Watershed Environmental Services, Inc.

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UST SITE INVESTIGATION REPORT

KEITH'S SALVAGE YARD
Plains Road
Pittsford, Vermont
VANR SMS #98-2437

Prepared for:

Keith's Salvage
Plains Road
P.O. Box 33
Pittsford, VT 05763

Prepared and Approved by:

Michael K. Sparks, REM #5770
Principal Hydrogeologist

January 7, 1999

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1.0 INTRODUCTION

On November 3, 1998 Watershed Environmental Services was retained by Keith's Salvage to perform an environmental site investigation designed to assess the degree and extent of petroleum contamination detected at the site of a 1000 gallon diesel fuel underground storage tank (UST) removed from the ground at the Keith's Salvage Yard property on Plains Road in Pittsford, Vermont. The 1000 gallon diesel fuel UST and a 4000 gallon gasoline UST, both reportedly out-of-service since circa 1985, were removed from the property on May 22, 1998. The property has been the site of a vehicle salvage and repair business since circa 1953. Site location maps are provided in Appendix 1.

The stated purpose of this investigation is to assess the present condition of soil and groundwater on the premises, with emphasis on evaluating the potential for petroleum contaminants to impact sensitive receptors in the vicinity of the diesel fuel release. The environmental site screening of the Keith's Salvage property entailed only limited research of land use activities at the site, focusing instead on the performance of a walk-through inspection of the property, the excavation of soil borings with field screening for volatile organic compounds (utilizing a photoionization detector), and the installation of monitoring wells to facilitate the collection of groundwater samples for laboratory analysis. Soil boring logs are provided in Appendix 2 while Appendix 3 contains the laboratory reports for the groundwater quality assays.

Research of the property's land use history relied mainly upon information provided by landowner Bob Keith, examination of aerial photographs of the site, and review of the Vermont Agency of Natural Resources Waste Management Division (VANR WMD) Sites Management Section records. Several historic photographs of the site (dating back to 1954), as well as a series of recent photographs documenting the subsurface exploration of the property are provided in Appendix 4.

2.0 PREVIOUS WORK AND LAND USE HISTORY

On May 14, 1998 Watershed Environmental Services, Inc. discovered two abandoned underground storage tanks (USTs) on the premises of Keith's Salvage in Pittsford, VT during the performance of a preliminary environmental site inspection. Watershed Environmental Services was then retained by Keith's Salvage to monitor and supervise the removal of the two abandoned USTs.

The UST removals were completed on May 22, 1998. Excavation services were provided by Dick Conway Excavating of Pittsford. The UST cutting and cleaning operations were performed by MacIntyre Fuels of Middlebury, VT. The closed USTs were a 4000 gallon gasoline tanks (Tank #1) and a 1000 gallon diesel fuel oil tank (Tank #2). The two tanks were located adjacent to the north side of the salvage yard's office building. Also removed was the underground piping connecting the USTs to a fuel dispensing pump island located approximately 35 feet northwest of the tank site. A Copy of the Underground Storage Tank Permanent Closure Form submitted to the Vermont Agency of Natural Resources Waste Management Division (VANR WMD) are provided in Appendix 1 (pages 5 and 6). Photographs taken during the UST removal operation are provided in Appendix 4.

The 4000 gal. gasoline UST was found to be in good condition and no evidence of gasoline contamination was detected in the surrounding soil. However, a small perforation was observed in the bottom of the east end of the 1000 gallon diesel fuel UST and a narrow column of soil directly under the east end of the tank was found to be contaminated with diesel fuel as evidenced by staining in the soil and photoionization detector (PID) vapor readings of up to 250 parts per million (ppm). A test pit excavation at the east end of the diesel fuel UST determined that the level of contamination decreased with depth, however the vertical limit of contamination could not be determined as the depth of the contamination exceeded the reach of the excavator.

The two product lines removed from the ground between the tank site and the nearby fuel dispensing pump island were found to be good condition; no pitting or perforations were visible in the piping. Additionally no PID readings, petroleum odors or staining were detected in soil samples collected from the piping trench line.

No contaminated soil was removed or stockpiled at the site. As the limits of the contamination could not be verified at the time of the UST closure, all contaminated soils excavated during the tank removal and test pit investigation were returned to the excavation. The balance of the excavation was backfilled with clean fill trucked to the site by Dick Conway Excavating. The cleaned tank carcasses and piping fixtures are stored on-site in the salvage yard area; they will eventually be disposed through scrap metal recycling. Approximately 30 gallons of fuel was removed from the diesel fuel tank. The diesel fuel will be re-used as fuel. The gasoline tank was clean and dry. Less than 5 gallons of diesel sludge generated during the tank cleaning was stored with other shop wastes to be disposed at a later date.

In accordance with State regulations, an environmental site assessment was performed during the UST removal and a report on the findings of the site assessment was submitted to the VANR WMD (*Keith's Salvage Underground Storage Tank Closure Report, May 22, 1998*, Watershed Environmental Services, Inc., July 22, 1998). In response to the discovery of petroleum contamination at the former UST site, on October 9, 1998 the VANR WMD placed Keith's Salvage Yard on the Vermont Hazardous Sites List (#98-2437). The VANR WMD subsequently requested the completion of a follow-up investigation designed to ascertain the extent of the petroleum contamination and evaluate the potential for the contamination to impact potentially sensitive receptors. A copy of the VANR WMD's November 10, 1998 letter to Keith's Salvage requesting the additional work is provided in Appendix 1 (pages 7-9).

Review of the latest edition of the Vermont Hazardous Sites List (dated October 9, 1998) found that there are nine other hazardous sites in the Town of Pittsford. Excerpts of the Vermont Hazardous Sites List for containing the listings of the hazardous sites in Pittsford are provided in Appendix 1 (pages 10 and 11). Of the nine listed sites, only one site, the Caverly Early Childhood Education Building (site #951784) located on Plains Road is the only site in the immediate vicinity of the Keith's Salvage Yard property (approximately 1000 feet to the west). However, as will be discussed in the following sections of this report, the Caverly Early Childhood Education site is located hydraulically down-gradient of the Keith's Salvage Yard property and is therefore not considered to pose a threat to environmental conditions on the Keith's Salvage Yard property.

According to current property owner Bob Keith, automotive salvage activities have occurred at the site since circa 1953. Prior to this, the property is believed to have been used primarily for agricultural purposes. Appendix 4 contains a series of aerial photographs of the Keith's

Salvage Yard property. According to Bob Keith, the photographs were taken in circa 1954, 1964, 1972 and 1995. The photographs document the development of the property over the years, which has consisted primarily of additions to the original office/shop building and the construction of the metal warehouse building (in circa 1970). The photographs also show a marked increase in the number of salvaged vehicles stored on the premises between 1954 and 1964. Between 1964 and 1995 the number of which appears to have remained relatively constant. Within the last year the number of autos stored on premises has been reduce considerably.

Historically, operations at the site have primarily involved the dismantling of vehicles for salvage (scrap metal recycling) and sales of used parts. While batteries are removed from vehicles prior to their placement in the storage area, components such as motors, transmissions, radiators, etc. remain in the vehicles until needed or sold. Batteries are stored inside the main building and removed periodically by R. Brown & Sons. Gasoline recovered from salvaged vehicles is immediately reused by the business' employees. No significant quantities of gasoline are stored or disposed onsite. The recovered gasoline is stored temporarily in 5 gallon gas cans until used.

According to Bob Keith, only light repairs and vehicle maintenance is performed in the office/shop building and the motor fuel USTs were for company use only - no services or fuel were dispensed commercially. Waste oil is collected and stored on-site in 55 gallon drums and periodically removed from the site by a local business which utilizes the waste oil for heating (waste oil furnace). No large accumulations of regulated wastes were observed on the premises during the course of this site assessment.

3.0 PHYSIOGRAPHIC SETTING

Keith's Salvage Yard is an automotive salvage business located on the south side of Plains Road in the town of Pittsford, VT. The property is located approximately 2000 feet east of Route 7 on the northern outskirts of Pittsford village (see U.S.G.S. Topographic Map Section-Site Map, Appendix 1, page 1).

The Keith's Salvage Yard property is an approximately 2.5 acre (estimated) lot on which are located a 5500 sq. ft. concrete block garage and office building and a 3500 sq. ft. metal warehouse building. Until their removal in May, 1998, a 4000 gallon gasoline underground storage tank (UST) and a 1000 gallon diesel fuel UST were also located on the premises. A portion of the concrete block building is currently leased by a woodworking business and the metal warehouse building is leased by Tents for Events, a tent rental business .

The main office/shop building is of concrete block construction with a concrete slab-on-grade foundation. There are two vehicle service bays in the building - a large bay on the southeast side of the building and a smaller bay in the west end of the building. Only one floor drain was found in the building; it is located in the larger service bay. According to Bob Keith, the floor drain discharges to a dry well located under the building. PID screening of the floor drain yielded no detectable vapor concentrations.

Inspection of the shop area where vehicle repair and servicing is performed found it to be in to be in reasonable condition. Although the concrete floor was stained in places, no significant amounts of petroleum residue were observed. The concrete floor in the shop area was in good condition (i.e. no large cracks) and no floor drains or other penetrations in the concrete floor were found. No parts cleaning devices or large containers of parts cleaning

solvents were observed in the building. The building is heated by a no.2 fuel oil furnace; the fuel oil is stored indoors in a 275 gallon aboveground storage tank.
The warehouse building on the west end of the property is of steel construction with a slab-on-grade concrete foundation. There are no floor drains in the warehouse building. The building is heated via a fuel oil-fired furnace; the fuel oil (no.2 oil) is stored in a 275 gallon aboveground storage tank located inside the building. The building does not have water or sewer services.

The only other permanent structure on the property is a small wood and metal shed (open on the south side) with an earth floor located in the vehicle storage yard at the rear (south) side of the office/shop building. The shed was found to contain only building products such as lumber and sheet metal; no containers of regulated substances were found in the shed.

Semi-permanent structures on the property consist of two parked semi-trailers utilized by Tents for Events for storage of tents and related hardware. No regulated substances or hazardous wastes are stored in the semi-trailers.

The southern portion of the property is utilized for the storage of salvaged automobiles and as a transfer station for scrap metal and appliances. Salvaged vehicles are stored onsite until such time as it is determined that all reusable components have been removed. Stripped and wrecked vehicles are typically crushed and removed from the site once per year by R. Brown & Sons of Colchester, VT. The scrap metal and appliances are also crushed and removed from the site by R. Brown & Sons

Although several small patches of stained/discolored soil were observed on the ground surface in the vehicle storage area, the majority of the area was free of any visible contamination. Additionally, no petroleum sheens were visible on water ponded in mud puddles (the inspection was conducted just after a rain storm) in the access corridors throughout the yard. No petroleum odors were noted during the inspection.

The are no water supply wells on the property. The property is served by a municipal water supply system (Champlain Water District). Septic wastewater is disposed on-site via a leaching bed disposal system with includes a 1000 gallon septic tank. The septic disposal field is located on the north side of the office/shop building near the former location of the underground petroleum storage tanks.

The two abandoned underground storage tanks discovered on the property were located adjacent to the north wall of the salvage yard's office building (see Site Diagram, Appendix 1, page 3). According to property owner Bob Keith the USTs had been out of service since circa 1985. The actual age of the UST system is not known is reported to be at least 40 years old. The site does not have a history of known petroleum spills or releases. There are no other USTs on the premises.

The Keith's Salvage property is bounded to the north by Plains Road beyond which are located several single-family dwellings; to the east by a single-family dwelling (a trailer home); to the south by a commercial building beyond which is a single-family dwelling; and to the south by lands owned by the State of Vermont (former Vermont Sanitarium). The closest dwelling to the UST site is a trailer home located approximately 85 feet to the east.

Topographically the UST site is relatively flat although the overall topography of the area slopes to the west-southwest at a gradient of 1% to 2%. The Keith's Salvage property is near southern margin of a large, flat, elongate terrace located at the south side of Cox

Mountain. The western margin of the terrace slopes steeply down to Otter Creek, located approximately 1 mile west of the Keith's Salvage property. The elevation of the terrace is approximately 240 feet higher than the elevation of Otter Creek. The eastern margin of the terrace is bounded by Sugar Hollow Brook (located approximately 1500 ft. from the Keith's site). The southern margin of the site is bounded by a small hillock beyond which is Furnace Brook (located approximately 1 mile from the site). The closest surface waters to the site are wetlands located at the northwest margin of the terrace approximately 600 feet north of the Keith's Salvage site. Given the west-southwesterly slope of the surface topography and the proximity of Otter Creek, the direction of groundwater flow at the Keith's Salvage site should also be to the west-northwest. However, as detailed in the following sections of this report, contouring of the water table using water level measurements taken from the recently installed monitoring wells indicates that groundwater flow at the site is more to the south (see Water Table Contour Map, Appendix 1, page 3).

Soils encountered at the site are predominantly sands and silty sands to a depth of 27 feet below ground surface. Depth to bedrock was ascertained but appears to be deeper than 27 feet. Depths to groundwater at the site range from 18 to 21 feet. There are no water supply wells on the Keith's Salvage property nor within a 1/2 mile radius of the site. Pittsford utilizes a municipal water supply system.

4.0 DEEP SOIL BORING AND GROUNDWATER SAMPLING RESULTS

On November 6, 1998, Watershed Environmental Services, Inc. supervised and monitored the completion of three deep soil borings and groundwater monitoring well installations (designated MW-1, MW-2 and MW-3) at the Keith's Salvage Yard site. The drilling and well installations were completed by Tri State Drilling & Boring of West Burke, VT. A fourth soil boring/monitoring well (designated MW-4) was completed by Adams Engineering of Underhill, VT on December 14, 1998. The locations of the four soil borings/monitoring wells are depicted on the attached site maps (see Appendix 1, pages 2 and 3).

As groundwater at the site was initially thought to flow to the west-southwest (based on the surface topography and drainage patterns), the locations for wells MW-1 and MW-2 were intended to evaluate soil and groundwater conditions immediately down-gradient of the office/shop building and UST site. However water level measurements obtained from the first three wells revealed that groundwater at the site flows in a more southerly direction. As a result, it was determined that none of the first three wells were in a position to fully evaluate subsurface conditions down-gradient of the diesel fuel UST and shop area. Hence the need for the completion of the fourth soil boring/monitoring well.

The soil borings and well installations performed by Tri State Drilling & Boring of West Burke, VT utilized a rotary hollow-stem auger drilling machine. Soil samples were recovered at 5 ft. intervals in advance of the augers via a split-spoon sampling tool. The last soil boring and well installation (MW-4) completed by Adams Engineering utilized vibratory push drilling techniques with continuous soil sample recovery via an NQ core barrel with a polyethylene liner.

Soils recovered from the ground during the soil boring were visually inspected, logged and screened for the presence of volatile organic compounds (vapors) with a photoionization detector or PID (H-Nu Systems model PI-101 with a 10.2 eV lamp). The soil sample

screening procedure entailed the placement of soils in a self-sealing plastic bag. After allow several minutes for the sample to equilibrate, the PID probe end was placed into the bag to screen the sample bag head space for vapors. Soil descriptions and the PID screening results are provided in the attached Soil Boring Logs (see Appendix 2, pages 1-4).

4.1 Soil Boring Results

Soil descriptions and PID screening results for soil samples recovered during the soil boring operation are provided in the attached Soil Boring Logs (Appendix 1, pages 1-4). The first soil boring (MW-1) was located approximately 50 feet northwest of the UST site (see Site Map, Appendix 1, page 2). Soils encountered at the site consisted of a veneer of gravel fill overlying a thick sequence of very fine to medium sands containing lenses of silt and coarse sands. No PID vapor readings or odors were detected upon penetrating the asphalt pavement nor in the upper 15 feet of the soil profile. However, soil recovered from 15 to 17 feet below ground surface yielded a PID vapor reading of up to 7.5 parts per million (ppm) although no odors were detectable. The elevated PID readings coincided with the presence of small nodes or droplets of dark red-brown discoloration in the wet, silty fine sand soil. Groundwater was encountered at approximately 17 feet below ground surface (bgs). No petroleum sheens were observed in the saturated soil. The PID vapor readings then decreased with depth (0.5 ppm at 25 to 27 feet below ground surface).

The second soil boring (MW-2) was located 70 feet northwest of the office/shop building. Soil recovered at this location were similar to those found at boring site MW-1). However, the highest PID reading recorded at this location was 0.5 ppm at the 25-27 ft. interval. The overlying soil yielded PID readings ranging from 0 to 0.2 ppm. No petroleum sheens or odors were noted, although soil recovered from within the water table evidenced the same node-like discoloration as was seen at boring MW-1.

The third soil boring (MW-1) was intended to evaluate subsurface conditions up-gradient of the UST site and office/shop building but down-gradient of the small wooden shed and vehicle storage area. The soil boring was located at the northwest (down-gradient) corner of the wooden shed situated approximately 35 south of the office/shop building. The soil profile at this location was sandier than was observed on the north side of the office/shop complex, consisting predominantly of fine to medium sands with some coarse and pebbly sand lenses. No petroleum odors, sheens or discoloration was observed in the subsoil sampled to a depth of 27 feet. Additionally, the highest PID vapor reading recorded was only 0.2 ppm.

The fourth and last soil boring was completed just off the southeast corner of the metal warehouse building. The soil profile at this location consisted of fine to medium sands with some coarse sand and pebbly sand lenses. No PID-detectable vapors were present in the upper 20 feet of the soil profile although a slightly elevated PID reading of 2 ppm over background was detected at 20 to 25 feet bgs. No discoloration, petroleum sheens or odors were discernible in the subsoils at this location which, based on the contouring of the water table, is hydraulically down-gradient of the UST site and the office/shop building complex.

While the presence of PID-detectable volatile organic vapors in the subsoil is likely indicative of contamination, it may also be the result of natural organic decay (as

occurs in wetland areas) or a combination of the two. A PID reading of 0.5 is considered to be a low value and at the margin of the photoionization detector's limit of accuracy. Ambient air PID vapor readings generally fluctuate between 0 and 0.5 ppm in busy commercial and vehicle traffic areas (exhaust gases, fuel and chemical fumes, etc.) As a yard stick, the VTDEC limit for gasoline contamination in soils (backfill limit) is 20 ppm for gasoline and 10 ppm for no.2 fuel/diesel fuel oil contaminated soils. However, heavy petroleum products and waste oils and some chlorinated compounds typically excite a low PID response so the PID readings measured at the Keith's Salvage Yard site are best evaluated in conjunction with the groundwater quality sampling results.

Soil borings MW-1, 2 and 3 were completed with the installation of 2 inch PVC monitoring wells, installed to water quality-grade specifications (filter sand pack, bentonite seals). The monitoring well was constructed with 10 or 15 ft. sections of factory-slot (0.010 ft slot perforations) screen centered on the water table. Soil boring MW-4 was completed with the installation of a 1-1/2" Monoflex well, also installed to water quality-grade specifications. Well construction details are provided in the attached Soil Boring Log and well driller's log (Appendix 1).

4.2 Groundwater Sampling Methodology and Procedure

Monitoring wells MW-1, 2 and 3 were developed and sampled by Watershed Environmental Services on November 10, 1998. Monitoring well MW-4 was developed by Adams Engineering and sampled by Watershed Environmental Services on December 14, 1998. The locations of the four groundwater monitoring well sites are depicted on the attached Site Map (Appendix 1, page 2). Upon completion of the groundwater sampling activity, the groundwater samples and a trip blank sample (for QA/QC of the sample containers and sample handling procedures) were delivered to the testing laboratory (Endyne, Inc. in Williston, VT) for analysis.

Prior to developing the wells for sampling, water level measurements were taken and the wells were checked for the presence of free phase product. The water level measurements along with the well point elevation data are tabulated in Table 1 provided in Appendix 1 (page 4). In preparation for sampling, a minimum of three well-volumes of groundwater were removed from each well during the well development procedure to insure sampling of fresh groundwater. After development, the disposable bailers were used to collect the record groundwater samples. A new bailer was utilized at each sampling location.

The groundwater samples were collected in 40 ml glass VOA vials, preserved with 10% HCl (to prevent bacterial degradation of any organic contaminants in the groundwater sample) and placed on ice in a cooler until delivery to the laboratory. At the beginning of the groundwater sampling operation a trip blank sample of distilled water sample placed in a VOA vial similarly preserved and delivered to the laboratory with the record samples.

The water samples were analyzed at Endyne, Inc. laboratories for purgeable volatile organic compounds via either EPA Method 8240 (wells MW-1, 2, and 3) or 8260B (well MW-4). Groundwater samples from wells 1-3 were also analyzed for Total Petroleum Hydrocarbons via Modified EPA Method 8100. The Endyne laboratory report forms are provided in Appendix 3. The absence of detectable contamination in the trip blank sample and the sample matrix spike, duplicate and quality control

analysis results indicate that the sampling handling and laboratory performance was within acceptable QA/QC limits (Appendix 3, pages 1 and 2).

The EPA Methods 8240 and 8260B analyses are broad-based tests designed to test for the more common constituents of gasoline, fuel oil/ diesel fuel, waste oil and cleaning solvents. The Modified EPA Method 8100 analyses are designed to test for the presence of the semi-volatile components of petroleum products. No toxic metals, pesticide or PCB testing was performed on groundwater sampled at the Keith's Salvage Yard, as none of these contaminants are known to have been released at the subject property or at any of the neighboring properties.

4.3 Field Measurements and Observations

The results of the water level gauging are tabulated on the attached Table 1 (see Appendix 1, page 4). Depths to the water table at the site as measured on November 10, 1998 ranged from approximately 17.9 feet at well MW-1 to 18.8 feet at well MW-3. Contouring of the water table elevations calculated for the groundwater monitoring wells indicates that groundwater flow is predominantly to the south at a gradient of approximately 1.4% (see Water Table Contour Map, Appendix 1, page 3).

The water table contouring indicates that monitoring well MW-4 is in the best position to intercept any dissolved phase contaminants migrating from the leaking diesel fuel UST site and the office/shop building area (particularly the floor drain dry well under the eastern service bay). Inspection of groundwater removed during the well development operation found no evidence of free phase product or petroleum sheens in groundwater at any of the four monitoring well sites. All the wells recharged quickly.

4.4 Groundwater Analytical Results

The results of the EPA Method 8240/8260B and Modified EPA Method 8100 laboratory assays of groundwater collected from the monitoring well array are tabulated below.

TABLE 2
November 10 and December 14, 1998 Groundwater Sampling Results

EPA Method 8240/8260B	GWES (ug/L)	STATION / CONCENTRATION				
PARAMETER		MW-1	MW-2	MW-3	MW-4	Trip Blank
Benzene (ug/L)	5	<10	<20	<1	<1	<1
Ethylbenzene (ug/L)	700	193	<1	<1	<1	<1
Toluene (ug/L)	1000	<10	<1	<1	<1	<1
Xylene (ug/L)	10000	1150	<2	<2	<2	<2
MTBE (ug/L)	40	<20	<2	2.3	<2	<2
Acetone (ug/L)	700	<200	<20	<20	<20	<20
Carbon Tetrachloride (ug/L)	5	<10	<1	<1	<1	<1
Tetrachloroethene (ug/L)	5	<10	<1	<1	<1	<1
Trichloroethylene (ug/L)	5	<10	<1	<1	<1	<1
Unidentified Peaks		>10	0	0	0	0
EPA Method 8100						
Total Petroleum Hydrocarbons (mg/L)		3.22	<0.4	<0.4	na	<0.4

GWES = Groundwater Enforcement Standard, VANR Chapter 12 Groundwater Protection Rule and Strategy, 11/97

The sampling results for monitoring well MW-1 indicates that the diesel fuel oil released at the former 1000 gallon underground storage tank site has impacted groundwater, however the degree of impact is below the Groundwater Enforcement Standard or GWES (VANR *Chapter 12 Groundwater Protection Rule and Strategy, 11/97)* for the compounds detected (Ethyl Benzene and Xylene). As illustrated in Table 2, the concentrations of Ethyl Benzene and Xylene detected in groundwater are well below their respective GWES limits. The Total Petroleum Hydrocarbon concentration of 3.22 mg/L in groundwater is not considered to pose a significant health risk due to the absence of receptors in the vicinity of the site.

The only other contaminant present in detectable concentrations in groundwater at the site is MTBE (2.3 ug/L detected at monitoring well MW-3). . MTBE is most typically associated with gasoline product (added to gasoline as an anti-knock compound upon implementation of the Federal ban on lead additives in gasoline). Given the absence of any other common gasoline constituents (namely Benzene, Toluene, Ethylbenzene and Xylene - also known as BTEX) in groundwater at well location MW-3, it is possible that the MTBE detected in groundwater at the site is the result of cross-contamination during the soil boring operation (contaminated soil drawn down into the water table by the augers). Nonetheless, as the GWES for MTBE is 40 ug/L, the level of MTBE in groundwater at this location is well within permissible limits.

Lastly, it should be noted that no Chlorine-based compounds were detected in any of the groundwater sampled at the site. The absence of these compounds (particularly Tetrachloroethylene, and Trichloroethene), appears to confirm the findings of the land use research which indicated that chlorinated solvent-type cleaners and degreasers were not utilized at the site in significant quantities.

5.0 CONCLUSIONS

On the basis of the information and data referenced in this report, the results of investigation of the Keith's Salvage Yard property on Plains Road in Pittsford, VT indicates that the diesel fuel released to the subsurface environment at the former 1000 gallon diesel fuel UST site has not significantly impacted groundwater quality conditions on the property. Additionally, the soil and groundwater quality testing results indicate that the petroleum contamination present at the site is unlikely to threaten potentially sensitive receptors either on-premises or on neighboring properties. The testing results also indicate that other activities associated with the operation of the automotive salvage business have not significantly impacted soil and water quality conditions at the site.

While evidence of minor petroleum releases to the ground surface at the site was detected, none of the testing data, visual observations or land use research information leads us to believe or suspect that hazardous materials have been intentionally disposed on the premises. The areas of visible contamination on the ground surface appear to originate from the crushing, dismantling, and storage of motor vehicles and automotive components in the storage area at the southern end of the property. Based on the results of the testing performed in support of this investigation, the petroleum contamination present in the near surface portion of the soil profile appears to be neither severe nor extensive. Exposure to sun light and air appears to have facilitated the natural degradation of the surface contaminants. In any case, the results of in-field PID screening and laboratory analysis of groundwater samples indicates that the presence of petroleum contaminants in the near surface soil horizon have not significantly impacted water quality at the site. This is likely

due in part to the significant separation between the ground surface and the water table at the site (ranging from 19 to 21 feet).

Although an indeterminate quantify of diesel fuel oil was released to the subsurface environment at the site of the perforated 1000 gallon underground storage tank, the results of soil and groundwater quality testing indicate that the release has not significantly impacted groundwater quality at the site. Considering that the source of the contamination (the UST) has been removed, and given that the zone of contamination appears to be neither vertically nor laterally extensive, we conclude that the residual contamination is likely degrade without significantly impact to neighboring properties or sensitive receptors in the vicinity of the site. None of the contaminants present in groundwater at the site (Ethyl Benzene, Xylene and MTBE) were detected in concentrations that exceed the State (and Federal) limits for these compounds in groundwater.

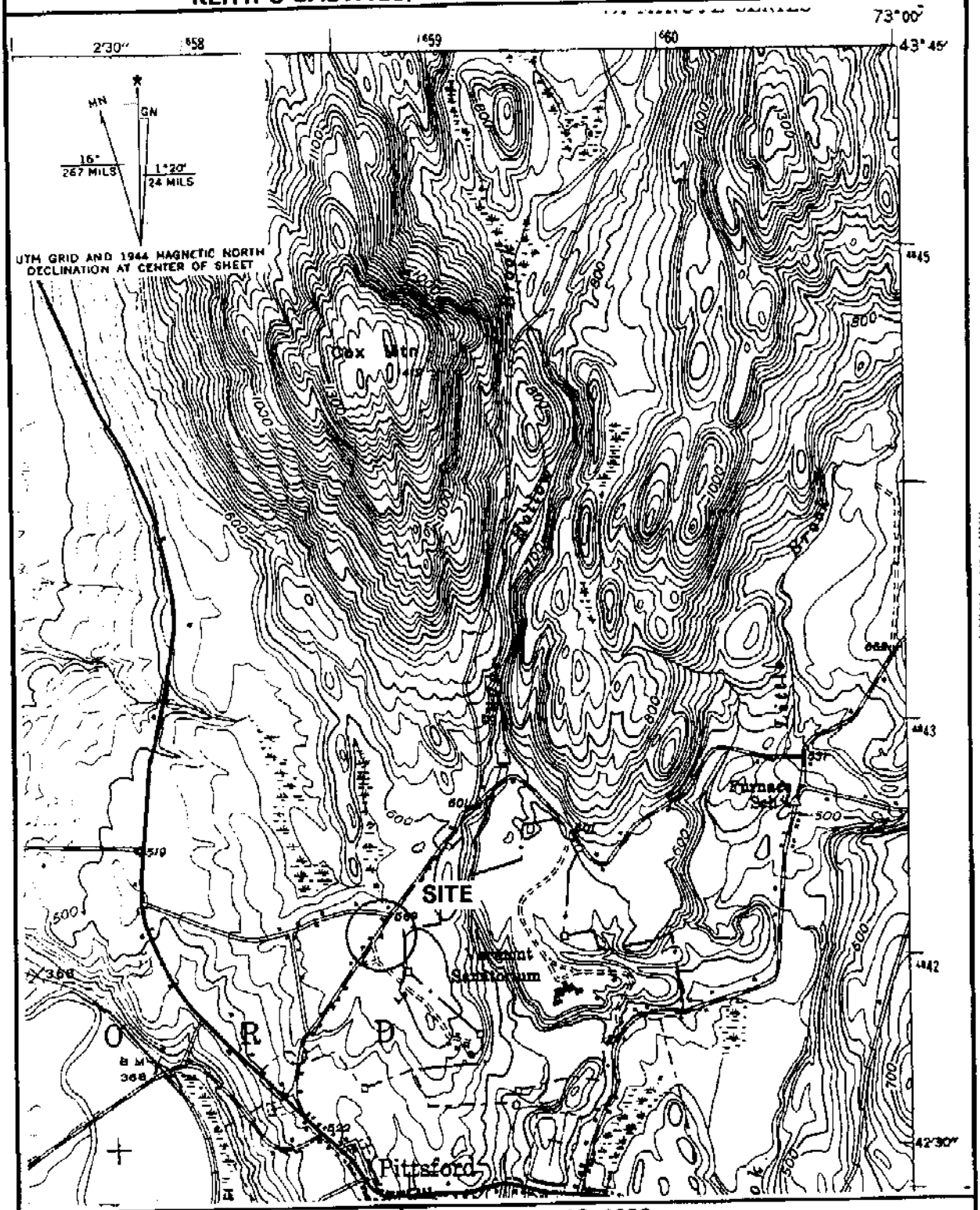
Review of current land use activities at the site, particularly in regard to waste storage and disposal practices, found that the Keith's Salvage Yard business is properly disposing of hazardous materials generated through the salvaging, repair, and servicing of motor vehicles.

6.0 RECOMMENDATIONS

In consideration of the aforementioned conclusions regarding the condition of soil and groundwater proximal to the former 1000 gallon diesel fuel UST, we submit that no further testing is required at the Keith's Salvage Yard site and recommend the site for closure.

U.S.G.S TOPOGRAPHIC MAP SECTION - SITE MAP

KEITH'S SALVAGE, PLAINS ROAD, PITTSFORD, VT



Scale: 1: 24,000
Contour Interval: 20 ft.
Map Source:
U.S.G.S. Proctor Quadrangle, 1944
U.S. Geological Survey

Prepared: June 18, 1998

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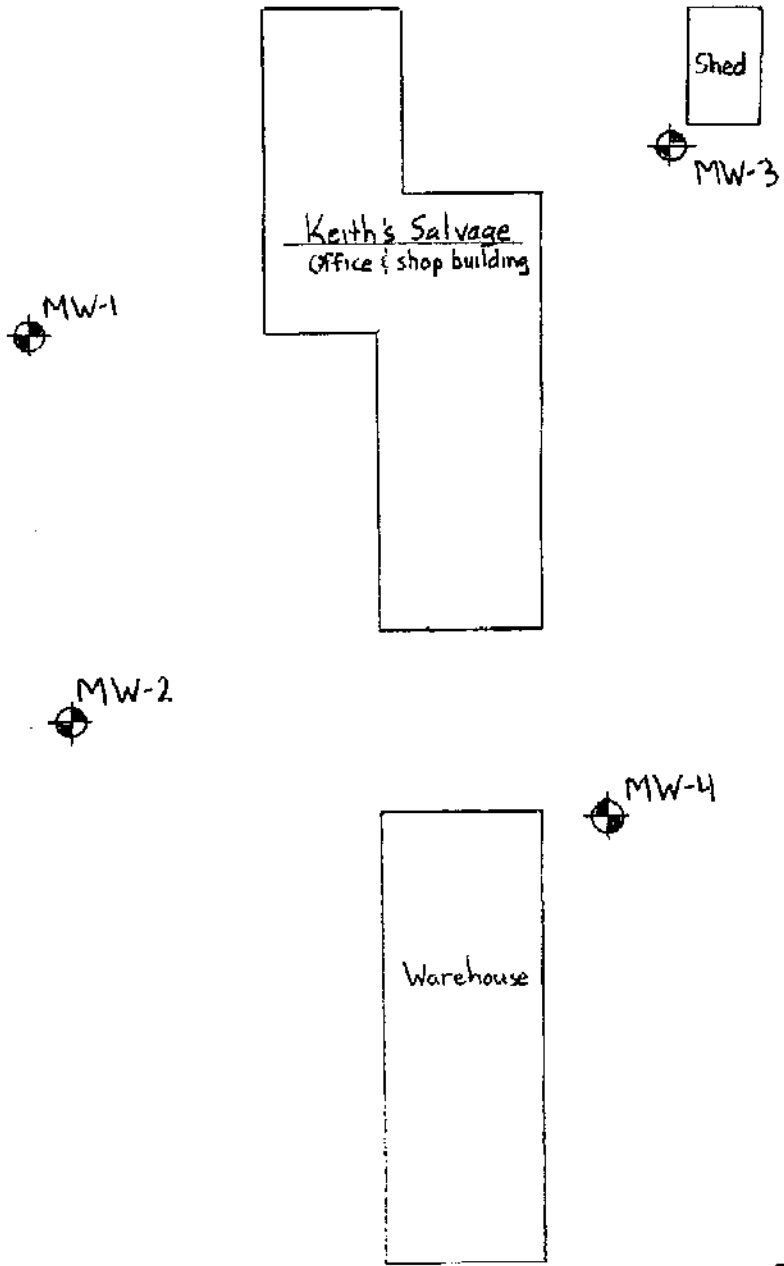
SITE MAP

KEITH'S SALVAGE, PLAINS ROAD, PITTSFORD, VT



Scale: 1 inch = 40 feet

MW-1 Groundwater monitoring well

Prepared: December 5, 1998

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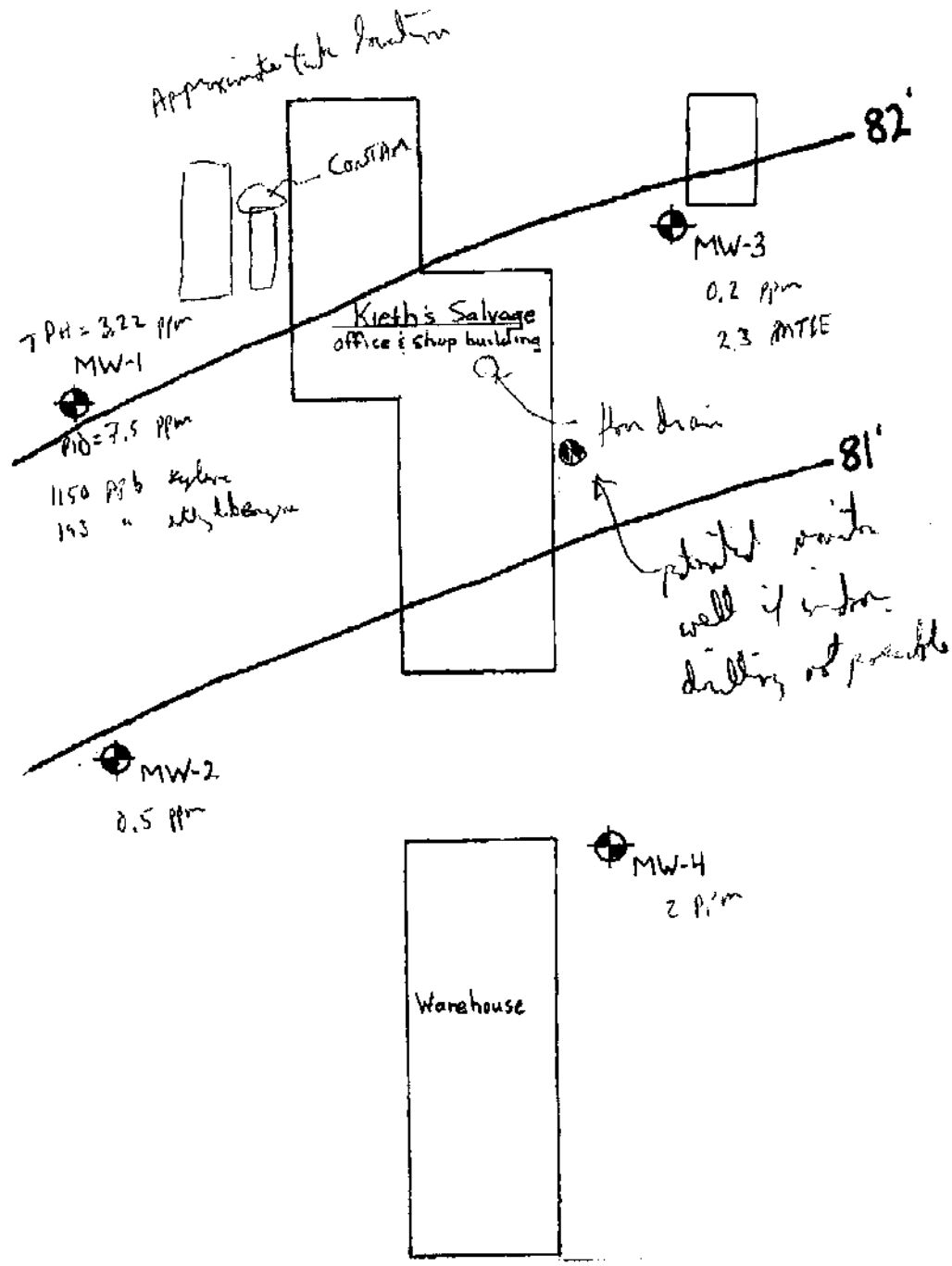
WATER TABLE CONTOUR MAP

KEITH'S SALVAGE, PLAINS ROAD, PITTSFORD, VT



Scale: 1 inch = 40 feet

MW-1 Groundwater monitoring well

Prepared: December 15, 1998

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KEITH'S SALVAGE
PLAINS ROAD, PITTSFORD, VT

TABLE 1
MONITORING WELL POINT AND GROUNDWATER ELEVATIONS
NOVEMBER 10, 1998

STATION	WELL ELEVATION (Top of Pipe)	WATER LEVEL	WATER TABLE ELEVATION
MW-1	100	17.92	82.08
MW-2	100.06	19.1	80.96
MW-3	100.71	18.77	81.94

Notes:
Measurements in decimal feet
Bench mark: top of pipe MW-1
Bench mark elevation: 100.00 feet

Watershed Environmental Services, Inc.
P.O. Box 64947 Burlington, Vermont 05406

UNDERGROUND STORAGE TANK PERMANENT CLOSURE FORM

Agency Use Only
Facility ID#
Date of scheduled activity: 5/22/98
Facility Town: PITTSFORD
DEC Official: SC Eval by:

Vermont Agency of Natural Resources
Dept. of Environmental Conservation
Waste Management Division
103 South Main Street, West Building
Waterbury, Vermont 05671-0404
Telephone: (802) 241-3888

Site assessment company: Watershed Environmental Services
Site assessor: Mike Sparks
Phone Number of company or person: (802) 860-1385
Date of UST closure: 5/22/98
Date of site assessment: 5/22/98

Section A. Facility Information:
Name of facility: KEITH'S SALVAGE Number of employees:
Street address of facility: Plains Rd Pittsford, VT 05763
Owner of UST(s) to be closed: Keith's Salvage Contact(if different than owner): Bob Keith
Mailing address of owner: P.O. Box 33 Pittsford
Telephone number of owner: Contact telephone #: 483-2563

Section B. UST Closure Information: (please check one)
Reason for initiating UST closure: __Suspected Leak __Liability __Replacement ✓Abandoned
Which Portion of UST is to be closed: __Tanks __Piping ✓Tanks & Piping

USTs (piping is considered a part of UST system) undergoing permanent closure. Include condition of USTs

UST #	Product	Size (gallons)	Tank age	Tank Condition	Piping age	Piping condition
Tank #1	Gas	4000 gal	Unknown 24 years	Good	Unknown	Good
Tank #2	Diesel	1000 gal	Unknown 24 years	Poor - Holes	Unknown	Good

Which tanks, if any, will be closed in-place: USTs# No Authorized by: Date: / /
Disposal/destruction of removed UST(s): Location On-Site Method Hole Punched Date: / /
Amount (gal.) and type of waste generated from USTs: N/A
(tank contents are hazardous wastes unless recovered as usable product)
Tank cleaning company (must be trained in confined space entry) Mac Intype Tank
Certified hazardous waste hauler: N/A Generator ID number:

Section C. Initial site characterization:
Work in this section must be completed by a professional environmental consultant or hydrogeologist with experience in environmental sampling for the presence of hazardous materials. A full report from the consultant must accompany this form.

PID information:
Make: H-Nu Model: PI-101 w/10.2eV Calibration information (date, time, gas): 5/22/98 9:30am Isobutylene

Excavation information: *(some tank pulls require more than one excavation)*

Tank(s) # and Excavation (A,B,C,etc)	Depth (ft)	Excavation size(ft²)	Peak PID reading	Depth of Peak (ft)	Avg PID reading	Bedrock Depth (ft)	Groundwater encountered? (y/n) and at depth (ft)	Soil type
Tank #1	8'	240'	3500 ppm	8.5'	1 ppm	>9'	No	Pebbly Fine-Medium sand
Tank #2	6.5'	64'	250 ppm	6.5-8.0'	100 ppm	>9'	No	" " " "
Piping	1'	70'	70 ppm	1'	20 ppm	>9'	No	Gravel

Locate all readings and samples on site diagram
Number of soil samples collected for laboratory analysis? 0 results due date / /
Have any soils been polyencapsulated on site? Yes__ (#yds³ PID range above zero low high) No ✓
Have any soils been transported off site? Yes__ list amount (yds³): No ✓
Location transported to: N/A DEC official who approved
Amount of soils backfilled(yds³): 89 yd³ PID range above zero low 0 high 250
Have limits of contamination been defined? Yes__ No ✓
Is there any other known contamination on- site? Yes__ No ✓ Comments:

Free Phase product encountered? Yes__ thickness__ No ✓
Groundwater encountered? Yes__ depth(ft)__ No ✓
Are there existing monitoring wells on-site? Yes__ how many:__ (locate on site diagram) No ✓
Have new monitoring wells been installed? Yes__ how many:__ (locate on site diagram) No ✓
Have samples been taken from any monitoring wells for lab analysis? Yes__ results due date / / No ✓

Is there a water supply well on site? Yes__ (check type: shallow__ rock__ spring__) No ✓
How many public water supply wells are located within a 0.5 mile radius? 0 min. distance (ft.):
How many private water supply wells located within a 0.5 mile radius? 0 min distance (ft.):

What receptors have been impacted? ✓soil __indoor air __groundwater __surface water __water supply

Facility ID#_____

Section D: Tanks/Piping Remaining/installed

Regardless of size, include USTs at site as to *status, e.g. "abandoned", "in use", or "to be installed". (Most installations require permits and advance notice to this office.)

UST#	Product	Size(gallons)	Tank age	*Tank status	Piping age	*Piping Status
	None					

✓ There are no other tanks at this site.

Section E. Statements of UST closure compliance:

(must have both signatures or site assessment not complete)

As the party responsible for compliance with the Vermont UST Regulations and related statutes at this facility, I hereby certify that the all of the information provided on this form is true and correct to the best of my knowledge.

Robert P. Keith _____ Date: 5/21 98

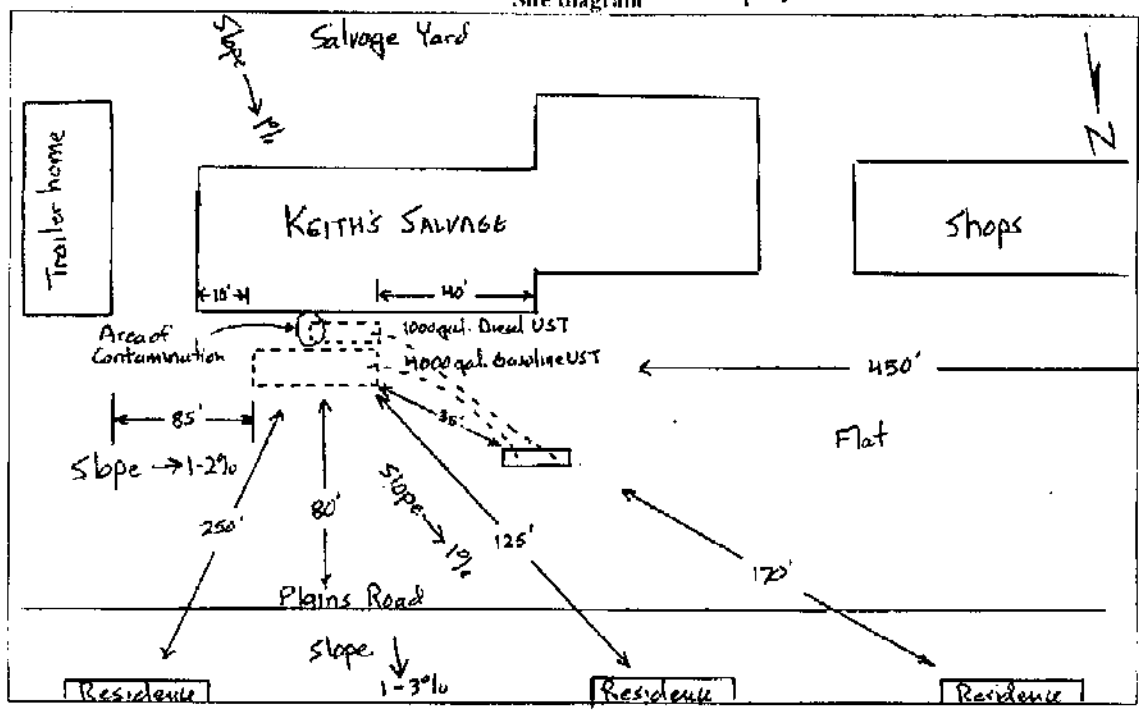
Signature of UST owner or owner's authorized representative

As the environmental consultant on site, I hereby certify that the site assessment requirements were performed in accordance with DEC policy and regulations, and that information which I have provided on this form is true and correct to the best of my knowledge.

_____ Date: 5/22/98

Signature of Environmental Consultant

Site diagram



Return form along with complete narrative report and photographs to the Department of Environmental Conservation(DEC), Underground Storage Tank Program within 72 hours of closure.

This Closure Form may only be issued for the facility and the date indicated in the upper left hand corner of page 1. **Changes in the scheduled closure date should be phoned in at least 48 hours in advance.** Both the yellow and white copies of this form must be returned to the address on the top of page 1 of this form; the pink copy should be retained by the UST owner. A written report from an environmental consultant covering all aspects of closure and site assessment, complete with photographs and any other relevant data, must accompany this form. All procedures must be conducted by qualified personnel, to include training required by 29 CFR 1910.120. Documentation of all methods and materials used must be adequate. All work must be performed in compliance with DEC policy "UST Closure and Site Assessment Requirements" as well as all applicable statues, regulations, and additional policies. The DEC may reject inadequate closure forms and reports.

Waste Management Division
103 South Main Street/West Office
Waterbury, Vermont 05671-0404
(802) 241-3888
FAX (802) 241-3296

November 10, 1998

Mr. Bob Keith
Keith's Salvage
P.O. Box 33
Pittsford, Vermont 05763

RE: Petroleum Contamination at Keith's Salvage
Pittsford, Vermont
SMS Site # 98-2437

Dear Mr. Keith:

The Sites Management Section (SMS) has received the Underground Storage Tank (UST) closure report which outlines the subsurface conditions for the above referenced site. The fieldwork was conducted by Watershed Environmental on May 14, 1998. The report is dated July 22, 1998 and summarizes the degree and extent of contamination encountered. The USTs removed include:

- UST #1 - 4,000 gallon gasoline UST
- UST #2 - 1,000 gallon diesel UST

During the site activities, screened soils had concentrations up to 250 parts per million (ppm) as measured by a photoionization detector (PID). The peak PID readings were measured at depths of 1 to 8 feet below ground surface (fbgs) in the excavation. The limits of soil contamination were not defined. All soil was used for backfill at the conclusion of the UST removal program.

Site soils consisted of primarily sand and gravel. Groundwater was not encountered at a (maximum) depth of approximately 8 fbgs.

The Keith's Salvage was inspected for sensitive receptors. The possible receptors potentially affected include groundwater, basements of adjacent buildings, and soil.

Based on the report information, the SMS has determined additional work is necessary to determine the severity of contamination. Due to possible contamination to nearby receptors, the SMS requests that Keith's Salvage retain the services of a qualified environmental consultant to perform the following:

- ☐ Further define the degree and extent of contamination to the soil.
- ☐ If appropriate, determine if the airspace beneath the site and site adjacent building(s) (e.g. basements) has been impacted by the release using a PID. Wall and floor construction and susceptibility to vapor migration should be noted. PID measurements should be made in cracks and/or joints likely impacted. If the airspace has been impacted, SMS requests confirmatory sampling and laboratory analyses be performed using

EPA Method TO-2.

- ❑ Determine the degree and extent of contamination, if any, to groundwater. A sufficient number of monitoring sites should be installed to adequately define the severity of site contamination. Analyze groundwater samples for TPH, BTEX and MTBE. At sites proximal to water supply sources, determine the hydrologic relationship of the contaminated area to the water supply source. Pumping influences should be considered in the evaluation.

- ❑ Assess the potential for contaminant impact on sensitive receptors. Base this update on all available information and include basements of adjacent buildings, nearby surface water, any proximal drinking water sources, wetlands, sensitive ecologic areas, outdoor or indoor air, sewers, or utility corridors. Sample and analyze any at-risk water supplies for BTEX, TPH and MTBE compounds.

- ❑ Determine the need for long-term treatment and/or monitoring that addresses groundwater contamination.

- ❑ Submit a summary report that outlines the work performed, as well as provides conclusions and recommendations. As appropriate include analytical data; a site map showing the location of any potential sensitive receptors, stockpiled soils and monitoring or sample locations; an area map; detailed well logs; and a groundwater contour map.

Please have your consultant submit a preliminary work plan and cost estimate or a site investigation expressway notification form within fifteen days of your receipt of this letter, so it may be approved prior to the initiation of onsite work. Enclosed please find a list of consultants who perform this type of work as well as the brochure "*Selecting Your UST Cleanup Contractor*," which will help you in choosing an environmental consultant.

Based on current information, the underground storage tanks at Keith's Salvage are eligible for participation in the Petroleum Cleanup Fund (PCF). You must provide written proof to the SMS that you hold no other applicable insurance in order to receive reimbursement from the PCF. The owner or permittee must pay for the removal and/or repair of the failed tank(s), and for the initial $10,000.00 of the cleanup. The fund will reimburse the tank owner or permittee for additional eligible cleanup costs of up to $1 million. All expenditures must be pre-approved by the Agency or performed in accordance with the "*Site Investigation Guidance*" expressway program. Please refer to the enclosed guidance document titled, "*Procedures for Reimbursement from the Petroleum Cleanup Fund*" for additional information concerning the PCF.

The Secretary of the Agency of Natural Resources reserves the right to seek cost recovery of fund monies spent at the Keith's Salvage site if the Secretary concludes that Keith's Salvage is in significant violation of the Vermont Underground Storage Tank Regulations or the Underground Storage Tank statute (10 V.S.A., Chapter 59).

We realize this may be a lot to absorb and respond to. We are here to help make this process as effective and uncomplicated as possible. Please review the enclosed

documents and call me with any questions you may have. I can be reached at (802) 241-3876.

Sincerely,

Chuck Schwer, Supervisor
Sites Management Section

Enclosures (3)

cc: Pittsford Selectboard w/o enclosure
Pittsford Health Officer w/o enclosure
DEC Regional Office w/o enclosure (transmitted electronically) ✓

Mike Sparks, Watershed Environmental w/o enclosure (transmitted electronically) ✓

CS:rgb
H:\Myfiles\l12437.wpd

Site Number:	Site Name	Site Address	Site Town	Project Status
931552	NORTON COUNTRY STORE	RT 114	NORTON	DETERMINE DEGREE AND EXTENT OF CONTAMINATION
900589	JOHNSON AND DIX	RIVER RD	NORWICH	INVESTIGATING LANDFARM OPTION
911000	CONTAMINATED PRIVATE WELLS	RT 5	NORWICH	ANNUAL/QUARTERLY GROUNDWATER MONITORING
921293	EMERSON HOUSE	MAIN ST	NORWICH	UST TO BE CLOSED IN PLACE. CONTAM NEEDS FURTHER INVESTIGATION.
941581	NORWICH SQUARE	ELM AND MAIN ST	NORWICH	DETERMINE DEGREE AND EXTENT OF CONTAMINATION
972246	THE CAR STORE	ROUTE 5 SOUTH	NORWICH	UST REMOVED. CONTAMINATION FOUND. INVESTIGATION NEEDED.
972254	AGWAY NORWICH	CHURCH ST	NORWICH	UST REMOVED. CONTAMINATION FOUND. INVESTIGATION NEEDED.
941739	CHIPMAN POINT MARINA	ROUTE 73 A	ORWELL	FURTHER DETERMINE DEGREE AND EXTENT OF CONTAMINATION
900566	BURNETT'S COUNTRY STORE	JERSEY RD.	PANTON	UST CONTAMINATION. STOCKPILED SOILS.
911084	SHELDON CONSTRUCTION	RT 30	PAWLET	SMS REQUESTING ADDITIONAL INFORMATION
931393	LOCKMASTERS INC	MAIN ST	PAWLET	TPH & LEAD CONTAMINATED SOILS
931408	SHELDONS MARKET	RT 30 SOUTH	PAWLET	UST'S REMOVED INVEST IN PROGRESS
931519	LOOMIS TRUCKING	ROUTE 149	PAWLET	DETERMINE DEGREE AND EXTENT OF CONTAMINATION
941596	BAKER RESIDENCE	TOWN HIGHWAY 32	PAWLET	SITE TO BE CLOSED.
972330	Parks Residence	Parks Ave	PAWLET	Petroleum contaminated
972231	PEACHAM TOWN GARAGE	TOWN HGWY #2	PEACHAM	UST REMOVAL. CONTAMINATION FOUND. INVESTIGATION NEEDED.
951902	BROMLEY BASE LODGE	BROMLEY SKI AREA	PERU	Iongoing groundwater monitoring.
972289	PARRISH RESIDENCE	RUSSELL RD	PERU	UST REMOVED. CONTAMINATION FOUND. INVESTIGATION NEEDED.
972281	PITTSFIELD PIT STOP	ROUTE 100	PITTSFIELD	SEE SITE #97-2154
770063	PROCTOR DUMP	DEERE ROAD	PITTSFORD	DEC PA COMPLETED 10/87
880197	LOGANS SUNOCO	RT 7	PITTSFORD	ANNUAL MONITORING, NEXT ROUND 9/98
890379	DICK'S MOBIL	RT 7	PITTSFORD	Initial gasoline underground storage tank investigation completed; report due 5/98
931392	KEITHS TRADING POST	MAIN ST, RT 7, BOX 65	PITTSFORD	UST REMOVED, SOILS STOCKPILED, GW ASSESS TO FOLLOW

Site Number:	Site Name	Site Address	Site Town	Project S
931490	OTTER VALLEY GARAGE	ROUTE 7	PITTSFORD	NEED PLAN
931491	GURSHICK BROTHERS REALTY	TRUCK RT TO FLORENCE	PITTSFORD	DETERMINE CONTAMINA
941707	PITTSFORD TOWN GARAGE	PLEASANT ST	PITTSFORD	DETERMINE CONTAMINA
951784	CAVERLY EARLY CHILDHOOD EDUC. BUILDING	PLAINS RD	PITTSFORD	Technical ser auger soil sa completion b
982396	Sugarwood Ridge	Route 7	PITTSFORD	Underground Contaminatio
982376	Town of Plainfield Wastewater Plant		Plainfield	Underground Contaminatio
911155	PLYMOUTH GENERAL STORE	RT 100	PLYMOUTH	QUARTERLY GROUNDWA
951916	SAILOR CONSTRUCTION	ROUTE 100 A	PLYMOUTH	DETERMINE CONTAMINA
972313	North Pomfret Store	Pomfret Rd	Pomfret	Underground Contaminati
770017	STACO	BEAMAN ROAD, ROUTE 30	POULTNEY	REMEDIAL V MONITORIN PROP
770018	OLD POULTNEY DUMP	DUMP ROAD	POULTNEY	LANDFILL M ANNUALLY.
931531	MAIN ST STEWARTS SHOP	MAIN AND MAPLE ST	POULTNEY	G W MONIT
941557	POULTNEY MOBIL	1 EAST MAIN ST	POULTNEY	Report for P hazardous w
961977	POULTNEY BP/EXXON	12 - 14 MAIN ST	POULTNEY	SEMI-ANNU
962120	HEALDS GARAGE	2 BEAMAN ST	POULTNEY	REQUEST D CONTAMINA
972317	York Street Auto	83 York St	POULTNEY	Underground Contaminati
770066	POWNAL TANNERY	ROUTE 346	POWNAL	EE/CA from
870129	GENERAL CABLE	RT 346	POWNAL	ACTIVE GW RECOVERY
890311	VILLAGE MARKET	RT 7	POWNAL	REMEDIATI EXPERIMEN
921190	NORTHEAST WOOD PRODUCTS	CHURCH ST	POWNAL	INITIAL INV

Watershed Environmental Services, Inc.

P.O. Box 64947 Burlington, Vermont 05406 Office: 802-860-7385 FAX: 802-860-1964 *51

ENVIRONMENTAL SITE INVESTIGATION
KEITH'S SALVAGE
Plains Road, Pittsford, Vermont

SOIL BORING LOG

Date: November 6, 1998
Drilling contractor: Tri State Drilling & Boring, West Burke, VT
Drilling method: Rotary hollow-stem auger with split-spoon sampling
Inspector: Mike Sparks, Watershed Environmental Services, Inc.
PID: H-Nu Systems PI-101 w/10.2 eV lamp, isobutylene calibration to benzene equivalent

MW-1

SOIL BORING/MONITORING WELL MW-1
Location: 50 feet northwest of UST site on north side of office/shop building; 45 feet south of Plains Road.
Background PID = 0.0 ppm

Sample Interval	Soil Interval	PID reading	Soil Description
	Surface		Asphalt/gravel
	0.0 - 5.0'	0.0 ppm	Dry, brown-rusty brown, pebbly medium sand, poorly sorted, loose, no odor
5.0 - 7.0'	5.0 - 7.0'	0.0 ppm	Dry, rusty brown-tan, medium to fine sand, with 3" lense of pebbly coarse sand, moderately well sorted, loose, no odor, no discoloration
	7.0 - 10.0'	0.0 ppm	Dry, rusty brown-tan, pebbly medium to fine sand, no odor
10.0 - 12.0'	10.0 - 12.0'	0.05 ppm	Dry, brown, fine sand with some medium to coarse grains, moderately well sorted, loose, 1" lense of very fine sandy silt, no odor, no discoloration
	12.0 - 15.0'	0.0 ppm	Dry, brown fine to very fine sand
15.0 - 17.0'	15.0 - 16.0'	0.5 ppm	Dry, tan fine sand, loose, moderately well sorted, no odor, no discoloration
	16.0 - 17.0'	7.5 ppm	Wet, silty fine sand to very fine sandy silt, interbedded with fine to very fine sand, poorly sorted, no odor, no discoloration, no sheens
	17.0 - 20.0'	5.0 ppm	Wet, silty fine to very fine sand
20.0 - 22.0'	20.0 - 22.0'	2.0 ppm	Saturated, brown-olive green, very fine sand with trace silt and some small (> 1/8") nodes of dark red-brown discoloration, no sheens, no odor
	22.0 - 25.0'	1.0 ppm	No recovery
25.0 - 27.0'	25.0 - 27.0'	0.5 ppm	Saturated, brown very fine sand with some dark brown discoloration, well sorted, loose, no sheens, no odor

Well Construction:
Pipe: 2" sch. 40 PVC, flush-coupled, F480 thread
Screen: 15' section 0.010' factory slot screen
Screen interval: 10.0 - 25.0'
Sand pack: 8.0 - 26.0'
Bentonite: 6.0 - 8.0'
Well Protector: Flush mount steel with cement

ENVIRONMENTAL SITE INVESTIGATION
KEITH'S SALVAGE
Plains Road, Pittsford, Vermont

SOIL BORING LOG

Date: November 6, 1998
Drilling contractor: Tri State Drilling & Boring, West Burke, VT
Drilling method: Rotary hollow-stem auger with split-spoon sampling
Inspector: Mike Sparks, Watershed Environmental Services, Inc.
PID: H-Nu Systems PI-101 w/10.2 eV lamp, isobutylene calibration to benzene equivalent

MW-2

SOIL BORING/MONITORING WELL MW-2
Location: 70 feet west of northwest corner of office/shop building; 60 feet northwest of northeast corner of metal warehouse building. Background PID = 0.0 ppm

Sample Interval	Soil Interval	PID reading	Soil Description
	Surface		Asphalt
	0.0 - 5.0'	0.0 ppm	Dry, brown-rusty brown, coarse sand and gravel, poorly sorted, loose, no odor
5.0 - 7.0'	5.0 - 7.0'	0.2 ppm	Dry, brown-tan, fine sand with interbedded silty fine sand lenses, loose, no odor, no discoloration
	7.0 - 10.0'	0.0 ppm	Dry, brown-tan, pebbly medium to fine sand, no odor
10.0 - 12.0'	10.0 - 12.0'	0.2 ppm	Dry, brown, fine sand with some medium to coarse grains, moderately well sorted, loose, no odor, no discoloration
	12.0 - 15.0'	0.2 ppm	Dry, brown fine to medium sand
15.0 - 17.0'	15.0 - 16.7'	0.2 ppm	Dry-slightly damp, tan-brown, fine sand and silty fine sand, moderately well sorted with increasing percentage of silt with depth, loose, no odor, no discoloration
	16.7 - 17.0'	0.2 ppm	Wet-saturated, silty very fine sand, poorly sorted, loose, no sheen, no odor, no discoloration
	17.0 - 20.0'	0.2 ppm	No recovery
20.0 - 22.0'	20.0 - 22.0'	0.2 ppm	Saturated, brown-olive green, very fine sand with trace silt and some small (>1/8") nodes of dark red-brown discoloration, no sheens, no odor
	22.0 - 25.0'	0.2 ppm	No recovery
25.0 - 27.0'	25.0 - 27.0'	0.5 ppm	Saturated, brown-olive green, very fine sand with trace silt, moderately well sorted, loose, no sheens, no odor, no discoloration

Well Construction:
Pipe: 2" sch. 40 PVC, flush-coupled, F480 thread
Screen: 15' section 0.010' factory slot screen
Screen interval: 10.0 - 25.0'
Sand pack: 8.0 - 25.0'
Bentonite: 6.0 - 8.0'
Well Protector: Flush mount steel with cement

ENVIRONMENTAL SITE INVESTIGATION
KEITH'S SALVAGE
Plains Road, Pittsford, Vermont

SOIL BORING LOG

Date: November 6, 1996
Drilling contractor: Tri State Drilling & Boring, West Burke, VT
Drilling method: Rotary hollow-stem auger with split-spoon sampling
Inspector: Mike Sparks, Watershed Environmental Services, Inc.
PID: H-Nu Systems PI-101 w/10.2 eV lamp, isobutylene calibration to benzene equivalent

MW-3

SOIL BORING/MONITORING WELL MW-3
Location: 5 feet west or northwest corner of small wooden shed 35 feet south of office/shop building.
Background PID – 0.0 ppm

Sample Interval	Soil Interval	PID reading	Soil Description
	Surface		Gravel
	0.0 - 5.0'	0.0 ppm	Dry, rusty brown, coarse sand and gravel, loose, poorly sorted, no odor, no discoloration
5.0 - 7.0'	5.0 - 7.0'	0.2 ppm	Dry, brown, pebbly fine to medium sand, moderately well to poorly sorted, loose, no odor, no discoloration
	7.0 - 10.0'	0.0 ppm	Dry, brown, pebbly medium to fine sand, no odor
10.0 - 12.0'	10.0 - 12.0'	0.0 ppm	Dry, tan-brown, lenses of well sorted to moderately well sorted medium sands, fine sands and very fine sands, loose, no odor, no discoloration
	12.0 - 15.0'	0.0 ppm	Dry, brown medium to very fine sand, no odor
15.0 - 17.0'	15.0 - 17.0'	0.0 ppm	Dry, brown, fine sand, loose, moderately well sorted, no odor, no discoloration
	17.0 - 20.0'	0.0 ppm	No recovery
20.0 - 22.0'	20.0 - 22.0'	0.1 ppm	Saturated, brown, fine sand, moderately well sorted, no discoloration, no sheens, no odor
	22.0 - 25.0'	0.1 ppm	No recovery
25.0 - 27.0'	25.0 27.0'	0.1 ppm	Saturated, brown, fine to very fine sand with lenses of medium to coarse sand with manganese staining, moderately well sorted, loose, no odor, no sheen

Well Construction:
Pipe: 2" sch. 40 PVC, flush-coupled, F480 thread
Screen: 10' section 0.010' factory slot screen
Screen interval: 15.0 - 25.0'
Sand pack: 13.0 - 25.0'
Bentonite: 11.0 - 13.0'
Well Protector: Flush mount steel with cement

Watershed Environmental Services, Inc.

P.O. Box 64947 Burlington, Vermont 05406 Office: 802-860-7385 FAX: 802-860-1964 *51

ENVIRONMENTAL SITE INVESTIGATION
KEITH'S SALVAGE
Plains Road, Pittsford, Vermont

SOIL BORING LOG

Date: December 14, 1998
Drilling contractor: Adams Engineering, Underhill, VT
Drilling method: Vibratory push boring machine with continuous core sampling
Inspector: Mike Sparks, Watershed Environmental Services, Inc.
PID: H-Nu Systems PI-101 w/10.2 eV lamp, isobutylene calibration to benzene equivalent

MW-4

SOIL BORING/MONITORING WELL MW-4
Location: 5 feet southeast of southeast corner of metal warehouse building; 40 feet west of office/shop building; 130 feet west-southwest of UST site. Background PID = 0.4 ppm

Sample Interval	Soil Interval	PID reading	Soil Description
	Surface		Gravel
0.0 - 5.0'	0.0 - 2.0'	0.4 ppm	Frost; gravel over dark brown sandy loam with organic matter, no odor
	2.0 - 5.0'	0.4 ppm	Dry, brown rusty brown, gravelly medium to coarse sand, poorly sorted, loose, no odor, no discoloration
5.0 - 10.0'	5.0 - 10.0'	0.4 ppm	Dry, brown, fine to medium sand, moderately well sorted, loose, no odor, no discoloration
10.0 - 15.0'	10.0 - 15.0'	0.4 ppm	Dry, brown, fine to medium sand, moderately well sorted, loose, no odor, no discoloration
15.0 - 20.0'	15.0 - 20.0'	0.4 ppm	Dry to slightly damp, pebbly medium to fine sand, poorly sorted, loose, no odor, no discoloration
20.0 - 25.0'	20.0 - 25.0'	2.0 ppm	Wet, gray-brown, very fine sand, well sorted, no discoloration, no sheens, no odor

Well Construction:
Pipe: 1-1/2" Monoflex tubing, flush-coupled
Screen: 10' section 0.010' factory slot screen
Screen interval: 15.0 - 25.0'
Sand pack: 11.5 - 25.0'
Bentonite: 10.0 - 11.5'
Well Protector: Flush mount steel with cement

Tri-State Drilling & Boring, Inc.

RR#2 Box 113, Gaskell Hill
West Burke, Vermont 05871
802-467-3123

BIT # FTG

BIT # FTG

SHEET 1

TO Watershed Env. Address

DATE 11/6/98

PROJECT NAME Location Pittsford VT

HOLE NO. MW-1

REPORT SENT TO PROJECT #

LINE & STA.

SAMPLES SENT TO OUR JOB # 88B

OFFSET

GROUND WATER OBSERVATIONS

AT AFTER HRS

AT AFTER HRS

CASING: TYPE 4 1/4; SIZE ID; HAMMER WT. 140; HAMMER FAL 30"

SAMPLER: CORE BAR: BIT

SURFACE ELEV.

DATE STARTED 11/6/98

DATE COMPLE. 11/6/98

BORING FOREMAN Wayne

INSPECTOR Mike Sparks

SOILS ENGR.

LOCATION OF BORING

DEPTH	CASING BLOWS PER/FT	SAMPLE DEPTHS FROM-TO	TYPE OF SAMPLE	BLOWS PER 6" ON SAMPLER 140 lb FROM TO 0-6	6-12	12-18	18-24	MOISTURE DENSITY/ CONSIST.	NO.	PEN.	REC.	SOIL IDENTIFICATION REMARKS, INCLUDE COLOR, GRADATION, TYPE OF SOIL ROCK-COLOR, TYPE, CONDITION, HARNESS, DRILLING TIME, SEAMS AND ETC.
	5-7			4	5	5	4			24	10"	Tan- fine sand
	10-12			4	4	4	4			24	12"	Tan- fine sand
	15-17			4	4	4	4	wet		24	10"	Tan- fine sand, trace of silt
	20-22			3	4	2	3	wet		24	10"	Tan fine sand, trace silt

WELL REPORT

Set well at 25', 9'6" Riser, 15' Screen, sand to 8', Chips to 6', natural backfill to surface

GROUND SURFACE TO 25'

SAMPLE TYPE
D=DRY, C=CORED W=WASHED
UP=UNDISTURBED PISTON
TP=TEST PIT A=AUGER V=VANE TEST
UT=UNDISTURBED THINWALL

USED
PROPORTIONS USED
TRACE 0 TO 10%
LITTLE 10 TO 20%
SOME 20 TO 35%
AND 35 TO 50%

CASING: THEN
140LB WT. X30" FALL ON 2" O.D. SAMPLER

COHESIONLESS DENSITY		COHESIVE CONSISTENCY
0-10	LOOSE	0-4 SOFT
10-30	MED.DENSE	4-8 M/STIFF
30-50	DENSE	8-15 STIFF
50+	VERY DENSE	15-30 VERY STIFF

SUMMARY
EARTH BORING 8
ROCK CORING
SAMPLES

MATERIALS USED

SCREEN	15	SAND	4	ROAD BOX	1 with cement pad
RISER	9.5	BENTONITE	1	WELL GUARDS	
CAPS	1	HOLE PLUG		MIS:	
L.PLUG	1	ENV GROUT			

Tri-State Drilling & Boring, Inc.

RR#2 Box 113, Gaskell Hill
West Burke, Vermont 05871
802-467-3123

BIT # FTG
BIT # FTG

SHEET 2

TO Watershed Env. Address
PROJECT NAME Location Pittsford VT
REPORT SENT TO PROJECT #
SAMPLES SENTTO OUR JOB # 88B

DATE 11/6/98
HOLE NO. 2
LINE & STA.
OFFSET

GROUND WATER OBSERVATIONS
AT ____ AFTER ____ HRS
AT ____ AFTER ____ HRS

CASING: TYPE 4 1/4, SIZE ID, HAMMER WT. 140, HAMMER FAL 30"
SAMPLER: ____ / ____
CORE BAR: ____ / BIT

SURFACE ELEV.
DATE STARTED 11/6/98
DATE COMPLE 11/6/98
BORING FOREMAN Wayne
INSPECTOR Mike Sparks
SOILS ENGR.

LOCATION OF BORING

DEPTH	CASING BLOWS PER/FT	SAMPLE DEPTHS FROM TO	TYPE OF SAMPLE	BLOWS PER 6" ON SAMPLER 140 lb FROM TO 0-6	6-12	12-18	18-24	MOISTURE DENSITY/ CONSIST.	NO.	PEN.	REC.	SOIL IDENTIFICATION REMARKS, INCLUDE COLOR, GRADATION, TYPE OF SOIL ROCK-COLOR, TYPE, CONDITION, HARNESS, DRILLING TIME, SEAMS AND ETC.
	5-7			4	5	6	4					Fine sand with trace silt
	10-12			3	4	4	3					Fine sand with trace silt
	15-17			5	4	3	4					Fine sand with little silt
	20-22			4	5	3	2					Fine sand with trace silt, wet
	25-27			3	2	2	1					Wet fine sand and silt

WELL REPORT

Set well at 25', 9'6" Riser, 15' Screen, sand to 8', Chips to 6', natural backfill to surface

GROUND SUFACE TO 25'

USED

SAMPLE TYPE
D=DRY C=CORED W=WASHED
UP=UNDISTURBED PISTON
TP=TEST PIT A=AUGER V=VANE TEST
UT=UNDISTURBED THINWALL

PROPORTIONS USED
TRACE 0 TO 10%
LITTLE 10 TO 20%
SOME 20 TO 35%
AND 35 TO 50%

CASING: THEN
140LB WT. X30" FALL ON 2" O.D. SAMPLER

COHESIONLESS DENSITY		COHESIVE CONSISTENCY
0-10	LOOSE	0-4 SOFT
10-30	MED.DENSE	4-8 MSTIFF
30-50	DENSE	8-15 STIFF
50+	VERY DENSE	15-30 VERY STIFF

SUMMARY
EARTH BORING X
ROCK CORING
SAMPLES

MATERIALS USED

SCREEN	15	SAND	4	ROAD BOX	1 with cement pad
RISER	9.5	BENTONITE	1	WELL GUARDS	
CAPS	1	HOLE PLUG		MIS:	
L-PLUG	1	ENV GROUT			

Tri-State Drilling & Boring, Inc.

RR#2 Box 113, Gaskell Hill
West Burke, Vermont 05871
802-467-3123

BIT # ___ FTG _____
BIT # ___ FTG _____

SHEET # 3

TO Watershed Env. Address
PROJECT NAME Location Pittsford VT
REPORT SENT TO PROJECT #
SAMPLES SENTTO OUR JOB # 88B

DATE 11/6/98
HOLE NO. # 3
LINE & STA.
OFFSET

GROUND WATER OBSERVATIONS
AT ___ AFTER ___ HRS
AT ___ AFTER ___ HRS

CASING	SAMPLER	CORE BAR
TYPE 4 1/4		
SIZE ID		
HAMMER WT. 140	s/s	BIT
HAMMER FAL 30"		

SURFACE EL.EV.
DATE STARTED 11/6/98
DATE COMPLR. 11/6/98
BORING FOREMAN Wayne
INSPECTOR Mike Sparks
SOILS ENGR.

LOCATION OF BORING

DEPTH CASING BLOWS PER/FT	SAMPLE DEPTHS FROM-TO	TYPE OF SAMPLE	BLOWS PER 6" ON SAMPLER 140 lb FROM TO 0-6	6-12	12-18	18-24	MOISTURE DENSITY/ CONSIST.	NO.	PEN.	REC.	SOIL IDENTIFICATION REMARKS, INCLUDE COLOR, GRADATION, TYPE OF SOIL ROCK-COLOR, TYPE, CONDITION, HARNESS, DRILLING TIME, BEAMS AND ETC.
5-7			4	5	5	4			24	10"	Tan fine sand
10-12			4	4	4	4			24	12"	Tan fine sand
15-17			4	4	4	4			24	10"	Tan fine sand with tace of silt
20-22			3	4	2	3			24	10"	Tan fine sand with trace silt, wet (water at 21')
25-27			3	4	2	2					Tan fine sand trace silt, wet

WELL REPORT

Set well at 25', 9'6" Riser, 15' Screen, sand to 8', Chips to 6', natural backfill to surface

GROUND SUFACE TO 25'

USED

PROPORTIONS USED
TRACE 0 TO 10%
LITTLE 10 TO 20%
SOME 20 TO 35%
AND 35 TO 50%

CASING: THEN

140 LB WT. X30" FALL ON 2" O.D. SAMPLER

COHESION LESS DENSITY		COHESIVE CONSISTENCY
0-10	LOOSE	0-4 SOFT
10-30	MED DENSE	4-8 MSTIFF
30-50	DENSE	8-16 STIFF
50+	VERY DENSE	16-30 VERY STIFF

SAMPLE TYPE
D=DRY C=CORED W=WASHED
TP=UNDISTURBED PISTON
TW=TEST PIT A=AUGER V=VANE TEST
UT=UNDISTURBED THINWALL

SUMMARY
EARTH BORING 3
ROCK CORING
SAMPLES

MATERIALS USED

SCREEN	15	SAND	4	ROAD BOX	1 with cement pad
RISER	9.5	BENTONITE	1	WELL GUARDS	
CAPS	1	HOLE PLUG		MISc	
L. PLUG	1	ENV GROUT			

ADAMS ENGINEERING
Gerard Adams
#47 Blakey Rd., Underhill, VT 05489-9493
(802)-899-4945

December 15, 1998

Mr. Michael Sparks
Watershed Environmental
Well logs: Keith's Salvage/Pittsford

Soils sampled in open borehole with 2 3/4" OD X 2 3/8" ID X 5' NQ sampler lined with a polyethylene bag, the sampler brought to the surface, and the sample contained in the liner vibrated out for examination. Monitor well with a slip cap or point at the bottom that is larger in OD than well screen to create an annulus, is placed in the open borehole left by sampling down to top of "*collapsed native soils*", the borehole annulus partially filled with pack sand , the well with some pack sand vibrated to depth creating a partial sand pack enhancing natural development, the open annulus refilled with sand pack above well screen "*complete sand pack*", a granular bentonite seal is then placed in the open annulus, and a 7" manway cemented in place. Well developed with peristaltic pump using dedicated polyethylene suction tubing.

12/14/98 MW #4 Two tries frost & unknown refusal -1 > 2'

SOILS WELL

G	Manway cemented in place.
0 > -5.0'	Sand // (over gravel.
-.3'	Top well 1.5" solid riser, test plug.
-5 > 10.0'	Sand some collapsed gravel from 0 > -5' run.
-6'	1' Slug granular bentonite
-9'	Top of granular bentonite.
-10 > -15.0'	Sand some collapsed gravel from 0 > -5' run.
-10.5'	Bottom bentonite - top complete sand pack placed in open annulus.
-15.0'	Top well screen 2-5' X 1.5" X .010" slot Monoflex, typ.
-15 > 20.0'	Sand some collapsed gravel from 0 > -5' run. Dry.
-21'	Bottom complete sand pack-top native collapse partial sand pack & natural development.
-15 > 25.0'	Sand some collapsed gravel from 0 > -5' run, saturated fine sand.
-25'	Bottom well screen, point.

Well developed: Good flow, clean.

G. Adams

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

REPORT OF LABORATORY ANALYSIS

CLIENT: Watershed Environmental
PROJECT NAME: Keith's Salvage
REPORT DATE: November 13, 1998
DATE SAMPLED: November 10, 1998

PROJECT CODE: WATR1708
REF. #: 130,893 - 130,896

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody.

Chain of custody indicated sample preservation with HCl.

All samples were prepared and analyzed by requirements outlined in the referenced method and within the specified holding times.

All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced method.

Blank contamination was not observed at levels affecting the analytical results.

Analytical method precision and accuracy were monitored by laboratory control standards which included matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits.

Individual sample performance was monitored by the addition of surrogate analytes to each sample. All surrogate recovery data was determined to be within Laboratory QA/QC guidelines unless otherwise noted.

Reviewed by,

Harry B. Locker, Ph.D.
Laboratory Director

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LABORATORY REPORT

EPA METHOD 8240 WATER MATRIX

CLIENT: Watershed Environmental
PROJECT NAME: Keith's Salvage
REPORT DATE: November 13, 1998
DATE SAMPLED: November 10, 1998
DATE RECEIVED: November 10, 1998
ANALYSIS DATE: November 13, 1998

PROJECT CODE: WATR1708
REF.#: 130,893
STATION: Trip Blank
TIME SAMPLED: Not Indicated
SAMPLER: Greg Leech

Parameter	Detection Limit (ug/L)	Result (ug/L)	Parameter	Detection Limit (ug/L)	Result (ug/L)
Acetone	20	ND[1]	Dichlorodifluoromethane	10	ND
Benzene	1	ND	1,2-Dichloropropane	1	ND
Bromodichloromethane	1	ND	cis-1,3-Dichloropropene	1	ND
Bromoform	1	ND	trans-1,3-Dichloropropene	1	ND
Bromomethane	1	ND	Ethyl Benzene	1	ND
2-Butanone	20	ND	2-Hexanone	20	ND
Carbon Disulfide	5	ND	Methylene Chloride	10	ND
Carbon Tetrachloride	1	ND	4-Methyl-2-Pentanone	20	ND
Chlorobenzene	1	ND	MTBE	2	ND
Chloroethane	5	ND	Styrene	2	ND
Chloroform	1	ND	1,1,2,2-Tetrachloroethane	2	ND
Chloromethane	5	ND	Tetrachloroethene	1	ND
1,2-Dichlorobenzene	1	ND	Toluene	1	ND
1,3-Dichlorobenzene	1	ND	1,1,1-Trichloroethane	2	ND
1,4-Dichlorobenzene	1	ND	1,1,2-Trichloroethane	2	ND
Dibromochloromethane	1	ND	Trichloroethene	1	ND
1,1-Dichloroethane	1	ND	Trichlorofluoromethane	5	ND
1,2-Dichloroethane	1	ND	Vinyl Chloride	5	ND
1,1-Dichloroethene	1	ND	Total Xylenes	2	ND
trans-1,2-Dichloroethene	1	ND			

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

ANALYTICAL SURROGATE RECOVERY:

Dibromofluoromethane : 95.%
Toluene-d8 : 90.%
4-Bromofluorobenzene : 94.%

NOTES:
1 None detected

ENDYNE, INC.

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LABORATORY REPORT

EPA METHOD 8240 WATER MATRIX

CLIENT: Watershed Environmental
PROJECT NAME: Keith's Salvage
REPORT DATE: November 13, 1998
DATE SAMPLED: November 10, 1998
DATE RECEIVED: November 10, 1998
ANALYSIS DATE: November 13, 1998

PROJECT CODE: WATR1708
REF.#: 130,894
STATION: MW I
TIME SAMPLED: 12:30
SAMPLER: Greg Leech

Parameter	Detection Limit (ug/L)[1]	Result (ug/L)	Parameter	Detection Limit (ug/L)	Result (ug/L)
Acetone	200	ND[2]	Dichlorodifluoromethane	100	ND
Benzene	10	ND	1,2-Dichloropropane	10	ND
Bromodichloromethane	10	ND	cis-1,3-Dichloropropene	10	ND
Bromoform	10	ND	trans-1,3-Dichloropropene	10	ND
Bromomethane	10	ND	Ethyl Benzene	10	193.
2-Butanone	200	ND	2-Hexanone	200	ND
Carbon Disulfide	50	ND	Methylene Chloride	100	ND
Carbon Tetrachloride	10	ND	4-Methyl-2-Pentanone	200	ND
Chlorobenzene	10	ND	MTBE	20	ND
Chloroethane	50	ND	Styrene	20	ND
Chloroform	10	ND	1,1,2,2-Tetrachloroethane	20	ND
Chloromethane	50	ND	Tetrachloroethene	10	ND
1,2-Dichlorobenzene	10	ND	Toluene	10	ND
1,3-Dichlorobenzene	10	ND	1,1,1-Trichloroethane	20	ND
1,4-Dichlorobenzene	10	ND	1,1,2-Trichloroethane	20	ND
Dibromochloromethane	10	ND	Trichloroethene	10	ND
1,1-Dichloroethane	10	ND	Trichlorofluoromethane	50	ND
1,2-Dichloroethane	10	ND	Vinyl Chloride	50	ND
1,1-Dichloroethene	10	ND	Total Xylenes	20	1,150.
trans-1,2-Dichloroethene	10	ND			

NUMBER OF UNIDENTIFIED PEAKS FOUND: >10[3]

ANALYTICAL SURROGATE RECOVERY:
Dibromofluoromethane : 93.%
Toluene-d8 : 87.%
4-Bromofluorobenzene : 96.%

NOTES:
1 Detection limit raised due to high levels of contaminants. Sample run at a 10% dilution.
2 None detected
3 Unidentified peaks are Alkylated Benzenes from 10 - 500 ug/L.

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LABORATORY REPORT

EPA METHOD 8240 WATER MATRIX

CLIENT: Watershed Environmental
PROJECT NAME: Keith's Salvage
REPORT DATE: November 13, 1998
DATE SAMPLED: November 10, 1998
DATE RECEIVED: November 10, 1998
ANALYSIS DATE: November 13, 1998

PROJECT CODE: WATR1708
REF.#: 130,895
STATION: MW 2
TIME SAMPLED: 11:15
SAMPLER: Greg Leech

Parameter	Detection Limit (ug/L)	Result (ug/L)	Parameter	Detection Limit (ug/L)	Result (ug/L)
Acetone	20	ND[1]	Dichlorodifluoromethane	10	ND
Benzene	1	ND	1,2-Dichloropropane	1	ND
Bromodichloromethane	1	ND	cis-1,3-Dichloropropene	1	ND
Bromoform	1	ND	trans-1,3-Dichloropropene	1	ND
Bromomethane	1	ND	Ethyl Benzene	1	ND
2-Butanone	20	ND	2-Hexanone	20	ND
Carbon Disulfide	5	ND	Methylene Chloride	10	ND
Carbon Tetrachloride	1	ND	4-Methyl-2-Pentanone	20	ND
Chlorobenzene	1	ND	MTBE	2	ND
Chloroethane	5	ND	Styrene	2	ND
Chloroform	1	ND	1,1,2,2-Tetrachloroethane	2	ND
Chloromethane	5	ND	Tetrachloroethene	1	ND
1,2-Dichlorobenzene	1	ND	Toluene	1	ND
1,3-Dichlorobenzene	1	ND	1,1,1-Trichloroethane	2	ND
1,4-Dichlorobenzene	1	ND	1,1,2-Trichloroethane	2	ND
Dibromochloromethane	1	ND	Trichloroethene	1	ND
1,1-Dichloroethane	1	ND	Trichlorofluoromethane	5	ND
1,2-Dichloroethane	1	ND	Vinyl Chloride	5	ND
1,1-Dichloroethene	1	ND	Total Xylenes	2	ND
trans-1,2-Dichloroethene	1	ND			

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

ANALYTICAL SURROGATE RECOVERY:
Dibromofluoromethane : 90.%
Toluene-d8 : 108.%
4-Bromofluorobenzene : 93.%

NOTES:
1 None detected

ENDYNE, INC.

Laboratory Services

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LABORATORY REPORT

EPA METHOD 8240 WATER MATRIX

CLIENT: Watershed Environmental
PROJECT NAME: Keith's Salvage
REPORT DATE: November 13, 1998
DATE SAMPLED: November 10, 1998
DATE RECEIVED: November 10, 1998
ANALYSIS DATE: November 13, 1998

PROJECT CODE: WATR1708
REF.#: 130,896
STATION: MW 3
TIME SAMPLED: 10:40
SAMPLER: Greg Leech

Parameter	Detection Limit (ug/L)	Result (ug/L)	Parameter	Detection Limit (ug/L)	Result (ug/L)
Acetone	20	ND[1]	Dichlorodifluoromethane	10	ND
Benzene	1	ND	1,2-Dichloropropane	1	ND
Bromodichloromethane	1	ND	cis-1,3-Dichloropropene	1	ND
Bromoform	1	ND	trans-1,3-Dichloropropene	1	ND
Bromomethane	1	ND	Ethyl Benzene	1	ND
2-Butanone	20	ND	2-Hexanone	20	ND
Carbon Disulfide	5	ND	Methylene Chloride	10	ND
Carbon Tetrachloride	1	ND	4-Methyl-2-Pentanone	20	ND
Chlorobenzene	1	ND	MTBE	2	2.3
Chloroethane	5	ND	Styrene	2	ND
Chloroform	1	ND	1,1,2,2-Tetrachloroethane	2	ND
Chloromethane	5	ND	Tetrachloroethene	1	ND
1,2-Dichlorobenzene	1	ND	Toluene	1	ND
1,3-Dichlorobenzene	1	ND	1,1,1-Trichloroethane	2	ND
1,4-Dichlorobenzene	1	ND	1,1,2-Trichloroethane	2	ND
Dibromochloromethane	1	ND	Trichloroethene	1	ND
1,1-Dichloroethane	1	ND	Trichlorofluoromethane	5	ND
1,2-Dichloroethane	1	ND	Vinyl Chloride	5	ND
1,1-Dichloroethene	1	ND	Total Xylenes	2	ND
trans-1,2-Dichloroethene	1	ND			

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

ANALYTICAL SURROGATE RECOVERY:
Dibromofluoromethane : 95.%
Toluene-d8 : 118.%
4-Bromofluorobenzene : 94.%

NOTES:
1 None detected

ENDYNE, INC

32 James Brown Drive
Williston, Vermont 05495
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WA1R1109

130,893 — 130,900

CHAIN-OF-CUSTODY RECORD

Project Name: KEITH'S SALVAGE Site Location: PITTSFORD, VT	Reporting Address: WATERSHED ENVIRON	Billing Address: SAME
Endyne Project Number: WATR1108	Company: SAME Contact Name/Phone #: MIKE SPARKS	Sampler Name: GREG LEECH Phone #: 879-5078

Lab #	Sample Location	Matrix	G R A B	C O M P	Date/Time 11-10-98	Sample Containers No.	Sample Containers Type/Size	Field Results/Remarks	Analysis Required	Sample Preservation	Rush
130,893	TRIP BLANK	H2O				2	40ml	CASTLE SPRING WATER	25730	HCl	2WKS
130,894	MW1				1230			-			
130,895	MW2				1115			-			
130,896	MW3				1040			PETROLEUM ODOR			

Relinquished by: Signature	Received by: Signature	Date/Time 11-10-98 2:25
Relinquished by: Signature	Received by: Signature	Date/Time

New York State Project: Yes ____ No ✓

Requested Analyses

1	pH	6	TKN	11	Total Solids	16	Metals (Specify)	21	EPA 624	26	EPA 8270 B/N or Acid
2	Chloride	7	Total P	12	TSS	17	Coliform (Specify)	22	EPA 625 B/N or A	27	EPA 80.0/8020
3	Ammonia N	8	Total Diss. P	13	TDS	18	COD	23	EPA 418.1	28	EPA 8080 Pest/PCB
4	Nitrite N	9	BOD_5	14	Turbidity	19	BTEX	24	EPA 608 Pest/PCB		
5	Nitrate N	10	Alkalinity	15	Conductivity	20	EPA 601/602	25	EPA 8240		
29	TCLP (Specify: volatiles, semi-volatiles, metals, pesticides, herbicides)										
30	Other (Specify): MODIFIED EPA 8100 - TPH										

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
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REPORT OF LABORATORY ANALYSIS

CLIENT: Watershed Environmental Services
PROJECT NAME: Keith's Salvage
DATE REPORTED: November 16, 1998
DATE SAMPLED: November 10, 1998

PROJECT CODE: WATR1709
REF. #:130,897 - 130,900

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody record.

Chain of custody indicated sample preservation with HCl.

All samples were prepared and analyzed by requirements outlined in the referenced methods and within the specified holding times.

All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced methods.

Blank contamination was not observed at levels affecting the analytical results.

Analytical method precision and accuracy was monitored by laboratory control standards which included matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits.

Reviewed by,

Harry B. Locker, Ph.D.
Laboratory Director

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ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
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LABORATORY REPORT

TOTAL PETROLEUM HYDROCARBONS (TPH) BY MODIFIED EPA METHOD 8100

DATE: November 16, 1998
CLIENT: Watershed Environmental Services
PROJECT: Keith's Salvage
PROJECT CODE: WATR1709
COLLECTED BY: Greg Leech
DATE SAMPLED: November 10, 1998
DATE RECEIVED: November 10, 1998

Reference #	Sample ID	Concentration (mg/L)[1]
130,897	Trip Blank	ND[2]
130,898	MW1; 1230	3.22
130,899	MW2; 1115	ND
130,900	MW3; 1040	ND

Notes:

1 Values quantitated based on the response of #2 Fuel Oil. Method detection limit is 0.4 mg/L.
2 None Detected

ENDYNE, INC

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333

CHAIN-OF-CUSTODY RECORD

Project Name: KEITH'S SALVAGE Site Location: PITTSFORD, VT	Reporting Address: WATERSHED ENVIRON.	Billing Address: SAME
Endyne Project Number: WATR1709	Company: SAME Contact Name/Phone #: MIKE SPINELLI	Sampler Name: GREG LEECH Phone #: 879-5078

Lab #	Sample Location	Matrix	G R A B	C O M P	Date/Time 11-10-98	Sample Containers No.	Sample Containers Type/Size	Field Results/Remarks	Analysis Required	Sample Preservation	Rush
130,897	TRIP BLANK	H2O				2	40ml	CASTLE SPRING WATER	25430	HCl	2WKS
130,898	MW1				1230			—			
130,899	MW2				1115			—			
130,900	MW3				1040			PETROLEUM ODOR			

Relinquished by: Signature: Doug Leech

Received by: Signature: [illegible]

Date/Time: 11-10-98 2:25

Relinquished by: Signature

Received by: Signature

Date/Time

New York State Project: Yes ___ No ✓

Requested Analyses

1	pH	6	TKN	11	Total Solids	16	[illegible]	21	EPA 624	26	EPA 8270 B/N or Acid
2	Chloride	7	Total P	12	TSS		[illegible]	22	EPA 625 B/N or A	27	EPA 8010/8020
3	Ammonia N	8	Total Diss. P	13	TDS	18	COD	23	EPA 418.1	28	EPA 808C Pest/PCB
4	Nitrate N	9	BOD_5	14	Turbidity	19	BTEX	24	EPA 608 Pest/PCB		
5	Nitrite N	10	Alkalinity	15	Conductivity	20	EPA 601/602	25	EPA 8240		
29	TCLP (Specify: volatiles, semi-volatiles, metals, pesticides, herbicides)										
30	Other (Specify): MODIFIED EPA 8100 - TPH										

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
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FAX 879-7103

REPORT OF LABORATORY ANALYSIS

CLIENT: Watershed Environmental
PROJECT NAME: Keith's Salvage
REPORT DATE: December 16, 1998
DATE SAMPLED: December 14, 1998

PROJECT CODE: WATR1076
REF.#: 132,784

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody.

Chain of custody indicated sample preservation with HCl.

All samples were prepared and analyzed by requirements outlined in the referenced method and within the specified holding times.

All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced method.

Blank contamination was not observed at levels affecting the analytical results.

Analytical method precision and accuracy were monitored by laboratory control standards which included matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits.

Individual sample performance was monitored by the addition of surrogate analytes to each sample. All surrogate recovery data was determined to be within Laboratory QA/QC guidelines unless otherwise noted.

Reviewed by,

Harry B. Locker, Ph.D.
Laboratory Director

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ENDYNE, INC.

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32065

CHAIN-OF-CUSTODY RECORD

Project Name: Kleth's Salvage Site Location: Pittsford VT	Reporting Address: Watershed Environmental Services, Inc. P.O. Box 6949	Billing Address: Watershed
Endyne Project Number: WATR1076	Company: Watershed Contact Name/Phone #: Mike Sparks	Sampler Name: Mike Sparks Phone #: 862-1964

Lab #	Sample Location	Matrix	GRAB	COMP	Date/Time	Sample Containers No.	Sample Containers Type/Size	Field Results/Remarks	Analysis Required	Sample Preservation	Rush
32,784	MW-4	Water			12:45	2	40ml VOA	no odor No PID	8260B	HCl	10/7

Post-it® Fax Note 7671 | Date 12/17 | # of pages ▶ 3
To Mike Sparks | From Ernie
Co./Dept. Watershed Env | Co. Endyne/Organics
Phone # | Phone #
Fax # 862-1964 | Fax #

cool

Relinquished by: Signature	Received by: Signature	Date/Time 12:57pm 12/15/98
Relinquished by: Signature	Received by: Signature	Date/Time

New York State Project: Yes ____ No ____

Requested Analyses

1	pH	6	TKN	11	Total Solids	16	Metals (Specify)	21	EPA 624	26	EPA 8270 B/N or Acid
2	Chloride	7	Total P	12	TSS	17	Coliform (Specify)	22	EPA 625 B/N or A	27	EPA 8010/8020
3	Ammonia N	8	Total Diss. P	13	TDS	18	COD	23	EPA 418.1	28	EPA 8080 Pest/PCB
4	Nitrite N	9	BOD_5	14	Turbidity	19	BTEX	24	EPA 608 Pest/PCB		
5	Nitrate N	10	Alkalinity	15	Conductivity	20	EPA 601/602	25	EPA 8240		
29	TCLP (Specify: volatiles, semi-volatiles, metals, pesticides, herbicides)										
30	Other (Specify):										