



**JAWORSKI  
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**SERVICES**

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- Construction
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- Manchester, N.H.
- White River Jct., VT.
- Mansfield, MA.

**SUBSURFACE INVESTIGATION**

**MILLER AUTO COMPANY  
WHITE RIVER JUNCTION, VERMONT**

**PROJECT NO. V93116**

**JUNE 29, 1993**

**Prepared For:**

**Mr. William Miller  
Miller Auto Company  
28 Gates Street  
White River Junction, VT 05001**



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June 29, 1993

Mr. William Miller  
Miller Auto Company  
28 Gates Street  
White River Junction, VT 05001

re: Subsurface Investigation  
Miller Auto Company  
White River Junction, Vermont

Project No. V93116

Dear Mr. Miller:

The following is a summary report prepared by Jaworski Geotech, Inc. (JGI) concerning a subsurface investigation at the above-referenced location, herein referred to as the site. JGI previously completed an Environmental Site Assessment (ESA) at the site, the results of which were contained in a report dated March 18, 1993. The ESA included the advancement of two soil borings, the installation of one monitoring well, collection of soil and groundwater samples, and submittal of the samples for laboratory analysis. The samples were analyzed for total petroleum hydrocarbons (TPHs) and volatile organic compounds (VOCs).

High concentrations of TPHs and VOCs were detected in both soil and groundwater samples collected as part of the ESA. Environmental Protection Agency Maximum Contaminant Levels (MCLs) for benzene, toluene, and xylene were exceeded in the groundwater sample.

Benzene, toluene, ethylbenzene, and xylene (BTEX) compounds are associated with products including fuels, solvents, protective coatings, lacquers, and enamels. Many of the products are used at the site. JGI conducted a waste stream analysis at the site to evaluate potential sources for the contamination. Based on a survey of floor drains, hydraulic lift pits, and hazardous materials handling, the site does not appear to be releasing hazardous materials to the soil and groundwater. The contamination detected may be attributable to past releases at the site.

1992 was reported the J&D bulk plant. Approximately five gallons of gasoline was spilled as a result of a broken hose on a pump. J&D cleaned up the spill. A third spill occurred on January 16, 1993. Approximately 40 gallons of gasoline was spilled and cleaned up using Speedi-Dri. The Hartford Fire Department witnessed this cleanup. As noted above, incidents at the J&D bulk plant would not be expected to impact the subject site.

### **Bridge Street**

On February 8, 1993 a truck's fuel line broke while traveling along Bridge Street. Approximately 20 gallons of gasoline was released and cleaned up, using pads and sand. Charles Goodwin, the driver, was identified as the responsible party. Bridge Street is located approximately 1,000 feet northeast of the subject site.

## **4.00 WASTE STREAM ANALYSIS**

JGI met with Mr. Anthony J. Lambert of Miller Auto, on May 12, 1993. As Body Shop Manager, Mr. Lambert maintains Material Safety Data Sheets (MSDSs) for the body shop. Mr. Lambert is in the process of streamlining the number of suppliers that Miller uses to reduce the number of MSDSs needed. He has MSDSs for products manufactured by E.I. du Pont de Nemours & Co., Inc. (DuPont), Kar Kraft, and Premier Industrial Corporation. He has contacted the following companies for MSDSs including Worth, 3M, and Ever Coat. There are several miscellaneous products used in the body shop that will either be disposed or used up and not replaced for which Mr. Lambert does not intend to gather MSDS forms.

JGI reviewed the MSDSs available in the body shop. Several products commonly used at the body shop contain toluene and xylene. The body shop appeared to be relatively clean with orderly product storage areas.

Waste paints and solvents are stored in a 275-gallon AST located outside of the body shop. The waste paints and solvents are transferred to the AST via a funnel in the paint storage room. According to Mr. Charles Martin who has worked at Miller Auto for approximately 34 years, the 275-gallon AST replaced 55-gallon drums several years ago. In the early to mid 1900s, the waste solvents were likely disposed at the Town Dump.

Approximately 15 gallons per month of waste thinner was generated as a result of cleaning the spray guns prior to the purchase of a Safety Kleen unit. According to Mr. Lambert, five gallons of waste thinner is generated per month using the Safety Kleen unit. Safety Kleen collects the waste thinner and delivers new thinner on a regular basis.

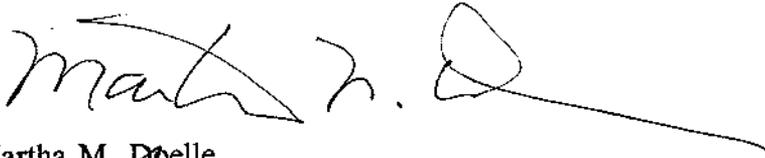
JGI also met with Mr. Randy Carpenter, the Service Director, who maintains MSDSs for the service area. The products used by the service department include those manufactured by GM

Mr. Miller  
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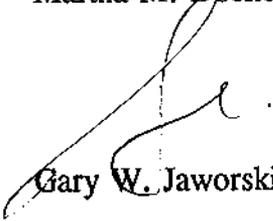
We trust that the contents of this report satisfy your present needs. Should you have any questions with respect to the contents of this report, please do not hesitate to contact our office. We thank you for allowing us this opportunity to provide you with our services and we look forward to working with you in the future.

Very truly yours,

JAWORSKI GEOTECH, INC.



Martha M. Doelle



Gary W. Jaworski, P.E., Ph.D.

V#2/etc

Attachment

cc: Mr. Cameron Eldred

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## 1.00 INTRODUCTION

### Property:

Miller Auto Company  
28 Gates Street  
Windsor County  
White River Junction, Vermont

Jaworski Geotech, Inc. (JGI) was retained by Miller Auto Company to perform an Environmental Site Assessment (ESA) on the above-referenced site. A Site Location Map is provided as Figure 1. Based on the results of the ESA completed on March 18, 1993, JGI recommended further investigation of the site to evaluate the magnitude and extent of contaminants detected at the site. The following is a summary report which provides a brief review of information gathered during the ESA and subsequent file reviews at the Vermont Department of Environmental Conservation, a waste stream analysis, and the results of the subsurface investigation.

As part of the ESA, JGI advanced two soil test borings at the site. One was advanced near the boiler at the northeast corner of the site (B-1) and the other was near the former gasoline pump and a storm drain on Currier Street (B-2).

A groundwater monitoring well (MW-1) was installed in soil boring B-2. Soil and groundwater samples were collected from MW-1 and submitted for total petroleum hydrocarbon (TPH) analysis by Environmental Protection Agency (EPA) Method 8100 (modified) and volatile organic compound (VOC) analysis by EPA Method 624.

High concentrations of VOCs were detected in the soil sample and high concentrations of TPHs and VOCs were detected in the groundwater sample collected during the ESA. EPA Maximum Contaminant Levels (MCLs) for benzene, toluene, and ethylbenzene were significantly exceeded in the groundwater sample.

JGI attempted to identify potential receptors within 1,000 feet of the site. Based on information provided by the Hartford Water Superintendent and Vermont Department of Water Resources, there are no municipal or private drinking water wells within 1,000 feet of the site. The White River is approximately 700 feet north of the site and the Connecticut River is approximately 1,500 feet east of the site.

Based on the results of the ESA, JGI recommended additional investigation of the site. This report presents the findings of a subsurface investigation including a file review, a waste stream analysis, a groundwater sampling and analysis program, and an evaluation of the probability of improper disposal or storage of hazardous wastes, oils, or gasoline at the site. The contents of this report are subject to the Limitations in Appendix A.

## 2.00 SITE HISTORY

The site is located on the south side of Gates Street at its intersection with Currier Street in White River Junction, Vermont. The site is served with municipal water and sewer. The site is located in an area zoned as the Central Business District on the Town of Hartford Zoning Map (1988). The site is identified as Lots 181 and 182 on Map 45. The site configuration and abutting properties are shown in Figure 2, Tax Map. Pertinent site features are illustrated in Figure 3, Site Features Plan.

The central portion of the site has been operated as Miller Auto Company since 1903 and used for automobile sales and service (Building #1 on Figure 3). Building #2, located on the eastern portion of the site, has had many previous uses, including Gibb's Livery Stable in the late 1800s, Gibb's and Wheeler's Garage and Livery, Kendall's Garage, Coolidge Garage, and Gateway Motors in the early 1970s. The parking area in the western portion of the site was formerly occupied by three residential homes.

According to information reviewed by JGI, the site has been operated as Miller Auto Company since 1903 and used for automobile sales and service. Three underground storage tanks (USTs) are registered with State of Vermont Department of Environmental Conservation (DEC) including a 10,000-gallon UST that is currently in use, a 8,000-gallon UST that is out of use, and a 6,000 gallon-UST that was removed. The three USTs were installed in approximately 1978. In addition, several above ground storage tanks (ASTs) were observed at the site including a 275-gallon AST containing waste solvents, three 275-gallon waste oil ASTs, and one 275-gallon heating oil UST.

According to Mr. Miller, gasoline USTs and pumps were formerly located along Currier and Gates Streets prior to 1975. Two fill ports were observed near the service garage indicating that the gasoline UST along Gates Street may be abandoned on site. JGI and several mechanics from Miller Auto attempted to pry the cap off the fill port. JGI later contacted Johnson and Dix (J&D) to assist in removing the fill cap. Both attempts were unsuccessful. J&D estimated the age of the cap as greater than 30 years.

Several floor drains were observed within the service areas of the building. The floor drains receive waste waters from the body shop and service areas and formerly discharged to the town's sewer system. Since they have been disconnected from the sewer system, they serve as collection galleries which must be manually emptied when filled. These were disconnected from the sewer system by filling outlet pipes with concrete. Eight hydraulic lifts were also observed in the service area.

The site is located approximately 0.25 mile southwest of the confluence of the White and Connecticut Rivers. Topography slopes steeply down from the southwest toward the relatively flat site.

### **3.00 STATE REVIEW**

JGI reviewed files at DEC Hazardous Materials Management Division (HMMD) on February 23, 1993 and April 13, 1993. The initial file review focused on the subject site and the second review focused on the surrounding properties. All of the incidents reported herein occurred within 1,000 feet of the subject site.

The site is listed on the EPA Resource Conservation and Recovery Act (RCRA) generator list as a small quantity generator (less than 100 kilograms per month). The site has several USTs registered with HMMD.

Several HMMD files were reviewed for hazardous waste generator sites in the general vicinity of the subject site. Files reviewed included H.O. Taylor Chevrolet, Inc. on Railroad Street, Miller Auto (site), and the J&D Bulk Plant.

#### **H.O. Taylor Chevrolet**

According to a June 24, 1987 trip report by HMMD, the site sells new and used cars and has a body shop. A 1,000-gallon waste oil UST and a 30-gallon drum used for the storage of waste thinners are located on the site. HAZCO removes the waste thinners for disposal. This facility is located approximately 1,000 feet north of the site.

#### **Miller Auto**

An EPA ID request form dated April 4, 1986 for the site was in the file maintained by HMMD. According to the request, approximately 100 pounds of waste paints and thinners are generated by the site per month. HAZCO removes the waste for disposal.

#### **Johnson & Dix Bulk Plant**

According to a report on file, on October 4, 1989, two 20,000-gallon diesel USTs were removed from the site which J&D has occupied for more than 40 years. On January 15, 1990, two monitoring wells were installed followed by the installation of five additional monitoring wells by Dufresne-Henry of Springfield, Vermont. The depth of the monitoring wells ranges from 15 to 25 feet below ground surface. According to the information contained in the file, two of the seven monitoring wells had free product, three had moderately high concentrations of petroleum hydrocarbons, and two were clean. Several sources for the contamination exist at the site including USTs, six ASTs, fuel dispensing stations, and abandoned lines from the nearby rail yard to the site.

Two plumes, including gasoline and oily product, were identified at the site. Total BTEX and TPH concentrations ranged up to 15,000 ppb and 500,000 ppm, respectively. Windham Environmental installed a soil vent system at the site as part of the remediation strategy.

The J&D Bulk Plant is located along the White River approximately 1,000 feet north of the subject site. Groundwater is expected to flow north beneath the J&D facility toward the White River. As such, incidents at this facility are not expected to impact the subject site.

Several USTs are located in the vicinity of the site including White River Junction Station, New England Telephone (NET), First Twin State Bank, Hotel Coolidge, and Gates & Briggs.

#### **White River Junction Station**

White River Junction Station maintains one 10,000-gallon UST containing No. 6 fuel oil that was installed approximately 30 years ago. This facility is located approximately 1,000 feet north of the subject site.

#### **New England Telephone**

NET at 7 Currier Street had four USTs removed in 1988 including a 5,000-gallon No. 2 fuel oil UST, a 6,000-gallon kerosene UST, a 2,500-gallon diesel UST, and a 20,000-gallon No. 2 fuel oil UST. The USTs were approximately 30 years old at the time of removal. One 20,000-gallon diesel UST that was installed approximately 22 years ago remains on site. NET is planning on replacing the diesel UST this summer with a fiberglass tank.

Wehran Engineering of Burlington, Vermont conducted a survey of the NET site on April 20, 1993 in preparation for the UST removal and replacement. According to field technicians for Wehran, several monitoring wells will be installed at the NET site.

NET is immediately north of the subject site across Gates Street as shown in Figure 2. As such, incidents at NET could potentially impact the subject site.

#### **First Twin State Bank**

First Twin State Bank at 10 Gates Street has one 6,000-gallon UST containing No. 2 or 4 fuel oil that was installed approximately 36 years ago. This facility is located approximately 250 feet northeast of the site as shown on Figure 2.

### **Hotel Coolidge**

Hotel Coolidge at 17 South Main Street maintains two USTs both for the storage of No. 2 or 4 fuel oil. The 1,700-gallon UST was installed approximately 45 years ago and the 5,000-gallon UST was installed approximately 35 years ago. The Hotel Coolidge is located approximately 200 feet northeast of the subject site near the intersection of South Main Street and Gates Street as shown in Figure 2.

### **Gates & Briggs**

Gates & Briggs on North Main Street maintains a 5,000-gallon No. 2 or 4 fuel oil UST that was installed approximately 20 years ago. Gates & Briggs is located at the intersection of Gates and North Main Street approximately 350 feet north of the subject site.

JGI also reviewed the HMMD Spills Data Base Listing dated March 13, 1993. According to the listing, several spills occurred in the site area. Information was available for review concerning spills at the B&M Rail Station, J&D Bulk Plant, Bridge Street, and a property located on Church Street.

### **Church Street Property**

On February 17, 1982, Agway delivered No. 2 fuel oil to the wrong pipe at a property on Church Street. According to the report, the 1,050-gallon spill was cleaned up by the responsible party. The actual location of this incident is unknown; however, the intersection of Church Street with Gates Street is located approximately 500 feet northwest of the subject site.

### **B&M Rail Station**

On December 18, 1982, a train accident occurred at the B&M Rail Station in White River Junction. Approximately 300 gallons of No. 2 fuel oil was spilled and DEC assisted with the cleanup. On June 27, 1989, a second spill occurred at the Rail Station. Approximately 20 gallons of No. 2 fuel oil was spilled as a result of overfilling a rail car. Velcher Oil and B&M were identified as the responsible parties. This facility is located approximately 1,000 feet northeast of the subject site.

### **Johnson & Dix Bulk Plant**

On August 10, 1989, a 153-gallon No. 2 fuel oil spill occurred at the J&D bulk plant. J&D was identified as the responsible party. A second spill on March 26,

1992 was reported the J&D bulk plant. Approximately five gallons of gasoline was spilled as a result of a broken hose on a pump. J&D cleaned up the spill. A third spill occurred on January 16, 1993. Approximately 40 gallons of gasoline was spilled and cleaned up using Speedi-Dri. The Hartford Fire Department witnessed this cleanup. As noted above, incidents at the J&D bulk plant would not be expected to impact the subject site.

### **Bridge Street**

On February 8, 1993 a truck's fuel line broke while traveling along Bridge Street. Approximately 20 gallons of gasoline was released and cleaned up, using pads and sand. Charles Goodwin, the driver, was identified as the responsible party. Bridge Street is located approximately 1,000 feet northeast of the subject site.

## **4.00 WASTE STREAM ANALYSIS**

JGI met with Mr. Anthony J. Lambert of Miller Auto, on May 12, 1993. As Body Shop Manager, Mr. Lambert maintains Material Safety Data Sheets (MSDSs) for the body shop. Mr. Lambert is in the process of streamlining the number of suppliers that Miller uses to reduce the number of MSDSs needed. He has MSDSs for products manufactured by E.I. du Pont de Nemours & Co., Inc. (DuPont), Kar Kraft, and Premier Industrial Corporation. He has contacted the following companies for MSDSs including Worth, 3M, and Ever Coat. There are several miscellaneous products used in the body shop that will either be disposed or used up and not replaced for which Mr. Lambert does not intend to gather MSDS forms.

JGI reviewed the MSDSs available in the body shop. Several products commonly used at the body shop contain toluene and xylene. The body shop appeared to be relatively clean with orderly product storage areas.

Waste paints and solvents are stored in a 275-gallon AST located outside of the body shop. The waste paints and solvents are transferred to the AST via a funnel in the paint storage room. According to Mr. Charles Martin who has worked at Miller Auto for approximately 34 years, the 275-gallon AST replaced 55-gallon drums several years ago. In the early to mid 1900s, the waste solvents were likely disposed at the Town Dump.

Approximately 15 gallons per month of waste thinner was generated as a result of cleaning the spray guns prior to the purchase of a Safety Kleen unit. According to Mr. Lambert, five gallons of waste thinner is generated per month using the Safety Kleen unit. Safety Kleen collects the waste thinner and delivers new thinner on a regular basis.

JGI also met with Mr. Randy Carpenter, the Service Director, who maintains MSDSs for the service area. The products used by the service department include those manufactured by GM

Goodwrench, Safety Kleen, and Kent Industries. Several products contain BTEX. The service area appeared to be relatively clean with orderly product storage areas.

JGI also reviewed the hydraulic lifts while in the service garage. No liquid was observed within the hydraulic lift pits. Waste oil is burned in a Clean Burn Multi-Fuel Furnace with a 250-gallon capacity storage tank. Surplus fuel is stored in three 275-gallon ASTs in the boiler room below the service garage.

During the reconnaissance of the service area, several 55-gallon drums were observed. The drums were reported to contain Speedi-Dri, sludge, and fluid. Speedi-Dri is used to clean up miscellaneous oil spills in the garage. The sludge and fluid was recovered from the floor drains during a recent cleaning. Most of the sludge and fluid was generated from car wash activities which occur in the service area. The floor drains receive waste waters from the body shop and service areas and formerly discharged to the Town's storm/sewer system. The floor drains were reportedly disconnected from the storm/sewer system within the last two years. Presently, the floor drains are bailed into drums.

JGI contacted the Hartford Sewer Department to gather information regarding the sewer system. According to the Superintendent, Mr. Tom Coutermarsh, the system is a combined stormwater/sewer system which was installed in late 1800 using clay tile pipes. The system is currently not mapped. However, the Town has plans to map the system in the fall of 1993 as part of its program to separate the storm and sewer systems.

A storm drainage system surrounds the site buildings and discharges to the main line along Gates Street. One storm drain on Currier Street is located approximately ten feet from monitoring well MW-1. The location does not appear to have influent other than surface waters. The drain discharges to storm drain across Currier Street near its intersection with Gates Street. According to the Hartford Sewer Department, the drainage system along Currier Street will be either eliminated or updated following mapping and analysis.

## **5.00 RECEPTOR IDENTIFICATION**

The site is situated within the Connecticut River Basin. The White River is located approximately 700 feet north of the site and the Connecticut River is located approximately 1,500 feet east of the site. Upstream flow on these rivers is regulated by several hydroelectric dams and reservoirs. According to the USGS map of Groundwater Resources of the White River Junction Area, Vermont, the nearest municipal water supply is located 3,000 feet southwest of the site.

The Town of Hartford water supply well is located in Wilder, Vermont approximately 2.5 miles north of the site. According to the Vermont Hazardous Waste Sites List, the Wilder Well has the potential to become contaminated from releases which have occurred in the area. However, according to Mr. Jim Mullen, the Town of Hartford Health Officer, there have not been any

reports of contamination at either the Wilder Well or private wells in the vicinity of the site. The well is located adjacent to the Connecticut River and is approximately 30 feet deep.

According to Mr. James Ashley of DEC, Vermont has issued permits for drinking water wells installed since 1966. Mr. Ashley was not aware of any drinking water wells within 1,000 feet of the site; however, he indicated that two abandoned test wells are in the vicinity of the site. In 1988, a test well for the Town of Hartford was installed near the Connecticut River and North Elm Street approximately ½ mile east of the site. The test well was 69 feet deep with a water level of 21.3 feet below ground surface. In the late 1960s, a test well for the USGS was located near the Hartford Town Office building approximately ½ mile north of the site. The depth of the test well was 78 feet and the water level was measured at 23 feet below ground surface.

## **6.00 SUBSURFACE EXPLORATION PROGRAM**

As part of the ESA, JGI advanced two soil test borings near the boiler at the northeast corner of the site (B-1) and near the former gasoline pump and storm drain on Currier Street (B-2). A groundwater monitoring well (MW-1) was installed in soil boring B-2.

A subsurface exploration program, completed as part of this study, included the advancement of four soil test borings. The soil test borings were advanced on April 15 and 16, 1993 by Tri-State Drilling & Boring of West Burke, Vermont using 4¼-inch inside diameter hollow stem augers.

The locations of the test borings were selected based on information gathered during the ESA. B-3 is located adjacent to the existing and former heating oil USTs approximately 100 feet south of MW-1. B-4 is located across Currier Street opposite NET's USTs and approximately 80 feet west of MW-1. B-5 is located approximately 60 feet east of MW-1 and B-6 is located adjacent to the boiler room and what appeared to be fill ports for an abandoned UST.

Split-spoon soil samples were typically sampled at five-foot intervals during the advancement of the soil borings in general accordance with ASTM D-1586. The borings were advanced to depths up to 40.0 feet below ground surface.

The exploration program was accomplished under the full-time direction of a JGI hydrogeologist who visually classified soil conditions encountered and logged this information as well as other pertinent data on the test boring logs contained in Appendix B. The locations of the test borings were determined in the field by a transit and stadia survey with an assumed elevation of 100.00 feet on a fire hydrant at NET. These locations are illustrated in Figure 3.

All split-spoon soil samples collected during the advancement of the test borings were screened by JGI using an HNu portable photoionization detector (PID). Using the jar headspace method with six-ounce soil jars, the samples were screened for the presence of VOCs in the soil.

Screening found no elevated VOC readings (>5 parts per million). PID readings were recorded on the test boring logs.

Following the completion of test borings B-3, B-4 and B-5, two-inch inside diameter PVC monitoring wells were installed and designated MW-2, MW-3, and MW-4, respectively. The wells were constructed with the lowermost section of the well pipe consisting of 0.010 inch slotted well screen. The length of the screen was such that the screened portion of the well penetrated the saturated zone and extended above the measured groundwater table. This was accomplished in order to allow for groundwater table fluctuations. The annular space around the screened section of the well was then backfilled with silica sand and sealed above the water table with a 0.5 foot thick bentonite clay seal. The top of the well was completed with a protective road box casing set in a concrete surface seal to reduce the potential for surface water intrusion, vandalism, or other damage. Specific details regarding the installation of the monitoring wells are recorded and provided on the attached monitoring well logs also contained in Appendix B.

## **7.00 SUBSURFACE CONDITIONS ENCOUNTERED**

The test borings advanced during the subsurface exploration indicated that the site was primarily underlain by stratified sands and gravels. The consistency of these materials ranged from loose to very dense.

Extensive coarse gravel deposits on the west side of the site (B-1 and B-6) caused auger refusal at depths ranging from 12.5 to 27.5 feet below ground surface. At other locations and depths, fine sands and silts were encountered as noted on the test boring logs.

During the advancement of B-2, a stiff dark grey silt was encountered beneath the sand and gravel at a depth of 23.5 feet. High PID readings and a sweet solvent odor were recorded in samples collected from the silt layer. JGI did not penetrate the silt layer during the subsurface exploration. No odor was noted in the lenses of laminated very fine sands, silts and clays encountered in the other borings at the site.

The groundwater table was encountered in three of the four test borings completed during the more recent exploration program. The depth to groundwater observed following the advancement of the test borings ranged from 28.6 to 29.5 feet below ground surface. After a stabilization period of four to five days, groundwater levels within the wells installed as part of this study, as well as in MW-1 previously installed, were measured and recorded.

It was noted that groundwater elevation in MW-1 increased by more than six feet in the period between February 16, 1993 and April 20, 1993, and it was more than five feet higher than that measured in the surrounding wells. Groundwater levels were remeasured on April 30 and May 13, 1993. Groundwater levels were relatively stable in MW-1 between April 20 and May 13,

1993 while levels in the other three monitoring wells decreased by 4.2 to 5.3 feet. A summary of groundwater level measurements is provided in Table 1, Summary of Groundwater Elevation Measurements.

It should be noted the groundwater levels are influenced by precipitation, percolation, temperature, and other factors. It is possible that flood controls along the Connecticut and White Rivers as well as leaky storm/sewer and drinking water systems in the Town of Hartford may influence the groundwater levels. The disparity between MW-1 and the other three monitoring wells is likely the result of the silt layer and possibly local releases from storm/sewer and water lines.

With the groundwater table elevation data, attempts were made to evaluate the direction of groundwater flow. The elevation in MW-1 was significantly higher, which is believed to represent a perched water table caused by the presence of the silt layer. It could also imply that it is located in a recharge area and that has possibly resulted from a break in an adjacent storm/sewer line. Under this scenario, with a relatively "flat" groundwater table, groundwater flow would be expected to "fan out" in all directions in the immediate vicinity of the recharge area.

Assuming a perched water table, the direction of the groundwater flow may be evaluated by neglecting the elevation measured in MW-1. However, upon review of the data obtained on the three separate site visits, the groundwater flow directions would appear to flow west, south, and east on April 20, April 30, and May 13, respectively. These variations may be attributed to a relatively flat groundwater gradient underlying the site, or more likely are being influenced by the groundwater conditions in the immediate vicinity of MW-1.

It is somewhat surprising, and as of this writing, remains unexplained, that although there was significant rise in the water table in MW-1 over the three-month period between February and April, it remained relatively stable over the three-week period in April/May. During this latter period, however, the groundwater elevation in each of the surrounding wells decreased but not very consistently. This is illustrated in Table 1. The rise in groundwater elevation in MW-1 may be attributable to spring thaw which, because of the silt layer, was less apt to drain.

Based on a Vermont Department of Water Resources publication "Ground-Water Availability in the White River Junction Area, Vermont," the water level in the surficial aquifer change in response to fluctuations in the White and Connecticut Rivers. Impoundment and release of water on the Connecticut River at the nearby Wilder Dam produced changes of the White River of two feet in two hours or less.

## **8.00 GROUNDWATER SAMPLING/AND ANALYSIS**

On April 20, 1993, following a four to five day stabilization period, groundwater samples were collected from the three new monitoring wells and the existing monitoring well. Prior to

obtaining groundwater samples, a water level measurement was recorded and the monitoring wells purged using dedicated bailers by removing a minimum of three volumes of water from the monitoring wells.

Physical groundwater measurements were taken in each monitoring well prior to purging and sampling. This data, summarized in Table 2, Field Groundwater Measurements, includes temperature, specific conductivity, pH, and the well and groundwater depths. It was noted that specific conductivity was higher and temperature lower in MW-1 compared with the other wells on the site. This data, together with the difference in groundwater elevations compared to other wells at the site, suggests that the groundwater in this well is being impacted or may exist a perched water table isolated from the underlying groundwater regime.

Groundwater samples were dispensed into laboratory prepared glassware and kept cool prior to delivery to the laboratory for analysis. Groundwater samples were submitted to AMRO Laboratories, Inc. (ALI) of Bow, New Hampshire for analysis under proper chain of custody. All four groundwater samples were submitted for analysis of VOCs by EPA Method 624 and TPHs by EPA Method 8100 (modified).

The results of the laboratory analyses are included as Appendix C and are summarized in Table 3, Summary of Compounds Detected in Samples. As can be seen from a review of Table 3, only the MCL for benzene (5 parts per billion (ppb)) was exceeded in the groundwater sample collected from MW-1. In general, it can be said that the concentrations measured during this most recent sampling round would not be considered excessive considering the past history of the site.

VOCs were present in each of the four groundwater samples obtained during the most recent sampling round. Benzene, ethylbenzene, and xylene were detected at concentrations of 13 ppb, 10 ppb, and 51 ppb in the groundwater sample collected from MW-1. Relatively low concentrations of toluene (26 to 120 ppb) were detected in all four groundwater samples. Benzene, toluene, ethylbenzene, xylene (BTEX) compounds are associated with various products including fuels, solvents, protective coatings, lacquers, enamels, and other products.

MTBE, a gasoline additive, was also detected at a concentration of 2.9 ppb in the groundwater sample collected from MW-4. This minor concentration of MTBE in this well, as well as the toluene in the remaining wells, may be attributed to minor spills associated with the past and present use of the site. MTBE has been used as a gasoline additive since the introduction of unleaded fuels.

## 9.00 CONCLUSIONS AND RECOMMENDATIONS

JGI completed an identification of potential receptors within 1,000 feet of the site. Based on information presented by the Hartford Water Superintendent and Vermont Department of Water Resources, it does not appear that there are potential receptors located within 1,000 feet of the site other than the White River, which is located approximately 700 feet north of the subject site.

Based on a waste stream analysis of the site, hazardous materials appeared to be properly handled. The floor drains and hydraulic lift pits at the site do not appear to be sources for the contamination. The floor drains may have contributed to on site contamination through discharges to a leaky storm/sewer system prior to being disconnected.

In addition to the USTs which exist or formerly existed on this site, there are several facilities located in the immediate vicinity of the site that have USTs. Also several fuel spills have reportedly occurred in the vicinity of the site. Many of the facilities and spill incidents could potentially impact the subject site.

The results of soil and groundwater sampling and analyses revealed the release of gasoline and/or oil at the site. Samples collected as part of the ESA revealed high concentrations of VOCs and TPHs in soil and groundwater samples collected in the vicinity of the former gasoline UST and storm drain. The EPA MCLs for benzene, toluene, and xylene were exceeded by one to three orders of magnitude. However, the results of the most recent round of groundwater sampling and analysis indicated that the only MCL exceeded was benzene (five ppb) in one of the four groundwater samples (MW-1) collected as part of the subsurface investigation. Further, the concentrations of compounds detected in this groundwater sample have significantly decreased from the February, 1993 sampling round.

The results of this investigation, together with data obtained in the prior ESA, suggests that contamination at this site is isolated. The significant reduction from the high levels detected in February, 1993 suggests that a localized pocket of contamination existed at the site or that it was introduced by a leaking storm/sewer line or other means. The apparent differences in groundwater levels at MW-1 suggests that some localized recharge is occurring in the area. Because groundwater levels were appreciably higher during the most recent sampling round, it is likely that dilution, at least in part, contributed to the reduction in concentrations.

The differences in groundwater elevation and concentrations in MW-1 may also be attributed to a perched water condition over the silt layer encountered. The rise in groundwater elevation may be attributed to the spring thaw which, because of the silt layer, was less apt to drain. The silt layer would also provide a "trap," capturing contaminants from surface spills or those generated from a UST. At times of low , more stagnant water, such as over the winter months, the groundwater would tend to leach off contaminants in the soil and become more highly concentrated.

Given that significant concentrations were not found in the other monitoring wells, and that the concentrations in MW-1 have significantly decreased, it would be reasonable to conclude that a significant contamination problem does not exist at this site. Because of its past and present use, it would not be unreasonable to also conclude that other isolated pockets of contamination exist at the site. A likely source of the contaminants detected in MW-1 may be the gasoline UST formerly located in that area.

Further groundwater sampling and analyses of the existing wells might be conducted at the site to provide additional data which would be of use in explaining the differences in groundwater elevations and contaminant concentrations between the wells over time. JGI would recommend that the existing wells be sampled quarterly over the next 12 months for this purpose.

JGI also discovered what appears to be two fill ports for an abandoned UST. The eastern portion of the site was formerly operated under different ownership as Gateway Motors and Coolidge Garage. The apparent UST has been abandoned for at least 28 years according to the former site owner. JGI would recommend that additional investigation of the UST be completed with a backhoe and that it be brought to formal closure in accordance with Vermont Regulations. There also exists an 8,000-gallon UST south of Building No. 2 which is no longer in use. It is recommended that this UST also be brought to formal closure in accordance with Vermont Regulations.

TABLE 1

Miller Automobile Company  
Project No. V93116

## Summary of Groundwater Elevation Measurements

Well No.	Surface Elevation	February 16, 1993			April 20, 1993			April 30, 1993			May 13, 1993		
		Depth to Water	Water Table Elevation	Change									
MW-1	98.80	29.50	69.30	22.75	76.05	+6.75	22.70	76.11	+0.06	22.71	76.09	-0.02	
MW-2	100.10	-	-	29.22	70.88	-	31.21	67.59	-3.29	34.41	65.69	-1.90	
MW-3	98.27	-	-	27.60	70.67	-	28.83	69.44	-1.23	31.79	66.48	-2.93	
MW-4	98.82	-	-	27.85	70.97	-	30.06	70.04	-0.93	33.17	65.65	-4.39	



TABLE 3

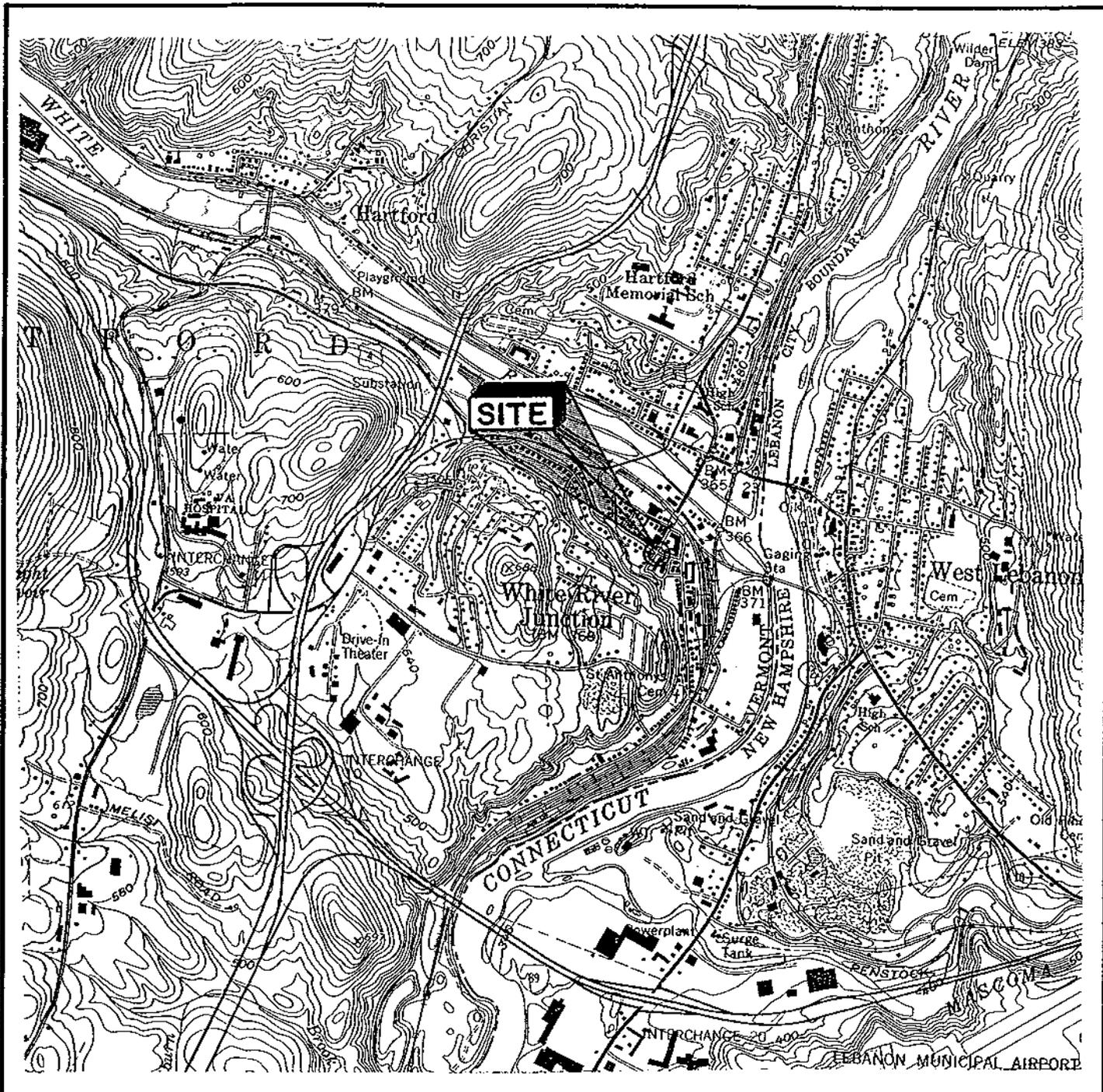
Miller Automobile Company  
Project No. V93116

Summary of Compounds Detected in Samples

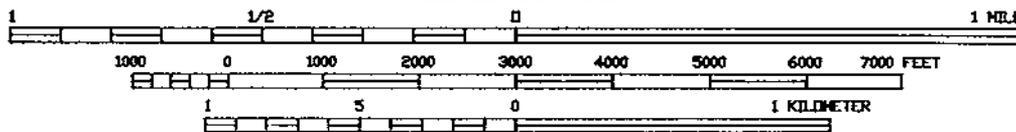
	<u>MW-1</u>	<u>MW-2</u>	<u>MW-3</u>	<u>MW-4</u>	<u>MCL</u>
Date of Sample:	4/20/93	4/20/93	4/20/93	4/20/93	
<u>TPHs (ppm):</u>					
Mineral Spirits	0.76	ND	ND	N/D	N/A
<u>VOCs (ppb):</u>					
Benzene	13	ND	ND	ND	5
Toulene	120	26	42	32	1,000
Ethylbenzene	10	ND	ND	ND	700
Xyiene	51	ND	ND	ND	10,000
MTBE	ND	ND	ND	2.9	N/A

Notes:

1. ND = Not detected.
2. ppm = Parts per million; ppb = parts per billion.
3. TPHs = Total Petroleum Hydrocarbons by EPA Method 8100 (modified).
4. VOCs = Volatile Organic Compounds by EPA Method 8240/624.
5. MCL = Maximum Contaminant Level.
6. MTBE = Maximum Contaminant Level.
7. N/A = Not Applicable, no MCL established.



SCALE: 1:24 000



CONTOUR INTERVAL 20 FEET  
NATIONAL GEODETIC VERTICAL DATUM OF 1929

PROJECT: MILLER AUTOMOBILE CO.  
WHITE RIVER JUNCTION, VT

PROJECT NO. V93116

DATE: MARCH, 1993

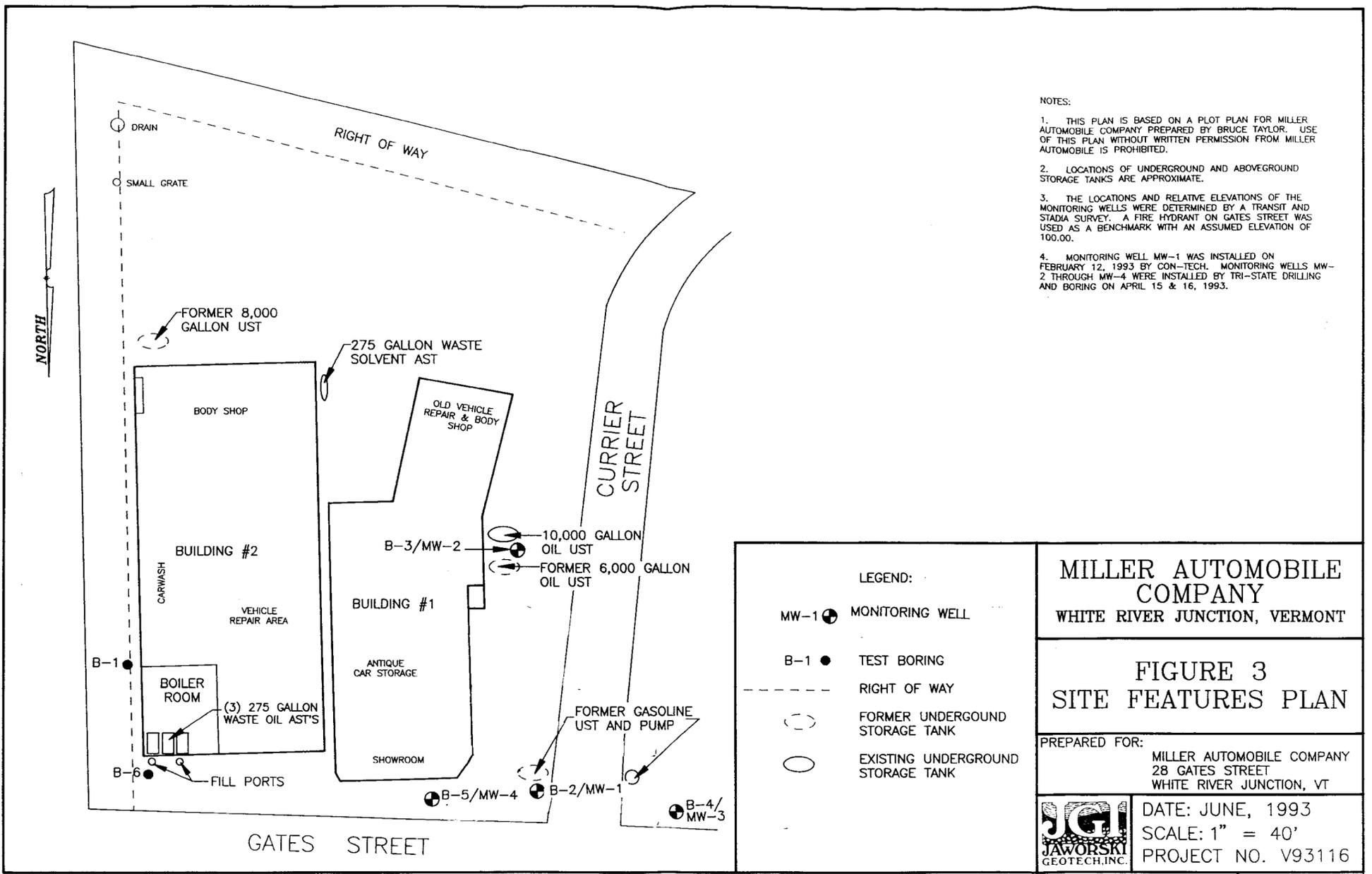
SOURCE: HANOVER, NH-VT  
USGS QUAD REV. 1988

FIGURE 1  
SITE  
LOCATION  
MAP



NOTES:

1. THIS PLAN IS BASED ON A PLOT PLAN FOR MILLER AUTOMOBILE COMPANY PREPARED BY BRUCE TAYLOR. USE OF THIS PLAN WITHOUT WRITTEN PERMISSION FROM MILLER AUTOMOBILE IS PROHIBITED.
2. LOCATIONS OF UNDERGROUND AND ABOVEGROUND STORAGE TANKS ARE APPROXIMATE.
3. THE LOCATIONS AND RELATIVE ELEVATIONS OF THE MONITORING WELLS WERE DETERMINED BY A TRANSIT AND STADIA SURVEY. A FIRE HYDRANT ON GATES STREET WAS USED AS A BENCHMARK WITH AN ASSUMED ELEVATION OF 100.00.
4. MONITORING WELL MW-1 WAS INSTALLED ON FEBRUARY 12, 1993 BY CON-TECH. MONITORING WELLS MW-2 THROUGH MW-4 WERE INSTALLED BY TRI-STATE DRILLING AND BORING ON APRIL 15 & 16, 1993.



**LEGEND:**

- MW-1 ● MONITORING WELL
- B-1 ● TEST BORING
- - - - - RIGHT OF WAY
- FORMER UNDERGROUND STORAGE TANK
- EXISTING UNDERGROUND STORAGE TANK

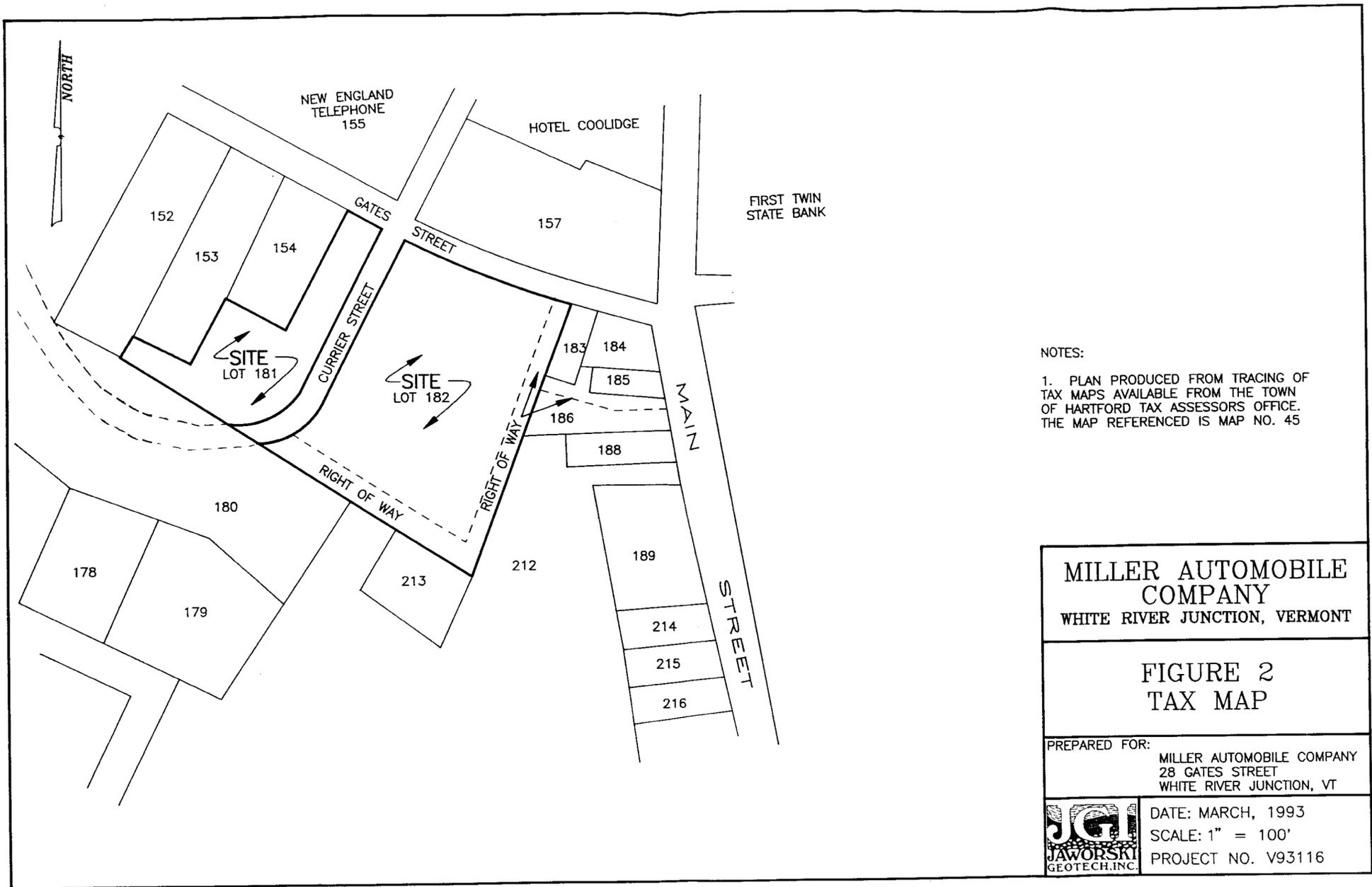
**MILLER AUTOMOBILE COMPANY**  
 WHITE RIVER JUNCTION, VERMONT

**FIGURE 3**  
 SITE FEATURES PLAN

PREPARED FOR:  
 MILLER AUTOMOBILE COMPANY  
 28 GATES STREET  
 WHITE RIVER JUNCTION, VT

**JGI**  
 JAWORSKI  
 GEOTECH, INC.

DATE: JUNE, 1993  
 SCALE: 1" = 40'  
 PROJECT NO. V93116



NOTES:

1. PLAN PRODUCED FROM TRACING OF TAX MAPS AVAILABLE FROM THE TOWN OF HARTFORD TAX ASSESSORS OFFICE. THE MAP REFERENCED IS MAP NO. 45

<b>MILLER AUTOMOBILE COMPANY</b> WHITE RIVER JUNCTION, VERMONT	
<b>FIGURE 2</b> <b>TAX MAP</b>	
PREPARED FOR: MILLER AUTOMOBILE COMPANY 28 GATES STREET WHITE RIVER JUNCTION, VT	
	DATE: MARCH, 1993 SCALE: 1" = 100' PROJECT NO. V93116

## LIMITATIONS

1. Analytical tests performed in the field and in the laboratory were done so for the purpose of identifying the likelihood that hazardous wastes exist beneath the Site. Analytical tests were not completed for every compound on the EPA list of priority pollutants, nor was the entire Site explored for the purpose of revealing a potential problem. Explorations were widely spaced, thus it is possible that hazardous materials may be present beneath unexplored areas of the Site.
  
2. The analyses and conclusions in this report are based in part upon chemical test data provided by others and are contingent upon their validity. Should additional chemical analyses indicate different evidence of contamination, these data should be reviewed by Jaworski Geotech, Inc. and the conclusions presented herein may be modified. It should be noted that variations in the type of contaminants, their concentrations, and their direction of flow will occur due to water table fluctuations and alteration of disposal practices, as well as other factors. As such, it cannot be stated with absolute certainty whether or not a hazardous waste contamination problem exists or will exist in the future at the site.
  
3. This study and report have been prepared for the exclusive use of Miller Auto Company and their Lender and Title Insurer associated with the Site solely for the use of an evaluation of the Site. This report and the findings contained herein shall not, in whole or part, be disseminated or conveyed to any other party, nor used by any other party, in whole or in part, without prior written consent of Jaworski Geotech, Inc. This report has been prepared in accordance with generally accepted environmental assessment practices. No other warranty, expressed or implied, is made.

# TEST BORING LOG

<b>PROJECT:</b> Miller Auto Company White River Junction, Vermont <b>PROJECT NO.:</b> V93116 <b>DATE START:</b> February 12, 1993 <b>DATE END:</b> February 12, 1993 <b>BORING CO.:</b> Con-Tec Concord, New Hampshire <b>FOREMAN:</b> Robert McGlashin <b>JGI INSPECTOR:</b> Martha Doelle					<b>CASING</b>	<b>SAMPLER</b>	SHEET 1 OF 2	
					<b>TYPE:</b> HSA <b>SIZE:</b> 4 1/4" <b>HAMMER:</b> <b>FALL:</b>	SS 1 3/8" 140 LBS 30"	<b>BORING NO:</b> B-1 <b>LOCATION:</b> See Plan <b>SURFACE</b> <b>ELEVATION:</b> NA	
					<b>GROUNDWATER OBSERVATIONS</b>			
					DATE	DEPTH	CASING AT	STABILIZATION PERIOD
					None Encountered			
<b>SAMPLING</b>					Sample Description	Stratum Change	PID Reading	
Depth FT.	No.	Depth	Blows/6"	Penetr/ Recovery				
					Asphalt. Frost to approximately 3 feet.			
5	S-1	5-7'	7-8 10-11	24"/12"	S-1: Loose, mostly coarse to medium SAND, dry, fill. Gravel.	8.0'	0	
10	S-2	10-12'	14-17 18-36	24"/10"	S-2: Medium dense SAND and GRAVEL, mostly coarse to medium Sand, Gravel to 2 inches, subrounded, slightly moist.		0.4	
15	S-3	15-15.5'	100/6"	6"/1"	S-3: Similar to S-2, more Gravel, sightly moist.		0.4	
20	S-4	20-22'	44-54 33-66	24"/14"	S-4: Top 6 inches similar to S-2. Bottom 8 inches Gravel and weathered boulders, slightly moist.		0.2	
25								

**NOTES:**



Proportions used: trace (0-10%), little (10-20%), some (20-35%), and (35-50%)			
Cohesive Consistency (Blows/ft.)		Cohesionless Density (Blows/ft.)	
very soft	0-2	very loose	0-4
soft	2-4	loose	4-10
medium stiff	4-8	medium dense	10-30
stiff	8-15	dense	30-50
very stiff	15-30	very dense	50+
hard	30+		

Remarks: The stratification lines represent the approximate boundary between soil types and the transition may be gradual. Water level readings have been made in the drill holes at times and under conditions stated on the boring logs. Fluctuations in the level of the groundwater may occur due to other factors than those present at the time measurements were made.



# TEST BORING LOG

PROJECT: Miller Auto Company White River Junction, Vermont					CASING	SAMPLER	SHEET 1 of 2	
PROJECT NO.: V93116 DATE START: February 12, 1993 DATE END: February 12, 1993					TYPE: HSA	SS	BORING NO: B-2	
BORING CO.: Con-Tec Concord, New Hampshire FOREMAN: Robert McGlashin IGI INSPECTOR: Martha Doelle					SIZE: 4 1/4"	1 3/8"	LOCATION: See Plan	
					HAMMER: 140 LBS	SURFACE		
					FALL: 30"	ELEVATION: NA		
					GROUNDWATER OBSERVATIONS			
					DATE	DEPTH	CASING AT	STABILIZATION PERIOD
					2/16/93	29.5'	4 Days	
SAMPLING					Sample Description	Stratum Change	PID Reading	
Depth FT.	No.	Depth	Blows/6"	Penetr/ Recovery				
					Asphalt. Fill.			
5	S-1	5-7'	9-13 6-7	24"/6"	S-1: Very loose, mostly fine to medium SAND, some Gravel, asphalt, fill.		0.6	
10	S-2	10-12'	8-8 8-8	24"/8"	S-2: Loose, medium SAND, moist, fill.	(1)	0.2	
15	S-3	15-17'	8-14 13-13	24"/9"	S-3: Medium dense, gravelly SAND, moist, mostly medium to coarse.		0.2	
20	S-4	20-22'	26-36 31-56	24"/10"	S-4: Similar to S-3, moist.		0	
25						23.5'		

NOTES: (1) End of fill.



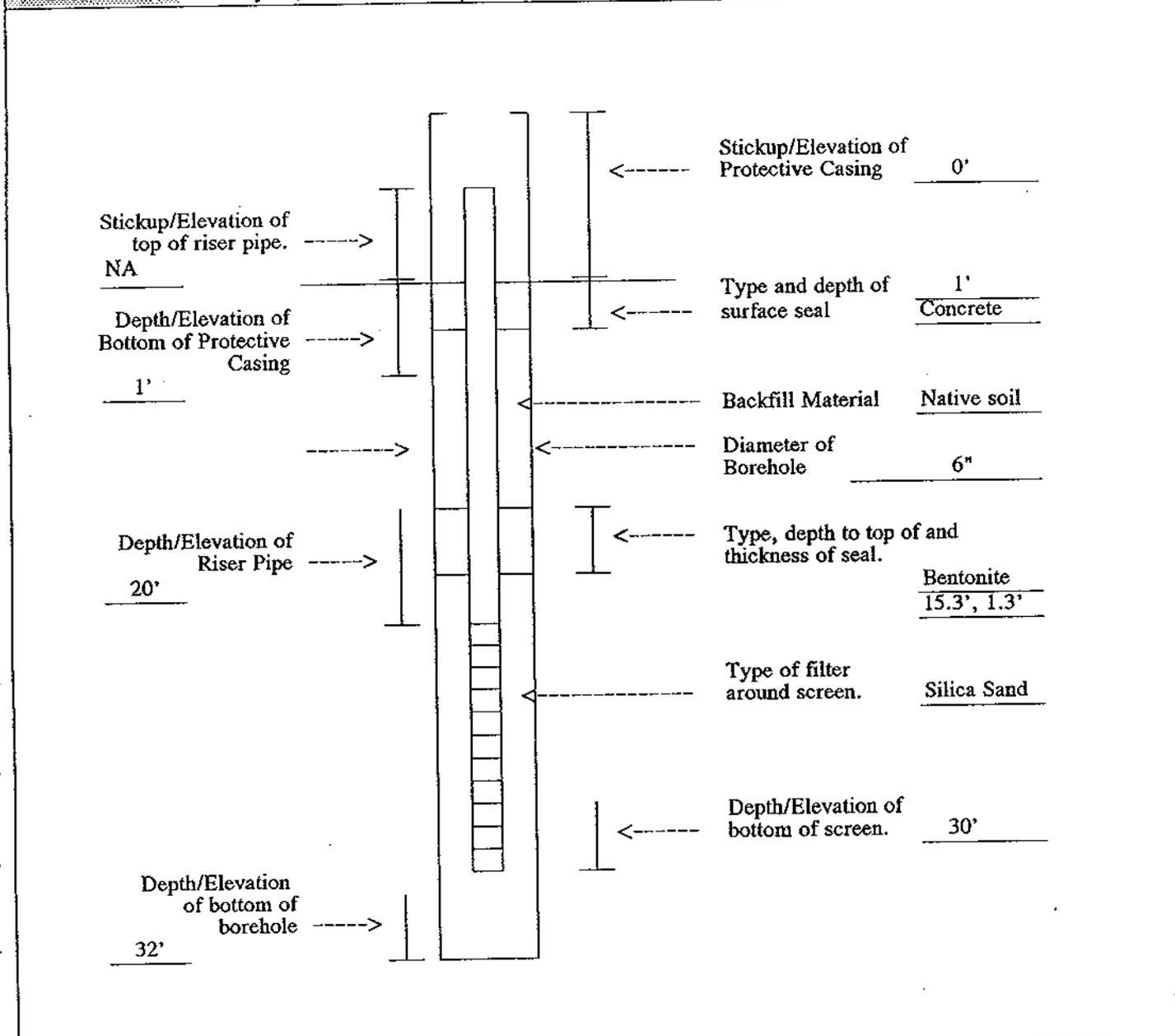
Proportions used: trace (0-10%), little (10-20%), some (20-35%), and (35-50%)			
Cohesive Consistency (Blows/ft.)		Cohesionless Density (Blows/ft.)	
very soft	0-2	very loose	0-4
soft	2-4	loose	4-10
medium stiff	4-8	medium dense	10-30
stiff	8-15	dense	30-50
very stiff	15-30	very dense	50+
hard	30+		

Remarks: The stratification lines represent the approximate boundary between soil types and the transition may be gradual. Water level readings have been made in the drill holes at times and under conditions stated on the boring logs. Fluctuations in the level of the groundwater may occur due to other factors than those present at the time measurements were made.



# MONITORING WELL LOG

<b>PROJECT:</b> Miller Auto Company White River Junction, VT <b>PROJECT NO.:</b> V93116 <b>DATE START:</b> February 12, 1993 <b>DATE END:</b> February 12, 1993	<b>DRILLING CO:</b> Con-Tec Concord, NH <b>FOREMAN:</b> Robert McGlashin <b>JGI INSPECTOR:</b> Martha Doelle	<b>SHEET:</b> 1 of 1 <b>BORING NO.:</b> B-2 <b>WELL NO.:</b> MW-1 <b>SURFACE EL.:</b> NA
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WELL MATERIALS			
	TYPE	DIAMETER	LENGTH
PROTECTIVE CASING	Aluminum	4"	1'
RISER PIPE	PVC	2"	20'
WELL SCREEN	PVC	2"	10'



# TEST BORING LOG

<b>PROJECT:</b> Miller Auto Company White River Junction, Vermont <b>PROJECT NO.:</b> J93116 <b>DATE START:</b> April 15, 1993 <b>DATE END:</b> April 15, 1993					<b>CASING</b> TYPE: HSA SIZE: 4 1/4" HAMMER: 140 LBS FALL: 30"	<b>SAMPLER</b> SS 1 3/8"	SHEET 1 OF 2 <b>BORING NO:</b> B-3 <b>LOCATION:</b> See Plan <b>SURFACE</b> <b>ELEVATION:</b> 98.8	
<b>BORING CO.:</b> Tri-State Drilling West Burke, Vermont <b>FOREMAN:</b> Neal Faulkner <b>JGI INSPECTOR:</b> Martha Doelle					<b>GROUNDWATER OBSERVATIONS</b>			
					<b>DATE</b> <b>DEPTH</b> <b>CASING AT</b> <b>STABILIZATION PERIOD</b> 4-15-93      29.5'                                      At completion.			
<b>SAMPLING</b>					<b>Sample Description</b>	<b>Stratum Change</b>	<b>PID Reading (1)</b>	
<b>Depth FT.</b>	<b>No.</b>	<b>Depth</b>	<b>Blows/6"</b>	<b>Penetr/ Recovery</b>				
5	S-1	5-7'	2-2 3-3	24/14"	S-1: Top 8" medium brown, very loose, fine dry SAND. Bottom 4" medium brown, slightly moist SILT.		0.2	
10	S-2	10-12'	3-2 4-3	24/15"	S-2: Medium gray with orange mottles, very loose, fine, silty, slightly moist SAND.		0.1	
15	S-3	15-17'	3-2 3-2	24/18"	S-3: Interbedded gray SILT, very loose, grading to reddish brown fine, moist SAND.		0.1	
20	S-4	20-22'	10-10 12-16	24/17"	S-4: Grayish brown, medium dense, medium to coarse, dry SAND and GRAVEL.		0.1	
25								

**NOTES:**

	Proportions used: trace (0-10%), little (10-20%), some (20-35%), and (35-50%)														
	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> <table style="width: 100%; border: none;"> <tr> <td style="padding: 2px;">Cohesive Consistency (Blows/ft.)</td> <td style="padding: 2px;">very soft      0-2</td> <td style="padding: 2px;">soft              2-4</td> <td style="padding: 2px;">medium stiff    4-8</td> <td style="padding: 2px;">stiff              8-15</td> <td style="padding: 2px;">very stiff        15-30</td> <td style="padding: 2px;">hard              30+</td> </tr> </table> </td> <td style="width: 50%; border: none;"> <table style="width: 100%; border: none;"> <tr> <td style="padding: 2px;">Cohesionless Density (Blows/ft.)</td> <td style="padding: 2px;">very loose      0-4</td> <td style="padding: 2px;">loose            4-10</td> <td style="padding: 2px;">medium dense   10-30</td> <td style="padding: 2px;">dense            30-50</td> <td style="padding: 2px;">very dense      50+</td> </tr> </table> </td> </tr> </table>	<table style="width: 100%; border: none;"> <tr> <td style="padding: 2px;">Cohesive Consistency (Blows/ft.)</td> <td style="padding: 2px;">very soft      0-2</td> <td style="padding: 2px;">soft              2-4</td> <td style="padding: 2px;">medium stiff    4-8</td> <td style="padding: 2px;">stiff              8-15</td> <td style="padding: 2px;">very stiff        15-30</td> <td style="padding: 2px;">hard              30+</td> </tr> </table>	Cohesive Consistency (Blows/ft.)	very soft      0-2	soft              2-4	medium stiff    4-8	stiff              8-15	very stiff        15-30	hard              30+	<table style="width: 100%; border: none;"> <tr> <td style="padding: 2px;">Cohesionless Density (Blows/ft.)</td> <td style="padding: 2px;">very loose      0-4</td> <td style="padding: 2px;">loose            4-10</td> <td style="padding: 2px;">medium dense   10-30</td> <td style="padding: 2px;">dense            30-50</td> <td style="padding: 2px;">very dense      50+</td> </tr> </table>	Cohesionless Density (Blows/ft.)	very loose      0-4	loose            4-10	medium dense   10-30	dense            30-50
<table style="width: 100%; border: none;"> <tr> <td style="padding: 2px;">Cohesive Consistency (Blows/ft.)</td> <td style="padding: 2px;">very soft      0-2</td> <td style="padding: 2px;">soft              2-4</td> <td style="padding: 2px;">medium stiff    4-8</td> <td style="padding: 2px;">stiff              8-15</td> <td style="padding: 2px;">very stiff        15-30</td> <td style="padding: 2px;">hard              30+</td> </tr> </table>	Cohesive Consistency (Blows/ft.)	very soft      0-2	soft              2-4	medium stiff    4-8	stiff              8-15	very stiff        15-30	hard              30+	<table style="width: 100%; border: none;"> <tr> <td style="padding: 2px;">Cohesionless Density (Blows/ft.)</td> <td style="padding: 2px;">very loose      0-4</td> <td style="padding: 2px;">loose            4-10</td> <td style="padding: 2px;">medium dense   10-30</td> <td style="padding: 2px;">dense            30-50</td> <td style="padding: 2px;">very dense      50+</td> </tr> </table>	Cohesionless Density (Blows/ft.)	very loose      0-4	loose            4-10	medium dense   10-30	dense            30-50	very dense      50+	
Cohesive Consistency (Blows/ft.)	very soft      0-2	soft              2-4	medium stiff    4-8	stiff              8-15	very stiff        15-30	hard              30+									
Cohesionless Density (Blows/ft.)	very loose      0-4	loose            4-10	medium dense   10-30	dense            30-50	very dense      50+										
Remarks: The stratification lines represent the approximate boundary between soil types and the transition may be gradual. Water level readings have been made in the drill holes at times and under conditions stated on the boring logs. Fluctuations in the level of the groundwater may occur due to other factors than those present at the time measurements were made.															

# TEST BORING LOG

<b>PROJECT:</b> Miller Auto Company White River Junction, Vermont					<b>CASING</b>	<b>SAMPLER</b>	SHEET 2 OF 2	
<b>PROJECT NO.:</b> J93116					<b>TYPE:</b> HSA	SS	<b>BORING NO:</b> B-3	
<b>DATE START:</b> April 15, 1993					<b>SIZE:</b> 4 1/4"	1 3/8"	<b>LOCATION:</b> See Plan	
<b>DATE END:</b> April 15, 1993					<b>HAMMER:</b>	140 LBS	<b>SURFACE</b>	
<b>BORING CO.:</b> Tri-State Drilling West Burke, Vermont					<b>FALL:</b>	30"	<b>ELEVATION:</b> 98.8	
<b>FOREMAN:</b> Neal Faulkner <b>JGI INSPECTOR:</b> Martha Doelle					<b>GROUNDWATER OBSERVATIONS</b>			
					<b>DATE</b>	<b>DEPTH</b>	<b>CASING AT</b>	<b>STABILIZATION PERIOD</b>
					4-15-93	29.5'	At completion.	
<b>SAMPLING</b>					<b>Sample Description</b>		<b>Stratum Change</b>	<b>PID Reading (I)</b>
<b>Depth FT.</b>	<b>No.</b>	<b>Depth</b>	<b>Blows/6"</b>	<b>Penetr/ Recovery</b>				
	S-5	25-27'	7-20	24/16"	S-5: Similar to S4, dry.			0.1
			16-17					
30								
	S-6	30-32'	8-9	24/17"	S-6: Similar to S5, moist.			0.1
			11-11					
35								
	S-7	35-37	8-12	24/24"	S-7: Brown, medium dense, medium to coarse, wet SAND.			0.1
			14-14					
40								
					Boring terminated - 40'.			
45								
50								

**NOTES:**

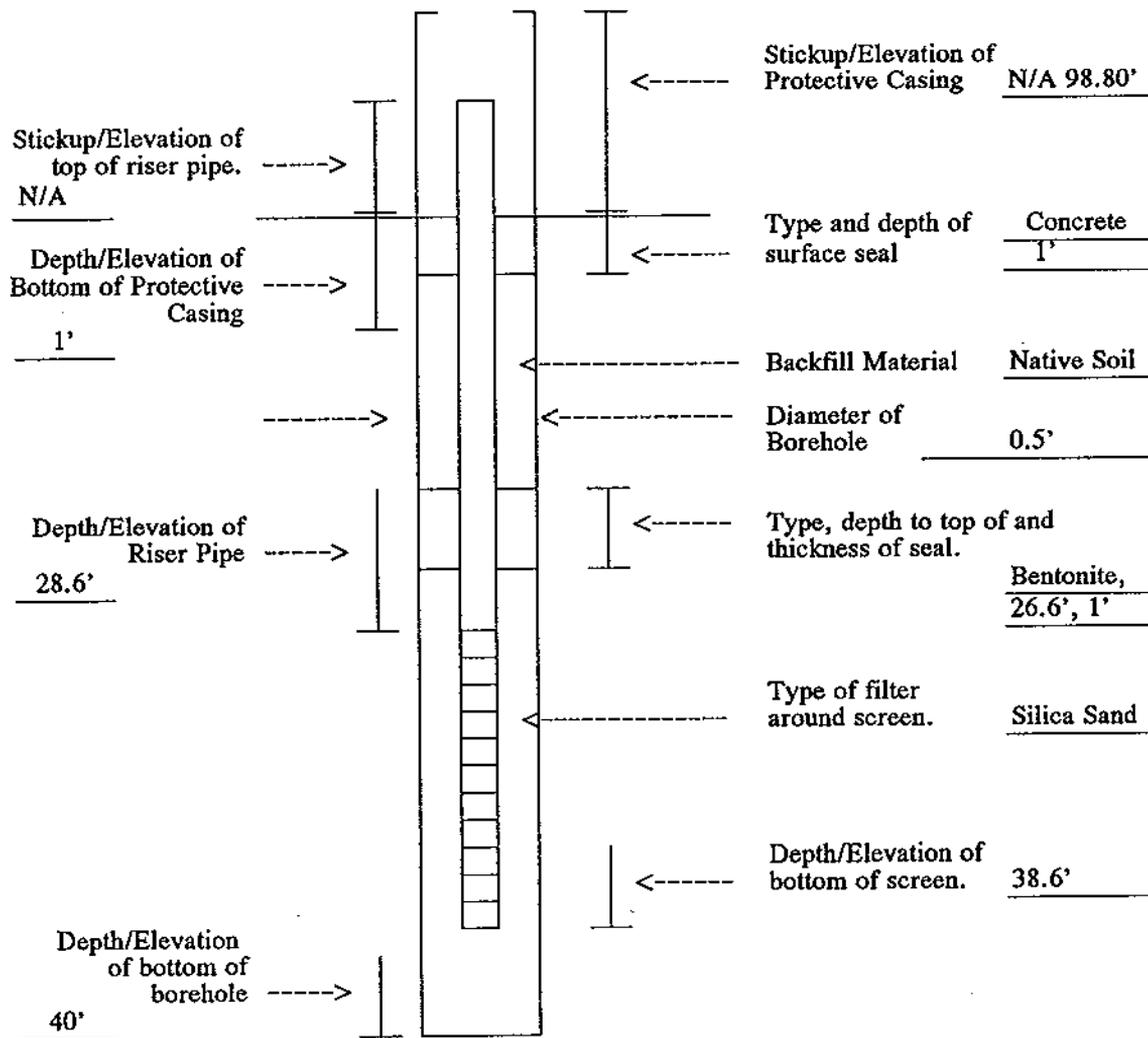


Proportions used: trace (0-10%), little (10-20%), some (20-35%), and (35-50%)			
Cohesive Consistency (Blows/ft.)		Cohesionless Density (Blows/ft.)	
very soft	0-2	very loose	0-4
soft	2-4	loose	4-10
medium stiff	4-8	medium dense	10-30
stiff	8-15	dense	30-50
very stiff	15-30	very dense	50+
hard	30+		

Remarks: The stratification lines represent the approximate boundary between soil types and the transition may be gradual. Water level readings have been made in the drill holes at times and under conditions stated on the boring logs. Fluctuations in the level of the groundwater may occur due to other factors than those present at the time measurements were made.

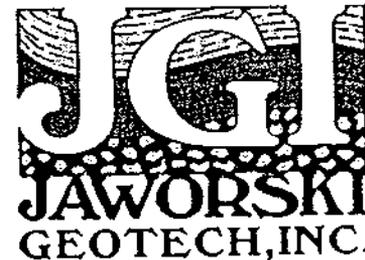
# MONITORING WELL LOG

<b>PROJECT:</b> Miller Auto Company White River Junction, Vermo <b>PROJECT NO.:</b> V93116 <b>DATE START:</b> April 15, 1993 <b>DATE END:</b> April 15, 1993	<b>DRILLING CO.:</b> Tri-State Drilling West Burke, Vermont <b>FOREMAN:</b> Neal Faulkner <b>JGI INSPECTOR:</b> Martha Doelle	<b>SHEET:</b> 1 of 1 <b>BORING NO.:</b> B-3 <b>WELL NO.:</b> MW-2 <b>SURFACE EL.:</b> 98.80'
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### WELL MATERIALS

	TYPE	DIAMETER	LENGTH
PROTECTIVE CASING	Roadbox	6"	1'
RISER PIPE	PVC	2"	28'
WELL SCREEN	PVC	2"	10'



# TEST BORING LOG

<b>PROJECT:</b> Miller Auto Company White River Junction, Vermont					<b>CASING</b> TYPE: HSA SIZE: 4 1/4" HAMMER: 140 LBS FALL: 30"	<b>SAMPLER</b> SS 1 3/8"	SHEET 1 OF 2 BORING NO: B-4 LOCATION: See Plan SURFACE ELEVATION: 98.27		
<b>PROJECT NO.:</b> J93116 <b>DATE START:</b> April 16, 1993 <b>DATE END:</b> April 16, 1993					<b>GROUNDWATER OBSERVATIONS</b>				
<b>BORING CO.:</b> Tri-State Drilling West Burke, Vermont <b>FOREMAN:</b> Neal Faulkner <b>JGI INSPECTOR:</b> Martha Doelle					DATE	DEPTH	CASING AT	STABILIZATION PERIOD	
					4-16-93	28.6'	At completion.		
<b>SAMPLING</b>					Sample Description	Stratum Change	PID Reading (1)		
Depth FT.	No.	Depth	Blows/6"	Penetr/ Recovery					
5	S-1	5-7'	4-3 7-7	24/7"	S-1: Brown, loose, SAND and GRAVEL well rounded, dry.				
10	S-2	10-12'	5-8 7-6	24/10"	S-2: Similar to S1, coarser, dry.				
15	S-3	15-17'	6-5 6-9	24/9"	S-3: Similar to S1, finer, dry.				
20	S-4	20-22'	6-11 11-22	24/18"	S-4: Gray brown, stiff, laminated, very fine, dry SAND and SILT.				
25									

**NOTES:**



Proportions used: trace (0-10%), little (10-20%), some (20-35%), and (35-50%)			
Cohesive Consistency (Blows/ft.)		Cohesionless Density (Blows/ft.)	
very soft	0-2	very loose	0-4
soft	2-4	loose	4-10
medium stiff	4-8	medium dense	10-30
stiff	8-15	dense	30-50
very stiff	15-30	very dense	50+
hard	30+		

Remarks: The stratification lines represent the approximate boundary between soil types and the transition may be gradual. Water level readings have been made in the drill holes at times and under conditions stated on the boring logs. Fluctuations in the level of the groundwater may occur due to other factors than those present at the time measurements were made.

# TEST BORING LOG

<b>PROJECT:</b> Miller Auto Company White River Junction, Vermont					<b>CASING</b> TYPE: HSA SIZE: 4 1/4" HAMMER: 140 LBS FALL: 30"	<b>SAMPLER</b> SS 1 3/8"	SHEET 2 OF 2 BORING NO: B-4 LOCATION: See Plan SURFACE ELEVATION: 98.27		
<b>PROJECT NO.:</b> J93116 <b>DATE START:</b> April 16, 1993 <b>DATE END:</b> April 16, 1993					<b>GROUNDWATER OBSERVATIONS</b>				
<b>BORING CO.:</b> Tri-State Drilling West Burke, Vermont <b>FOREMAN:</b> Neal Faulkner <b>JGI INSPECTOR:</b> Martha Doelle					<b>DATE</b> 4-16-93	<b>DEPTH</b> 28.6'	<b>CASING AT</b> At completion.		
<b>SAMPLING</b>					<b>Sample Description</b>		<b>Stratum Change</b>	<b>PID Reading (1)</b>	
<b>Depth FT.</b>	<b>No.</b>	<b>Depth</b>	<b>Blows/6"</b>	<b>Penetr/ Recovery</b>					
	S-5	25-27'	6-7 10-12	24/20"	S-5: Gray, stiff, laminated SILT and very fine SAND, some Clay layers, moist.			0.2	
30									
	S-6	30-32'	7-12 22-25	24/19"	S-6: Similar to S5, wet.			0.1	
35									
	S-7	35-37'	11-11 17-22	24/20"	S-7: Gray, stiff, SILT and very fine SAND, laminated, wet.			0.1	
40									
					Boring terminated - 40'.				
45									
50									

**NOTES:**

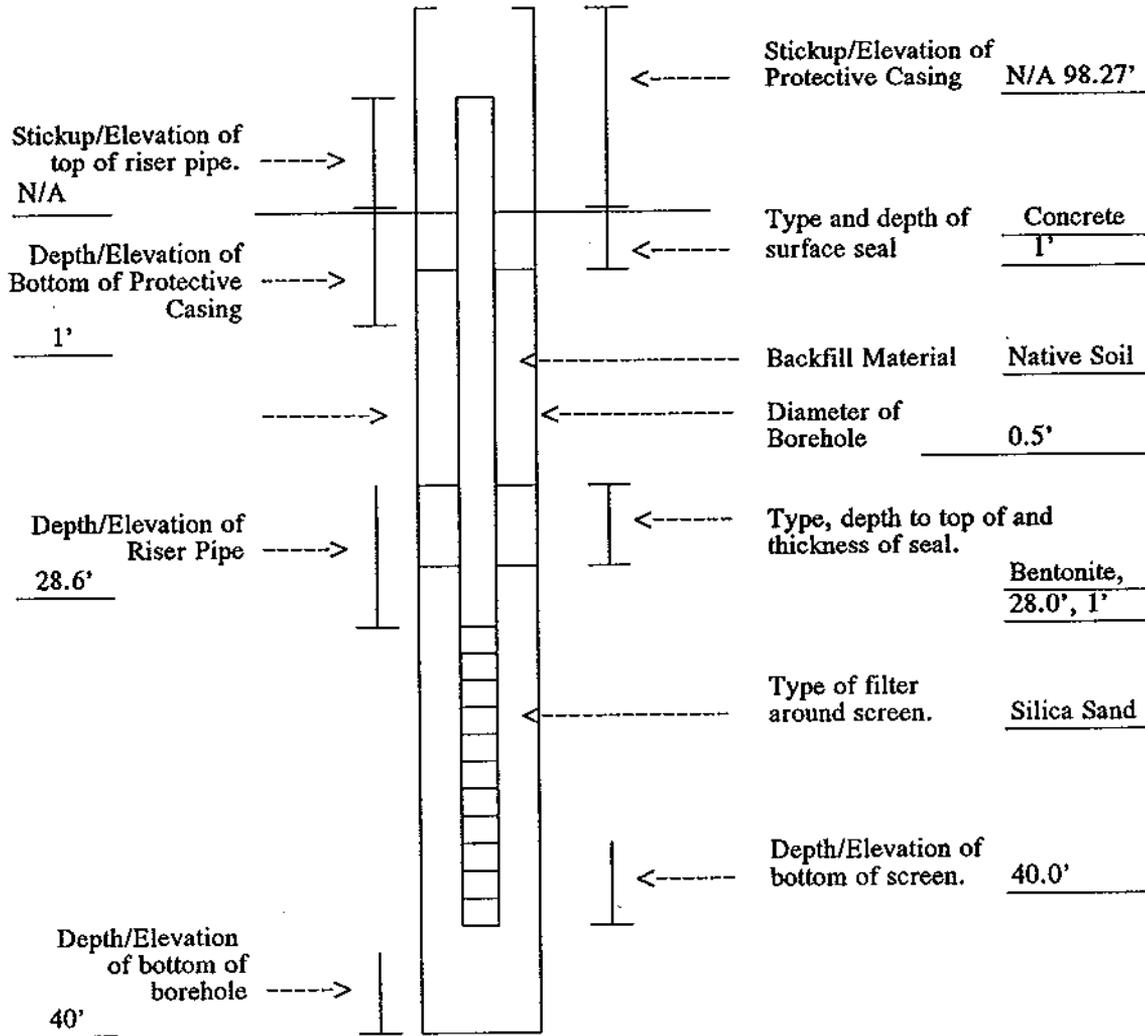


Proportions used: trace (0-10%), little (10-20%), some (20-35%), and (35-50%)			
Cohesive Consistency (Blows/ft.)		Cohesionless Density (Blows/ft.)	
very soft	0-2	very loose	0-4
soft	2-4	loose	4-10
medium stiff	4-8	medium dense	10-30
stiff	8-15	dense	30-50
very stiff	15-30	very dense	50+
hard	30+		

Remarks: The stratification lines represent the approximate boundary between soil types and the transition may be gradual. Water level readings have been made in the drill holes at times and under conditions stated on the boring logs. Fluctuations in the level of the groundwater may occur due to other factors than those present at the time measurements were made.

# MONITORING WELL LOG

<b>PROJECT:</b> Miller Auto Company White River Junction, Vermo <b>PROJECT NO.:</b> V93116 <b>DATE START:</b> April 15, 1993 <b>DATE END:</b> April 15, 1993	<b>DRILLING CO.:</b> Tri-State Drilling West Burke, Vermont <b>FOREMAN:</b> Neal Faulkner <b>JGI INSPECTOR:</b> Martha Doelle	<b>SHEET:</b> 1 of 1 <b>BORING NO.:</b> B-4 <b>WELL NO.:</b> MW-3 <b>SURFACE EL.:</b> 98.27
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### WELL MATERIALS

	TYPE	DIAMETER	LENGTH
PROTECTIVE CASING	Roadbox	6"	1'
RISER PIPE	PVC	2"	30'
WELL SCREEN	PVC	2"	10'



# TEST BORING LOG

<b>PROJECT:</b> Miller Auto Company White River Junction, Vermont					<b>CASING</b> TYPE: HSA SIZE: 4 1/4" HAMMER: 140 LBS FALL: 30"	<b>SAMPLER</b> SS 1 3/8"	SHEET 1 OF 2 BORING NO: B-5 LOCATION: See Plan SURFACE ELEVATION: 98.82'	
<b>PROJECT NO.:</b> J93116 <b>DATE START:</b> April 16, 1993 <b>DATE END:</b> April 16, 1993					<b>GROUNDWATER OBSERVATIONS</b>			
<b>BORING CO.:</b> Tri-State Drilling West Burke, Vermont <b>FOREMAN:</b> Neal Faulkner <b>JGI INSPECTOR:</b> Martha Doelle					<b>DATE</b> 4-16-93	<b>DEPTH</b> 28.7'	<b>CASING AT</b> At completion.	<b>STABILIZATION PERIOD</b>
<b>SAMPLING</b>					<b>Sample Description</b>	<b>Stratum Change</b>	<b>PID Reading (l)</b>	
<b>Depth FT.</b>	<b>No.</b>	<b>Depth</b>	<b>Blows/6"</b>	<b>Penetr/ Recovery</b>				
5	S-1	5-7'	5-7 6-4	24/10"	S-1: Medium brown, loose, very fine SAND, dry.		0.2	
10	S-2	10-12'	4-4 4-4	24/20"	S-2: Similar to S-1, orange mottles, dry.		0.1	
15	S-3	15-17'	2-3 7-12	24/20"	S-3: Gray with oxidized layers, loose interbedded very fine SAND and SILT, moist.		0.1	
20	S-4	20-20'	17-25 18-25	24/8"	S-4: Fine Sand underlain by coarse SAND and GRAVEL, dry.		0.1	
25								

**NOTES:**



Proportions used: trace (0-10%), little (10-20%), some (20-35%), and (35-50%)			
Cohesive Consistency (Blows/ft.)		Cohesionless Density (Blows/ft.)	
very soft	0-2	very loose	0-4
soft	2-4	loose	4-10
medium stiff	4-8	medium dense	10-30
stiff	8-15	dense	30-50
very stiff	15-30	very dense	50+
hard	30+		

Remarks: The stratification lines represent the approximate boundary between soil types and the transition may be gradual. Water level readings have been made in the drill holes at times and under conditions stated on the boring logs. Fluctuations in the level of the groundwater may occur due to other factors than those present at the time measurements were made.

# TEST BORING LOG

<b>PROJECT:</b> Miller Auto Company White River Junction, Vermont					<b>CASING</b> TYPE: HSA SIZE: 4 1/4" HAMMER: 140 LBS FALL: 30"	<b>SAMPLER</b> SS 1 3/8"	SHEET 2 OF 2 BORING NO: B-5 LOCATION: See Plan SURFACE ELEVATION: 98.82'	
<b>PROJECT NO.:</b> J93116 <b>DATE START:</b> April 16, 1993 <b>DATE END:</b> April 16, 1993					<b>GROUNDWATER OBSERVATIONS</b>			
<b>BORING CO.:</b> Tri-State Drilling West Burke, Vermont <b>FOREMAN:</b> Neal Faulkner <b>JGI INSPECTOR:</b> Martha Doelle					<b>DATE</b> 4-16-93	<b>DEPTH</b> 28.7'	<b>CASING AT</b>	<b>STABILIZATION PERIOD</b> At completion.
<b>SAMPLING</b>					<b>Sample Description</b>	<b>Stratum Change</b>	<b>PID Reading (I)</b>	
<b>Depth FT.</b>	<b>No.</b>	<b>Depth</b>	<b>Blows/6"</b>	<b>Penetr/ Recovery</b>				
	S-5	25-27'	17-25	24/9"	S-5: Dense, medium SAND and GRAVEL, dry.			
			35-45					
30								
	S-6	30-32'	18-33	24/8"	S-6: Top 4" buff, coarse SAND. Bottom 4" SAND and angular GRAVEL, wet.			
			30-33					
35								
	S-7	35-37'	4-6	24/ "	S-7: Medium dense, coarse SAND and GRAVEL, wet.			
			25-30					
40					Boring terminated - 40'.			
45								
50								

**NOTES:**

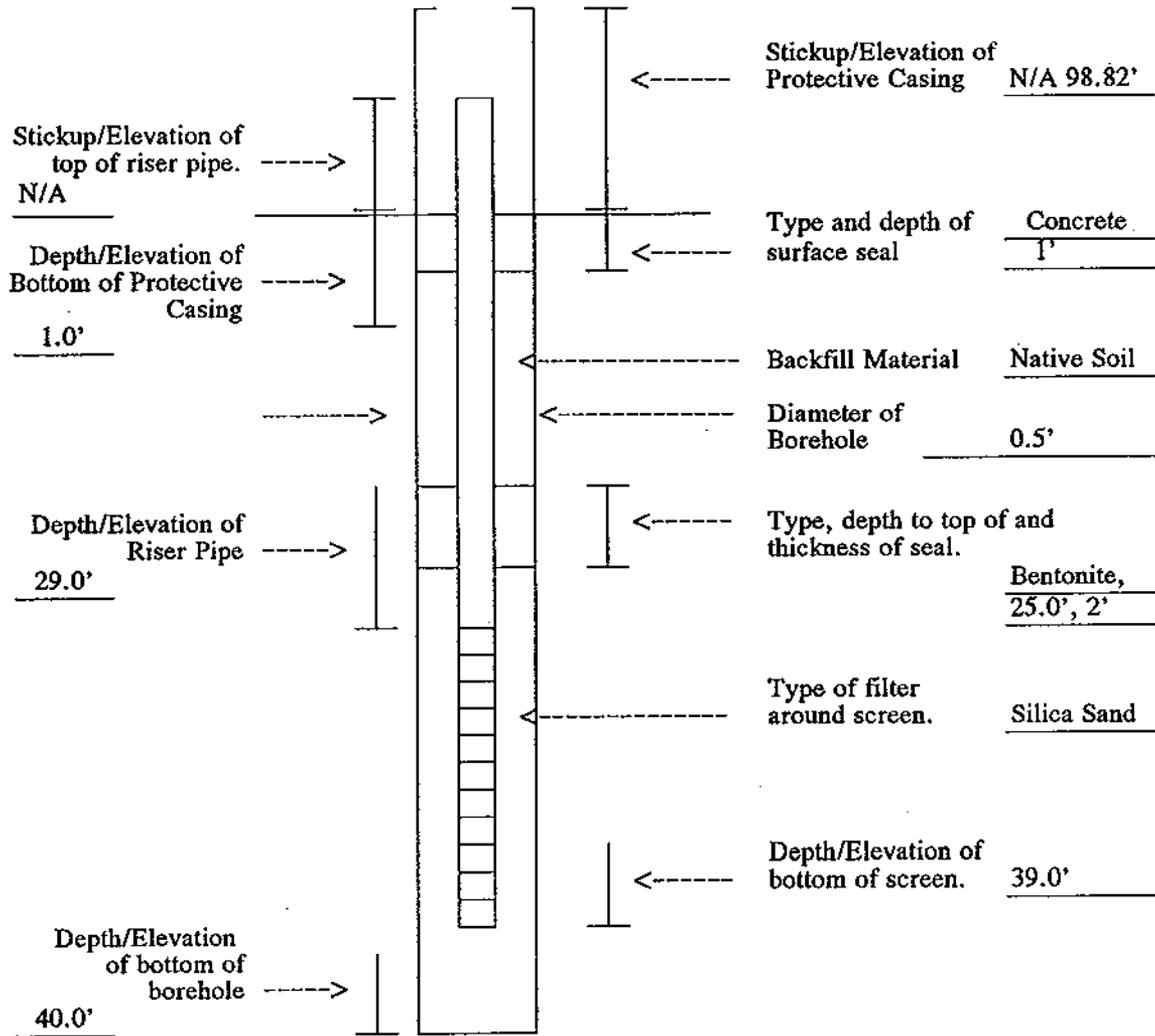


Proportions used: trace (0-10%), little (10-20%), some (20-35%), and (35-50%)			
Cohesive Consistency (Blows/ft.)		Cohesionless Density (Blows/ft.)	
very soft	0-2	very loose	0-4
soft	2-4	loose	4-10
medium stiff	4-8	medium dense	10-30
stiff	8-15	dense	30-50
very stiff	15-30	very dense	50+
hard	30+		

Remarks: The stratification lines represent the approximate boundary between soil types and the transition may be gradual. Water level readings have been made in the drill holes at times and under conditions stated on the boring logs. Fluctuations in the level of the groundwater may occur due to other factors than those present at the time measurements were made.

# MONITORING WELL LOG

<b>PROJECT:</b> Miller Auto Company White River Junction, VT <b>PROJECT NO.:</b> V93116 <b>DATE START:</b> April 16, 1993 <b>DATE END:</b> April 16, 1993	<b>DRILLING CO.:</b> Tri-State Drilling West Burke, VT <b>FOREMAN:</b> Neal Faulkner <b>JGI INSPECTOR:</b> Martha Doelle	<b>SHEET:</b> 1 of 1 <b>BORING NO.:</b> B-5 <b>WELL NO.:</b> MW-4 <b>SURFACE EL.:</b> 98.82'
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### WELL MATERIALS

	TYPE	DIAMETER	LENGTH
PROTECTIVE CASING	Roadbox	6"	1'
RISER PIPE	PVC	2"	29'
WELL SCREEN	PVC	2"	10'



# TEST BORING LOG

<b>PROJECT:</b> Miller Auto Company					<b>CASING</b>	<b>SAMPLER</b>	SHEET 1 OF 1	
White River Junction, Vermont					<b>TYPE:</b> HSA	SS	BORING NO: B-6	
<b>PROJECT NO.:</b> J93116					<b>SIZE:</b> 4 1/4"	1 3/8"	LOCATION: See Plan	
<b>DATE START:</b> April 15, 1993					<b>HAMMER:</b>	140 LBS	SURFACE	
<b>DATE END:</b> April 15, 1993					<b>FALL:</b>	30"	ELEVATION: N/A	
<b>BORING CO.:</b> Tri-State Drilling					<b>GROUNDWATER OBSERVATIONS</b>			
West Burke, Vermont					<b>DATE</b>	<b>DEPTH</b>	<b>CASING AT</b>	<b>STABILIZATION PERIOD</b>
<b>FOREMAN:</b> Neal Faulkner					4-15-93	29.5'		At completion.
<b>JGI INSPECTOR:</b> Martha Doelle								
<b>SAMPLING</b>					<b>Sample Description</b>	<b>Stratum Change</b>	<b>PID Reading (I)</b>	
<b>Depth FT.</b>	<b>No.</b>	<b>Depth</b>	<b>Blows/6"</b>	<b>Penetr/ Recovery</b>				
5								
	S-1	5-7'	5-4	24/8"	S-1: Dark brown, loose, fine to medium, slightly moist SAND.		0.1	
			2-1					
10								
	S-2	10-11.5'	8-12	18/6"	S-2: Dark brown, medium dense, fine to medium, dry SAND and GRAVEL.		0.1	
			22					
					Auger refusal, boring terminated - 12.5'.			
15								
20								
25								

**NOTES:**

Abandoned UST adjacent to test boring.  
 Refusal at 12.5'. Move rig 5'. Refusal at 11.0'.



Proportions used: trace (0-10%), little (10-20%), some (20-35%), and (35-50%)			
Cohesive Consistency (Blows/ft.)		Cohesionless Density (Blows/ft.)	
very soft	0-2	very loose	0-4
soft	2-4	loose	4-10
medium stiff	4-8	medium dense	10-30
stiff	8-15	dense	30-50
very stiff	15-30	very dense	50+
hard	30+		

Remarks: The stratification lines represent the approximate boundary between soil types and the transition may be gradual. Water level readings have been made in the drill holes at times and under conditions stated on the boring logs. Fluctuations in the level of the groundwater may occur due to other factors than those present at the time measurements were made.

April 30, 1993

Ms. Martha Doelle  
Jaworski Geotech, Inc.  
The Junction Marketplace  
White River Jt., VT 05001

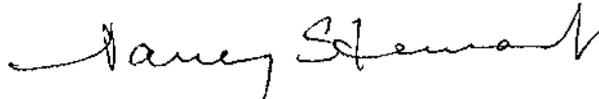
Dear Martha:

Enclosed please find the results for the samples (your project V93116 Miller Auto) received on April 21, 1993. No quality control problems were encountered during the analyses of these samples. This project was assigned AMRO Project Number 4456. If you have any questions regarding this project in the future, please refer to this number.

This letter is an integral part of your data report.

Please do not hesitate to call if you have any questions.

Sincerely,



Nancy Stewart  
Vice President

encl.  
NS/db

## LABORATORY REPORT

EPA Method 8240  
Volatile Organic Compounds

Client: Jaworski Geotech, Inc.  
 Client I.D.: V93116 Miller Auto  
MW-1  
 AMRO I.D.: 4456-01  
 Date sampled: 04/20/93 Date received: 04/21/93  
 Date prepared: 04/29/93 Date analyzed: 04/29/93  
 Sample Qty/Type: 1/Water

Test Parameter	Results (ug/L)	Reporting Limit (ug/L)
Chloromethane	ND	25
Bromomethane	ND	25
Vinyl Chloride	ND	25
Chloroethane	ND	25
Methylene Chloride	ND	10
Acetone	ND	50
Carbon Disulfide	ND	10
1,1-Dichloroethene	ND	10
1,1-Dichloroethane	ND	10
1,2-Dichloroethene (trans)	ND	10
1,2-Dichloroethene (cis)	ND	10
Chloroform	ND	10
1,2-Dichloroethane	ND	10
2-Butanone (MEK)	ND	50
1,1,1-Trichloroethane	ND	10
Carbon Tetrachloride	ND	10
Vinyl Acetate	ND	50
Bromodichloromethane	ND	10
1,2-Dichloropropane	ND	10
cis-1,3-Dichloropropene	ND	10
Trichloroethene	ND	10
Dibromochloromethane	ND	10
1,1,2-Trichloroethane	ND	10
Benzene	13	10
trans-1,3-Dichloropropene	ND	10
2-Chloroethylvinylether	ND	50
Bromoform	ND	10
4-Methyl-2-Pentanone (MIBK)	ND	50
2-Hexanone	ND	50
Tetrachloroethene	ND	10
1,1,2,2-Tetrachloroethane	ND	10
Toluene	120	10
Chlorobenzene	ND	10
Ethylbenzene	10	10
Styrene	ND	10
Xylene (total)	51	10
Methyl-tert-butyl ether (MTBE)	ND	10

ND = Not detected.

Approved by Nancy Stewart  
Nancy Stewart

## LABORATORY REPORT

EPA Method 8240  
Volatile Organic Compounds

Client: Jaworski Geotech, Inc.  
 Client I.D.: V93116 Miller Auto  
MW-2  
 AMRO I.D.: 4456-02  
 Date sampled: 04/20/93 Date received: 04/21/93  
 Date prepared: 04/28/93 Date analyzed: 04/28/93  
 Sample Qty/Type: 1/Water

Test Parameter	Results (ug/L)	Reporting Limit (ug/L)
Chloromethane	ND	5
Bromomethane	ND	5
Vinyl Chloride	ND	5
Chloroethane	ND	5
Methylene Chloride	ND	2
Acetone	ND	10
Carbon Disulfide	ND	2
1,1-Dichloroethene	ND	2
1,1-Dichloroethane	ND	2
1,2-Dichloroethene (trans)	ND	2
1,2-Dichloroethene (cis)	ND	2
Chloroform	ND	2
1,2-Dichloroethane	ND	2
2-Butanone (MEK)	ND	10
1,1,1-Trichloroethane	ND	2
Carbon Tetrachloride	ND	2
Vinyl Acetate	ND	10
Bromodichloromethane	ND	2
1,2-Dichloropropane	ND	2
cis-1,3-Dichloropropene	ND	2
Trichloroethene	ND	2
Dibromochloromethane	ND	2
1,1,2-Trichloroethane	ND	2
Benzene	ND	2
trans-1,3-Dichloropropene	ND	2
2-Chloroethylvinylether	ND	10
Bromoform	ND	2
4-Methyl-2-Pentanone (MIBK)	ND	10
2-Hexanone	ND	10
Tetrachloroethene	ND	2
1,1,2,2-Tetrachloroethane	ND	2
Toluene	26	2
Chlorobenzene	ND	2
Ethylbenzene	ND	2
Styrene	ND	2
Xylene (total)	ND	2
Methyl-tert-butyl ether (MTBE)	ND	2

ND = Not detected.

Approved by Nancy Stewart  
Nancy Stewart

## LABORATORY REPORT

EPA Method 8240  
Volatile Organic Compounds

Client: Jaworski Geotech, Inc.  
 Client I.D.: V93116 Miller Auto  
MW-3  
 AMRO I.D.: 4456-03  
 Date sampled: 04/20/93 Date received: 04/21/93  
 Date prepared: 04/29/93 Date analyzed: 04/29/93  
 Sample Qty/Type: 1/Water

Test Parameter	Results (ug/L)	Reporting Limit (ug/L)
Chloromethane	ND	5
Bromomethane	ND	5
Vinyl Chloride	ND	5
Chloroethane	ND	5
Methylene Chloride	ND	2
Acetone	ND	10
Carbon Disulfide	ND	2
1,1-Dichloroethene	ND	2
1,1-Dichloroethane	ND	2
1,2-Dichloroethene (trans)	ND	2
1,2-Dichloroethene (cis)	ND	2
Chloroform	ND	2
1,2-Dichloroethane	ND	2
2-Butanone (MEK)	ND	10
1,1,1-Trichloroethane	ND	2
Carbon Tetrachloride	ND	2
Vinyl Acetate	ND	10
Bromodichloromethane	ND	2
1,2-Dichloropropane	ND	2
cis-1,3-Dichloropropene	ND	2
Trichloroethene	ND	2
Dibromochloromethane	ND	2
1,1,2-Trichloroethane	ND	2
Benzene	ND	2
trans-1,3-Dichloropropene	ND	2
2-Chloroethylvinylether	ND	10
Bromoform	ND	2
4-Methyl-2-Pentanone (MIBK)	ND	10
2-Hexanone	ND	10
Tetrachloroethene	ND	2
1,1,2,2-Tetrachloroethane	ND	2
Toluene	42	2
Chlorobenzene	ND	2
Ethylbenzene	ND	2
Styrene	ND	2
Xylene (total)	ND	2
Methyl-tert-butyl ether (MTBE)	ND	2

ND = Not detected.

Approved by Nancy Stewart  
Nancy Stewart

## LABORATORY REPORT

EPA Method 8240  
Volatile Organic Compounds

Client: Jaworski Geotech, Inc.  
 Client I.D.: V93116 Miller Auto  
MW-4  
 AMRO I.D.: 4456-04  
 Date sampled: 04/20/93 Date received: 04/21/93  
 Date prepared: 04/29/93 Date analyzed: 04/29/93  
 Sample Qty/Type: 1/Water

Test Parameter	Results (ug/L)	Reporting Limit (ug/L)
Chloromethane	ND	5
Bromomethane	ND	5
Vinyl Chloride	ND	5
Chloroethane	ND	5
Methylene Chloride	ND	2
Acetone	ND	10
Carbon Disulfide	ND	2
1,1-Dichloroethene	ND	2
1,1-Dichloroethane	ND	2
1,2-Dichloroethene (trans)	ND	2
1,2-Dichloroethene (cis)	ND	2
Chloroform	ND	2
1,2-Dichloroethane	ND	2
2-Butanone (MEK)	ND	10
1,1,1-Trichloroethane	ND	2
Carbon Tetrachloride	ND	2
Vinyl Acetate	ND	10
Bromodichloromethane	ND	2
1,2-Dichloropropane	ND	2
cis-1,3-Dichloropropene	ND	2
Trichloroethene	ND	2
Dibromochloromethane	ND	2
1,1,2-Trichloroethane	ND	2
Benzene	ND	2
trans-1,3-Dichloropropene	ND	2
2-Chloroethylvinylether	ND	10
Bromoform	ND	2
4-Methyl-2-Pentanone (MIBK)	ND	10
2-Hexanone	ND	10
Tetrachloroethene	ND	2
1,1,2,2-Tetrachloroethane	ND	2
Toluene	32	2
Chlorobenzene	ND	2
Ethylbenzene	ND	2
Styrene	ND	2
Xylene (total)	ND	2
Methyl-tert-butyl ether (MTBE)	2.9	2

ND = Not detected.

Approved by Nancy Stewart  
Nancy Stewart

## LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography  
EPA Method 8100 (Modified)Client: Jaworski Geotech, Inc.Client I.D.: V93116 Miller AutoMW-1AMRO I.D.: 4456-01Date sampled: 04/20/93 Date received: 04/21/93Date prepared: 04/22/93 Date analyzed: 04/22/93Sample Qty/Type: 1/Water

Test Parameter	Results (mg/l)	Reporting Limit (mg/l)
Gasoline	ND	0.40
Kerosene	ND	0.40
Mineral Spirits	0.76	0.40
Fuel Oil #2/Diesel	ND	0.40
Fuel Oil #4	ND	0.40
Fuel Oil #6	ND	0.40
Motor Oil/Hydraulic Oil	ND	0.40

## Comments:

ND = Not Detected.

Approved by Nancy Stewart  
Nancy Stewart

## LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography  
EPA Method 8100 (Modified)

Client: Jaworski Geotech, Inc.  
Client I.D.: V93116 Miller Auto  
MW-2  
AMRO I.D.: 4456-02  
Date sampled: 04/20/93 Date received: 04/21/93  
Date prepared: 04/22/93 Date analyzed: 04/22/93  
Sample Qty/Type: 1/Water

Test Parameter	Results (mg/l)	Reporting Limit (mg/l)
Gasoline	ND	0.40
Kerosene	ND	0.40
Mineral Spirits	ND	0.40
Fuel Oil #2/Diesel	ND	0.40
Fuel Oil #4	ND	0.40
Fuel Oil #6	ND	0.40
Motor Oil/Hydraulic Oil	ND	0.40

Comments:

ND = Not Detected.

Approved by Nancy Stewart  
Nancy Stewart

## LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography  
EPA Method 8100 (Modified)Client: Jaworski Geotech, Inc.Client I.D.: V93116 Miller AutoMW-3AMRO I.D.: 4456-03Date sampled: 04/20/93 Date received: 04/21/93Date prepared: 04/22/93 Date analyzed: 04/22/93Sample Qty/Type: 1/Water

Test Parameter	Results (mg/l)	Reporting Limit (mg/l)
Gasoline	ND	0.40
Kerosene	ND	0.40
Mineral Spirits	ND	0.40
Fuel Oil #2/Diesel	ND	0.40
Fuel Oil #4	ND	0.40
Fuel Oil #6	ND	0.40
Motor Oil/Hydraulic Oil	ND	0.40

## Comments:

ND = Not Detected.

Approved by Nancy Stewart  
Nancy Stewart

## LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography  
EPA Method 8100 (Modified)Client: Jaworski Geotech, Inc.Client I.D.: V93116 Miller AutoMW-4AMRO I.D.: 4456-04Date sampled: 04/20/93 Date received: 04/21/93Date prepared: 04/22/93 Date analyzed: 04/22/93Sample Qty/Type: 1/Water

Test Parameter	Results (mg/l)	Reporting Limit(mg/l)
Gasoline	ND	0.40
Kerosene	ND	0.40
Mineral Spirits	ND	0.40
Fuel Oil #2/Diesel	ND	0.40
Fuel Oil #4	ND	0.40
Fuel Oil #6	ND	0.40
Motor Oil/Hydraulic Oil	ND	0.40

## Comments:

ND = Not Detected.

Approved by Nancy Stewart  
Nancy Stewart

