtons River.
- The former Moore apartment building (Lot 37) was destroyed by a fire of suspicious origin in 1979. According to reports from local residents of the Village, chemicals may have been stored in the basement of the building at the time of the fire.

Photolineament analysis completed by GEI detected two major lineaments trending through the site. One north/south trending lineament projects directly through the site area in the vicinity of the Pizza, Paul and Mary restaurant. An east/west lineament also projects through the site area running just south of Main Street. Geophysical surveys (electromagnetic) completed by GEI indicated a major anomaly indicative of a water bearing fracture along four of the five geophysical profiles performed by GEI. The fracture indicated by these anomalies coincides with the location of the major north/south trending lineament. The residential bedrock wells which have been found by the ANR to contain contamination appear to be located along the two major lineaments in the site area.

GEI's Site Investigation summarized in this document included:

- Collecting soil samples from potential source areas and testing them for volatile organic chemicals (VOCs).
- Examining potential source areas of non-petroleum ground water contamination by installing three overburden ground water monitoring wells and one boring, and sampling and testing ground water for VOCs.
- Locating bedrock fractures which may be acting as conduits for contaminated ground water movement in the bedrock aquifer by drilling two bedrock wells in areas identified by photolineaments and geophysical anomalies which potentially contain significant bedrock fractures, and sampling and testing ground water for VOCs.

Two potential sources areas of ground water contamination were indicated by the analytical data collected during this study. Soils contaminated with Perc (9 to 440 ppb) appear to exist in the basement of the Pizza, Paul, and Mary restaurant. Based on the soil samples collected, the extent of residual soil contaminated with Perc in the basement of the Pizza, Paul, and Mary restaurant appeared to be limited in area. The liquid contained in a tank labeled "Perk Chemical Co." located in the basement of the Pizza, Paul, and Mary restaurant was confirmed by both GEI and the ANR by gas chromatography/ mass spectroscopy (EPA Method 624) to be Perc.

Petroleum-contaminated soils appear to exist in the basement of the Tenney Hardware Store. Petroleum hydrocarbons were detected in soils from the basement of the Tenney Hardware Store (1,000 ppb) in soils from B1 (50,000 ppb) located in front of the Tenney Hardware Store. Previous activities at this site associated with the former Texaco service bays and/or underground storage tanks may be a source of petroleum contamination in this area.

Perc was not detected in the ground water from the overburden well MW1 located cross- and potentially up-gradient of the Pizza, Paul, and Mary restaurant. Perc was detected at low levels (5 ppb) in ground water from MW3, located downgradient from the Pizza, Paul, and Mary restaurant. Based on the analytical data collected for this study and the ANR residential well sampling data, it appears that the most significant pathway of Perc migration at the site is through fractured bedrock. However, Perc was not detected in the bedrock monitoring wells BRX1 and BRX2 installed for this study. This may indicate that Perc is migrating through deeper fractures encountered in the residential wells, which range from 200 to 500 feet in depth. However, given the low levels detected in the study area, BRX1 and BRX2 may require substantially more pumping before Perc is detected.

The presence of Perc identified in the bedrock residential wells and the low levels of Perc detected would likely make ground water remediation by pump and treat technologies technically difficult and cost-prohibitive. It is GEI's opinion, based on data collected during this study, that the levels and extent of soil contamination in the basement of the Pizza, Paul and Mary restaurant do not warrant removal at this time. Levels of Perc

contamination would be expected to decrease overall with time. However, additional soil sampling with depth is recommended. If significantly higher levels of contamination are detected with further sampling, soil remediation may be warranted. Soil remediation could include soil removal and/or soil venting with vapor extraction techniques. GEI recommends that ground water sampling of residential wells in the study area be continued.

Evaluating the location and extent of petroleum-contaminated soils or the extent of petroleum contamination of ground water was beyond the scope of this investigation. GEI recommends that this potential source area of petroleum contamination be included in the on-going study of petroleum contamination in the study area.

## TABLE OF CONTENTS

EXECUTIVE SUMMARY  
TABLE OF CONTENTS  
LIST OF FIGURES  
LIST OF APPENDICES

	Page No.
1. INTRODUCTION	1
2. PRELIMINARY ON-SITE INVESTIGATION	3
2.1 Background	3
2.2 Site History Research	4
2.3 Bedrock Geologic Mapping	4
2.4 Fracture Trace Analyses	5
2.5 Geophysical Investigation	6
2.6 Findings of the Preliminary On-Site Investigation	6
3. SITE INVESTIGATION	8
3.1 Soil Sampling Program	8
3.2 Boring and Monitoring Well Program	9
3.3 Surveying and Water Level Measurements	12
3.4 Ground Water Sampling Program	13
3.5 Perchloroethylene Tank Removal	13
4. SUBSURFACE CONDITIONS	14
4.1 Generalized Subsurface Conditions	14
4.2 Hydraulic Conductivity Estimates	15
4.3 Ground Water Flow	16
5. ANALYTICAL RESULTS	17
5.1 Soil Sampling	17
5.2 Ground Water Sampling	18
5.3 Residential Well Sampling	18
5.4 Tank Sampling	18
6. DISCUSSION AND RECOMMENDATIONS	19
7. LIMITATIONS	22
TABLES	
FIGURES	
APPENDICES	

## **LIST OF TABLES**

- 1 - Water Level Measurements
- 2 - Soil Analytical Results
- 3 - Aqueous Analytical Results

## **LIST OF FIGURES**

- 1 - Site Location Map
- 2 - Mapped Bedrock Outcrop Locations
- 3 - Photolineament Map
- 4 - Sketch of Hand Auger Locations - Basement Pizza, Paul and Mary
- 5 - Sketch of Hand Auger Locations - Basement Tenney Hardware Store
- 6 - Site Plan

## **LIST OF APPENDICES**

- APPENDIX A - Summary of Preliminary Site History Investigation
- APPENDIX B - Aerial Photographs
- APPENDIX C - Geophysical Survey Data
- APPENDIX D - Drillers Logs and GEI Well Installation Reports
- APPENDIX E - Hydraulic Conductivity Estimates
- APPENDIX F - GEI and VTANR Analytical Results
- APPENDIX G - VTANR Analytical Results from Residential Wells in Study Area

## 1. INTRODUCTION

GEI Consultants, Inc. (GEI) entered into contractual agreement with the State of Vermont Agency of Natural Resources (ANR) on October 12, 1990 to conduct a hazardous materials investigation in the Village of Saxtons River, Vermont. The purpose of this investigation is to collect information relative to the following:

1. Location and chemical composition of the source of the non-petroleum contaminant plume;
2. Identity and concentration of the chemicals causing the contamination;
3. Lateral and vertical extent of the non-petroleum constituent contaminant plume, based on ground water sampling points;
4. Direction in which the contamination is spreading and its rate of movement;
5. Identity and location of potential receptors, both environmental and human.

The scope of the investigation included Background Research (Contract Task 1), a Preliminary On-Site Investigation (Contract Task 3) and an On-Site Investigation (Contract Task 4).

The Preliminary On-Site Investigation included site history research, bedrock mapping, aerial photograph analysis, and geophysical surveys.

The On-Site Investigation included:

- Collecting soil samples from potential source areas and testing them for volatile organic chemicals (VOCs).
- Examining potential source areas of non-petroleum ground water contamination by installing three overburden ground water monitoring wells, and sampling and testing ground water for VOCs.
- Locating bedrock fractures which may be acting as conduits for contaminated ground water movement in the bedrock aquifer by drilling two bedrock wells in areas identified by photolineaments and geophysical anomalies which potentially contain significant bedrock fractures. Sample and test ground water for VOCs.
- Estimating specific yields of individual fractures during drilling of bedrock wells by blow testing the significant fractures encountered.
- Estimating the in-situ hydraulic conductivity of the surficial aquifer by performing falling head conductivity tests during drilling of overburden wells.

This document is GEF's Final Technical Report (Contract Task 6) for the Saxtons River investigation. It contains a summary of the findings from the Background Research, Preliminary On-Site Investigation and Site Investigation including site history, results of geophysical investigation, subsurface exploration information, and analytical results from soil and ground water quality sampling.

Work on this project was conducted by Joanne O. Morin (Project Manager), Christopher Covell (Geologist), and Joanne McLaughlin (Geologist).

## 2. PRELIMINARY ON-SITE INVESTIGATION

### 2.1 Background

The site is the Village of Saxtons River, which is an incorporated village of the Town of Rockingham, Vermont (Figure 1). The Village is located on the terraces of the Saxtons River which flows generally east where it enters the Connecticut River in Bellows Falls, Vermont.

The terrain in the site area varies from level river terraces immediately south and north of the River to steep slopes between terraces. Bedrock outcrops can be seen below the bridge on Hartley Hill Road and throughout the river bed. Bedrock also outcrops along the valley walls to the north along Pleasant Street and in the fields of the Vermont Academy to the north. The Village is densely populated with residential properties, small businesses, and shops. Property parcels within the Village average approximately 100 feet by 200 feet, with the majority of residences located off Main Street and the majority of businesses located along Main Street. The Village has no public water supply, but a public sewer system was completed in 1972. Prior to 1972, the waste was disposed directly into the River.

During July of 1989, Mrs. Bertha King (Lot 39) of Saxtons River, Vermont notified the Vermont Health Department of a gasoline odor from her water. On July 20, 1989 the State of Vermont's Health Department analyzed a sample of Mrs. King's water and detected low levels of hydrocarbons. The Petroleum Management Section (Petroleum Section) of the ANR was then notified and on August 22, 1989, Mrs. King's water was resampled and analyzed. Benzene, toluene, ethylbenzene, and xylene (BTEX) compounds were detected in the well water at levels higher than the Safe Drinking Water Act (SDWA) Maximum Contaminant Levels (MCLs).

The Petroleum Section expanded their sampling program to include other homes surrounding the King residence and found additional wells with BTEX contamination. The source was suspected to be leaking underground storage tanks (USTs) at the Sunoco gas station abutting the King residence. Tri-S Environmental Consultants of Brattleboro, Vermont was contracted by A.R. Sandri, owner of the Sunoco Station, to investigate and remediate the source of the BTEX contamination. Wells which have or have had BTEX contamination were identified in the ANR files as the Skovinski residence; King residence; Crispe residence (family housing); A. Smith; Pizza, Paul and Mary; Mortensen; A.R. Sandri; Smith; Fletcher; Kimball; and Trulow.

The sampling of local water wells in Saxtons River by ANR's Petroleum Section on September 26, 1989 determined that the Skovinski well also contained the chemical perchloroethylene (Perc). After further investigation by the ANR Petroleum Section, it was determined that a number of other residential water supplies in the Village were contaminated with Perc. ANR's Petroleum Section then transferred the handling of the case to ANR's Hazardous Sites Management Section for further investigation.

Initial review of the files by the ANR indicated that the suspect chemical contamination may be originating in the basement of the Pizza, Paul and Mary restaurant located at the corners of Main Street and School Street. Historical information indicates that the building which houses the restaurant (Lot 69, Tax Map U-13) used to house a laundromat which contained dry cleaning equipment that may have utilized Perc.

During a visit to the site, Mr. Richard Spiese of the ANR's Petroleum Section was shown a tank in the basement of the Pizza, Paul and Mary restaurant by Mr. Paul MacIntire, current owner of the property. The tank was allegedly located below the old dry cleaning equipment and was labeled "Perk Chemical Co., 217 South First Street, Elizabeth, New Jersey, 07206." This tank was suspected to contain perchloroethylene.

## **2.2 Site History Research**

As part of the Preliminary On-Site Investigation, GEI Consultants, Inc. (GEI) reviewed Town files, conducted interviews with residents owning contaminated wells, and conducted interviews with the Town's health officer, zoning and planning departments, assessor's office and fire chief. GEI also conducted interviews with people who were familiar with the Town's history and land use. GEI attempted to conduct interviews with property owners of Lots 69, 67, 68, 78 and 37 from Tax Map U-13. These properties include: The Pizza, Paul and Mary restaurant (location of the former laundromat)(Lot 69); an abutting property to the laundromat which formerly contained a gasoline station and engine parts store (Lot 67); an abutting property to the laundromat which contains a crafts store (Lot 68); an abutting property to the laundromat which contains the Contel Telephone Corporation (Lot 78); and an empty lot (Lot 37) in-between the laundromat and the contaminated wells (reportedly a previously existing building on this lot burned and its foundation was filled with debris of unknown origin). The locations of all of these properties are expected to be upgradient of the contaminated residential water supply wells identified by the ANR and near the suspected source area of the contamination. The results of the site history research were presented in the Site Investigation Work Plan. The summary of the information collected is presented in Appendix A.

## **2.3 Bedrock Geologic Mapping**

GEI conducted one day of bedrock mapping on October 18, 1990. Mapping was performed at three outcrops in the vicinity of the site (Figure 2). Outcrop A is located in the Village of Saxtons River downstream of the Hartley Hill Road. Outcrop B is

located along the southern bank of Saxtons River downstream of Outcrop A. Outcrop C is located north of the village, approximately 1/2 mile along the eastern embankment of Pleasant Street. Bedrock mapping results were presented in the Site Investigation Work Plan. The results of the bedrock mapping indicated two predominant joint systems: a north/south striking system which dips steeply east and an east/west striking system dipping steeply north and south.

As reported in the Site Investigation Work Plan, the Geologic Map of Vermont (1961) indicated bedrock in the Village of Saxtons River consists of the Standing Pond Volcanics member of the Waits River Formation, which is an amphibolite garnet schist, and the Gile Mountain formation, which is a quartz muscovite phyllite schist. At this location, the Gile Mountain formation is stratigraphically below the Standing Pond Volcanics member. Generally this area is considered to be on the west flank of the Brattleboro syncline and the major structural features in the area trend North/South.

#### **2.4 Fracture Trace Analyses**

During initial background research, GEI performed remote sensing analyses of the site as a reconnaissance tool for identifying potential bedrock discontinuities which could affect ground water flow and contaminant transport in the bedrock aquifer at the site.

GEI analyzed aerial photographs and other imagery to identify linear surface features (lineaments) that could be related to bedrock fractures or faults that are potentially water-bearing. These analyses were performed by visual methods using three sets of photographs obtained from EROS Data Center in Sioux Falls, South Dakota:

1. Medium altitude color infrared stereo photographs, scale 1:58,000
2. Medium altitude black and white stereo photographs, scale 1:80,000
3. High altitude black and white stereo photographs, scale 1:8,000,000 (Space Shuttle Large Format camera)

GEI compared the orientation of photolineaments with the bedrock mapping data to evaluate and rank the photolineaments with regard to significant contaminant migration pathways.

GEI observed two photolineament patterns during review of aerial photos (Figure 3). One lineament pattern trends 10 degrees  $\pm$  due north. This lineament trend is considered the primary fracture pattern for the region. A secondary lineament pattern trending more or less east/west was also observed (Figure 3). Two distinct lineaments pass through the Village of Saxtons River. Most important is a primary north/south trending lineament which passes through the center of town in the vicinity of Main Street. A second lineament trends east/west and is also located through the center of town just

south of Main Street. Due to expected interference from cultural features (e.g., power lines, underground piping, etc.), GEI could not perform a geophysical survey to identify the east/west trending lineament. Geophysical surveys were conducted during the Preliminary On-Site Investigation north and south of the center of town to examine the major north trending lineament.

## **2.5 Geophysical Investigation**

GEI conducted geophysical surveys utilizing an ABEM WADI (WADI) electromagnetic instrument. Based on interpretation of aerial photographs, GEI selected locations north and south of the Village of Saxtons River to perform five geophysical lines of exploration along portions of the north/south trending lineaments (Lines 100, 200, 300, 400 and 500). Geophysical lines were laid out using hip-chain (a type of measuring tool for distance) and compass bearings from known features. Readings were collected on November 20 and 21, 1990 at spacings of 10 meters along each geophysical line.

As presented in the Site Investigation Work Plan, significant anomalies were detected along survey lines 100, 200, 400 and 500. WADI output for these lines are shown in Figures B2, B3, B4, B5 and B6, respectively included in Appendix C. The strongest anomalies were measured along Line 400 in the Village of Saxtons River. The most significant anomaly was located at Station 185 meters (indicates station was 185 meters from beginning of line). Further reduction of this data presented in Figure B7 and B8 (further interpretation using the software program SECTOR) further confirms the anomaly. This anomaly could be the subsurface expression of the north/south photolineament identified in the aerial photographs for the site and may indicate a water bearing fracture. It also appears this anomaly may indicate a near vertical contact zone between the Standing Pond Volcanics member of the Waits River formation and the Gile Mountain formation. This contact is clearly evident on the Bedrock Geologic Map of Vermont (1961) and is believed to be the result of folding which occurred during the formation of the Brattleboro Syncline. The Village of Saxtons River is located on the western flank of this feature.

## **2.6 Findings of the Preliminary On-Site Investigation**

Based on the results of the site history investigation presented in Appendix A, three potential source areas of non-petroleum ground water contamination were identified:

- The Tenney Hardware Store (Lot 67), a former Texaco Service Station which may have used solvents in the degreasing and cleaning of engine parts and vehicle parts.
- The Pizza, Paul and Mary restaurant (Lot 69), formerly a laundromat containing one dry cleaning machine which may have used Perc, one of the chemicals detected in ground water samples collected in the Village of Saxtons River.

- The former Moore apartment building (Lot 37) was destroyed by a fire of suspicious origin in 1979. According to reports from local residents of the Village, chemicals may have been stored in the basement of the building at the time of the fire.

Other significant findings of the Preliminary On-Site Investigation were:

- Review of past information indicated ground water flow in the site area surficial aquifer is generally southeast. Surficial deposits are highly permeable sands and gravel of alluvial origin.
- Bedrock mapping completed by GEI indicated two major sets of joint systems: a predominant system with a north/south strike and a steep easterly dip, and an orthogonal system with an east/west strike with a steep southerly dip.
- Photolineament analysis completed by GEI detected two major lineaments trending through the site. One north/south trending lineament projects directly through the site area in the vicinity of Pizza, Paul and Mary restaurant. An east/west lineament also projects through the site area running just south of Main Street.
- Geophysical surveys (electromagnetic) completed by GEI indicated a major anomaly indicative of a water bearing fracture along four of the five geophysical profiles performed by GEI. The fracture indicated by these anomalies coincides with the location of the major north/south trending lineament.
- The residential bedrock wells which have been found by the ANR to contain contamination appear to be located along the two major lineaments in the site area.

### 3. SITE INVESTIGATION

#### 3.1 Soil Sampling Program

##### Pizza, Paul and Mary Restaurant

GEI collected soil samples from the basement of the Pizza Paul & Mary restaurant and from the basement of Tenney Hardware Store on March 7, 1991. Soil sampling was not conducted at the locations behind these properties as originally planned in the Site Investigation Work Plan. This decision was made jointly, in the field, by GEI and the ANR representative in order to concentrate efforts in the basements where potential source areas were suspected.

Shallow borings were advanced with a hand auger in the basements of both buildings to a maximum depth of approximately 24 inches. Borings were not advanced to 5 feet as planned due to the presence of significant amounts of cobbles and boulders. Hand auger locations were chosen based on historical information obtained during the Preliminary On-Site Investigation and locations of stained surface soils. Volatile organic chemical vapors were measured with an HnU photoionization detector (PID) in the boring as it is advanced. When elevated PID readings were measured, soil was removed with the hand auger and placed in 40-ml glass vials with Teflon<sup>R</sup> septum-lined screw caps.

Nine (9) borings were advanced with an hand auger in the basement of the Pizza, Paul and Mary restaurant (Figure 4). Boring PM1 was advanced at the original location of the Perc tank associated with the previous dry-cleaning operations. At the time of sampling, the Perc tank was located approximately 10 feet north of this location. Borings were then advanced approximately 5 feet north, west, and south from PM1. Due to the cement cistern located just east of PM1, boring PM5 was advanced less than 5 feet away (eastern direction). Two borings (PM6 and PM7) were advanced in the southern portion of the basement which were expected to downgradient of the suspected source area. Boring PM9 was advanced at a location expected to be upgradient (background location). PID readings ranged from 0 parts per million (ppm) in PM9 (background) to 2 ppm in PM5 (suspected source area).

GEI submitted two soil samples from the basement of the Pizza, Paul, and Mary restaurant to Eastern Analytical Incorporated (EAI) of Concord, New Hampshire for VOC analysis by EPA Method 8240. Samples were selected on the basis of PID readings for each boring. PID readings are presented on Figure 4. Soil was collected from an approximate depth of 7 inches in PM1 and from an approximately depth of 21 inches in PM5. GEI also submitted three (3) soil samples to the ANR representative for VOC analysis (EPA Method 8240) by the ANR laboratories. These samples included soil collected from approximately 12 inches in PM1, and soil collected from approximately 12 and 23 inches in PM5.

### Tenney Hardware Store

The original scope of the investigation did not include borings in the basement of Tenney Hardware Store. During GEI's drilling program, analytical data provided by Tri-S Consultants indicated that Perc had been detected in soil samples collected from AR6 located in front of the Tenney Hardware Store. Due to the past use of the property for auto repairs and the new analytical data, GEI and the ANR conducted additional soil sampling in the basement of the Tenney Hardware Store. Four borings were advanced with a hand auger in the basement after the concrete floor had been penetrated with a hammer (Figure 5). The borings were screened with a PID and advanced to a maximum depth of 18 inches. Boring TH1 was advanced at location suspected to be downgradient within the previous 2-bay garage. Three additional borings were advanced west and north of TH1 to examine extent of potential contamination. PID readings ranged from 11 ppm in TH2 and TH3 to 25 ppm in TH1.

GEI submitted two soil samples from the basement of the Tenney Hardware Store to EAI of Concord, New Hampshire for VOC analysis by EPA Method 8240. Samples were selected on the basis of PID readings. PID readings for each boring are presented on Figure 5. Soil was collected from a depth of 18 inches in TH1 and from a depth of 13 inches from TH4. GEI also submitted 4 soil samples to the ANR representative for VOC analysis (EPA Method 8240) by the ANR laboratories. These samples included soil collected from 8 and 14 inches in TH1, and soil collected from 9 and 15 inches in TH4.

The hand auger was decontaminated between borings with methanol and distilled water rinses. Samples were stored on ice in a cooler until delivery to EAI. Chain-of-custody documentation was maintained.

### **3.2 Boring and Monitoring Well Program**

Five ground water monitoring wells (MW1, MW2, and MW3; BRX1 and BRX2) and one boring (B1) were installed for this study (Figure 6). In addition, GEI observed the drilling of a bedrock residential water supply well on the King residence (Lot 39) on December 11, 1990 by Wragg Brothers of Ascutney, Vermont. The King bedrock well was installed under the supervision of Tri-S Consultants as a part of the investigation of the petroleum contamination in the area. The driller's logs for the three overburden wells and the boring, GEI well installation reports and GEI bedrock well logs (including the King bedrock well) are presented in Appendix D.

The original scope of the investigation included three overburden wells and two bedrock wells. An additional boring was drilled adjacent to existing monitoring well AR6 (installed previously by Tri-S Consultants), located in front of the Tenney Hardware Store. Analytical data provided by Tri-S Consultants during GEI's drilling program indicated that Perc had been detected in soil samples collected from AR6. These data are provided in Appendix F.

The rationale for each well location was as follows:

Overburden Wells:

- MW1:
- potential source area
  - located near the southeast corner of the Tenney Hardware Store
  - former underground storage tank (UST) location
  - no confirmation that UST was removed
  - former garage may have used solvents as degreasers
  - suspected to be upgradient of known contaminated residential wells
- MW2:
- potential source area
  - located near the southeast corner of Pizza, Paul and Mary restaurant
  - former laundromat containing dry cleaning equipment which used Perc
  - suspected to be upgradient of known contaminated residential wells
- MW3:
- located near the former Moore apartment building, which is now a vacant lot
  - suspected to be upgradient of known contaminated residential wells
  - suspected to be downgradient of MW1 and MW2
  - Fire of suspicious origin destroyed the building in 1979; local residents allege that chemicals may have been stored in basement

Borings

- B1:
- located in front of Tenney Hardware Store along Main Street adjacent to the previously installed well AR6
  - analytical data information obtained from Tri-S Consultants indicated concentrations of Perc in soils collected from AR6

Bedrock Wells

- BRX1:
- located on the Simonds property south of River Road and north of the Saxtons River
  - location of well is on north/south trending lineament identified in photolineament analysis
  - location of significant geophysical anomaly indicating water bearing fracture
  - well may intercept fractures which could provide a pathway for contaminant migration in bedrock to contaminated water supply wells

- BRX2:
- located along the Right-of-Way in Lot 31/25 of the Christ Church
  - recent sampling by the ANR indicates that contamination is migrating in an easterly direction, consistent with an east/west striking joint system which may provide a pathway for contaminant migration in bedrock parallel to the river

Borings for overburden wells were advanced until reaching refusal with 6-5/8 ID hollow stem augers. Split-spoon soil samples were obtained at a minimum of 5-foot intervals from each boring for visual classification and headspace screening for VOCs vapors using a PID. Soil descriptions followed the method of the Unified Soil Classification System. The split-spoon sample barrel was rinsed with methanol and distilled water between each sample. All down-hole drilling equipment was steam-cleaned prior to drilling each well.

GEI placed a portion of the following split-spoon soil samples in 40-ml vials and submitted them to the ANR representative for VOC analysis (EPA Method 8240) by the State laboratory:

<u>Boring/Well</u>	<u>Depth (ft.)</u>
B1	1-3
B1	3-5
B1	5-7
B1	7-9
B1	9-11
B1	11-13
MW1	0-2
MW1	5-7
MW2	0-2
MW2	5-7
MW3	0-3
MW3	5-7
MW3	15-17
MW3	20-22
MW3	25-27

GEI also placed a portion of the split-spoon sample from 9 to 10 feet in B1 in a 40-ml vial and submitted it to EAI for VOC analysis by Method 8240.

The monitoring wells installed in the overburden borings consist of 2-inch ID Schedule 40 PVC and well screen (0.010-inch slots). The PVC was steam cleaned in the field prior to installation. The annular space around the slotted section of the well was backfilled with an Ottawa sand filter. Bentonite seals were installed at the top of each sand pack and at the surface of each well. Protective locking standpipes or road boxes were installed at each location. Upon completion of the installation of each monitoring well, the previous screen section of the well was developed by surging or water jetting.

Upon the completion of borings and well installation, falling head hydraulic conductivity tests were performed in MW1 and MW3. MW2 was dry at the time of testing. Analysis of the data indicated that the hydraulic conductivity estimates were inaccurate due to the extension of the well screens above the water table. Therefore, a rising head hydraulic conductivity test was performed in MW3 on April 6, 1991 by removing a bailer-full of water. MW1 and MW2 were dry at the time of this additional testing.

The bedrock wells were drilled with a rotary rig until a significant fracture was encountered based on blow tests. BRX1 and BRX2 were advanced to 140 feet and 120 feet, respectively. Rock chip samples were collected and analyzed for the presence of fractures and blow tests were run to determine selected downhole permeabilities. Water samples were collected at depths of 81 feet, 120 feet and 140 feet in BRX1, and at depths of 100 feet and 120 feet in BRX2, and were provided to ANR personnel for VOC analysis (EPA Method 8240). The samples were collected by filling 40-ml glass vials with discharge from the borehole.

Bedrock wells consist of 6-inch open-holes with 6-7/8-inch ID steel casing advanced through the overburden. The well casing was sealed into rock by driving a steel drive shoe into competent bedrock and pumping a grout seal around the bottom 3 feet of casing.

### **3.3 Surveying and Water Level Measurements**

Upon completion of the three overburden monitoring wells, the boring, and the two bedrock monitoring wells, GEI surveyed surface water levels at two location in Saxtons River and all wells to the nearest 0.01 foot. The original scope of the investigation included surveying a spring tentatively identified on site. Upon closer examination at the time of surveying, the "spring" was actually a culvert covered by leaves and debris and, therefore, was not included in the survey.

All elevations were measured to top of PVC wells and to top of steel casing in bedrock wells. All elevations are relative to a temporary benchmark established by GEI in the northeast corner of the Hartley Hill Road Bridge abutment (assumed elevation 100 ft.) The elevations of the monitoring wells installed for this investigation were tied to the elevations of the monitoring wells installed for the petroleum contamination study by including well AR6, located in front of the Tenney Hardware Store.

GEI measured ground water levels to the nearest 0.01 foot in each of the monitoring wells installed for this investigation on March 8 and April 18, 1991 to estimate ground water flow direction and gradients in the site area. Water-level measuring instruments were decontaminated prior to use in each well with methanol and distilled water.

### **3.4 Ground Water Sampling Program**

Ground water samples were collected from all GEI monitoring wells, except BRX1, on March 8, 1991. Due to apparent silting-in of the well, GEI was not able to remove the submersible pump from BRX 2 upon completion of sampling. GEI therefore returned to the site with new equipment to complete ground water sampling of BRX1 on March 29, 1991.

To remove the pump lodged in BRX2, water needs to be jetted into the well to loosen the silt in order to free the pump. Smaller casing can then be sleeved into the existing casing. The boring should be drilled with a rotary rig until the new casing can be advanced into more competent bedrock. The presence of the submersible pump lodged in BRX2 does not pose a threat to ground water quality in Saxton's River.

The monitoring wells were sampled in order of anticipated decreasing contaminant levels. Prior to sampling, a minimum of three standing well volumes of water were purged from the wells using a clean Teflon™ bailer, or submersible pump. Sampling equipment was decontaminated prior to use with methanol and distilled water rinses.

Ground water samples were stored on ice in a light-tight cooler immediately after sampling and submitted to EAI for VOC analysis using EPA Method 601/602.

### **3.5 Perchloroethylene Tank Removal**

GEI observed the removal of an approximately 120-gallon steel tank located in the basement of the Pizza, Paul and Mary restaurant on Main Street, Saxtons River, Vermont on April 15, 1991 by Twin State Environmental of Windsor, Vermont. The tank was labeled "property of Perk Chemical Co., Elizabeth, New Jersey." The removal of the tank was completed in Level C respiratory protection under the observation of an ANR representative.

The tank was drained of approximately 8 gallons of liquid, carried outside, cut up, and placed in a 55-gallon drum for proper disposal. The liquid was placed in a 30-gallon drum. PID readings measured at the top of the tank at the filler cap ranged from 0 ppm to 100 ppm. PID readings measured at the valve located at the bottom of the tank ranged from 200 to 250 ppm. A sample of the liquid was collected by Twin State Environmental in a 40-ml vial and provided to GEI and the ANR representative. GEI submitted the sample to Aquarian Analytical of Canterbury, New Hampshire for VOC analysis by Method 624.

A pump labeled "property of Perk Chemical Co." was also removed from the basement and included with the remains of the tank. One 30-gallon drum of liquid, one 55-gallon drum containing the remains of the tank, and the pump were removed by Pollution Solutions of Williston, Vermont. Photographs were taken to document tank sampling and removal and are on file with the ANR.

## 4. SUBSURFACE CONDITIONS

### 4.1 Generalized Subsurface Conditions

The site is underlain by a wide range of fluvial material from silts to high energy gravel and cobbles. The majority of the village is situated on a series of river terraces which were formed during the retreat of the last glacial period approximately 14,000 years ago. The upper terrace is located along Main Street and contains MW1, MW2, AR6, B1 and BRX2. The middle terrace is located immediately south of Main Street in the vicinity of MW3 and the lower terrace is located adjacent to the river and contains BRX1. Driller's well logs, GEI well installation reports, and GEI's bedrock well logs are provided in Appendix D. The well installation report for AR6 (provided by Tri-S Consultants) is also provided in Appendix D.

The following soils were encountered in borings:

#### Sand with Gravel

Soils along the upper terrace in the vicinity of the Pizza, Paul and Mary restaurant and the Tenney Hardware Store consist of a wide range of sand with gravel to sand gravel with cobbles and boulders. This upper terrace is highly permeable and contains little silt based on the split-spoon samples collected from MW1, MW2, B1, and a number of hand auger borings completed by GEI in the basements of the Pizza, Paul & Mary restaurant and the Tenney Hardware Store. The basement of the Pizza, Paul and Mary restaurant contained medium to coarse sand throughout the basement in varying thickness. This sand in the basement of the Pizza, Paul and Mary restaurant is interpreted by GEI to be fill based on field observations.

#### Narrowly Graded Sand with Silt

Soils located in the middle terrace immediately south of Main Street consist of narrowly graded fine sand and silts with some silty clay based split-spoon samples collected from MW3. Some gravel was encountered at this location at depths of approximately 25 feet. This middle terrace appears to be substantially less permeable, based on soil types, than the upper terrace and would restrict the flow of ground water in the overburden relative to the upper terrace.

#### Widely Graded Gravel with Sand

The lowest terrace immediately north of the Saxtons River appears to consist of widely graded gravel with sand. These deposits can be observed along the river bank in the Simonds backyard (Lot 18) and were observed in soils at BRX1.

Bedrock depths in the upper terrace along Main Street are estimated to range from 8 feet to 12 feet based on depth of refusal in borings in the basement of Pizza, Paul, and Mary, the Tenney Hardware Store, and MW3. Bedrock at MW3 is estimated to be at 29 feet based on depth of refusal. Bedrock was encountered at 16 feet in BRX2, and 15 feet in the King bedrock monitoring well. Bedrock was encountered at 36 feet south of these wells at BRX1. A highly weathered bedrock surface was encountered in BRX1, BRX2, and the King well.

Glacial potholes were observed just below the Hartley Hill Bridge in the Saxtons River (Figure 6). These suggest a high-energy environment where bedrock elevations may vary tens of feet over short distances. Bedrock outcrops in the Saxtons River with a distinct linear pattern trending north/south and dipping very steeply east also indicate that bedrock elevations may vary widely in the study area.

#### 4.2 Hydraulic Conductivity Estimates

A rising head hydraulic conductivity test was performed by GEI in boring MW3 to estimate the hydraulic conductivity of the subsurface soils. The hydraulic conductivity of the soils was calculated using a procedure developed by Cooper (1967) and presented in Ground Water Hydrology (1978, McGraw-Hill). The data collected during conductivity testing are contained in Appendix E.

The hydraulic conductivity of the lower silty stratum in MW3 is estimated to be  $8.93 \times 10^{-5}$  cm/sec. This value indicates a relatively low hydraulic conductivity in the silts and fine sands in the vicinity of MW3. However, this value is not indicative of the upper terrace area where highly permeable sand and gravel was observed. The hydraulic conductivity of the upper terrace would be expected to be substantially more permeable.

Blow tests were performed on bedrock wells during drilling to estimate hydraulic conductivities. Blow tests were performed by injecting air into the borehole for five to ten minutes. Measurements of discharge were made after the standing water in the borehole had been evacuated. Yields of the three bedrock wells were as follows:

King residence	± 15 gallons per minute
BRX1	± 2.5 gallons per minute
BRX2	± 6 gallons per minute

These results indicate a large amount of variability in the water bearing capacity of fractures and/or the degree of fracturing in bedrock in the study area. This variability could potentially influence contaminant migration in the bedrock aquifer.

### 4.3 Ground Water Flow

Ground water and surface water levels were measured on March 8, 1991 and ground water levels were measured again on April 18, 1991. Ground water and surface water elevations were referenced by a temporary benchmark established on the northeast corner of the Hartley Hill Road bridge and are listed in Table 1. Ground water flow in the overburden is estimated to be generally southeast based on interpretation of water levels measured on March 8, 1991 and April 18, 1991. Ground water levels ranged from dry (MW2) to 6 feet (MW1) and to 10 feet below ground surface in MW3 on March 8, 1991. Ground water levels in the overburden ranged from dry wells at MW2 and MW1 to approximately 10 feet below ground surface in MW3 on March 18, 1991.

Ground water levels in the bedrock wells range from approximately 16.31 feet below ground surface in BRX2 to 3.65 feet below ground surface in BRX1. The existence of the higher ground water elevation in BX1 appears to indicate discharge of ground water in the bedrock to the Saxtons River and the overburden in this area.

Based on ground water elevations measured in the overburden monitoring wells on March 8, 1991, topography and river flow, ground water is anticipated to flow in a southeasterly direction beneath the site at a gradient ranging from approximately .025 to .040. It must be noted that ground water flow in the site area is substantially dependent on the time of year and the amount of precipitation. Property owners in the Village of Saxtons River indicated that, at certain times of the year or during high precipitation periods, water floods the basements of some of the properties, including the Pizza, Paul and Mary restaurant.

In the middle terrace area, the velocity of ground water flow in the silt stratum encountered in MW3 is estimated to range from approximately 7 feet to 11 feet per year (based on a hydraulic conductivity of  $8.93 \times 10^{-5}$  cm/sec, a gradient of .025 to .040, and a porosity of .35). The velocity of ground water flow in the upper terrace is believed to be many orders of magnitude greater due to more permeable soils encountered during drilling of B1, MW1 and MW2.

## 5. ANALYTICAL RESULTS

### 5.1 Soil Sampling

GEI and ANR analytical results and chain-of-custody records are provided in Appendix F. Perc was detected in concentrations ranging from 9 ppb to 440 ppb in soil samples collected from boring PM1 in the basement of the Pizza, Paul and Mary restaurant where a tank labeled "Perk Chemical Co." had been located (Table 2). Except for the presence of bromodichloromethane in the ANR data, (a common laboratory contaminant), no other VOCs were detected. Perc was detected at 440 ppb at a depth of approximately 7 inches and decreased to 9 ppb at a depth of approximately 12 inches. VOCs were not detected in soil samples from boring PM5.

The soil sample collected from the basement of the Tenney Hardware Store from a depth of approximately 18 inches in boring TH1 contained 1,000 ppb volatile petroleum hydrocarbons (Table 2). The ANR also noted the presence of "many hydrocarbon peaks" in the soil sample TH4-15 collected from a depth of approximately 15 inches from boring TH4. Except for the presence of bromodichloromethane in the ANR data (a common laboratory contaminant), no other VOCs were detected.

Volatile petroleum hydrocarbons were also detected by EAI at concentrations of 50,000 ppb in a soil sample collected from 9 to 10 feet in B1 located in front of the Tenney Hardware Store (Table 2). The ANR detected 7 ppb toluene in the soil sample from 1 to 3 feet, 6 ppb toluene and 9 ppb ethylbenzene in the soil sample from 3 to 5 feet, and 7 ppb ethylbenzene in the soil sample from 7 to 9 feet collected from boring B1. Note that the ANR did not analyze for volatile petroleum hydrocarbons other than the individual VOCs listed for EPA Method 8240. According to data provided by Tri-S Consultants, 1,100 ppb trichloroethylene, 320 ppb perchloroethylene, and 150 ppb toluene were detected previously in a soil sample collected from AR6, a monitoring well located in from the Tenney Hardware Store. These data are also included in Appendix F. Boring B1 was performed adjacent to AR6.

No VOCs were detected by the ANR in soil samples collected from MW1 and MW3 (Table 2). Perc was detected at concentrations of 6 ppb in the soil sample collected from 0 to 2 feet in MW2. Chloroform was also detected at concentrations less than 10 ppb in soil samples from MW2, but is likely attributable to laboratory contamination. No other VOCs were detected in soil samples collected from MW2.

## **5.2 Ground Water Sampling**

Perc was detected by EAI at concentrations of 5 ppb in MW3 (Table 3). The laboratory results and chain-of-custody records are provided in Appendix F. No VOCs were detected by EAI in ground water from MW1, BRX1 or BRX2. MW2 was dry at the time of sampling. Volatile petroleum hydrocarbons were detected at concentrations of 100 ppb in ground water from AR6. No other VOCs were detected in ground water from AR6. The ANR did not detect VOCs in ground water samples collected during blow testing of BRX1 and BRX2.

## **5.3 Residential Well Sampling**

Analytical data from periodic residential well sampling by the ANR is presented in Appendix G. The highest concentrations of Perc detected in residential wells by the ANR and are presented on Figure 6. Low levels of Perc (< 10 ppb) have been detected in a number of residential drilled bedrock wells in the Village of Saxtons River (Figure 6). The residential wells are located along the lineaments identified by GEI during the Preliminary On-Site Investigation.

The most recent sampling of residential wells conducted on April 11, 1991 indicated trace levels (< 2 ppb) of Perc in the Burgess well (Lot 29). Perc was not detected in this well previously. Perc is currently detected at concentrations of 3 ppb in the Catholic Church well just west of the Burgess well. Perc has been detected previously in the Catholic Church well at concentrations of 2 ppb. Over the time period that the ANR has conducted residential well sampling, Perc was initially not detected in either the Catholic Church or Burgess wells.

## **5.4 Tank Sampling**

Essentially pure perchloroethylene was detected by both Aquarian Analytical, Inc. and the ANR in the liquid sample collected from the tank located in the basement of the Pizza, Paul, and Mary restaurant (Table 3 and Appendix F). Aquarian Analytical, Inc. estimated 99.5 percent Perc containing approximately 0.3 percent trichloroethylene.

## 6. DISCUSSION AND RECOMMENDATIONS

Two potential source areas of ground water contamination were indicated by the analytical data collected during this study. Perc-contaminated soils appear to exist in the basement of the Pizza, Paul, and Mary restaurant and petroleum-contaminated soils appear to exist in the basement of the Tenney Hardware Store.

Perc was detected at concentrations of 440 ppb in soil from what is believed to be the original location of a tank labelled "Perk Chemical Co." The liquid contained in this tank was confirmed by both GEI and ANR (EPA Method 624) to be Perc. Soil contamination appeared to decrease to a concentration of 9 ppb at an approximate depth of 12 inches. Perc was not detected at a location approximately 5 feet away. Based on these data, the amount of residual soil contamination appears to be limited.

Perc was not detected in the ground water from the overburden well MW1 located cross- and potentially up-gradient of the Pizza, Paul, and Mary restaurant. Perc was detected at low levels (5 ppb) in ground water from MW3, located downgradient from the Pizza, Paul, and Mary restaurant. The location of MW3 was also downgradient of the location of the former apartment building that burned (Lot 37). It had been reported that the cellar hole of this building contained a large number of paint cans and other domestic household cleaners and chemicals. Subsurface explorations within the cellar were not conducted. However, the levels of Perc detected in MW3 and analysis of soils from MW3 do not indicate a significant source of Perc from the location of the former apartment building (Lot 37). If the former apartment building had been a source of Perc, higher levels of ground water contamination would have been expected in MW3. However, the levels detected in MW3 were similar to the low levels detected elsewhere in the study area. In addition, the State Police arson report did not indicate the presence of hazardous materials (except for a drum of kerosene) in the building remains.

Based on photolineament analysis, two major lineaments appeared to trend through the site. One north/south trending lineament projects directly through the site area in the vicinity of the Pizza, Paul, and Mary restaurant. An east/west lineament also projects through the site area running to just south of Main Street. Residential wells containing Perc contamination are located along these lineaments. ANR analytical data from residential well sampling indicate the migration of Perc in wells east along Main Street. In earlier sampling rounds, Perc was not detected in either the Catholic Church well or the Burgess well. Perc was later detected in only the Catholic Church well and, more recently, in both the Catholic Church and Burgess wells. These data indicate that Perc contamination is migrating along the expected predominant fracture pattern in bedrock.

It appears the most significant pathway of Perc migration at the site is through fractured bedrock. However, Perc was not detected in the GEI bedrock monitoring wells BRX1 and BRX2 or the water samples collected during blow testing BRX1 and BRX2. This may indicate that Perc is migrating predominantly through the deeper fractures encountered in the residential wells. Residential wells in the study area range from 200 to 500 feet in depth. However, BRX1 and BRX2 may need substantially more pumping before Perc is detected in these wells, especially considering the low levels of Perc detected in the study area. Perc contamination would be expected to continue to migrate along the lineaments identified in the area.

Migration of Perc-contaminated ground water in the soils near MW3 would be expected to be slow. Ground water velocity in this area was estimated to be 7 to 11 feet per year. Migration of Perc-contaminated ground water through the soils near MW2 would be an order of magnitude or more higher due to the presence of more permeable sands and gravel. Bedrock in the vicinity of the Pizza, Paul, and Mary restaurant is estimated at between 8 to 12 feet. A source of Perc in the basement of the Pizza, Paul, and Mary restaurant would initially percolate through soil until it reached ground water. It appears that, depending on the season, ground water may be encountered within the soils or in bedrock. Ground water levels appear to be highly variable at the site as indicated by water levels measured in MW1 and the indication of seasonal flooding of basements in the area. Perc-contaminated ground water would migrate from the source area at a slower rate in overburden and at a much faster rate in fractured bedrock.

The presence of Perc identified in the bedrock residential wells and the low levels of Perc detected would likely make ground water remediation by pump and treat technologies technically difficult and cost-prohibitive. It is GEI's opinion, based on the data collected during this study, that the levels and extent of soil contamination in the basement of the Pizza, Paul and Mary restaurant do not warrant removal at this time. Levels of Perc contamination would be expected to decrease overall with time. However, additional soil sampling with depth is recommended. If significantly higher levels of soil contamination are detected with further sampling, soil remediation may be warranted. Soil remediation could include soil removal and/or soil venting with vapor extraction techniques.

GEI recommends that ground water sampling of residential wells in the study area be continued. Sampling should include those wells that Perc has been detected in previously as well as the newly installed monitoring wells. Based on the photolineament analysis conducted from this study, wells east of the Burgess well along Main Street and wells south of River Street should be included in future monitoring. In addition, the residential well on Lot 37 (which is currently not functioning and, therefore, has not been sampled) should also be included in future monitoring, if possible.

Petroleum hydrocarbons at concentrations of 1,000 ppb were detected in soils from the basement of the Tenney Hardware Store. Concentrations of petroleum hydrocarbons of 50,000 ppb were detected in soils from B1 located in front of the Tenney Hardware Store. In addition, ground water collected from AR6, located adjacent to B1, contained petroleum hydrocarbons at concentrations of 100 ppb. Previous activities at this site associated with the former Texaco service bays and/or underground storage tanks may have been a source of petroleum contamination in this area. Previous data reported by Tri-S Consultants indicating Perc-contaminated soils at AR6 have not been confirmed by this investigation. Evaluating the location and extent of petroleum-contaminated soils or the extent of petroleum contamination of ground water was beyond the scope of this investigation. GEI recommends that this potential source area of petroleum contamination be included in the on-going study of petroleum contamination in the study area.

## **7. LIMITATIONS**

This report was prepared for the use of the Vermont Agency of Natural Resources. The conclusions provided by GEI in this report are based solely on the information contained and referenced within this document. Conclusions reached in this report are based upon technical analyses of soil and water samples collected at the stated locations. While we are unaware of any facts or circumstances which could cause us to suspect that the conclusions drawn herein are incorrect or misleading, it is always possible that additional quantitative information on the site could require refinement or modification of the conclusions of this report.

This report has been prepared in accordance with generally-accepted hydrogeologic practices, and in accordance with the terms and conditions set forth in the Contract and subsequent Amendments between GEI and the State of Vermont (Contract No. 0963247).

**TABLE 1 - WATER LEVEL MEASUREMENTS**  
**Hazardous Materials Investigation**  
**Saxtons River, Vermont**

Well No.	Elevation*	March 8, 1991 Water Level (ft.)	March 8, 1991 Water Level Elevation	April 18, 1991 Water Level (ft.)	April 18, 1991 Water Level Elevation
MW1	98.72	7.70	91.02	Dry	Dry
MW2	97.8	Dry	Dry	Dry	Dry
MW3	88.89	12.16	76.73	11.58	86.73
AR6	98.31	8.15	90.16	8.30	90.01
BRX1	72.54	3.65	68.89	2.62	69.92
BRX2	89.18	16.31	72.87	17.94	71.24
River Low Shot	61.15	61.15	61.15	--	--
River Middle Shot	66.37	66.37	66.37	--	--

Notes:

All elevations were measured to top of PVC in overburden wells (MW) and to top of steel casing in bedrock wells (BRX).

All elevations are relative to a temporary bench mark established at the site by GEI in the northeast corner of the Hartley Hill Road Bridge abutment (assumed elevation 100 feet).

\*-- indicates water level not measured.

**TABLE 2 - SOIL ANALYTICAL RESULTS**  
 Hazardous Materials Investigation  
 Saxton River, Vermont

Compound	Concentrations (ppb)											
	Boring Location	PM1	PM1*	PM5*	PM5	PM5*	TH1*	TH1*	TH1	TH4*	TH4	TH4*
	Boring Sample Depth	7"	12"	12"	21"	23"	8"	14"	18"	9"	13"	15"
Perchloroethylene		440	9	-	-	-	-	-	-	-	-	-
Bromodichloromethane		-	6	-	-	-	-	-	-	11	-	14
Volatile Petroleum Hydrocarbons		-	NA	NA	-	NA	NA	NA	1,000	NA	-	NA
Toluene		-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene		-	-	-	-	-	-	-	-	-	-	-
Chloroform		-	-	-	-	-	-	-	-	-	-	-

Notes:

\* Indicates samples were analyzed by the VT ANR utilizing EPA Method 8240.  
 The remainder of the samples were analyzed by Eastern Analytical Incorporated of Concord, New Hampshire utilizing EPA Method 8240.

NA Parameter not analyzed for

- Indicates not detected above laboratory quantitation limit

**TABLE 2 - SOIL ANALYTICAL RESULTS**  
 Hazardous Materials Investigation  
 Saxton River, Vermont

Compounds	Concentrations (ppb)											
	Boring Location	B1	B1*	B1*	B1*	B1*	B1*	B1*	MW1*	MW1*	MW2*	MW2*
	Boring Sample Depth	9-10'	0-3'	3-5'	5-7'	7-9'	9-11'	11-13'	0-2'	5-7'	0-2'	5-7'
Perchloroethylene	-	-	-	-	-	-	-	-	-	-	6	-
Bromodichloromethane	-	-	-	-	-	-	-	-	-	-	-	-
Volatile Petroleum Hydrocarbons	50,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	-	7	6	-	-	-	-	-	-	-	-	-
Ethylbenzene	-	-	9	-	7	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-	-	-	-	7	6

Notes:

- \* Indicates samples were analyzed by the VT ANR utilizing EPA Method 8240.  
 The remainder of the samples were analyzed by Eastern Analytical Incorporated of Concord, New Hampshire utilizing EPA Method 8240.
- NA Parameter not analyzed for
- Indicates not detected above laboratory quantitation limit

**TABLE 2 - SOIL ANALYTICAL RESULTS**  
 Hazardous Materials Investigation  
 Saxton River, Vermont

Compound	Concentrations (ppb)						
	Boring Location	MW3*	MW3*	MW3*	MW3*	MW3*	
	Boring Sample Depth	0-2'	3-5'	5-7'	15-17'	20-22'	25-22'
Perchloroethylene		-	-	-	-	-	-
Bromodichloromethane		-	-	-	-	-	-
Volatile Petroleum Hydrocarbons		NA	NA	NA	NA	NA	NA
Toluene		-	-	-	-	-	-
Ethylbenzene		-	-	-	-	-	-
Chloroform		-	-	-	-	-	-

Notes:

- \* Indicates samples were analyzed by the VT ANR utilizing EPA Method 8240. The remainder of the samples were analyzed by Eastern Analytical Incorporated of Concord, New Hampshire utilizing EPA Method 8240.
- NA Parameter not analyzed for
- Indicates not detected above laboratory quantitation limit

**TABLE 3 - AQUEOUS ANALYTICAL RESULTS**  
Hazardous Materials Investigation  
Saxtons River, Vermont

Compound	Concentrations (ppb)											
	Sample Location											
	MW1	MW2	MW3	AR6	BRX1	BRX2	BRX1* 81'	BRX1* 120'	BRX1* 140'	BRX2* 100'	BRX2* 120'	TANK
Perchloroethylene	-	-	5	-	-	-	-	-	-	-	-	99.5%
Trichloroethylene	-	-	-	-	-	-	-	-	-	-	-	0.3%
Volatile Petroleum Hydrocarbons	-	-	-	100	-	-	NA	NA	NA	NA	NA	-

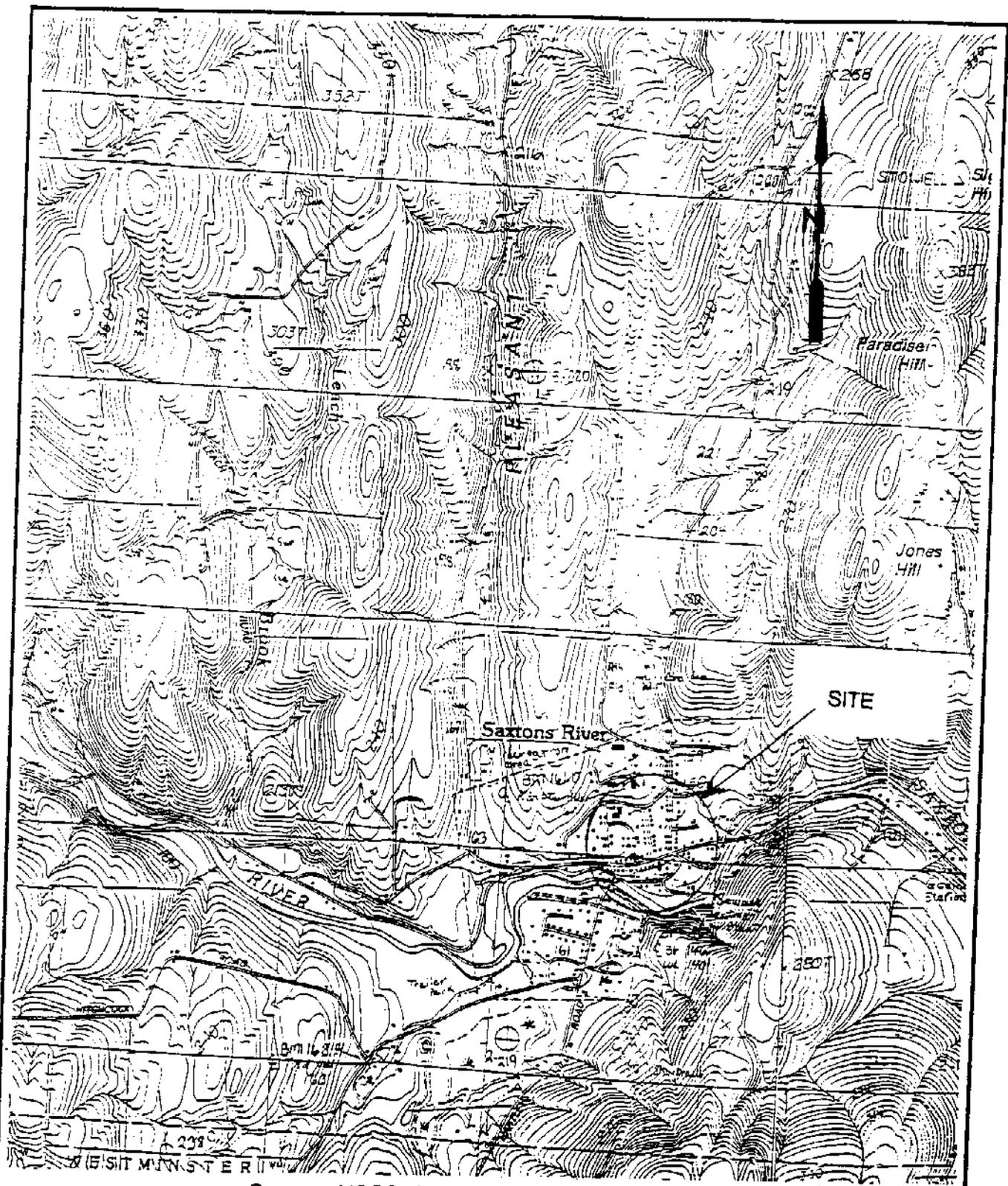
Notes:

Ground water samples were analyzed by Eastern analytical Incorporated of Concord, New Hampshire utilizing EPA Method 601/602.

The tank sample was analyzed by Aquarian Analytical of Canterbury, New Hampshire utilizing EPA Method 624.

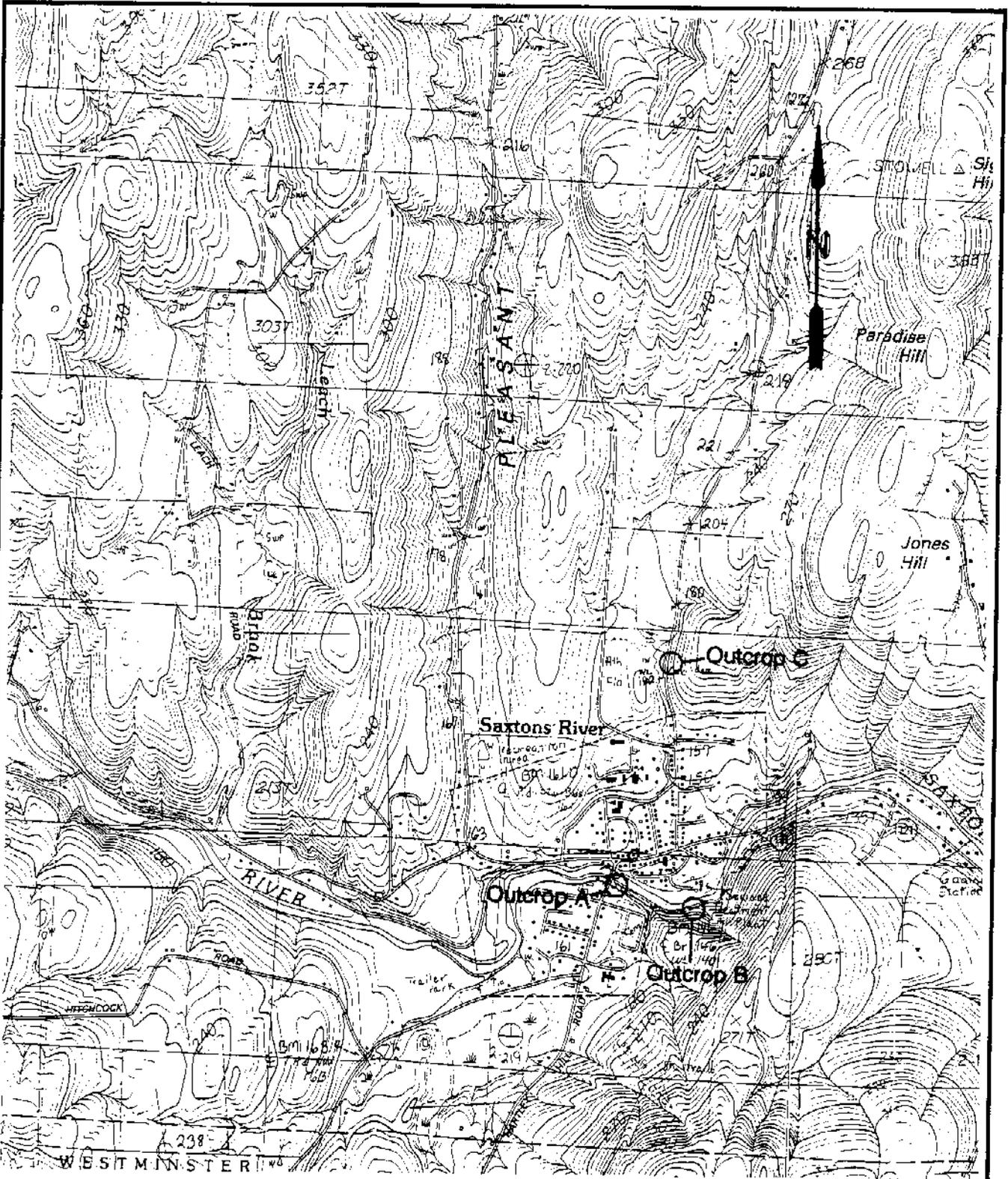
\* Collected from discharge from borehole at specified depth of drilling and analyzed by the VT ANR utilizing EPA Method 601/602.

- Indicates not detected above laboratory quantitation limits.

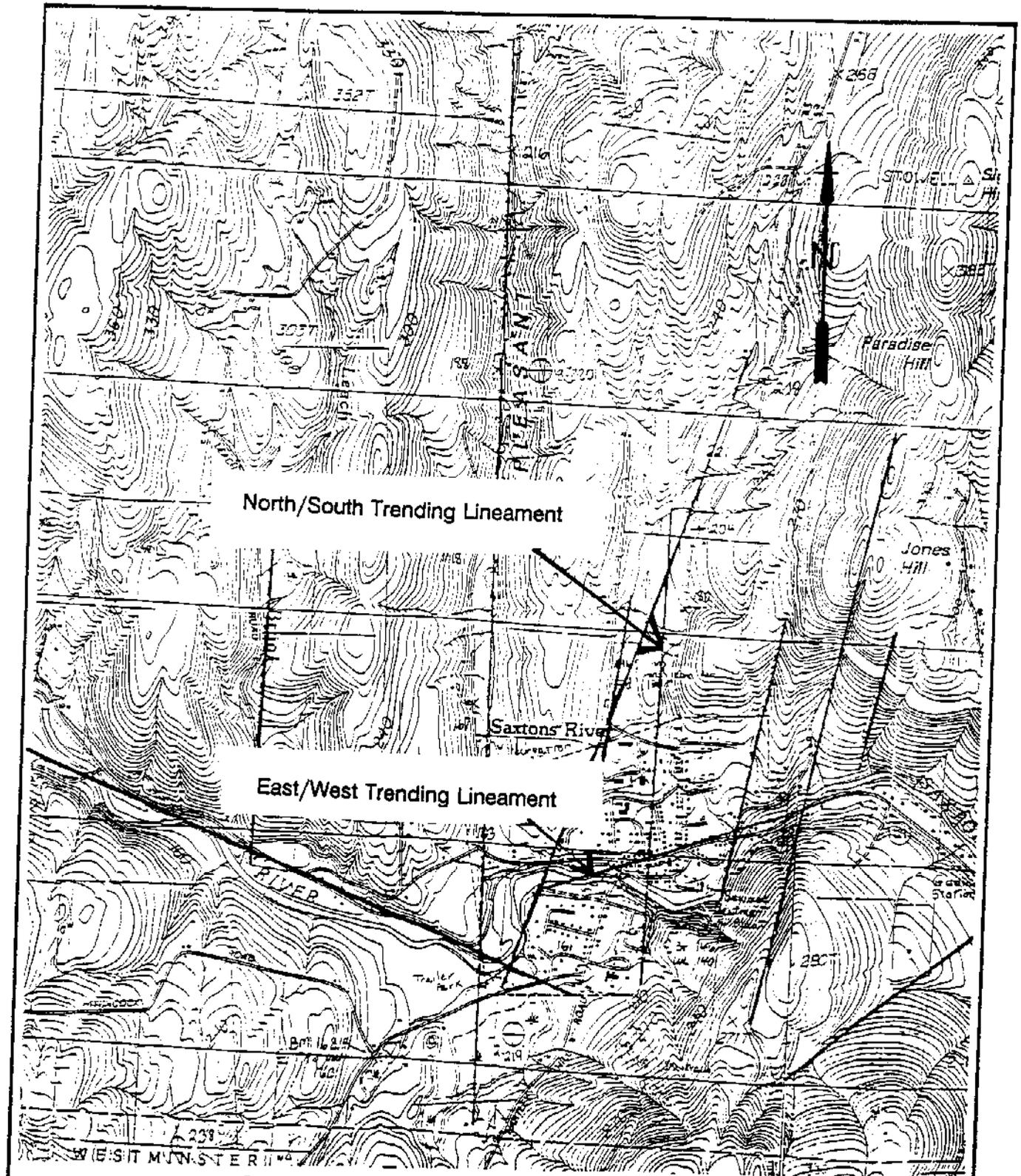


Source: USGS, Saxtons River and Bellows Falls  
 15 Minute Quadrangle  
 Scale: 1:25,000  
 1984 Provisional Edition

Vermont Agency of Natural Resources Waterbury, Vermont	Saxtons River Hazardous Waste Site Investigation Saxtons River, Vermont	SITE LOCATION MAP
 GEI Consultants, Inc.	Project 90379	May 1991      Fig. 1



Vermont Agency of Natural Resources Waterbury, Vermont	Saxtons River Hazardous Waste Site Investigation Saxtons River, Vermont	MAPPED BEDROCK OUTCROP LOCATIONS
 GEI Consultants, Inc.	Project 90379	May 1991      Fig.2

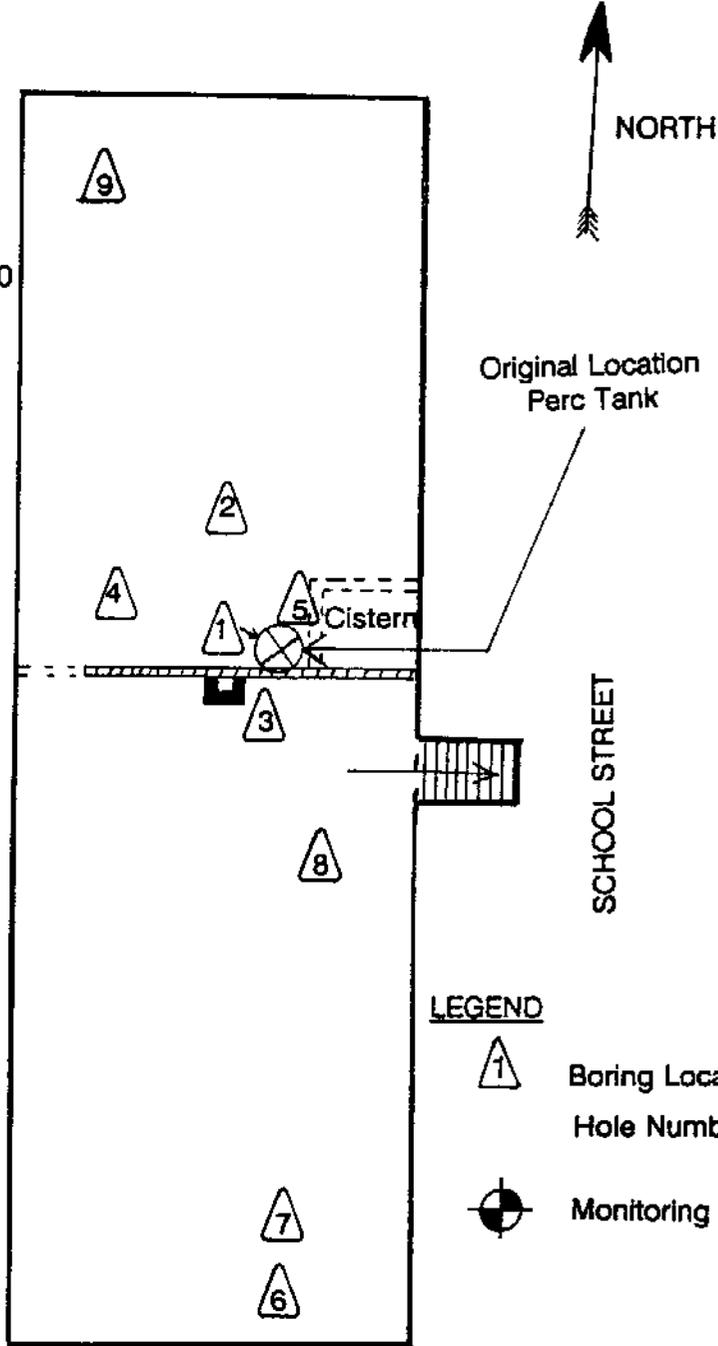


Source: USGS, Saxtons River and Bellows Falls  
 15 Minute Quadrangle  
 Scale: 1:25,000  
 1984 Provisional Edition

Vermont Agency of Natural Resources Waterbury, Vermont	PHOTO- LINEAMENT MAP	Saxtons River Hazardous Waste Site Investigation Saxtons River, Vermont
 GEI Consultants, Inc.		

Auger Hole #      PID Reading (PPM) w/Depth

PM1	1, .5
PM2	.5
PM3	.5
PM4	.5
PM5	1, 1.8, 2.0
PM6	1
PM7	0
PM8	1
PM9	0



- LEGEND**
- Boring Location with Auger Hole Number
  - Monitoring Well Location

0'      10'  
 Scale  
 1" = 10'

MAIN STREET

MW2

Vermont Agency of Natural Resources Waterbury, Vermont GEI Consultants, Inc.	Saxtons River Hazardous Waste Site Investigation Saxtons River, Vermont	Sketch HAND AUGER LOCATIONS BASEMENT OF PIZZA PAUL & MARY
	Project 90379	May 1991      Fig. 4

Auger  
Hole # 2

PiD Reading  
(PPM) w/Depth

TH1

15, 21, 20, 15, 25, 20

TH2

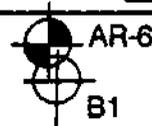
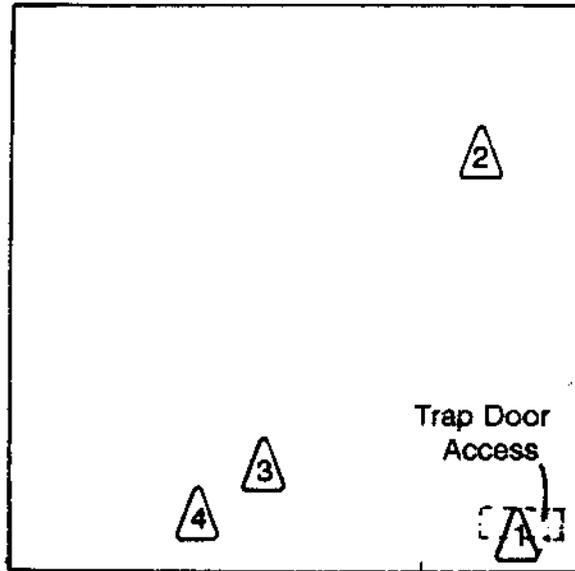
12, 11.5, 11

TH3

Aborted Due to Boulder

TH4

19, 15, 17, 11



MAIN STREET

LEGEND

-  Monitoring Well Location
-  Boring Location
-  Boring Location with Auger Hole Number

NOT TO SCALE

Vermont Agency of  
Natural Resources  
Waterbury, Vermont

Saxtons River  
Hazardous Waste  
Site Investigation  
Saxtons River, Vermont

Sketch  
HAND AUGER LOCATIONS  
BASEMENT OF  
TENNY HARDWARE



GEI Consultants, Inc.

Project 90379

May 1991

Fig. 5

## **APPENDIX A**

### **Summary of Preliminary Site History Investigation**

## 1. SUMMARY OF PRELIMINARY ON-SITE INVESTIGATION

### 1.1 Summary of Interviews

As part of the Preliminary On-Site Investigation, GEI Consultants, Inc. (GEI) reviewed town files, conducted interviews with residents owning contaminated wells, and conducted interviews with the town's health officer, zoning and planning departments, assessor's office and fire chief. GEI also conducted interviews with people who were familiar with the Town's history and land use. GEI conducted interviews with property owners of Lots 69, 67, 78 and 37 from Tax Map U-13. These properties include: The Pizza, Paul & Mary restaurant (location of the former laundromat)(Lot 69); an abutting property to the laundromat which formerly contained a gasoline station and engine parts store (Lot 67); an abutting property to the laundromat which contains the Contel Telephone Corporation (Lot 78) and an empty lot in-between the laundromat and the contaminated wells (reportedly a previously existing building on this lot burned and its foundation was filled with debris of unknown origin). GEI was not able to contact the owner of the abutting property to the laundromat which contains a crafts store (Lot 68). The locations of all of these properties are expected to be upgradient of the contaminated residential water supply wells identified by the Vermont Agency of Natural Resources (ANR) and near the suspected source area of the contamination. The following is a summary of the information collected.

#### **Pizza, Paul and Mary Restaurant (Lot 69)**

Conversations with Mr. Paul McIntire, current owner of "Pizza, Paul and Mary" restaurant (Tax Map U13, Lot 69) located on Main Street in Saxtons River indicated that the building used to be a laundromat which also contained one self-service dry cleaning machine which was in operation prior to his ownership of the property. Mr. McIntire indicated that when he initially leased the building (prior to purchasing), the dry cleaning equipment was still in the building but had been out of service for a number of years. Mr. McIntire indicated that while he was leasing the building he requested that the owner of the building (Mr. Patrick Boyland of A & B Associates) remove the old equipment to provide more room for his restaurant. Mr. McIntire indicated that in early 1988 Mr. Boyland's son and himself along with a McIntire Fuel employee (no relation to the current owner) removed the equipment along with a 55-gallon drum of the chemical perchloroethylene (Perc). Mr. McIntire indicated that conversations he had with Mr. Richard Smith seemed to indicate that the machine was not in use for at least 15 years, probably more, prior to being removed. At the time of removal of the dry cleaning machine, a tank of perchloroethylene (Perc) was still in the earthen basement of the building. GEI personnel, along with Mr. McIntire, observed an abandoned tank (approximate capacity of 100 gallons) in the basement on October 18, 1990 and October

31, 1990. The tank contained valves which had been wired shut, and it appeared to contain some type of brown precipitate on the top surface of the tank. It appeared that some liquid was still in the tank. GEI also observed a pump which at one time appeared to have been connected to the tank. Both the tank and the pump were labelled with the address of Perk Chemical Co. in Elizabeth, New Jersey.

Mr. McIntire indicated that in order to install a central vacuuming unit in the building he had recently moved the tank approximately 10 feet to the north of its original location. Upon inspection of the tank, it was observed that the two openings on the top of the tank had been safety wired shut with thin wire rope and sealed with crimped lead seals. The safety wire crumbled upon touch. The tank did not appear to be leaking any type of liquid. The floor of the basement is still dirt.

GEI interviewed two former owners of the building, Mr. Patrick Boyland (owner from August 1, 1981 through September 20, 1988) of A & B Associates, and Mr. Richard Smith (owner from May 28, 1975 through August 1, 1981). Mr. Boyland indicated he bought the building at tax sale in 1981 and at the time he sold it to Mr. McIntire, "there was no equipment in the building that had anything to do with dry cleaning." Mr. Boyland also said that there had been no tanks or any other dry cleaning equipment in the basement. Mr. Boyland indicated that Mr. Don Perrault of Bellows Falls, Vermont ran the laundromat for him during the mid-1980s and that no dry cleaning operations took place on the premises during the time he owned the building. This is contrary to information received from Mr. McIntire, who indicated he and Mr. Boyland's son removed dry cleaning equipment to Rockingham Hospital just prior to the McIntire purchase in 1988.

GEI personnel interviewed Mr. Don Perrault and his wife Marie, former operators of the laundromat, at their current place of business, Perrault's Appliance, Inc., 58 Williams Street in Bellows Falls, Vermont. Mr. and Mrs. Perrault indicated that they had operated the laundromat in the Pizza Paul & Mary building from April 1985 to Spring 1988. Mr. and Mrs. Perrault indicated that no dry cleaning operations took place during the time they operated the laundromat. However, Mr. Perrault did confirm the existence of the dry cleaning equipment in the building during the period of time he operated the laundromat. However, Mr. and Mrs. Perrault said the equipment was not used. Mr. Perrault indicated that Richard Smith of Saxtons River was the previous site operator.

During review of deeds for the site, GEI determined that Mr. Richard Smith owned the property from May 28, 1975 to August 1, 1981. According to deeds on file at the Bellows Falls, Vermont Town Clerk's office on Main Street in Bellows Falls, Mr. Richard Smith acquired the property for the sum of one dollar (\$1.00) on May 28, 1975 subject to the mortgage of Bellows Falls Trust Company. The property was formerly owned by Donald and Iris Dunbar.

Mr. Smith indicated he used to work for Mr. Donald Dunbar during the late 1960s. During the period Mr. Dunbar owned the property (October 10, 1967 to May 1975), Mr. Smith maintained the daily business of the laundromat and dry cleaning operation. According to Mr. Smith, a Mr. Dick Stevens was the first person to put in the self-service dry cleaning machine around 1960 or soon after. Mr. Smith indicated that during the early years of operation, the chemical perchloroethylene (Perc) was delivered in 55-gallon drums and was pumped by hand into the machine from the drums. When the chemical was saturated with dye and dirt, the waste product was drained and Mr. Smith "believes" put into 55-gallon drums. Mr. Smith could not recall what happened to the waste chemical once it was removed from the machine. Mr. Smith indicated that from time to time, red dye would permeate the dry cleaning fluid (perchloroethylene) and the red dye would have to be removed along with the chemical because it would stain other clothes if it was left in the machine.

#### **Tenney Hardware Store (Lot 67)**

Ms. Pat Tenney, current owner of Tenney Hardware Store, indicated that she owned the building for 14 years. She purchased the property from the former owners who ran a Texaco gas station which contained two service bays or pits for repairs. The "pits" had been filled in with cement when the hardware store was built. Her water supply is from the property behind her building, which is owned by Mr. Randy Billmier (Map 13, Lot 71). Ms. Tenney indicated she has no knowledge as to any use of Perc in the building during her ownership. Ms. Tenney indicated that in approximately April of 1978 underground storage tanks were removed from the property. GEI attempted to confirm the removal of the underground storage tanks with Ms. Ellen Howard, Bellows Falls Health Officer. According to Ms. Howard there is no record of the underground storage tanks ever being removed.

GEI contacted Mr. Richard Smith, Saxtons River Fire Chief, about the possibility of underground storage tanks at the Tenney Hardware Store. Mr. Smith could not confirm the removal of the tanks at the site. The hardware store currently has a 1,000-gallon underground storage tank and a 275-gallon above-ground storage tank on the property which are both used for fuel oil.

#### **Vacant Lot - Former Moore Apartment Building (Lot 37)**

GEI interviewed Mr. Steven Moore on November 7, 1990 via telephone relative to his property on Main Street (Map U13, Lot 37). Mr. Moore indicated that the property used to be an apartment building. Prior to the apartment building it was also a grocery store, a post office and a "bar room." Mr. Moore indicated the building burned down in the late 1970s and that it contained a three-car garage and one other out-building.

According to conversations with Lt. Glenn Cutting of the Vermont State Police, the fire occurred on April 29, 1979 and was investigated by the Arson Division of the Vermont State Police. The investigation (Case #552-263) was conducted by Detective David B. Sargent (retired). According to Lt. Cutting the fire was determined to be arson by Detective Sargent. GEI requested to review the file but was told by Lt. Cutting that the file had been sealed and could not be accessed by the public. Through a request by the ANR Hazardous Materials Division, GEI was given permission to review the file. Except for the possible presence of a drum of kerosene, the report did not indicate the presence of hazardous materials in the building.

#### **Skovinski Residence (Lot 36)**

GEI conducted an interview with Ms. Wilma Skovinski (Map U13, Lot 36) on October 31, 1990 relative to ground water contamination of her private residence well. Ms. Skovinski complained of problems with her children's health, including extreme dry skin, frequent nose bleeds, and cracked skin on hands and feet and in the vicinity of the nostrils. Ms. Skovinski feels this is because of the ground water contamination. Previously Ms. Skovinski was told it was due to the hardness of her water.

#### **Contel Telephone - Block Building Containing Telephone Equipment (Lot 78)**

GEI interviewed Mr. Don Randall, supervisor of CONTEL Telephone on October 31, 1990 and viewed the inside of the building, which is an operations building for the phone system. CONTEL is located at Lot 78, adjacent to the Pizza, Paul and Mary restaurant. GEI observed approximately 25 batteries which, according to Mr. Randall, are used in case of power failure to keep the phone system operating until the generator starts. Mr. Randall indicated that a 250-gallon underground diesel tank was located on the property and contained diesel fuel to run the generator in case of power failure. Mr. Walter Rauchiski indicated that the 250-gallon diesel tank failed a recent leak-test and that the tank would be excavated at the end of May.

#### **Truslow Residence (Lot 79)**

GEI interviewed Mr. Truslow on October 31, 1990 (Map 13, Lot 79, a private residence). Mr. Truslow indicated he has a 500-gallon underground storage tank for heating oil. Mr. Truslow also indicated that approximately two years ago he observed an excavation in front of the Tenney Lumber Company Hardware store, the site of the former Texaco service station. Mr. Truslow indicated that when he questioned the operator of the excavator as to why they were digging, the operator replied that they were trying to determine if there was any underground storage tanks still in the ground at the location which used to be a Texaco gas station. Mr. Truslow indicated he believes that the tanks were removed but could not be certain.

## 1.2 Other Information Sources

GEI Consultants, Inc. interviewed other people who contributed to information gathered for this report. The following is a brief summary of their statements:

- Mrs. Mortensen (Map 13, Lot 35) indicated during an interview with GEI on November 1, 1990 that she was aware of the ground water contamination in the village and to her water supply. Mrs. Mortensen indicated she shares a well with the Arthur Smith residence Map 13, Lot 22.
- Mrs. Simonds (Map 13, Lot 18) indicated during a conversation with GEI on October 31, 1990 she was aware of the ground water contamination and the State had provided her with bottled water to drink. Mrs. Simonds indicated that she was eager to assist the State with their investigation.
- Mr. Jeff Jewett, Village of Saxtons River Trustee (president) was interviewed on October 30, 1990 by GEI via phone. Mr. Jewett indicated he would be of assistance if needed, and was aware of the non-petroleum ground water contamination.
- Mr. Peter Stolley, Village of Saxtons River Trustee, was interviewed by GEI on October 30, 1990 by phone. Mr. Stolley indicated he was aware of the non-petroleum ground water problem. Mr. Stolley indicated the Moore lot had been known as the "frost block" and after the fire the cellar hole was backfilled with bank run gravel. Mr. Stolley also indicated it had been reported the cellar hole contained a large amount of paint cans and other domestic household cleaners and chemicals.
- Ms. Paulette Lynch of the Saxtons River Inn was interviewed November 7, 1990 via phone. Ms. Lynch indicated she owned several of the properties affected by the non-petroleum ground water contamination. Ms. Lynch indicated that three wells served the properties as follows: the Pretzel Factory and hardware store are serviced by a well which also services two residences behind the two Main Street buildings, which according to the tax map would be the Boyd Property (Map 13, Lot 23) and the Simonds residence (Map 13, Lot 24). Ms. Lynch indicated the well is buried and she believes it is located on the Boyd residence property. The Colvin House (Map 13, Lot 34) has its own well, and according to Ms. Lynch showed contamination first. The Saxtons River Inn (Map 13, Lot 80) has its own well located on the property of the Inn.
- GEI reviewed plans at the Saxtons River Waste Water Treatment Plant on October 31, 1990. The plans reviewed were titled: Village of Saxtons River, Vermont, New Sewage Works Project 2, Sewer Plan and Profile, Main Street, dated January 1970. The plans were prepared by Dufresne-Henry of Precision Park, North Springfield, Vermont and were stamped "AS BUILT PLANS." The plans were reviewed to locate any possible former leach fields and to locate any underground utilities. The plans

show the old location of the 8-inch clay tile pipe as well as the location of tie-ins to the new sewer line. The plans indicate the old Texaco station and its gas pumps and show the Pizza, Paul and Mary building to be a laundromat.

According to Mr. Richard Smith, Waste Water Treatment Plant Manager, the sewer line was completed in 1972. Prior to completion of the sewer line in 1972, approximately 90 percent of all the village's sewer waste went directly into the Saxtons River, according to Mr. Richard Smith. GEI personnel observed 8-inch clay tile pipes along the north edge of the Saxtons River during a reconnaissance of the site. The clay pipes appeared to be weathering out of the embankment and appeared to extend northward toward the residences along Main Street and River Street (Figure 2). GEI believes these pipes are the remnants of the old sewer lines which discharged into the river.

After interviews with local residents and officials and review of the plans, GEI believes, based on the information to date, that no septic systems existed prior to the installation of the sewer line in 1972.

- GEI reviewed well information in the files of Cushing & Sons Water Well Drilling in Westmoreland, New Hampshire. Well logs were obtained that provided geologic information for the area.

### 1.3 Deed Research

GEI reviewed historical documents to develop a history of ownership of the former laundromat at the Pizza, Paul and Mary restaurant. The current deed for the property is recorded in the Town of Rockingham, Vermont Bellows Falls District Registry of Deeds Book 208 Page 513. Information obtained from the Bellows Falls Office Registry of Deeds indicates the following ownership history for the site:

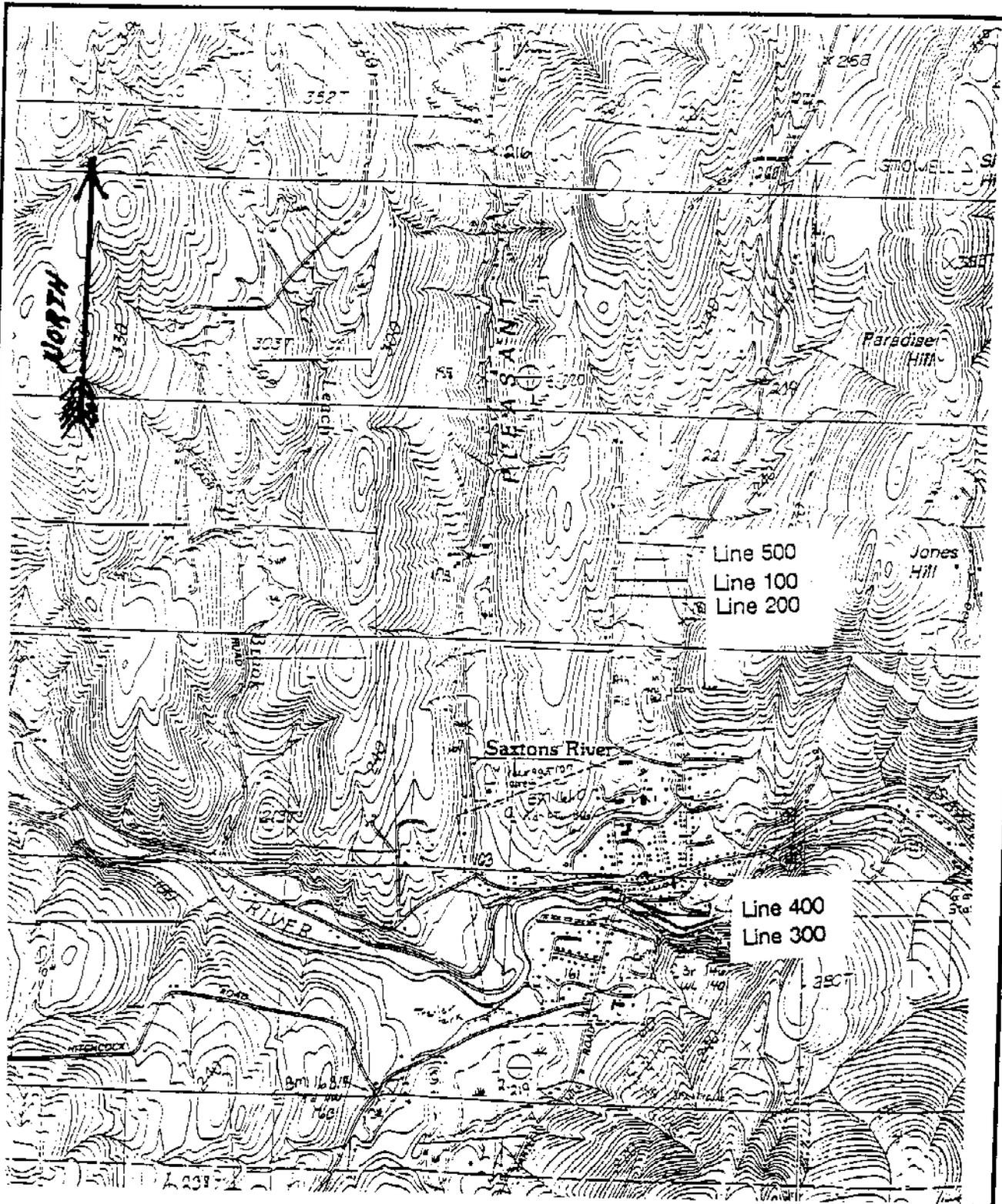
September 1988 to present	Mr. Paul McIntire and Ms. Mary Pitman
August 1981 to September 1988	A & B Associates
May 1975 to August 1981	Mr. Richard Smith
October 1967 to May 1975	Donald and Iris Dunbar
April 1960 to October 1967	Richard and Nellie Stevens
January 1954 to April 1960	Edward E. Freeman

April 1951 to January 1954	Anne and Ralph Edwards
June 1947 to April 1951	James E. Bigelow
June 1938 to June 1947	Lislye Bascom
April 1938 to June 1938	John Bryant
December 1926 to April 1938	Charles Stone
September 1922 to December 1926	Saxtons River Lodge No. 33 I.O.O.F. (parcel split in 1926)

**APPENDIX B**

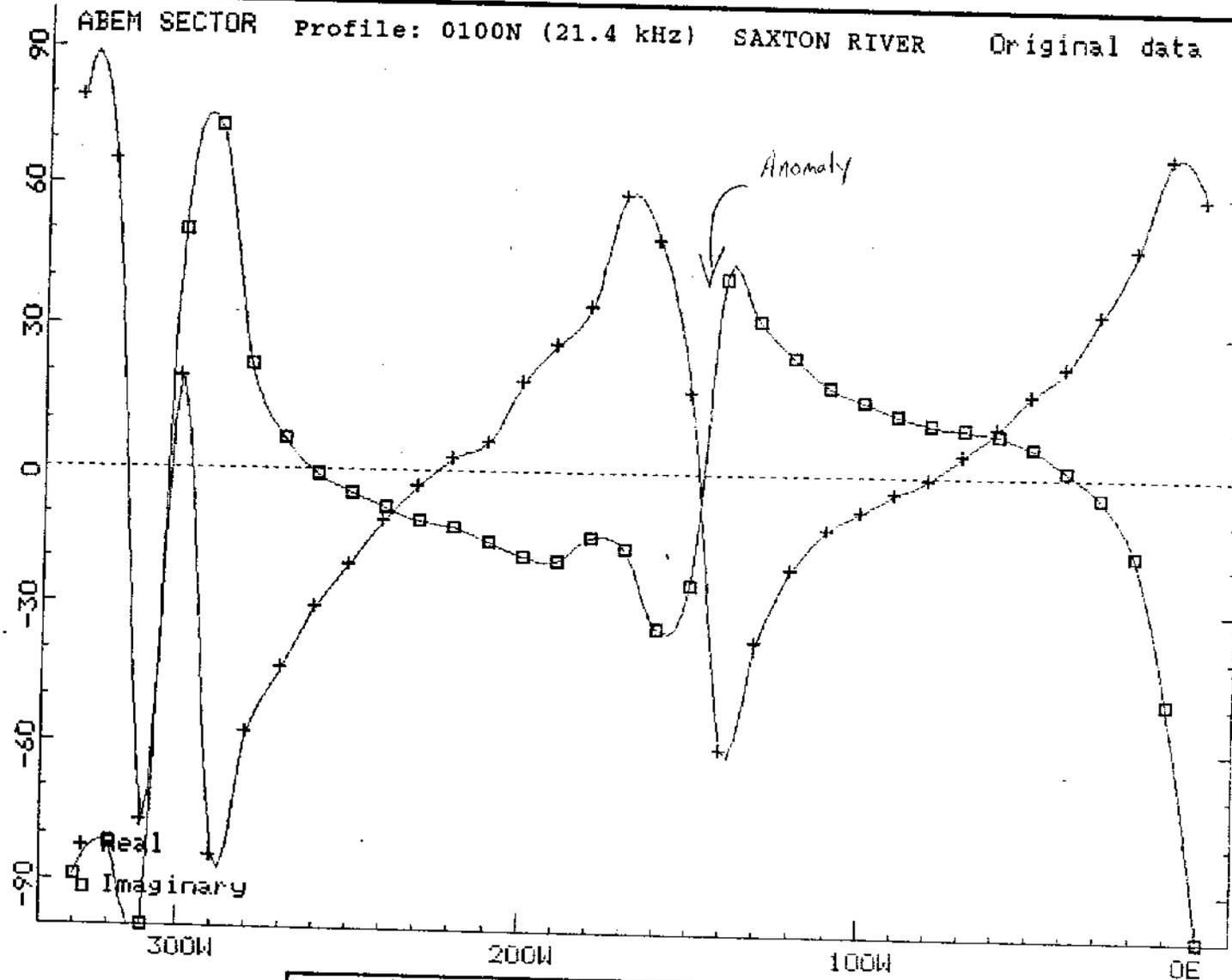
**AERIAL PHOTOGRAPHS**  
**(Contents of Appendix B Provided in Attached Envelope)**

**APPENDIX C**  
**GEOPHYSICAL SURVEY RESULTS**



Source: USGS, Saxtons River and Bellows Falls  
15 Minute Quadrangle  
Scale: 1:25,000  
1984 Provisional Edition

Vermont Agency of Natural Resources Waterbury, Vermont	Saxtons River Hazardous Waste Site Investigation Saxtons River, Vermont	GEOPHYSICAL SURVEY LINES
 GEI Consultants, Inc.	Project 90379	January 1991 Fig. B-1



Vermont Agency of  
Natural Resources  
Waterbury, Vermont

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$\Phi$  GEI Consultants, Inc.

Saxtons River  
Hazardous Waste  
Site Investigation  
Saxtons River, Vermont

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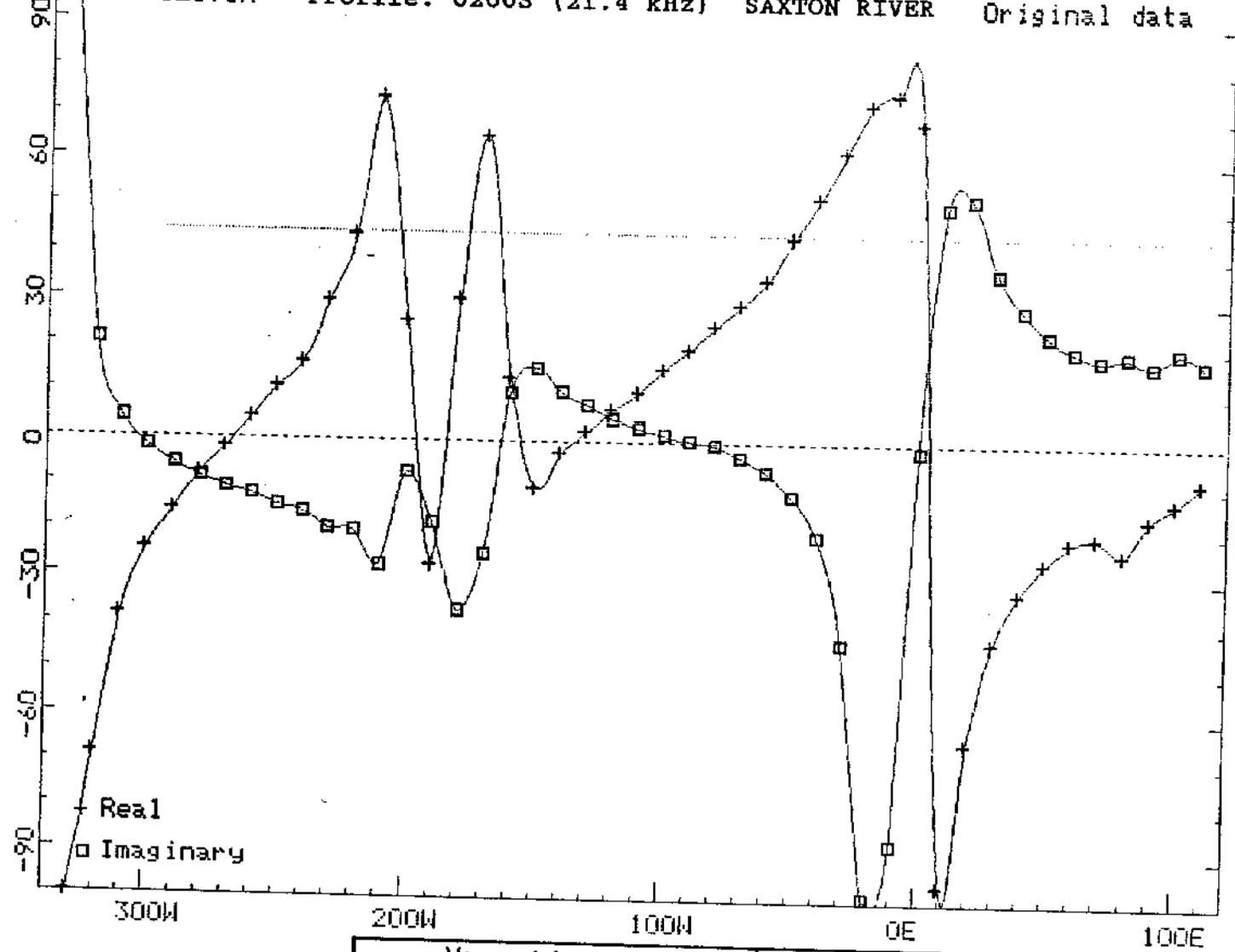
Project 90379

GEOPHYSICAL PROFILE  
ABEM WADI  
LINE 100  
UNFILTERED DATA

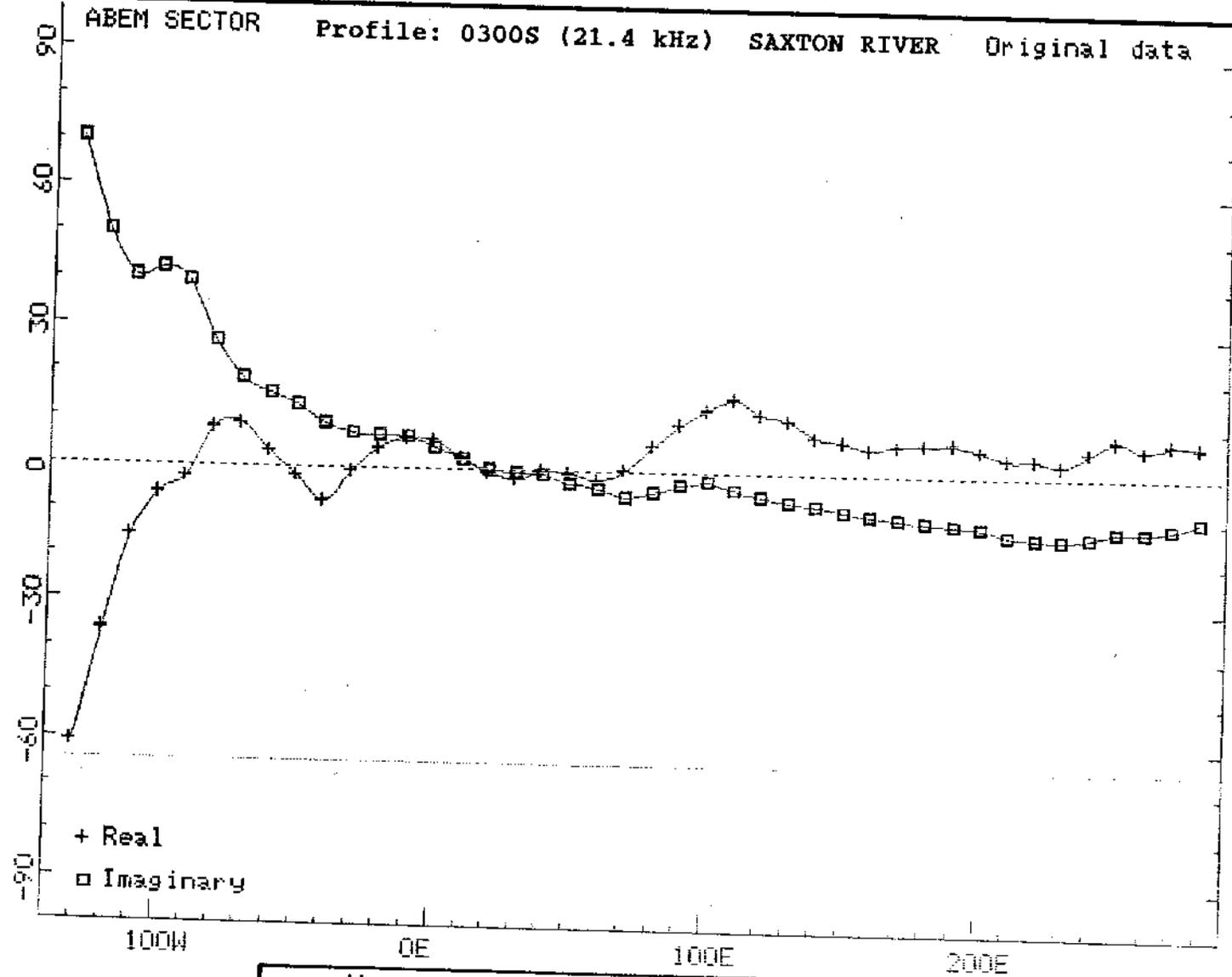
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January 1991 Fig.B2

ABEM SECTOR Profile: 0200S (21.4 kHz) SAXTON RIVER Original data



Vermont Agency of Natural Resources Waterbury, Vermont	Saxtons River Hazardous Waste Site Investigation Saxtons River, Vermont	GEOPHYSICAL PROFILE ABEM WADI LINE 200 UNFILTERED DATA
$\Phi$ GEI Consultants, Inc.	Project 90379	January 1991 Fig.B3



Vermont Agency of  
Natural Resources  
Waterbury, Vermont

$\Phi$  GEI Consultants, Inc.

Saxtons River  
Hazardous Waste  
Site Investigation  
Saxtons River, Vermont

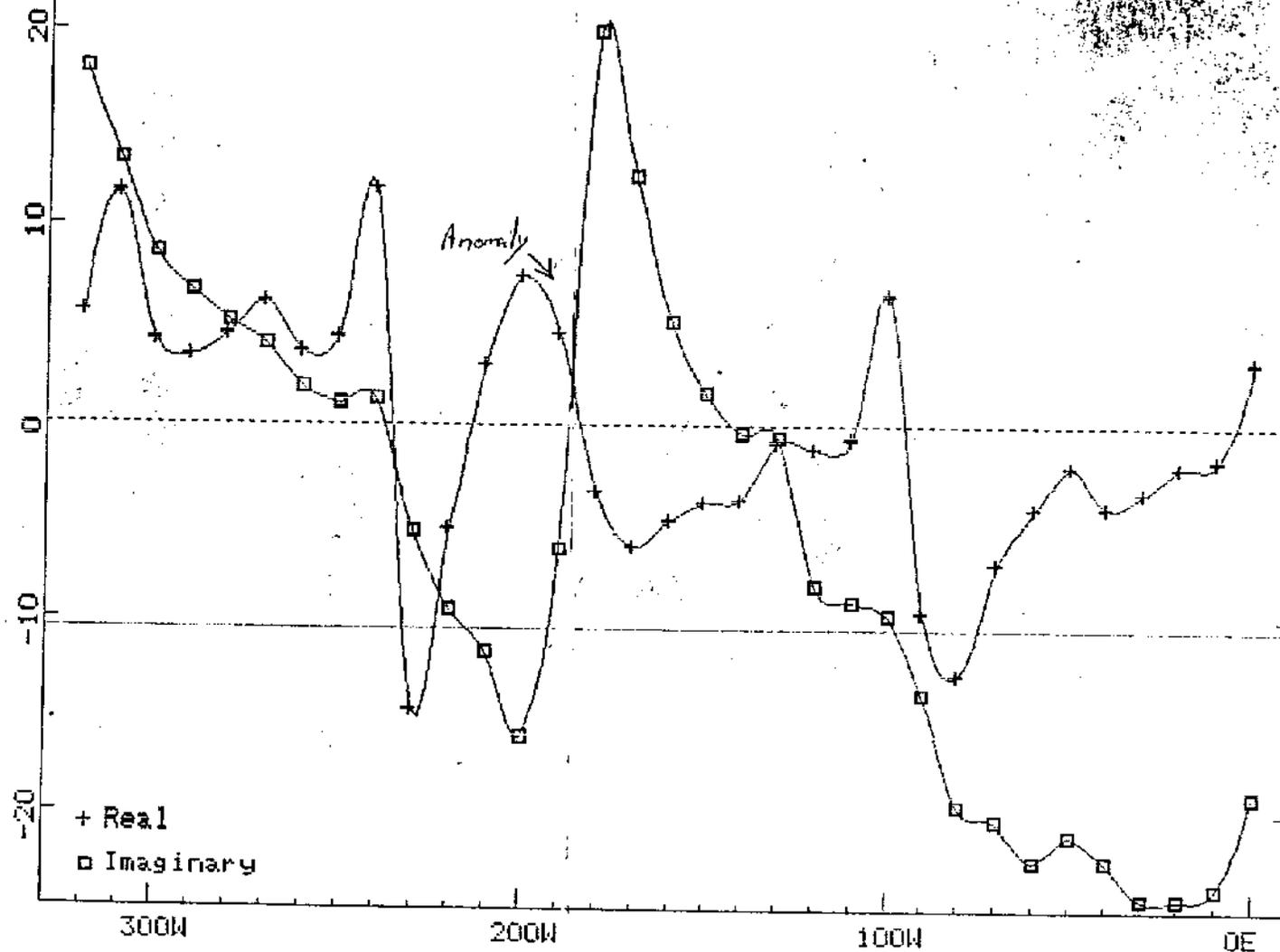
Project 90379

GEOPHYSICAL PROFILE  
ABEM WADI  
LINE 300  
UNFILTERED DATA

January 1991 Fig.B4

ABEM SECTOR

Profile: 0400N (21.4 kHz) SAXTON RIVER Original data



Vermont Agency of  
Natural Resources  
Waterbury, Vermont



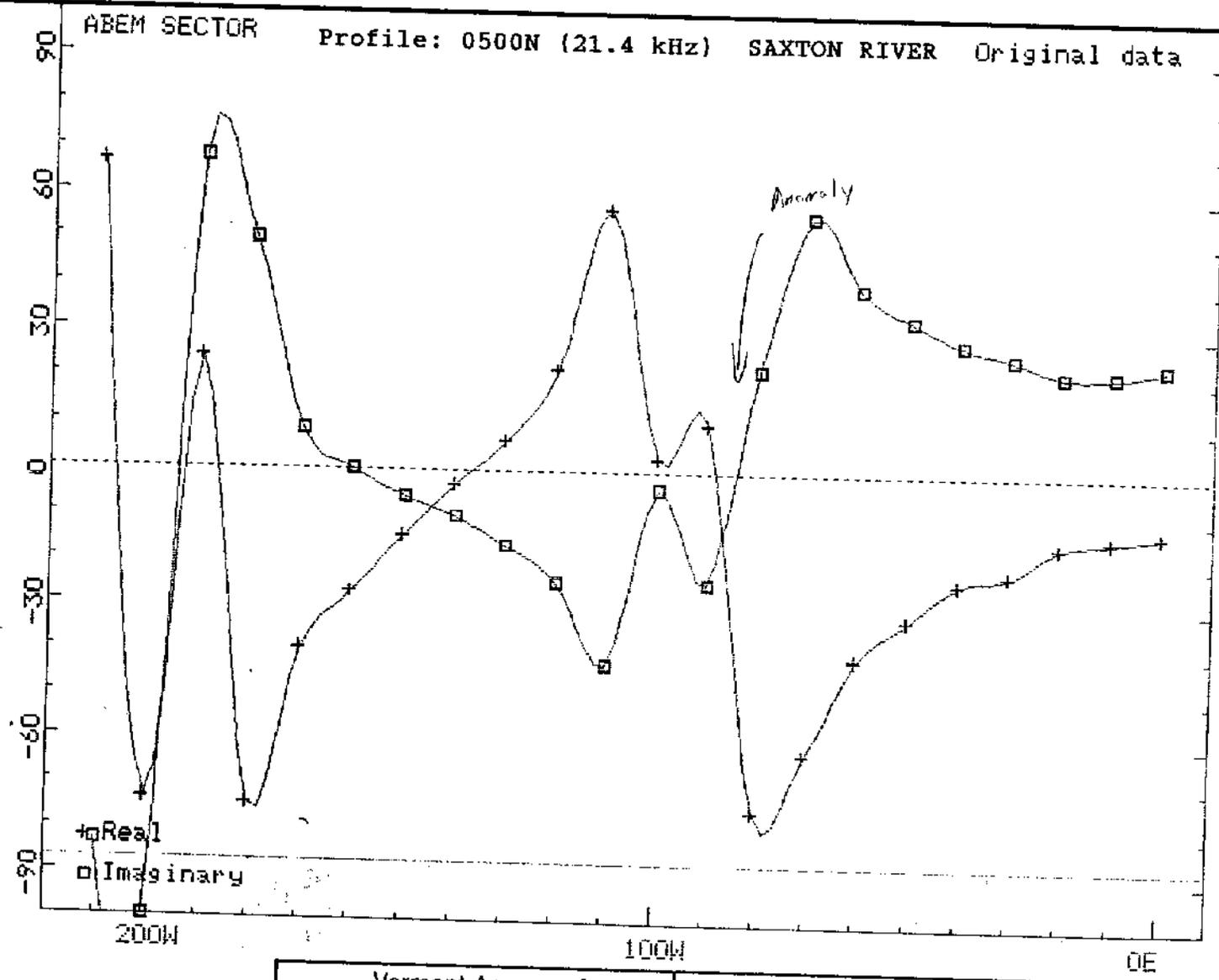
GEI Consultants, Inc.

Saxtons River  
Hazardous Waste  
Site Investigation  
Saxtons River, Vermont

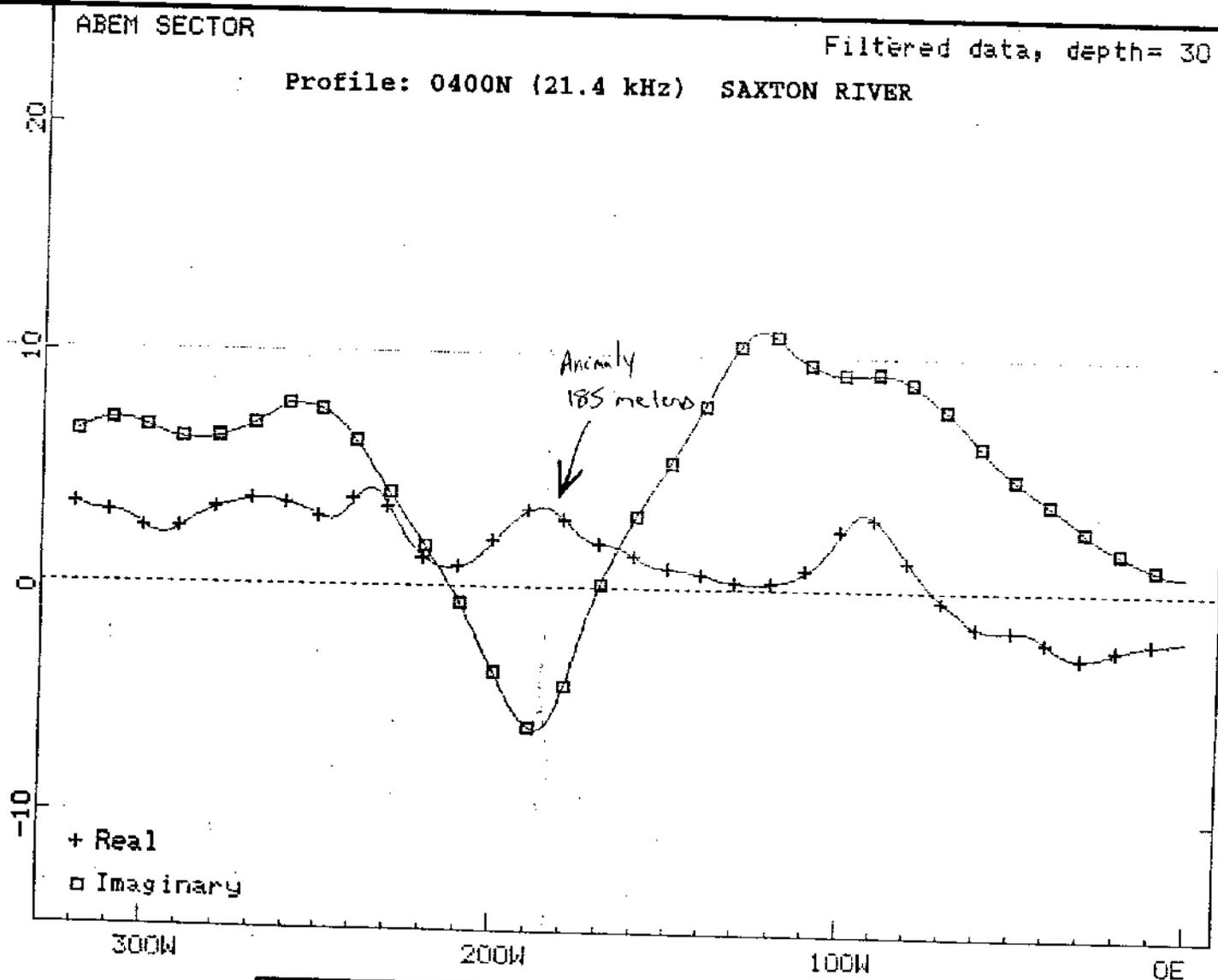
Project 90379

GEOPHYSICAL PROFILE  
ABEM WADI  
LINE 400  
UNFILTERED DATA

January 1991 Fig.B5



Vermont Agency of Natural Resources Waterbury, Vermont	Saxtons River Hazardous Waste Site Investigation Saxtons River, Vermont	GEOPHYSICAL PROFILE ABEM WADI LINE 500 UNFILTERED DATA
$\Phi$ GEI Consultants, Inc.	Project 90379	January 1991 Fig.B6



Vermont Agency of  
Natural Resources  
Waterbury, Vermont



GEI Consultants, Inc.

Saxtons River  
Hazardous Waste  
Site Investigation  
Saxtons River, Vermont

Project 90379

GEOPHYSICAL PROFILE  
ABEM WADI  
LINE 400 - FILTERED DATA  
30 METERS

January 1991 Fig.B7

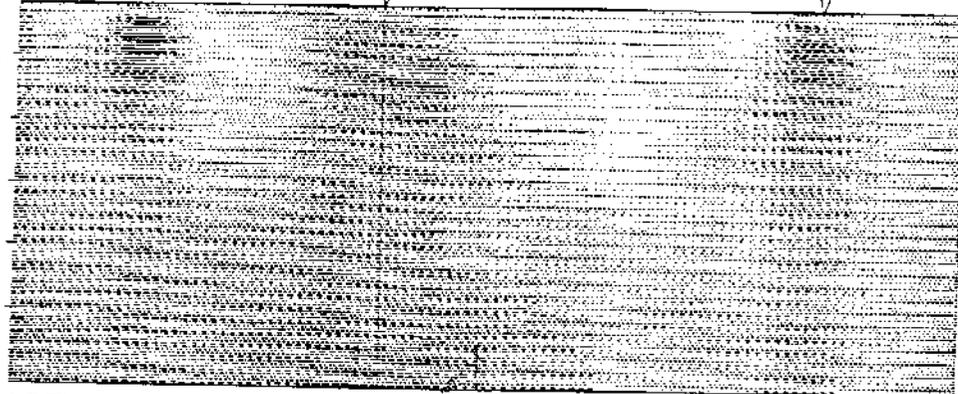
Profile: 0400N

SAXTON RIVER

200W

100W

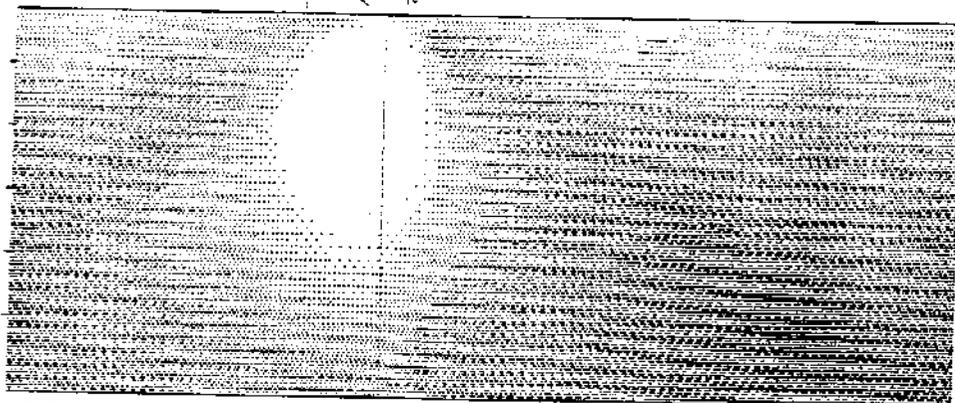
10  
20  
30  
40  
50



ABEM SECTOR

Real

10  
20  
30  
40  
50



ABEM SECTOR

Imag

Vermont Agency of  
Natural Resources  
Waterbury, Vermont

Saxtons River  
Hazardous Waste  
Site Investigation  
Saxtons River, Vermont

SECTOR SOFTWARE  
CURRENT DENSITY  
GEOPHYSICAL  
CROSS-SECTION LINE 400



GEI Consultants, Inc.

Project 90379

January 1991 Fig.B8

**APPENDIX D**

**DRILLERS LOGS AND GEI WELL INSTALLATION REPORTS**





# TEST BORING LOG

**CAPITAL ENVIRONMENTAL  
DRILLING SERVICES INC.**

RFD 2 - Box 132B  
Concord, NH 03301  
(603) 774-4920  
Fax (603) 774-6165

PROJECT GEI Consultants  
LOCATION Saxton's River, Vermont

DATE STARTED 03/05/91 COMPLETED 03/05/91

GROUND WATER 10'

HOLE NO. MW-3

SURF. ELEV.

N-NO. OF BLOWS TO DRIVE 2" SAMPLER 6" W/140 LB. WEIGHT FALLING 30"

JOB NO. 90379

C-NO. OF BLOWS TO DRIVE CASING 12" W/300 LB. WEIGHT FALLING 24"

SHEET 1 OF 1

DEPTH	C.	N.	SPL NO.	SAMPLE DEPTH	DESCRIPTION OF MATERIAL
0'		10	S-1	2'	Recovery 13" Mostly Fine Sands.
		3			
		3			
		3			
5'		4	S-2	7'	Recovery 15" Mostly Fine Sands, Bottom Sample 6½", changing inton Fine to Medium Sub Angular Gravel.
		4			
		13			
		14			
10'		4	S-3	12'	Recovery 17" Fine Silty Sand with some Fine Layers of Clay sample is Wet.
		7			
		4			
		6			
15'		8	S-4	17'	Recovery 7" Very Fine Silty Clay with some Angular Rock.
		11			
		19			
		10			
20'		6	S-5	22'	Recovery 16" Top sample Silty Clay Changing approx. 21' into Fine Sands.
		11			
		12			
		16			
25'		9	S-6	27'	Recovery 18" Fine Sands- Fine Sub Angular & Angular Gravel Well Sorted.
		9			
		9			
		11			
30'		100-3"	S-7	32'	No Recovery
					Well was installed
					25' Screen
					7' Riser

# TEST BORING LOG

**CAPITAL ENVIRONMENTAL  
DRILLING SERVICES INC.**

RFD 2 - Box 132B  
Concord, NH 03301  
(603) 774-4920  
Fax (603) 774-6165

PROJECT GEI Consultants

LOCATION Saxton's River, Vermont

DATE STARTED 03/05/91

COMPLETED 03/05/91

HOLE NO. B-1

GROUND WATER approx. 10'

SURF. ELEV.

N-NO. OF BLOWS TO DRIVE 2" SAMPLER 6" W/140 LB. WEIGHT FALLING 30"

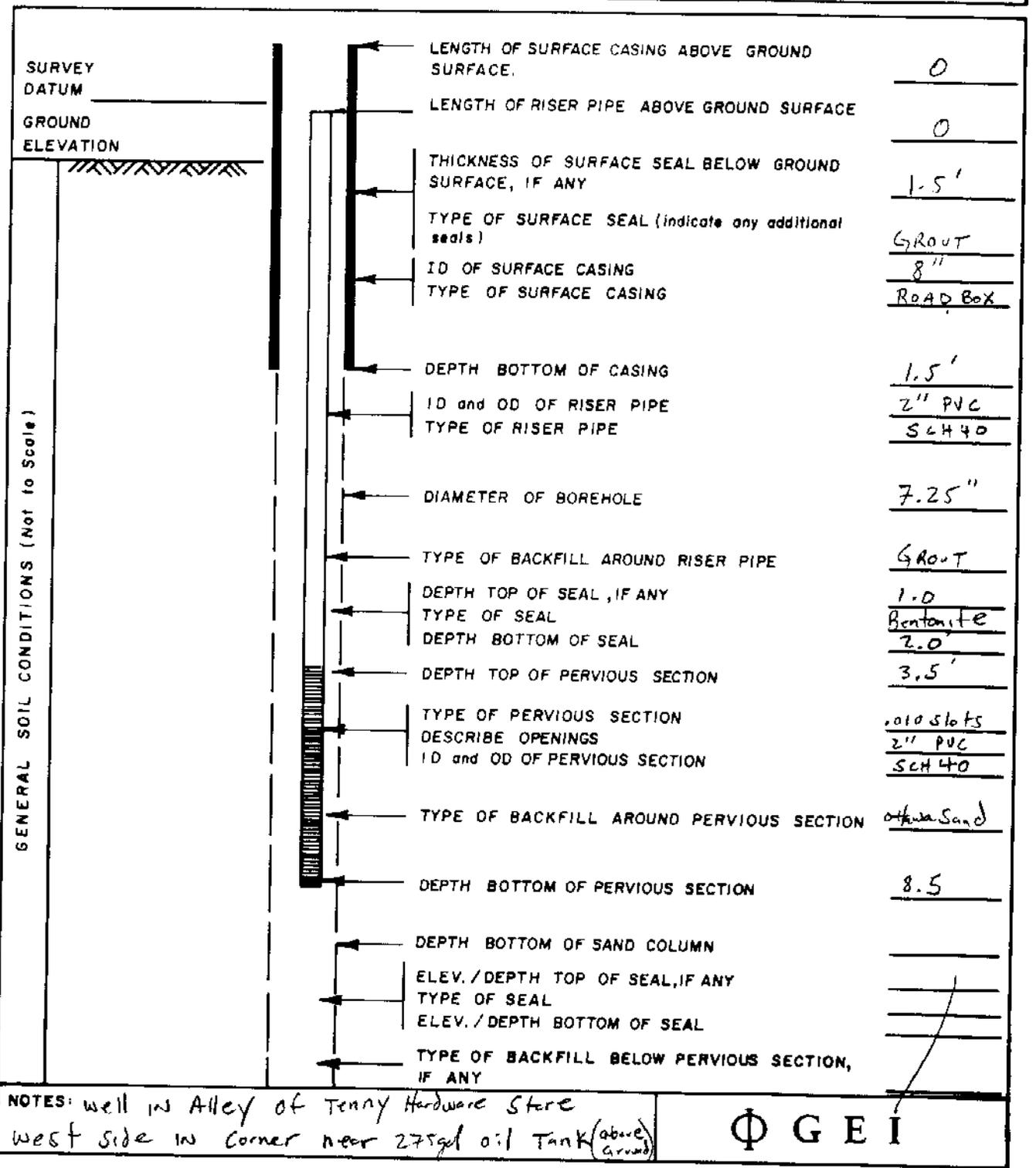
JOB NO. 90379

C-NO. OF BLOWS TO DRIVE CASING 12" W/300 LB. WEIGHT FALLING 24"

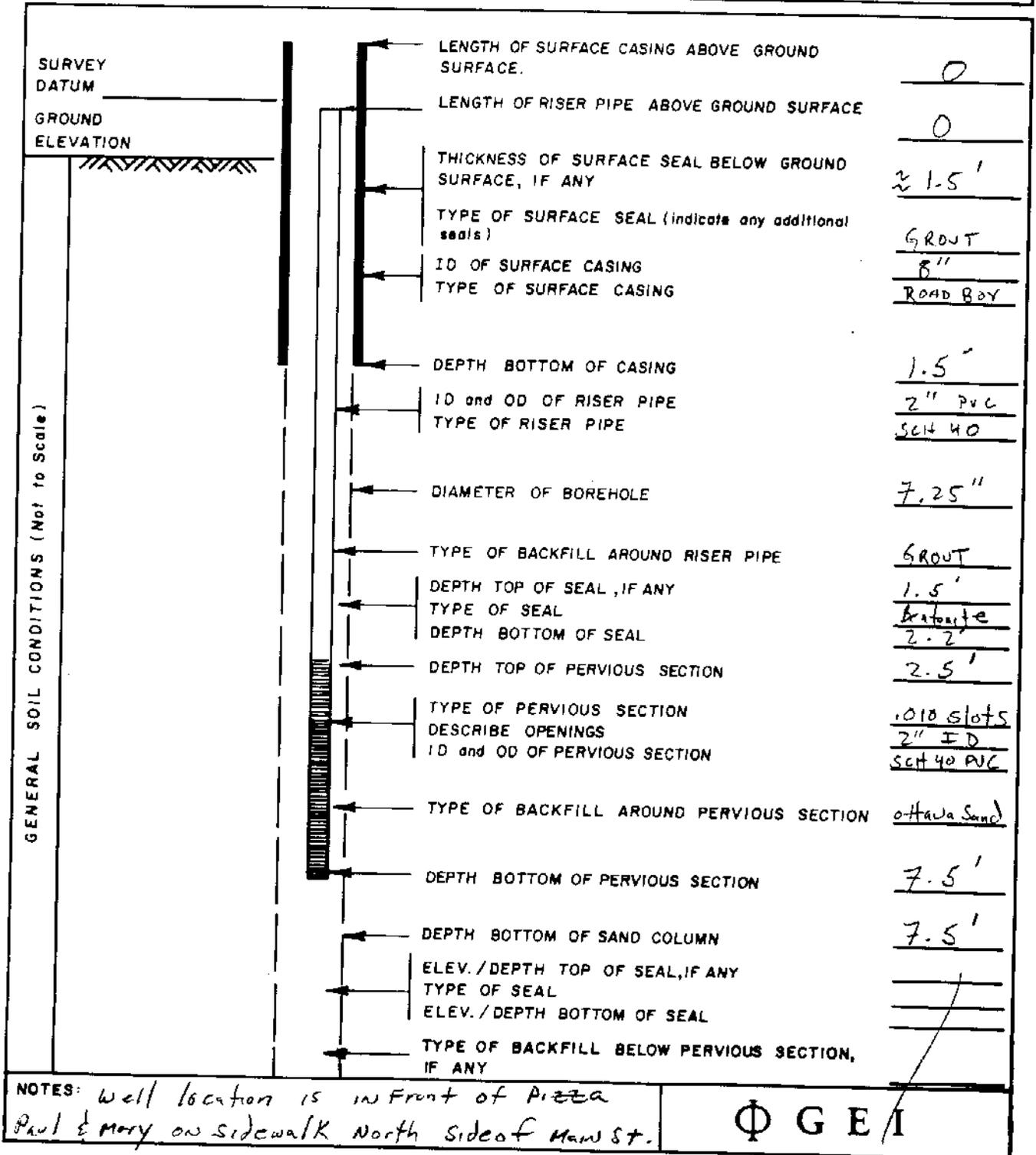
SHEET 1 OF 1

DEPTH	C.	N.	SPL NO.	SAMPLE DEPTH	DESCRIPTION OF MATERIAL
0'				1'	Concrete
1'		4		3'	Recovery 8" Silty sand
		3			
		2	S-1		
		2			
3'		6	S-2	5'	Recovery 10" Widely graded Sands and Gravels some Cobles.
		6			
		16			
		21			
5'		8	S-3	7'	Recovery 16" Same As Above.
		15			
		23			
		47			
7'		35	S-4	9'	Recovery 8" Widely Graded Gravel with Sand.
		31			
		21			
		20			
9'		8	S-5	11'	Recovery 14" Silty Sand Widely Graded Sand with Gravel, Oil Smell with Sample.
		10			
		8			
		8			
11'		14		13'	Recovery 12" Widely Graded Sand with Gravel and Decomposed Bedrock.
		55			
		30			
		30			
					No Well Installed

GROUNDWATER OBSERVATION WELL REPORT			MW # 1
Project	SAXTONS RIVER VT		PG. 1 OF 1
Location	SAXTONS RIVER VT		Boring No. MW # 1
Client	STATE OF VERMONT		Location Tenny Hardware Alley
Contractor	CAPITOL WELL	Driller MIKE DRAGON	Project No. 90379
Inspected by	C. L. COVEL	Date 5 MARCH 91	
Checked by		Date	



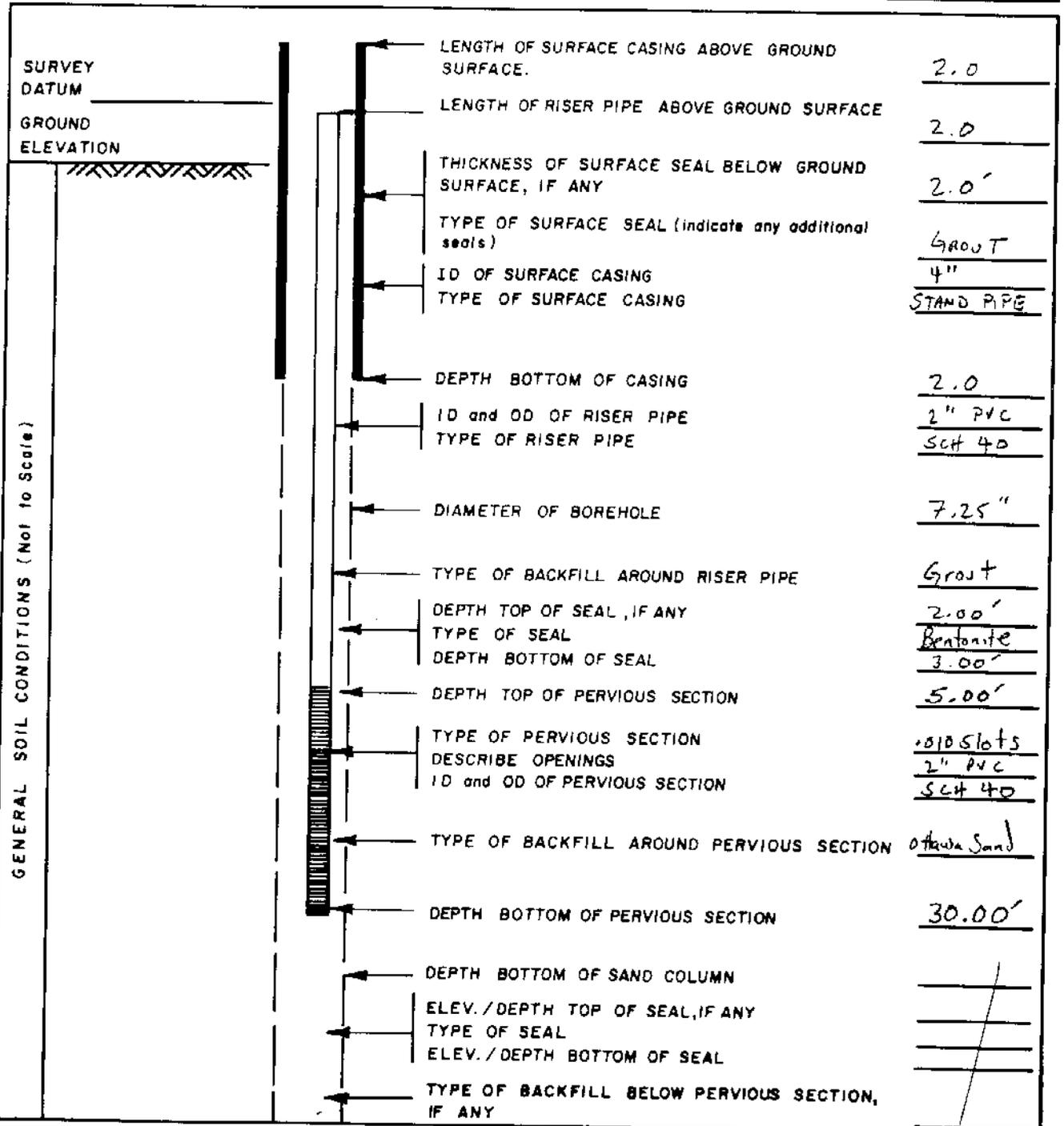
GROUNDWATER OBSERVATION WELL REPORT		MW # 2
Project	SAXTONS RIVER VT	PG. 1 OF 1
Location	SAXTONS RIVER VT	Boring No. MW 2
Client	STATE OF VERMONT	Location PIZZA PAUL & MARY SIDEWALK
Contractor	CAPITOL WELL Driller MIKE DRAGON	Project No. 90379
Inspected by	C. L. COVEL Date 5 MARCH 91	
Checked by	Date	



NOTES: Well location is in front of Pizza Paul & Mary on sidewalk North side of Main St.



GROUNDWATER OBSERVATION WELL REPORT		MW # 3
Project	SAXTONS RIVER, VERMONT	PG. 1 OF 1
Location	SAXTONS RIVER, VERMONT	Boring No. MW # 3
Client	STATE OF VERMONT	Location Skovinski Back Yard
Contractor	CAPITAL WELL Driller MIKE DRAGON	Project No. 90379
Inspected by	C. L. COVEL Date 5 MARCH 91	
Checked by	Date	



NOTES: WELL LOCATED IN SKOVINSKI BACK YARD  
EAST EDGE OF PROPERTY LINE

Φ G E I

Client: STATE OF VERMONT ANR		Project No. 90379		Boring No. BRX #1	
Ground El.		Bottom El.		Water El. \ Date	
Type/Diam. Boring: 6"		Drill Equip. AIR HAMMER ROTARY		Drilled by: CAPITOL WELL COMPANY	
Boring Location: SIMONDS BACK YARD		Date:		Logged by: C. L. COVEL	
Boring Location: SIMONDS BACK YARD		Date:		Sheet / of /	
Feet	WELL YIELD (gpm)		Log	Rock Descriptions	Remarks
	Blow Test	Packer Test			
16			0.0 0.2 0.5 0.6	OVERBURDEN Sw - widely graded sand w/ gravel	FLUVIAL DEPOSITS
20				Brown weathered schist w/ biotite, muscovite, hornblende, chlorite, Qtz and amphiboles, also kaolinite from weathered zones	STANDING POND VOLCANICS
40				50' more competent	55' Fracture
60	0.9 gpm			green/gray schist w/ chlorite, biotite, muscovite, Qtz & hornblende some feldspar	61'-81' Series of minor fractures throughout zone.
80	2.5 gpm				
100					
117'				Kaolinite zone ~ 110'	110'-117' soft / quick drilling
120				Black schist - Hornblende, biotite, muscovite, calcite, Pyrite	GILE MOUNTAIN FORMATION
140	2.5 gpm				Fracture 132'
				BOTTOM OF BORING, 140'	FINAL BLOW TEST 2.5 gpm
160					
180					
NOTES: LEGEND  Overburden Deposits  Dike  Fracture  Gile Mountain  Standing Pond Volcanics					
* GEI CONSULTANTS, Inc.					

Client: STATE OF VERMONT ANR		Project No. 90379		Boring No. BRX # 2	
Ground El.		Bottom El.		Hole Depth (ft.) 120	
Type/Diam. Borings: 6"		Drill Equip. AIR HAMMER ROTARY		Drilled by: CAPITOL WELL COMPANY	
Boring Location: CHAIST CHURCH R.O.W.		Date: 6 MARCH 91		Logged by: C. L. COVEL	
Sheet 1 of 1					
Feet	WELL YIELD (gpm)		Log	Rock Descriptions	Remarks
	Blow Test	Packer Test			
20			0-30	OVERBURDEN SW - widely graded Sand w/ gravel	FLUVIAL DEPOSITS Lower Terrace Saxtons River
36			30-40	Brown weathered Schist w/ Hornblende Chlorite, Biotite, Muscovite Calcite, Qtz, Trace K-spar	CASING SET 0 - 40' <u>STANDING POND VOLCANICS?</u>
40			40-60	Gray schist w/ Hornblende, Biotite, muscovite, Qtz, Calcite	65' More competent water Gray
60	0 GPM		60-80	Black/gray Schist w/ Hornblende Biotite, muscovite, Qtz, Calcite Garnet and Feldspar?	FRACTURE 88'-90' WATER BEARING GILE MOUNTAIN?
80			80-100		
100	5 GPM		100-120		
120	6 GPM		120	BOTTOM OF BORING, 120'	FINAL BLOW TEST 6 GPM
140					
160					
180					
NOTES: LEGEND  Overburden Deposits  Dike  Fracture Gile Mountain  Standing Pond Volcanics					
					GEI CONSULTANTS, Inc.

Client: TRIS Consultants	Project No. 90379	Boring No. KING WELL
Ground El.	Bottom El.	Hole Depth (ft.) 225
Type/Diam. Boring: Rock 6"	Drill Equip. AIR HAMMER ROTARY	Drilled by: WRAGG Brothers
Boring Location: KING RESIDENCE	Date: 11 DEC 90	Logged by: C. L. COVEL / PAUL MILLER

Feet	WELL YIELD (gpm)		Log	Rock Descriptions	Remarks
	Blow Test	Packer Test			
15			0.0 0.0 0.0	OVERBURDEN Sw - widely graded sand w/ Gravel	FLUVIAL DEPOSITS LOWER TERRACE OF SARONS RIVER
20	0gpm			Gray Schist w/ Biotite, Muscovite Hornblend, Qtz, Garnet Trace Pyrite, chlorite? - WEATHERED -	STANDING POND VOLCANICS MEMBER FRACTURE 35'-37'
40				MORE COMPETENT ROCK	Minor Fracture 60' large chips 2" dia.
60					
80					
100	0gpm			Gray Phyllite schist w/ Biotite, muscovite, Hornblend Qtz, Garnet	CASING SET 0'-100'
120	0gpm			Gray Phyllite schist w/ Biotite muscovite, Hornblend Qtz, Garnet, chlorite	FRACTURE 132' Slickensides on some chips
140					
150'					150' CHANGE IN ROCK
160	.5gpm			Black/Gray Schist w/ Biotite muscovite, Hornblend, Garnet, Pyrite, Graphite?	GILE MOUNTAIN FORMATION
180				Fe staining on chips, Yuggy Quartz ≈ 190'	FRACTURE WATER BEARING 190' ± 2" CHIPS
225	15gpm			BOTTOM OF BORING 225'	FINAL BLOW TEST 15 GPM

NOTES: LEGEND: Overburden Deposits Dike Fracture  
 Gile Mountain Standing Pond Volcanics



# WELL INSTALLATION RECORD

CLIENT: AR. SANDRI PROJECT: SAXTONS RIVER, VT. FILE NO: 924

STATION NO:                      WELL NO. AR-6

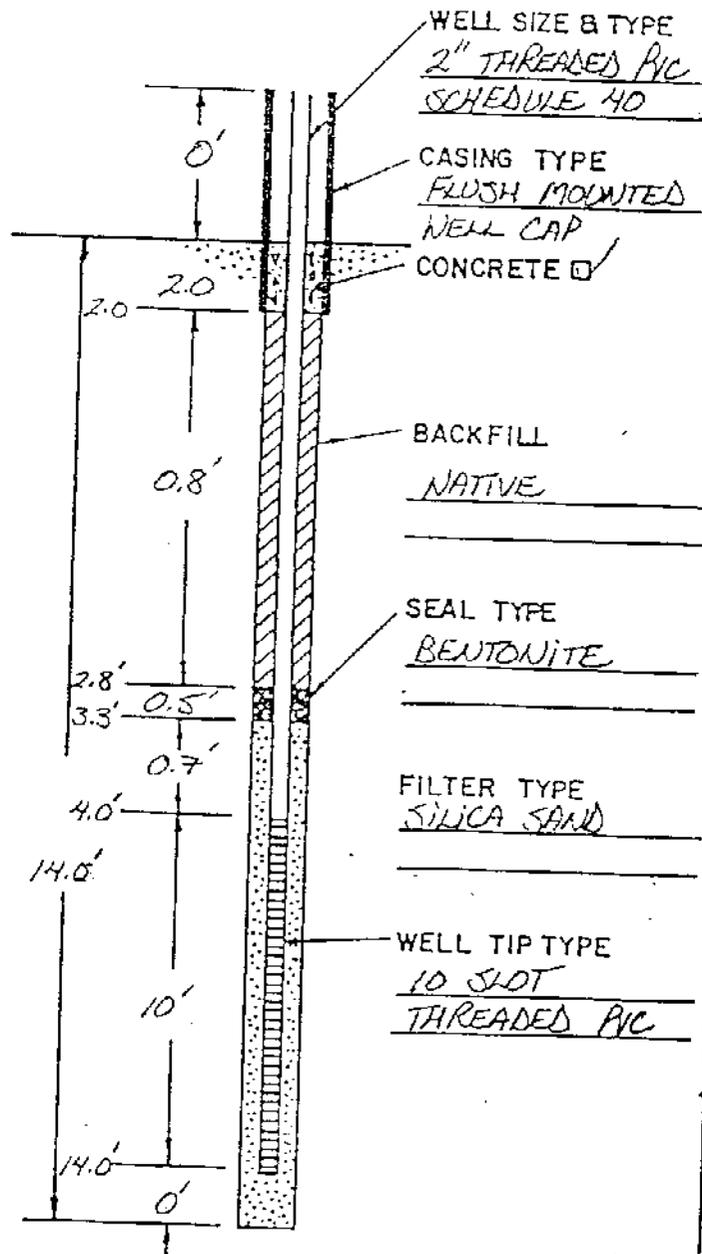
CREW SUPERVISOR: PAUL MILLER DATE INSTALLED: 11/9/89

WELL LOCATION: SIDEWALK SOUTH OF TENNEY'S LUMBER (SEE SITE MAP)

GROUND ELEV: 103.56 WELL TOP ELEV: 103.56  
PVC ELEV: 103.31

DEPTH-  
FEET SOIL PROFILE

(SEE SOIL BORING LOG)



**APPENDIX E**  
**HYDRALIC CONDUCTIVITY ESTIMATES**



Client STATE OF VERMONT

Date 18 APRIL 91 By C. L. COVEL

Subject SLUG TEST CALCULATIONS MW # 3

Checked SML By 4-10-91

Approved By

Elapsed Time Seconds	Water Level feet	y/t Change in H <sub>2</sub> O Level
0	11.70	—
20	12.25	.55
30	12.15	.45
50	12.10	.40
60	12.07	.37
80	12.04	.34
90	12.02	.32
100	11.99	.29
110	11.98	.28
120	11.96	.26
135	11.94	.24
150	11.93	.23
165	11.92	.22
180	11.89	.19
210	11.87	.17
255	11.86	.16
270	11.84	.14
300	11.82	.12
330	11.81	.11
360	11.80	.10
420	11.77	.07
600	11.75	.05

$$\ln \frac{R_e/r_w}{L_e/r_w} = \frac{1.1}{\ln L_e/r_w} + \frac{A+B \ln \left[ \frac{(H-L_w)}{r_w} \right]}{L_e/r_w}$$

$$= \ln \frac{R_e/r_w}{L_e/r_w} = \frac{1.1}{\ln 18.27/.3} + \frac{3.25 + .6 \ln \left[ \frac{29.97-11.82}{.3} \right]}{18.27/.3}$$

$$\frac{1.1}{4.11} + \frac{3.25 + .6(3.66)}{60.90} =$$

$$.2676 + .0894 = 2.80$$

$L_w = 18.27$

$L_e = 18.27 \text{ screen}$

$H = 29.97$

$r_c = .083 \text{ (2" ID)}$

$\ln R_e/r_w = 2.80$

$y_0 = .52$

$y_t = .19$

$t = 180 \text{ sec}$

$L_e/r_w = \frac{18.27}{.3} = 60.90$

$A = 3.25$

$B = .6$

$r_w = .3 \text{ Disturbed Auger}$

$L_w = 32.00 - 11.70 = 20.3 - 2.03 = 18.27$



Client STATE OF VERMONT

Date 18 APRIL 91 By C. L. Co-EL

Subject PERMEABILITY CALCULATIONS

Checked SDC By 4-17-91

Approved

By

$$K = \frac{r_c^2 \ln(R_c/r_w)}{2Le} \cdot \frac{1}{t} \cdot \ln\left(\frac{y_0}{y_t}\right) =$$

$$\frac{(0.083)^2 (2.80)}{2(18.27)} \cdot \frac{1}{180} \cdot \ln\left(\frac{0.52}{0.19}\right) =$$

$$\frac{1.0193}{36.54} \cdot (0.0055) \cdot (1.01) = 2.93 \times 10^{-6} \text{ ft}^2/\text{sec}$$

OR

$$8.93 \times 10^{-5} \text{ cm}^2/\text{sec}$$

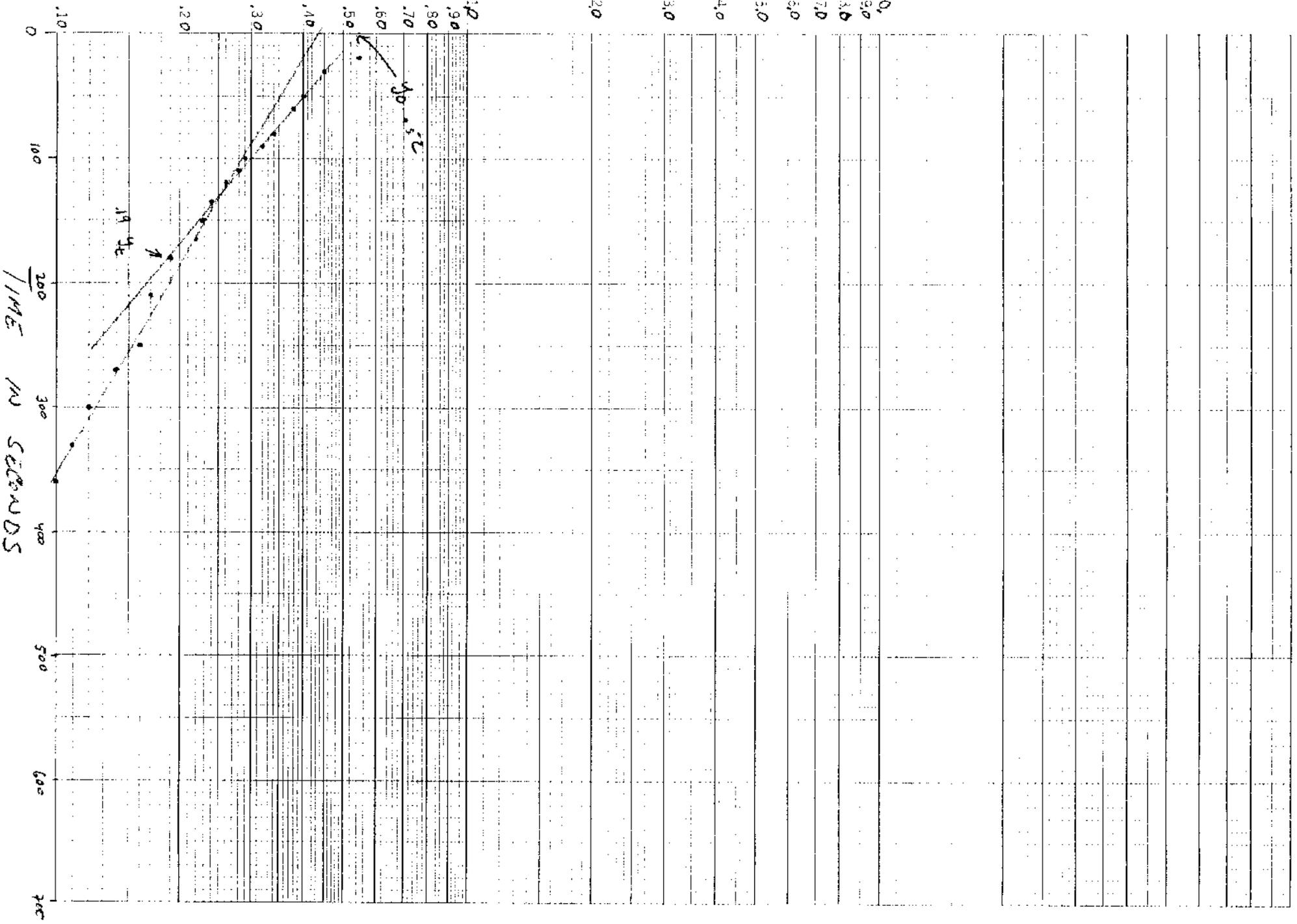
SLOW TEST HCU#3 SKIMMERS WELL

K&M SEMI-LOGARITHMIC • 3 CYCLES X 10 DIVISIONS  
KEUFFEL & ESSER CO. MADE IN U.S.A.

46 5492

(12/2)

CHANGE IN WATER LEVEL (FEET)



**APPENDIX F**

**SOIL ANALYTICAL RESULTS  
FROM AR6**

**GEI Analytical Results**

**VTANR Analytical Results**

BEDROCK (A) 14'



# STEVENS ANALYTICAL LABORATORIES, INC.

38 Montvale Avenue, Stonham, MA 02180, (617) 438-6114

FAX (617) 438-0173

SUBMITTED BY:  
TRI-S, INC.  
214 MAIN STREET  
BRATTLEBORO, MA. 02254-3677

LABORATORY NUMBER: 8773  
SAMPLE DATE: 11/09/89  
DATE RECEIVED: 11/14/89  
ANALYSIS DATE: 11/17/89  
SAMPLE MATRIX: SOIL  
SAMPLE CONTAINER: VOA Vial  
EPA METHOD 8240

ATTN: DAVID GAGNON

SAMPLE SOURCE: A.R. SANDRI #1

(WELL AR-6  
IN FRONT OF TENNEY'S LUMBER)

<u>COMPOUND</u>	<u>CONCENTRATION</u> ug/kg	<u>DETECTION LIMIT</u> ug/kg
Chloromethane	ND	250
Bromomethane	ND	250
Vinyl Chloride	ND	250
Chloroethane	ND	250
Methylene Chloride	ND	250
Trichlorofluoromethane	ND	250
1,1 Dichloroethene	ND	125
1,1 Dichloroethane	ND	125
trans-1,2 Dichloroethene	ND	125
Chloroform	ND	125
1,2 Dichloroethane	ND	125
1,1,1 Trichloroethane	ND	125
Carbon Tetrachloride	ND	125
Bromodichloromethane	ND	125
1,2 Dichloropropane	ND	125
1,3 Dichloropropane(cis & trans)	ND	125
Trichloroethene	1,100	125
Dibromochloromethane	ND	125
1,1,2 Trichloroethane	ND	125
Benzene	ND	125
Bromoform	ND	125
1,1,2,2 Tetrachloroethane	ND	125
Tetrachloroethene	320	125
Toluene	150	125
Chlorobenzene	ND	125
Ethylbenzene	ND	125
1,3 Dichlorobenzene	ND	125
1,2 Dichlorobenzene	ND	125
1,4 Dichlorobenzene	ND	125
Total Xylenes	ND	125

Authorized by: Katharine S. Walker  
Katharine S. Walker, General Manager

ND - NONE DETECTED

Sample results are reported on a wet weight basis.



# STEVENS ANALYTICAL LABORATORIES, INC.

38 Montvale Avenue, Stoneham, MA 02180, (617) 438-6114

FAX (617) 438-0173

LABORATORY NUMBER: 8773

SAMPLE DATE: 11/09/89

DATE RECEIVED: 11/14/89

SUBMITTED BY: TRI-S, INC.  
214 MAIN STREET  
BRATTLEBORO, VT 02254-3677

ATTN: DAVID GAGNON

SAMPLE SOURCE: A. R. SANDRI

REFERENCE: According to Standard Methods of Water and Wastewater Analysis, 16th Ed.

SAMPLE SOURCE

TPH (IR)

#1

5.8 mg/kg

Wet Weight Basis

Authorized by: \_\_\_\_\_

Katharine S. Walker, General Manager

## **GEI ANALYTICAL RESULTS**

# Eastern Analytical, Inc.

130 Hall St., Concord, NH 03301 (603) 228-0525

April 2, 1991

RECEIVED

APR 04 1991

Chris Covell  
GEI Consultants, Inc.  
123 Sheep Davis Road, Suite C  
Concord, NH 03301

### Sample Identification:

Client ID: 90379/Saxtons River, Vermont  
Sample Qty/Type: 4 aqueous, 5 soil  
Date Recv'd: March 12, 1991  
EAI ID: 1599 GEI

Dear Mr. Covell:

Enclosed, please find the results of the analysis of the sample(s) identified above. This report contains the following sections:

ANALYSIS TYPE	NO. OF PAGES
• Hazardous Substance List (HSL) VOCs	2

The following standard abbreviations and conventions apply throughout all Eastern Analytical, Inc. reports:

- < = "Less than" followed by the detection limit
- TNR = Testing Not Requested
- ND = None detected, no established detection limits

If you have any questions regarding the results contained within, feel free to directly contact the chemist who performed the analysis. We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,



William Brunkhorst  
QA/QC Coordinator

APPROVED FOR PAYMENT
GEI CONSULTANTS, INC.
CONCORD, NH
BY: <u>[Signature]</u>
DATE: <u>4-11-91</u>
PROJECT: <u>90379</u>
PO: <u>3590</u>



# LABORATORY REPORT

Eastern Analytical, Inc. Designation: 1599 GEI

Client: GEI Consultants, Inc.  
Sample Qty/Type: 4 aqueous, 5 soil

Client Designation: 90379/Saxtons River, Vermont  
Date Received: March 12, 1991

## Hazardous Substance List Volatile Organic Compounds

Page 2 of 2

Sample ID:	B1-9	PM-1-7	PM-5-21	TH-1-18	TH-4-13	EPA Method
Matrix:	Soil	Soil	Soil	Soil	Soil	
Date of Analysis:	3/14/91	3/14/91	3/14/91	3/14/91	3/14/91	
Units:	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
Analyst:	NZ	NZ	NZ	NZ	NZ	
Dilution factor:	10	1	1	1	1	
Chloromethane	< 500	< 50	< 50	< 50	< 50	8240
Bromomethane	< 500	< 50	< 50	< 50	< 50	8240
Vinyl Chloride	< 500	< 50	< 50	< 50	< 50	8240
Chloroethane	< 500	< 50	< 50	< 50	< 50	8240
Methylene Chloride	< 100	< 10	< 10	< 10	< 10	8240
Acetone	< 1000	< 100	< 100	< 100	< 100	8240
Carbon Disulfide	< 100	< 10	< 10	< 10	< 10	8240
1,1-Dichloroethene	< 100	< 10	< 10	< 10	< 10	8240
1,1-Dichloroethane	< 100	< 10	< 10	< 10	< 10	8240
Trans-1,2-Dichloroethene	< 100	< 10	< 10	< 10	< 10	8240
Cis-1,2-Dichloroethene	< 100	< 10	< 10	< 10	< 10	8240
Chloroform	< 100	< 10	< 10	< 10	< 10	8240
1,2-Dichloroethane	< 100	< 10	< 10	< 10	< 10	8240
2-Butanone (MEK)	< 1000	< 100	< 100	< 100	< 100	8240
1,1,1-Trichloroethane	< 100	< 10	< 10	< 10	< 10	8240
Carbon Tetrachloride	< 100	< 10	< 10	< 10	< 10	8240
Vinyl Acetate	< 1000	< 100	< 100	< 100	< 100	8240
Bromodichloromethane	< 100	< 10	< 10	< 10	< 10	8240
1,2-Dichloropropane	< 100	< 10	< 10	< 10	< 10	8240
Trans-1,3-Dichloropropene	< 100	< 10	< 10	< 10	< 10	8240
Trichloroethene	< 100	< 10	< 10	< 10	< 10	8240
Dibromochloromethane	< 100	< 10	< 10	< 10	< 10	8240
1,1,2-Trichloroethane	< 100	< 10	< 10	< 10	< 10	8240
Benzene	< 100	< 10	< 10	< 10	< 10	8240
Cis-1,3-Dichloropropene	< 100	< 10	< 10	< 10	< 10	8240
2-Chloroethylvinylether	< 100	< 10	< 10	< 10	< 10	8240
Bromoform	< 100	< 10	< 10	< 10	< 10	8240
4-Methyl-2-Pentanone (MIBK)	< 1000	< 100	< 100	< 100	< 100	8240
2-Hexanone	< 1000	< 100	< 100	< 100	< 100	8240
Tetrachloroethene	< 100	440	< 10	< 10	< 10	8240
1,1,2,2-Tetrachloroethane	< 100	< 10	< 10	< 10	< 10	8240
Toluene	< 100	< 10	< 10	< 10	< 10	8240
Chlorobenzene	< 100	< 10	< 10	< 10	< 10	8240
Ethylbenzene	< 100	< 10	< 10	< 10	< 10	8240
Styrene	< 100	< 10	< 10	< 10	< 10	8240
Total Xylenes	< 100	< 10	< 10	< 10	< 10	8240
Volatile Petroleum						
Hydrocarbons (C4-C16)	50,000	< 500	< 500		< 500	8015
(C10-C16)				1,000		8015

Approved By: William Brunkhorst  
William Brunkhorst, Organics Supervisor

# LABORATORY REPORT

**Eastern Analytical, Inc.** Designation: 1599 GEI

Client: GEI Consultants, Inc.  
Sample Qty/Type: 4 aqueous, 5 soil

Client Designation: 90379/Saxtons River, Vermont  
Date Received: March 12, 1991

## Hazardous Substance List Volatile Organic Compounds

Page 1 of 2

Sample ID:	AR6	BRX2	MW1	MW3	EPA Method
Matrix:	Aqueous	Aqueous	Aqueous	Aqueous	
Date of Analysis:	3/15/91	3/15/91	3/15/91	3/15/91	
Units:	µg/L	µg/L	µg/L	µg/L	
Analyst:	NZ	NZ	NZ	NZ	
Chloromethane	< 5	< 5	< 5	< 5	601
Bromomethane	< 5	< 5	< 5	< 5	601
Vinyl Chloride	< 5	< 5	< 5	< 5	601
Chloroethane	< 5	< 5	< 5	< 5	601
Methylene Chloride	< 2	< 2	< 2	< 2	601
Acetone	< 10	< 10	< 10	< 10	8015
Carbon Disulfide	< 2	< 2	< 2	< 2	601
1,1-Dichloroethene	< 2	< 2	< 2	< 2	601
1,1-Dichloroethane	< 2	< 2	< 2	< 2	601
Trans-1,2-Dichloroethene	< 2	< 2	< 2	< 2	601
Cis-1,2-Dichloroethene	< 2	< 2	< 2	< 2	601
Chloroform	< 2	< 2	< 2	< 2	601
1,2-Dichloroethane	< 2	< 2	< 2	< 2	601
2-Butanone (MEK)	< 10	< 10	< 10	< 10	8015
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2	601
Carbon Tetrachloride	< 2	< 2	< 2	< 2	601
Vinyl Acetate	< 10	< 10	< 10	< 10	8015
Bromodichloromethane	< 2	< 2	< 2	< 2	601
1,2-Dichloropropane	< 2	< 2	< 2	< 2	601
Trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2	601
Trichloroethene	< 2	< 2	< 2	< 2	601
Dibromochloromethane	< 2	< 2	< 2	< 2	601
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2	601
Benzene	< 1	< 1	< 1	< 1	602
Cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2	601
2-Chloroethylvinylether	< 2	< 2	< 2	< 2	601
Bromoform	< 2	< 2	< 2	< 2	601
4-Methyl-2-Pentanone (MIBK)	< 10	< 10	< 10	< 10	8015
2-Hexanone	< 10	< 10	< 10	< 10	8015
Tetrachloroethene	< 2	< 2	< 2	5	601
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2	601
Toluene	< 1	< 1	< 1	< 1	602
Chlorobenzene	< 2	< 2	< 2	< 2	602
Ethylbenzene	< 1	< 1	< 1	< 1	602
Styrene	< 1	< 1	< 1	< 1	602
Total Xylenes	< 1	< 1	< 1	< 1	602
Volatiles Petroleum	< 1	< 1	< 1	< 1	602
Hydrocarbons (C4-C14)	100	< 20	< 20	< 20	8015

Approved By :



William Brunkhorst, Organics Supervisor

April 18, 1991

REC'D  
APR 19 1991  
GEI CONSULTANTS, INC.

Chris Covell  
GEI Consultants, Inc.  
123 Sheep Davis Road, Suite C  
Concord, NH 03301

**Sample Identification:**  
Client ID: 90379/Saxtons River, Vermont  
Sample Qty/Type: 1 aqueous  
Date Recv'd: April 1, 1991  
EAI ID: 1693 GEI

Dear Mr. Covell:

Enclosed, please find the results of the analysis of the sample(s) identified above. This report contains the following sections:

ANALYSIS TYPE	NO. OF PAGES
• Hazardous Substance List (HSL) VOCs	1

The following standard abbreviations and conventions apply throughout all Eastern Analytical, Inc. reports:

- < = "Less than" followed by the detection limit
- TNR = Testing Not Requested
- ND = None detected, no established detection limits

If you have any questions regarding the results contained within, feel free to directly contact the chemist who performed the analysis. We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,



William Brunkhorst  
QA/QC Coordinator

# LABORATORY REPORT

**Eastern Analytical, Inc.** Designation: 1693 GEI

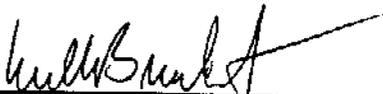
Client: GEI Consultants, Inc.  
Sample Qty/Type: 1 aqueous

Client Designation: 90379/Saxtons River, Vermont  
Date Received: April 1, 1991

## Hazardous Substance List Volatile Organic Compounds

Sample ID:	BRX1		
Matrix:	Aqueous		
Date of Analysis:	4/5/91		
Units:	µg/L		
Analyst:	NZ		EPA Method
Chloromethane	< 5		601
Bromomethane	< 5		601
Vinyl Chloride	< 5		601
Chloroethane	< 5		601
Methylene Chloride	< 2		601
Acetone	< 10		8015
Carbon Disulfide	< 2		601
1,1-Dichloroethene	< 2		601
1,1-Dichloroethane	< 2		601
Trans-1,2-Dichloroethene	< 2		601
Cis-1,2-Dichloroethene	< 2		601
Chloroform	< 2		601
1,2-Dichloroethane	< 2		601
2-Butanone (MEK)	< 10		8015
1,1,1-Trichloroethane	< 2		601
Carbon Tetrachloride	< 2		601
Vinyl Acetate	< 10		8015
Bromodichloromethane	< 2		601
1,2-Dichloropropane	< 2		601
Trans-1,3-Dichloropropene	< 2		601
Trichloroethene	< 2		601
Dibromochloromethane	< 2		601
1,1,2-Trichloroethane	< 2		601
Benzene	< 1		602
Cis-1,3-Dichloropropene	< 2		601
2-Chloroethylvinylether	< 2		601
Bromoform	< 2		601
4-Methyl-2-Pentanone (MIBK)	< 10		8015
2-Hexanone	< 10		8015
Tetrachloroethene	< 2		601
1,1,2,2-Tetrachloroethane	< 2		601
Toluene	< 1		602
Chlorobenzene	< 2		602
Ethylbenzene	< 1		602
Styrene	< 1		602
Total Xylenes	< 1		602
Volatile Petroleum Hydrocarbons	< 20		8015

Approved By :

  
 William Brunkhorst, Organics Supervisor



AQUARIAN ANALYTICAL INC.

Laboratory Services

P.O. Box 186

Canterbury, N.H. 03224

603-783-9097

Volatile Organic Report

04-16-91, 21:25

Sample 1343

Date Sampled = 04-15-91, 10:10  
Date Logged In = 04-16-91, 08:27  
Date Completed = 04-16-91

Sampler = C. COVEL  
Location = #90379 TANK SAMPLE #2  
Town = SAXTON RIVER

Organic Compound	Result	percent	Det. Lim.	percent
Bromodichloromethane	BD		0.10	
Chlorodibromomethane	BD		0.10	
Bromoform	BD		0.10	
Chloroform	BD		0.10	
Carbon Tetrachloride	BD		0.10	
dichloromethane	BD		0.20	
1,1-dichloroethane	BD		0.10	
1,2-dichloroethane	BD		0.10	
1,1,1-trichloroethane	BD		0.10	
1,1-dichloroethylene	BD		0.10	
Trichloroethylene		0.30	0.10	
Tetrachloroethylene	>	99.50	0.10	
1,2-Dichloroethylene (c)	BD		0.10	
1,2-Dichloroethylene (t)	BD		0.10	
Chloroethane	BD		0.10	
Vinylchloride	BD		0.10	
Bromomethane	BD		0.50	
Chloromethane	BD		0.50	
Trichlorofluoromethane	BD		0.10	
Trichlorotrifluoroethane	BD		0.10	
Benzene	BD		0.10	
Toluene	BD		0.10	
Ethylbenzene	BD		0.10	
m&p-Xylene	BD		0.10	
o-Xylene	BD		0.10	
Chlorobenzene	BD		0.10	
1,2-dichlorobenzene	BD		0.20	
1,3-dichlorobenzene	BD		0.20	
1,4-dichlorobenzene	BD		0.20	
Styrene	BD		0.10	
Acetone	BD		5.00	
Tetrahydrofuran	BD		2.50	
Diethylether	BD		1.50	
Methyl t-butyl ether	BD		0.30	
Methyl isobutyl ketone	BD		2.50	
Methyl ethyl ketone	BD		2.50	
Carbon Disulfide	BD		0.20	

Comments:

In addition to the two solvents listed above, the sample contained traces of water, and what appeared to be rust. Tetrachloroethylene was confirmed by a library search.

Method of Analyses = Modified EPA-8260  
Certified - N.H., Conn., Mass., Maine EPA-624/524  
BD = Below Detection Limit  
All Results are in percent.







GE! Consultants, Inc. 53 Regional Drive Concord, NH 03301-8500

CHAIN OF CUSTODY RECORD  
DOCUMENT NUMBER

PROJECT NAME AND NUMBER:

SAXTONS RIVER/Vermont 90379

SAMPLERS:

C.L. POVEL / Joanne McLushin

NO. OF CONTAINERS

EM 8240  
WOC's  
EM 8240

REMARKS

STATION NO.	DATE	TIME (hours)	COMP	CRAB	SAMPLE NUMBER	NO. OF CONTAINERS	EM 8240	WOC's	EM 8240	REMARKS
ARK6	3/8/91	18:20		✓	ARK6	2	✓			Tenny Hardware old well possible PERC.
MW 1	3/8/91	18:27		✓	MW#1	2	✓			Alloy Tenny Hardware
BRX2	3/8/91	12:33		✓	BRX#2	2	✓			Bedrock well #2
MW3	3/8/91	17:44		✓	MW#3	2	✓			Christ Church Alley
TH-4-13	3/7/91	13:48		✓	TH-4-13	1		✓		Wilma Skowinski overburden well
TH-1-18	3/7/91	10:55		✓	TH-1-18	1		✓		Tenny Hardware Basement Test Hole 4
PM-5-21	3/2/91	15:35		✓	PM-5-21	1		✓		Tenny Hardware Basement Test Hole 1
PM-1-7	3/7/91	14:30		✓	PM-1-7	1		✓		Pizza Paul & Mary Basement Test Hole 5
B1-9					B1-9	2		✓		Pizza Paul & Mary Basement Test Hole 1 (Below Tank)
										Tenny Hardware Basement @ 4 to 10 feet

RELINQUISHED BY (SIGNATURE):

RELINQUISHED BY (SIGNATURE):

RELINQUISHED BY (SIGNATURE):

DATE/TIME: (hours)

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RECEIVED BY (SIGNATURE):

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RECEIVED FOR LABORATORY BY (SIGNATURE):

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RELINQUISHED BY (SIGNATURE):

DATE/TIME:

REMARKS:

DATE/TIME:

DATE/TIME:

RECEIVED BY (SIGNATURE):

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3/12/91 10:35 AM



PROJECT NAME AND NUMBER: <u>Saxtons River (135)</u>						NO. OF CONTAINERS	REMARKS			
SAMPLERS: <u>Chris Covel, Steve Winters</u>										
STATION NO.	DATE	TIME (HOURS)	COMP	GRAB	SAMPLE NUMBER					
TH-1-14	3/7/91	10:05		✓	TH-1-14	1	✓			10 ppm H <sub>2</sub> O; PCE suspected
TH-4-9	3/7/91	13:45		✓	TH-4-9	1	✓			16 ppm H <sub>2</sub> O; PCE suspected
PM-5-12	3/7/91	15:06		✓	PM-5-12	1	✓			1 ppm H <sub>2</sub> O; suspect pce
PM-5-23	3/7/91	15:38		✓	PM-5-23	1	✓			0.8 ppm H <sub>2</sub> O; suspect pce
TH-1-8	3/7/91	10:55		✓	TH-1-8	1	✓			5 ppm H <sub>2</sub> O; suspect pce
TH-4-15	3/7/91	13:58		✓	TH-4-15	1	✓			11 ppm H <sub>2</sub> O; suspect pce
PM-1-12	3/7/91	14:35		✓	PM-1-12	1	✓			0.5 ppm H <sub>2</sub> O; suspect pce

200-211-1347-1100  
 8/24/91

RELINQUISHED BY (SIGNATURE): <i>[Signature]</i>	DATE/TIME (hours): 14:52 3/7/91	RECEIVED BY (SIGNATURE): <i>[Signature]</i>	RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):
RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):	RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):
RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED FOR LABORATORY BY (SIGNATURE):	DATE/TIME:	REMARKS:	

## **VTANR ANALYTICAL RESULTS**

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR METHOD 8240 GC/MS FOR VOLATILE ORGANICS - SOILS

SAMPLE NUMBER: 59855

DATE RUN: 03-20-91

SITE: PM 1-12

ANALYST: LVV REMARKS CODE 824S: 5

SAMPLE WT: 2.3g

METHOD: 8240S

		Practical Quant. Limits	TEST
		Low-Level Soil (EPA)	RESULTS ug/kg
VS07	Vinylchloride	10	ND
VS08	Chloromethane	10	ND
VS09	Bromomethane	10	ND
VS10	Chloroethane	10	ND
VS11	Trichlorofluoromethane	10	ND
VS12	Acetone	100	ND
VS13	1,1-Dichloroethene	5	ND
VS14	Carbondisulfide	5	ND
VS15	Methylene Chloride	5	ND
VS16	Methyl-t-Butylether (MTBE)	---	ND
VS17	1,2-Dichloroethene	5	ND
VS18	1,1-Dichloroethane	5	ND
VS19	Vinyl Acetate	50	ND
VS20	2-Butanone	100	ND
VS21	Chloroform	5	ND
VS22	1,1,1-Trichloroethane	5	ND
VS23	Carbon Tetrachloride	5	ND
VS24	Benzene	5	ND
VS25	1,2-Dichloroethane	5	ND
VS26	Trichloroethene	5	ND
VS27	1,2-Dichloropropane	5	ND
VS28	Bromodichloromethane	5	6
VS29	4-Methyl-2-Pentanone	50	ND
VS30	Cis-1,3-Dichloropropane	5	ND
VS31	Toluene	5	ND
VS32	Trans-1,3-Dichloropropene	5	ND
VS33	1,1,2-Trichloroethane	5	ND
VS34	2-Hexanone	50	ND
VS35	Tetrachloroethene	5	9
VS36	Dibromochloromethane	5	ND
VS37	Chlorobenzene	5	ND
VS38	Ethylbenzene	5	ND
VS39	Xylenes	5	ND
VS40	Styrene	5	ND
VS41	Bromoform	5	ND
VS42	1,1,2,2,-Tetrachloroethane	5	ND

REMARKS.....  
 Results recalculated based on dry weight (SRL).  
 GD\180-LOW

MAR 27 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/25/91

LAB ID 59855 REPORT TO S/WINTERS DUE DATE 04/11/91

SOURCE LOCATION PM-1-12 COLLECTION DATE 03/07/91

PROGRAM 022-HAZARDOUS WASTE (STATE) AMBIENT WATER SAMPLE N

SUBMITTED BY S/WINTERS PHONE 244-8702 SUBMIT DATE 03/11/91 LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
824S	METHOD 8240 TESTS, SOIL	0	NONE	S	03/20/91
828	=BROMODICHLOROMETHANE	5	UG/KG WW		03/20/91
835	=TETRACHLOROETHENE (PCE)	8	UG/KG WW		03/20/91

MAR 27 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/25/91

LAB ID 59851      REPORT TO S/WINTERS      DUE DATE 04/11/91  
SOURCE LOCATION PM-5-12      COLLECTION DATE 03/07/91  
PROGRAM 022-HAZARDOUS WASTE (STATE)      AMBIENT WATER SAMPLE N  
SUBMITTED BY S/WINTERS      PHONE 244-8702      SUBMIT DATE 03/11/91      LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
324S	METHOD 8240 TESTS, SOIL	0	NONE	Z	03/20/91

MAR 27 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/25/91

LAB ID 59852 REPORT TO S/WINTERS DUE DATE 04/11/91  
SOURCE LOCATION PM-5-23 COLLECTION DATE 03/07/91  
PROGRAM 022-HAZARDOUS WASTE (STATE) AMBIENT WATER SAMPLE N  
SUBMITTED BY S/WINTERS PHONE 244-8702 SUBMIT DATE 03/11/91 LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
8245	METHOD 8240 TESTS, SOIL	0	NONE	2	03/20/91

MAR 27 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/25/91

LAB ID 59853 REPORT TO S/WINTERS DUE DATE 04/11/91

SOURCE LOCATION TH-1-8 COLLECTION DATE 03/07/91

PROGRAM 022-HAZARDOUS WASTE (STATE) AMBIENT WATER SAMPLE N

SUBMITTED BY S/WINTERS PHONE 244-8702 SUBMIT DATE 03/11/91 LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
824S	METHOD 8240 TESTS, SOIL	0	NONE	Z	03/20/91

MAR 27 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/25/91

AB ID 59849 REPORT TO S/WINTERS DUE DATE 04/11/91  
SOURCE LOCATION TH-1-14 COLLECTION DATE 03/07/91  
PROGRAM 022-HAZARDOUS WASTE (STATE) AMBIENT WATER SAMPLE N  
SUBMITTED BY S/WINTERS PHONE 244-8702 SUBMIT DATE 03/11/91 LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
24S	METHOD 8240 TESTS, SOIL	0	NONE	Z	03/20/91

MAR 27 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/25/91

LAB ID 59850 REPORT TO S/WINTERS DUE DATE 04/11/91

SOURCE LOCATION TH-4-9 COLLECTION DATE 03/07/91

PROGRAM 022-HAZARDOUS WASTE (STATE) AMBIENT WATER SAMPLE N

SUBMITTED BY S/WINTERS PHONE 244-8702 SUBMIT DATE 03/11/91 LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
3_4S	METHOD 8240 TESTS, SOIL	0	NONE	T	03/20/91
7_28	:BROMODICHLOROMETHANE	11	UG/KG WW		03/20/91

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR METHOD 8240 GC/MS FOR VOLATILE ORGANICS - SOILS

APR 28 1991

SAMPLE NUMBER: 59854

ANALYST: LVV REMARKS CODE 824S: T

DATE RUN: 03-20-91

SAMPLE WT: 0.9g

SITE: TH 4-15

METHOD: 8240S

		Practical Quant. Limits Low-Level Soil (EPA)	TEST RESULTS ug/kg
VS07	Vinylchloride	10	ND
VS08	Chloromethane	10	ND
VS09	Bromomethane	10	ND
VS10	Chloroethane	10	ND
VS11	Trichlorofluoromethane	10	ND
VS12	Acetone	100	ND
VS13	1,1-Dichloroethene	5	ND
VS14	Carbondisulfide	5	ND
VS15	Methylene Chloride	5	ND
VS16	Methyl-t-Butylether (MTBE)	---	ND
VS17	1,2-Dichloroethene	5	ND
VS18	1,1-Dichloroethane	5	ND
VS19	Vinyl Acetate	50	ND
VS20	2-Butanone	100	ND
VS21	Chloroform	5	ND
VS22	1,1,1-Trichloroethane	5	ND
VS23	Carbon Tetrachloride	5	ND
VS24	Benzene	5	ND
VS25	1,2-Dichloroethane	5	ND
VS26	Trichloroethene	5	ND
VS27	1,2-Dichloropropane	5	ND
VS28	Bromodichloromethane	5	14
VS29	4-Methyl-2-Pentanone	50	ND
VS30	Cis-1,3-Dichloropropene	5	ND
VS31	Toluene	5	ND
VS32	Trans-1,3-Dichloropropene	5	ND
VS33	1,1,2-Trichloroethane	5	ND
VS34	2-Hexanone	50	ND
VS35	Tetrachloroethene	5	ND
VS36	Dibromochloromethane	5	ND
VS37	Chlorobenzene	5	ND
VS38	Ethylbenzene	5	ND
VS39	Xylenes	5	ND
VS40	Styrene	5	ND
VS41	Bromoform	5	ND
VS42	1,1,2,2,-Tetrachloroethane	5	ND

REMARKS.....

Results recalculated based on dry weight (SRL). Many hydrocarbon peaks present. TVH = 1150 ug/kg (estimated).  
 GD\180-LOW

MAR 27 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/25/91

AB ID 59854 REPORT TO S/WINTERS DUE DATE 04/11/91

SOURCE LOCATION TH-4-15 COLLECTION DATE 03/07/91

PROGRAM 022-HAZARDOUS WASTE (STATE) AMBIENT WATER SAMPLE N

SUBMITTED BY S/WINTERS PHONE 244-8702 SUBMIT DATE 03/11/91 LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
6245	METHOD 8240 TESTS, SOIL	0	NONE	T	03/20/91
128	=BROMODICHLOROMETHANE	13	UG/KG WW		03/20/91

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR METHOD 8240 GC/MS FOR VOLATILE ORGANICS - SOILS

APR 20

SAMPLE NUMBER: 59782

DATE RUN: 03-18-91

SITE: B1 1-3 ft.

ANALYST: LVV REMARKS CODE 824S: S

SAMPLE WT: 4.1g

METHOD: 8240S

		Practical Quant. Limits	TEST
		Low-Level Soil (EPA)	RESULTS ug/kg
VS07	Vinylchloride		
VS08	Chloromethane	10	ND
VS09	Bromomethane	10	ND
VS10	Chloroethane	10	ND
		10	ND
VS11	Trichlorofluoromethane		
VS12	Acetone	10	ND
VS13	1,1-Dichloroethene	100	ND
VS14	Carbondisulfide	5	ND
		5	ND
VS15	Methylene Chloride		
VS16	Methyl-t-Butylether (MTBE)	5	ND
VS17	1,2-Dichloroethene	---	ND
VS18	1,1-Dichloroethane	5	ND
		5	ND
VS19	Vinyl Acetate		
VS20	2-Butanone	50	ND
VS21	Chloroform	100	ND
VS22	1,1,1-Trichloroethane	5	ND
		5	ND
VS23	Carbon Tetrachloride		
VS24	Benzene	5	ND
VS25	1,2-Dichloroethane	5	ND
VS26	Trichloroethene	5	ND
		5	ND
VS27	1,2-Dichloropropane		
VS28	Bromodichloromethane	5	ND
VS29	4-Methyl-2-Pentanone	5	ND
VS30	Cis-1,3-Dichloropropene	50	ND
		5	ND
VS31	Toluene		
VS32	Trans-1,3-Dichloropropene	5	7
VS33	1,1,2-Trichloroethane	5	ND
VS34	2-Hexanone	5	ND
		50	ND
VS35	Tetrachloroethene		
VS36	Dibromochloromethane	5	ND
VS37	Chlorobenzene	5	ND
VS38	Ethylbenzene	5	ND
		5	ND
VS39	Xylenes	---	
VS40	Styrene	5	ND
VS41	Bromoform	5	ND
VS42	1,1,2,2,-Tetrachloroethane	5	ND
		5	ND

REMARKS.....  
 Revised calculations based on dry weight (SRL).  
 GD\180-LOW

MAR 22 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/21/91

LAB ID 59782 REPORT TO S/WINTERS DUE DATE 04/06/91

SOURCE LOCATION 135-B1,1-3\* COLLECTION DATE 03/05/91

PROGRAM 022-HAZARDOUS WASTE (STATE) AMBIENT WATER SAMPLE N

SUBMITTED BY S/WINTERS PHONE 244-8702 SUBMIT DATE 03/06/91 LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
45	METHOD 8240 TESTS, SOIL	0	NONE	S	03/19/91
31	TOLUENE	6	UG/KG WW		03/19/91

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR METHOD 8240 GC/MS FOR VOLATILE ORGANICS - SOILS

APR 20 1991  
 824S: S

SAMPLE NUMBER: 59783  
 DATE RUN: 03-18-91  
 SITE: B1 3-5ft.

ANALYST: LVV  
 SAMPLE WT: 3.9g  
 METHOD: 8240S

REMARKS CODE

		Practical Quant. Limits Low-Level Soil (EPA)	TEST RESULTS ug/kg
VS07	Vinylchloride	10	ND
VS08	Chloromethane	10	ND
VS09	Bromomethane	10	ND
VS10	Chloroethane	10	ND
VS11	Trichlorofluoromethane	10	ND
VS12	Acetone	100	ND
VS13	1,1-Dichloroethene	5	ND
VS14	Carbondisulfide	5	ND
VS15	Methylene Chloride	5	ND
VS16	Methyl-t-Butylether (MTBE)	---	ND
VS17	1,2-Dichloroethene	5	ND
VS18	1,1-Dichloroethane	5	ND
VS19	Vinyl Acetate	50	ND
VS20	2-Butanone	100	ND
VS21	Chloroform	5	ND
VS22	1,1,1-Trichloroethane	5	ND
VS23	Carbon Tetrachloride	5	ND
VS24	Benzene	5	ND
VS25	1,2-Dichlorethane	5	ND
VS26	Trichloroethene	5	ND
VS27	1,2-Dichloropropane	5	ND
VS28	Bromodichloromethane	5	ND
VS29	4-Methyl-2-Pentanone	50	ND
VS30	Cis-1,3-Dichloropropene	5	ND
VS31	Toluene	5	6
VS32	Trans-1,3-Dichloropropene	5	ND
VS33	1,1,2-Trichloroethane	5	ND
VS34	2-Hexanone	50	ND
VS35	Tetrachloroethene	5	9
VS36	Dibromochloromethane	5	ND
VS37	Chlorobenzene	5	ND
VS38	Ethylbenzene	5	ND
VS39	Xylenes	5	ND
VS40	Styrene	5	ND
VS41	Bromoform	5	ND
VS42	1,1,2,2,-Tetrachloroethane	5	ND

REMARKS.....  
 Revised calculations based on dry weight (SRL).  
 GD\180-LOW

MAR 22 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/21/91

LAB ID 59783 REPORT TO S/WINTERS DUE DATE 04/06/91

SOURCE LOCATION 135-B1,3-5\* COLLECTION DATE 03/05/91

PROGRAM 022-HAZARDOUS WASTE (STATE) AMBIENT WATER SAMPLE N

SUBMITTED BY S/WINTERS PHONE 244-8702 SUBMIT DATE 03/06/91 LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CGDE	PROCESS DATE
824S	METHOD 8240 TESTS, SOIL	0	NCNE	S	03/19/91
S31	:TOLUENE	6	UG/KG HW		03/19/91
VS38	:ETHYLBENZENE	9	UG/KG HW		03/19/91

MAR 22 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/21/91

LAB ID 59784 REPORT TO S/WINTERS DUE DATE 04/06/91

SOURCE LOCATION 135-81,5-7' COLLECTION DATE 03/05/91

PROGRAM 022-HAZARDOUS WASTE (STATE) AMBIENT WATER SAMPLE N

SUBMITTED BY S/WINTERS PHONE 244-8702 SUBMIT DATE 03/06/91 LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
24S	METHOD 8240 TESTS, SOIL	0	NONE	Z	03/19/91

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR METHOD 8240 GC/MS FOR VOLATILE ORGANICS - SOILS

APR 26 1991

SAMPLE NUMBER: 59785

DATE RUN: 03-13-91

SITE: B1 7-9ft.

ANALYST: LVV REMARKS CODE 824S: S

SAMPLE WT: 5.1g

METHOD: 8240S

	Practical Quant. Limits Low-Level Soil (EPA)	TEST RESULTS ug/kg	
VS07	Vinylchloride	10	ND
VS08	Chloromethane	10	ND
VS09	Bromomethane	10	ND
VS10	Chloroethane	10	ND
VS11	Trichlorofluoromethane	10	ND
VS12	Acetone	100	ND
VS13	1,1-Dichloroethene	5	ND
VS14	Carbondisulfide	5	ND
VS15	Methylene Chloride	5	ND
VS16	Methyl-t-Butylether (MTBE)	---	ND
VS17	1,2-Dichloroethene	5	ND
VS18	1,1-Dichloroethane	5	ND
VS19	Vinyl Acetate	50	ND
VS20	2-Butanone	100	ND
VS21	Chloroform	5	ND
VS22	1,1,1-Trichloroethane	5	ND
VS23	Carbon Tetrachloride	5	ND
VS24	Benzene	5	ND
VS25	1,2-Dichlorethane	5	ND
VS26	Trichloroethene	5	ND
VS27	1,2-Dichloropropane	5	ND
VS28	Bromodichloromethane	5	ND
VS29	4-Methyl-2-Pentanone	50	ND
VS30	Cis-1,3-Dichloropropene	5	ND
VS31	Toluene	5	ND
VS32	Trans-1,3-Dichloropropene	5	ND
VS33	1,1,2-Trichloroethane	5	ND
VS34	2-Hexanone	50	ND
VS35	Tetrachloroethene	5	ND
VS36	Dibromochloromethane	5	ND
VS37	Chlorobenzene	5	ND
VS38	Ethylbenzene	5	7
VS39	Xylenes	5	ND
VS40	Styrene	5	ND
VS41	Bromoform	5	ND
VS42	1,1,2,2,-Tetrachloroethane	5	ND

REMARKS.....  
 Revised calculations based on dry weight (SRL).  
 GD\180-LOW

MAR 22 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/21/91

LAB ID 59785 REPORT TO S/WINTERS DUE DATE 04/06/91

SOURCE LOCATION 135-81,7-9 COLLECTION DATE 03/05/91

PROGRAM 022-HAZARDOUS WASTE (STATE) AMBIENT WATER SAMPLE N

SUBMITTED BY S/WINTERS PHONE 244-8702 SUBMIT DATE 03/06/91 LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CGDE	PROCESS DATE
245	METHOD 8240 TESTS, SOIL	0	NGNE	S	03/19/91
S38	:ETHYLBENZENE	7	UG/KG WW		03/19/91

MAR 22 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/21/91

LAB ID 59786 REPORT TO S/WINTERS DUE DATE 04/06/91  
SOURCE LOCATION 135-B1,9-11' COLLECTION DATE 03/05/91  
PROGRAM 022-HAZARDOUS WASTE (STATE) AMBIENT WATER SAMPLE N  
SUBMITTED BY S/WINTERS PHONE 244-8702 SUBMIT DATE 03/06/91 LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
824S	METHOD 8240 TESTS, SOIL	0	MGNE	U	03/19/91

MAR 22 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/21/91

LAB ID 59787 REPORT TO S/WINTERS DUE DATE 04/06/91

SOURCE LOCATION 135-81,11-13<sup>A</sup> COLLECTION DATE 03/05/91

PROGRAM 022-HAZARDOUS WASTE (STATE) AMBIENT WATER SAMPLE N

SUBMITTED BY S/WINTERS PHONE 244-8702 SUBMIT DATE 03/06/91 LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
824S	METHOD 8240 TESTS, SOIL	0	NGNE	U	03/19/91

MAR 19 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/18/91

LAB ID 59777

REPORT TO S/WINTERS

DUE DATE 04/06/91

SOURCE LOCATION 135-MW1,0-2'

COLLECTION DATE 03/05/91

PROGRAM 022-HAZARDOUS WASTE (STATE)

AMBIENT WATER SAMPLE N

SUBMITTED BY S/WINTERS

PHONE 244-8702 SUBMIT DATE 03/06/91 LEGAL YES

SAMPLE NOTES:

TEST  
CODE

TEST NAME

RESULT

UNIT OF  
MEASURE

REMARKS  
CODE

PROCESS  
DATE

AS METHOD 8240 TESTS, SOIL

0

NONE

Z

03/14/91

MAR 19 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/18/91

3 ID 59778 REPORT TO S/WINTERS DUE DATE 04/06/91  
SOURCE LOCATION 135-MW1, 5-7' COLLECTION DATE 03/05/91  
PROGRAM 022-HAZARDOUS WASTE (STATE) AMBIENT WATER SAMPLE N  
SUBMITTED BY S/WINTERS PHONE 244-8702 SUBMIT DATE 03/06/91 LEGAL YES

SAMPLE NOTES:

EST CDE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
245	METHOD 8240 TESTS, SOIL	0	NCNE	Z	03/14/91

APR 26 1991

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR METHOD 8240 GC/MS FOR VOLATILE ORGANICS - SOILS

SAMPLE NUMBER: 59775

DATE RUN: 03-14-91

SITE: MW2 0-2ft.

ANALYST: LVV REMARKS CODE 824S: T

SAMPLE WT: 4.9g

METHOD: 8240S

	Practical Quant. Limits Low-Level Soil (EPA)	TEST RESULTS ug/kg	
VS07	Vinylchloride	10	ND
VS08	Chloromethane	10	ND
VS09	Bromomethane	10	ND
VS10	Chloroethane	10	ND
VS11	Trichlorofluoromethane	10	ND
VS12	Acetone	100	ND
VS13	1,1-Dichloroethene	5	ND
VS14	Carbondisulfide	5	ND
VS15	Methylene Chloride	5	ND
VS16	Methyl-t-Butylether (MTBE)	---	ND
VS17	1,2-Dichloroethene	5	ND
VS18	1,1-Dichloroethane	5	ND
VS19	Vinyl Acetate	50	ND
VS20	2-Butanone	100	ND
VS21	Chloroform	5	7
VS22	1,1,1-Trichloroethane	5	ND
VS23	Carbon Tetrachloride	5	ND
VS24	Benzene	5	ND
VS25	1,2-Dichloroethane	5	ND
VS26	Trichloroethene	5	ND
VS27	1,2-Dichloropropane	5	ND
VS28	Bromodichloromethane	5	ND
VS29	4-Methyl-2-Pentanone	50	ND
VS30	Cis-1,3-Dichloropropene	5	ND
VS31	Toluene	5	ND
VS32	Trans-1,3-Dichloropropene	5	ND
VS33	1,1,2-Trichloroethane	5	ND
VS34	2-Hexanone	50	ND
VS35	Tetrachloroethene	5	6
VS36	Dibromochloromethane	5	ND
VS37	Chlorobenzene	5	ND
VS38	Ethylbenzene	5	ND
VS39	Xylenes	5	ND
VS40	Styrene	5	ND
VS41	Bromoform	5	ND
VS42	1,1,2,2,-Tetrachloroethane	5	ND

REMARKS.....  
 Revised calculations based on dry weight (SRL). Some aromatic hydrocarbons present,  
 naphthalene present at about 17ppb.  
 GD\180-LCW

MAR 19 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/18/91

LAB ID 59775 REPORT TO S/WINTERS DUE DATE 04/06/91

SOURCE LOCATION 135-MW2,0-2' COLLECTION DATE 03/05/91

PROGRAM 022-HAZARDOUS WASTE (STATE) AMBIENT WATER SAMPLE N

SUBMITTED BY S/WINTERS PHONE 244-8702 SUBMIT DATE 03/06/91 LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
824S	METHOD 8240 TESTS, SOIL	0	NONE	T	03/14/91
V 21	:CHLOROFORM	6	UG/KG WW		03/14/91
VS35	:TETRACHLOROETHENE (PCE)	5	UG/KG WW		03/14/91

APR 26 199

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR METHOD 8240 GC/MS FOR VOLATILE ORGANICS - SOILS

SAMPLE NUMBER: 59774

DATE RUN: 03-14-91

SITE: MW2 5-7 ft.

ANALYST: LVV

SAMPLE WT: 4.2g

METHOD: 8240S

REMARKS CODE 824S,

		Practical Quant. Limits Low-Level Soil (EPA)	TEST RESULTS ug/kg
VS07	Vinylchloride	10	ND
VS08	Chloromethane	10	ND
VS09	Bromomethane	10	ND
VS10	Chloroethane	10	ND
VS11	Trichlorofluoromethane	10	ND
VS12	Acetone	100	ND
VS13	1,1-Dichloroethene	5	ND
VS14	Carbondisulfide	5	ND
VS15	Methylene Chloride	5	ND
VS16	Methyl-t-Butylether (MTBE)	---	ND
VS17	1,2-Dichloroethene	5	ND
VS18	1,1-Dichloroethane	5	ND
VS19	Vinyl Acetate	50	ND
VS20	2-Butanone	100	ND
VS21	Chloroform	5	6
VS22	1,1,1-Trichloroethane	5	ND
VS23	Carbon Tetrachloride	5	ND
VS24	Benzene	5	ND
VS25	1,2-Dichloroethane	5	ND
VS26	Trichloroethene	5	ND
VS27	1,2-Dichloropropane	5	ND
VS28	Bromodichloromethane	5	ND
VS29	4-Methyl-2-Pentanone	50	ND
VS30	Cis-1,3-Dichloropropene	5	ND
VS31	Toluene	5	ND
VS32	Trans-1,3-Dichloropropene	5	ND
VS33	1,1,2-Trichloroethane	5	ND
VS34	2-Hexanone	50	ND
VS35	Tetrachloroethene	5	ND
VS36	Dibromochloromethane	5	ND
VS37	Chlorobenzene	5	ND
VS38	Ethylbenzene	5	ND
VS39	Xylenes	5	ND
VS40	Styrene	5	ND
VS41	Bromoform	5	ND
VS42	1,1,2,2,-Tetrachloroethane	5	ND

REMARKS.....  
 Revised Calculations for dry weight (SRL). Some aromatic hydrocarbons present; naphthalene present at about 50 ppb; traces of tetrachloroethylene present (4ug/kg - the detection limit is 5ug/kg).  
 GDA180-LQW

MAR 18 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM

PAGE 1

FINAL LAB REPORT

DATE 03/18/91

LAB ID 59774 REPORT TO S/WINTERS DUE DATE 04/06/91

SOURCE LOCATION 135-MW2,5-7' COLLECTION DATE 03/05/91

PROGRAM 022-HAZARDOUS WASTE (STATE) AMBIENT WATER SAMPLE N

SUBMITTED BY S/WINTERS PHONE 244-8702 SUBMIT DATE 03/06/91 LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
824S	METHOD 8240 TESTS, SOIL	0	NONE	T	03/14/91
V 21	=CHLOROFORM	6	UG/KG WW		03/14/91

MAR 19 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

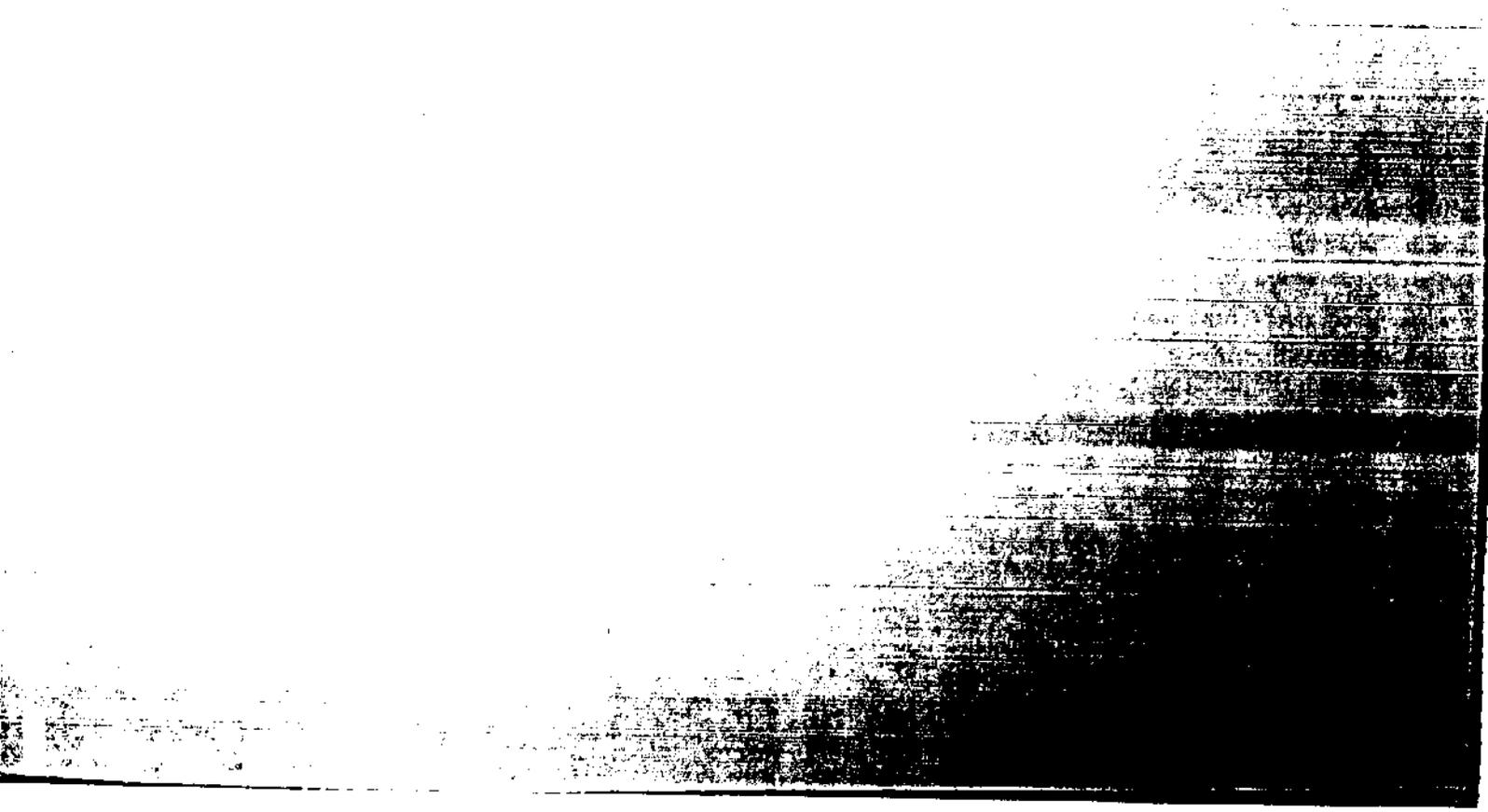
FINAL LAB REPORT

DATE 03/18/91

LAB ID 59776      REPORT TO S/WINTERS      DUE DATE 04/06/91  
 SOURCE LOCATION 135-MW3,0-2\*      COLLECTION DATE 03/04/91  
 PROGRAM 022-HAZARDOUS WASTE (STATE)      AMBIENT WATER SAMPLE N  
 SUBMITTED BY S/WINTERS      PHONE 244-8702      SUBMIT DATE 03/06/91      LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
3.4S	METHOD 8240 TESTS, SOIL	0	NONE	2	03/14/91



MAR 19 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/18/91

LAB ID 59773 REPORT TO S/WINTERS DUE DATE 04/06/91

SOURCE LOCATION 135-MW3,5-3\* COLLECTION DATE 03/04/91

PROGRAM 022-HAZARDOUS WASTE (STATE) AMBIENT WATER SAMPLE N

SUBMITTED BY S/WINTERS PHONE 244-8702 SUBMIT DATE 03/06/91 LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
245	METHOD 8240 TESTS, SOIL	0	NONE	Z	03/14/91

MAR 19 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/18/91

LAB ID 59772      REPORT TO S/WINTERS      DUE DATE 04/06/91  
SOURCE LOCATION 135-MW3, 5-7'      COLLECTION DATE 03/04/91  
PROGRAM 022-HAZARDOUS WASTE (STATE)      AMBIENT WATER SAMPLE N  
SUBMITTED BY S/WINTERS      PHONE 244-8702      SUBMIT DATE 03/06/91      LEGAL YES  
SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
824S	METHOD 8240 TESTS, SOIL	0	NONE	Z	03/14/91

MAR 19 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/18/91

AB ID 59771 REPORT TO S/WINTERS DUE DATE 04/06/91

SOURCE LOCATION 135-MW3, 15-17' COLLECTION DATE 03/04/91

PROGRAM 022-HAZARDOUS WASTE (STATE) AMBIENT WATER SAMPLE N

SUBMITTED BY S/WINTERS PHONE 244-8702 SUBMIT DATE 03/06/91 LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
024S	METHOD 8240 TESTS, SOIL	0	NGNE	Z	03/14/91

MAR 19 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/18/91

LAB ID 59770 REPORT TO S/WINTERS DUE DATE 04/06/91  
SOURCE LOCATION 135-MW3,20-22' COLLECTION DATE 03/04/91  
PROGRAM 022-HAZARDOUS WASTE (STATE) AMBIENT WATER SAMPLE N  
SUBMITTED BY S/WINTERS PHONE 244-8702 SUBMIT DATE 03/06/91 LEGAL YES  
AMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
245	METHOD 8240 TESTS, SOIL	0	NONE	Z	03/14/91

MAR 19 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/18/91

LAB ID 59769 REPORT TO S/WINTERS DUE DATE 04/06/91  
SOURCE LOCATION 135-MW3,25-27' COLLECTION DATE 03/04/91  
PROGRAM 022-HAZARDOUS WASTE (STATE) AMBIENT WATER SAMPLE N  
SUBMITTED BY S/WINTERS PHONE 244-8702 SUBMIT DATE 03/06/91 LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
324S	METHOD 8240 TESTS, SOIL	0	NGNE	Z	03/14/91

MAR 22 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/21/91

AB ID 59779 REPORT TO S/WINTERS DUE DATE 04/06/91

SOURCE LOCATION 135-BRX1, 81\* COLLECTION DATE 03/05/91

PROGRAM 022-HAZARDOUS WASTE (STATE) AMBIENT WATER SAMPLE Y

SUBMITTED BY S/WINTERS PHONE 244-8702 SUBMIT DATE 03/06/91 LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
024W	METHOD 8240 TESTS, WATER	0	NCNE	Z	03/19/91

MAR 22 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/21/91

LAB ID 59780 REPORT TO S/WINTERS DUE DATE 04/06/91  
SOURCE LOCATION 135-BRX1.120\* COLLECTION DATE 03/05/91  
PROGRAM 022-HAZARDOUS WASTE (STATE) AMBIENT WATER SAMPLE Y  
SUBMITTED BY S/WINTERS PHONE 244-8702 SUBMIT DATE 03/06/91 LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
624W	METHOD 8240 TESTS, WATER	0	NONE	Z	03/19/91

MAR 22 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/21/91

LAB ID 59781 REPORT TO S/WINTERS DUE DATE 04/06/91  
SOURCE LOCATION 135-BRX1,140 COLLECTION DATE 03/05/91  
PROGRAM 022-HAZARDOUS WASTE (STATE) AMBIENT WATER SAMPLE Y  
SUBMITTED BY S/WINTERS PHONE 244-8702 SUBMIT DATE 03/06/91 LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
824W	METHOD 8240 TESTS, WATER	0	NCNE	Z	03/19/91

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/14/91

LAB ID 59819      REPORT TO S/WINTERS      DUE DATE 04/08/91  
 SOURCE LOCATION 135-BRX2-100\*      COLLECTION DATE 03/06/91  
 PROGRAM 022-HAZARDOUS WASTE (STATE)      AMBIENT WATER SAMPLE Y  
 SUBMITTED BY S/WINTERS      PHONE 244-8702      SUBMIT DATE 03/08/91      LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
124W	METHOD 8240 TESTS, WATER	0	NONE	Z	03/14/91

MAR 18 1991

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 03/14/91

LAB ID 59820 REPORT TO S/WINTERS DUE DATE 04/08/91  
SOURCE LOCATION 135-BRX2-120\* COLLECTION DATE 03/06/91  
PROGRAM 022-HAZARDOUS WASTE (STATE) AMBIENT WATER SAMPLE Y  
SUBMITTED BY S/WINTERS PHONE 244-8702 SUBMIT DATE 03/08/91 LEGAL YES

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
24W	METHOD 8240 TESTS, WATER	0	NONE	2	03/14/91

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR VOLATILE ORGANICS - WATER

APR 30 1991

SAMPLE NUMBER: 60358

ANALYST: SRL

REMARKS CODE

004W: S

DATE RUN: 04-25-91

DILUTION FACTOR:

SITE: Saxton's River

DATE COLLECTED: 04-15-91

Approximate Detection Limit

		Approximate Detection Limit ug/l	Detected at ug/l
VW07	Vinyl chloride	10	ND
VW08	Chloromethane	10	ND
VW09	Bromomethane	10	ND
VW10	Chloroethane	10	ND
VW11	Trichlorofluoromethane	10	ND
VW12	Acetone	50	ND
VW13	1,1-Dichloroethene	2	ND
VW14	Carbon disulfide	2	ND
VW15	Methylene chloride	2	ND
VW16	Methyl-t-Butylether (MTBE)	10	ND
VW17	1,2-Dichloroethene	2	ND
VW18	1,1-Dichloroethane	2	ND
VW19	Vinyl acetate	50	ND
VW20	2-Butanone	50	ND
VW21	Chloroform	2	ND
VW22	1,1,1-Trichloroethane	2	ND
VW23	Carbon tetrachloride	2	ND
VW24	Benzene	2	ND
VW25	1,2-Dichloroethane	2	ND
VW26	Trichloroethene	2	ND
VW27	1,2-Dichloropropane	2	ND
VW28	Bromodichloromethane	2	ND
VW29	4-Methyl-2-pentanone	20	ND
VW30	cis-1,3-Dichloropropene	2	ND
VW31	Toluene	2	ND
VW32	trans-1,3-Dichloropropene	2	ND
VW33	1,1,2-Trichloroethane	2	ND
VW34	2-Hexanone	20	ND
VW35	Tetrachloroethene	2	ND
VW36	Dibromochloromethane	2	ND
VW37	Chlorobenzene	2	ND
VW38	Ethylbenzene	2	ND
VW39	Xylenes	2	ND
VW40	Styrene	2	ND
VW41	Bromoform	2	ND
VW42	1,1,2,2,-Tetrachloroethane	2	ND
TVH	Total Volatile Hydrocarbons	100	ND

REMARKS.....  
 Sample was essentially pure tetrachloroethene.

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 100%      D8-Toluene: 104%      4-BromoFluorobenzene: 104%

GD\VW01

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
CHAIN OF CUSTODY RECORD

PROJECT NAME/NUMBER: <u>Saxby River (135)</u>	SAMPLER(S): (signature) <u>[Signature]</u>	LABORATORY:
--	---	-------------

Samples sealed at collection	Seals broken & remade for addition of preservative	DESCRIPTION AND NUMBER OF CONTAINERS										Samples sealed on receipt by laboratory					
Y or N	Initial	Y or N	Initial	/x 40 mL /water /+ 40 mL /2011										Total	Y or N	Initials	
SAMPLE LOCATION	COLLECTION DATE	TIME	COMP/ GRAB												REMARKS		
BRX1, 81'	3/5/91	10:45	6v8P	Z												Z	824W requested HCl added
BRX1, 120'	3/5/91	11:25		Z												Z	↓
BRX1, 140'	3/5/91	12:00	↓	Z												Z	↓
B1, 1-3'	3/5/91	14:30	↓		1											1	824S
B1, 3-5'	3/5/91	14:35	↓		1											1	↓
B1, 5-7'	3/5/91	14:40	↓		1											1	↓
B1, 7-7'	3/5/91	14:50	↓		1											1	oily odor 3/5/91
B1, 9-11'	3/5/91	14:55	↓		1											1	oily odor
B1, 11-13'	3/5/91	15:15	↓		1											1	oily odor

RELINQUISHED BY:  
[Signature] MARCH 7 / 3:37  
(signature) (date/time)

RECEIVED BY:  
[Signature] 5 Mar. 91 3:37  
(signature) (date/time)

REMARKS:

RELINQUISHED BY:  
\_\_\_\_\_  
(signature) (date/time)

RECEIVED BY:  
\_\_\_\_\_  
(signature) (date/time)

REMARKS:

RELINQUISHED BY:  
\_\_\_\_\_  
(signature) (date/time)

RECEIVED AT LABORATORY BY:  
\_\_\_\_\_  
(signature) (date/time)

REMARKS:

"E O" "RMC"  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
CHAIN OF CUSTODY RECORD

PROJECT NAME/NUMBER: Saxtons River (135)      SAMPLER(S): (signature) Chris Covel      LABORATORY: \_\_\_\_\_

SAMPLE LOCATION	COLLECTION		COMP/GRAB	DESCRIPTION AND NUMBER OF CONTAINERS										Total	Samples sealed on receipt by laboratory			
	DATE	TIME		1x40 mL Soil	1x40 mL Soil	1x40 mL Soil	1x40 mL Soil	1x40 mL Soil	1x40 mL Soil	1x40 mL Soil	1x40 mL Soil	1x40 mL Soil	1x40 mL Soil		Y or N	Initials		
MW3, 25-27'	3/4/91		Grab	1														
MW3, 25-22'	3/4/91																	8245' requested
MW3, 15-17'	3/4/91																	
MW3, 5-7'	3/4/91																	
M3, 5-3'	3/4/91																	
MW2, 5-7'	3/5/91																	
MW2, 0-2'	3/5/91																	
MW3, 0-2'	3/4/91																	
MW1, 0-2'	3/4/91																	
MW1, 5-7'	3/4/91																	

RELINQUISHED BY: CC Covel      5 MARCH 91 3:37  
(signature)      (date/time)

RECEIVED BY: John Lantz      5 MAR 91 3:37  
(signature)      (date/time)

REMARKS:

RELINQUISHED BY: \_\_\_\_\_  
(signature)      (date/time)

RECEIVED BY: \_\_\_\_\_  
(signature)      (date/time)

REMARKS:

RELINQUISHED BY: \_\_\_\_\_  
(signature)      (date/time)

RECEIVED AT LABORATORY BY: \_\_\_\_\_  
(signature)      (date/time)

REMARKS:

**APPENDIX G**

**VERMONT AGENCY OF NATURAL RESOURCES  
ANALYTICAL RESULTS  
FROM RESIDENTIAL WELLS IN STUDY AREA**

FINAL LAB REPORT

DATE 12/04/89

Saxa River  
discovered  
- 12/9

LAB ID 48147 REPORT TO R/SPIESE DUE DATE 12/17/89

SOURCE LOCATION FAMILY HOUSING COLLECTION DATE 11/17/89

PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y

SUBMITTED BY B/HASLAM PHONE 244-8702 SUBMIT DATE 11/17/89 LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
01W	METHOD 8010 TESTS, WATER	0	NONE	S	11/30/89
02W	METHOD 8020 TESTS, WATER	0	NONE	Z	11/30/89
02W	METHOD 8240 TESTS, WATER	0	NONE	M	11/30/89
016	METHYL BUTYL ETHER (MTBE)	11	PPB		11/30/89
015	TETRACHLOROETHENE (PCE)	< 2	PPB		11/30/89

Steve,  
 Here are the Nov. results from S.R. I've put you on the CC for results. I have all back data & geology & contacts you may need. Let me know.  
 Richard

OL: our sampling this month  
 12/12 1/11/89 can do.

See Stan (off container) file etc

1 R/mud sup well  
 5 R / mud BR well  
 10 R / mud BR

See Richard S. with record of 12/89  
 then single. Jan.

12/11

DEC 6 1989

FINAL LAB REPORT

DATE 12/04/89

LAB ID 48146 REPORT TO R/SPIESE DUE DATE 12/17/89

SOURCE LOCATION SIMON <sup>Location P</sup> COLLECTION DATE 11/17/89

PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y

SUBMITTED BY B/HASLAM PHONE 244-8702 SUBMIT DATE 11/17/89 LEGAL NO

SAMPLE NOTES:

ST DE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
01W	METHOD 8010 TESTS, WATER	0	NCNE	S	11/30/89
02W	METHOD 8020 TESTS, WATER	0	NCNE	Z	11/30/89
04W	METHOD 8240 TESTS, WATER	0	NCNE	M	11/30/89
W35	1;TETRACHLOROETHENE (PCE)	10	PPB		11/30/89

DEC 6 1989

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 12/24/89

LAB ID 48151 REPORT TO R/SPIESE DUE DATE 12/17/89

SOURCE LOCATION COLVIN HOUSE COLLECTION DATE 11/17/89

PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y

SUBMITTED BY B/HASLAM PHONE 244-8702 SUBMIT DATE 11/17/89 LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
01W	METHOD 8010 TESTS, WATER	0	NONE	S	11/30/89
02W	METHOD 8020 TESTS, WATER	0	NONE	Z	11/30/89
24W	METHOD 8240 TESTS, WATER	0	NONE	M	11/30/89
W35	[;TETRACHLOROETHENE (PCE)	67	PPB		11/30/89

DEC 6 1989

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 12/04/89

WJ ID 48145 REPORT TO R/SPIESE DUE DATE 12/17/89

SOURCE LOCATION SMITH COLLECTION DATE 11/17/89

PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y

SUBMITTED BY B/HASLAM PHONE 244-8702 SUBMIT DATE 11/17/89 LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
01W	METHOD 8010 TESTS, WATER	0	NONE	S	11/30/89
02W	METHOD 8020 TESTS, WATER	0	NONE	Z	11/30/89
02W	METHOD 8240 TESTS, WATER	0	NONE	M	11/30/89
W16	(; METHYL BUTYL ETHER (MTBE)	60	PPB		11/30/89
V	* TOTAL VOLATILE HYDROCARBONS	< 100	PPB	J	11/30/89

DEC 6 1989

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 12/04/89

LAB ID 48155 REPORT TO R/SPIESE DUE DATE 12/17/89  
SOURCE LOCATION PIZZA PAUL MARY COLLECTION DATE 11/17/89  
PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y  
SUBMITTED BY B/HASLAM PHONE 244-8702 SUBMIT DATE 11/17/89 LEGAL NO

SAMPLE NOTES:

TEST ID	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
014	METHOD 8010 TESTS, WATER	0	NONE	S	11/30/89
02W	METHOD 8020 TESTS, WATER	0	NONE	Z	11/30/89
03V	METHOD 8240 TESTS, WATER	0	NONE	M	11/30/89
016	METHYL BUTYL ETHER (MTBE)	< 10	PPB		11/30/89

DEC 6 1989

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 12/04/89

LAB ID 48156 REPORT TO R/SPIESE DUE DATE 12/17/89  
SOURCE LOCATION TRUSLOW ✓ COLLECTION DATE 11/17/89  
PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y  
SUBMITTED BY B/HASLAM PHONE 244-8702 SUBMIT DATE 11/17/89 LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
01W	METHOD 8010 TESTS, WATER	0	NONE	S	11/30/89
02W	METHOD 8020 TESTS, WATER	0	NONE	Z	11/30/89
03W	METHOD 8240 TESTS, WATER	C	NONE	M	11/30/89
W16	METHYL BUTYL ETHER (MTBE)	< 10	PPB		11/30/89

DEC 6 1989

FINAL LAB REPORT

DATE 12/04/89

LAB ID 48152 REPORT TO R/SPIESE DUE DATE 12/17/89

SOURCE LOCATION KIMBLE IN *Whom?* COLLECTION DATE 11/17/89

PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y

SUBMITTED BY B/HASLAM PHONE 244-8702 SUBMIT DATE 11/17/89 LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
01W	METHOD 8010 TESTS, WATER	0	NONE	T	11/30/89
02W	METHOD 8020 TESTS, WATER	0	NONE	T	11/30/89
03W	METHOD 8240 TESTS, WATER	0	NONE	M	11/30/89
W16	; METHYL BUTYL ETHER (MTBE)	350	PPB		11/30/89
W4	; BENZENE	45	PPB		11/30/89
W31	; TOLUENE	2	PPB		11/30/89
W29	; XYLENES	3	PPB		11/30/89
W	* TOTAL VOLATILE HYDROCARBONS	640	PPB		11/30/89

DEC 6 1989

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 12/04/89

AS ID 43153 REPORT TO R/SPIESE DUE DATE 12/17/89

SOURCE LOCATION KIMBLE MIDDLE COLLECTION DATE 11/17/89

PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y

SUBMITTED BY B/HASLAM PHONE 244-8702 SUBMIT DATE 11/17/89 LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
01W	METHOD 8010 TESTS, WATER	0	NONE	S	11/30/89
02W	METHOD 8020 TESTS, WATER	0	NONE	Z	11/30/89
2 W	METHOD 8240 TESTS, WATER	0	NONE	M	11/30/89
W16	; METHYL BUTYL ETHER (MTBE)	110	PPB		11/30/89
V	• TOTAL VOLATILE HYDROCARBONS	110	PPB		11/30/89

DEC 6 1989

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 12/04/89

LAB ID 48154 REPORT TO R/SPIESE DUE DATE 12/17/89

SOURCE LOCATION KIMBLE OUT *view 2 ✓* COLLECTION DATE 11/17/89

PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y

SUBMITTED BY B/HASLAM PHONE 244-8702 SUBMIT DATE 11/17/89 LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CCODE	PROCESS DATE
01W	METHOD 8010 TESTS, WATER	0	NCNE	S	11/30/89
02W	METHOD 8020 TESTS, WATER	0	NCNE	Z	11/30/89
03W	METHOD 8240 TESTS, WATER	0	NCNE	M	11/30/89
W15	; METHYLENE CHLORIDE	< 2	PPB	X, P	11/30/89
W 6	; METHYL BUTYL ETHER (MTBE)	< 10	PPB		11/30/89

DEC 6 1989

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 12/04/89

AL ID 48150 REPORT TO R/SPIESE DUE DATE 12/17/89  
SOURCE LOCATION HARDWARE STORE <sup>100</sup> COLLECTION DATE 11/17/89  
PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y  
SUBMITTED BY B/HASLAM PHONE 244-8702 SUBMIT DATE 11/17/89 LEGAL NO

SAMPLE NOTES:

TEST ID	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
01W	METHOD 8010 TESTS, WATER	0	NONE	Z	11/30/89
02W	METHOD 8020 TESTS, WATER	0	NCNE	Z	11/30/89
03W	METHOD 8240 TESTS, WATER	0	NCNE	M	11/30/89

DEC 6 1989

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 12/04/89

LAB ID 48149 REPORT TO R/SPIESE DUE DATE 12/17/89  
SOURCE LOCATION SAXTONS RIVER INN COLLECTION DATE 11/17/89  
PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y  
SUBMITTED BY B/HASLAM PHONE 244-8702 SUBMIT DATE 11/17/89 LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
01W	METHOD 8010 TESTS, WATER	0	NCNE	Z	11/30/89
02W	METHOD 8020 TESTS, WATER	0	NCNE	Z	11/30/89
2 W	METHOD 8240 TESTS, WATER	0	NCNE	M	11/30/89

DEC 6 1989

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 12/04/89

AL ID 48148 REPORT TO R/SPIESE DUE DATE 12/17/89  
SOURCE LOCATION FLETCHER *Water?* ✓ COLLECTION DATE 11/17/89  
PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y  
SUBMITTED BY B/HASLAM PHONE 244-8702 SUBMIT DATE 11/17/89 LEGAL NO

SAMPLE NOTES:

TEST TYPE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
D1W	METHOD 8010 TESTS, WATER	0	NCNE	U	11/30/89
D2W	METHOD 8020 TESTS, WATER	0	NCNE	U	11/30/89
D4W	METHOD 8240 TESTS, WATER	0	NCNE	M	11/30/89
WH	* TOTAL VOLATILE HYDROCARBONS	< 100	PPB	J	11/30/89

DEC 8 1989

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 12/04/89

LAB ID 48144 REPORT TO R/SPIESE DUE DATE 12/17/89  
SOURCE LOCATION BRENNEN *Whm?* COLLECTION DATE 11/17/89  
PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y  
SUBMITTED BY B/HASLAM PHONE 244-8702 SUBMIT DATE 11/17/89 LEGAL NO

SAMPLE NOTES:

ST DE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
01W	METHOD 8010 TESTS, WATER	0	NONE	Z	11/30/89
02W	METHOD 8020 TESTS, WATER	0	NONE	Z	11/30/89
04W	METHOD 8240 TESTS, WATER	0	NONE	M	11/30/89

DEC 6 1989

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 12/04/89

3 ID 48143 REPORT TO R/SPIESE DUE DATE 12/17/89

SOURCE LOCATION LAWRENCE *> VWA* COLLECTION DATE 11/17/89

PROGRAM 041-UNDERGRGUND STORAGE TANK AMBIENT WATER SAMPLE Y

SUBMITTED BY B/HASLAM PHONE 244-8702 SUBMIT DATE 11/17/89 LEGAL NO

SAMPLE NOTES:

EST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PRECESS DATE
01W	METHOD 8010 TESTS, WATER	0	NONE	Z	11/30/89
02W	METHOD 8020 TESTS, WATER	0	NONE	Z	11/30/89
03W	METHOD 8240 TESTS, WATER	0	NONE	M	11/30/89

DEC 6 1989

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 12/04/89

LAB ID 48142 REPORT TO R/SPIESE DUE DATE 12/17/89

SOURCE LOCATION SYKTE COLLECTION DATE 11/17/89

PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y

SUBMITTED BY B/HASLAM PHONE 244-8702 SUBMIT DATE 11/17/89 LEGAL NO

SAMPLE NOTES:

EST C E	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
01W	METHOD 8010 TESTS, WATER	0	NGNE	Z	11/30/89
02W	METHOD 8020 TESTS, WATER	0	NCNE	Z	11/30/89
024W	METHOD 8240 TESTS, WATER	0	NCNE	M	11/30/89

JUN 2 1990

FINAL LAB REPORT

DATE 12/29/89

LAB ID 48420 REPORT TO R/CHARD SPIESE DUE DATE 01/14/90

SOURCE LOCATION BRENNEN COLLECTION DATE 12/14/89

PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y

SUBMITTED BY R/CHARD SPIESE PHONE 244-8702 SUBMIT DATE 12/14/89 LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
801W	METHOD 8010 TESTS, WATER	0	NONE	Z	12/27/89
802W	METHOD 8020 TESTS, WATER	0	NONE	Z	12/27/89
84W	METHOD 8240 TESTS, WATER	0	NONE	M	12/27/89

Jan 2 1990

FINAL LAB REPORT

DATE 12/29/89

LAB ID 48419 REPORT TO RICHARD SPIESE DUE DATE 01/14/90

SOURCE LOCATION LAWRENCE ✓ COLLECTION DATE 12/14/89

PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y

SUBMITTED BY RICHARD SPIESE PHONE 244-8702 SUBMIT DATE 12/14/89 LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
801W	METHOD 8010 TESTS, WATER	0	NONE	Z	12/27/89
802W	METHOD 8020 TESTS, WATER	0	NONE	Z	12/27/89
824W	METHOD 8240 TESTS, WATER	0	NONE	M	12/27/89

1989

FINAL LAB REPORT

DATE 12/29/89

ID 48418 REPORT TO RICHARD SPIESE DUE DATE 01/14/90

SOURCE LOCATION SYKIE COLLECTION DATE 12/14/89

PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y

SUBMITTED BY RICHARD SPIESE PHONE 244-8702 SUBMIT DATE 12/14/89 LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
01W	METHOD 8010 TESTS, WATER	0	NONE	Z	12/27/89
02W	METHOD 8020 TESTS, WATER	0	NONE	Z	12/27/89
02W	METHOD 8240 TESTS, WATER	0	NONE	H	12/27/89

JAN 2 1990

FINAL LAB REPORT

DATE 12/29/89

LAB ID 48457 REPORT TO R/CHARD SPIESE DUE DATE 01/20/90

SOURCE LOCATION KURN HATTIN SCHOOL COLLECTION DATE 12/20/89

PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y

SUBMITTED BY R/CHARD SPIESE PHONE 244-8702 SUBMIT DATE 12/20/89 LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
801W	METHOD 8010 TESTS, WATER	0	NONE	M	12/22/89
802W	METHOD 8020 TESTS, WATER	0	NONE	M	12/22/89
824W	METHOD 8240 TESTS, WATER	0	NONE	Z	12/22/89

JAN 2 1990

FINAL LAB REPORT

DATE 12/29/89

B ID 48433      REPORT TO RICHARD SPIESE      DUE DATE 01/14/90  
 SOURCE LOCATION SAXTONS RIVER INN      COLLECTION DATE 12/14/89  
 PROGRAM 041-UNDERGROUND STORAGE TANK      AMBIENT WATER SAMPLE Y  
 SUBMITTED BY RICHARD SPIESE      PHONE 244-8702      SUBMIT DATE 12/14/89      LEGAL NO  
 SAMPLE NOTES:

EST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
1W	METHOD 8010 TESTS, WATER	0	NONE	Z	12/27/89
2W	METHOD 8020 TESTS, WATER	0	NONE	Z	12/27/89
24W	METHOD 8240 TESTS, WATER	0	NONE	M	12/27/89

JAN 2 1990

FINAL LAB REPORT

DATE 12/29/89

LAB ID 48426      REPORT TO RICHARD SPIESE      DUE DATE 01/14/90  
 SOURCE LOCATION JELLY BEAN ✓      COLLECTION DATE 12/14/89  
 PROGRAM 041-UNDERGROUND STORAGE TANK      AMBIENT WATER SAMPLE Y  
 SUBMITTED BY RICHARD SPIESE      PHONE 244-8702      SUBMIT DATE 12/14/89      LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
810W	METHOD 8010 TESTS, WATER	0	NONE	Z	12/27/89
802W	METHOD 8020 TESTS, WATER	0	NONE	Z	12/27/89
824W	METHOD 8240 TESTS, WATER	0	NONE	M	12/27/89

JAN 2 1990

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 12/29/89

LAB ID 48427 REPORT TO RICHARD SPIESE DUE DATE 01/14/90

SOURCE LOCATION KIMBALL (IN)✓ COLLECTION DATE 12/14/89

PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y

SUBMITTED BY RICHARD SPIESE PHONE 244-8702 SUBMIT DATE 12/14/89 LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
1W	METHOD 8010 TESTS, WATER	0	NONE	T	12/27/89
302W	METHOD 8020 TESTS, WATER	0	NONE	T	12/27/89
4W	METHOD 8240 TESTS, WATER	0	NONE	M	12/27/89
W16	;METHYL BUTYL ETHER (MTBE)	290	PPB	E	12/27/89
24	;BENZENE	9	PPB		12/27/89
TH	* TOTAL VOLATILE HYDROCARBONS	310	PPB	E	12/27/89

JAN 4 1990

FINAL LAB REPORT

DATE 01/03/90

LAB ID 48428 REPORT TO RICHARD SPIESE DUE DATE 01/14/90  
SOURCE LOCATION KIMBALL (MID) COLLECTION DATE 12/14/89  
PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y  
SUBMITTED BY RICHARD SPIESE PHONE 244-8702 SUBMIT DATE 12/14/89 LEGAL NC

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
801W	METHOD 8010 TESTS, WATER	0	NCNE	S	12/27/89
802W	METHOD 8020 TESTS, WATER	0	NCNE	Z	12/27/89
824W	METHOD 8240 TESTS, WATER	0	NCNE	M	12/27/89
W16	METHYL BUTYL ETHER (MTBE)	268	PPB	E	12/27/89
1	TOTAL VOLATILE HYDROCARBONS	285	PPB	E	12/27/89

JAN 2 1990

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 12/29/89

LAB ID 48429 REPORT TO RICHARD SPIESE DUE DATE 01/14/90

SOURCE LOCATION KIMBALL (OUT) ✓ COLLECTION DATE 12/14/89

PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y

SUBMITTED BY RICHARD SPIESE PHONE 244-8702 SUBMIT DATE 12/14/89 LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
301W	METHOD 8010 TESTS, WATER	0	NONE	S	12/27/89
302W	METHOD 8020 TESTS, WATER	0	NONE	Z	12/27/89
303W	METHOD 8240 TESTS, WATER	0	NONE	M	12/27/89
304W16	METHYL BUTYL ETHER (MTBE)	10	PPB	E	12/27/89

JAN 2 1990

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 12/29/89

LAB ID 48432 REPORT TO R/CHARD SPIESE DUE DATE 01/14/90

SOURCE LOCATION FLETCHER COLLECTION DATE 12/14/89

PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y

SUBMITTED BY R/CHARD SPIESE PHONE 244-8702 SUBMIT DATE 12/14/89 LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
301W	METHOD 8010 TESTS, WATER	0	NONE	U	12/27/89
302W	METHOD 8020 TESTS, WATER	0	NONE	U	12/27/89
304W	METHOD 8240 TESTS, WATER	0	NONE	M	12/27/89

JAN 2 1990

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 12/29/89

LAB ID 48423 REPORT TO R/CHARD SPIESE DUE DATE 01/14/90

SOURCE LOCATION SMITHV COLLECTION DATE 12/14/89

PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y

SUBMITTED BY R/CHARD SPIESE PHONE 244-8702 SUBMIT DATE 12/14/89 LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
301W	METHOD 8010 TESTS, WATER	0	NONE	S	12/27/89
312W	METHOD 8020 TESTS, WATER	0	NONE	Z	12/27/89
314W	METHOD 8240 TESTS, WATER	0	NONE	M	12/27/89
1W16	:METHYL BUTYL ETHER (MTBE)	42	PPB	E	12/27/89
135	:TETRACHLOROETHENE (PCE)	< 2	PPB		12/27/89

FINAL LAB REPORT

DATE 12/29/89

LAB ID 48422 REPORT TO RICHARD SPIESE DUE DATE 01/14/90

SOURCE LOCATION MORTENSEN COLLECTION DATE 12/14/89

PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y

SUBMITTED BY RICHARD SPIESE PHONE 244-8702 SUBMIT DATE 12/14/89 LEGAL NO

SAMPLE NOTES:

TEST NO	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
01W	METHOD 8010 TESTS, WATER	0	NONE	S	12/27/89
02W	METHOD 8020 TESTS, WATER	0	NONE	Z	12/27/89
03W	METHOD 8240 TESTS, WATER	0	NONE	M	12/27/89
016	METHYL BUTYL ETHER (MTBE)	43	PPB	E	12/27/89
05	TETRACHLOROETHENE (PCE)	< 2	PPB		12/27/89

JAN 2 1990

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 12/29/89

LAB ID: 48425 REPORT TO RICHARD SPIESE DUE DATE 01/14/90

SOURCE LOCATION PIZZA, PM ✓ COLLECTION DATE 12/14/89

PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y

SUBMITTED BY RICHARD SPIESE PHONE 244-8702 SUBMIT DATE 12/14/89 LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
801W	METHOD 8010 TESTS, WATER	0	NONE	S	12/27/89
802W	METHOD 8020 TESTS, WATER	0	NONE	Z	12/27/89
824W	METHOD 8240 TESTS, WATER	0	NONE	M	12/27/89
W16	METHYL BUTYL ETHER (MTBE)	< 2	PPB	E	12/27/89

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR VOLATILE ORGANICS - WATER

SAMPLE NUMBER: 59429

ANALYST: SRL

REMARKS CODE

824W: S

DATE RUN: 01-29-91

DILUTION FACTOR: 1

SITE: Family Housing - 29

DATE COLLECTED: 01-25-91

Approximate Detection Limit

Detected at

		ug/l	ug/l
VW07	Vinyl chloride	10	ND
VW08	Chloromethane	10	ND
VW09	Bromomethane	10	ND
VW10	Chloroethane	10	ND
VW11	Trichlorofluoromethane	10	ND
VW12	Acetone	50	ND
VW13	1,1-Dichloroethene	2	ND
VW14	Carbon disulfide	2	ND
VW15	Methylene chloride	2	ND
VW16	Methyl-t-Butylether (MTBE)	10	91E
VW17	1,2-Dichloroethene	2	ND
VW18	1,1-Dichloroethane	2	ND
VW19	Vinyl acetate	50	ND
VW20	2-Butanone	50	ND
VW21	Chloroform	2	ND
VW22	1,1,1-Trichloroethane	2	ND
VW23	Carbon tetrachloride	2	ND
VW24	Benzene	2	ND
VW25	1,2-Dichloroethane	2	ND
VW26	Trichloroethene	2	ND
VW27	1,2-Dichloropropane	2	ND
VW28	Bromodichloromethane	2	ND
VW29	4-Methyl-2-pentanone	20	ND
VW30	cis-1,3-Dichloropropene	2	ND
VW31	Toluene	2	ND
VW32	trans-1,3-Dichloropropene	2	ND
VW33	1,1,2-Trichloroethane	2	ND
VW34	2-Hexanone	20	ND
VW35	Tetrachloroethene	2	3
VW36	Dibromochloromethane	2	ND
VW37	Chlorobenzene	2	ND
VW38	Ethylbenzene	2	ND
VW39	Xylenes	2	ND
VW40	Styrene	2	ND
VW41	Bromoform	2	ND
VW42	1,1,2,2,-Tetrachloroethane	2	ND
TVH	Total Volatile Hydrocarbons	100	ND

REMARKS.....

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 80%      D8-Toluene: 96%      4-BromoFluorobenzene: 90%

JAN 4 1990

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 01/03/90

LAB ID 48417 REPORT TO RICHARD SPIESE DUE DATE 01/14/90

SOURCE LOCATION SAXTONS RIVER TO COLLECTION DATE 12/14/89

PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y

INITIATED BY RICHARD SPIESE PHONE 244-8702 SUBMIT DATE 12/14/89 LEGAL NO

SAMPLE NOTES:

TEST	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
01W	METHOD 8010 TESTS, WATER	0	NCNE	Z	12/27/89
02W	METHOD 8020 TESTS, WATER	C	NCNE	Z	12/27/89
03W	METHOD 8240 TESTS, WATER	0	NCNE	M	12/29/89

JAN 2 1990

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM PAGE 1

FINAL LAB REPORT

DATE 12/29/89

LAB ID 48430 REPORT TO RICHARD SPIESE DUE DATE 01/14/90

SOURCE LOCATION FAMILY HOUSING COLLECTION DATE 12/14/89

PROGRAM 041-UNDERGROUND STORAGE TANK AMBIENT WATER SAMPLE Y

SUBMITTED BY RICHARD SPIESE PHONE 244-8702 SUBMIT DATE 12/14/89 LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
01W	METHOD 8010 TESTS, WATER	0	NONE	S	12/27/89
02W	METHOD 8020 TESTS, WATER	0	NONE	Z	12/27/89
03W	METHOD 8240 TESTS, WATER	0	NONE	M	12/27/89
W16	:METHYL BUTYL ETHER (MTBE)	7	PPB	E	12/27/89
W15	:TETRACHLOROETHENE (PCE)	< 2	PPB		12/27/89

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR VOLATILE ORGANICS - WATER

FEB 06 1991

SAMPLE NUMBER: 59422

ANALYST: SRL

REMARKS CODE

824W: S

DATE RUN: 01-29-91

DILUTION FACTOR: 1

SITE: Truslow

DATE COLLECTED: 01-25-91

		Approximate Detection Limit	Detected at
		ug/l	ug/l
VW07	Vinyl chloride	10	ND
VW08	Chloromethane	10	ND
VW09	Bromomethane	10	ND
VW10	Chloroethane	10	ND
VW11	Trichlorofluoromethane	10	ND
VW12	Acetone	50	ND
VW13	1,1-Dichloroethene	2	ND
VW14	Carbon disulfide	2	ND
VW15	Methylene chloride	2	ND
VW16	Methyl-t-Butylether (MTBE)	10	<10 E
VW17	1,2-Dichloroethene	2	ND
VW18	1,1-Dichloroethane	2	ND
VW19	Vinyl acetate	50	ND
VW20	2-Butanone	50	ND
VW21	Chloroform	2	ND
VW22	1,1,1-Trichloroethane	2	ND
VW23	Carbon tetrachloride	2	ND
VW24	Benzene	2	ND
VW25	1,2-Dichloroethane	2	ND
VW26	Trichloroethene	2	ND
VW27	1,2-Dichloropropane	2	ND
VW28	Bromodichloromethane	2	ND
VW29	4-Methyl-2-pentanone	20	ND
VW30	cis-1,3-Dichloropropene	2	ND
VW31	Toluene	2	ND
VW32	trans-1,3-Dichloropropene	2	ND
VW33	1,1,2-Trichloroethane	2	ND
VW34	2-Hexanone	20	ND
VW35	Tetrachloroethene	2	ND
VW36	Dibromochloromethane	2	ND
VW37	Chlorobenzene	2	ND
VW38	Ethylbenzene	2	ND
VW39	Xylenes	2	ND
VW40	Styrene	2	ND
VW41	Bromoform	2	ND
VW42	1,1,2,2,-Tetrachloroethane	2	ND
TVH	Total Volatile Hydrocarbons	100	ND

REMARKS.....

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 78%      D8-Toluene: 84%      4-BromoFluorobenzene: 82%

GD\VW01

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR VOLATILE ORGANICS - WATER

SAMPLE NUMBER: 59424

ANALYST: SRL

REMARKS CODE

824W: Z

DATE RUN: 01-29-91

DILUTION FACTOR: 1

SITE: Fred Brown

DATE COLLECTED: 1-25-91

	Approximate Detection Limit	Detected at
	ug/l	ug/l
VW07	Vinyl chloride	10 ND
VW08	Chloromethane	10 ND
VW09	Bromomethane	10 ND
VW10	Chloroethane	10 ND
VW11	Trichlorofluoromethane	10 ND
VW12	Acetone	50 ND
VW13	1,1-Dichloroethene	2 ND
VW14	Carbon disulfide	2 ND
VW15	Methylene chloride	2 ND
VW16	Methyl-t-Butylether (MTBE)	10 ND
VW17	1,2-Dichloroethene	2 ND
VW18	1,1-Dichloroethane	2 ND
VW19	Vinyl acetate	50 ND
VW20	2-Butanone	50 ND
VW21	Chloroform	2 ND
VW22	1,1,1-Trichloroethane	2 ND
VW23	Carbon tetrachloride	2 ND
VW24	Benzene	2 ND
VW25	1,2-Dichloroethane	2 ND
VW26	Trichloroethene	2 ND
VW27	1,2-Dichloropropane	2 ND
VW28	Bromodichloromethane	2 ND
VW29	4-Methyl-2-pentanone	20 ND
VW30	cis-1,3-Dichloropropene	2 ND
VW31	Toluene	2 ND
VW32	trans-1,3-Dichloropropene	2 ND
VW33	1,1,2-Trichloroethane	2 ND
VW34	2-Hexanone	20 ND
VW35	Tetrachloroethene	2 ND
VW36	Dibromochloromethane	2 ND
VW37	Chlorobenzene	2 ND
VW38	Ethylbenzene	2 ND
VW39	Xylenes	2 ND
VW40	Styrene	2 ND
VW41	Bromoform	2 ND
VW42	1,1,2,2,-Tetrachloroethane	2 ND
TVH	Total Volatile Hydrocarbons	100 ND

REMARKS.....

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 82%      D8-Toluene: 100%      4-BromoFluorobenzene: 96%

GD\VW01

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR VOLATILE ORGANICS - WATER

SAMPLE NUMBER: 59426  
 DATE RUN: 01-29-91  
 SITE: Arthur Mark  
 DATE COLLECTED: 01-25-91

ANALYST: SRL                      REMARKS CODE                      824W: Z  
 DILUTION FACTOR: 1

		Approximate Detection Limit	Detected at
		ug/l	ug/l
VW07	Vinyl chloride	10	ND
VW08	Chloromethane	10	ND
VW09	Bromomethane	10	ND
VW10	Chloroethane	10	ND
VW11	Trichlorofluoromethane	10	ND
VW12	Acetone	50	ND
VW13	1,1-Dichloroethene	2	ND
VW14	Carbon disulfide	2	ND
VW15	Methylene chloride	2	ND
VW16	Methyl-t-Butylether (MTBE)	10	ND
VW17	1,2-Dichloroethene	2	ND
VW18	1,1-Dichloroethane	2	ND
VW19	Vinyl acetate	50	ND
VW20	2-Butanone	50	ND
VW21	Chloroform	2	ND
VW22	1,1,1-Trichloroethane	2	ND
VW23	Carbon tetrachloride	2	ND
VW24	Benzene	2	ND
VW25	1,2-Dichloroethane	2	ND
VW26	Trichloroethene	2	ND
VW27	1,2-Dichloropropane	2	ND
VW28	Bromodichloromethane	2	ND
VW29	4-Methyl-2-pentanone	20	ND
VW30	cis-1,3-Dichloropropene	2	ND
VW31	Toluene	2	ND
VW32	trans-1,3-Dichloropropene	2	ND
VW33	1,1,2-Trichloroethane	2	ND
VW34	2-Hexanone	20	ND
VW35	Tetrachloroethene	2	ND
VW36	Dibromochloromethane	2	ND
VW37	Chlorobenzene	2	ND
VW38	Ethylbenzene	2	ND
VW39	Xylenes	2	ND
VW40	Styrene	2	ND
VW41	Bromoform	2	ND
VW42	1,1,2,2,-Tetrachloroethane	2	ND
TVH	Total Volatile Hydrocarbons	100	ND

REMARKS.....

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 84%                      D8-Toluene: 88%                      4-BromoFluorobenzene: 86%

GD\VW01

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR VOLATILE ORGANICS - WATER

SAMPLE NUMBER: 59427 ANALYST: SRL REMARKS CODE 824W: S  
 DATE RUN: 01-29-91 DILUTION FACTOR: 1  
 SITE: Mortensen  
 DATE COLLECTED: 01-25-91

		Approximate Detection Limit	Detected at
		ug/l	ug/l
VW07	Vinyl chloride	10	ND
VW08	Chloromethane	10	ND
VW09	Bromomethane	10	ND
VW10	Chloroethane	10	ND
VW11	Trichlorofluoromethane	10	ND
VW12	Acetone	50	ND
VW13	1,1-Dichloroethene	2	ND
VW14	Carbon disulfide	2	ND
VW15	Methylene chloride	2	ND
VW16	Methyl-t-Butylether (MTBE)	10	21E
VW17	1,2-Dichloroethene	2	ND
VW18	1,1-Dichloroethane	2	ND
VW19	Vinyl acetate	50	ND
VW20	2-Butanone	50	ND
VW21	Chloroform	2	ND
VW22	1,1,1-Trichloroethane	2	ND
VW23	Carbon tetrachloride	2	ND
VW24	Benzene	2	ND
VW25	1,2-Dichloroethane	2	ND
VW26	Trichloroethene	2	2
VW27	1,2-Dichloropropane	2	ND
VW28	Bromodichloromethane	2	ND
VW29	4-Methyl-2-pentanone	20	ND
VW30	cis-1,3-Dichloropropene	2	ND
VW31	Toluene	2	ND
VW32	trans-1,3-Dichloropropene	2	ND
VW33	1,1,2-Trichloroethane	2	ND
VW34	2-Hexanone	20	ND
VW35	Tetrachloroethene	2	ND
VW36	Dibromochloromethane	2	ND
VW37	Chlorobenzene	2	ND
VW38	Ethylbenzene	2	ND
VW39	Xylenes	2	ND
VW40	Styrene	2	ND
VW41	Bromoform	2	ND
VW42	1,1,2,2,-Tetrachloroethane	2	ND
TVH	Total Volatile Hydrocarbons	100	ND

REMARKS.....

SURROGATE RECOVERIES.....  
 1,2-Dichloroethane - D4: 82% D8-Toluene: 90% 4-BromoFluorobenzene: 88%

GD\VW01

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR VOLATILE ORGANICS - WATER

SAMPLE NUMBER: 59429

DATE RUN: 01-29-91

SITE: Family Housing - 39

DATE COLLECTED: 01-25-91

ANALYST: SRL  
 DILUTION FACTOR: 1

REMARKS CODE 824W: S

		Approximate Detection Limit	Detected at
		ug/l	ug/l
VW07	Vinyl chloride	10	ND
VW08	Chloromethane	10	ND
VW09	Bromomethane	10	ND
VW10	Chloroethane	10	ND
VW11	Trichlorofluoromethane	10	ND
VW12	Acetone	50	ND
VW13	1,1-Dichloroethene	2	ND
VW14	Carbon disulfide	2	ND
VW15	Methylene chloride	2	ND
VW16	Methyl-t-Butylether (MTBE)	10	91E
VW17	1,2-Dichloroethene	2	ND
VW18	1,1-Dichloroethane	2	ND
VW19	Vinyl acetate	50	ND
VW20	2-Butanone	50	ND
VW21	Chloroform	2	ND
VW22	1,1,1-Trichloroethane	2	ND
VW23	Carbon tetrachloride	2	ND
VW24	Benzene	2	ND
VW25	1,2-Dichloroethane	2	ND
VW26	Trichloroethene	2	ND
VW27	1,2-Dichloropropane	2	ND
VW28	Bromodichloromethane	2	ND
VW29	4-Methyl-2-pentanone	20	ND
VW30	cis-1,3-Dichloropropene	2	ND
VW31	Toluene	2	ND
VW32	trans-1,3-Dichloropropene	2	ND
VW33	1,1,2-Trichloroethane	2	ND
VW34	2-Hexanone	20	ND
VW35	Tetrachloroethene	2	3
VW36	Dibromochloromethane	2	ND
VW37	Chlorobenzene	2	ND
VW38	Ethylbenzene	2	ND
VW39	Xylenes	2	ND
VW40	Styrene	2	ND
VW41	Bromoform	2	ND
VW42	1,1,2,2,-Tetrachloroethane	2	ND
TVH	Total Volatile Hydrocarbons	100	ND

REMARKS.....

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 80%      D8-Toluene: 96%      4-BromoFluorobenzene: 90%

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
DATA SHEET FOR VOLATILE ORGANICS - WATER

SAMPLE NUMBER: 59431  
DATE RUN: 01-29-91  
SITE: King (Mid)  
DATE COLLECTED: 01-25-91

ANALYST: SRL  
DILUTION FACTOR: 1  
REMARKS CODE 824W: Z

		Approximate Detection Limit	Detected at
		ug/l	ug/l
VW07	Vinyl chloride	10	ND
VW08	Chloromethane	10	ND
VW09	Bromomethane	10	ND
VW10	Chloroethane	10	ND
VW11	Trichlorofluoromethane	10	ND
VW12	Acetone	50	ND
VW13	1,1-Dichloroethene	2	ND
VW14	Carbon disulfide	2	ND
VW15	Methylene chloride	2	ND
VW16	Methyl-t-Butylether (MTBE)	10	ND
VW17	1,2-Dichloroethene	2	ND
VW18	1,1-Dichloroethane	2	ND
VW19	Vinyl acetate	50	ND
VW20	2-Butanone	50	ND
VW21	Chloroform	2	ND
VW22	1,1,1-Trichloroethane	2	ND
VW23	Carbon tetrachloride	2	ND
VW24	Benzene	2	ND
VW25	1,2-Dichloroethane	2	ND
VW26	Trichloroethene	2	ND
VW27	1,2-Dichloropropane	2	ND
VW28	Bromodichloromethane	2	ND
VW29	4-Methyl-2-pentanone	20	ND
VW30	cis-1,3-Dichloropropene	2	ND
VW31	Toluene	2	ND
VW32	trans-1,3-Dichloropropene	2	ND
VW33	1,1,2-Trichloroethane	2	ND
VW34	2-Hexanone	20	ND
VW35	Tetrachloroethene	2	ND
VW36	Dibromochloromethane	2	ND
VW37	Chlorobenzene	2	ND
VW38	Ethylbenzene	2	ND
VW39	Xylenes	2	ND
VW40	Styrene	2	ND
VW41	Bromoform	2	ND
VW42	1,1,2,2,-Tetrachloroethane	2	ND
TVH	Total Volatile Hydrocarbons	100	ND

REMARKS.....

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 84%      D8-Toluene: 100%      4-BromoFluorobenzene: 96%

GD\VW01

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR VOLATILE ORGANICS - WATER

FEB 06 1991

SAMPLE NUMBER: 59433

DATE RUN: 01-31-91

SITE: PPM

DATE COLLECTED: 01-25-91

ANALYST: SRL  
 DILUTION FACTOR: 1

REMARKS CODE 824W: Z

		Approximate Detection Limit	Detected at
		ug/l	ug/l
VW07	Vinyl chloride	10	ND
VW08	Chloromethane	10	ND
VW09	Bromomethane	10	ND
VW10	Chloroethane	10	ND
VW11	Trichlorofluoromethane	10	ND
VW12	Acetone	50	ND
VW13	1,1-Dichloroethene	2	ND
VW14	Carbon disulfide	2	ND
VW15	Methylene chloride	2	ND
VW16	Methyl-t-Butylether (MTBE)	10	ND
VW17	1,2-Dichloroethene	2	ND
VW18	1,1-Dichloroethane	2	ND
VW19	Vinyl acetate	50	ND
VW20	2-Butanone	50	ND
VW21	Chloroform	2	ND
VW22	1,1,1-Trichloroethane	2	ND
VW23	Carbon tetrachloride	2	ND
VW24	Benzene	2	ND
VW25	1,2-Dichloroethane	2	ND
VW26	Trichloroethene	2	ND
VW27	1,2-Dichloropropane	2	ND
VW28	Bromodichloromethane	2	ND
VW29	4-Methyl-2-pentanone	20	ND
VW30	cis-1,3-Dichloropropene	2	ND
VW31	Toluene	2	ND
VW32	trans-1,3-Dichloropropene	2	ND
VW33	1,1,2-Trichloroethane	2	ND
VW34	2-Hexanone	20	ND
VW35	Tetrachloroethene	2	ND
VW36	Dibromochloromethane	2	ND
VW37	Chlorobenzene	2	ND
VW38	Ethylbenzene	2	ND
VW39	Xylenes	2	ND
VW40	Styrene	2	ND
VW41	Bromoform	2	ND
VW42	1,1,2,2,-Tetrachloroethane	2	ND
TVH	Total Volatile Hydrocarbons	100	ND

REMARKS.....

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 82%      D8-Toluene: 94%      4-BromoFluorobenzene: 94%

GD\W01

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR VOLATILE ORGANICS - WATER

SAMPLE NUMBER: 59436

ANALYST: SRL

REMARKS CODE

824W: Z

DATE RUN: 01-31-91

DILUTION FACTOR: 1

SITE: Sykie

DATE COLLECTED: 01-25-91

		Approximate Detection Limit	Detected at
		ug/l	ug/l
VW07	Vinyl chloride	10	ND
VW08	Chloromethane	10	ND
VW09	Bromomethane	10	ND
VW10	Chloroethane	10	ND
VW11	Trichlorofluoromethane	10	ND
VW12	Acetone	50	ND
VW13	1,1-Dichloroethene	2	ND
VW14	Carbon disulfide	2	ND
VW15	Methylene chloride	2	ND
VW16	Methyl-t-Butylether (MTBE)	10	ND
VW17	1,2-Dichloroethene	2	ND
VW18	1,1-Dichloroethane	2	ND
VW19	Vinyl acetate	50	ND
VW20	2-Butanone	50	ND
VW21	Chloroform	2	ND
VW22	1,1,1-Trichloroethane	2	ND
VW23	Carbon tetrachloride	2	ND
VW24	Benzene	2	ND
VW25	1,2-Dichloroethane	2	ND
VW26	Trichloroethene	2	ND
VW27	1,2-Dichloropropane	2	ND
VW28	Bromodichloromethane	2	ND
VW29	4-Methyl-2-pentanone	20	ND
VW30	cis-1,3-Dichloropropene	2	ND
VW31	Toluene	2	ND
VW32	trans-1,3-Dichloropropene	2	ND
VW33	1,1,2-Trichloroethane	2	ND
VW34	2-Hexanone	20	ND
VW35	Tetrachloroethene	2	ND
VW36	Dibromochloromethane	2	ND
VW37	Chlorobenzene	2	ND
VW38	Ethylbenzene	2	ND
VW39	Xylenes	2	ND
VW40	Styrene	2	ND
VW41	Bromoform	2	ND
VW42	1,1,2,2,-Tetrachloroethane	2	ND
TVH	Total Volatile Hydrocarbons	100	ND

REMARKS.....

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 86%      D8-Toluene: 94%      4-BromoFluorobenzene: 94%

GD\VW01

VI. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
DATA SHEET FOR VOLATILE ORGANICS - WATER

SAMPLE NUMBER: 59438

ANALYST: SRL

REMARKS CODE

824W: Z

DATE RUN: 01-31-91

DILUTION FACTOR: 1

SITE: Lawrence

DATE COLLECTED: 01-25-91

	Approximate Detection Limit	Detected at	
	ug/l	ug/l	
VW07	Vinyl chloride	10	ND
VW08	Chloromethane	10	ND
VW09	Bromomethane	10	ND
VW10	Chloroethane	10	ND
VW11	Trichlorofluoromethane	10	ND
VW12	Acetone	50	ND
VW13	1,1-Dichloroethene	2	ND
VW14	Carbon disulfide	2	ND
VW15	Methylene chloride	2	ND
VW16	Methyl-t-Butylether (MTBE)	10	ND
VW17	1,2-Dichloroethene	2	ND
VW18	1,1-Dichloroethane	2	ND
VW19	Vinyl acetate	50	ND
VW20	2-Butanone	50	ND
VW21	Chloroform	2	ND
VW22	1,1,1-Trichloroethane	2	ND
VW23	Carbon tetrachloride	2	ND
VW24	Benzene	2	ND
VW25	1,2-Dichloroethane	2	ND
VW26	Trichloroethene	2	ND
VW27	1,2-Dichloropropane	2	ND
VW28	Bromodichloromethane	2	ND
VW29	4-Methyl-2-pentanone	20	ND
VW30	cis-1,3-Dichloropropene	2	ND
VW31	Toluene	2	ND
VW32	trans-1,3-Dichloropropene	2	ND
VW33	1,1,2-Trichloroethane	2	ND
VW34	2-Hexanone	20	ND
VW35	Tetrachloroethene	2	ND
VW36	Dibromochloromethane	2	ND
VW37	Chlorobenzene	2	ND
VW38	Ethylbenzene	2	ND
VW39	Xylenes	2	ND
VW40	Styrene	2	ND
VW41	Bromoform	2	ND
VW42	1,1,2,2,-Tetrachloroethane	2	ND
TVH	Total Volatile Hydrocarbons	100	ND

REMARKS.....

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 82%      D8-Toluene: 110%      4-BromoFluorobenzene: 106%

GD\VW01

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR VOLATILE ORGANICS - WATER

FEB 06 1991

SAMPLE NUMBER: 59440

ANALYST: SRL

REMARKS CODE

824W: S

DATE RUN: 01-31-91

DILUTION FACTOR: 1

SITE: Fletcher - 83

DATE COLLECTED: 01-25-91

	Approximate Detection Limit	Detected at
	ug/l	ug/l
VW07 Vinyl chloride	10	ND
VW08 Chloromethane	10	ND
VW09 Bromomethane	10	ND
VW10 Chloroethane	10	ND
VW11 Trichlorofluoromethane	10	ND
VW12 Acetone	50	ND
VW13 1,1-Dichloroethene	2	ND
VW14 Carbon disulfide	2	ND
VW15 Methylene chloride	2	ND
VW16 Methyl-t-Butylether (MTBE)	10	ND
VW17 1,2-Dichloroethene	2	ND
VW18 1,1-Dichloroethane	2	ND
VW19 Vinyl acetate	50	ND
VW20 2-Butanone	50	ND
VW21 Chloroform	2	ND
VW22 1,1,1-Trichloroethane	2	ND
VW23 Carbon tetrachloride	2	ND
VW24 Benzene	2	ND
VW25 1,2-Dichloroethane	2	ND
VW26 Trichloroethene	2	ND
VW27 1,2-Dichloropropane	2	ND
VW28 Bromodichloromethane	2	ND
VW29 4-Methyl-2-pentanone	20	ND
VW30 cis-1,3-Dichloropropene	2	ND
VW31 Toluene	2	ND
VW32 trans-1,3-Dichloropropene	2	ND
VW33 1,1,2-Trichloroethane	2	ND
VW34 2-Hexanone	20	ND
VW35 Tetrachloroethene	2	2
VW36 Dibromochloromethane	2	ND
VW37 Chlorobenzene	2	ND
VW38 Ethylbenzene	2	ND
VW39 Xylenes	2	ND
VW40 Styrene	2	ND
VW41 Bromoform	2	ND
VW42 1,1,2,2,-Tetrachloroethane	2	ND
TVH Total Volatile Hydrocarbons	100	ND

REMARKS.....

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 86%      D8-Toluene: 100%      4-BromoFluorobenzene: 96%

GD\W01

DEPT. OF ENVIRONMENTAL CONSERVATION LAB MANAGEMENT SYSTEM

REGULAR SAMPLE LOG-IN

SUBMITTED BY: RFS                      PHONE: 244-8702                      DATE COLLECTED: 01/25/91  
REQUIRED COMPLETION DATE: 02/25/91                      DATE SUBMITTED: 01/25/91  
PROGRAM CODE: 041                      REPORT RESULTS TO: RICHARD SPIESE  
LEGAL SAMPLE (Y/N): N                      AMBIENT WATER SAMPLE (Y/N): Y

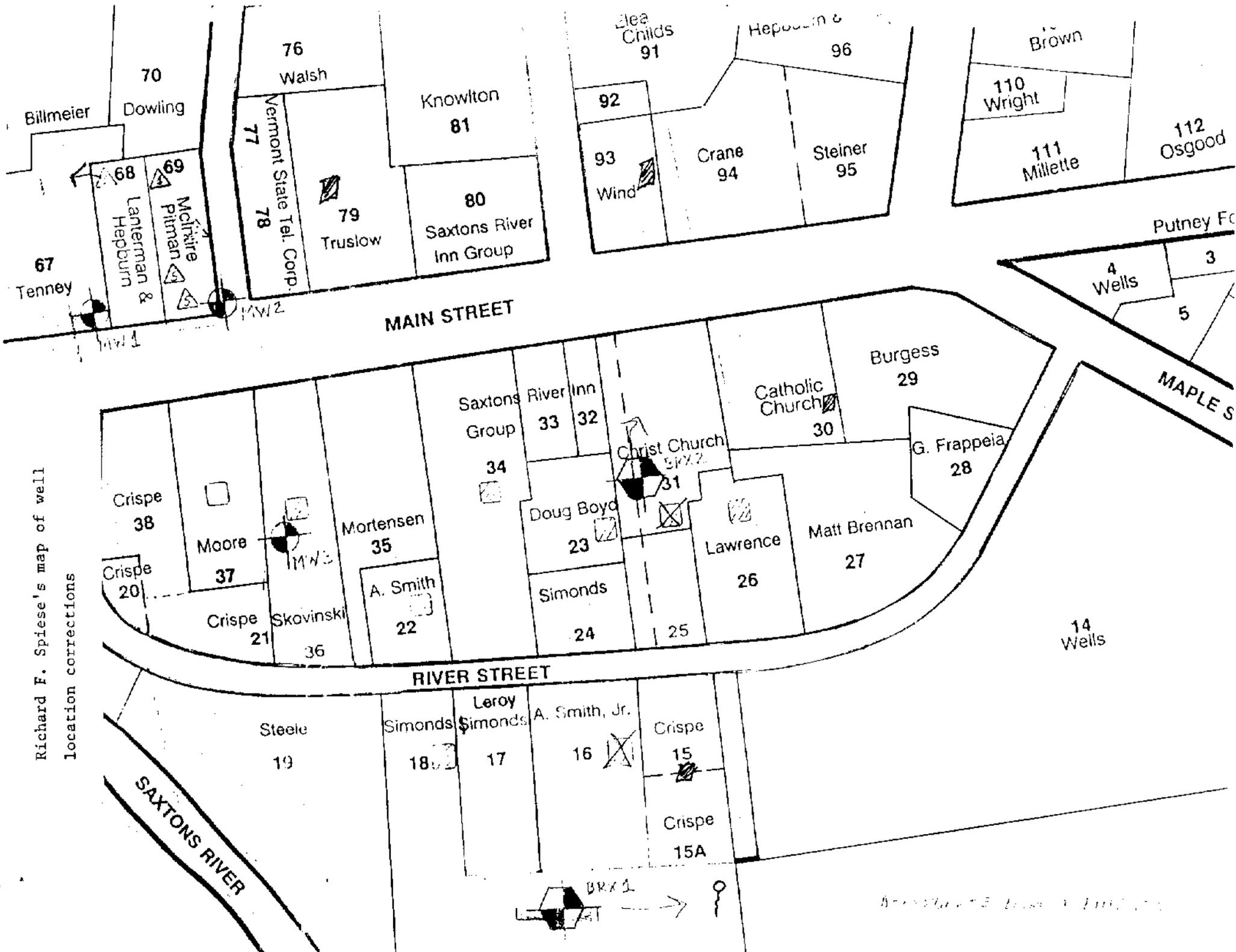
\*\*\*\*\* TESTS REQUESTED \*\*\*\*\*

824W

\*\*\*\*\* SAMPLES SUBMITTED FOR TESTS \*\*\*\*\*

LAB ID	SOURCE LOCATION	LAB ID	SOURCE LOCATION
59422	9416-TRUSLOW	59423	9416-S.R.GENERAL STOR
59424	9416-FRED BROWN	59425	9416-CHRIST CHURCH
59426	9416-AURTHUR MARK	59427	9416-MORTENSEN
59428	9416-SKOVINSKI	59429	9416-FAMILY HOUSING
59430	9416-KING(OUT)	59431	9416-KING(MID)
59432	9416-KING(IN)	59433	9416-PPM
59434	9416-SIMON	59435	9416-SMITH
59436	9416-SYKIE	59437	9416-VHS
59438	9416-LAWRENCE	59439	9416-BRENNEN
59440	9416-FLETCHER	59441	9416-FULLER HARDWARE

Richard F. Spiese's map of well  
location corrections



As of 1/1/81

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR VOLATILE ORGANICS - WATER

SAMPLE NUMBER: 59441

ANALYST: SRL

REMARKS CODE

824W: S

DATE RUN: 01-31-91

DILUTION FACTOR: 1

SITE: Fuller Hardware

DATE COLLECTED: 01-25-91

	Approximate Detection Limit	Detected at
	ug/l	ug/l
VW07	Vinyl chloride	10 ND
VW08	Chloromethane	10 ND
VW09	Bromomethane	10 ND
VW10	Chloroethane	10 ND
VW11	Trichlorofluoromethane	10 ND
VW12	Acetone	50 ND
VW13	1,1-Dichloroethene	2 ND
VW14	Carbon disulfide	2 ND
VW15	Methylene chloride	2 ND
VW16	Methyl-t-Butylether (MTBE)	10 ND
VW17	1,2-Dichloroethene	2 ND
VW18	1,1-Dichloroethane	2 ND
VW19	Vinyl acetate	50 ND
VW20	2-Butanone	50 ND
VW21	Chloroform	2 ND
VW22	1,1,1-Trichloroethane	2 ND
VW23	Carbon tetrachloride	2 ND
VW24	Benzene	2 ND
VW25	1,2-Dichloroethane	2 ND
VW26	Trichloroethene	2 2
VW27	1,2-Dichloropropane	2 ND
VW28	Bromodichloromethane	2 ND
VW29	4-Methyl-2-pentanone	20 ND
VW30	cis-1,3-Dichloropropene	2 ND
VW31	Toluene	2 ND
VW32	trans-1,3-Dichloropropene	2 ND
VW33	1,1,2-Trichloroethane	2 ND
VW34	2-Hexanone	20 ND
VW35	Tetrachloroethene	2 2
VW36	Dibromochloromethane	2 ND
VW37	Chlorobenzene	2 ND
VW38	Ethylbenzene	2 ND
VW39	Xylēnes	2 ND
VW40	Styrene	2 ND
VW41	Bromoform	2 ND
VW42	1,1,2,2,-Tetrachloroethane	2 ND
TVH	Total Volatile Hydrocarbons	100 ND

REMARKS.....

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 86% D8-Toluene: 102% 4-BromoFluorobenzene: 98%

GD\VW01

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR VOLATILE ORGANICS - WATER

SAMPLE NUMBER: 59439

ANALYST: SRL

REMARKS CODE

824W: Z

DATE RUN: 01-31-91

DILUTION FACTOR: 1

SITE: Brennen

DATE COLLECTED: 01-25-91

		Approximate Detection Limit	Detected at
		ug/l	ug/l
VW07	Vinyl chloride	10	ND
VW08	Chloromethane	10	ND
VW09	Bromomethane	10	ND
VW10	Chloroethane	10	ND
VW11	Trichlorofluoromethane	10	ND
VW12	Acetone	50	ND
VW13	1,1-Dichloroethene	2	ND
VW14	Carbon disulfide	2	ND
VW15	Methylene chloride	2	ND
VW16	Methyl-t-Butylether (MTBE)	10	ND
VW17	1,2-Dichloroethene	2	ND
VW18	1,1-Dichloroethane	2	ND
VW19	Vinyl acetate	50	ND
VW20	2-Butanone	50	ND
VW21	Chloroform	2	ND
VW22	1,1,1-Trichloroethane	2	ND
VW23	Carbon tetrachloride	2	ND
VW24	Benzene	2	ND
VW25	1,2-Dichloroethane	2	ND
VW26	Trichloroethene	2	ND
VW27	1,2-Dichloropropane	2	ND
VW28	Bromodichloromethane	2	ND
VW29	4-Methyl-2-pentanone	20	ND
VW30	cis-1,3-Dichloropropene	2	ND
VW31	Toluene	2	ND
VW32	trans-1,3-Dichloropropene	2	ND
VW33	1,1,2-Trichloroethane	2	ND
VW34	2-Hexanone	20	ND
VW35	Tetrachloroethene	2	ND
VW36	Dibromochloromethane	2	ND
VW37	Chlorobenzene	2	ND
VW38	Ethylbenzene	2	ND
VW39	Xylenes	2	ND
VW40	Styrene	2	ND
VW41	Bromoform	2	ND
VW42	1,1,2,2,-Tetrachloroethane	2	ND
TVH	Total Volatile Hydrocarbons	100	ND

REMARKS

SURROGATE RECOVERIES

1,2-Dichloroethane - D4: 88%      D8-Toluene: 110%      4-BromoFluorobenzene: 106%

GD\VW01

FEB 06 1991

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR VOLATILE ORGANICS - WATER

SAMPLE NUMBER: 59437  
 DATE RUN: 01-31-91  
 SITE: VHS  
 DATE COLLECTED: 01-25-91

ANALYST: SRL  
 DILUTION FACTOR: 1  
 REMARKS CODE 824W: Z

		Approximate Detection Limit	Detected at
		ug/l	ug/l
VW07	Vinyl chloride	10	ND
VW08	Chloromethane	10	ND
VW09	Bromomethane	10	ND
VW10	Chloroethane	10	ND
VW11	Trichlorofluoromethane	10	ND
VW12	Acetone	50	ND
VW13	1,1-Dichloroethene	2	ND
VW14	Carbon disulfide	2	ND
VW15	Methylene chloride	2	ND
VW16	Methyl-t-Butylether (MTBE)	10	ND
VW17	1,2-Dichloroethene	2	ND
VW18	1,1-Dichloroethane	2	ND
VW19	Vinyl acetate	50	ND
VW20	2-Butanone	50	ND
VW21	Chloroform	2	ND
VW22	1,1,1-Trichloroethane	2	ND
VW23	Carbon tetrachloride	2	ND
VW24	Benzene	2	ND
VW25	1,2-Dichloroethane	2	ND
VW26	Trichloroethene	2	ND
VW27	1,2-Dichloropropane	2	ND
VW28	Bromodichloromethane	2	ND
VW29	4-Methyl-2-pentanone	20	ND
VW30	cis-1,3-Dichloropropene	2	ND
VW31	Toluene	2	ND
VW32	trans-1,3-Dichloropropene	2	ND
VW33	1,1,2-Trichloroethane	2	ND
VW34	2-Hexanone	20	ND
VW35	Tetrachloroethene	2	ND
VW36	Dibromochloromethane	2	ND
VW37	Chlorobenzene	2	ND
VW38	Ethylbenzene	2	ND
VW39	Xylenes	2	ND
VW40	Styrene	2	ND
VW41	Bromoform	2	ND
VW42	1,1,2,2,-Tetrachloroethane	2	ND
TVH	Total Volatile Hydrocarbons	100	ND

REMARKS.....

SURROGATE RECOVERIES.....  
 1,2-Dichloroethane - D4: 82%      D8-Toluene: 104%      4-BromoFluorobenzene: 100%

GD\VW01

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR VOLATILE ORGANICS - WATER

FEB 06 1991

SAMPLE NUMBER: 59434

ANALYST: SRL

REMARKS CODE

824W: S

DATE RUN: 01-31-91

DILUTION FACTOR: 1

SITE: Simon *102 18*

DATE COLLECTED: 01-25-91

		Approximate Detection Limit	Detected at
		ug/l	ug/l
VW07	Vinyl chloride	10	ND
VW08	Chloromethane	10	ND
VW09	Bromomethane	10	ND
VW10	Chloroethane	10	ND
VW11	Trichlorofluoromethane	10	ND
VW12	Acetone	50	ND
VW13	1,1-Dichloroethene	2	ND
VW14	Carbon disulfide	2	ND
VW15	Methylene chloride	2	ND
VW16	Methyl-t-Butylether (MTBE)	10	ND
VW17	1,2-Dichloroethene	2	ND
VW18	1,1-Dichloroethane	2	ND
VW19	Vinyl acetate	50	ND
VW20	2-Butanone	50	ND
VW21	Chloroform	2	ND
VW22	1,1,1-Trichloroethane	2	ND
VW23	Carbon tetrachloride	2	ND
VW24	Benzene	2	ND
VW25	1,2-Dichloroethane	2	ND
VW26	Trichloroethene	2	ND
VW27	1,2-Dichloropropane	2	ND
VW28	Bromodichloromethane	2	ND
VW29	4-Methyl-2-pentanone	20	ND
VW30	cis-1,3-Dichloropropene	2	ND
VW31	Toluene	2	ND
VW32	trans-1,3-Dichloropropene	2	ND
VW33	1,1,2-Trichloroethane	2	ND
VW34	2-Hexanone	20	ND
VW35	Tetrachloroethene	2	8
VW36	Dibromochloromethane	2	ND
VW37	Chlorobenzene	2	ND
VW38	Ethylbenzene	2	ND
VW39	Xylenes	2	ND
VW40	Styrene	2	ND
VW41	Bromoform	2	ND
VW42	1,1,2,2,-Tetrachloroethane	2	ND
TVH	Total Volatile Hydrocarbons	100	ND

REMARKS.....

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 80%      D8-Toluene: 110%      4-BromoFluorobenzene: 108%

GD\VW01

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR VOLATILE ORGANICS - WATER

SAMPLE NUMBER: 59430

ANALYST: SRL

REMARKS CODE

824W: Z

DATE RUN: 01-29-91

DILUTION FACTOR: 1

SITE: King (Out)

DATE COLLECTED: 01-25-91

	Approximate Detection Limit	Detected at	
	ug/l	ug/l	
VW07	Vinyl chloride	10	ND
VW08	Chloromethane	10	ND
VW09	Bromomethane	10	ND
VW10	Chloroethane	10	ND
VW11	Trichlorofluoromethane	10	ND
VW12	Acetone	50	ND
VW13	1,1-Dichloroethene	2	ND
VW14	Carbon disulfide	2	ND
VW15	Methylene chloride	2	ND
VW16	Methyl-t-Butylether (MTBE)	10	ND
VW17	1,2-Dichloroethene	2	ND
VW18	1,1-Dichloroethane	2	ND
VW19	Vinyl acetate	50	ND
VW20	2-Butanone	50	ND
VW21	Chloroform	2	ND
VW22	1,1,1-Trichloroethane	2	ND
VW23	Carbon tetrachloride	2	ND
VW24	Benzene	2	ND
VW25	1,2-Dichloroethane	2	ND
VW26	Trichloroethene	2	ND
VW27	1,2-Dichloropropane	2	ND
VW28	Bromodichloromethane	2	ND
VW29	4-Methyl-2-pentanone	20	ND
VW30	cis-1,3-Dichloropropene	2	ND
VW31	Toluene	2	ND
VW32	trans-1,3-Dichloropropene	2	ND
VW33	1,1,2-Trichloroethane	2	ND
VW34	2-Hexanone	20	ND
VW35	Tetrachloroethene	2	ND
VW36	Dibromochloromethane	2	ND
VW37	Chlorobenzene	2	ND
VW38	Ethylbenzene	2	ND
VW39	Xylenes	2	ND
VW40	Styrene	2	ND
VW41	Bromoform	2	ND
VW42	1,1,2,2,-Tetrachloroethane	2	ND
TVH	Total Volatile Hydrocarbons	100	ND

REMARKS.....

VW15 quantitated from 1 to 10 dilution run.

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 86%      D8-Toluene: 88%      4-BromoFluorobenzene: 86%

GD\VW01

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
DATA SHEET FOR VOLATILE ORGANICS - WATER

SAMPLE NUMBER: 59432  
DATE RUN: 01-31-91  
SITE: King (In)  
DATE COLLECTED: 01-25-91

ANALYST: SRL  
DILUTION FACTOR: 1  
REMARKS CODE 824W: S

	Approximate Detection Limit	Detected at
	ug/l	ug/l
VW07 Vinyl chloride	10	ND
VW08 Chloromethane	10	ND
VW09 Bromomethane	10	ND
VW10 Chloroethane	10	ND
VW11 Trichlorofluoromethane	10	ND
VW12 Acetone	50	ND
VW13 1,1-Dichloroethene	2	ND
VW14 Carbon disulfide	2	ND
VW15 Methylene chloride	2	ND
VW16 Methyl-t-Butylether (MTBE)	10	ND
VW17 1,2-Dichloroethene	2	ND
VW18 1,1-Dichloroethane	2	ND
VW19 Vinyl acetate	50	ND
VW20 2-Butanone	50	ND
VW21 Chloroform	2	ND
VW22 1,1,1-Trichloroethane	2	ND
VW23 Carbon tetrachloride	2	ND
VW24 Benzene	2	ND
VW25 1,2-Dichloroethane	2	ND
VW26 Trichloroethene	2	ND
VW27 1,2-Dichloropropane	2	ND
VW28 Bromodichloromethane	2	ND
VW29 4-Methyl-2-pentanone	20	ND
VW30 cis-1,3-Dichloropropene	2	ND
VW31 Toluene	2	7
VW32 trans-1,3-Dichloropropene	2	ND
VW33 1,1,2-Trichloroethane	2	ND
VW34 2-Hexanone	20	ND
VW35 Tetrachloroethene	2	ND
VW36 Dibromochloromethane	2	ND
VW37 Chlorobenzene	2	ND
VW38 Ethylbenzene	2	ND
VW39 -Xylenes	2	13
VW40 Styrene	2	ND
VW41 Bromoform	2	ND
VW42 1,1,2,2,-Tetrachloroethane	2	ND
TVH Total Volatile Hydrocarbons	100	ND

REMARKS.....

SURROGATE RECOVERIES.....  
1,2-Dichloroethane - D4: 80%      D8-Toluene: 96%      4-BromoFluorobenzene: 94%

V.I. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR VOLATILE ORGANICS - WATER

SAMPLE NUMBER: 59428

DATE RUN: 01-29-91

SITE: Skovinski

DATE COLLECTED: 1-25-91

ANALYST: SRL  
 DILUTION FACTOR: 1

REMARKS CODE 824W: S

		Approximate Detection Limit	Detected at
		ug/l	ug/l
VW07	Vinyl chloride	10	ND
VW08	Chloromethane	10	ND
VW09	Bromomethane	10	ND
VW10	Chloroethane	10	ND
VW11	Trichlorofluoromethane	10	ND
VW12	Acetone	50	ND
VW13	1,1-Dichloroethene	2	ND
VW14	Carbon disulfide	2	ND
VW15	Methylene chloride	2	ND
VW16	Methyl-t-Butylether (MTBE)	10	ND
VW17	1,2-Dichloroethene	2	ND
VW18	1,1-Dichloroethane	2	ND
VW19	Vinyl acetate	50	ND
VW20	2-Butanone	50	ND
VW21	Chloroform	2	ND
VW22	1,1,1-Trichloroethane	2	ND
VW23	Carbon tetrachloride	2	ND
VW24	Benzene	2	ND
VW25	1,2-Dichloroethane	2	ND
VW26	Trichloroethene	2	2
VW27	1,2-Dichloropropane	2	ND
VW28	Bromodichloromethane	2	ND
VW29	4-Methyl-2-pentanone	20	ND
VW30	cis-1,3-Dichloropropene	2	ND
VW31	Toluene	2	ND
VW32	trans-1,3-Dichloropropene	2	ND
VW33	1,1,2-Trichloroethane	2	ND
VW34	2-Hexanone	20	ND
VW35	Tetrachloroethene	2	8
VW36	Dibromochloromethane	2	ND
VW37	Chlorobenzene	2	ND
VW38	Ethylbenzene	2	ND
VW39	Xylenes	2	ND
VW40	Styrene	2	ND
VW41	Bromoform	2	ND
VW42	1,1,2,2,-Tetrachloroethane	2	ND
TVH	Total Volatile Hydrocarbons	100	ND

REMARKS.....

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 86%      D8-Toluene: 92%      4-BromoFluorobenzene: 88%

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VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR VOLATILE ORGANICS - WATER

SAMPLE NUMBER: 59435  
 DATE RUN: 01-31-91  
 SITE: Smith  
 DATE COLLECTED: 01-25-91

ANALYST: SRL  
 DILUTION FACTOR: 1  
 REMARKS CODE 824W: S

		Approximate Detection Limit	Detected at
		ug/l	ug/l
VW07	Vinyl chloride	10	ND
VW08	Chloromethane	10	ND
VW09	Bromomethane	10	ND
VW10	Chloroethane	10	ND
VW11	Trichlorofluoromethane	10	ND
VW12	Acetone	50	ND
VW13	1,1-Dichloroethene	2	ND
VW14	Carbon disulfide	2	ND
VW15	Methylene chloride	2	ND
VW16	Methyl-t-Butylether (MTBE)	10	15E
VW17	1,2-Dichloroethene	2	ND
VW18	1,1-Dichloroethane	2	ND
VW19	Vinyl acetate	50	ND
VW20	2-Butanone	50	ND
VW21	Chloroform	2	ND
VW22	1,1,1-Trichloroethane	2	ND
VW23	Carbon tetrachloride	2	ND
VW24	Benzene	2	ND
VW25	1,2-Dichloroethane	2	ND
VW26	Trichloroethene	2	2
VW27	1,2-Dichloropropane	2	ND
VW28	Bromodichloromethane	2	ND
VW29	4-Methyl-2-pentanone	20	ND
VW30	cis-1,3-Dichloropropene	2	ND
VW31	Toluene	2	ND
VW32	trans-1,3-Dichloropropene	2	ND
VW33	1,1,2-Trichloroethane	2	ND
VW34	2-Hexanone	20	ND
VW35	Tetrachloroethene	2	3
VW36	Dibromochloromethane	2	ND
VW37	Chlorobenzene	2	ND
VW38	Ethylbenzene	2	ND
VW39	Xylenes	2	ND
VW40	Styrene	2	ND
VW41	Bromoform	2	ND
VW42	1,1,2,2,-Tetrachloroethane	2	ND
TVH	Total Volatile Hydrocarbons	100	ND

REMARKS.....

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 84%      D8-Toluene: 94%      4-BromoFluorobenzene: 94%

GD\VW01

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
DATA SHEET FOR VOLATILE ORGANICS - WATER

SAMPLE NUMBER: 59425

ANALYST: SRL

REMARKS CODE

824W: S

DATE RUN: 01-29-91

DILUTION FACTOR: 1

SITE: Christ Church

DATE COLLECTED: 1-25-91

		Approximate Detection Limit	Detected at
		ug/l	ug/l
VW07	Vinyl chloride	10	ND
VW08	Chloromethane	10	ND
VW09	Bromomethane	10	ND
VW10	Chloroethane	10	ND
VW11	Trichlorofluoromethane	10	ND
VW12	Acetone	50	ND
VW13	1,1-Dichloroethene	2	ND
VW14	Carbon disulfide	2	ND
VW15	Methylene chloride	2	ND
VW16	Methyl-t-Butylether (MTBE)	10	ND
VW17	1,2-Dichloroethene	2	ND
VW18	1,1-Dichloroethane	2	ND
VW19	Vinyl acetate	50	ND
VW20	2-Butanone	50	ND
VW21	Chloroform	2	ND
VW22	1,1,1-Trichloroethane	2	ND
VW23	Carbon tetrachloride	2	ND
VW24	Benzene	2	ND
VW25	1,2-Dichloroethane	2	ND
VW26	Trichloroethene	2	ND
VW27	1,2-Dichloropropane	2	ND
VW28	Bromodichloromethane	2	ND
VW29	4-Methyl-2-pentanone	20	ND
VW30	cis-1,3-Dichloropropene	2	ND
VW31	Toluene	2	ND
VW32	trans-1,3-Dichloropropene	2	ND
VW33	1,1,2-Trichloroethane	2	ND
VW34	2-Hexanone	20	ND
VW35	Tetrachloroethene	2	2
VW36	Dibromochloromethane	2	ND
VW37	Chlorobenzene	2	ND
VW38	Ethylbenzene	2	ND
VW39	Xylenes	2	ND
VW40	Styrene	2	ND
VW41	Bromoform	2	ND
VW42	1,1,2,2,-Tetrachloroethane	2	ND
TVH	Total Volatile Hydrocarbons	100	ND

REMARKS.....

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 78%      D8-Toluene: 90%      4-BromoFluorobenzene: 86%

GD\VW01

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
DATA SHEET FOR VOLATILE ORGANICS - WATER

SAMPLE NUMBER: 59423  
DATE RUN: 01-29-91  
SITE: General Store  
DATE COLLECTED: 1-29-91

ANALYST: SRL  
DILUTION FACTOR: 1  
REMARKS CODE 824W: Z

		Approximate Detection Limit	Detected at
		ug/l	ug/l
VW07	Vinyl chloride	10	ND
VW08	Chloromethane	10	ND
VW09	Bromomethane	10	ND
VW10	Chloroethane	10	ND
VW11	Trichlorofluoromethane	10	ND
VW12	Acetone	50	ND
VW13	1,1-Dichloroethene	2	ND
VW14	Carbon disulfide	2	ND
VW15	Methylene chloride	2	ND
VW16	Methyl-t-Butylether (MTBE)	10	ND
VW17	1,2-Dichloroethene	2	ND
VW18	1,1-Dichloroethane	2	ND
VW19	Vinyl acetate	50	ND
VW20	2-Butanone	50	ND
VW21	Chloroform	2	ND
VW22	1,1,1-Trichloroethane	2	ND
VW23	Carbon tetrachloride	2	ND
VW24	Benzene	2	ND
VW25	1,2-Dichloroethane	2	ND
VW26	Trichloroethene	2	ND
VW27	1,2-Dichloropropane	2	ND
VW28	Bromodichloromethane	2	ND
VW29	4-Methyl-2-pentanone	20	ND
VW30	cis-1,3-Dichloropropene	2	ND
VW31	Toluene	2	ND
VW32	trans-1,3-Dichloropropene	2	ND
VW33	1,1,2-Trichloroethane	2	ND
VW34	2-Hexanone	20	ND
VW35	Tetrachloroethene	2	ND
VW36	Dibromochloromethane	2	ND
VW37	Chlorobenzene	2	ND
VW38	Ethylbenzene	2	ND
VW39	Xylenes	2	ND
VW40	Styrene	2	ND
VW41	Bromoform	2	ND
VW42	1,1,2,2,-Tetrachloroethane	2	ND
TVH	Total Volatile Hydrocarbons	100	ND

REMARKS.....

SURROGATE RECOVERIES.....  
1,2-Dichloroethane - D4: 78%      D8-Toluene: 86%      4-BromoFluorobenzene: 84%

GD\VW01

APR 30 1991

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY

DATA SHEET FOR VOLATILE ORGANICS - WATER

SAMPLE NUMBER: 60349

ANALYST: SRL

REMARKS CODE

824W: S

DATE RUN: 04-24-91

DILUTION FACTOR: 1

SITE: Smith Jr.

DATE COLLECTED: 04-11-91

Approximate Detection Limit

Detected at

		<u>ug/l</u>	<u>ug/l</u>
VW07	Vinyl chloride	10	ND
VW08	Chloromethane	10	ND
VW09	Bromomethane	10	ND
VW10	Chloroethane	10	ND
VW11	Trichlorofluoromethane	10	ND
VW12	Acetone	50	ND
VW13	1,1-Dichloroethene	2	ND
VW14	Carbon disulfide	2	ND
VW15	Methylene chloride	2	ND
VW16	Methyl-t-Butylether (MTBE)	10	35 E
VW17	1,2-Dichloroethene	2	ND
VW18	1,1-Dichloroethane	2	ND
VW19	Vinyl acetate	50	ND
VW20	2-Butanone	50	ND
VW21	Chloroform	2	ND
VW22	1,1,1-Trichloroethane	2	ND
VW23	Carbon tetrachloride	2	ND
VW24	Benzene	2	ND
VW25	1,2-Dichloroethane	2	ND
VW26	Trichloroethene	2	<2
VW27	1,2-Dichloropropane	2	ND
VW28	Bromodichloromethane	2	ND
VW29	4-Methyl-2-pentanone	20	ND
VW30	cis-1,3-Dichloropropene	2	ND
VW31	Toluene	2	ND
VW32	trans-1,3-Dichloropropene	2	ND
VW33	1,1,2-Trichloroethane	2	ND
VW34	2-Hexanone	20	ND
VW35	Tetrachloroethene	2	ND
VW36	Dibromochloromethane	2	ND
VW37	Chlorobenzene	2	ND
VW38	Ethylbenzene	2	ND
VW39	Xylenes	2	ND
VW40	Styrene	2	ND
VW41	Bromoform	2	ND
VW42	1,1,2,2,-Tetrachloroethane	2	ND
TVH	Total Volatile Hydrocarbons	100	ND

REMARKS.....

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 100%      D8-Toluene: 80%      4-BromoFluorobenzene: 80%

GD\VW01

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR VOLATILE ORGANICS - WATER

APR 30 1991

SAMPLE NUMBER: 60348

ANALYST: SRL

REMARKS CODE

824W: S

DATE RUN: 04-24-91

DILUTION FACTOR: 1

SITE: Smith

DATE COLLECTED: 04-11-91

Approximate Detection Limit

ug/l

Detected at

ug/l

		Approximate Detection Limit ug/l	Detected at ug/l
VW07	Vinyl chloride	10	ND
VW08	Chloromethane	10	ND
VW09	Bromomethane	10	ND
VW10	Chloroethane	10	ND
VW11	Trichlorofluoromethane	10	ND
VW12	Acetone	50	ND
VW13	1,1-Dichloroethene	2	ND
VW14	Carbon disulfide	2	ND
VW15	Methylene chloride	2	ND
VW16	Methyl-t-Butylether (MTBE)	10	36 E
VW17	1,2-Dichloroethene	2	ND
VW18	1,1-Dichloroethane	2	ND
VW19	Vinyl acetate	50	ND
VW20	2-Butanone	50	ND
VW21	Chloroform	2	ND
VW22	1,1,1-Trichloroethane	2	ND
VW23	Carbon tetrachloride	2	ND
VW24	Benzene	2	4
VW25	1,2-Dichloroethane	2	ND
VW26	Trichloroethene	2	<2
VW27	1,2-Dichloropropane	2	ND
VW28	Bromodichloromethane	2	ND
VW29	4-Methyl-2-pentanone	20	ND
VW30	cis-1,3-Dichloropropene	2	ND
VW31	Toluene	2	ND
VW32	trans-1,3-Dichloropropene	2	ND
VW33	1,1,2-Trichloroethane	2	ND
VW34	2-Hexanone	20	ND
VW35	Tetrachloroethene	2	ND
VW36	Dibromochloromethane	2	ND
VW37	Chlorobenzene	2	ND
VW38	Ethylbenzene	2	ND
VW39	Xylenes	2	ND
VW40	Styrene	2	ND
VW41	Bromoform	2	ND
VW42	1,1,2,2,-Tetrachloroethane	2	ND
TVH	Total Volatile Hydrocarbons	100	ND

REMARKS.....

Non-acidified sample.

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 100%

D8-Toluene: 80%

4-BromoFluorobenzene: 76%

GD\VW01

APR 30 1991

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR VOLATILE ORGANICS - WATER

SAMPLE NUMBER: 60350

ANALYST: SRL

REMARKS CODE

824W: S

DATE RUN: 04-22-91

DILUTION FACTOR: 1

SITE: Simon

DATE COLLECTED: 04-11-91

		Approximate Detection Limit	Detected at
		ug/l	ug/l
VW07	Vinyl chloride	10	ND
VW08	Chloromethane	10	ND
VW09	Bromomethane	10	ND
VW10	Chloroethane	10	ND
VW11	Trichlorofluoromethane	10	ND
VW12	Acetone	50	ND
VW13	1,1-Dichloroethene	2	ND
VW14	Carbon disulfide	2	ND
VW15	Methylene chloride	2	ND
VW16	Methyl-t-Butylether (MTBE)	10	ND
VW17	1,2-Dichloroethene	2	ND
VW18	1,1-Dichloroethane	2	ND
VW19	Vinyl acetate	50	ND
VW20	2-Butanone	50	ND
VW21	Chloroform	2	ND
VW22	1,1,1-Trichloroethane	2	ND
VW23	Carbon tetrachloride	2	ND
VW24	Benzene	2	ND
VW25	1,2-Dichloroethane	2	ND
VW26	Trichloroethene	2	ND
VW27	1,2-Dichloropropane	2	ND
VW28	Bromodichloromethane	2	ND
VW29	4-Methyl-2-pentanone	20	ND
VW30	cis-1,3-Dichloropropene	2	ND
VW31	Toluene	2	ND
VW32	trans-1,3-Dichloropropene	2	ND
VW33	1,1,2-Trichloroethane	2	ND
VW34	2-Hexanone	20	ND
VW35	Tetrachloroethene	2	10
VW36	Dibromochloromethane	2	ND
VW37	Chlorobenzene	2	ND
VW38	Ethylbenzene	2	ND
VW39	Xylenes	2	ND
VW40	Styrene	2	ND
VW41	Bromoform	2	ND
VW42	1,1,2,2,-Tetrachloroethane	2	ND
TVH	Total Volatile Hydrocarbons	100	ND

REMARKS.....

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 78%      D8-Toluene: 118%      4-BromoFluorobenzene: 108%

GD\VW01

MT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR VOLATILE ORGANICS - WATER

SAMPLE NUMBER: 60339 ANALYST: SRL REMARKS CODE 824W: S  
 DATE RUN: 04-19-91 DILUTION FACTOR: 1  
 SITE: Cath Church  
 DATE COLLECTED: 04-11-91

	Approximate Detection Limit	Detected at	
	<u>ug/l</u>	<u>ug/l</u>	
VW07	Vinyl chloride	10	ND
VW08	Chloromethane	10	ND
VW09	Bromomethane	10	ND
VW10	Chloroethane	10	ND
VW11	Trichlorofluoromethane	10	ND
VW12	Acetone	50	ND
VW13	1,1-Dichloroethene	2	ND
VW14	Carbon disulfide	2	ND
VW15	Methylene chloride	2	ND
VW16	Methyl-t-Butylether (MTBE)	10	ND
VW17	1,2-Dichloroethene	2	ND
VW18	1,1-Dichloroethane	2	ND
VW19	Vinyl acetate	50	ND
VW20	2-Butanone	50	ND
VW21	Chloroform	2	ND
VW22	1,1,1-Trichloroethane	2	ND
VW23	Carbon tetrachloride	2	ND
VW24	Benzene	2	ND
VW25	1,2-Dichloroethane	2	ND
VW26	Trichloroethene	2	ND
VW27	1,2-Dichloropropane	2	ND
VW28	Bromodichloromethane	2	ND
VW29	4-Methyl-2-pentanone	20	ND
VW30	cis-1,3-Dichloropropene	2	ND
VW31	Toluene	2	ND
VW32	trans-1,3-Dichloropropene	2	ND
VW33	1,1,2-Trichloroethane	2	ND
VW34	2-Hexanone	20	ND
VW35	Tetrachloroethene	2	3
VW36	Dibromochloromethane	2	ND
VW37	Chlorobenzene	2	ND
VW38	Ethylbenzene	2	ND
VW39	Xylenes	2	ND
VW40	Styrene	2	ND
VW41	Bromoform	2	ND
VW42	1,1,2,2,-Tetrachloroethane	2	ND
TVH	Total Volatile Hydrocarbons	100	ND

REMARKS.....

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 74%      DB-Toluene: 128%      4-BromoFluorobenzene: 114%

APR 30 1991

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR VOLATILE ORGANICS - WATER

SAMPLE NUMBER: 60345  
 DATE RUN: 04-22-91  
 SITE: Family Housing  
 DATE COLLECTED: 04-11-91

ANALYST: SRL  
 DILUTION FACTOR: 1

REMARKS CODE 824W: S

	Approximate Detection Limit	Detected at
	<u>ug/l</u>	<u>ug/l</u>
VW07 Vinyl chloride	10	ND
VW08 Chloromethane	10	ND
VW09 Bromomethane	10	ND
VW10 Chloroethane	10	ND
VW11 Trichlorofluoromethane	10	ND
VW12 Acetone	50	ND
VW13 1,1-Dichloroethene	2	ND
VW14 Carbon disulfide	2	ND
VW15 Methylene chloride	2	ND
VW16 Methyl-t-Butylether (MTBE)	10	15 E
VW17 1,2-Dichloroethene	2	ND
VW18 1,1-Dichloroethane	2	ND
VW19 Vinyl acetate	50	ND
VW20 2-Butanone	50	ND
VW21 Chloroform	2	ND
VW22 1,1,1-Trichloroethane	2	ND
VW23 Carbon tetrachloride	2	ND
VW24 Benzene	2	ND
VW25 1,2-Dichloroethane	2	ND
VW26 Trichloroethene	2	ND
VW27 1,2-Dichloropropane	2	ND
VW28 Bromodichloromethane	2	ND
VW29 4-Methyl-2-pentanone	20	ND
VW30 cis-1,3-Dichloropropene	2	ND
VW31 Toluene	2	ND
VW32 trans-1,3-Dichloropropene	2	ND
VW33 1,1,2-Trichloroethane	2	ND
VW34 2-Hexanone	20	ND
VW35 Tetrachloroethene	2	2
VW36 Dibromochloromethane	2	ND
VW37 Chlorobenzene	2	ND
VW38 Ethylbenzene	2	ND
VW39 Xylenes	2	ND
VW40 Styrene	2	ND
VW41 Bromoform	2	ND
VW42 1,1,2,2,-Tetrachloroethane	2	ND
TVH Total Volatile Hydrocarbons	100	ND

REMARKS.....

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 80%      D8-Toluene: 126%      4-BromoFluorobenzene: 106%

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR VOLATILE ORGANICS - WATER

SAMPLE NUMBER: 60341

ANALYST: SRL

REMARKS CODE

824W: S

DATE RUN: 04-22-91

DILUTION FACTOR: 1

SITE: Vt. Pretzel

DATE COLLECTED: 04-11-91

	Approximate Detection Limit	Detected at
	ug/l	ug/l
JW07 Vinyl chloride	10	ND
JW08 Chloromethane	10	ND
VW09 Bromomethane	10	ND
JW10 Chloroethane	10	ND
VW11 Trichlorofluoromethane	10	ND
VW12 Acetone	50	ND
JW13 1,1-Dichloroethene	2	ND
VW14 Carbon disulfide	2	ND
JW15 Methylene chloride	2	ND
JW16 Methyl-t-Butylether (MTBE)	10	ND
VW17 1,2-Dichloroethene	2	ND
JW18 1,1-Dichloroethane	2	ND
VW19 Vinyl acetate	50	ND
VW20 2-Butanone	50	ND
JW21 Chloroform	2	ND
VW22 1,1,1-Trichloroethane	2	ND
VW23 Carbon tetrachloride	2	ND
JW24 Benzene	2	ND
VW25 1,2-Dichloroethane	2	ND
JW26 Trichloroethene	2	ND
VW27 1,2-Dichloropropane	2	ND
VW28 Bromodichloromethane	2	ND
VW29 4-Methyl-2-pentanone	20	ND
VW30 cis-1,3-Dichloropropene	2	ND
VW31 Toluene	2	ND
VW32 trans-1,3-Dichloropropene	2	ND
VW33 1,1,2-Trichloroethane	2	ND
VW34 2-Hexanone	20	ND
VW35 Tetrachloroethene	2	<2
VW36 Dibromochloromethane	2	ND
VW37 Chlorobenzene	2	ND
VW38 Ethylbenzene	2	ND
VW39 Xylenes	2	ND
VW40 Styrene	2	ND
VW41 Bromoform	2	ND
JW42 1,1,2,2,-Tetrachloroethane	2	ND
TVH Total Volatile Hydrocarbons	100	ND

REMARKS.....

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 78%      D8-Toluene: 124%      4-BromoFluorobenzene: 114%

3D\VW01

VT. DEPT. ENVIRONMENTAL CONSERVATION LABORATORY  
 DATA SHEET FOR VOLATILE ORGANICS - WATER

SAMPLE NUMBER: 60340

DATE RUN: 04-19-91

SITE: Burgess

DATE COLLECTED: 04-11-91

ANALYST: SRL  
 DILUTION FACTOR: 1

REMARKS CODE

824W: S

Approximate Detection Limit

		ug/l	Detected at
			ug/l
VW07	Vinyl chloride	10	ND
VW08	Chloromethane	10	ND
VW09	Bromomethane	10	ND
VW10	Chloroethane	10	ND
VW11	Trichlorofluoromethane	10	ND
VW12	Acetone	50	ND
VW13	1,1-Dichloroethene	2	ND
VW14	Carbon disulfide	2	ND
VW15	Methylene chloride	2	ND
VW16	Methyl-t-Butylether (MTBE)	10	ND
VW17	1,2-Dichloroethene	2	ND
VW18	1,1-Dichloroethane	2	ND
VW19	Vinyl acetate	50	ND
VW20	2-Butanone	50	ND
VW21	Chloroform	2	ND
VW22	1,1,1-Trichloroethane	2	ND
VW23	Carbon tetrachloride	2	ND
VW24	Benzene	2	ND
VW25	1,2-Dichloroethane	2	ND
VW26	Trichloroethene	2	ND
VW27	1,2-Dichloropropane	2	ND
VW28	Bromodichloromethane	2	ND
VW29	4-Methyl-2-pentanone	20	ND
VW30	cis-1,3-Dichloropropene	2	ND
VW31	Toluene	2	ND
VW32	trans-1,3-Dichloropropene	2	ND
VW33	1,1,2-Trichloroethane	2	ND
VW34	2-Hexanone	20	ND
VW35	Tetrachloroethene	2	<2
VW36	Dibromochloromethane	2	ND
VW37	Chlorobenzene	2	ND
VW38	Ethylbenzene	2	ND
VW39	Xylenes	2	ND
VW40	Styrene	2	ND
VW41	Bromoform	2	ND
VW42	1,1,2,2,-Tetrachloroethane	2	ND
TVH	Total Volatile Hydrocarbons	100	ND

REMARKS.....

SURROGATE RECOVERIES.....

1,2-Dichloroethane - D4: 78%

D8-Toluene: 130%

*Arthur Mark*

ne: 116%