CONFIDENTIAL

RIZZO ASSOCIATES, INC.

ENGINEERS AND ENVIRONMENTAL SCIENTISTS

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May 21, 1993

CONFIDENTIAL

Ms. Debra Thorndike
Fleet Management & Recovery
245 Summer Street
Boston, MA 02209

Re: Investigation of Former Hallman Chevrolet Properties
Rochester, New York

Dear Ms. Thorndike:

Rizzo Associates, Inc. is pleased to submit this Preliminary Site Assessment Update/ Limited Subsurface Investigation report for the four properties formerly operated by Hallman Chevrolet in the area of 200 East Avenue in Rochester, New York (the Site). This investigation was conducted to evaluate the Site for evidence of releases of oil or hazardous materials. The update investigation included a review of the Site history, a Site visit, and a review of local and regulatory agency files. However, this investigation was conducted in 11 days to meet the necessary deadline, and some information sources were unable to respond to our requests for information. The subsurface investigation consisted of advancing soil borings, installing monitoring wells, collecting soil and groundwater samples, and surveying water table elevations. This work updates and supplements findings presented in *Phase I Environmental Liability Assessment Hallman Chevrolet Ltd. Property* report prepared by Fred C. Hart Associates dated June 12, 1989. The findings of our investigation are summarized in the attached report.

We appreciate the opportunity to provide these services to you. Please contact us if you have any questions concerning this report.

Very truly yours,

Kenneth B. Jaeger
Project Geologist

Janina J. Curtis
Project Manager

Richard J. Hughto, Ph.D., P.E.
Vice President

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EXECUTIVE SUMMARY

This report presents the results of Rizzo Associates investigation of the former Hallman Chevrolet properties located in the area of 200 East Avenue in Rochester, New York (the Site). The investigation was conducted to look for evidence of releases of oil or hazardous material into the soil or groundwater at the Site. The street addresses and Hallman Chevrolet's former uses for the four properties considered in this investigation are as follows:

- 200 East Avenue - Main showroom and auto servicing garage
- 24 Winthrop Street - Vehicle finishing building
- 15-17 Pitkin Street - Truck service and body shop
- 62-64 Scio Street - Parts warehouse

The Site consists of 4 noncontiguous lots with a combined area of 3.9 acres. Each of the lots is occupied by a building as indicated above. All of the parcels except for the parts warehouse at 62-64 Scio Street contain parking areas. The buildings were constructed between 1910 and 1935. The 200 East Avenue parcel has been occupied by automobile dealerships since 1912 (by Hallman Chevrolet since the 1930s), and the other parcels were acquired by Hallman and occupied from the 1930s to 1990 when the Site was vacated. Other commercial ventures have since rented space in portions of the Site.

Two issues of environmental concern were identified in a preliminary environmental assessment of the Site conducted by Fred C.Hart Associates, Inc. in 1989. First, the report identified nine underground storage tanks (USTs) at the Site. The former contents of the tanks include gasoline, heating oil, motor oil, and waste oil. Three of the tanks were located beneath buildings and had been abandoned by filling with concrete. The rest were reportedly out of service. Rizzo Associates identified a tenth UST, a heating oil tank beneath the west end of the 24 Winthrop Street building, during our inspection of the Site. The second identified environmental issue was that waste petroleum naphtha has been generated at the body shop building and was reportedly collected in drums in a metal shed built on a concrete slab north of the body shop building.

A subsurface investigation was conducted to test the soil and groundwater on the Site near the identified potential sources. The investigation consisted of advancing seven soil borings, installing six monitoring wells, collecting soil and groundwater samples for laboratory analysis, and surveying water table elevations in the monitoring wells.

The results of this investigation indicate that there have been significant releases from USTs at two locations on the Site; the southeast corner of the 200 East Avenue parcel and the west side of the 24 Winthrop Street parcel. The release on the 200 East Avenue parcel appears to be a gasoline release from either the existing UST at that location or an older, previously removed UST. The release at 24 Winthrop Street appears to

contain dissolved gasoline constituents from the gasoline UST at that location, and also includes heating oil, presumably from the heating oil UST located beneath the west Site of the 24 Winthrop Street building.

Two of the USTs on the Site were located beneath buildings and one was located beneath a lot covered with junk cars; therefore, the borings and monitoring wells intended to investigate the soil and groundwater near these USTs were installed downgradient from the USTs as near as was feasible. These borings and monitoring wells would presumably have detected large scale releases from the USTs. While no such large scale contamination was detected, smaller scale contamination could exist nearer the tanks and would not have been detected.

No soil or groundwater assessment was possible near the UST located beneath the parts warehouse at 62-64 Scio Street. The warehouse building completely fills the land surface of the lot leaving no access for a drill rig. While it is possible that soil or groundwater contamination is located beneath the parts warehouse building, it is considered unlikely that any action will be required to investigate the location because it is inaccessible and because the UST has been filled with concrete.

No waste petroleum naphtha was detected in soil samples collected from beneath the drum storage shed beside the body shop building; however, soil or groundwater contamination may exist beneath the garage portions of the Site buildings or in the vicinity of the USTs or hydraulic lifts located beneath the buildings. Unknown hydrocarbon was detected in a monitoring well installed adjacent to the garage portion of the main building and may be an indication of such contamination. The absence of significant contamination in wells further downgradient from the garage buildings may indicate that if such contamination exists it is not heavily impacting the groundwater downgradient from the two largest buildings. However, if in the future the existing buildings are torn down, expenses may be incurred dealing with some amount of contaminated soil beneath the buildings.

1.0 INTRODUCTION

This report presents the results of Rizzo Associates investigation of the former Hallman Chevrolet properties located in the area of 200 East Avenue in Rochester, New York (the Site). The investigation was conducted to look for evidence of releases of oil or hazardous materials into the soil or groundwater at the Site. The street addresses and Hallman Chevrolet's former uses for the four properties considered in this investigation are as follows:

- 200 East Avenue - Main showroom and auto servicing garage
- 24 Winthrop Street - Vehicle finishing building
- 15-17 Pitkin Street - Truck service and body shop
- 62-64 Scio Street - Parts warehouse

The Site location is shown in Figure 1, and a Site Plan is shown in Figure 2.

The Site consists of 4 noncontiguous lots with a combined area of 3.9 acres. Each of the lots is occupied by a building as indicated above. The buildings were constructed between 1910 and 1935. The 200 East Avenue parcel has been occupied by automobile dealerships since 1912 (by Hallman Chevrolet since the 1930s), and the other parcels were acquired by Hallman and occupied from the 1930s to 1990 when the Site was vacated. Other commercial ventures have since rented space in portions of the Site.

1.1 PREVIOUS INVESTIGATIONS

The Site was the subject of an environmental investigation in 1989 conducted by Fred C. Hart Associates, Inc. (Hart) of Albany, New York. Hart conducted a Phase I investigation, which consisted of historical research and Site reconnaissance. The subsurface investigation portion of Rizzo Associates investigation was planned based on the potential contamination areas identified in the Hart report.

1.2 SIGNIFICANT FINDINGS OF PREVIOUS INVESTIGATIONS

The following issues of environmental concern were identified in the above-referenced Hart report:

- Nine underground storage tanks (USTs) are located at the Site. Three of the tanks are located beneath buildings and have been abandoned by filling with concrete. The rest of the USTs are out of service. The former contents of the tanks include gasoline, heating oil, motor oil, and waste oil.

- Waste petroleum naphtha has been generated at the body shop building and was reportedly collected in drums in a metal shed built on a concrete slab north of the body shop building.

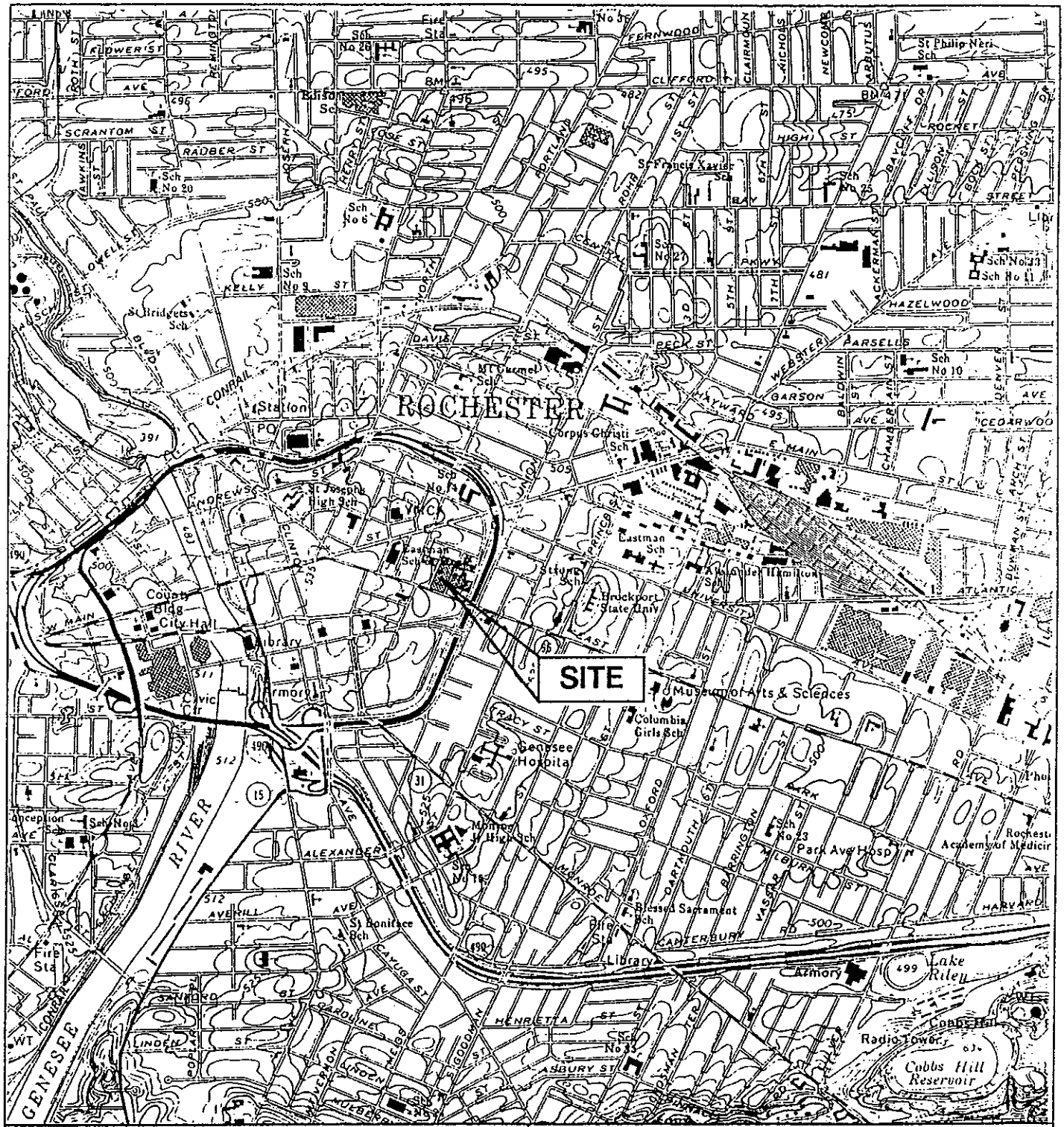


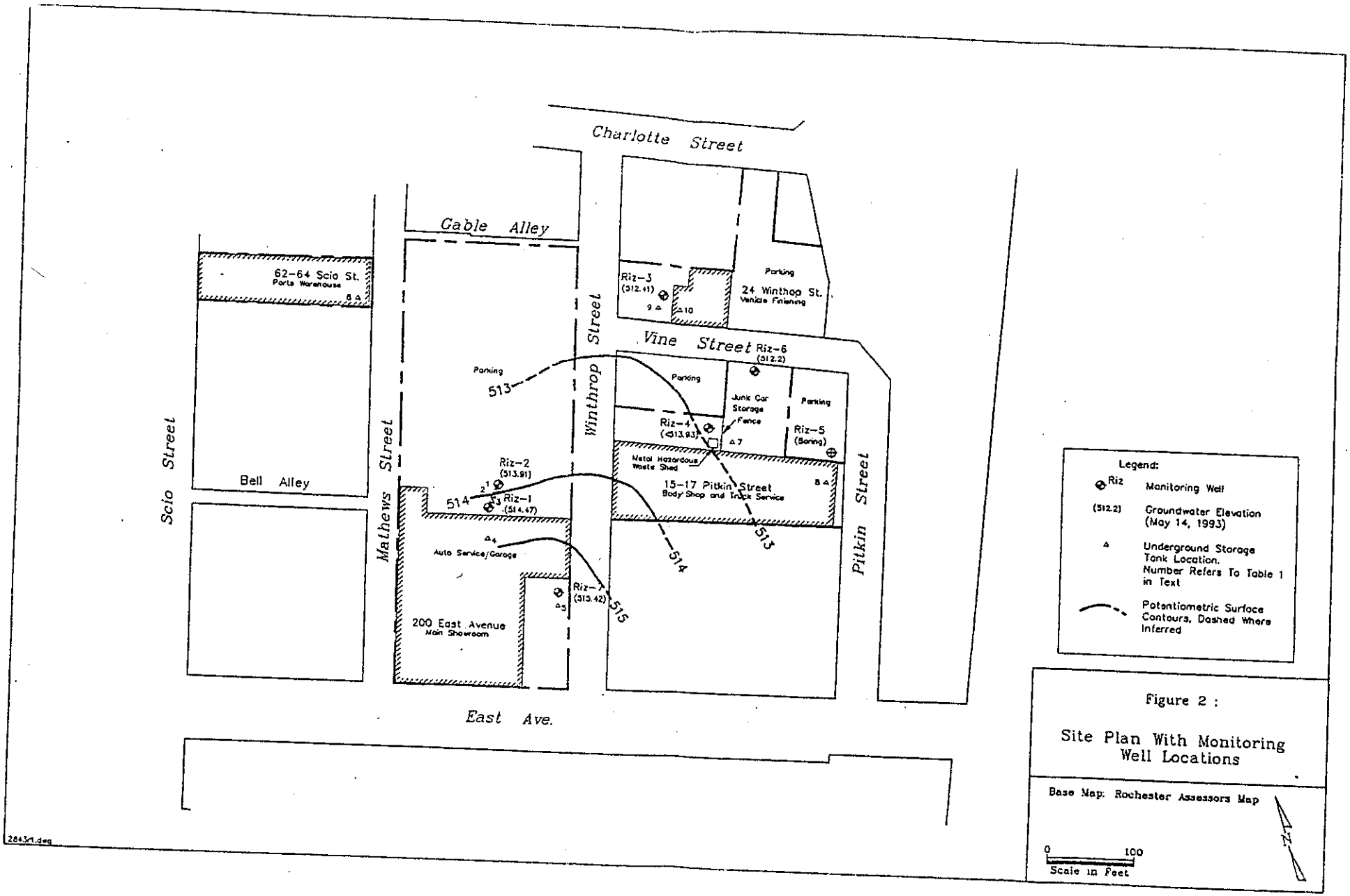
Figure 1:

Locus Map

TABLE 1

UNDERGROUND STORAGE TANK INFORMATION

Tank Designation	Contents ( ) Indicates Former Contents	Size (gallons)	Current Status	Age	Construction	Tightness Testing Data	Tank Accessibility
Main Building							
#1	Motor oil	1,000	Abandoned	Unknown	Steel?	Tight 1987	Under parking lot
#2	Motor oil	1,000	Abandoned	Unknown	Steel?	Tight 1987	Under parking lot
#3	Motor oil	1,000	Abandoned	Unknown	Steel?	Tight 1987	Under parking lot
#4	(Waste oil)	1,000	Concrete filled	—	—	Tight 1987, test documents unavailable	Under floor of cashier's booth in building
#5	(Gasoline)	2,000	Removed 1987	Unknown	Steel	Fire marshal reported no contamination observed when tank was removed	—
	(Gasoline/waste oil)	2,000	Recently converted to waste oil storage	Installed 1987	Fiberglass	No testing available	Under parking lot
Parts Warehouse							
#6	(Heating oil)	1,000	Concrete filled	Probably installed 1910 during construction of building	Steel?	No testing available	Under building
Truck Service and Body Shop							
#7	Waste oil	1,000	Abandoned	Installed 1987	Unknown	No testing available	Under lot covered with junked cars
#8	(Waste oil)	1,000	Concrete filled	Probably installed 1935 during construction of building	Steel?	Failed Tank Test 1987	Under building
Vehicle Preparation							
#9	Gasoline	4,000	Removed 1986	Unknown	Steel?	Fire marshal reported no contamination observed when tank was removed	—
	Gasoline	4,000	Abandoned, empty	Installed 1986	Unknown	No testing available	Under parking lot
#10	Heating oil	Unknown	Abandoned	Probably installed 1920 when building was constructed	Steel?	No testing available	Under building


Charlotte Street
Gable Alley
62-64 Scio St.
Ports Warehouse
Riz-3
(512.41)
Parking
24 Winthop St.
Vehicle Finishing
Vine Street
Riz-6
(512.2)
Winthrop Street
Parking
513
Junk Car Storage
Fence
Riz-4
(<513.93)
Riz-5
(Boring)
Scio Street
Bell Alley
Mathews Street
Riz-2
(513.91)
514
Riz-1
(514.47)
Metal Hazardous Waste Shed
15-17 Pitkin Street
Body Shop and Truck Service
Pitkin Street
Auto Service/Garage
Riz-7
(513.42)
515
200 East Avenue
Main Showroom
East Ave.
Legend:
Riz
Monitoring Well
(512.2)
Groundwater Elevation (May 14, 1993)
Underground Storage Tank Location. Number Refers To Table 1 in Text
Potentiometric Surface Contours, Dashed Where Inferred
Figure 2 :
Site Plan With Monitoring Well Locations
Base Map: Rochester Assessors Map
0
100
Scale in Feet
N
2843r1.dwg

2.0 SITE RECONNAISSANCE

A Site reconnaissance was conducted on May 12, 1993 by Rizzo Associates personnel. Charlie Fornataro, former manager of maintenance for Hallman Chevrolet, accompanied us on the walkover and provided building access to the main showroom building. The body shop building is open to the public as a parking garage and was accessed; however, the vehicle preparation building and the warehouse building could not be accessed for interior inspection and were only viewed from the outside. The purpose of the visit was to look for surficial evidence of releases of oil or hazardous materials.

Conditions found at the Site generally matched the description of the Site in the Hart report and will not be described again in this report. Hallman Chevrolet no longer occupies the Site and other concerns are operating in parts of the Site. Most of the showroom building is vacant; however, a few individuals are using space in the garage building to do automotive repairs. The bottom floor of 15-17 Pitkin Street is used as a parking garage, and the upper floor is occupied by Brewster Auto and Marine for auto body repair and servicing. The 24 Winthrop Street parcel is apparently used by Genesee Hospital for storage and maintenance of their fleet of vehicles. The use of the parts warehouse at 60-62 Scio Street since the departure of Hallman Chevrolet is not known; however, the Hallman signs on the building have not been replaced.

A summary of the available UST information is presented in Table 1. Three issues were noted during Rizzo Associates inspection, which were not discussed in the Hart report. First, a fill pipe labeled "oil" and a vent pipe were noted protruding from the west wall of the vehicle preparation building at 24 Winthrop Street. The fill pipe was opened and had a strong oil odor. The fill pipe showed no indication of being concrete filled as has been the case with the other heating oil tanks on the Site when the heating system they supplied was converted to natural gas. The orientation of the pipes indicate that the tank is beneath the building. The building does not have a basement and, therefore, the tank can be assumed to be underground beneath the building.

The second environmental issue is an aboveground storage tank, approximately 275 gallons in size, in the small garage extension at the northwest corner of the showroom building. The tank was observed through the window of a locked door and could not be inspected closely; however, there was no evidence of spills around the tank. The contents of the tank are unknown. Third, in-ground hydraulic lifts were observed in the garage portion of the showroom building and in the body shop building.

The file of UST and hazardous waste records formerly maintained by Hallman Chevrolet was obtained by Rizzo Associates from Charles Fornataro. The file was reviewed; however, little useful information was obtained from the file. Manifests in the file confirmed that waste petroleum distillates and waste motor oil had been hauled off of the Site. Invoices in the file confirmed that tightness tests had been performed and that USTs were filled with concrete, as indicated in Table 1; however, many of the references to tanks in the documents did not specify the address or location of the tank at issue.

3.0 LOCAL RESEARCH

Interviews with local officials and reviews of local records were conducted to update similar research conducted by Hart for their 1989 report on the Site. Unfortunately, the process for obtaining public information from government offices in New York generally involves filing a Freedom of Information Act request to the office and processing these requests takes a minimum of one week. Therefore, most of the offices contacted have not been able to respond with records within the 11 day time frame of this project. The local sources of information included the Monroe County Health Department Division of Public Water Supply and Division of Toxic Controls and Spills, Monroe County Engineering Department, Monroe County Historian, City of Rochester Environmental Services, Tax Assessor, and fire department. Property dimension information was obtained from the Tax Assessor's Office and several local groundwater geology reports for the Rochester area were obtained at the Rochester Public Library.

3.1 HISTORICAL MAP RESEARCH

Sanborn Fire Insurance maps of the Site were obtained through Environmental Risk Information and Imaging Services of Alexandria Virginia. Sanborn maps are detailed, large scale maps produced for fire insurance purposes from the late 1800s until the 1970s showing buildings, storage tanks, and land uses. The maps obtained for the Site were dated 1892, 1912, 1938, 1950, and 1971.

The 1892 map shows all four parts of the Site occupied by residences except for the west side of the 200 East Avenue parcel, which is occupied by a carpenters shop. In 1912 the 200 East Avenue parcel had been redeveloped as the Mandery Motor Car Company showroom and garage, while the other three parts of the Site remained residential.

On the 1938 map, the Site was shown in the same general configuration as it is currently. 200 East Avenue was in its current configuration except that the parking area north of the building was still occupied by residences and a filling station was shown in the southeast corner of the 200 East Avenue property. Two gas tanks were shown in the garage portion of the showroom building, near Winthrop Street. The warehouse at 60-62 Scio Street had been constructed and was being used as an auto parts warehouse. The building at 24 Winthrop Street was constructed but was listed as vacant, and the building at 15 Pitkin Street had been constructed and was labeled auto sales and service.

The 1950 map shows the Site generally unchanged from 1938 with the exception of the addition of four gasoline tanks in the parking area on the southeast corner of the 200 East Avenue parcel. The 1971 map shows the Site and surroundings in their present configuration. The gasoline tanks in the southeast corner of the 200 East Avenue parcel are not shown, and the residences on the north part of 200 East Avenue and adjacent to 24 Winthrop and 15-17 Pitkin were replaced by parking. In addition, the residential areas to the east of Pitkin Street have been replaced by the "Inner Loop" highway.

4.0 STATE AND FEDERAL FILE REVIEW

State and federal records of reported use, storage, or releases of oil or hazardous material in the vicinity of the Site were searched and compiled by Environmental Risk Information and Imaging Services of Alexandria, Virginia. The search was conducted to a 1 mile radius and included the *National Priorities List*, *CERCLIS List*, RCRIS large and small quantity hazardous waste generators list, Emergency Response Notification System, U.S. EPA Civil Enforcement Docket, and the following New York State documents: Inactive Hazardous Waste Disposal Sites List, Leaking Storage Tank Report, Chemical Bulk Storage Report, Hazardous Waste Manifest Report, Petroleum Bulk Storage Report, and Spills List Report.

The Site and surrounding properties were not listed on the New York State Hazardous Waste Disposal Sites List. The New York State Leaking Storage Tank report records a leaking tank incident at 200 East Avenue, Hallman Chevrolet, in November 1986. The report states that a tank tightness test in November 1986 detected a leak in a gasoline tank. The cleanup date of the incident is listed as January 30, 1987. The Leaking Storage Tank report also lists discovery of a leaking gasoline tank at E. G. Snyder, 86 Scio Street on August 20, 1991. No cleanup completion is listed; however, 86 Scio Street is hydrologically downgradient from the Site and is not likely to impact the Site.

Small quantity hazardous waste generators in the vicinity of the Site are listed as Woltings Collision Service, 7 Pitkin Street and the Hallman Chevrolet Body Shop, 12 Winthrop Street (the address of the back of 15-17 Pitkin Street). In addition, the New York Hazardous Waste Manifest Report lists Hallman Chevrolet; however, this list does not provide any details of what wastes were manifested or when.

5.0 SUBSURFACE INVESTIGATION

Based on the number and age of the USTs on the Site and the generation of paint wastes in the body shop building a subsurface investigation of the Site was undertaken. The purpose for the subsurface investigation was to look for potential contamination in the areas of concern identified during the historical review of the Site. The subsurface investigation consisted of advancing seven soil borings on the Site and completing six of them as groundwater monitoring wells. Groundwater from the monitoring wells and soil from the borings were sampled for laboratory analysis. Surface soil samples were also collected. The elevations of groundwater in the monitoring wells were measured to evaluate the groundwater flow direction on the Site.

5.1 SOIL BORING AND MONITORING WELL INSTALLATION

Seven soil borings were advanced on the Site for monitoring well installation on May 13 and 14, 1993 by Pennsylvania Drilling, Inc. of Rochester, New York. Soil boring and monitoring well construction were conducted under the direction of Rizzo Associates personnel following the standard protocols outlined in Appendix B. The borings were advanced using an Acker AD-2 truck-mounted drill rig with 4.25-inch-inside-diameter hollow-stem augers. Boring logs and monitoring well construction diagrams for the wells are included in Appendix C. The locations of the monitoring wells are shown on Figure 2.

Monitoring well locations were selected to address specific areas of potential contamination on the Site. Well locations were selected based on the assumption that groundwater flow generally mimics the slope of surface topography on the Site and would flow to the north or northeast. RIZ-1 was installed beside the north wall of the automobile maintenance portion of the main showroom building to evaluate the groundwater downgradient from tank No. 4 and from the garage work area. RIZ-2 was installed north of the three motor oil USTs (No. 1, No. 2, and No. 3 on Figure 2). RIZ-3 was installed north of tanks No. 9 and No. 10 near the vehicle finishing building (24 Winthrop Street). RIZ-4 was installed north of the metal shed beside the body shop building where waste petroleum naphtha was accumulated for disposal. RIZ-5 was a soil boring not completed as a monitoring well because of bedrock refusal above the water table. RIZ-5 was advanced at the northeast corner of the body shop building, as near to tank No. 8 as was feasible. RIZ-6 was advanced north of the waste oil tank along the north side of the body shop building; however, because of the junk cars in the lot, the boring was 85 feet from the tank. RIZ-7 was installed 12 feet north of tank No. 5 located southeast of the showroom building.

Soil samples were collected from the auger flights from 0 to 2 feet below grade, and then continuously with a splitspoon from five feet below grade to the bottom of each boring. The soil samples were field screened for VOCs using a photoionization detector (PID). The samples were placed in jars and the headspace over each sample was screened using an HNu Model PI-101 PID using the standard procedure described in Appendix B. The HNu was equipped with a 10.2 eV lamp and was calibrated to an isobutylene standard at Rizzo Associates office. The HNu responds to the presence of VOCs with ionization potentials less than 10.2 eV. Concentrations are displayed in analog form in parts per million (ppm). Most priority pollutant VOCs are ionized at this potential and will generate a response on the HNu; however, the sensitivity of the instrument to VOCs other than the calibration gas varies. Positive HNu screening responses indicate that VOCs are likely to be present in the sample.

Positive PID responses are shown in Table 2. No significant positive responses (greater than 2 ppm) were detected in soil samples collected from above the water table;

however, significant responses were obtained from samples collected at and below the water table in borings RIZ-3 and RIZ-7.

TABLE 2

PID RESPONSES FROM SOIL SAMPLES (ppm)

Sample Depth	Boring Number						
	RIZ-1	RIZ-2	RIZ-3	RIZ-4	RIZ-5	RIZ-6	RIZ-7
0-2	1.5	0.2	0.0	0.0	0.0	0.0	0.0
5-7	1.0	0.0	0.0	0.0	0.2	0.0	0.1
7-9	0.5	0.4	No sample	0.5	0.4	0.0	170
9-11	No	0.2	35	0.0	—	No sample	290
11-13	recovery	—	45	—		No sample	—

— Bottom of boring

The soil samples were also used to characterize the subsurface sediments in the vicinity of the borings. The surficial material at each of the borings was either sand and gravel fill material or asphalt overlying fill material. The surficial fill layer generally extended to a depth of 2 to 3 feet with the exception of RIZ-3, which was drilled through the filled basement of a house. The fill was typically gray in color and contained coarse to fine sand, angular gravel, and traces of bricks, metal, coal, and ceramic tiles. Beneath the fill layer, reddish fine- to medium-grained sand with silt and round to angular gravel was encountered. With increasing depth from approximately 4 to 7 feet the amount of gray and red fine- to medium-grained dolomite fragments increased in the samples.

The bedrock surface beneath the Site was encountered at about 8 to 9 feet; however, the bedrock was weathered and in some of the borings could be augered through for a small distance. Borings RIZ-3 and RIZ-6 were drilled 4 and 5 feet, respectively, into weathered bedrock. When drilling through this material the hollow stemmed augers cored through competent rock horizons resulting in 1- to 2-inch thick plugs of the rock inside the augers. Between the competent horizons the borings penetrated reddish fine sand with silt.

Each boring was completed as a monitoring well except for RIZ-5. Monitoring wells were constructed of 2-inch-inside-diameter polyvinyl chloride (PVC) schedule 40 slotted well screen and solid riser. Filter sand was placed in the annular space around the screen to approximately one foot above the screen/riser connection. Approximately one foot of bentonite pellets was placed over the sand pack in each of the wells to restrict the percolation of surface water into the well screen. Native materials were backfilled around the riser pipe, and a gasketed iron road box closed with 9/16-inch

hex-nuts was cemented flush to the ground over each well. The well pipes are fitted with padlocked expansion plugs.

5.2 COLLECTION OF SOIL SAMPLES FOR LABORATORY ANALYSIS

Two soil samples were collected from the Site for laboratory analysis during soil boring advancement on May 14, 1993 and a third surficial soil sample was collected from beside the metal storage shed north of the body shop building on May 14, 1993. The samples were collected according to the procedures in Appendix B. The samples were placed in bottles, labeled, and stored on ice for shipment via Federal Express to Alpha Analytical Labs in Westborough, Massachusetts.

One sample of water saturated soil was collected from 10 feet below grade in boring RIZ-4 when auger refusal was encountered at the level of the observed water table and it was uncertain whether a monitoring well set in the boring would be in the water table. When no water entered well RIZ-4 the soil sample (sample number FR-SS-RZ4-10FT) was submitted to the lab to be analyzed for Petroleum Scan by Gas Chromatograph including naphtha. A second soil sample was collected from the bottom of boring RIZ-5 when solid auger refusal on bedrock was encountered at 8 feet below grade. The sample was collected in lieu of a groundwater sample when solid bedrock refusal was encountered prior to reaching the water table. The sample was given sample number FR-SS-RZ5-8FT and was submitted to the laboratory to be analyzed for petroleum scan, including naphtha, by gas chromatograph and VOCs by EPA Method 8260.

One near surface soil sample was collected from near the metal storage shed beside the body shop building, 15-17 Pitkin Street. The soil sample was collected from 6 inches to 1 foot below grade in a hole dug north of the shed, next to the low side of the concrete slab underlying the shed. The sample was collected from the location where an overflow of liquid from the bermed concrete floor of the shed would reach the soil. The sample was given sample number FR-SS-SHED-107 and was submitted to the laboratory to be analyzed for VOCs by EPA Method 8260 and for petroleum scan, including naphtha by gas chromatograph.

5.3 SOIL SAMPLE ANALYSIS RESULTS

Laboratory Certificates of Analysis for the soil sample analyses are included in Appendix D. None of the targeted compounds were detected in the analyses of the soil samples.

5.4 GROUNDWATER SAMPLE COLLECTION

The monitoring wells on-site were sampled by Rizzo Associates personnel on May 14 1993. The wells were purged and sampled according to the standard procedures in Appendix B. Droplets of gold colored oil and a moderate oil odor were observed on

the water from monitoring well RIZ-3, and a slight sheen was observed on the water from monitoring wells RIZ-1 and RIZ-7. The groundwater recharge to all of the monitoring wells was very slow and had a high silt content. RIZ-4 was dry on the sampling date.

Groundwater samples from each monitoring well were analyzed in the field for specific conductance and pH; the results of these analyses are given in Table 3. The pH measurements were made using pH paper. The pH values are within the range normally found in groundwater. The specific conductance values in some monitoring wells is elevated, probably as the result of road deicing salt.

TABLE 3

RESULTS OF FIELD MEASUREMENTS OF SPECIFIC CONDUCTANCE AND pH

Well Number	Specific Conductance (μmhos/cm)	pH
RIZ-1	950	7
RIZ-2	1,100	7
RIZ-3	2,900	7
RIZ-6	1,350	7
RIZ-7	2,100	7

The samples were placed in appropriate glassware and transported on ice to Alpha Analytical Labs on the date of collection. Samples from each well were submitted for analyses for VOCs by EPA Method 8260 and petroleum scan, including naphtha by gas chromatograph. Groundwater from monitoring wells RIZ-3 and RIZ-6 were submitted to be analyzed for soluble 13 priority pollutant metals plus barium.

5.5 GROUNDWATER ANALYSIS RESULTS

The positive laboratory analysis results from the groundwater samples are presented in Table 4 along with applicable water quality standards and guidelines for comparison. Complete Laboratory Certificates of Analysis are in Appendix D.

The analysis results identify two significant areas where hydrocarbons are present in the groundwater. Dissolved gasoline constituents and heating oil were detected in the groundwater near RIZ-3. Dissolved gasoline constituents, mineral spirits, and unknown hydrocarbon were detected in the hydrocarbon scan of the groundwater from RIZ-7. Unknown hydrocarbon was also detected in the water from RIZ-1. Alpha Analytical Labs was contacted regarding the nature of the unknown hydrocarbon. Jim Roth, Laboratory Manager, gave a preliminary indication that the unknown hydrocarbon could be some type of oil, which has been weathered and degraded over time; however, he is reviewing the analysis before offering a final opinion.

TABLE 4

POSITIVE GROUNDWATER ANALYSIS RESULTS FOR GROUNDWATER SAMPLES

Sample I.D.: Laboratory I.D.: Location:	*RZ1-101 9303958-04 RIZ-1	RZ2-102 9303958-05 RIZ-2	RZ3-103 9303958-06 RIZ-3	RZ6-104 9303958-07 RIZ-6	RZ7-105 9303958-08 RIZ-7	RZ7d-106 9303958-09 Field Dup of RIZ-7	Trip Blank	Standard or Guideline
Constituent								
Volatile Organics (µg/L)								
Benzene	ND	ND	1,500	ND	640	790	ND	0.7[1]
Toluene	ND	ND	1,500	ND	4,900	7,700	ND	5[1]
Ethylbenzene	ND	ND	2,800	ND	4,500	8,200	ND	5[1]
Xylenes	ND	ND	19,000	1.8	23,000	41,000	ND	NE
Hydrocarbon Scan (mg/L)								
Mineral Spirits	ND	ND	ND	ND	220	ND	—	NE
Gasoline	ND	ND	ND	ND	ND	ND	—	NE
Fuel Oil #2/Diesel	ND	ND	240	ND	ND	ND	—	NE
Motor Oil	ND	ND	ND	ND	ND	ND	—	NE
Naphtha	ND	ND	ND	ND	ND	ND	—	NE
Unknown Hydrocarbon	370	ND	ND	ND	84	ND	—	NE
Dissolved Metals (mg/L)								
Barium	—	—	0.21	0.06	—	—	—	1.0
Nickel	—	—	ND	0.04	—	—	—	1.8[2]

* The prefix FR-GW- was dropped from the beginning of all of the sample numbers to save space

ND None detected

— Not analyzed

NE Not established

[1] New York State Groundwater Quality Standard

[2] New York State Groundwater Quality Standard (expressed as function of hardness)

5.6 GROUNDWATER FLOW DIRECTION

The locations and elevations of the well casings were surveyed by Herman J. Klingenberger, P.C. Land Surveyors of Rochester, New York on May 17, 1993. The elevation survey was conducted relative to the city of Rochester Elevation Datum. Depths to groundwater in the monitoring wells were measured on May 14, 1993 using an electronic water level probe.

Groundwater elevations from the May 14 measurements were calculated by subtracting the depth between groundwater and the top of the casing from the surveyed elevation of the casing. The casing elevation, measured distance from casing to PVC measuring point, depth to groundwater from the PVC measuring point, and groundwater elevation data are listed in Table 5.

TABLE 5

GROUNDWATER ELEVATION DATA

	Road Box Elevation*	Road Box – PVC (feet)	Depth to Groundwater from PVC (feet)	Groundwater Elevation*
RIZ-1	522.60	0.26	7.87	514.47
RIZ-2	522.61	0.45	8.25	513.91
RIZ-3	520.19	0.50	7.28	512.41
RIZ-4	523.28	0.48	>8.83	<513.93
RIZ-5	—	—	no well	—
RIZ-6	520.14	0.68	7.25	512.21
RIZ-7	522.72	0.30	7.00	515.42

* Elevations relative to city of Rochester elevation datum

The results of the groundwater elevation survey are presented graphically as potentiometric surface contours on Figure 2. The potentiometric surface indicates that groundwater flow at the Site is northerly on the western portion of the Site and northeasterly on the eastern portion of the Site.

6.0 GROUNDWATER GEOLOGY OF SITE

The geology of the Site, based on soil borings and literature reviews consists of a relatively thin layer of overburden material 10 feet or less thick overlying Lockport Formation dolomite. The overburden includes a surficial fill layer, a thin layer of glacial till, and a layer of weathered bedrock. According to *Water Resources in the Rochester Area, New York*, I. G. Grossman and L.B . Yarger, USGS Geological Circular 246, published 1953, the area of the Site as being underlain by the Lockport Dolomite. The

Lockport is described as a dark, fairly coarse grained rock with cavities, joints, and enlarged bedding planes.

Based on the geology of the Lockport Dolomite, the possibility exists that contaminated groundwater could flow into the bedrock; however, the potentiometric surface data currently available for the Site, although limited, show no indication of significant flow into the bedrock. The existence of such caverns or voids acting as a groundwater conduit would presumably dewater the overburden. However, the low gradient and flatness of the potentiometric surface at the Site and the consistent occurrence of the water table at the bedrock/overburden interface are interpreted to indicate that there are no significant caverns or other voids providing a conduit for groundwater flow into the Lockport from the Site.

Groundwater flow in the overburden on the Site is expected to be very slow. The grain size distribution in the overburden sediments from silt to medium sand is generally associated with low permeabilities. The low hydraulic gradient on the Site and absence of unpaved areas for precipitation to recharge the groundwater will contribute to slow groundwater flow. The assumption of low permeability in the overburden was supported by very slow recharge to the monitoring wells when they were purged for sampling.

Groundwater flow on the eastern portion of the Site appears to be more easterly than on the western portion of the Site. This is interpreted to reflect the presence of the "Inner Loop" highway 40 feet east of the Site. In this area the highway is in a 10- to 15-foot deep underpass where it travels beneath East Avenue. Discharge of groundwater into drainage associated with the underpass appears to be depressing the water table on the eastern portion of the Site. This lowering may be the reason that the water table was only inches above the bedrock surface in RIZ-4 and was beneath the bedrock surface in borings RIZ-5 and RIZ-6.

7.0 CONCLUSIONS

The results of this investigation indicate that there have been significant releases from USTs at two locations on the Site, the southeast corner of the 200 East Avenue parcel and the west side of the 24 Winthrop Street. The release on the 200 East Avenue parcel appears to be a gasoline release from either the existing UST at that location or an older, previously removed, UST. The release at 24 Winthrop appears to contain dissolved gasoline constituents from the gasoline UST at that location and also contains heating oil, presumably from the heating oil UST located beneath the west side of the 24 Winthrop Street Building.

Two of the USTs on the Site were located beneath buildings (UST Nos. 4 and 8) and one was located beneath a lot covered with junk cars (UST No. 7); therefore, the borings and monitoring wells intended to investigate the soil and groundwater near these USTs

were installed downgradient from the USTs as near as was feasible. These borings and monitoring wells would presumably have detected large scale releases from the USTs. While no such large scale contamination was detected, smaller scale contamination could exist nearer the tanks and would not have been detected. In addition, the localized deflection of groundwater flow to the east by the "Loop Road" underpass meant that boring RIZ-5 was not directly downgradient of UST No. 8.

No soil or groundwater assessment was possible near UST No. 6, located beneath the parts warehouse at 62-64 Scio Street. The warehouse building completely fills the land surface of the lot leaving no access for a drill rig. While it is possible that soil or groundwater contamination is located beneath the parts warehouse building, it is considered unlikely that any action will be required to investigate the location because of the obstruction caused by the Site building and because the UST has been filled with concrete.

No waste petroleum naphtha was detected in soil samples collected from beneath the drum storage shed beside the body shop building; however, soil or groundwater contamination may exist beneath the garage portions of the buildings or in the vicinity of the USTs or hydraulic lifts located beneath the buildings. The unknown hydrocarbon detected in RIZ-1 may be an indication of such contamination; however, the absence of significant contamination in wells RIZ-2 and RIZ-6 indicate that if such contamination exists it is not heavily impacting the groundwater downgradient from the two largest buildings. However, if in the future the existing buildings are torn down, expenses may be incurred dealing with some amount of contaminated soil beneath the buildings.

8.0 LIMITATIONS

This report is subject to the limitations outlined in Appendix A. This study and report have been prepared on behalf of and for the exclusive use of Fleet Management & Recovery solely for use in an environmental evaluation of the Site. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, nor used by any other party in whole or in part, without the prior written consent of Rizzo Associates. However, Rizzo Associates acknowledges and agrees that, subject to the terms and conditions of our contract provided in Appendix A, the report may be conveyed to the client's attorney, lender, title insurer, regulatory agencies, and potential purchasers associated with the proximate purchase or refinancing of the Site by our client. Rizzo Associates would be pleased to discuss the conditions of dissemination of the report to additional parties associated with the transaction. The report has been prepared in accordance with the Terms and Conditions set forth in our contract dated May 10, 1993. No other warranty, express or implied, is made.

9.0 REFERENCES

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APPENDIX A

1. The observations described in this report were made under the conditions stated therein. The conclusions presented in the report were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by Client. The work described in this report was carried out in accordance with the Terms and Conditions in our contract.

2. In preparing this report, Rizzo Associates has relied on certain information provided by state and local officials and other parties referenced therein, and on information contained in the files of State and/or local agencies available to Rizzo Associates at the time of the site assessment. Although there may have been some degree of overlap in the information provided by these various sources, Rizzo Associates did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this site assessment.

3. Observations were made of the Site and of structures on the Site as indicated within the report. Where access to portions of the Site or to structures on the Site was unavailable or limited, Rizzo Associates renders no opinion as to the presence of hazardous materials or oil, or to the presence of indirect evidence relating to hazardous material or oil, in that portion of the Site or structure. In addition, Rizzo Associates renders no opinion as to the presence of hazardous material or oil, or the presence of indirect evidence relating to hazardous material or oil, where direct observation of the interior walls, floor, or ceiling of a structure on a Site was obstructed by objects or coverings on or over these surfaces.

4. Rizzo Associates did not perform testing or analyses to determine the presence or concentration of asbestos at the Site or in the environment at the Site.

5. The purpose of this report is to assess the physical characteristics of the subject Site with respect to the presence in the environment of hazardous material or oil. No specific attempt was made to check on the compliance of present or past owners or operators of the Site with federal, state, or local laws and regulations, environmental or otherwise.

6. The conclusions and recommendations contained in this report are based in part, where noted, upon the data obtained from a limited number of soil samples obtained from widely spaced subsurface explorations. The nature and extent of variations between these explorations may not become evident until further exploration. If variations or other latent conditions then appear evident, it will be necessary to reevaluate the conclusions and recommendations of this report.

7. Any water level readings made in test pits, borings, and/or observation wells were made at the times and under the conditions stated on the report. However, it must be noted that fluctuations in the level of groundwater may occur due to variations in rainfall and other factors different from those prevailing at the time measurements were made.

8. Except as noted within the text of the report, no quantitative laboratory testing was performed as part of the site assessment. Where such analyses have been conducted by an outside laboratory, Rizzo Associates has relied upon the data provided and has not conducted an independent evaluation of the reliability of these data.

9. The conclusions and recommendations contained in this report are based in part, where noted, upon various types of chemical data and are contingent upon their validity. These data have been reviewed and interpretations made in the report. As indicated within the report, some of these data may be preliminary "screening" level data and should be confirmed with quantitative analyses if more specific information is necessary. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors. Should additional chemical data become available in the future, these data should be reviewed, and the conclusions and recommendations presented herein modified accordingly.

10. Chemical analyses have been performed for specific constituents during the course of this site assessment, as described in the text. However, it should be noted that additional chemical constituents not searched for during the current study may be present in soil and/or groundwater at the Site.

STANDARD OPERATING PROTOCOL FOR DECONTAMINATING SAMPLING EQUIPMENT

Whenever possible, sampling equipment will be dedicated to each sampling location or disposable equipment will be used. When this is not possible, field decontamination of the equipment will occur prior to the collection of samples for chemical analysis. The method of choice for decontamination is that which most fully removes site contaminants from the sampling equipment with the least interference to the ultimate chemical analysis. Do not use fluids that have been stored in plastic bottles to decontaminate field equipment. Deionized water and methanol used for decontamination should be stored in nalgene or teflon bottles.

Equipment used to collect samples for chemical analysis will be decontaminated as follows:

1. Wash equipment with a nonphosphate detergent solution (e.g., Alconox) and a brush.

2. Rinse thoroughly with tap water.

3. Rinse with reagent grade methanol.

4. Rinse the equipment thoroughly with deionized water.

5. Equipment that is stored or transported will be kept in a dedicated plastic bag or wrapped in aluminum foil to prevent contamination prior to use.

6. When collecting water samples, rinse the equipment three times with the media being sampled before collecting the sample.

Steam cleaning is another acceptable technique for field decontamination.

Decontamination procedures will be recorded in the field book or on the field report form. These entries will include the date, time, location, personnel, equipment, and specific procedures used for the decontamination of field equipment and the source of all fluids, including water, used in the procedure. Deviations from the standard protocols will also be noted in the field log.

Waste water and methanol solutions generated during decontamination procedures will be discharged on-site, provided that the pH is between 2 and 12.

STANDARD OPERATING PROTOCOL FOR COMPLETING SOIL BORINGS AND MONITORING WELL BORINGS IN UNCONSOLIDATED SURFICIAL DEPOSITS

1. All drilling is inspected continuously by a staff geologist or inspector. The geologist or inspector is familiar with the particular drilling program, and is responsible for ensuring that established procedures are followed. The geologist or inspector has the authority to modify the program and/or procedures when warranted by unanticipated field conditions.

2. The geologist or inspector is responsible for maintaining field notes and for keeping a well log independent of the driller.

3. All drilling equipment is steam-cleaned prior to each use. Steam cleaning is performed on the augers and/or casing, drilling rods, samplers, auger forks, lifting hooks, and other equipment needed for establishing the well. The working end of the drill rig is steam-cleaned, and the rig is generally inspected by the geologist or inspector for evidence of leaks (i.e., gasoline or diesel fuel and hydraulic fluid). Finally, well construction materials, including casing, screens, protective risers, and/or road boxes, are also steam-cleaned prior to use.

4. Soil samples are collected at five-foot intervals unless otherwise specified, and/or at changes in strata, utilizing a clean split-spoon sampler. These soil samples are used for characterizing the physical nature of the subsurface sediments and may be collected for laboratory analyses. Similarly, spoon samples may be screened in the field for contamination utilizing appropriate field analytical devices.

5. Sediments collected from the sampler or brought to the surface by the drilling process are left on-site, unless there are specific instructions to the contrary. Sediments will be screened using a photoionization detector (PID) or a flame ionization detector (FID), and the results of that screening will be used to determine the disposal method for the soil. Soils exhibiting detector responses of greater then 10 ppm will be placed in drums or will be stockpiled on and covered with polyethylene sheeting. Soils exhibiting responses of less than 10 ppm will be placed in an unlined stockpile on the site.

6. When installing a groundwater monitoring well, the well screen is set at a depth whereby it intercepts the surface of the water table, unless otherwise specified. The screen is set to extend above the highest anticipated groundwater levels to a maximum of within two feet of the land surface. The annular space between the wall of the bore hole and the screen is then packed with clean silica sand to a level one foot above the screen (to allow for settling), and then with a minimum one-foot bentonite seal. The method of backfilling the bore hole above the bentonite seal will be left to the discretion of the site geologist or inspector. If

the bore hole creates the potential for migration of contaminants into previously uncontaminated deposits, the bore hole will be filled with a portland cement and bentonite slurry. If migration of contaminants is not a concern, then the well will be backfilled with the drill cuttings if detector responses are less than 10 ppm, or with clean backfill material if detector responses are greater than 10 ppm. The final one foot is filled with cement, into which is set a protective riser with locking cap or a road box.

7.	Submission of Final Summary Report**	August 9, 1993
8.	Data and Information Management	As Needed

* Project milestone
** Project milestone requiring performance evaluation

UFI shall be utilized on an as needed basis, as determined by the Department.

4.0 STAFFING PLAN

Management and primary technical staff that will be assigned to this Work Assignment are listed below.

Rizzo Associates Engineering, P.C. Personnel:

Richard J. Hughto	-	Vice President, NSPE Grade VIII
Nancy C. Roberts	-	Senior Project Manager, NSPE Grade VII
Peylina Chu	-	Senior Project Engineer, NSPE Grade V
James D. Doherty	-	Senior Project Engineer, NSPE Grade VI
Ann M. Roseberry	-	Project Scientist, NSPE Grade V
Deborah A. Canty	-	Senior Technician, NSPE Grade II

Upstate Freshwater Institute Personnel:

Dr. Steven W. Effler	-	Director of Research, NSPE Grade

The expected level of effort from the staff listed above is specified in the budget. Dr. Hughto shall be responsible for overall project quality control and will provide technical oversight and review of all project deliverables. Ms. Roberts will provide project management and cost tracking, quality assurance/quality control coordination and technical oversight. Ms. Chu will oversee research relating to mercury contamination and remediation, coordinate activities with the Department and UFI, and assist in the preparation and review of deliverables. Mr. Doherty and Ms. Roseberry will assist in technical research efforts. Ms. Canty will assist in preparation of deliverables and maintenance of project records, including monthly Cost Control and Project Summary Reports. Dr. Effler and UFI staff will provide technical advice to the Department on an as needed basis. Additional support staff from the team firms will be assigned as needed.

5.0 SUBCONTRACTS

STANDARD OPERATING PROTOCOL FOR SAMPLING MONITORING WELLS

DISCUSSION

To obtain a representative sample of groundwater, it must be understood that the water within the well casing and in close proximity to the well is generally not representative of the groundwater quality at that sampling site. Therefore, the well will be pumped or bailed until it is thoroughly flushed of standing water and contains water from the aquifer. Wells may be purged and sampled with a pump from the ground surface, with a submersible pump or with a bailer, depending on the specific needs of the sampling program. Bailers are generally preferred for collecting samples where volatile stripping is of concern. Pumps are useful for purging large volumes of water from deep wells or when a sample from a discrete depth below the water surface is desired. Refer to DEP Policy #WSC-310-91 to chose the appropriate method for purging and sampling a well and operate sampling equipment according to manufacturer's directions.

PROCEDURES FOR PURGING AND SAMPLING

1. Using clean, noncontaminating equipment (i.e., an electronic level indicator [avoid indicating paste]), determine and record in the field logbook the water level in the well, then calculate the fluid volume in the casing.

   The volume of water in the well can be calculated using the following equation:

   $v=(\pi r^2 h)/c$

   v= one well volume of water (gallons)
   π = 3.14
   r= the radius of the well or one half of the diameter (inches)
   h=the height of the water column in the well (inches)
   c= 231 cubic inches per gallon; constant to convert cubic inches to gallons

2. Use a pump or bailer to begin flushing the well. Periodically during the purging of the well, measure and record the pH, temperature, and specific conductivity of the water being removed.

3. Avoid contamination and do not allow sampling equipment or the bailer line to contact the ground while sampling.

4. Continue purging the well until the following is achieved:

   a. a minimum of three casing volumes have been removed from the well, and pH, temperature, and conductivity have stabilized; or
   b. five well volumes have been removed; or

c. the well is evacuated to dryness

Three times the well volume (gallons) in a 2-inch-diameter well is approximately one half the height of the water column measured in feet.

5. After water pH, temperature, and specific conductance have stabilized, allow the water level to return to a sufficient level to collect a complete sample and proceed with the sample collection as described below.

6. Select sample bottles and preservative as required by the analysis. Sample bottles containing preservative may be obtained from the laboratory, or samples may be preserved in the field. Samples for metals analysis that require field filtering will be collected in a transfer vessel and then filtered into a preserved container.

7. When transferring the sample in the bailer to the sample container, tip the bailer to allow a slow discharge from the bailer top to flow gently down the side of the sample bottle with minimum entry turbulence.

8. When collecting a sample with a pump, the flow rate of the pump should be low so as to minimize disturbing the sample.

9. In order to compare analytical data for a given well over time, the same purging and sampling method should be used consistently at a given well.

10. Check that a teflon liner is present in the cap, if required. Secure the cap tightly.

11. Label the sample bottle with an appropriate label and waterproof ink. Record the sample number, location, well purging information, the temperature, pH, specific conductivity, and deviations from protocol and relevant observations, such as colors, odors, or sheens, in the field logbook. Complete the chain of custody. Samples will be stored in a cooler until they are delivered to the laboratory.

12. Discard disposable bailers after use in one well. If reusable bailers are used, clean and store each bailer according to the *Standard Operating Protocol for Decontaminating Sampling Equipment*.

13. Tubing used with a pump may be discarded after each well or cleaned by pumping the decontamination fluids through the tubing according to the Standard Operating Procedure for Decontaminating Field Equipment.

ADAPTED FROM:

Standard References for Monitoring Wells, The Massachusetts Department of Environmental Protection #WSC-310-91.

STANDARD OPERATING PROTOCOL FOR JAR HEADSPACE SCREENING

The following procedures will be used to screen soil samples for volatile organic compounds with a portable photoionization detector (PID) or a flame ionization detector (FID).

1. Half-fill a clean glass 8-ounce jar with the sample to be analyzed. Quickly cover the open top with a sheet of clean aluminum foil and apply the screw cap to tightly seal the jar.

2. Vigorously shake the jar for 10 seconds both at the beginning and end of the headspace development period. Allow the jar to stand 10 minutes for headspace development. When ambient temperatures are below 32°F (0°C), allow the samples to stand in a heated vehicle or building.

3. After the headspace development period, remove screw lid to expose the foil seal. Puncture the foil seal with an instrument sampling probe, to a point about one-half of the headspace depth. Do not allow water droplets or soil particulates to touch the instrument probe.

4. Observe the instrument response and record the highest meter response as the jar headspace concentration. The maximum response should occur from two to five seconds after the probe is inserted into the jar. The meter response may be erratic when the concentration of organic vapor is high or if there is excessive moisture in the sample. The experience and judgement of the instrument operator must be used to determine the validity of the headspace measurement.

5. Benzene or an equivalent compound will be used to calibrate the field screening instrument. Jar headspace sample results will be reported as "total organic vapors" in ppm (v/v). Instruments will be operated, maintained, and calibrated in accordance with the manufacturer's specifications. A calibration and maintenance log is kept at Rizzo Associates' office for each instrument. The daily calibration data are transcribed to the field log for each day that the instrument is used. Some samples may be collected and analyzed in duplicate to measure sample variability.

STANDARD OPERATING PROTOCOL FOR SOIL SAMPLING WITH A SPADE AND SCOOP

DISCUSSION

The simplest, most direct method of collecting soil samples is with a spade and scoop. Remove the top cover of soil to the required depth with a lawn or garden spade and then use a smaller stainless steel scoop to collect the sample.

USES

This method can be used in most soil types but is limited to sampling near the surface. Samples from depths greater than 50 cm are extremely labor intensive in most soil types. Very accurate, representative samples can be collected with this procedure. Use a flat, pointed mason trowel to cut a block of the desired soil when undisturbed profiles are required. A stainless steel scoop or lab spoon can be used in most other applications. Avoid the use of devices plated with chrome or other materials that may contaminate samples for laboratory analysis.

PROCEDURES FOR USE

1. Prior to initiating any work, the Field Technician and the Project Manager will review the Health and Safety Plan developed for the specific site activities. The indicated measures of the Plan should be enacted prior to initiation of the sampling activities. Concerns not addressed in the Health and Safety Plan document are to be brought immediately to the attention of the Health and Safety Officer.

2. Carefully remove the top layer of soil to the desired sample depth with a shovel or spade.

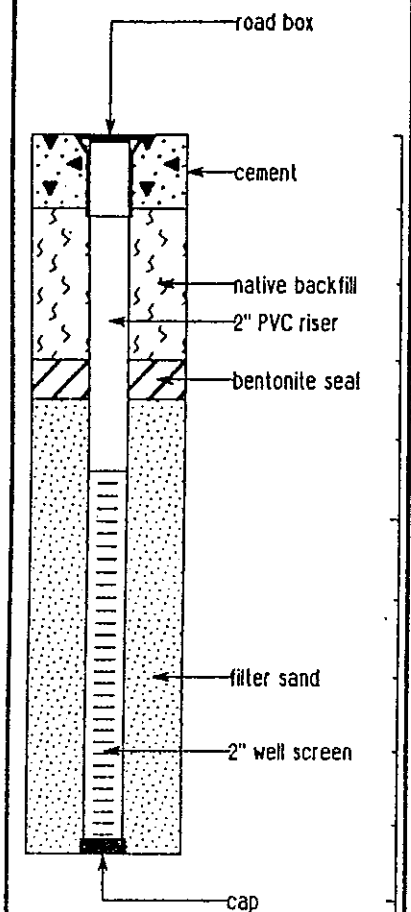
3. Use a stainless steel scoop or trowel to remove and discard the layer of soil that was in contact with the shovel.

4. Collect the sample and transfer it to an appropriate sample bottle with a stainless steel spoon or equivalent.

5. Check that a teflon liner is present in the cap, if required. Secure the cap tightly.

6. Label the sample jar and document the sample location, depth and field conditions in the field log. Complete the chain-of-custody. Store samples for laboratory analysis in a cooler.

RIZ-1



Blow Counts	Recov/Advance	PID (ppm)	Depth (ft)	Sample Interval	Graphic Log	Materials Description
			0			asphalt
grab		1.5				gray fill consisting of fine to coarse sand with angular gravel up to 2" in diameter and clumps of orange silty sand. trace coal and brick fragments
						drilling cuttings change to orange-gray silty fine sand with dolomite fragments
18			5			till grading downward into weathered bedrock. angular fragments of gray fine-grained dolomite in a matrix of fine medium orange/gray sand.
17	14/24"	1.0				
21						
25						
14						
13	11/24"	0.5				depth to water 7.87'
20						
21						
50/3"	0/3"	0.5				
			10			auger refusal on bedrock, Lockport Formation dolomite
			15			

BORING LOG AND WELL CONSTRUCTION FOR WELL RIZ-1

Project: Fleet/Rochester | Project Number: 2843-01 | Location: Hallman Chevrolet

Well Location: 5 feet north of garage portion of Hallman Chevrolet showroom building.

Rizzo Associates, Inc.

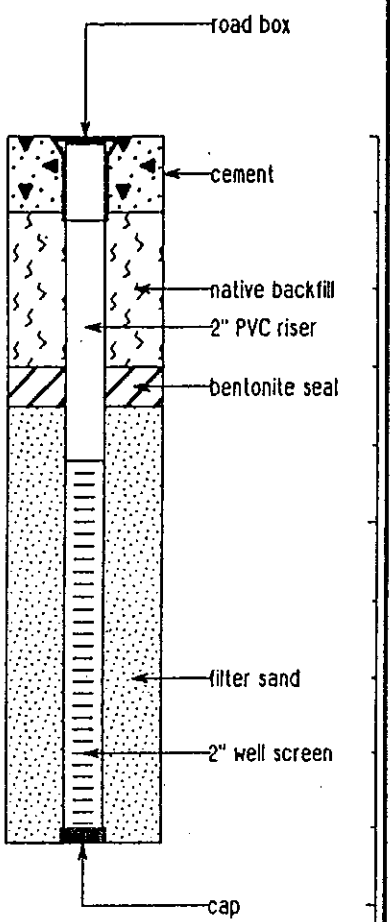
Engineers and Environmental Scientists
235 West Central Street, Natick, MA 01760

Installation Date: May 12, 1993 | Depth of Boring: 9.5

Inspector: Ken Jaeger | Depth to Water: 7.87

Contractor: Pennsylvania Drilling | Surface Elev.: 522.60

Drilling Method: HSA | PID used: HNu PI-101



RIZ-2

Blow Counts	Recov/Advance	PID (ppm)	Depth (ft)	Sample Interval	Graphic Log	Materials Description
						asphalt
grab		0.2				gray fill consisting of fine to coarse sand with angular gravel up to 2" in diameter and clumps of orange silty sand. trace coal and brick fragments
						drilling cuttings change to orange-gray silty fine sand with dolomite fragments
6			5			till grading downward into weathered bedrock. angular fragments of gray fine-grained dolomite in a matrix of fine to medium orange/gray sand.
18	18/24"	0.0				
22						
20						
10						
12	15/24"	0.4				
11						depth to water 8.25'
12						
17						
29	7/11"	0.2				
50/1"			10			auger refusal on bedrock, Lockport Formation dolomite
			15			

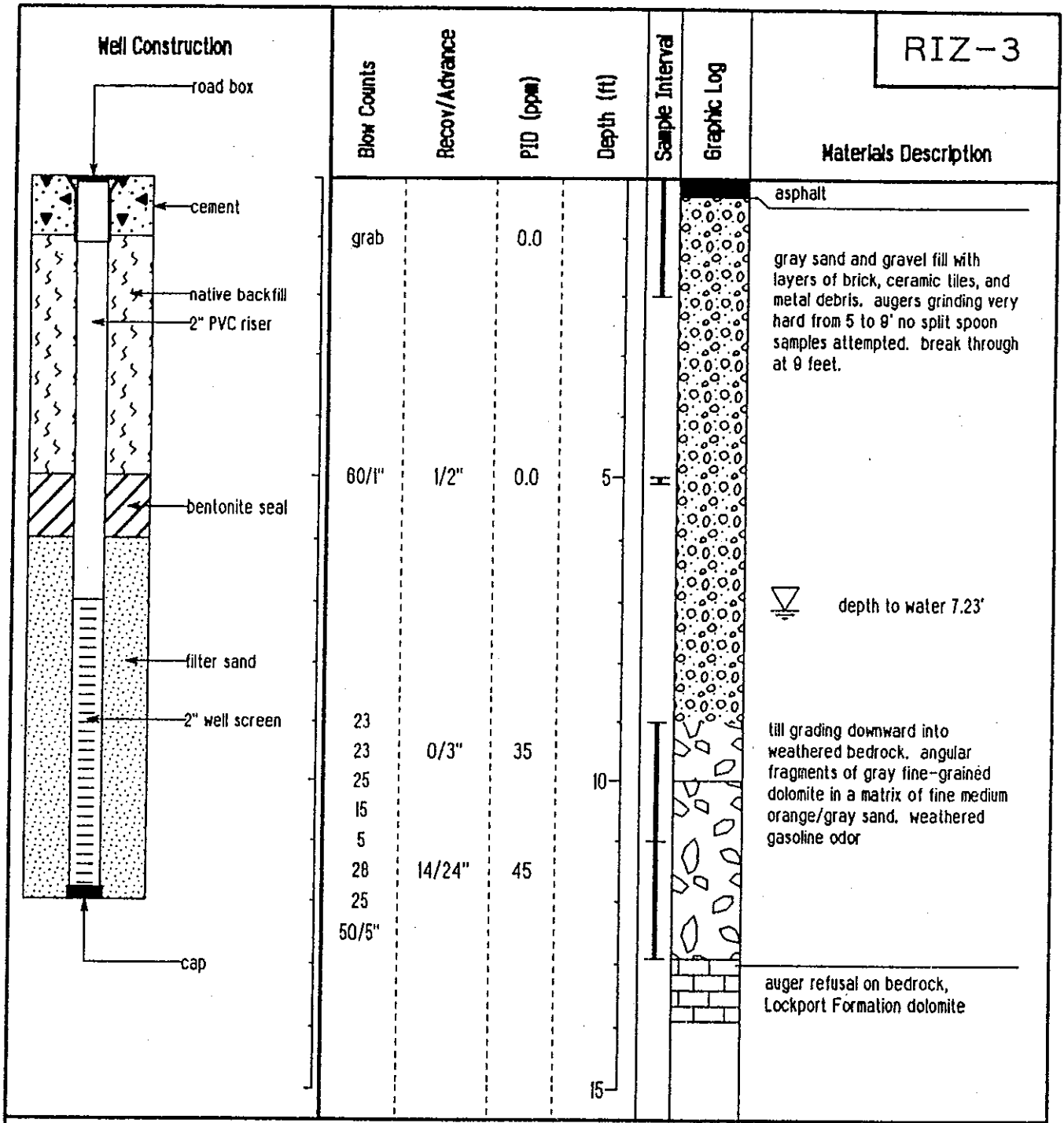
BORING LOG AND WELL CONSTRUCTION FOR WELL RIZ-2

Project: Fleet/Rochester | Project Number: 2843-01 | Location: Hallman Chevrolet

Well Location: 5 feet north of three motor oil USTs north of Hallman Chevrolet showroom building.

Rizzo Associates, Inc.
Engineers and Environmental Scientists
235 West Central Street, Natick, MA 01760

Installation Date: May 12, 1993 | Depth of Boring: 10.2
Inspector: Ken Jaeger | Depth to Water: 8.25
Contractor: Pennsylvania Drilling | Surface Elev.: 522.61
Drilling Method: HSA | PID used: HNu PI-101



BORING LOG AND WELL CONSTRUCTION FOR WELL RIZ-3

Project: Fleet/Rochester | Project Number: 2843-01 | Location: Hallman Chevrolet

Well Location: 8 feet north of empty, abandoned gasoline tank west of Hallman Chevrolet "vehicle prep." bldg.

Rizzo Associates, Inc.

Engineers and Environmental Scientists
235 West Central Street, Natick, MA 01760

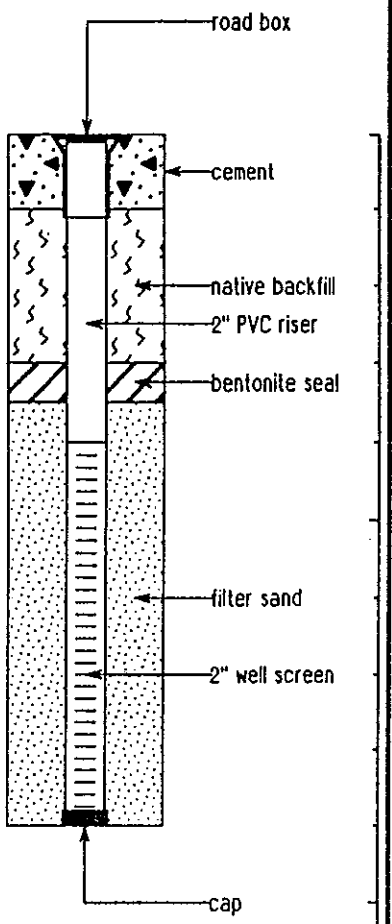
Installation Date: May 13, 1993 | Depth of Boring: 13

Inspector: Ken Jaeger | Depth to Water: 7.23

Contractor: Pennsylvania Drilling | Surface Elev.: 520.19

Drilling Method: HSA | PID used: HNu PI-101

RIZ-4



Blow Counts	Recov/Advance	PID (ppm)	Depth (ft)	Sample Interval	Graphic Log	Materials Description
grab		0.0				brown sand and gravel fill with fine to coarse sand and angular gravel up to 3/4"
4			5			
2	18/24"	0.0				reddish brown silty fine sand with few red and gray dolomite pebbles
8						
10						
11						
21	11/19"	0.5				
16						angular gray and red dolomite fragments in a matrix of reddish brown fine sand and silt
50/1"						
37						
34	10/16"	0.0				same as above, higher percentage of rock fragments, sample saturated, no odor.
50/4"			10			auger refusal on bedrock, Lockport Formation dolomite
			15			

BORING LOG AND WELL CONSTRUCTION FOR WELL RIZ-4

Project: Fleet/Rochester | Project Number: 2843-01 | Location: Hallman Chevrolet

Well Location: 10 feet northeast of steel shed on slab, along north wall of Hallman Chevrolet body shop bldg.

Rizzo Associates, Inc.

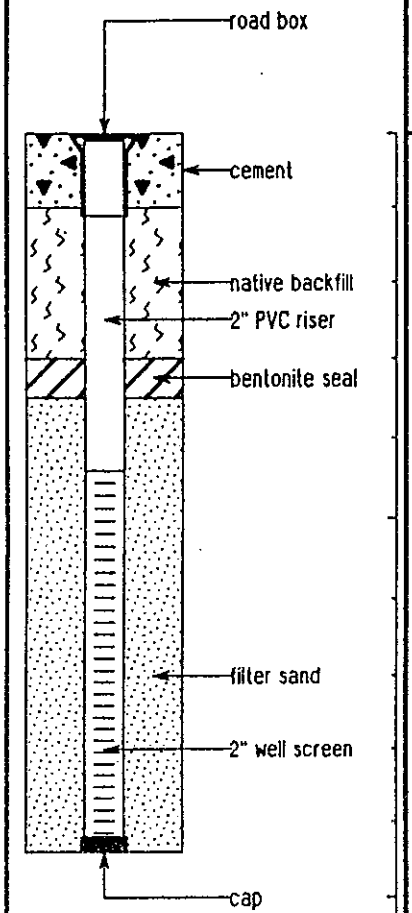
Engineers and Environmental Scientists
235 West Central Street, Natick, MA 01760

Installation Date: May 13, 1993 | Depth of Boring: 10

Inspector: Ken Jaeger | Depth to Water: dry

Contractor: Pennsylvania Drilling | Surface Elev.: 523.28

Drilling Method: HSA | PID used: HNu PI-101



RIZ-5

Blow Counts	Recov/Advance	PID (ppm)	Depth (ft)	Sample Interval	Graphic Log	Materials Description
grab		0.0				brown-gray fill consisting of fine to coarse sand with angular gravel
3 11 13 4	14/24"	0.2	5			angular fragments of gray fine-grained dolomite in a matrix of fine medium orange/gray sand, dry, no odors
2 70/3"	6/9"	0.4				auger refusal on bedrock, Lockport Formation dolomite
			10			
			15			

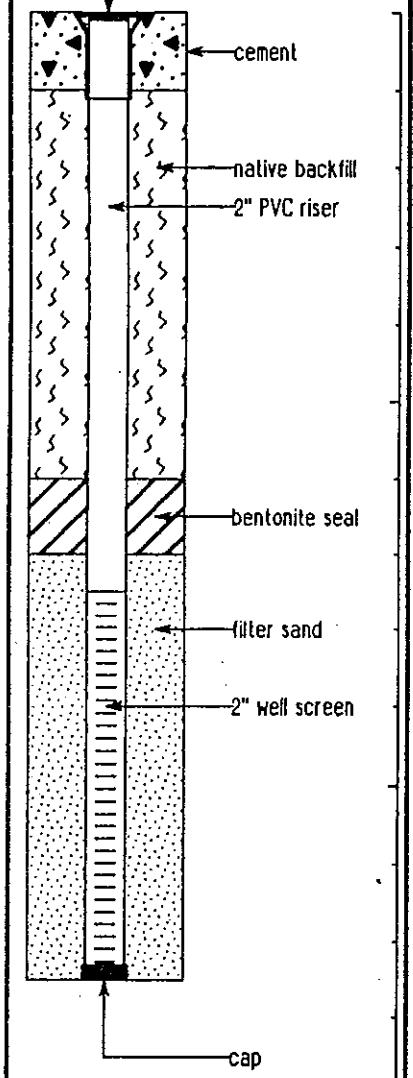
BORING LOG AND WELL CONSTRUCTION FOR WELL RIZ-5

Project: Fleet/Rochester | Project Number: 2843-01 | Location: Hallman Chevrolet

Well Location: near northeast corner of Hallman Chevrolet body shop building.

Rizzo Associates, Inc.
Engineers and Environmental Scientists
235 West Central Street, Natick, MA 01760

Installation Date: May 13, 1993 | Depth of Boring: 8
Inspector: Ken Jaeger | Depth to Water: no well installed
Contractor: Pennsylvania Drilling | Surface Elev.: not surveyed
Drilling Method: HSA | PID used: HNu PI-101



RIZ-6

Blow Counts	Recov/Advance	PID (ppm)	Depth (ft)	Sample Interval	Graphic Log	Materials Description
grab		0.0				brown sand and gravel fill
29 50/0"	5/6"	0.0	5			red-brown fine to medium sand with dolomite pebbles, few are sub- rounded.
50/3"	2/3"	0.0				depth to water 7.25'
			10			sub horizontal layers of dolomite 1 to 2" thick separated by layers of red-brown fine to medium sand with silt. weathered bedrock. augers grinding very hard from 7 to 13' no split spoon samples attempted.
			15			auger refusal on bedrock, Lockport Formation dolomite

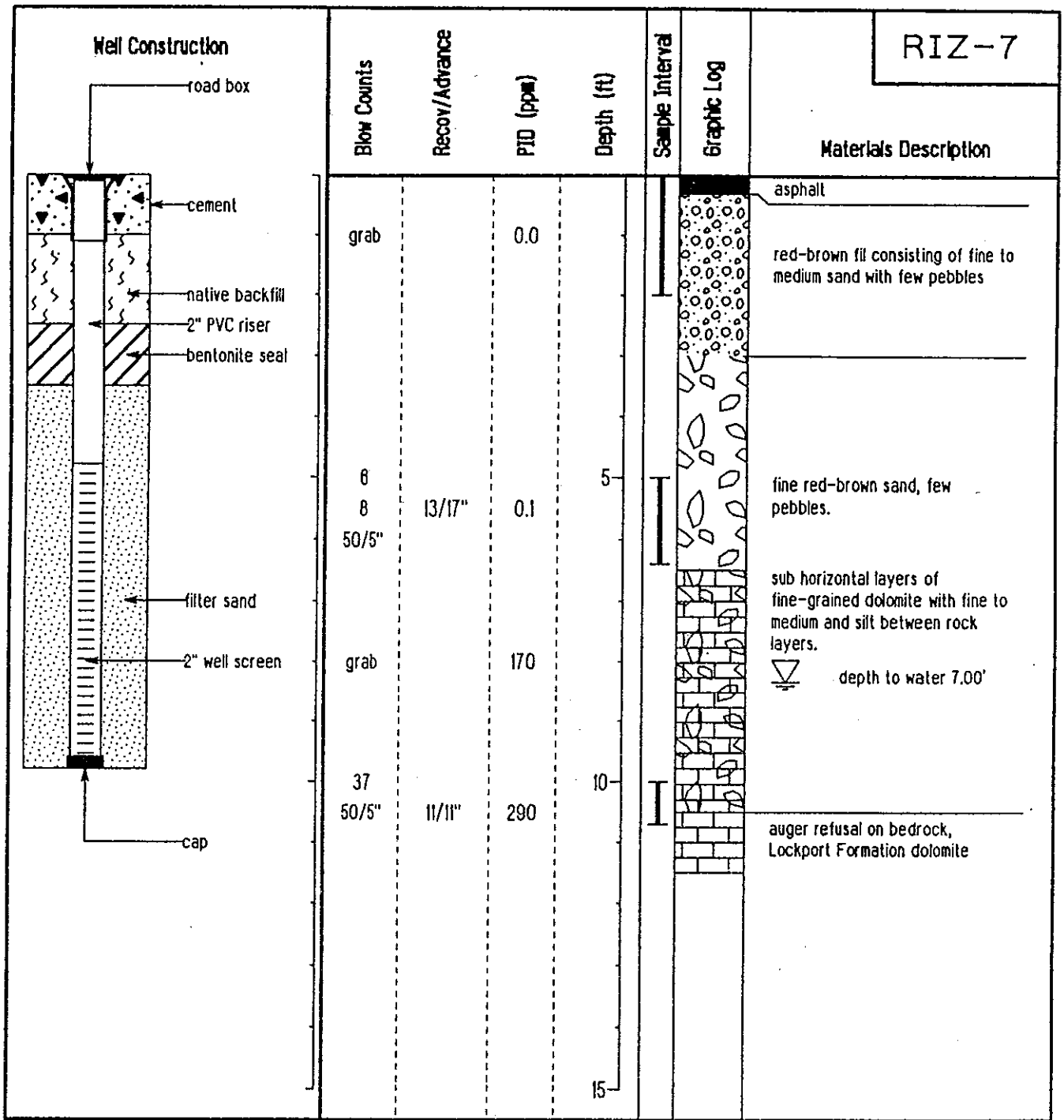
BORING LOG AND WELL CONSTRUCTION FOR WELL RIZ-6

Project: Fleet/Rochester | Project Number: 2843-01 | Location: Hallman Chevrolet

Well Location: north of Hallman Chevrolet body shop bldg, beside Vine Street.

Rizzo Associates, Inc.
Engineers and Environmental Scientists
235 West Central Street, Natick, MA 01760

Installation Date: May 13, 1993 | Depth of Boring: 13.0
Inspector: Ken Jaeger | Depth to Water: 7.25
Contractor: Pennsylvania Drilling | Surface Elev.: 520.14
Drilling Method: HSA | PID used: HNu PI-101



BORING LOG AND WELL CONSTRUCTION FOR WELL RIZ-7

Project: Fleet/Rochester | Project Number: 2843-01 | Location: Hallman Chevrolet

Well Location: 12 feet north of abandoned gasoline tank located at southeast corner of Hallman showroom bldg.

Rizzo Associates, Inc.

Engineers and Environmental Scientists
235 West Central Street, Natick, MA 01760

Installation Date: May 13, 1993	Depth of Boring: 10.75
Inspector: Ken Jaeger	Depth to Water: 7.00
Contractor: Pennsylvania Drilling	Surface Elev.: 522.72
Drilling Method: HSA	PID used: HNu PI-101

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

CERTIFICATE OF ANALYSIS

Client: Rizzo Associates

Address: 235 West Central Street

Natick, MA 01760

Attn: Ken Jaeger

Project Number: 2843-01

Site: Fleet

Laboratory Job Number: L9303958

Invoice Number: 52383

Date Received: 17-MAY-93

Date Reported: 18-MAY-93

Delivery Method: Fed ex

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L9303958-01	FR-SS-RZ4-10FT	Rochester
L9303958-02	FR-SS-RZ5-8FT	Rochester
L9303958-03	FR-SS-SHED-107	Rochester
L9303958-04	FR-GW-RZ1-101	Rochester
L9303958-05	FR-GW-RZ2-102	Rochester
L9303958-06	FR-GW-RZ3-103	Rochester
L9303958-07	FR-GW-RZ6-104	Rochester
L9303958-08	FR-GW-RZ7-105	Rochester
L9303958-09	FR-GW-RZ71-106	Rochester
L9303958-10	TRIP BLANK	Rochester

Authorized by:

Scott McLean - Laboratory Director

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number: L9303958-01
FR-SS-RZ4-10FT
Sample Matrix: SOIL
Condition of Sample: Satisfactory
Number & Type of Containers: 1 Glass

Date Received: 17-MAY-93
Date Reported: 18-MAY-93
Field Prep: None

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Solids, Total	80.	%	0.10	3	2540B		18-May
Hydrocarbon Scan GC 8100 Modified				1	8100M	17-May	18-MAY
Mineral Spirits	ND	mg/kg	10.				
Gasoline	ND	mg/kg	10.				
Fuel Oil #2/Diesel	ND	mg/kg	10.				
Fuel Oil #4	ND	mg/kg	10.				
Fuel Oil #6	ND	mg/kg	10.				
Motor Oil	ND	mg/kg	10.				
Kerosene	ND	mg/kg	10.				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number: L9303958-02
FR-SS-RZ5-8FT
Sample Matrix: SOIL
Condition of Sample: Satisfactory
Number & Type of Containers: 1 Glass,1 Vial

Date Received: 17-MAY-93
Date Reported: 18-MAY-93
Field Prep: None

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Solids, Total	86.	%	0.10	3	2540B		18-May
Volatile Organics by GC/MS				1	8260		18-MAY
Methylene chloride	ND	ug/kg	25.				
1,1-Dichloroethane	ND	ug/kg	7.5				
Chloroform	ND	ug/kg	7.5				
Carbon tetrachloride	ND	ug/kg	5.0				
1,2-Dichloropropane	ND	ug/kg	18.				
Dibromochloromethane	ND	ug/kg	5.0				
1,1,2-Trichloroethane	ND	ug/kg	7.5				
2-Chloroethylvinyl ether	ND	ug/kg	50.				
Tetrachloroethene	ND	ug/kg	7.5				
Chlorobenzene	ND	ug/kg	18.				
Trichlorofluoromethane	ND	ug/kg	25.				
1,2-Dichloroethane	ND	ug/kg	7.5				
1,1,1-Trichloroethane	ND	ug/kg	5.0				
Bromodichloromethane	ND	ug/kg	5.0				
trans-1,3-Dichloropropene	ND	ug/kg	7.5				
cis-1,3-Dichloropropene	ND	ug/kg	5.0				
Bromoform	ND	ug/kg	5.0				
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.0				
Benzene	ND	ug/kg	5.0				
Toluene	ND	ug/kg	7.5				
Ethylbenzene	ND	ug/kg	5.0				
Chloromethane	ND	ug/kg	50.				
Bromomethane	ND	ug/kg	10.				
Vinyl chloride	ND	ug/kg	18.				
Chloroethane	ND	ug/kg	10.				
1,1-Dichloroethene	ND	ug/kg	7.5				
trans-1,2-Dichloroethene	ND	ug/kg	7.5				
Trichloroethene	ND	ug/kg	5.0				
1,2-Dichlorobenzene	ND	ug/kg	50.				
1,3-Dichlorobenzene	ND	ug/kg	50.				
1,4-Dichlorobenzene	ND	ug/kg	50.				
Methyl tert butyl ether	ND	ug/kg	50.				
Xylenes	ND	ug/kg	5.0				
cis-1,2-Dichloroethene	ND	ug/kg	5.0				
Dibromomethane	ND	ug/kg	50.				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9303958-02

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS continued				1	8260		18-MAY
1,4-Dichlorobutane	ND	ug/kg	50.				
Iodomethane	ND	ug/kg	50.				
1,2,3-Trichloropropane	ND	ug/kg	50.				
Styrene	ND	ug/kg	5.0				
Dichlorodifluoromethane	ND	ug/kg	50.				
Acetone	ND	ug/kg	50.				
Carbon disulfide	ND	ug/kg	50.				
2-Butanone	ND	ug/kg	23.				
Vinyl acetate	ND	ug/kg	50.				
4-Methyl-2-pentanone	ND	ug/kg	50.				
2-Hexanone	ND	ug/kg	50.				
Ethyl methacrylate	ND	ug/kg	50.				
Acrolein	ND	ug/kg	130				
Acrylonitrile	ND	ug/kg	50.				
SURROGATE RECOVERY							
1,2-Dichloroethane-d4	98.0	%					
Toluene-d8	98.0	%					
4-Bromofluorobenzene	95.0	%					
Hydrocarbon Scan GC 8100 Modified				1	8100M	17-May	18-MAY
Mineral Spirits	ND	mg/kg	50.				
Gasoline	ND	mg/kg	50.				
Fuel Oil #2/Diesel	ND	mg/kg	50.				
Fuel Oil #4	ND	mg/kg	50.				
Fuel Oil #6	ND	mg/kg	50.				
Motor Oil	ND	mg/kg	50.				
Kerosene	ND	mg/kg	50.				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number: L9303958-03 Date Received: 17-MAY-93
FR-SS-SHED-107
Sample Matrix: SOIL Date Reported: 18-MAY-93

Condition of Sample: Satisfactory Field Prep: None

Number & Type of Containers: 1 Glass

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Solids, Total	89.	%	0.10	3	2540B		18-May
Volatile Organics by GC/MS				1	8260		18-MAY
Methylene chloride	ND	ug/kg	25.				
1,1-Dichloroethane	ND	ug/kg	7.5				
Chloroform	ND	ug/kg	7.5				
Carbon tetrachloride	ND	ug/kg	5.0				
1,2-Dichloropropane	ND	ug/kg	18.				
Dibromochloromethane	ND	ug/kg	5.0				
1,1,2-Trichloroethane	ND	ug/kg	7.5				
2-Chloroethylvinyl ether	ND	ug/kg	50.				
Tetrachloroethene	ND	ug/kg	7.5				
Chlorobenzene	ND	ug/kg	18.				
Trichlorofluoromethane	ND	ug/kg	25.				
1,2-Dichloroethane	ND	ug/kg	7.5				
1,1,1-Trichloroethane	ND	ug/kg	5.0				
Bromodichloromethane	ND	ug/kg	5.0				
trans-1,3-Dichloropropene	ND	ug/kg	7.5				
cis-1,3-Dichloropropene	ND	ug/kg	5.0				
Bromoform	ND	ug/kg	5.0				
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.0				
Benzene	ND	ug/kg	5.0				
Toluene	ND	ug/kg	7.5				
Ethylbenzene	ND	ug/kg	5.0				
Chloromethane	ND	ug/kg	50.				
Bromomethane	ND	ug/kg	10.				
Vinyl chloride	ND	ug/kg	18.				
Chloroethane	ND	ug/kg	10.				
1,1-Dichloroethene	ND	ug/kg	7.5				
trans-1,2-Dichloroethene	ND	ug/kg	7.5				
Trichloroethene	ND	ug/kg	5.0				
1,2-Dichlorobenzene	ND	ug/kg	50.				
1,3-Dichlorobenzene	ND	ug/kg	50.				
1,4-Dichlorobenzene	ND	ug/kg	50.				
Methyl tert butyl ether	ND	ug/kg	50.				
Xylenes	ND	ug/kg	5.0				
cis-1,2-Dichloroethene	ND	ug/kg	5.0				
Dibromomethane	ND	ug/kg	50.				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9303958-03

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS continued				1	8260		18-MAY
1,4-Dichlorobutane	ND	ug/kg	50.				
Iodomethane	ND	ug/kg	50.				
1,2,3-Trichloropropane	ND	ug/kg	50.				
Styrene	ND	ug/kg	5.0				
Dichlorodifluoromethane	ND	ug/kg	50.				
Acetone	ND	ug/kg	50.				
Carbon disulfide	ND	ug/kg	50.				
2-Butanone	ND	ug/kg	23.				
Vinyl acetate	ND	ug/kg	50.				
4-Methyl-2-pentanone	ND	ug/kg	50.				
2-Hexanone	ND	ug/kg	50.				
Ethyl methacrylate	ND	ug/kg	50.				
Acrolein	ND	ug/kg	130				
Acrylonitrile	ND	ug/kg	50.				
SURROGATE RECOVERY							
1,2-Dichloroethane-d4	90.0	%					
Toluene-d8	99.0	%					
4-Bromofluorobenzene	85.0	%					
Hydrocarbon Scan GC 8100 Modified				1	8100M	17-May	18-MAY
Mineral Spirits	ND	mg/kg	50.				
Gasoline	ND	mg/kg	50.				
Fuel Oil #2/Diesel	ND	mg/kg	50.				
Fuel Oil #4	ND	mg/kg	50.				
Fuel Oil #6	ND	mg/kg	50.				
Motor Oil	ND	mg/kg	50.				
Kerosene	ND	mg/kg	50.				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number: L9303958-04
FR-GW-RZ1-101
Sample Matrix: LIQUID
Condition of Sample: Satisfactory
Number & Type of Containers: 1 Amber Glass,2 Vial

Date Received: 17-MAY-93
Date Reported: 18-MAY-93
Field Prep: None

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS				1	8260		18-MAY
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	1.5				
Chloroform	ND	ug/l	1.5				
Carbon tetrachloride	ND	ug/l	1.0				
1,2-Dichloropropane	ND	ug/l	3.5				
Dibromochloromethane	ND	ug/l	1.0				
1,1,2-Trichloroethane	ND	ug/l	1.5				
2-Chloroethylvinyl ether	ND	ug/l	10.				
Tetrachloroethene	ND	ug/l	1.5				
Chlorobenzene	ND	ug/l	3.5				
Trichlorofluoromethane	ND	ug/l	5.0				
1,2-Dichloroethane	ND	ug/l	1.5				
1,1,1-Trichloroethane	ND	ug/l	1.0				
Bromodichloromethane	ND	ug/l	1.0				
trans-1,3-Dichloropropene	ND	ug/l	1.5				
cis-1,3-Dichloropropene	ND	ug/l	1.0				
Bromoform	ND	ug/l	1.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	1.0				
Benzene	ND	ug/l	1.0				
Toluene	ND	ug/l	1.5				
Ethylbenzene	ND	ug/l	1.0				
Chloromethane	ND	ug/l	10.				
Bromomethane	ND	ug/l	2.0				
Vinyl chloride	ND	ug/l	3.5				
Chloroethane	ND	ug/l	2.0				
1,1-Dichloroethene	ND	ug/l	1.5				
trans-1,2-Dichloroethene	ND	ug/l	1.5				
Trichloroethene	ND	ug/l	1.0				
1,2-Dichlorobenzene	ND	ug/l	10.				
1,3-Dichlorobenzene	ND	ug/l	10.				
1,4-Dichlorobenzene	ND	ug/l	10.				
Methyl tert butyl ether	ND	ug/l	10.				
Xylenes	ND	ug/l	1.0				
cis-1,2-Dichloroethene	ND	ug/l	1.0				
Dibromomethane	ND	ug/l	10.				
1,4-Dichlorobutane	ND	ug/l	10.				
Iodomethane	ND	ug/l	10.				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9303958-04

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS continued				1	8260		18-MAY
1,2,3-Trichloropropane	ND	ug/l	10.				
Styrene	ND	ug/l	1.0				
Dichlorodifluoromethane	ND	ug/l	10.				
Acetone	ND	ug/l	10.				
Carbon disulfide	ND	ug/l	10.				
2-Butanone	ND	ug/l	4.5				
Vinyl acetate	ND	ug/l	10.				
4-Methyl-2-pentanone	ND	ug/l	10.				
2-Hexanone	ND	ug/l	10.				
Ethyl methacrylate	ND	ug/l	10.				
Acrolein	ND	ug/l	25.				
Acrylonitrile	ND	ug/l	10.				
SURROGATE RECOVERY							
1,2-Dichloroethane-d4	107.	%					
Toluene-d8	92.0	%					
4-Bromofluorobenzene	98.0	%					
Hydrocarbon Scan GC 8100 Modified				1	8100M	17-May	18-MAY
Mineral Spirits	ND	mg/l	1.0				
Gasoline	ND	mg/l	1.0				
Fuel Oil #2/Diesel	ND	mg/l	1.0				
Fuel Oil #4	ND	mg/l	1.0				
Fuel Oil #6	ND	mg/l	1.0				
Motor Oil	ND	mg/l	1.0				
Kerosene	ND	mg/l	1.0				
Unknown Hydrocarbon	370	mg/l	1.0				
Naphtha	ND	mg/l	1.0				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number: L9303958-05 FR-GW-RZ2-102 Date Received: 17-MAY-93
Sample Matrix: LIQUID Date Reported: 18-MAY-93
Condition of Sample: Satisfactory Field Prep: None
Number & Type of Containers: 1 Amber Glass,2 Vial

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS				1	8260		17-MAY
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	1.5				
Chloroform	ND	ug/l	1.5				
Carbon tetrachloride	ND	ug/l	1.0				
1,2-Dichloropropane	ND	ug/l	3.5				
Dibromochloromethane	ND	ug/l	1.0				
1,1,2-Trichloroethane	ND	ug/l	1.5				
2-Chloroethylvinyl ether	ND	ug/l	10.				
Tetrachloroethene	ND	ug/l	1.5				
Chlorobenzene	ND	ug/l	3.5				
Trichlorofluoromethane	ND	ug/l	5.0				
1,2-Dichloroethane	ND	ug/l	1.5				
1,1,1-Trichloroethane	ND	ug/l	1.0				
Bromodichloromethane	ND	ug/l	1.0				
trans-1,3-Dichloropropene	ND	ug/l	1.5				
cis-1,3-Dichloropropene	ND	ug/l	1.0				
Bromoform	ND	ug/l	1.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	1.0				
Benzene	ND	ug/l	1.0				
Toluene	ND	ug/l	1.5				
Ethylbenzene	ND	ug/l	1.0				
Chloromethane	ND	ug/l	10.				
Bromomethane	ND	ug/l	2.0				
Vinyl chloride	ND	ug/l	3.5				
Chloroethane	ND	ug/l	2.0				
1,1-Dichloroethene	ND	ug/l	1.5				
trans-1,2-Dichloroethene	ND	ug/l	1.5				
Trichloroethene	ND	ug/l	1.0				
1,2-Dichlorobenzene	ND	ug/l	10.				
1,3-Dichlorobenzene	ND	ug/l	10.				
1,4-Dichlorobenzene	ND	ug/l	10.				
Methyl tert butyl ether	ND	ug/l	10.				
Xylenes	ND	ug/l	1.0				
cis-1,2-Dichloroethene	ND	ug/l	1.0				
Dibromomethane	ND	ug/l	10.				
1,4-Dichlorobutane	ND	ug/l	10.				
Iodomethane	ND	ug/l	10.				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9303958-05

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS continued				1	8260		17-MAY
1,2,3-Trichloropropane	ND	ug/l	10.				
Styrene	ND	ug/l	1.0				
Dichlorodifluoromethane	ND	ug/l	10.				
Acetone	ND	ug/l	10.				
Carbon disulfide	ND	ug/l	10.				
2-Butanone	ND	ug/l	4.5				
Vinyl acetate	ND	ug/l	10.				
4-Methyl-2-pentanone	ND	ug/l	10.				
2-Hexanone	ND	ug/l	10.				
Ethyl methacrylate	ND	ug/l	10.				
Acrolein	ND	ug/l	25.				
Acrylonitrile	ND	ug/l	10.				
SURROGATE RECOVERY							
1,2-Dichloroethane-d4	91.0	%					
Toluene-d8	89.0	%					
4-Bromofluorobenzene	91.0	%					
Hydrocarbon Scan GC 8100 Modified				1	8100M	17-May	18-MAY
Mineral Spirits	ND	mg/l	2.0				
Gasoline	ND	mg/l	2.0				
Fuel Oil #2/Diesel	ND	mg/l	2.0				
Fuel Oil #4	ND	mg/l	2.0				
Fuel Oil #6	ND	mg/l	2.0				
Motor Oil	ND	mg/l	2.0				
Kerosene	ND	mg/l	2.0				
Naphtha	ND	mg/l	2.0				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number: L9303958-06 Date Received: 17-MAY-93
FR-GW-RZ3-103
Sample Matrix: LIQUID Date Reported: 18-MAY-93

Condition of Sample: Satisfactory Field Prep: Field Filtered

Number & Type of Containers: 1 Amber Glass,2 Vial,1 Plastic

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Dissolved Metals				1	3005/3050		
Antimony, Dissolved	ND	mg/l	0.05	1	6010	17-May	18-May
Arsenic, Dissolved	ND	mg/l	0.005	1	7060	17-May	17-May
Barium, Dissolved	0.21	mg/l	0.01	1	6010	17-May	18-May
Beryllium, Dissolved	ND	mg/l	0.005	1	6010	17-May	18-May
Cadmium, Dissolved	ND	mg/l	0.005	1	6010	17-May	18-May
Chromium, Dissolved	ND	mg/l	0.01	1	6010	17-May	18-May
Copper, Dissolved	ND	mg/l	0.01	1	6010	17-May	18-May
Lead, Dissolved	ND	mg/l	0.05	1	6010	17-May	18-May
Mercury, Dissolved	ND	mg/l	0.0005	1	7470/7471	17-May	17-May
Nickel, Dissolved	ND	mg/l	0.025	1	6010	17-May	18-May
Selenium, Dissolved	ND	mg/l	0.005	1	7740	17-May	17-May
Silver, Dissolved	ND	mg/l	0.01	1	6010	17-May	18-May
Thallium, Dissolved	ND	mg/l	0.005	1	7841	17-May	17-May
Zinc, Dissolved	ND	mg/l	0.01	1	6010	17-May	18-May

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9303958-06

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS				1	8260		18-MAY
Methylene chloride	ND	ug/l	500				
1,1-Dichloroethane	ND	ug/l	150				
Chloroform	ND	ug/l	150				
Carbon tetrachloride	ND	ug/l	100				
1,2-Dichloropropane	ND	ug/l	350				
Dibromochloromethane	ND	ug/l	100				
1,1,2-Trichloroethane	ND	ug/l	150				
2-Chloroethylvinyl ether	ND	ug/l	1000				
Tetrachloroethene	ND	ug/l	150				
Chlorobenzene	ND	ug/l	350				
Trichlorofluoromethane	ND	ug/l	500				
1,2-Dichloroethane	ND	ug/l	150				
1,1,1-Trichloroethane	ND	ug/l	100				
Bromodichloromethane	ND	ug/l	100				
trans-1,3-Dichloropropene	ND	ug/l	150				
cis-1,3-Dichloropropene	ND	ug/l	100				
Bromoform	ND	ug/l	100				
1,1,2,2-Tetrachloroethane	ND	ug/l	100				
Benzene	1500	ug/l	100				
Toluene	1500	ug/l	150				
Ethylbenzene	2800	ug/l	100				
Chloromethane	ND	ug/l	1000				
Bromomethane	ND	ug/l	200				
Vinyl chloride	ND	ug/l	350				
Chloroethane	ND	ug/l	200				
1,1-Dichloroethene	ND	ug/l	150				
trans-1,2-Dichloroethene	ND	ug/l	150				
Trichloroethene	ND	ug/l	100				
1,2-Dichlorobenzene	ND	ug/l	1000				
1,3-Dichlorobenzene	ND	ug/l	1000				
1,4-Dichlorobenzene	ND	ug/l	1000				
Methyl tert butyl ether	ND	ug/l	1000				
Xylenes	19000	ug/l	100				
cis-1,2-Dichloroethene	ND	ug/l	100				
Dibromomethane	ND	ug/l	1000				
1,4-Dichlorobutane	ND	ug/l	1000				
Iodomethane	ND	ug/l	1000				
1,2,3-Trichloropropane	ND	ug/l	1000				
Styrene	ND	ug/l	100				
Dichlorodifluoromethane	ND	ug/l	1000				
Acetone	ND	ug/l	1000				
Carbon disulfide	ND	ug/l	1000				
2-Butanone	ND	ug/l	450				
Vinyl acetate	ND	ug/l	1000				
4-Methyl-2-pentanone	ND	ug/l	1000				
2-Hexanone	ND	ug/l	1000				
Ethyl methacrylate	ND	ug/l	1000				
Acrolein	ND	ug/l	2500				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9303958-06

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS continued				1	8260		18-MAY
Acrylonitrile	ND	ug/l	1000				
SURROGATE RECOVERY							
1,2-Dichloroethane-d4	98.0	%					
Toluene-d8	98.0	%					
4-Bromofluorobenzene	101.	%					
Hydrocarbon Scan GC 8100 Modified				1	8100M	17-May	18-MAY
Mineral Spirits	ND	mg/l	10.				
Gasoline	ND	mg/l	10.				
Fuel Oil #2/Diesel	240	mg/l	10.				
Fuel Oil #4	ND	mg/l	10.				
Fuel Oil #6	ND	mg/l	10.				
Motor Oil	ND	mg/l	10.				
Kerosene	ND	mg/l	10.				
Naphtha	ND	mg/l	10.				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number: L9303958-07
FR-GW-RZ6-104
Sample Matrix: LIQUID
Condition of Sample: Satisfactory
Date Received: 17-MAY-93
Date Reported: 18-MAY-93
Field Prep: Field Filtered

Number & Type of Containers: 1 Amber Glass,2 Vial,1 Plastic

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Dissolved Metals				1	3005/3050		
Antimony, Dissolved	ND	mg/l	0.05	1	6010	17-May	18-May
Arsenic, Dissolved	ND	mg/l	0.005	1	7060	17-May	17-May
Barium, Dissolved	0.06	mg/l	0.01	1	6010	17-May	18-May
Beryllium, Dissolved	ND	mg/l	0.005	1	6010	17-May	18-May
Cadmium, Dissolved	ND	mg/l	0.005	1	6010	17-May	18-May
Chromium, Dissolved	ND	mg/l	0.01	1	6010	17-May	18-May
Copper, Dissolved	ND	mg/l	0.01	1	6010	17-May	18-May
Lead, Dissolved	ND	mg/l	0.05	1	6010	17-May	18-May
Mercury, Dissolved	ND	mg/l	0.0005	1	7470/7471	17-May	17-May
Nickel, Dissolved	0.040	mg/l	0.025	1	6010	17-May	18-May
Selenium, Dissolved	ND	mg/l	0.005	1	7740	17-May	17-May
Silver, Dissolved	ND	mg/l	0.01	1	6010	17-May	18-May
Thallium, Dissolved	ND	mg/l	0.005	1	7841	17-May	17-May
Zinc, Dissolved	ND	mg/l	0.01	1	6010	17-May	18-May

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9303958-07

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS				1	8260		18-MAY
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	1.5				
Chloroform	ND	ug/l	1.5				
Carbon tetrachloride	ND	ug/l	1.0				
1,2-Dichloropropane	ND	ug/l	3.5				
Dibromochloromethane	ND	ug/l	1.0				
1,1,2-Trichloroethane	ND	ug/l	1.5				
2-Chloroethylvinyl ether	ND	ug/l	10.				
Tetrachloroethene	ND	ug/l	1.5				
Chlorobenzene	ND	ug/l	3.5				
Trichlorofluoromethane	ND	ug/l	5.0				
1,2-Dichloroethane	ND	ug/l	1.5				
1,1,1-Trichloroethane	ND	ug/l	1.0				
Bromodichloromethane	ND	ug/l	1.0				
trans-1,3-Dichloropropene	ND	ug/l	1.5				
cis-1,3-Dichloropropene	ND	ug/l	1.0				
Bromoform	ND	ug/l	1.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	1.0				
Benzene	ND	ug/l	1.0				
Toluene	ND	ug/l	1.5				
Ethylbenzene	ND	ug/l	1.0				
Chloromethane	ND	ug/l	10.				
Bromomethane	ND	ug/l	2.0				
Vinyl chloride	ND	ug/l	3.5				
Chloroethane	ND	ug/l	2.0				
1,1-Dichloroethene	ND	ug/l	1.5				
trans-1,2-Dichloroethene	ND	ug/l	1.5				
Trichloroethene	ND	ug/l	1.0				
1,2-Dichlorobenzene	ND	ug/l	10.				
1,3-Dichlorobenzene	ND	ug/l	10.				
1,4-Dichlorobenzene	ND	ug/l	10.				
Methyl tert butyl ether	ND	ug/l	10.				
Xylenes	1.8	ug/l	1.0				
cis-1,2-Dichloroethene	ND	ug/l	1.0				
Dibromomethane	ND	ug/l	10.				
1,4-Dichlorobutane	ND	ug/l	10.				
Iodomethane	ND	ug/l	10.				
1,2,3-Trichloropropane	ND	ug/l	10.				
Styrene	ND	ug/l	1.0				
Dichlorodifluoromethane	ND	ug/l	10.				
Acetone	ND	ug/l	10.				
Carbon disulfide	ND	ug/l	10.				
2-Butanone	ND	ug/l	4.5				
Vinyl acetate	ND	ug/l	10.				
4-Methyl-2-pentanone	ND	ug/l	10.				
2-Hexanone	ND	ug/l	10.				
Ethyl methacrylate	ND	ug/l	10.				
Acrolein	ND	ug/l	25.				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9303958-07

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS continued				1	8260		18-MAY
Acrylonitrile	ND	ug/l	10.				
SURROGATE RECOVERY							
1,2-Dichloroethane-d4	95.0	%					
Toluene-d8	95.0	%					
4-Bromofluorobenzene	101.	%					
Hydrocarbon Scan GC 8100 Modified				1	8100M	17-May	18-MAY
Mineral Spirits	ND	mg/l	1.0				
Gasoline	ND	mg/l	1.0				
Fuel Oil #2/Diesel	ND	mg/l	1.0				
Fuel Oil #4	ND	mg/l	1.0				
Fuel Oil #6	ND	mg/l	1.0				
Motor Oil	ND	mg/l	1.0				
Kerosene	ND	mg/l	1.0				
Naphtha	ND	mg/l	1.0				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number: L9303958-08
FR-GW-RZ7-105
Sample Matrix: LIQUID
Condition of Sample: Satisfactory
Number & Type of Containers: 1 Amber Glass,2 Vial

Date Received: 17-MAY-93
Date Reported: 18-MAY-93
Field Prep: None

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS				1 8260		17-MAY
Methylene chloride	ND	ug/l	2500			
1,1-Dichloroethane	ND	ug/l	750			
Chloroform	ND	ug/l	750			
Carbon tetrachloride	ND	ug/l	500			
1,2-Dichloropropane	ND	ug/l	1800			
Dibromochloromethane	ND	ug/l	500			
1,1,2-Trichloroethane	ND	ug/l	750			
2-Chloroethylvinyl ether	ND	ug/l	5000			
Tetrachloroethene	ND	ug/l	750			
Chlorobenzene	ND	ug/l	1800			
Trichlorofluoromethane	ND	ug/l	2500			
1,2-Dichloroethane	ND	ug/l	750			
1,1,1-Trichloroethane	ND	ug/l	500			
Bromodichloromethane	ND	ug/l	500			
trans-1,3-Dichloropropene	ND	ug/l	750			
cis-1,3-Dichloropropene	ND	ug/l	500			
Bromoform	ND	ug/l	500			
1,1,2,2-Tetrachloroethane	ND	ug/l	500			
Benzene	640	ug/l	500			
Toluene	4900	ug/l	750			
Ethylbenzene	4500	ug/l	500			
Chloromethane	ND	ug/l	5000			
Bromomethane	ND	ug/l	1000			
Vinyl chloride	ND	ug/l	1800			
Chloroethane	ND	ug/l	1000			
1,1-Dichloroethene	ND	ug/l	750			
trans-1,2-Dichloroethene	ND	ug/l	750			
Trichloroethene	ND	ug/l	500			
1,2-Dichlorobenzene	ND	ug/l	5000			
1,3-Dichlorobenzene	ND	ug/l	5000			
1,4-Dichlorobenzene	ND	ug/l	5000			
Methyl tert butyl ether	ND	ug/l	5000			
Xylenes	23000	ug/l	500			
cis-1,2-Dichloroethene	ND	ug/l	500			
Dibromomethane	ND	ug/l	5000			
1,4-Dichlorobutane	ND	ug/l	5000			
Iodomethane	ND	ug/l	5000			

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9303958-08

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS continued				1	8260		17-MAY
1,2,3-Trichloropropane	ND	ug/l	5000				
Styrene	ND	ug/l	500				
Dichlorodifluoromethane	ND	ug/l	5000				
Acetone	ND	ug/l	5000				
Carbon disulfide	ND	ug/l	5000				
2-Butanone	ND	ug/l	2300				
Vinyl acetate	ND	ug/l	5000				
4-Methyl-2-pentanone	ND	ug/l	5000				
2-Hexanone	ND	ug/l	5000				
Ethyl methacrylate	ND	ug/l	5000				
Acrolein	ND	ug/l	13000				
Acrylonitrile	ND	ug/l	5000				
SURROGATE RECOVERY							
1,2-Dichloroethane-d4	103.	%					
Toluene-d8	91.0	%					
4-Bromofluorobenzene	101.	%					
Hydrocarbon Scan GC 8100 Modified				1	8100M	17-May	18-MAY
Mineral Spirits	220	mg/l	5.0				
Gasoline	ND	mg/l	5.0				
Fuel Oil #2/Diesel	ND	mg/l	5.0				
Fuel Oil #4	ND	mg/l	5.0				
Fuel Oil #6	ND	mg/l	5.0				
Motor Oil	ND	mg/l	5.0				
Kerosene	ND	mg/l	5.0				
Unknown Hydrocarbon	84.	mg/l	5.0				
Naphtha	ND	mg/l	5.0				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number: L9303958-09
FR-GW-RZ71-106
Sample Matrix: LIQUID
Condition of Sample: Satisfactory
Number & Type of Containers: 2 Vial

Date Received: 17-MAY-93
Date Reported: 18-MAY-93
Field Prep: None

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS				1	8260		18-MAY
Methylene chloride	ND	ug/l	2500				
1,1-Dichloroethane	ND	ug/l	750				
Chloroform	ND	ug/l	750				
Carbon tetrachloride	ND	ug/l	500				
1,2-Dichloropropane	ND	ug/l	1800				
Dibromochloromethane	ND	ug/l	500				
1,1,2-Trichloroethane	ND	ug/l	750				
2-Chloroethylvinyl ether	ND	ug/l	5000				
Tetrachloroethene	ND	ug/l	750				
Chlorobenzene	ND	ug/l	1800				
Trichlorofluoromethane	ND	ug/l	2500				
1,2-Dichloroethane	ND	ug/l	750				
1,1,1-Trichloroethane	ND	ug/l	500				
Bromodichloromethane	ND	ug/l	500				
trans-1,3-Dichloropropene	ND	ug/l	750				
cis-1,3-Dichloropropene	ND	ug/l	500				
Bromoform	ND	ug/l	500				
1,1,2,2-Tetrachloroethane	ND	ug/l	500				
Benzene	790	ug/l	500				
Toluene	7700	ug/l	750				
Ethylbenzene	8200	ug/l	500				
Chloromethane	ND	ug/l	5000				
Bromomethane	ND	ug/l	1000				
Vinyl chloride	ND	ug/l	1800				
Chloroethane	ND	ug/l	1000				
1,1-Dichloroethene	ND	ug/l	750				
trans-1,2-Dichloroethene	ND	ug/l	750				
Trichloroethene	ND	ug/l	500				
1,2-Dichlorobenzene	ND	ug/l	5000				
1,3-Dichlorobenzene	ND	ug/l	5000				
1,4-Dichlorobenzene	ND	ug/l	5000				
Methyl tert butyl ether	ND	ug/l	5000				
Xylenes	41000	ug/l	500				
cis-1,2-Dichloroethene	ND	ug/l	500				
Dibromomethane	ND	ug/l	5000				
1,4-Dichlorobutane	ND	ug/l	5000				
Iodomethane	ND	ug/l	5000				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9303958-09

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS continued				1	8260		18-MAY
1,2,3-Trichloropropane	ND	ug/l	5000				
Styrene	ND	ug/l	500				
Dichlorodifluoromethane	ND	ug/l	5000				
Acetone	ND	ug/l	5000				
Carbon disulfide	ND	ug/l	5000				
2-Butanone	ND	ug/l	2300				
Vinyl acetate	ND	ug/l	5000				
4-Methyl-2-pentanone	ND	ug/l	5000				
2-Hexanone	ND	ug/l	5000				
Ethyl methacrylate	ND	ug/l	5000				
Acrolein	ND	ug/l	13000				
Acrylonitrile	ND	ug/l	5000				
SURROGATE RECOVERY							
1,2-Dichloroethane-d4	92.0	%					
Toluene-d8	101.	%					
4-Bromofluorobenzene	98.0	%					

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number: L9303958-10 Date Received: 17-MAY-93
TRIP BLANK
Sample Matrix: WATER Date Reported: 18-MAY-93

Condition of Sample: Satisfactory Field Prep: None

Number & Type of Containers: 1 Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS				1 8260		18-MAY
Methylene chloride	ND	ug/l	5.0			
1,1-Dichloroethane	ND	ug/l	1.5			
Chloroform	ND	ug/l	1.5			
Carbon tetrachloride	ND	ug/l	1.0			
1,2-Dichloropropane	ND	ug/l	3.5			
Dibromochloromethane	ND	ug/l	1.0			
1,1,2-Trichloroethane	ND	ug/l	1.5			
2-Chloroethylvinyl ether	ND	ug/l	10.			
Tetrachloroethene	ND	ug/l	1.5			
Chlorobenzene	ND	ug/l	3.5			
Trichlorofluoromethane	ND	ug/l	5.0			
1,2-Dichloroethane	ND	ug/l	1.5			
1,1,1-Trichloroethane	ND	ug/l	1.0			
Bromodichloromethane	ND	ug/l	1.0			
trans-1,3-Dichloropropene	ND	ug/l	1.5			
cis-1,3-Dichloropropene	ND	ug/l	1.0			
Bromoform	ND	ug/l	1.0			
1,1,2,2-Tetrachloroethane	ND	ug/l	1.0			
Benzene	ND	ug/l	1.0			
Toluene	ND	ug/l	1.5			
Ethylbenzene	ND	ug/l	1.0			
Chloromethane	ND	ug/l	10.			
Bromomethane	ND	ug/l	2.0			
Vinyl chloride	ND	ug/l	3.5			
Chloroethane	ND	ug/l	2.0			
1,1-Dichloroethene	ND	ug/l	1.5			
trans-1,2-Dichloroethene	ND	ug/l	1.5			
Trichloroethene	ND	ug/l	1.0			
1,2-Dichlorobenzene	ND	ug/l	10.			
1,3-Dichlorobenzene	ND	ug/l	10.			
1,4-Dichlorobenzene	ND	ug/l	10.			
Methyl tert butyl ether	ND	ug/l	10.			
Xylenes	ND	ug/l	1.0			
cis-1,2-Dichloroethene	ND	ug/l	1.0			
Dibromomethane	ND	ug/l	10.			
1,4-Dichlorobutane	ND	ug/l	10.			
Iodomethane	ND	ug/l	10.			

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9303958-10

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS continued				1	8260		18-MAY
1,2,3-Trichloropropane	ND	ug/l	10.				
Styrene	ND	ug/l	1.0				
Dichlorodifluoromethane	ND	ug/l	10.				
Acetone	ND	ug/l	10.				
Carbon disulfide	ND	ug/l	10.				
2-Butanone	ND	ug/l	4.5				
Vinyl acetate	ND	ug/l	10.				
4-Methyl-2-pentanone	ND	ug/l	10.				
2-Hexanone	ND	ug/l	10.				
Ethyl methacrylate	ND	ug/l	10.				
Acrolein	ND	ug/l	25.				
Acrylonitrile	ND	ug/l	10.				
SURROGATE RECOVERY							
1,2-Dichloroethane-d4	95.0	%					
Toluene-d8	98.0	%					
4-Bromofluorobenzene	96.0	%					

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE DUPLICATE ANALYSIS

Laboratory Job Number: L9303958

Parameter	Value 1	Value 2	RPD	Units
Dissolved Metals	DUPLICATE for sample(s) 06-07			
Mercury, Dissolved	ND	ND	NC	mg/l

RUSH!!

CHAIN OF C[illegible]RECORD

Rizzo Associates, Inc.
235 West Central Street
Natick, MA 01760
(508) 651-3401
(508) 651 1189 (FAX)

Rizzo Project Number: 2813-01
Rizzo Project Name: Fleet / Rochester
Samplers (signatures):

Lab: Alpha
Lab ID #:
Send report to: KEN JAEGER
Turnaround Time: 2 day Tuesday PM.

Rizzo Sample Number	Sample Depth	Sample Location	Sample Collected		Container			Sample Matrix	Requested Analyses
			Date	Time	#	Type	Preservative		
FR-SS-RZ4-10 FT			5/13			1 8 oz	No	Soil	Pest Scan + Napths
FR-SS-RZ5-8 FT			"			1 8 oz 1 VOA	NO	"	" 8260 VOA
FR-SS-SHED-107			5/14			"	"	"	" "
FR-GW-RZ1-101						2 VOA, 1 amber	Water	HCl	" "
RZ2-102						" "			" "
RZ3-103						" " 1 plastic			" " 1 sil. 13 PP metals + C
RZ6-104						" " 1 plastic			" " "
RZ7-105						2 VOA 1 amber			" "
RZ8-106						2 VOA			" "
Trip blank						1 VOA			~~" "~~

Relinquished by:

Received by: FED EX

Date: 5/14/93

Time: @ 4:00

Method of Shipment: Courier to Lab