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**REMEDIAL INVESTIGATION
BOB'S SERVICE STATION
FALUN, WISCONSIN
NWD LUST ID NO. 148**

PREPARED FOR:

**ROBERT ANDERSON
FALUN, WISCONSIN**

MAY 1996

AYRES
ASSOCIATES

Rec'd 05/25/96
Brule

REMEDIAL INVESTIGATION

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NWD LUST ID No. 148

**THIS REPORT PREPARED BY:
AYRES ASSOCIATES**

James C. Hicks 5/7/96
**James C. Hicks, Environmental Tech.
PECFA Registration No. 00164**

Joseph F. Hoeme, 5/6/96
**Joseph F. Hoeme, E.I.T.
Environmental Engineer
PECFA Registration No. 06303**

Lori A. Rosemore 5-10-96
**Lori A. Rosemore, P.G.
Hydrogeologist
PECFA Registration No. 03818**

REVIEWED BY:

Jan M. Smit 5/6/96
**Jan M. Smit, P.E., Civil Engineer
PECFA Registration No. 01987**

**AYRES
ASSOCIATES**

3433 Oakwood Hills Parkway
P.O. Box 1590
Eau Claire, WI 54702-1590
(715) 834-3161, FAX (715) 831-7500

Ayres Project No. 10-0232.00
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EXECUTIVE SUMMARY

INVESTIGATION

Ayres Associates conducted a remedial investigation at Bob's Service Station in Falun, Wisconsin. The investigation included the installation of six test pits and five soil borings. Organic vapor screening of soil samples collected at each boring location resulted in photo ionization detector (PID) responses ranging from no response to 1,176 instrument units as isobutylene gas.

Soil and ground water samples collected for quantitative analysis were sent to Mid-State Associates, Inc., and analyzed for gasoline range organics (GRO), volatile organic compounds (VOCs), and lead.

CONCLUSION

Based on qualitative and quantitative analysis of soil and ground water samples collected as part of this remedial investigation, and information obtained from previous on-site investigations, Ayres Associates makes the following conclusions.

- Soil petroleum contamination, in excess of NR 720 Soil Cleanup Standards, due to the former on-site underground storage tanks (USTs) and related piping is present at this site. This contamination is one of two plumes on the site.
- The other plume of petroleum contamination, in excess of NR 720 Soil Cleanup Standards, has migrated onto this property from the Hedlund property, a former gas station, which is adjacent to and directly west of this site.
- Soil contamination in the plume resulting from the gasoline spill from the former USTs has much lower concentrations than are found in the plume migrating from the Hedlund property.
- The contamination plumes may have commingled.
- No petroleum contamination was found in the test pit installed near the 2,000-gallon waste oil UST.
- No ground water contamination was documented on site during the investigation.

RECOMMENDATIONS

Based on the remedial alternatives analysis, we recommend that the contaminated soil be excavated and hauled for disposal. The treatment option would be asphalt incorporation, biopile treatment, or thermal desorption, depending on the lowest bid received. We also recommend that this excavation be conducted on or after such time that the remediation of petroleum contamination from the Hedlund property is conducted. If Mr. Anderson remediates the contamination caused by his USTs before the Hedlund contamination is remediated, the Hedlund contamination could possibly spread into the clean backfill on Mr. Anderson's property.

1.0 INTRODUCTION

1.1 PURPOSE

This report documents the technical findings of a remedial investigation performed by Ayres Associates at Bob's Service Station, 10545 STH 70, Falun, Wisconsin. This report also presents conclusions, remedial alternatives, and recommendations relative to the extent of soil and ground water contamination at the site. The project site is in Burnett County in the NW 1/4 of the NW 1/4, Section 19, Township 38 North, Range 17 West. Figure 1, Falun 7.5 Minute United States Geological Survey (USGS) Topographic Map (1984), shows the regional setting of the site.

Ayres Associates will submit this report, together with supporting cost information, to the Wisconsin Department of Industry, Labor and Human Relations (DILHR) for cost reimbursement to the owner under the Wisconsin Petroleum Environmental Cleanup Fund Act (PECFA).

1.2 BACKGROUND

1.2.1 Project Information

Pertinent information for the project is as follows:

Project Mailing Address and Site Owner:

Bob's Service Station
10545 STH 70
Siren, WI 54872
Telephone (715) 689-2445

Robert Anderson, Owner
10531 STH 70
Siren, WI 54872
Telephone (715) 689-2445

NWD LUST Case Number:

148

DILHR PECFA Claim Number:

54872-8522-31

Consultant:

Ayres Associates
3433 Oakwood Hills Parkway
P.O. Box 1590
Eau Claire, WI 54702-1590
Telephone (715) 834-3161
Jan M. Smit, P.E., Project Manager
Joseph F. Hoeme, E.I.T., Environmental Engineer
James C. Hicks, Environmental Technician
Lori A. Rosemore, P.G., Hydrogeologist

Regulatory Contact:

Wisconsin Department of Natural Resources
Route 2, Box 125
Brule, WI 54820
Telephone (715) 372-4866
Christopher A. Saari, Hydrogeologist

1.2.2 Site History

Bob's Service Station is an active automobile repair shop. The site was a creamery from 1931 to 1975. In 1975, Mr. Anderson converted it to a gasoline service station and installed the gasoline tanks. Gasoline was dispensed at the site until June 1993. The dispensing system consisted of two 10,000-gallon underground storage tanks (USTs) (one unleaded gasoline tank and one regular leaded gasoline tank) plumbed to a pump island containing two dispensers.

In 1989, Aqua-Tech, Inc., conducted an environmental site assessment for the Wisconsin Department of Transportation. Laboratory analysis detected petroleum contamination in both the ground water and soil samples from soil boring DB-2, installed north of the former pump island at Bob's Service Station. The concentrations of petroleum volatile organic compounds (PVOs) in the ground water were below the Enforcement Standards (ES) of the Wisconsin Department of Natural Resources (WDNR). However, benzene was present at a concentration of 4.3 parts per billion (ppb), which is above the NR 140 Preventive Action Limit (PAL) of 0.5 ppb. Other detects were low. The soil sample contained 20 ppm total petroleum hydrocarbons (TPH) as diesel at a depth of 12 to 14 feet below ground surface. No petroleum contamination was detected in the ground water and soil samples from soil boring DB-1, installed east of DB-2. Mr. Anderson has stated that he never sold diesel fuel on his property.

The USTs were pumped as dry as possible in anticipation of tank removal in June 1993. Mr. John Foster, a DILHR representative, was contacted for the tank inspection at the site. Mr. Foster stated he could not be present at the site until July 14, 1993. On June 20, 1993, elevated ground water pushed the nearly empty tanks from the ground. On July 4, 1993, the tanks overturned and approximately 200 gallons of gasoline was spilled. Mr. Anderson called the WDNR to report the release. The WDNR retained Bay West, Inc., of St. Paul, Minnesota, to perform emergency remediation measures to limit the environmental impacts

of the release. Bay West, Inc., pumped the water and free product from the area where the tanks were located.

The two USTs and associated piping were removed from the site by Oachs Construction of Grantsburg, Wisconsin, on July 16, 19, and 20, 1993. A tank closure site assessment report dated September 30, 1993, was completed by Cooper Engineering Company, Inc. This report documents that contamination by petroleum hydrocarbons was encountered during removal of the USTs. A soil sample collected under the former west pump had no odor and had a gasoline range organic (GRO) concentration of less than 10 ppm. A soil sample collected beneath the former east pump had no odor and had a concentration of only 13 ppm GRO.

One 2,000-gallon waste oil aboveground storage tank (AST) remains on site. Figure 2 shows the location of the two former USTs and the active AST.

On the property adjacent and west of Bob's Service Station is an abandoned DX gasoline station owned by Mr. Carl Hedlund. According to the April 2, 1990, WDNR letter in Appendix A, petroleum contamination was observed when the USTs were removed at the Hedlund site in 1980. The 1,000-gallon gasoline UST to the east of the former DX station (see Figure 2) was owned by Mr. Hedlund, but located on Mr. Anderson's property. In December 1990, Foth & Van Dyke installed soil borings and monitoring wells at the Hedlund site. Soil samples collected from soil boring HB-3, which is presumed from the information we have available for this site to be where monitoring well MW-3 is located, and HB-4, which appears to be MW-4, had elevated levels of PVOCs that exceed the current NR 720 Soil Cleanup Standards. Other soil samples collected from HB-2 and MW-1 had lower detections, but had benzene detections that exceed the current NR 720 criteria. The sampling locations are shown in Figure 2.

Foth & Van Dyke collected ground water samples at the Hedlund site in March 1991. In the MW-1 sample, concentrations of PVOCs were minimal and none exceeded the PAL. However, in the MW-3 sample, the benzene concentration was 1,700 ppb; toluene, 890 ppb; ethylbenzene, 450 ppb; total xylenes, 1,600 ppb; MTBE, 88 ppb; and TPH as gasoline, 27,000 ppb. In the MW-4 sample, concentrations were even higher with benzene of 6,900 ppb; toluene, 12,000 ppb; ethylbenzene 1,600 ppb; total xylenes, 7,800 ppb; and TPH as gasoline, 120,000 ppb. Most of the PVOCs exceed the ES.

1.2.3 Chronology of Remedial Investigation Events

In 1994, Bob's Service Station retained Ayres Associates to conduct a remedial investigation of the site. Following is a chronology of the events to date:

- A remedial investigation work plan was submitted to the WDNR on April 26, 1994, and a notice to proceed was received in letters dated April 28 and June 8, 1994. A copy of the second response letter is in Appendix A.
- Six test pits were installed and soil samples were collected on July 25, 1994.
- Soil analytical results for the test pit samples were received on August 15, 1994. Results indicated that the soil contamination plume was not defined.

- A remedial investigation work plan addendum was submitted to the WDNR on December 13, 1994, and a notice to proceed was received in a letter dated December 15, 1994. A copy of the response letter is in Appendix A.
- Five soil borings were installed and soil samples were collected on October 30, 1995, to better define the extent of soil contamination.
- A temporary well was installed and a ground water sample was collected in boring B/W-1 on October 30, 1995.
- Soil and ground water analytical results from the soil borings were received on November 27, 1995. Results indicated that the soil contamination plume is defined.

2.0 REGIONAL SETTING

2.1 TOPOGRAPHY

The regional topography surrounding the site is shown in Figure 1. The area has a relatively flat and low-lying topography, with the majority of the region being classified as marsh.

2.2 SURFACE WATER AND DRAINAGE

As shown in Figure 1, the site is approximately 400 feet north of the Wood River, which flows generally east to west. The Wood River discharges into Little Wood Lake. The majority of the marshes and intermittent streams appear to discharge into the Wood River. The Wood River is a tributary of the St. Croix River.

2.3 SOILS AND GEOLOGY

According to Water Resources of Wisconsin - St. Croix River Basin, Atlas HA-451, the soils on site are pitted outwash consisting of stratified sands and gravels. Soils encountered on site are a clay until approximately 11 feet deep where a brown, fine to medium sand was encountered. These soils are classified ML and SW according to the Unified Soil Classification System (USCS). Underlying this outwash is undifferentiated sandstone of Cambrian age.

2.4 HYDROGEOLOGY

The site is within the St. Croix River drainage basin of Wisconsin. According to HA-451, ground water quality is generally good, with dissolved solids and mineral content being related to the aquifer rock type.

According to HA-451, regional ground water flow direction is westerly toward the St. Croix River. Ayres Associates measured site ground water elevations on October 30, 1995, to determine ground water flow direction. The ground water elevations indicate that ground water flow direction is northeasterly. This direction is based on the one round of ground

water elevation measurements and one of the measurements collected from the temporary well, B/W-1, which was developed.

3.0 SITE INVESTIGATION METHODS

3.1 GENERAL

After seeking commodity bids, Bob's Service Station retained Oachs Brothers Construction, Grantsburg, Wisconsin, to install backhoe test pits on July 25, 1994. The analytical results for the test pit soil samples indicated that additional soil sampling was needed. After seeking commodity bids, Bob's Service Station retained Midwest Engineering Services (MES), Chippewa Falls, Wisconsin, to install soil borings and a temporary well on October 30, 1995.

3.2 TEST PITS

The contractor used a backhoe equipped with a standard bucket to excavate six test pits in the locations shown in Figure 2. During excavation, an Ayres Associates representative was present to direct the locations of the test pits and collect soil samples from the backhoe bucket. Excavated soil was placed back into the hole when sampling was completed.

Test pits could not be excavated exactly where the two 10,000-gallon USTs were located because the hole had not yet been backfilled. However, TP-1A and TP-1B were dug near the edge of the excavation, as shown in Figure 2. TP-2 and TP-3 were dug to provide samples from a location near the former pump island. TP-2 provided samples from a location between the former pump island and former tank bed. TP-4 was dug on the eastern perimeter of the site.

Ayres Associates screened the soil samples collected from the test pits with a photo ionization detector (PID), classified soil samples in regard to soil type, grain size and USCS, and documented any apparent contamination. Soil descriptions and PID screening results are summarized on the soil boring logs in Appendix B.

The samples with highest (most elevated) field PID screening results and the boring terminus samples were submitted to Central Wisconsin Enviro-Lab (CWEL), Schofield, Wisconsin (Wisconsin Laboratory Certification Number 737125510), for analysis of GRO, volatile organic compounds (VOCs), and total lead. Sampling methods are described in Appendix C. A copy of the CWEL analytical reports is in Appendix D, and the results are summarized in Table 1.

3.3 SOIL BORINGS

3.3.1 Installation and Sample Collection

The contractor installed five soil borings to supplement the test pits using a drill rig equipped with 4¼-inch-inside-diameter hollow stem augers. Soil samples were collected from a split spoon sampler in accordance with ASTM-1586 at 2.5-foot intervals. During installation, an

Ayres Associates representative was present to direct the locations of the soil borings and collect soil samples. Soil cuttings were stored on site in a sealed and clearly marked 55-gallon drum and will be properly disposed of.

Ayres Associates screened soil samples collected from the borings with a PID, classified soil samples in regard to soil type, grain size and USCS, and documented any apparent contamination. Soils description and PID screening results are summarized on the soil boring logs in Appendix B.

The samples with the highest (most elevated) field PID screening results and the boring terminus samples were submitted to Mid-State Associates (MSA), Inc., Baraboo, Wisconsin, (Wisconsin Laboratory Certification Number 157066030) for analysis of GRO and VOCs. Sampling methods are discussed in Appendix C. A copy of the MSA analytical reports is in Appendix D, and the results are summarized in Table 1.

3.4 GROUND WATER SAMPLING

Ayres Associates collected one ground water sample from the Bob's Service Station site. This sample was collected from a temporary well installed in soil boring B/W-1.

The water sample was submitted to MSA for analysis of GRO and VOCs. Sampling methods are discussed in Appendix C. A copy of the MSA ground water analytical report is in Appendix E, and the results are summarized in Table 2.

4.0 RESULTS

4.1 SOIL SAMPLING

A total of six test pits and five soil borings have been installed at the site. Organic vapor screening of soil samples collected at each sampling interval resulted in PID responses ranging from no response (NR) to 1,176 instrument units as isobutylene gas. The soil sample screening and analytical results are summarized in Table 1. The estimated horizontal extent of contamination due to the former USTs on this site is shown in Figure 2. The analytical results for the samples collected within this contamination area, sampling locations TP-1A, TP-1B, and TP-2, indicate that only the benzene detections exceed the NR 720 criteria. However, we think that higher levels of soil contamination may be present in the former UST bed area because of the gasoline that spilled when the two USTs tipped. We also believe that the other detections that exceed the NR 720 criteria (sample locations TP-3, B-2, and B-3) are the result of contamination migrating from the Hedlund site.

Soils encountered on site consisted of red-brown fine to medium sands and gray-green clays classified as SW and ML respectively. Appendix B contains the soil boring logs and abandonment forms, which describe in detail the soil characteristics encountered.

4.2 GROUND WATER SAMPLING RESULTS

Analytical results from the ground water sample collected from the temporary well in boring B/W-1 are summarized in Table 2. No GRO or VOCs were detected in this sample.

4.2.1 Ground Water Flow Direction and Elevation

On October 30, 1995, Ayres Associates measured ground water elevations in monitoring wells MW-1 and MW-3 located on the former Hedlund's gas station property, which is directly west of Bob's Service Station, and the temporary well in B/W-1. Monitoring well MW-4 could not be found. Monitoring well construction and development forms for temporary well B/W-1 are in Appendix F. Ayres Associates used the ground water elevations to construct the ground water contours shown in Figure 3, which indicate that ground water flows in an east-northeasterly direction. The depth to ground water was approximately 3 feet below ground surface on October 30, 1995. In 1991, when Foth & Van Dyke collected ground water samples from the Hedlund monitoring wells, the ground water depth was from 1.0 to 1.7 feet lower than what we measured in 1995. In 1991, the difference in water elevation between MW-1 and MW-3 was 0.65 feet compared to a difference of only 0.09 feet in 1991. In 1991 the ground water was flowing southwesterly; whereas in 1995 it was flowing northeasterly. Ground water appears to change flow direction depending on its depth.

5.0 DISCUSSION

Based on the sampling results, there are two plumes of soil petroleum contamination on the Bob's Service Station property. One plume of contamination lies in and around the former UST bed and may have moved as far down gradient as TP-2. This plume is shown in Figure 2. The second plume contains higher concentrations of petroleum contamination and stems from petroleum contamination migrating onto Bob's Service Station property from the former Hedlund property. The second plume is not shown in Figure 2 because we were retained by Mr. Anderson to conduct a remedial investigation due to the petroleum contamination caused when his former USTs tipped and spilled gasoline. The Hedlund property has soil and ground water petroleum contamination as documented in analysis of samples from monitoring wells and soil borings installed in December 1990. The ground water flow direction and the elevated contaminant levels in soil samples from boring B-2 indicate that contamination from the Hedlund property is affecting soil and ground water along the north and northwest sides of Bob's Service Station property. The contamination in TP-3 appears to be coming from the west because no contamination was found under the west side of the pump island when the tank closure site assessment sampling was conducted and because elevated concentrations have been detected in a B-2 sample.

6.0 CONCLUSIONS

Based on qualitative and quantitative analysis of soil and ground water samples collected as part of this remedial investigation and information obtained from previous on-site investigations, we have made the following conclusions:

- Petroleum contaminated ground water exceeding the PAL and diesel contaminated soil was found in 1989 along the south side of STH 70. Mr. Anderson never sold diesel fuel on his property.
- Both petroleum contaminated soil and ground water are present on the Hedlund property to the west of Mr. Anderson's site.

- Two gasoline USTs were removed from the Anderson site in 1993, along with associated product piping and pumps. Minimal petroleum contamination was found under the former east pump and no contamination was found under the former west pump. The contaminated ground water and free product from the spill that occurred when the USTs tipped were removed during an emergency cleanup.
- Soil contamination in excess of NR 720 Soil Cleanup Standards, due to the former on-site USTs and related piping, is present at this site. This is one of two soil contamination plumes on the site.
- The second soil contamination plume is due to petroleum contamination, in excess of NR 720 Soil Cleanup Standards, that has migrated onto the Anderson site from the Hedlund property, which is adjacent to and directly west of the Anderson site.
- Soil contamination in the plume resulting from the gasoline spill from the former USTs has much lower concentrations than are found in the plume migrating from the Hedlund property.
- The two contamination plumes may have commingled.
- No petroleum contamination was found in the test pit installed near the 2,000-gallon waste oil AST.
- No ground water contamination was documented on site during this investigation.
- Ground water flow direction appears to change depending on depth. In 1995, ground water was flowing northeasterly.

7.0 REMEDIAL ALTERNATIVE EVALUATIONS

7.1 GENERAL

This section evaluates the estimated cost and anticipated performance of several remedial alternatives. This evaluation is required by DILHR, per ILHR 47: "the remedial action plan developed for the site shall include a consideration of at least three remedial alternatives, one of which shall be passive bioremediation with long-term monitoring." This rule also requires the implementation of the most cost-effective remediation alternative that meets the requirements of the WDNR.

The ultimate objective of any remediation is to remove the existing source of contamination and reduce the associated contaminant concentrations to acceptable levels throughout the site. The alternatives discussed below address the remediation of soil contamination due to the former UST system on the Bob's Service Station property. The contamination encountered in soil samples from boring B-2 and B-3 and test pit TP-3 is due to petroleum contamination that has migrated from an off-site source. The soils affected by this migrating plume will not be addressed in the following remedial alternatives. Instead, these soils

should be addressed when remediation is conducted at the former Hedlund property. The description of the remedial alternatives includes their respective advantages and disadvantages. In accordance with ILHR 47, life cycle cost estimates for construction, operation, and maintenance of each system are provided for each alternative.

Passive bioremediation was evaluated as a possible remedial alternative for this site. As documented in *WDNR Interim Guidance - Natural Biodegradation as a Remedial Action Option*, degradation of most volatile compounds is inhibited whenever the permeability coefficient for the soil is less than 10^{-5} cm/sec. Permeability is a measure of the ability of the soil to transmit fluids, such as water or air. This is an important factor for biodegradation because it controls the movement of water, gases, and nutrients through the soil system. According to the WDNR guidelines, permeability of soil should be greater than 10^{-3} cm/sec for optimal biodegradation conditions; values in the 10^{-5} - 10^{-3} cm/sec range may be acceptable if other site characteristics are favorable. Soil sampling results indicate that soil characteristics at this site are primarily clays. Typical permeability coefficients of clay are less than 10^{-6} cm/sec. Therefore, bioremediation is not feasible at this site.

We also determined that landfilling and soil vapor extraction are not feasible alternatives for the site. Landfilling of excavated contaminated soil is not a feasible remediation alternative because of its long-term liabilities to the client.

Soil vapor extraction (SVE) is also not feasible at this site for the following reasons:

- Soil type--Soil venting has been ineffective in heavy soil types. Heavy clay layers are present at this site as shown in the soil boring logs. (See Appendix B).
- Depth to ground water--Shallow ground water at this site would reduce the effectiveness of SVE remediation.

The following alternatives were evaluated for treatment of the petroleum contaminated soil at the project site:

Alternative 1: Soil excavation asphalt incorporation

Alternative 2: Soil excavation with commercial biopile treatment

Alternative 3: Soil excavation with thermal desorption

Alternative 1: Soil Excavation with Asphalt Incorporation

Description: This alternative involves excavation of contaminated soil from the area where contamination exceeds NR 720 Soil Cleanup Standards in the former UST and pump system locations. Following contaminated soil removal, the excavation would be backfilled with clean fill material to the original grade elevation. Backfill materials would be compacted.

The limits of the proposed soil excavation are shown as the plume of soil contamination in Figure 2. Contaminated soils would be excavated to a depth of approximately 8 feet. A pumper truck would be on site during excavation activities to remove any ground water that

enters into the work area. This water would be hauled to an approved wastewater treatment facility and properly disposed of. No sheet piling or other slope stabilization measures are proposed. Approximately 620 cubic yards of soil would be excavated. The contaminated soils, estimated to be 260 cubic yards, would be hauled from the site to an approved asphalt incorporation plant.

During excavation of contaminated soils, soil screening and sampling would be completed in accordance with WDNR Publication SW-157-92, *Guidance for Conducting Environmental Response Actions*. In accordance with the WDNR requirements, the following schedule for sample field screening with a PID or flame ionization detector (FID) and laboratory analysis for GRO and VOCs would be followed:

- Collection of one soil sample for laboratory analysis from every 25-foot grid interval of sidewall from the zones that showed the highest levels during field screening
- Collection of one soil sample for laboratory analysis per 25-foot grid interval from the base of the excavation
- Screening of one soil sample per 15 cubic yards of excavated soil
- Collection of one soil sample for laboratory analysis from each 300 cubic yards or less of excavated soil when the screening indicates contamination, or collection of one soil sample for laboratory analysis for each 100 cubic yards or less of soil when the screening does not indicate contamination but the soil was shown to be contaminated during the site investigation

Advantages and Disadvantages: The benefits of this alternative are that it provides immediate removal of contaminated soils as compared to an active remediation system, such as vapor extraction, and removal of the soil contamination eliminates additional contamination from potentially affecting the ground water. The disadvantage of this alternative is the surface disturbance to the site.

Opinion of Cost: The total opinion of probable costs associated with Alternative 1 are summarized in Table 3. More detailed estimates are in Appendix G. All costs presented in this report are at 1995 rates and do not account for inflation. The total opinion of probable cost for excavation of approximately 620 cubic yards of soil, asphalt incorporation of approximately 260 cubic yards of contaminated soil (at a treatment cost of \$40/ton), clean backfill and compaction, and site closure is estimated to be \$53,300.

Alternative 2: Soil Excavation with Biopile Treatment

Description: This alternative is similar to Alternative 1, except that the contaminated soils would be hauled to a biopile site, such as Timberline Trail BioSite near Bruce, Wisconsin, for disposal in a biopile system. Biopiles use natural biodegradation as a remedial action. Many indigenous microbes in soil are capable of transforming both naturally occurring and artificial hydrocarbon compounds through direct metabolism. The term "biodegradation" refers to complete mineralization of the organic contaminants to carbon dioxide, water,

inorganic compounds, and cell protein. Excavation and soil sampling would be the same as described in Alternative 1.

Advantages and Disadvantages: This alternative has the same advantages and disadvantage as those described for Alternative 1.

Opinion of Cost: The total opinion of probable costs associated with Alternative 2 are summarized in Table 3. More detailed estimates are included in Appendix G. All costs presented in this report are at 1995 rates and do not account for inflation. The total opinion of probable cost for excavation of approximately 620 cubic yards of soil, biopile disposal of approximately 260 cubic yards of contaminated soil (at a treatment cost of \$27/ton), clean backfill and compaction, and site closure is estimated to be \$49,100.

Alternative 3: Soil Excavation with Thermal Desorption

Description: This alternative is similar to Alternative 1, except contaminated soils would be hauled to an off-site thermal desorption plant. This treatment technology involves heating the contaminated soil to a point where the volatiles are driven-off into the off-gas stream along with the moisture. The treated soil is then rehydrated for cooling, fugitive dust control, and soil workability. Excavation and soil sampling would be the same as described in Alternative 1.

Advantages and Disadvantages: This alternative has the same advantages and disadvantages as those described for Alternative 1.

Opinion of Cost: The total opinion of probable costs associated with Alternative 3 are summarized in Table 3. More detailed estimates are in Appendix G. All costs presented in this report are at 1995 rates and do not account for inflation. The total opinion of probable cost for excavating approximately 620 cubic yards of soil, off-site thermal desorption of approximately 260 cubic yards of contaminated soil (at a treatment cost of \$45/ton), and site closure is estimated to be \$56,700.

8.0 RECOMMENDATIONS

Based on the results of this investigation and the analysis of costs for cleanup options, excavation of the contaminated soil near the two former USTs is the only feasible alternative for remediation of this site. Whether the excavated soil is transported to an asphalt plant, transported to a thermal desorption plant, or disposed of in a biopile, the estimated cost of hauling and disposal fees are nearly the same.

The provisions of Wisconsin Administrative Code ILHR 47, "Petroleum Environmental Cleanup Fund Act," provide for reimbursement of eligible costs associated with the most economical treatment alternative. In this case, that alternative is excavation and biopile treatment of contaminated soil at Timberline Trail BioSite (Alternative 2). However, we recommend that bids be taken from contractors for the asphalt incorporation, biopile treatment, or thermal desorption options. Consideration should then be given to the least costly bid received.

We recommend that the excavation be conducted on or after such time that the remediation is conducted for the petroleum contamination on the Hedlund property. This would include both the contamination on the Hedlund property as well as the petroleum contamination that has spread onto Mr. Anderson's property. If Mr. Anderson remediates the contamination caused by his USTs before the other contamination is remediated, the contamination caused by the Hedlund's site could potentially spread into the clean backfill on Mr. Anderson's property and contaminate it.

9.0 STANDARD OF CARE

This remedial investigation report is based on data obtained by Ayres Associates and other contractors associated with the client through the collection and analysis of soil and ground water samples. Water level measurements and soil and ground water qualities reported apply only to the specific locations and times at which this work was performed. Variations in sample results may occur if samples were collected at other locations between the soil borings and monitoring wells. Design data, computations, and correspondence supporting the information presented in this report are on file at Ayres Associates.

Conclusions and recommendations made represent our professional engineering judgment in interpreting these data, including data obtained from reports prepared by others relative to soil and ground water conditions in the study area.

10.0 NR 712.09 SUBMITTAL CERTIFICATION

"I, Lori A. Rosemore, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."

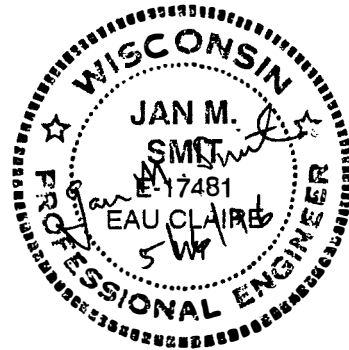
Lori A. Rosemore

5-10-96

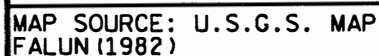
"I, Jan M. Smit, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-#8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."

Jan M. Smit

5/6/96



8X118DR.DCN ON - 1-63

**AVRES ASSOCIATES**

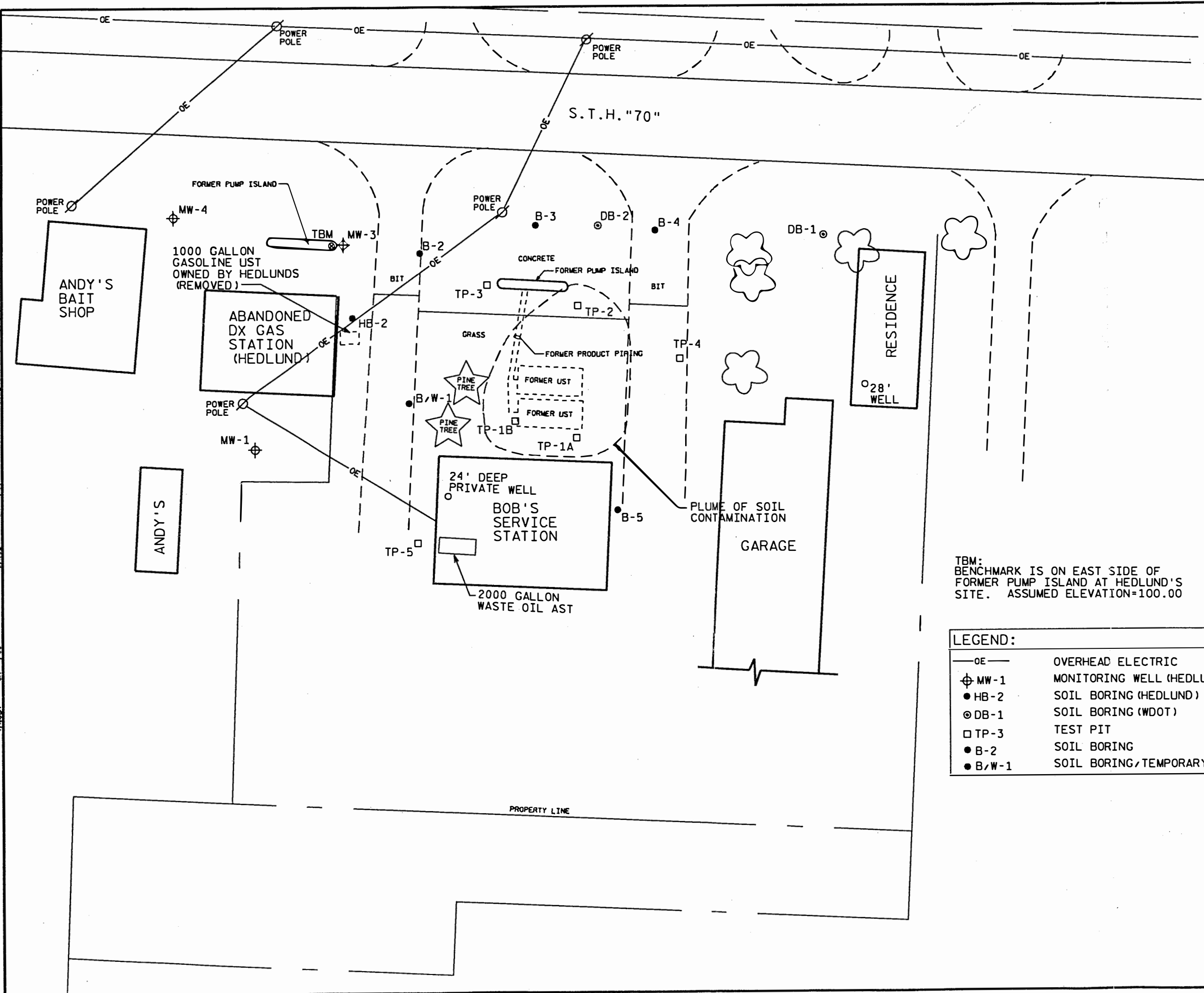
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 ON = 22-25,27

ptail.dgn ON = 11-17,21
 ON = 1-63

bit10r.dgn ON = 1-63
 qcor.dgn ON = 127,57
 41.dgn ON = 1-63



TBM:
 BENCHMARK IS ON EAST SIDE OF
 FORMER PUMP ISLAND AT HEDLUND'S
 SITE. ASSUMED ELEVATION=100.00

LEGEND:	
— OE —	OVERHEAD ELECTRIC
⊕ MW-1	MONITORING WELL (HEDLUND)
● HB-2	SOIL BORING (HEDLUND)
⊙ DB-1	SOIL BORING (WDOT)
□ TP-3	TEST PIT
● B-2	SOIL BORING
● B/W-1	SOIL BORING/TEMPORARY WELL

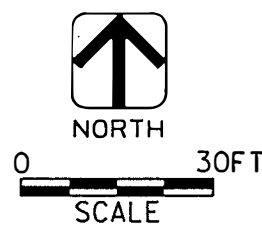
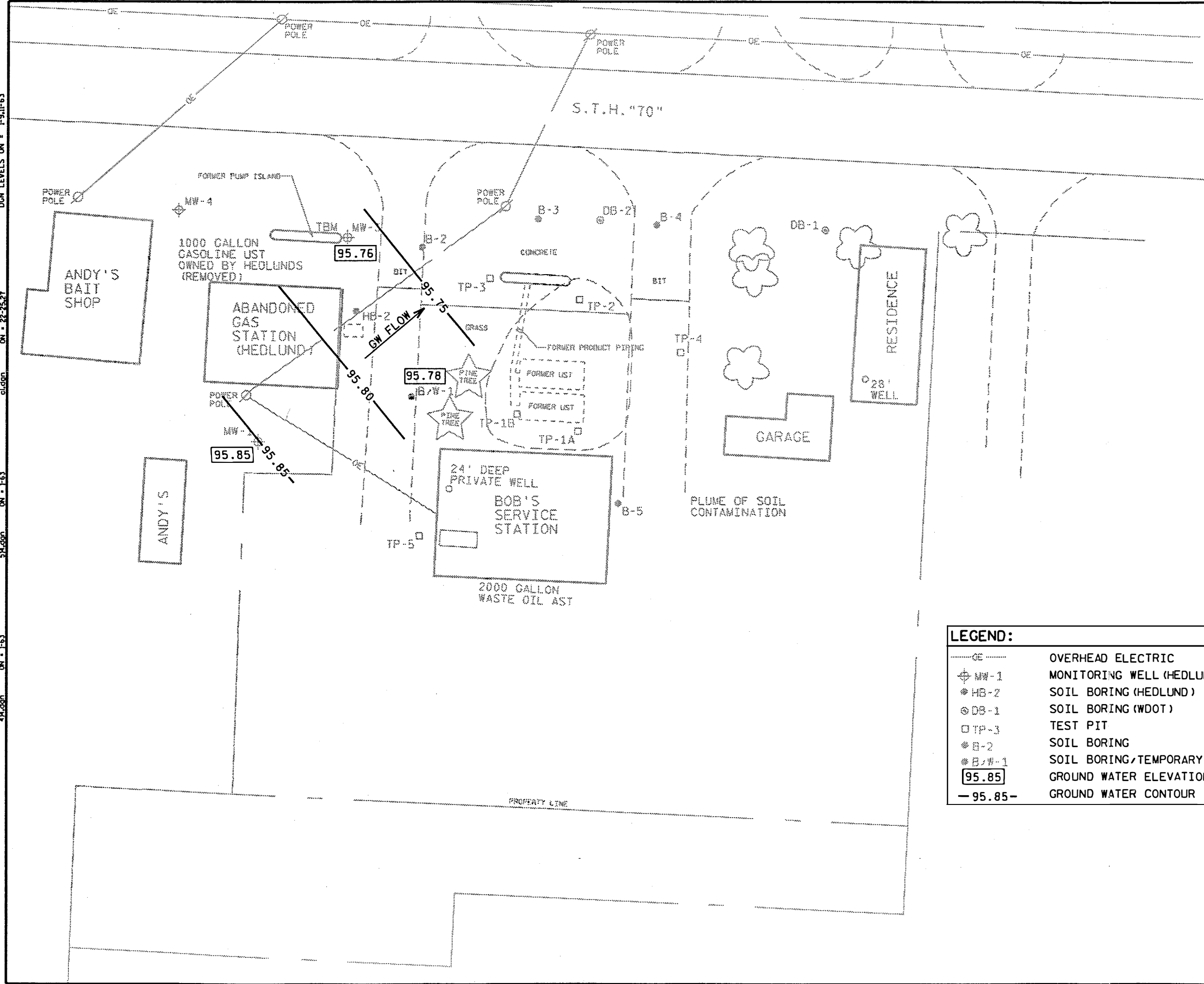
SITE PLAN	
DRN. BY: MLE CHK. BY: JFH DATE: APRIL 1996	AVRES ASSOCIATES
REMEDIAL INVESTIGATION BOB'S SERVICE STATION SIREN, WISCONSIN	
FIGURE 2	

PEN TABLE = #plot72:ioser+NFULL.TBL
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ON = 2-22-95-27

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SV: air.dgn ON = 1-63
SV: 14.dgn ON = 1-63

1002323L.DGN ON = 2-9-91-63
SV: air.dgn ON = 1-63
SV: 14.dgn ON = 1-63



LEGEND:	
—OE—	OVERHEAD ELECTRIC
⊕ MW-1	MONITORING WELL (HEDLUND)
● HB-2	SOIL BORING (HEDLUND)
⊙ DB-1	SOIL BORING (WDOT)
□ TP-3	TEST PIT
● B-2	SOIL BORING
● B/W-1	SOIL BORING/TEMPORARY WELL
95.85	GROUND WATER ELEVATION
—95.85—	GROUND WATER CONTOUR

GROUND WATER CONTOURS
OCTOBER 30, 1995

DRN. BY: MLE
CHK. BY: JFH
DATE: APRIL 1996
AVRES ASSOCIATES

REMEDIAL INVESTIGATION
BOB'S SERVICE STATION
SIREN, WISCONSIN

FIGURE
3

TABLE 1
SOIL ANALYTICAL RESULTS
BOB'S SERVICE STATION - FALUN, WISCONSIN

Sample Date	Sample Location	Sample Depth (ft)	PID Response (i.u.)	GRO (mg/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Ethylbenzene (ug/kg)	Total Xylenes (ug/kg)	1,2-DCA (ug/kg)	Naphthalene (ug/kg)	n-Butylbenzene (ug/kg)	sec-Butylbenzene (ug/kg)	Dichloromethane (ug/kg)	Isopropylbenzene (ug/kg)	p-Isopropyltoluene (ug/kg)	n-Propylbenzene (ug/kg)	1,2,4-TMB (ug/kg)	1,3,5-TMB (ug/kg)	Lead (ug/kg)
7/25/94	TP-1a	2.5 - 4.5	NR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		5.0 - 7.0	113.5	23.6	< 6.0	< 6.0	< 6.0	<13.4	< 6.0	< 12.0	193	70.4	< 6.0	6.9	133	28	79.7	282	3.49
		7.5 - 9.5	15.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10.0 - 12.0	NR	< 5.8	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	3.22
7/25/94	TP-1b	2.5 - 4.5	6.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		5.0 - 7.0	1176	10.2	13.8	45.5	22.5	293	< 6.6	55	< 6.6	< 6.6	< 6.6	< 6.6	< 6.6	10.8	156	38.7	5.90
		7.5 - 9.5	31.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10.0 - 12.0	NR	<6.9	< 2.7	< 2.7	< 2.7	< 5.4	< 2.7	< 5.4	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 5.4	< 2.7	14.6
7/25/94	TP-2	2.5 - 4.5	NR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		5.0 - 7.0	NR	< 6.4	6.5	< 2.3	< 2.3	< 5.1	< 2.3	< 4.6	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 4.6	< 2.3	13.80
		7.5 - 9.5	NR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10.0 - 12.0	NR	< 6.8	< 2.6	< 2.6	< 2.6	< 5.3	< 2.6	< 5.3	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 5.3	< 2.6	16.10
7/25/94	TP-3	2.5 - 4.5	NR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		5.0 - 7.0	13.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		7.5 - 9.5	44.6	52.8	58.5	< 6.5	147	< 13.0	< 6.5	14.7	213	86.8	< 6.5	130	< 6.5	306	< 13.0	8.3	12.9
		10.0 - 12.0	1.5	< 7.1	< 2.8	< 2.8	< 2.8	< 5.6	< 2.8	< 5.6	< 2.8	< 2.8	< 2.8	< 2.8	< 2.8	< 2.8	< 5.6	< 2.8	14.8
7/25/94	TP-4	2.5 - 4.5	NR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		5.0 - 7.0	NR	< 7.4	< 2.8	< 2.8	< 2.8	< 5.6	< 2.8	< 5.7	< 2.8	< 2.8	< 2.8	< 2.8	< 2.8	< 2.8	< 5.7	< 2.8	15.6
		7.5 - 9.5	NR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10.0 - 12.0	NR	< 7.6	< 2.8	< 2.8	< 2.8	< 5.6	< 2.8	< 5.6	< 2.8	< 2.8	3.3	< 2.8	< 2.8	< 2.8	< 5.6	< 2.8	15
7/25/94	TP-5	2.5 - 4.5	NR	< 5.8	< 2.2	< 2.2	< 2.2	< 4.4	< 2.2	< 4.4	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 4.4	< 2.2	4.45
		5.0 - 7.0	NR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		7.5 - 9.5	NR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10.0 - 12.0	NR	< 6.9	< 2.7	< 2.7	< 2.7	< 5.4	< 2.7	< 5.4	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 5.4	< 2.7	13.4
NR 720 Soil Cleanup Standards				100	5.5	1,500	2,900	4,100	4.9	xx	xx	xx	xx	xx	xx	xx	xx	xx	

[Shaded Box] = Exceeds Wisconsin Administrative Code NR 720 Soil Cleanup Standards
 (mg/kg) = milligrams per kilogram, equivalent to parts per million (ppm)
 (ug/kg) = micrograms per kilogram, equivalent to parts per billion (ppb)
 (i.u.) = instrument units

-- = Not analyzed
 NR = No reading
 < = Not detected above method detection limit
 Only detected VOCs are listed in this table

TMB = Trimethylbenzene
 xx = No NR 720 Standard

TABLE 1 (Cont.)
SOIL ANALYTICAL RESULTS
BOB'S SERVICE STATION - FALUN, WISCONSIN

Date	Sample Location	Sample Depth (ft)	PID Response (i.u.)	GRO (mg/kg)	Benzene (ug/kg)	Toluene (ug/Kg)	Ethyl-benzene (ug/Kg)	Total Xylenes (ug/Kg)	1,2-DCA (ug/Kg)	Naphthalene (ug/Kg)	n-Butyl-benzene (ug/Kg)	sec-Butyl-benzene (ug/Kg)	Dichloromethane (ug/Kg)	Isopropyl-benzene (ug/Kg)	p-Isopropyl-toluene (ug/Kg)	n-Propyl-benzene (ug/Kg)	1,2,4-TMB (ug/Kg)	1,3,5-TMB (ug/Kg)	Lead (mg/Kg)
10/30/95	B/W-1	2.5 - 4.5	NR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		5.0 - 7.0	0.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		7.5 - 9.5	0.3	< 1.0	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	--
		10.0 - 12.0	0.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		12.5 - 14.5	0.3	< 1.0	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	--
10/30/95	B-2	2.5 - 4.5	525	1,400	17,000	25,000	14,000	72,000	< 1200	2,000	10,000	< 1200	< 2500	< 1200	< 1200	3,600	36,000	8,600	--
		5.0 - 7.0	518	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		7.5 - 9.5	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10.0 - 12.0	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		12.5 - 14.5	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		15.0 - 17.0	30	1.9	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	--
10/30/95	B-3	2.5 - 4.5	NR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		5.0 - 7.0	1.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		7.5 - 9.5	NR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10.0 - 12.0	16	2.8	50	34	47	237	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	92	< 25	--
		12.5 - 14.5	14	1.6	< 25	< 25	29	180	< 25	< 25	40	< 25	< 25	< 25	< 25	< 25	180	< 25	--
10/30/95	B-4	2.5 - 4.5	NR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		5.0 - 7.0	NR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		7.5 - 9.5	NR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10.0 - 12.0	NR	< 1.0	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	--
		12.5 - 14.5	NR	< 1.0	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	--
10/30/95	B-5	2.5 - 4.5	NR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		5.0 - 7.0	NR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		7.5 - 9.5	NR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10.0 - 12.0	NR	< 1.0	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	--
		12.5 - 14.5	NR	< 1.0	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	--
NR 720 Soil Cleanup Standards				100	5.5	1,500	2,900	4,100	4.9	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx

 = Exceeds Wisconsin Administrative Code NR 720 Soil Cleanup Standards
 (mg/kg) = milligrams per kilogram, equivalent to parts per million (ppm)
 (ug/kg) = micrograms per kilogram, equivalent to parts per billion (ppb)
 (i.u.) = instrument units

-- = Not analyzed
 NR = No reading
 < = Not detected above method detection limit
 Only detected VOCs are listed in this table

TMB = Trimethylbenzene
 xx = No NR 720 Standard

TABLE 2
GROUND WATER ANALYTICAL RESULTS
BOB'S SERVICE STATION - FALUN, WISCONSIN

Date	Sample Location	GRO (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)	1,2- DCA (ug/L)	Naph- thalene (ug/L)	n-Butyl- benzene (ug/L)	sec-Butyl- benzene (ug/L)	Dichloro- methane (ug/L)	Isopropyl- benzene (ug/L)	p-Isopropyl- toluene (ug/L)	n-Propyl- benzene (ug/L)	1,2,4- TMB (ug/L)	1,3,5- TMB (ug/L)	Dissolved Lead (ug/L)
10/30/95	BW-1	< 50	< 0.2	< 0.2	< 0.2	< 0.6	< 0.2	< 0.2	< 0.2	< 0.2	< 1.1	< 0.2	< 0.2	< 0.2	< 0.3	< 0.2	--
NR 140 Enforcement Standards		xx	5	343	700	620	5	40	xx	xx	5	xx	xx	xx	xx	xx	15
NR 140 Preventive Action Limits		xx	0.5	68.6	140	124	0.5	8	xx	xx	0.5	xx	xx	xx	xx	xx	1.5

-- = Not analyzed

(ug/L) = micrograms per liter, equivalent to parts per billion (ppb)

< = Not detected above method detection limit

TMB = Trimethylbenzene

xx = No NR 140 standard

TABLE 3
REMEDIAL ALTERNATIVE OPINION OF PROBABLE COSTS
BOB'S SERVICE STATION - FALUN, WISCONSIN

	ALTERNATIVE 1 SOIL EXCAVATION WITH ASPHALT INCORPORATION	ALTERNATIVE 2 SOIL EXCAVATION WITH COMMERCIAL BIOPILE TREATMENT	ALTERNATIVE 3 SOIL EXCAVATION WITH THERMAL DESORPTION
ENGINEERING	\$ 15,300.	\$ 15,300.	\$ 15,300.
CONSTRUCTION	\$ 33,200.	\$ 29,000.	\$ 36,600.
LABORATORY	\$ 3,300.	\$ 3,300.	\$ 3,300.
SITE CLOSURE	\$ 1,500.	\$ 1,500.	\$ 1,500.
TOTAL	\$ 53,300.	\$ 49,100.	\$ 56,700.

APPENDIX A

CORRESPONDENCE

**State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES**

Northwest District Headquarters
Box 309
Spooner, WI 54801

Carroll D. Beaudry, Secretary
TELEFAX NO. 715-635-4105

April 2, 1990

File Ref: 4440

Mr. Carl A. Hedlund
Hedlund Oil Company
Route 1, Box H6
Grantsburg, WI 54840

Mr. Robert P. Anderson
10531 STH 70
Siren, WI 54872

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Dear Sirs:

RE: Hedlund DX Service Station and Bob's Service Station,
Falun, WI (NW NW Sec. 19 T38N-R17W)

On February 9, 1990, Aqua-Tech, Inc. submitted to the Department of Natural Resources (DNR) a preliminary environmental site assessment report that their firm conducted for the Department of Transportation (DOT) at the former DX service station located in Falun, WI. The report determined that groundwater and soil contamination from petroleum product exists at this site. It is possible that the contamination has migrated off-site and is a possible source of petroleum product contamination confirmed to be in the water supply belonging to Mr. Otmer Anderson of Andy's Bait Shop, west of the site.

A site history included in this report states that the DX service station had two underground storage tanks removed in 1980; there was observed leakage at the time of removal.

A site assessment report by Aqua-Tech, Inc. was also conducted at Bob's Service Station, located adjacent to the DX service station site. This report states that similar soil and water contamination exists at this property as well, owned by Robert P. Anderson.

Under s. 144.76(3), Wisconsin Statutes, any person who possesses or controls a hazardous substance which is discharged, or who causes the discharge of a hazardous substance, must take the actions necessary to restore the environment and minimize the harmful effects from the discharge to the air, lands or waters of the State.

RE: Hadlund DX Service Station & Bob's Service Station - April 2, 1990

2.

Based on information available to the Department, the Department believes you have such a responsibility.

The Department is, therefore, requesting that within 10 days of receipt of this letter you contact the person identified below and indicate whether you intend to conduct the following activities:

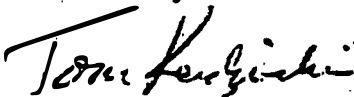
1. Immediately supply an adequate, safe water supply to the Otmer Anderson residence and business.
2. Retain a qualified environmental consultant acceptable to the department to conduct the necessary investigation and/or remediation.
3. Define degree and extent of soil and groundwater contamination.
4. Recommend remedial options and feasibility.
5. Implement any necessary remedial activities.

If the hazardous substance was, or may have been, released from an underground storage tank regulated under Subtitle I or the Resource Conservation and Recovery Act, you are also required to comply with the provisions of that law and 40 CFR Parts 280 and 281. You may be able to fulfill your responsibilities under the federal law by working with the Department to investigate and/or remediate the suspected release.

The Department ranks every reported contamination incident based on what is known about the site. If you fail to respond within the time period identified above, or if you fail to take the appropriate action, the Department has the authority under s. 144.76(7), Wis. Stats., to take the necessary action and to seek reimbursement for all its actual and necessary expenditures from the responsible parties. If the Department utilizes federal funds to undertake the necessary actions, the U.S. Environmental Protection Agency also has the right to seek reimbursement for all Department expenditures from the responsible party(ies).

Finally, you may be eligible to be reimbursed for your investigation and/or remediation costs from Wisconsin's Petroleum Storage Remedial Action Fund. This fund is administered by the Wisconsin Department of Industry, Labor and Human Relations (DILHR). Please contact DILHR for further information or an application package.

Sincerely,



Tom Kendzierski
Hydrogeologist

Attach.

cc: DILHR

SW/3 (ERR - Tank Unit)

Dale Marg, WDOT - District 8, P.O. Box 429, Superior, WI 54880

0390\HW8N0318.KKM



RECEIVED

OCT 20 1993

AYRES ASSOCIATES

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Cumberland Area Headquarters

July 8, 1993

P.O. Box 397

1341 2nd Ave.

Cumberland, Wisconsin 54829

TELEPHONE 715-822-3590

TELEFAX 715-822-3592

831-8100

To: Joe Gause

Mr. Bob Anderson
Bob's Garage
Highway 70
Siren, WI 54872

CERTIFIED MAIL
RETURN RECEIPT REQ

Dear Mr. Anderson:

**RE: Spill at Bob's Garage, NWNW, Section 19 T38N, R17W, Burnett County,
Wisconsin**

The Department of Natural Resources has responsibility under Wisconsin law to regulate and enforce laws relating to hazardous substance spills or discharges. We also have responsibility for regulation and enforcement of other laws protecting public health, safety and environmental quality.

Unfortunately, hazardous substance discharges do occur. The purpose of this letter is to make sure persons who may be responsible for such discharges know their responsibilities under the law and act accordingly. If you are already involved in a clean-up, this letter is intended as clarification and information.

Based on information available to the Department, we believe you have such a responsibility. This office was notified of a spill that occurred at the above-mentioned site on July 4, 1993 when 200 gallons of gasoline were spilled due to the tanks floating and then overturning.

Under s. 144.76(3), Wisconsin Statutes, any person who possesses or controls a hazardous substance which is discharged, or who causes the discharge of a hazardous substance, must take the actions necessary to restore the environment and minimize the harmful effects from the discharge to the air, lands or waters of the State.

The Department is, therefore, requesting that within 30 days of receipt of this letter you contact the person identified below in writing and indicate whether you intend to conduct the following activities*:

1. Immediately determine whether or not the discharge poses an imminent fire, exposure or safety threat to persons, structures, sewers, surface waters, groundwater or the community **AND take appropriate emergency action.** In the event of an emergency situation, contact your local fire department and other emergency officials. You do not need DNR approval to take appropriate action to minimize the harmful effects of a spill.
2. Show proof within 60 days that you have retained a qualified environmental consultant, acceptable to the Department, to conduct the necessary investigation and/or remediation. However, for sites that are eligible for PECFA reimbursement, consultants must be hired based on a comparison of three proposals and the consulting firm must provide only consulting services. Consultants and consulting firms must be registered with the Department of Industry, Labor and Human Relations (DILHR). If you have specific questions about PECFA or for a list of registered consultants, please contact DILHR at 608/266-2424.
3. Determine and document the degree and extent of soil and groundwater contamination.
4. Recommend remedial options and feasibility.
5. Implement any necessary remedial activities.
6. Propose and adhere to a schedule for regular progress reports and completion of the above tasks.

The Department wishes to remind you that time is of the essence in responding to environmental contamination incidents. Generally, the more quickly a release is discovered and responded to, the smaller the damaging impacts and the cost of investigation and/or remediation. Attached to this letter is guidance developed by the Department to aid persons in investigation and/or remediating hazardous substance releases.

Although such investigations may be expensive, the State does provide assistance in some cases. You may be eligible to be reimbursed for your investigation and/or remediation costs from Wisconsin's Petroleum Storage Remedial Action Fund. This fund is administered by the Wisconsin Department of Industry, Labor and Human Relations (DILHR). Please contact them in Madison at 608/267-3753 for further information or an application package.

We prefer to work cooperatively with people to resolve problems. However, if you fail to respond within the time period identified above, or if you fail to take the appropriate action, the Department has the authority under s. 144.76(7), Wis. Stats., to take the necessary action and to seek reimbursement for all its actual and necessary expenditures from the responsible parties.

*If you have already engaged in clean-up activities, please provide the Department with a status report.

If there is anything you don't understand about this letter or have any concerns at all, please write or call me at 715/822-3590.

Sincerely,



James A. Hosch
Hydrogeologist

IAH:dk

Enclosures

cc: Darrell Christy, Tank Inspector, DILHR, 13 E. Spruce St., Chippewa Falls, WI
54729
Tom Kendzieraki - DNR Spooner



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Cumberland Area Headquarters

June 8, 1994

Robert Anderson
Bob's Service Station
10531 State Rd. 70
Siren, WI 54872

RECEIVED

JUN 09 1994

AYRES ASSOCIATES

P.O. Box 397
1341 2nd Ave.
Cumberland, WI 54829
Telephone 715-822-3590
Telefax 715-822-3592
NWD ID NO.: 148

RE: Bob's Service Station - Falun, Rt 1, Hwy 70, Daniels, Burnett, Wisconsin

Dear Mr. Anderson:

This Notice to Proceed was originally sent on April 28, 1994, and returned to our office indicating that the forwarding authorization had expired. The address that was shown on the letter was Rt 1. Box 719.

The Department has received the report entitled Remedial Investigation Work Plan prepared by Ayres Associates, dated April 26, 1994. Currently, workload and staffing levels do not allow us to provide you with direct oversight at this time.

This letter serves as your "Notice to Proceed" with investigation and remediation of the site. All actions must comply with all applicable statutes, program guidance, standards and Administrative Rules. This letter is not an approval of your work plans and/or reports. They will be filed as public records until the Department is able to review them, or until site remediation is completed.

In order to assist you and your consultant in understanding what is required by the Department, I have attached a Remedial Investigation Checklist for your reference. This checklist was prepared by the Department as a summary of what needs to be done, the rules that need to be followed, and the standards which need to be met for complete assessment of a LUST site.

Your consultant should follow the Department's "Guidance for Conducting Environmental Response Actions" (PUBL SW-1577-92). All samples should be analyzed according to the parameters in the "Leaking Underground Storage Tank (LUST) and Petroleum, Analytical and Quality Assurance Guidance" (PUBL-SW-130-93). It is very important that your consultant understand and meet the standards established by the Department; however, you, as the responsible party, are ultimately responsible for the investigation and remediation that is required at your site, according to Wisconsin Statute 144.76. Failure to follow guidance may result in delays when the site is reviewed for closure or reimbursement from PECFA.

Any well construction variances or WPDES permits, if applicable, should be obtained prior to construction, disposal or discharge. PECFA payment requests, along with necessary reports or closure documents, can still be submitted for review upon completion of milestones as detailed in ILHR 47 or as provided by s. ILHR 47.35(2)(b). Form 4's received by this office will be processed in order of the date that they were received.

Effective the date of this letter, every 90 days, you or your consultant should provide the Department with a brief status report of one or two pages, providing an update on site activities and your proposed schedule. The Department should be notified immediately of any emergency actions and follow them up with a report. As workload and staff levels are adjusted, the status of this case may be changed and we may be able to review your consultant's work for completeness and acceptability. You will be informed, in writing, if the site status is changed.

If you are interested in obtaining the protection of limited liability under s. 144.765, Stats., please contact Mark Giesfeldt at (608) 267-7562 or Darsi Foss at (608) 267-6713, in the Department of Natural Resources' Madison office for more information. The liability exemption under s. 144.765, Stats., is available to persons who meet the definition of "purchaser" in s. 144.765 (1)(c) and receive Department approval for the response actions taken at the property undergoing cleanup. The Department will determine eligibility for this program on a case-by-case basis, prior to the "purchaser" developing a scope of work for conducting a ch. NR 716 site investigation at the property.

The Department will review your case when the full extent of contamination has been determined and appropriate clean-up has occurred.

If you should have any questions, please feel free to contact our office at 715/822-3590.

Sincerely,

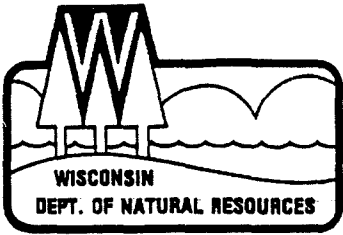


James A. Hosch
Hydrogeologist

JAH:dc

Attachment: Remedial Investigation Checklist

cc: Susan J. Vasey, Ayres Associates, PO Box 1590, Eau Claire, WI 54702-1590
Tom Kendzierski - DNR Spooner



RECEIVED

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

AYRES ASSOCIATES

Cumberland Area Headquarters

December 15, 1994

Mr. Robert Anderson
Bob's Service Station
10531 State Road 70
Siren, WI 54872

P.O. Box 397
1341 2nd Ave.
Cumberland, WI 54829
Telephone 715-822-3590
Telefax 715-822-3592
NWD ID No.: 148

RE: Bob's Service Station - Falun, Rt. 1, Hwy 70, Daniels, Burnett, Wisconsin

Dear Mr. Anderson:

The Department has received the report titled "Work Plan Addendum" prepared by Owen Ayres & Associates, Inc., dated December 13, 1994. Currently, workload and staffing levels do not allow us to provide you with direct oversight at this time.

This letter serves as your "Notice to Proceed" with investigation and remediation of the site. All actions must comply with all applicable statutes, program guidance, standards and Administrative Rules. This letter is not an approval of your work plans and/or reports. They will be filed as public records until the Department is able to review them, or until site remediation is completed.

In order to assist you and your consultant in understanding what is required by the Department, I have attached a Remedial Investigation Checklist for your reference. This checklist was prepared by the Department as a summary of what needs to be done, the rules that need to be followed, and the standards which need to be met for complete assessment of a Leaking Underground Storage Tank (LUST) site. Wisconsin Administrative Codes NR 700 through NR 728 establish requirements for interim actions, public information, site investigations, design and operation of remedial action systems, and case closure. Wisconsin Administrative Code NR 140 establishes groundwater standards. Any samples, soil and/or groundwater, should be analyzed according to the parameters in the LUST Analytical Guidance publication. It is very important that your consultant understand and meet the standards established by the Department; however, you, as the responsible party, are ultimately responsible for the investigation and remediation that is required at your site, according to section 144.76, Wisconsin Statutes. Failure to follow guidance may result in delays when the site is reviewed for closure or reimbursement from PECFA.

The Department will continue to review soil disposal applications as they are submitted. Any well construction variances or WPDES permits, if applicable, should be obtained prior to construction, disposal or discharge. PECFA progress payment requests, along with necessary reports or closure documents, can still be submitted for review.

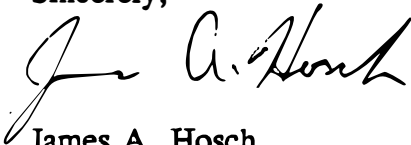
Effective the date of this letter, every 90 days, you or your consultant should provide the Department with a brief status report of one or two pages, providing an update on site activities and your proposed schedule. The Department should be notified immediately of any emergency actions and follow them up with a report. As workload and staff levels are adjusted, the status of this case may be changed and we may be able to review your consultant's work for completeness and acceptability. You will be informed, in writing, if the site status is changed.

If you are interested in obtaining the protection of limited liability under s. 144.765, Stats., please contact Mark Giesfeldt at (608) 267-7562 or Darsi Foss at (608) 267-6713, in the Department of Natural Resources' Madison office for more information. The liability exemption under s. 144.765, Stats., is available to persons who meet the definition of "purchaser" in s. 144.765 (1)(c) and receive Department approval for the response actions taken at the property undergoing cleanup. The Department will determine eligibility for this program on a case-by-case basis, prior to the "purchaser" developing a scope of work for conducting a ch. NR 716 site investigation at the property.

The Department will review your case when the full extent of contamination has been determined and appropriate clean-up has occurred.

If you should have any questions, please feel free to contact our office at 715/822-3590.

Sincerely,



James A. Hosch
Hydrogeologist

JAH:lml

cc: Joseph Hoeme - Owen Ayres & Associates, Inc., P.O. Box 1590, Eau Claire, WI 54702
Tom Kendzierski - DNR Spooner

APPENDIX B

**SOIL BORING LOGS
AND ABANDONMENT FORMS**

Facility/Project Name Bob's Service Station, Falun, Wisconsin				License/Permit/Monitoring Number				Boring Number Test Pit #1a			
Boring Drilled By (Firm name and name of crew chief) Oachs Brothers Construction, Inc.				Date Drilling Started 07/25/94 MM/DD/YY		Date Drilling Completed 07/25/94 MM/DD/YY		Drilling Method Backhoe Test Pit			
DNR Facility Well No.		WI Unique Well No.		Common Well Name		Final Static Water Level		Surface Elevation		Borehole Dia. Not Applicable	
Boring Location State Plane NW 1/4 of NW 1/4 of Section 19, Township 38 N, Range 17 W				Lat. ----- Long.		Local Grid Location (if applicable) Feet <input type="text"/> N <input type="text"/> E Feet <input type="text"/> S <input type="text"/> W					
County Burnett				DNR County Code 7		Civil Town/City/or Village Falun					

SAMPLE		BLOW COUNT	DEPTH IN FEET	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	GRAPHIC LOG	WELL DIAGRAM	PID RESPONSE	SOIL PROPERTIES					comment
NUMBER	LENGTH RECOVERED (FT)								STANDARD PENETRATION	MOISTURE CONTENT	LIQUID LIMIT	PLASTIC LIMIT	P-200	
1			-0 -1 -2 -3 -4	Brown Fine Sand with fine to medium gravel	SW			No Response		Moist				Odor
2			-5 -6	As Above	SW			113.5		Moist				
3			-7 -8 -9	As Above	SW			15.6		Moist				
4			-10 -11 -12 -13 -14 -15 -16 -17 -18 -19 -20 -21 -22	Sandy Clay Test Pit Terminated at 12 Feet	ML			No Response		Moist				

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 

Firm
AYRES ASSOCIATES

This form is authorized by Chapters 144.147 and 162, Wis.Stats. Completion of this report is mandatory. Penalties: Forfeit not less than \$10 or nor more than \$5,000 for each violation. Fined not less than \$10 or more than \$100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

Facility/Project Name Bob's Service Station, Falun, Wisconsin				License/Permit/Monitoring Number				Boring Number Test Pit #1b						
Boring Drilled By (Firm name and name of crew chief) Oachs Brothers Construction, Inc.				Date Drilling Started 07/25/94 MM/DD/YY		Date Drilling Completed 07/25/94 MM/DD/YY		Drilling Method Backhoe Test Pit						
DNR Facility Well No.		WI Unique Well No.		Common Well Name		Final Static Water Level		Surface Elevation		Borehole Dia. Not Applicable				
Boring Location State Plane NW 1/4 of NW 1/4 of Section 19, Township 38 N, Range 17 W				Lat. ----- Long.		Local Grid Location (If applicable) Feet <input type="checkbox"/> N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W								
County Burnett				DNR County Code 7		Civil Town/City/or Village Falun								
SAMPLE		BLOW COUNT	DEPTH IN FEET	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	GRAPHIC LOG	WELL DIAGRAM	PID RESPONSE	SOIL PROPERTIES					comment
NUMBER	LENGTH RECOV- ERED (FT)								STANDARD PENETRA- TION	MOISTURE CONTENT	LIQUID LIMIT	PLASTIC LIMIT	P-200	
1			-0 -1 -2 -3 -4	----- Red-Brown F to M Sand	SW			6.2		Moist				
2			-5 -6 -7	----- Brown F to M Sand	SW			1176		Moist				
3			-8 -9 -10	----- As Above	SW			31.4		Moist				
4			-11 -12 -13 -14 -15 -16 -17 -18 -19 -20 -21 -22	----- Grey Clay Test Pit Terminated at 12 Feet	ML			No Response		Dry				

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature



Firm

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Facility/Project Name Bob's Service Station, Falun, Wisconsin				License/Permit/Monitoring Number				Boring Number Test Pit #2			
Boring Drilled By (Firm name and name of crew chief) Oachs Brothers Construction, Inc.				Date Drilling Started 07/25/94 MM/DD/YY		Date Drilling Completed 07/25/94 MM/DD/YY		Drilling Method Backhoe Test Pit			
DNR Facility Well No.		WI Unique Well No.		Common Well Name		Final Static Water Level		Surface Elevation		Borehole Dia. Not Applicable	
Boring Location State Plane NW 1/4 of NW 1/4 of Section 19, Township 38 N, Range 17 W				Lat. ----- Long.		Local Grid Location (if applicable) Feet N E S W					
County Burnett				DNR County Code 7		Civil Town/City/or Village Falun					

SAMPLE NUMBER	LENGTH RECOV- ERED (FT)	BLOW COUNT	DEPTH IN FEET	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	GRAPHIC LOG	WELL DIAGRAM	PID RESPONSE	SOIL PROPERTIES					comment	
									STANDARD PENETRA- TION	MOISTURE CONTENT	LIQUID LIMIT	PLASTIC LIMIT	P-200		
1			-0	Red-Brown F to M Sand with clay	SM			No Response		Dry					
			-1												
			-2												
			-3												
2			-4	Grey Clay with mottling	ML			No Response		Dry					
			-5												
			-6												
			-7												
3			-8	As Above	ML			No Response		Dry					
			-9												
			-10												
			-11												
4			-12	As Above	ML			No Response		Dry					
			-13												
			-14												
			-15												
			-16												
			-17												
			-18												
			-19												
			-20												
			-21												
			-22												
				Test Pit Terminated at 12 Feet											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature



Firm

AYRES ASSOCIATES

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Facility/Project Name Bob's Service Station, Falun, Wisconsin		License/Permit/Monitoring Number		Boring Number Test Pit #3	
Boring Drilled By (Firm name and name of crew chief) Oachs Brothers Construction, Inc.		Date Drilling Started 07/25/94 MM/DD/YY	Date Drilling Completed 07/25/94 MM/DD/YY	Drilling Method Backhoe Test Pit	
DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Dia. Not Applicable
Boring Location State Plane NW 1/4 of NW 1/4 of Section 19, Township 38 N, Range 17 W		Lat. -----	Local Grid Location (If applicable) Feet <u> </u> N <u> </u> E Feet <u> </u> S <u> </u> W		
County Burnett		DNR County Code 7	Civil Town/City/or Village Falun		

SAMPLE		BLOW COUNT	DEPTH IN FEET	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	GRAPHIC LOG	WELL DIAGRAM	PID RESPONSE	SOIL PROPERTIES					P-200	comment
NUMBER	LENGTH RECOVERED (FT)								STANDARD PENETRATION	MOISTURE CONTENT	LIQUID LIMIT	PLASTIC LIMIT			
1			-0												
			-1												
			-2												
			-3	Brown Fine Sand to 3 feet	SP			No		Moist					
2			-4	From 3 feet Grey Clay with mottling	ML										
			-5												
			-6	Grey Clay with mottling	ML			13.1		Dry					
			-7												
3			-8	As Above	ML			44.6		Dry					
			-9												
			-10												
			-11	As Above	ML			1.5		Dry					
4			-12												
			-13	Test Pit Terminated at 12 Feet											
			-14												
			-15												
			-16												
			-17												
			-18												
			-19												
			-20												
			-21												
			-22												
			-												

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 	Firm AYRES ASSOCIATES
--------------------------------------------------------------------------------------------------	---------------------------------

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Facility/Project Name Bob's Service Station, Falun, Wisconsin				License/Permit/Monitoring Number				Boring Number Test Pit #4			
Boring Drilled By (Firm name and name of crew chief) Oachs Brothers Construction, Inc.				Date Drilling Started 07/25/94 MM/DD/YY		Date Drilling Completed 07/25/94 MM/DD/YY		Drilling Method Backhoe Test Pit			
DNR Facility Well No.		WI Unique Well No.		Common Well Name		Final Static Water Level 9 Feet		Surface Elevation		Borehole Dia. Not Applicable	
Boring Location State Plane NW 1/4 of NW 1/4 of Section 19, Township 38 N, Range 17 W				Lat. ----- Long.		Local Grid Location (if applicable) Feet N Feet E S Feet W					
County Burnett				DNR County Code 7		Civil Town/City/or Village Falun					

SAMPLE		BLOW COUNT	DEPTH IN FEET	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	GRAPHIC LOG	WELL DIAGRAM	PID RESPONSE	SOIL PROPERTIES					comment
NUMBER	LENGTH RECOVERED (FT)								STANDARD PENETRATION	MOISTURE CONTENT	LIQUID LIMIT	PLASTIC LIMIT	P-200	
1			-0											
			-1											
			-2											
			-3	Grey Clay with mottling	ML			No Response		Moist				
2			-4											
			-5	As Above	ML			No Response		Dry				
			-6											
			-7											
3			-8	As Above	ML			No Response		Dry				
			-9											
			-10	As Above	ML			No Response		Dry				
			-11											
4			-12											
			-13	(Red - Brown Fine Sand)	(SP)			No Response		(Wet)				
			-14											
			-15											
			-16											
			-17											
			-18											
			-19											
			-20											
			-21											
			-22											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 	Firm AYRES ASSOCIATES
-----------------------------------------------------------------------------------------------	---------------------------------

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Facility/Project Name Bob's Service Station, Falun, Wisconsin				License/Permit/Monitoring Number				Boring Number Test Pit #5			
Boring Drilled By (Firm name and name of crew chief) Oachs Brothers Construction, Inc.				Date Drilling Started 07/25/94 MM/DD/YY		Date Drilling Completed 07/25/94 MM/DD/YY		Drilling Method Backhoe Test Pit			
DNR Facility Well No.		WI Unique Well No.		Common Well Name		Final Static Water Level 9 Feet		Surface Elevation		Borehole Dia. Not Applicable	
Boring Location State Plane NW 1/4 of NW 1/4 of Section 19, Township 38 N, Range 17 W				Lat. -----		Local Grid Location (If applicable) Feet N S E W					
County Burnett				DNR County Code 7		Civil Town/City/or Village Falun					

SAMPLE		BLOW COUNT	DEPTH IN FEET	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	GRAPHIC LOG	WELL DIAGRAM	PID RESPONSE	SOIL PROPERTIES					comment
NUMBER	LENGTH RECOVERED (FT)								STANDARD PENETRATION	MOISTURE CONTENT	LIQUID LIMIT	PLASTIC LIMIT	P-200	
1			-0											
			-1											
			-2											
			-3	----- Grey Fine Sand	SP			No Response		Moist				
2			-4											
			-5	-----										
			-6	----- Grey Clay with mottling	ML			No Response		Dry				
			-7	-----										
3			-8	----- As Above	ML			No Response		Dry				
			-9											
			-10	-----										
			-11	----- As Above	ML			No Response		Dry				
4			-12	-----										
			-13											
			-14											
			-15											
			-16											
			-17											
			-18											
			-19											
			-20											
			-21											
			-22											
				Test Pit Terminated at 12 Feet										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm AYRES ASSOCIATES
-----------	---------------------------------

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Department of Natural Resources

Route to:

— Solid Waste

— Emergency Response

— Waste Water

— Haz. Waste

— Underground Tanks

— Water Resources

— Other

SOIL BORING LOG INFORMATION

Form 4400-122

7-91

Page 1 of 2

Facility/Project Name BOB'S SERVICE - FALUN				License/Permit/Monitoring Number				Boring Number B/W - 1						
Boring Drilled By (Firm name and name of crew chief) MIDWEST ENGINEERING SERVICES-GARY WELLNER				Date Drilling Started 10/30/95		Date Drilling Completed 10/30/95		Drilling Method 4.25" HSA						
DNR Facility Well No.		WI Unique Well No.		Common Well Name		Final Static Water Level		Surface Elevation 98.20		Borehole Dia. 8"				
Boring Location State Plane NW 1/4 OF NW 1/4, SECTION 19, T38N, R17W				Lat. ----- Long.		Local Grid Location (If applicable) Feet _____ N _____ S _____ E _____ W								
County BURNETT				DNR County Code O7		Civil Town/City/or Village FALUN								
SAMPLE		BLOW COUNT	DEPTH IN FEET	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	GRAPHIC LOG	WELL DIAGRAM	PID (field)	MOISTURE CONTENT	LAB RESULTS (mg/Kg)				
NUMBER	LENGTH RECOV- ERED (IN)									GRO	Benzene	Ethyl- Benzene	Toluene	Xylene
S-1	8		-0	Grey-green clay	CL			NR	M					
			-1											
			-2											
			-3											
			-4											
S-2	20		-5	As Above (A. A.)	CL			0.3	M					
			-6											
			-7											
S-3	24		-8	A. A.	CL			0.3	M	<1.0	<.025	<.025	<.025	<.05
			-9											
			-10											
S-4	24		-11	Bm fn-med sand, tr gravel ground water @ 10'	SP			0.3	W					
			-12											
			-13											
S-5	24		-14	Bm med-fn sand	SP			0.3	W	<1.0	<.025	<.025	<.025	<.05
			-15											
			-16											
			-17											
			-18											
			-19											
			-20											
			-21											
			-22											
			-23											
			-24	END OF BORING 14.5 FEET										
			-25											
			-26											
			-27											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature <i>James C. Hicks</i>	Firm AYRES ASSOCIATES
------------------------------------	--------------------------

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than \$10 or nor more than \$5,000 for each violation. Fined not less than \$10 or more than \$100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

(1) GENERAL INFORMATION		(2) FACILITY NAME	
Well/Drillhole/Borehole	County	Original Well Owner (If Known)	
Location	Burnett		
NW 1/4 of NW 1/4 of Sec. 19; T. 38 N; R. 17 W		Present Well Owner	
(If Applicable)		Mr. Robert Anderson	
Gov't Lot		Street or Route	
Grid Number		10531 State Highway 70	
Grid Location		City, State, Zip Code	
ft. N. S. ft. E. W.		Siren, WI 54872	
Civil Town Name		Facility Well No. and/ or Name (If Applicable)	
Daniels		B-W1	
Street Address of Well		WI Unique Well No.	
10545 State Highway 70			
City, Village		Reason for Abandonment	
Falun		Exploratory Borehole / Temporary Well	
		Date of Abandonment	
		10-30-95	

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On		(4) Depth to Water (Feet)	
(Date) 10-30-95		10	
<input type="checkbox"/> Monitoring Well		Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input type="checkbox"/> Water Well		Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input type="checkbox"/> Drillhole		Screen Removed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
<input checked="" type="checkbox"/> Borehole		Casing Left in Place? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Construction Report Available?		If No, Explain	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Temporary Well	
<input checked="" type="checkbox"/> Drilled		Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<input type="checkbox"/> Driven (Sandpoint)		Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> Dug		Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<input type="checkbox"/> Other (Specify)		If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Formation Type:		(5) Required Method of Placing Sealing Material	
<input checked="" type="checkbox"/> Unconsolidated Formation		<input checked="" type="checkbox"/> Conductor Pipe - Gravity	
<input type="checkbox"/> Bedrock		<input type="checkbox"/> Conductor Pipe - Pumped	
Total Well Depth (ft.) 14.5		<input type="checkbox"/> Dump Bailer	
Casing Diameter (in.) 2.0		<input type="checkbox"/> Other (Explain)	
(From Groundsurface)		(6) Sealing Materials	
Casing Depth (ft.) 10		For monitoring wells and monitoring well boreholes only	
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		<input type="checkbox"/> Neat Cement Grout	
If Yes, To What Depth? Feet		<input type="checkbox"/> Sand - Cement (Concrete) Grout	
		<input type="checkbox"/> Concrete	
		<input type="checkbox"/> Clay - Sand Slurry	
		<input type="checkbox"/> Bentonite - Sand Slurry	
		<input checked="" type="checkbox"/> Chipped Bentonite	
		<input type="checkbox"/> Bentonite Pellets	
		<input type="checkbox"/> Granular Bentonite	
		<input type="checkbox"/> Bentonite - Cement Grout	

(7) Sealing Material Used	From (Ft.)	To (Ft.)	Number of		Mix Ratio or Mud Weight
			<input type="checkbox"/> Yards	<input checked="" type="checkbox"/> Sacks	
3/8 inch Bentonite Chips	Surface	5.0		2	
#30 Red Flint Filter Sand	5.0	14.5		5.0	

(8) Comments:		(10) FOR DNR OR COUNTY USE ONLY	
Name of Person or Firm Doing Sealing Work		Date Received/Inspected	
Midwest Engineering Services, Inc.		District/County	
Signature of Person Doing Work	Date Signed	Reviewer/Inspector	
<i>[Signature]</i>	10/31/95	<input type="checkbox"/> Complying Work	
Street or Route	Telephone Number	<input type="checkbox"/> Noncomplying Work	
13 E. Spruce St., No. 105	(715) 720-0700	Follow-up Necessary	
City, State, Zip Code			
Chippewa Falls, WI 54729			

☐ Solid Waste
☐ Emergency Response
☐ Waste Water

☐ Haz. Waste
☐ Underground Tanks
☐ Water Resources
☐ Other

Facility/Project Name BOB'S SERVICE -- FALUN				License/Permit/Monitoring Number				Boring Number B-2			
Boring Drilled By (Firm name and name of crew chief) MIDWEST ENGINEERING SERVICES-GARY WELLNER				Date Drilling Started 10/30/95 MM/DD/YY		Date Drilling Completed 10/30/95 MM/DD/YY		Drilling Method 4.25" HSA			
DNR Facility Well No.		WI Unique Well No.		Common Well Name		Final Static Water Level		Surface Elevation 98.34		Borehole Dia. 8"	
Boring Location State Plane NW 1/4 OF NW 1/4, SECTION 19, T38N, R17W				Lat. -----		Local Grid Location (If applicable) Feet _____ N _____ E Feet _____ S _____ W					
County BURNETT				DNR County Code O7		Civil Town/City/or Village FALUN					

SAMPLE		BLOW COUNT	DEPTH IN FEET	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	GRAPHIC LOG	WELL DIAGRAM	PID (field)	MOISTURE CONTENT	LAB RESULTS (mg/Kg)				
NUMBER	LENGTH RECOVERED (IN)									GRO	Benzene	Ethyl-Benzene	Toluene	Xylene
S-1	16		-0 -1 -2 -3 -4	Grey-green clay (petroleum odor)	CL			525	M	1400	17	14	25	72
S-2	24		-5 -6	As Above (A. A.)	CL			518	M					
S-3	24		-7 -8 -9	A. A.	CL			50	M					
S-4	24		-10 -11	A. A. to 11' Bm fn-med sand ground water @ 11'?	CL SP			50	W					
S-5	24		-12 -13 -14	A. A.	SP			40	W					
S-6	24		-15 -16 -17 -18 -19 -20 -21 -22 -23 -24 -25 -26	Bm med-fn sand END OF BORING 17.0 FEET	SP			30	W	1.9	<.025	<.025	<.025	<.05

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

James C. Hicks

Firm

AYRES ASSOCIATES

This form is authorized by Chapters 144.147 and 162, Wis.Stats. Completion of this report is mandatory. Penalties: Forfeit not less than \$10 or nor more than \$5,000 for each violation. Fined not less than \$10 or more than \$100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

(1) GENERAL INFORMATION		(2) FACILITY NAME	
Well/Drillhole/Borehole	County	Original Well Owner (If Known)	
Location	Burnett		
NW 1/4 of NW 1/4 of Sec. 19; T. 38 N; R. 17 W (If Applicable)		Present Well Owner Mr. Robert Anderson	
Gov't Lot		Street or Route 10531 State Highway 70	
Grid Location		City, State, Zip Code Siren, WI 54872	
ft. N. S. ft. E. W.		Facility Well No. and/ or Name (If Applicable)	
Civil Town Name Daniels		WI Unique Well No. B-2	
Street Address of Well 10545 State Highway 70		Reason for Abandonment Exploratory Borehole	
City, Village Falun		Date of Abandonment 10-30-95	

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On (Date) 10-30-95		(4) Depth to Water (Feet) 10.5	
<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input checked="" type="checkbox"/> Borehole		Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A Casing Left in Place? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A If No, Explain	
Construction Report Available? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No	
<input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input type="checkbox"/> Other (Specify)		(5) Required Method of Placing Sealing Material <input checked="" type="checkbox"/> Conductor Pipe - Gravity <input type="checkbox"/> Conductor Pipe - Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain)	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		(6) Sealing Materials <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Sand - Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Clay - Sand Slurry <input type="checkbox"/> Bentonite - Sand Slurry <input checked="" type="checkbox"/> Chipped Bentonite	
Total Well Depth (ft.) 17.0 Casing Diameter (in.) 4.25 (From Groundsurface)		For monitoring wells and monitoring well boreholes only <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite - Cement Grout	
Casing Depth (ft.) 17.0			
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			
If Yes, To What Depth? Feet			

(7) Sealing Material Used	From (Ft.)	To (Ft.)	Number of		Mix Ratio or Mud Weight
			<input type="checkbox"/> Yards	<input checked="" type="checkbox"/> Sacks <input type="checkbox"/> Vol.	
3/8 inch Bentonite Chips	Surface	7.0	2		
	7.0	17.0	caved		

(8) Comments:		(10) FOR DNR OR COUNTY USE ONLY	
Name of Person or Firm Doing Sealing Work Midwest Engineering Services, Inc.		Date Received/Inspected	District/County
Signature of Person Doing Work <i>Chippewa Falls</i>	Date Signed 10/31/95	Reviewer/Inspector	<input type="checkbox"/> Complying Work <input type="checkbox"/> Noncomplying Work
Street or Route 13 E. Spruce St., No. 105	Telephone Number (715) 720-0700	Follow-up Necessary	
City, State, Zip Code Chippewa Falls, WI 54729			

Facility/Project Name BOB'S SERVICE - FALUN				License/Permit/Monitoring Number				Boring Number B-3			
Boring Drilled By (Firm name and name of crew chief) MIDWEST ENGINEERING SERVICES-GARY WELLNER				Date Drilling Started 10/30/95 MM/DD/YY		Date Drilling Completed 10/30/95 MM/DD/YY		Drilling Method 4.25" HSA			
DNR Facility Well No.		WI Unique Well No.		Common Well Name		Final Static Water Level		Surface Elevation 98.86		Borehole Dia. 8"	
Boring Location State Plane NW 1/4 OF NW 1/4, SECTION 19, T38N, R17W				Lat. ----- Long.		Local Grid Location (if applicable) Feet N Feet E Feet S Feet W					
County BURNETT				DNR County Code O7		Civil Town/City/or Village FALUN					

SAMPLE		BLOW COUNT	DEPTH IN FEET	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	GRAPHIC LOG	WELL DIAGRAM	PID (field)	MOISTURE CONTENT	LAB RESULTS (mg/Kg)				
NUMBER	LENGTH RECOVERED (IN)									GRO	Benzene	Ethyl-Benzene	Toluene	Xylene
S-1	24		0	Brn med-fn sand w/ silt to 4.3'	SM			NR	M					
			-1											
			-2											
			-3											
			-4											
S-2	24		-5	Grey-green clay As Above (A. A.)	CL			1.0	M					
			-6											
			-7											
S-3	16		-8	A. A.	CL			NR	M					
			-9											
			-10											
S-4	20		-11	Bm fn-med and (petroleum odor, diesel?) ground water @ 10'	SP			16	W	2.8	0.05	0.047	0.034	0.237
			-12											
S-5	20		-13	A. A.	SP			14	W	1.6	<.025	0.029	<.025	0.180
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All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis.
Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/Drillhole/Borehole	County
Location	Burnett
NW 1/4 of NW 1/4 of Sec. 19; T. 38 N; R. 17 W	
(If Applicable)	
Gov't Lot	Grid Number
Grid Location	
ft. <input type="checkbox"/> N. <input type="checkbox"/> S. ft. <input type="checkbox"/> E. <input type="checkbox"/> W.	
Civil Town Name	
Daniels	
Street Address of Well	
10545 State Highway 70	
City, Village	
Falun	

(2) FACILITY NAME

Original Well Owner (If Known)	
Present Well Owner	
Mr. Robert Anderson	
Street or Route	
10531 State Highway 70	
City, State, Zip Code	
Siren, WI 54872	
Facility Well No. and/ or Name (If Applicable)	WI Unique Well No.
B-3	
Reason for Abandonment	
Exploratory Borehole	
Date of Abandonment	
10-30-95	

WELL/DRILLHOLE/BOREHOLE INFORMATION**(3) Original Well/Drillhole/Borehole Construction Completed On**

(Date) 10-30-95

- ☐ Monitoring Well
☐ Water Well
☐ Drillhole
☒ Borehole

Construction Report Available?

☒ Yes ☐ No

- ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:

- ☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 14.5 Casing Diameter (in.) 4.25
 (From Groundsurface)

Casing Depth (ft.) 14.5

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown

If Yes, To What Depth? _____ Feet

(4) Depth to Water (Feet)

10

- Pump & Piping Removed? ☐ Yes ☐ No ☒ N/A
 Liner(s) Removed? ☐ Yes ☐ No ☒ N/A
 Screen Removed? ☐ Yes ☐ No ☒ N/A
 Casing Left in Place? ☐ Yes ☐ No ☒ N/A
 If No, Explain _____

Was Casing Cut Off Below Surface? ☐ Yes ☒ NoDid Sealing Material Rise to Surface? ☒ Yes ☐ NoDid Material Settle After 24 Hours? ☐ Yes ☒ NoIf Yes, Was Hole Retopped? ☐ Yes ☐ No**(5) Required Method of Placing Sealing Material**

- ☒ Conductor Pipe - Gravity ☐ Conductor Pipe - Pumped
☐ Dump Bailer ☐ Other (Explain) _____

(6) Sealing Materials

For monitoring wells and monitoring well boreholes only

- ☐ Neat Cement Grout
☐ Sand - Cement (Concrete) Grout ☐ Bentonite Pellets
☐ Concrete ☐ Granular Bentonite
☐ Clay - Sand Slurry ☐ Bentonite - Cement Grout
☐ Bentonite - Sand Slurry
☒ Chipped Bentonite

(7)

Sealing Material Used

From (Ft.)	To (Ft.)	Number of <input type="checkbox"/> Yards <input checked="" type="checkbox"/> Sacks <input type="checkbox"/> Vol.	Mix Ratio or Mud Weight
Surface	9.0	2.5	
9.0	14.5	caved	

(8) Comments:

Name of Person or Firm Doing Sealing Work

Midwest Engineering Services, Inc.

Signature of Person Doing Work

Date Signed

Street or Route

Telephone Number

13 E. Spruce St., No. 105

(715) 720-0700

City, State, Zip Code

Chippewa Falls, WI 54729

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected	District/County
Reviewer/Inspector	<input type="checkbox"/> Complying Work <input type="checkbox"/> Noncomplying Work
Follow-up Necessary	

Facility/Project Name BOB'S SERVICE - FALUN				License/Permit/Monitoring Number				Boring Number B-4						
Boring Drilled By (Firm name and name of crew chief) MIDWEST ENG. SERV. INC.-GARY WELLNER				Date Drilling Started 10/30/95 M/D/Y		Date Drilling Complete 10/30/95 M/D/Y		Drilling Method 4.25" HSA						
DNR Facility Well No.		WI Unique Well No.		Common Well Name		Final Static Water Level		Surface Elevation 98.23		Borehole Dia. 8"				
Boring Location State Plane NW 1/4, NW 1/4, SECTION 19, T 38 N, R 17 W				Lat.		Local Grid Location (If applicable)								
County BURNETT				DNR County Code 7		Civil Town/City/Or Village FALUN								
SAMPLE				FIELD OBSERVATIONS				LABORATORY RESULTS (mg/Kg)						
NUMBER	LENGTH RECOVERED (IN)	BLOW COUNT	DEPTH IN FEET	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT		USCS	MOISTURE CONTENT	PH FIELD READING	PETRO ODOR	GRO	Benz.	Ethyl-Benzene	Toluene	Xylene
S-1	16		-0 -1 -2 -3 -4	Grey-green clay		CL	M	NR	None					
S-2	20		-5 -6 -7	As Above (A. A.)		CL	M	NR	None					
S-3	24		-8 -9	A. A.		CL	M	NR	None					
S-4	24		-10 -11	A. A. to 11.5'		CL	W	NR	None	<1.0	<.025	<.025	<.025	<.05
S-5	24		-12 -13 -14 -15 -16 -17 -18 -19 -20 -21 -22 -23 -24 -25 -26	Brn fn-cse sand ground water @ 11.5' Brn fn-med sand, tr gravel END OF BORING 14.5 FEET		SW SP	W	NR	None	<1.0	<.025	<.025	<.025	<.05

I hereby certify that the information on this form is true and correct to the best of my knowledge.

D:\REM_INV\LES\IESOILLOGS\XLT

Signature *James E. Nichols*Firm **AYRES ASSOCIATES**

This form is authorized by Chapters 144.14/ and 162, Wis.Stats. Completion of this report is mandatory. Penalties: Forfeit not less than \$10 or nor more than \$5,000 for each violation. Fined not less than \$10 or more than \$100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

(1) GENERAL INFORMATION		(2) FACILITY NAME	
Well/Drillhole/Borehole	County	Original Well Owner (If Known)	
Location	Burnett		
<u>NW</u> 1/4 of <u>NW</u> 1/4 of Sec. <u>19</u> ; T. <u>38</u> N; R. <u>17</u> <input type="checkbox"/> E <input checked="" type="checkbox"/> W (If Applicable)		Present Well Owner Mr. Robert Anderson	
Gov't Lot _____ Grid Number _____		Street or Route 10531 State Highway 70	
Grid Location ft. <input type="checkbox"/> N. <input type="checkbox"/> S. _____ ft. <input type="checkbox"/> E. <input type="checkbox"/> W.		City, State, Zip Code Siren, WI 54872	
Civil Town Name Daniels		Facility Well No. and/ or Name (If Applicable) WI Unique Well No. B-4	
Street Address of Well 10545 State Highway 70		Reason for Abandonment Exploratory Borehole	
City, Village Falun		Date of Abandonment 10-30-95	

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On (Date) <u>10-30-95</u>		(4) Depth to Water (Feet) <u>11</u>	
<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input checked="" type="checkbox"/> Borehole	Construction Report Available? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A Casing Left in Place? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A If No, Explain _____	
<input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input type="checkbox"/> Other (Specify) _____		Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		(5) Required Method of Placing Sealing Material <input checked="" type="checkbox"/> Conductor Pipe - Gravity <input type="checkbox"/> Conductor Pipe - Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain) _____	
Total Well Depth (ft.) <u>14.5</u> Casing Diameter (in.) <u>4.25</u> (From Groundsurface)		(6) Sealing Materials For monitoring wells and monitoring well boreholes only	
Casing Depth (ft.) <u>14.5</u>		<input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Sand - Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Clay - Sand Slurry <input type="checkbox"/> Bentonite - Sand Slurry <input checked="" type="checkbox"/> Chipped Bentonite	
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet		<input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite - Cement Grout	

(7) Sealing Material Used	From (Ft.)	To (Ft.)	Number of		Mix Ratio or Mud Weight
			<input type="checkbox"/> Yards	<input checked="" type="checkbox"/> Sacks <input type="checkbox"/> Vol.	
3/8 inch Bentonite Chips	Surface	10.0		3.0	
	10.0	14.5		caved	

(8) Comments:

Name of Person or Firm Doing Sealing Work

Midwest Engineering Services, Inc.

Signature of Person Doing Work

Date Signed

Street or Route

Telephone Number

13 E. Spruce St., No. 105

(715) 720-0700

City, State, Zip Code

Chippewa Falls, WI 54729

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected

District/County

Reviewer/Inspector

☐ Complying Work

☐ Noncomplying Work

Follow-up Necessary

Department of Natural Resource ☐ Solid Waste
☐ Emergency Response
☐ Waste Water

Route to:

☐ Haz. Waste
☐ Underground Tanks
☐ Water Resources
☐ Other

SOIL BORING LOG INFORMATION
Form 4400-122 7-91

Page 1 of 1

Facility/Project Name BOB'S SERVICE - FALUN					License/Permit/Monitoring Number				Boring Number B-5				
Boring Drilled By (Firm name and name of crew chief) MIDWEST ENG. SERV. INC.-GARY WELLNER					Date Drilling Started 10/30/95 M/D/Y		Date Drilling Complete 10/30/95 M/D/Y		Drilling Method 4.25" HSA				
DNR Facility Well No.		WI Unique Well No.			Common Well		Final Static Water Level		Surface Elevation 100.38		Borehole Dia. 8"		
Boring Location State Plane NW 1/4, NW 1/4, SECTION 19, T 38 N, R 17 W					Name Lat.		Local Grid Location (If applicable) Long. Feet N Feet E Feet S Feet W						
County BURNETT					DNR County Code 7		Civil Town/City/or Village FALUN						
SAMPLE					FIELD OBSERVATIONS				LABORATORY RESULTS (mg/Kg)				
NUMBER	LENGTH RECOV- ERED (IN)	BLOW COUNT	DEPTH IN FEET	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	MOISTURE CONTENT	PID FIELD READING	PETRO ODOR	GRO	Benz.	Ethyl- Benzene	Toluene	Xylene
S-1	24		-0 -1 -2 -3 -4	Grey-green fn silty sand	SM	M	NR	None					
S-2	24		-5 -6 -7	As Above (A. A.) to 6' Grey-green clay, tr fn sand	SM CL	M	NR	None					
S-3	24		-8 -9	Grey-green clay	CL	M	NR	None					
S-4	24		-10 -11 -12	A. A.	CL	M	NR	None	<1.0	<.025	<.025	<.025	<.05
S-5	24		-13 -14 -15 -16 -17 -18 -19 -20 -21 -22 -23 -24 -25 -26	A. A. to 14' Brn med-cse sand ground water @ 14'? END OF BORING 14.5 FEET	CL SP	W	NR	None	<1.0	<.025	<.025	<.025	<.05

I hereby certify that the information on this form is true and correct to the best of my knowledge.

D:\REM_INV\LES\IE\SOILLOGS\XLT

Signature

James C. Kiefer

Firm

AYRES ASSOCIATES

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than \$10 or nor more than \$5,000 for each violation. Fined not less than \$10 or more than \$100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis.

Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION		(2) FACILITY NAME	
Well/Drillhole/Borehole	County	Original Well Owner (If Known)	
Location	Burnett		
<input type="checkbox"/> E NW 1/4 of NW 1/4 of Sec. 19; T. 38 N; R. 17 W <input checked="" type="checkbox"/> W (If Applicable)		Present Well Owner Mr. Robert Anderson	
Gov't Lot		Street or Route 10531 State Highway 70	
Grid Number		City, State, Zip Code Siren, WI 54872	
Grid Location ft. <input type="checkbox"/> N. <input type="checkbox"/> S. ft. <input type="checkbox"/> E. <input type="checkbox"/> W.		Facility Well No. and/or Name (If Applicable) B-5	
Civil Town Name Daniels		WI Unique Well No.	
Street Address of Well 10545 State Highway 70		Reason for Abandonment Exploratory Borehole	
City, Village Falun		Date of Abandonment 10-30-95	

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On (Date) 10-30-95		(4) Depth to Water (Feet) 13.5	
<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input checked="" type="checkbox"/> Borehole	Construction Report Available? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A Casing Left in Place? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A If No, Explain	
<input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input type="checkbox"/> Other (Specify)		Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		(5) Required Method of Placing Sealing Material <input checked="" type="checkbox"/> Conductor Pipe - Gravity <input type="checkbox"/> Conductor Pipe - Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain)	
Total Well Depth (ft.) 14.5 Casing Diameter (in.) 4.25 (From Groundsurface)		(6) Sealing Materials <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Sand - Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Clay - Sand Slurry <input type="checkbox"/> Bentonite - Sand Slurry <input checked="" type="checkbox"/> Chipped Bentonite	
Casing Depth (ft.) 14.5		For monitoring wells and monitoring well boreholes only <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite - Cement Grout	
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? Feet			

(7) Sealing Material Used	From (Ft.)	To (Ft.)	Number of <input type="checkbox"/> Yards <input checked="" type="checkbox"/> Sacks <input type="checkbox"/> Vol.	Mix Ratio or Mud Weight
	Surface	11.5	5.0	
3/8 inch Bentonite Chips	11.5	14.5	caved	

(8) Comments:		(10) FOR DNR OR COUNTY USE ONLY	
Name of Person or Firm Doing Sealing Work Midwest Engineering Services, Inc.		Date Received/Inspected	District/County
Signature of Person Doing Work <i>Robert Anderson</i>	Date Signed 10/31/95	Reviewer/Inspector	<input type="checkbox"/> Complying Work <input type="checkbox"/> Noncomplying Work
Street or Route 13 E. Spruce St., No. 105	Telephone Number (715) 720-0700	Follow-up Necessary	
City, State, Zip Code Chippewa Falls, WI 54729			

APPENDIX C

FIELD PROCEDURES

FIELD PROCEDURES

Test Pit Installation

A total of six test pits were installed on the site using a backhoe. Test pits TP-1A and TP-1B were installed in the original tank bed excavation, as shown in Figure 2. Soil samples were collected at 2.5-foot vertical intervals to a depth of 12 feet. Samples were obtained directly from the backhoe bucket using clean 25-mL syringes to transfer the soil to the sampling jars.

Samples for potential laboratory analysis were placed in laboratory prepared containers. Gasoline range organic (GRO), volatile organic compound (VOC), and lead analysis samples collected from the soil borings were placed on ice in a cooler immediately after collection and remained on ice until receipt at the laboratory. GRO and VOC samples submitted for laboratory analysis were preserved with 25 mL of methanol within 2 hours of collection. Soil collection methods were in accordance with requirements outlined in the *WDNR Leaking Underground Storage Tank Analytical Guidance*, April 1992.

Hollow Stem Auger (HSA) Boring Installation

Hollow stem auger soil borings were installed by Midwest Engineering Services (MES), Chippewa Falls, Wisconsin, in accordance with Wisconsin Administrative Code, Chapter 141. MES installed borings with a Diedrich D-50 drilling rig equipped with 4¼-inch hollow stem augers. In general, soil samples were collected at 2.5-foot vertical intervals from the surface to boring termination. Soil samples were obtained using a split spoon sampler (1-3/8-inch-diameter-x-2-feet-long) driven by a 140- or 300-pound hammer per ASTM D-1586. Clean augers were used in each boring. All augers were steam-cleaned prior to leaving the site. An Ayres Associates representative was present during the drilling process to locate boring locations, collect and screen soil samples, and classify soils. Soils information was logged on WDNR Soil Boring Log Forms 4400-122. Soil samples were retrieved from the split spoon using a clean wooden spatula; samples were collected from the middle of the split spoon along total length of sample to avoid collection of borehole blowback. The split spoon cleaning process involved three steps: a wash in Alconox soap, a tap water rinse, and a final rinse with deionized water. The cleaning solution and rinse water were changed regularly during sampling.

As mentioned previously, soil samples were collected at 2.5-foot sample intervals. At each sampling point, five groups of soil samples were collected: headspace screening, GRO, VOCs, total lead, and percent solid.

Samples for potential laboratory analysis were placed in laboratory-prepared containers. GRO, VOC, and lead analysis samples collected from the soil borings were placed on ice in a cooler immediately after collection and remained on ice until receipt at the laboratory. GRO and VOC samples submitted for laboratory analysis were preserved with 25 mL of methanol within 2 hours of collection. Soil collection methods were in accordance with requirements outlined in the *WDNR Leaking Underground Storage Tank Analytical Guidance*, April 1992.

After sampling, all holes are filled with 3/8-inch chipped bentonite and surfacing material is restored. Borehole abandonment details are presented on WDNR Form 3300-5B, which are in Appendix B.

Field Screening

Samples for headspace analysis were placed in clean 16-ounce Mason jars with a screw cap and lid. Jars were filled approximately one-half full. Soil samples were qualitatively screened for organic vapors using a Photovac TIP 1 Photo Ionization Detector (PID) equipped with a 10.6 eV lamp. Headspace screening was conducted to aid in determining which soil samples should be submitted for laboratory analysis. The accuracy of the PID is checked daily by calibrating the instrument prior to sampling to 100 parts per million (ppm) isobutylene gas according to the manufacturer's specifications.

After allowing the soil samples to equilibrate for the required length of time, total organic vapors in the Mason jars were screened by piercing the lid and then immediately inserting the PID probe. Meter responses were recorded as parts per million isobutylene equivalents. The PID responses are a relative indication of total ionizable volatile organic compounds present in the atmosphere surrounding the sample and do not necessarily represent the concentration of any specific compound.

Water Sampling

After soil sampling was completed in boring B/W-1, a 2-inch diameter by 10-foot-long Schedule 40 PVC casing with a No. 10 factory slotted well screen was temporarily installed to a depth of 10 feet. Filter pack for the temporary monitoring well consisted of No. 30 red flint sand installed from the base of the boring (14.5-foot depth) to the top of the screen (ground surface). The well construction details for this temporary well is on Form 4400-113A in Appendix F of this report.

Temporary well B/W-1 was developed on the same day of installation. Well development is described on Form 4400-113B in Appendix F of this report. Ground water sampling occurred immediately after well development. The sample was obtained by lowering a disposable bailer into the temporary well using a Teflon-coated line. The sample was collected directly from the bailer into laboratory-provided sample containers.

Samples were collected for analysis of the following parameters:

- GRO and VOC samples: Filled 4-mL vial with cap and septum and preserved with 0.5 mL of dilute 1:1 hydrochloric acid.

We placed the samples on ice in a cooler; enclosed a completed WDNR chain-of-custody record, Form 4400-151; and shipped the cooler to the laboratory so it arrived within 72 hours of sample collection.

Following the ground water sampling, temporary well B/W-1 was abandoned as described previously. Borehole abandonment details are presented on WDNR Form 3300-5B in Appendix B.

Chain-of-Custody

A chain-of-custody log was initiated at the time of collection of each sample. Information contained on the log included project name and number, sampler, sample location and depth, sample number, date and time of collection, type of sample, number of containers, type of chemical analyses to be performed, and remarks pertaining to each sample. In addition, the date, time, and signature of each individual handling the samples is recorded on the log. Copies of the soil and ground water chain-of-custody documents are in Appendix D and E respectively.

Laboratory Analysis

Initial soil samples were analyzed by Central Wisconsin Enviro-Lab (CWEL), Schofield, Wisconsin (Wisconsin DNR Laboratory Certification No. 737125510). The second round of soil and ground water samples was analyzed by Mid-State Associates (MSA), Baraboo, Wisconsin (Wisconsin DNR Laboratory Certification No. 157066030). Soil analytical reports are in Appendix D. Ground water analytical reports are in Appendix E. Analytical methods for each laboratory are listed below.

CWEL

<u>ANALYTE</u>	<u>SOIL</u>	<u>WATER</u>
GRO	WDNR LUST Analytical Guidance PUBL-SW-140 93 REV	--
VOCs	EPA Method 8260 using GC-MS	--
Total Lead	EPA Method 7420	--

MSA

<u>ANALYTE</u>	<u>SOIL</u>	<u>WATER</u>
GRO	WDNR Modified GRO	WDNR Modified GRO
VOCs	EPA Method 8021	EPA Method 8021
Total Lead	EPA Method 7420	--

APPENDIX D

SOIL ANALYTICAL RESULTS

✓

CENTRAL WISCONSIN ENVIRO LAB, INC.

To: Owen Ayres & Associates, Inc.

3433 Oakwood Hills Pkwy

PO Box 1590

Eau Claire, WI 54702-1590

Phone: 715-834-3161

Attn: Sue Vasey

Date: August 15, 1994

Wisconsin Certification No. 737125510

PROJECT: Bob's Service

LAB BATCH ID: 9407047

PROJECT NUMBER: 10-0232.00

METHODOLOGIES:

GRO concentration was determined by the Wisconsin WDNR LUST Analytical Guidance PUBL-SW-140 93 REV.

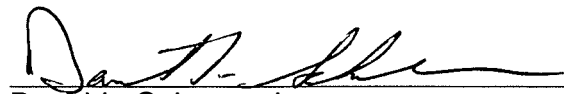
Volatile organics were determined by modified EPA Method 8260 using GC-MS.

Total Lead

REMARKS:

Nearly all samples analyzed for VOC by method 8260 exhibited surrogate failures due to the heavy clay-like material. Most samples were analyzed in duplicate to verify the surrogate failure. Matrix spikes of the samples did result in good recoveries so the impact upon the data is not considered to be very great.

CENTRAL WISCONSIN ENVIRO LAB, INC.



David L. Schumacher
Lab Director

Date: 8-14-94

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.:	TP-1a D = 5-7	Date Received:	7/27/94
Sample Matrix:	Soil	Lab Batch ID:	9407047
Date Collected:	7/25/94	Lab Sample ID:	005120
Project:	Bob's Service	Reviewed By:	DCS
Project #:	10-0232.00		

Parameter Number	Parameter	PQL	Concentration	Units	Comments	Date Analyzed
78920	Gasoline Range Organics (GRO)	6.1	23.6	mg/kg	None	8/04/94
	Total Lead		3.49	mg/kg	None	8/11/94
	Digestion Date					8/05/94

ND: Not Detected
J: Detected but below PQL. Estimated concentration
PQL: Practical Quantitation Limit
GRO/DRO: Determined by Modified Wisconsin WDNRLUST Guidance.
PVOC: Determined according to Modified EPA Method 8020.
CONCENTRATION: Results on dry weight basis

GRO Comments:

1. Significant early eluting peaks before GRO window.
2. Significant late eluting peaks after GRO window.
3. Majority of GRO compounds in early portion of window.
4. Majority of GRO compounds in later portion of window.
5. GRO window shows a raised baseline.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.:	<u>TP-1a D = 5-7</u>	Date Received:	<u>7/27/94</u>
Sample Matrix:	<u>Soil</u>	Lab Batch ID:	<u>9407047</u>
Date Collected:	<u>7/25/94</u>	Lab Sample ID:	<u>005120</u>
Project:	<u>Bob's Service</u>	Date Analyzed:	<u>8/07/94</u>
Project #:	<u>10-0232.00</u>	Reviewed By:	<u>DCS</u>

Parameter	Detection Limit	Sample Conc.	Units	Parameter	Detection Limit	Sample Conc.	Units
Benzene	6.0	ND	µg/kg	1,2-Dichloropropane	6.0	ND	µg/kg
Bromobenzene	6.0	ND	µg/kg	1,3-Dichloropropane	6.0	ND	µg/kg
Bromochloromethane	6.0	ND	µg/kg	2,2-Dichloropropane	6.0	ND	µg/kg
Bromodichloromethane	6.0	ND	µg/kg	1,1-Dichloropropene	6.0	ND	µg/kg
Bromoform	6.0	ND	µg/kg	cis-1,3-Dichloropropene	6.0	ND	µg/kg
n-Butylbenzene	6.0	193	µg/kg	trans-1,3-Dichloropropene	6.0	ND	µg/kg
sec-Butylbenzene	6.0	70.4	µg/kg	Ethylbenzene	6.0	ND	µg/kg
t-Butylbenzene	6.0	ND	µg/kg	Hexachlorobutadiene	6.0	ND	µg/kg
Carbon Tetrachloride	6.0	ND	µg/kg	Isopropylbenzene	6.0	6.9	µg/kg
Chlorobenzene	6.0	ND	µg/kg	p-Isopropyltoluene	6.0	133	µg/kg
Chloroethane	6.0	ND	µg/kg	Naphthalene	12.0	ND	µg/kg
Chloroform	6.0	ND	µg/kg	n-Propylbenzene	6.0	28.0	µg/kg
Chloromethane	6.0	ND	µg/kg	Styrene	6.0	ND	µg/kg
2-Chlorotoluene	6.0	ND	µg/kg	1,1,1,2-Tetrachloroethane	6.0	ND	µg/kg
4-Chlorotoluene	6.0	ND	µg/kg	1,1,2,2-Tetrachloroethane	6.0	ND	µg/kg
Dibromochloromethane	6.0	ND	µg/kg	Tetrachloroethene	6.0	ND	µg/kg
1,2-Dibromo-3-chloropropane	6.0	ND	µg/kg	Toluene	6.0	ND	µg/kg
1,2-Dibromoethane	6.0	ND	µg/kg	1,2,3-Trichlorobenzene	6.0	ND	µg/kg
Dibromomethane	6.0	ND	µg/kg	1,2,4-Trichlorobenzene	6.0	ND	µg/kg
1,2-Dichlorobenzene	6.0	ND	µg/kg	1,1,1-Trichloroethane	6.0	ND	µg/kg
1,3-Dichlorobenzene	6.0	ND	µg/kg	1,1,2-Trichloroethane	6.0	ND	µg/kg
1,4-Dichlorobenzene	6.0	ND	µg/kg	Trichloroethene	6.0	ND	µg/kg
Dichlorodifluoromethane	6.0	ND	µg/kg	Trichlorofluoromethane	6.0	ND	µg/kg
1,1-Dichloroethane	6.0	ND	µg/kg	1,2,3-Trichloropropane	6.0	ND	µg/kg
1,2-Dichloroethane	6.0	ND	µg/kg	1,2,4-Trimethylbenzene	12.0	79.7	µg/kg
1,1-Dichloroethene	6.0	ND	µg/kg	1,3,5-Trimethylbenzene	6.0	282	µg/kg
cis-1,2-Dichloroethene	6.0	ND	µg/kg	Vinyl Chloride	6.0	ND	µg/kg
trans-1,2-Dichloroethene	6.0	ND	µg/kg	m&p-Xylene	6.0	ND	µg/kg
Dichloromethane	6.0	ND	µg/kg	o-Xylene	6.0	7.4	µg/kg
				Diisopropyl Ether	6.0	ND	µg/kg
				MTBE	6.0	ND	µg/kg

ND: Not Detected

B: Detected in method blank.

J: Detected but below detection limit. Estimated concentration
Determined according to modified EPA GC-MS Method 8260.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.: TP-1a D = 10-12
Sample Matrix: Soil
Date Collected: 7/25/94
Project: Bob's Service
Project #: 10-0232.00

Date Received: 7/27/94
Lab Batch ID: 9407047
Lab Sample ID: 005121
Reviewed By: DCS

Parameter Number	Parameter	PQL	Concentration	Units	Comments	Date Analyzed
78920	Gasoline Range Organics (GRO)	5.8	ND	mg/kg	None	8/04/94
	Total Lead		3.22	mg/kg	None	8/11/94
	Digestion Date					8/05/94

ND: Not Detected
J: Detected but below PQL. Estimated concentration
PQL: Practical Quantitation Limit
GRO/DRO: Determined by Modified Wisconsin WDNRLUST Guidance.
PVOC: Determined according to Modified EPA Method 8020.
CONCENTRATION: Results on dry weight basis

GRO Comments:

1. Significant early eluting peaks before GRO window.
2. Significant late eluting peaks after GRO window.
3. Majority of GRO compounds in early portion of window.
4. Majority of GRO compounds in later portion of window.
5. GRO window shows a raised baseline.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.:	TP-1a D = 10-12	Date Received:	7/27/94
Sample Matrix:	Soil	Lab Batch ID:	9407047
Date Collected:	7/25/94	Lab Sample ID:	005121
Project:	Bob's Service	Date Analyzed:	7/28/94
Project #:	10-0232.00	Reviewed By:	DLS

Parameter	Detection Limit	Sample Conc.	Units	Parameter	Detection Limit	Sample Conc.	Units
Benzene	1.0	ND	µg/kg	1,2-Dichloropropane	1.0	ND	µg/kg
Bromobenzene	1.0	ND	µg/kg	1,3-Dichloropropane	1.0	ND	µg/kg
Bromochloromethane	1.0	ND	µg/kg	2,2-Dichloropropane	1.0	ND	µg/kg
Bromodichloromethane	1.0	ND	µg/kg	1,1-Dichloropropene	1.0	ND	µg/kg
Bromoform	1.0	ND	µg/kg	cis-1,3-Dichloropropene	1.0	ND	µg/kg
n-Butylbenzene	1.0	ND	µg/kg	trans-1,3-Dichloropropene	1.0	ND	µg/kg
sec-Butylbenzene	1.0	ND	µg/kg	Ethylbenzene	1.0	ND	µg/kg
t-Butylbenzene	1.0	ND	µg/kg	Hexachlorobutadiene	1.0	ND	µg/kg
Carbon Tetrachloride	1.0	ND	µg/kg	Isopropylbenzene	1.0	ND	µg/kg
Chlorobenzene	1.0	ND	µg/kg	p-Isopropyltoluene	1.0	ND	µg/kg
Chloroethane	1.0	ND	µg/kg	Naphthalene	2.0	ND	µg/kg
Chloroform	1.0	ND	µg/kg	n-Propylbenzene	1.0	ND	µg/kg
Chloromethane	1.0	ND	µg/kg	Styrene	1.0	ND	µg/kg
2-Chlorotoluene	1.0	ND	µg/kg	1,1,1,2-Tetrachloroethane	1.0	ND	µg/kg
4-Chlorotoluene	1.0	ND	µg/kg	1,1,2,2-Tetrachloroethane	1.0	ND	µg/kg
Dibromochloromethane	1.0	ND	µg/kg	Tetrachloroethene	1.0	ND	µg/kg
1,2-Dibromo-3-chloropropane	1.0	ND	µg/kg	Toluene	1.0	ND	µg/kg
1,2-Dibromoethane	1.0	ND	µg/kg	1,2,3-Trichlorobenzene	1.0	ND	µg/kg
Dibromomethane	1.0	ND	µg/kg	1,2,4-Trichlorobenzene	1.0	ND	µg/kg
1,2-Dichlorobenzene	1.0	ND	µg/kg	1,1,1-Trichloroethane	1.0	ND	µg/kg
1,3-Dichlorobenzene	1.0	ND	µg/kg	1,1,2-Trichloroethane	1.0	ND	µg/kg
1,4-Dichlorobenzene	1.0	ND	µg/kg	Trichloroethene	1.0	ND	µg/kg
Dichlorodifluoromethane	1.0	ND	µg/kg	Trichlorofluoromethane	1.0	ND	µg/kg
1,1-Dichloroethane	1.0	ND	µg/kg	1,2,3-Trichloropropane	1.0	ND	µg/kg
1,2-Dichloroethane	1.0	ND	µg/kg	1,2,4-Trimethylbenzene	2.0	ND	µg/kg
1,1-Dichloroethene	1.0	ND	µg/kg	1,3,5-Trimethylbenzene	1.0	ND	µg/kg
cis-1,2-Dichloroethene	1.0	ND	µg/kg	Vinyl Chloride	1.0	ND	µg/kg
trans-1,2-Dichloroethene	1.0	ND	µg/kg	m&p-Xylene	1.0	ND	µg/kg
Dichloromethane	1.0	ND	µg/kg	o-Xylene	1.0	ND	µg/kg
				Diisopropyl Ether	1.0	ND	µg/kg
				MTBE	1.0	ND	µg/kg

ND: Not Detected

B: Detected in method blank.

J: Detected but below detection limit. Estimated concentration
Determined according to modified EPA GC-MS Method 8260.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.: TP-1b D = 5-7
Sample Matrix: Soil
Date Collected: 7/25/94
Project: Bob's Service
Project #: 10-0232.00

Date Received: 7/27/94
Lab Batch ID: 9407047
Lab Sample ID: 005122
Reviewed By: DCS

Parameter Number	Parameter	PQL	Concentration	Units	Comments	Date Analyzed
78920	Gasoline Range Organics (GRO)	6.0	10.2	mg/kg	None	8/04/94
	Total Lead		5.90	mg/kg	None	8/11/94
	Digestion Date					8/05/94

ND: Not Detected

J: Detected but below PQL. Estimated concentration

PQL: Practical Quantitation Limit

GRO/DRO: Determined by Modified Wisconsin WDNR LUST Guidance.

PVOC: Determined according to Modified EPA Method 8020.

CONCENTRATION: Results on dry weight basis

GRO Comments:

1. Significant early eluting peaks before GRO window.
2. Significant late eluting peaks after GRO window.
3. Majority of GRO compounds in early portion of window.
4. Majority of GRO compounds in later portion of window.
5. GRO window shows a raised baseline.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.:	<u>TP-1b D = 5-7</u>	Date Received:	<u>7/27/94</u>
Sample Matrix:	<u>Soil</u>	Lab Batch ID:	<u>9407047</u>
Date Collected:	<u>7/25/94</u>	Lab Sample ID:	<u>005122</u>
Project:	<u>Bob's Service</u>	Date Analyzed:	<u>8/07/94</u>
Project #:	<u>10-0232.00</u>	Reviewed By:	<u>JCS</u>

Parameter	Detection Limit	Sample Conc.	Units	Parameter	Detection Limit	Sample Conc.	Units
Benzene	6.6	13.8	µg/kg	1,2-Dichloropropane	6.6	ND	µg/kg
Bromobenzene	6.6	ND	µg/kg	1,3-Dichloropropane	6.6	ND	µg/kg
Bromochloromethane	6.6	ND	µg/kg	2,2-Dichloropropane	6.6	ND	µg/kg
Bromodichloromethane	6.6	ND	µg/kg	1,1-Dichloropropene	6.6	ND	µg/kg
Bromoform	6.6	ND	µg/kg	cis-1,3-Dichloropropene	6.6	ND	µg/kg
n-Butylbenzene	6.6	ND	µg/kg	trans-1,3-Dichloropropene	6.6	ND	µg/kg
sec-Butylbenzene	6.6	ND	µg/kg	Ethylbenzene	6.6	22.5	µg/kg
t-Butylbenzene	6.6	ND	µg/kg	Hexachlorobutadiene	6.6	ND	µg/kg
Carbon Tetrachloride	6.6	ND	µg/kg	Isopropylbenzene	6.6	ND	µg/kg
Chlorobenzene	6.6	ND	µg/kg	p-Isopropyltoluene	6.6	ND	µg/kg
Chloroethane	6.6	ND	µg/kg	Naphthalene	13.2	55.0	µg/kg
Chloroform	6.6	ND	µg/kg	n-Propylbenzene	6.6	10.8	µg/kg
Chloromethane	6.6	ND	µg/kg	Styrene	6.6	ND	µg/kg
2-Chlorotoluene	6.6	ND	µg/kg	1,1,1,2-Tetrachloroethane	6.6	ND	µg/kg
4-Chlorotoluene	6.6	ND	µg/kg	1,1,2,2-Tetrachloroethane	6.6	ND	µg/kg
Dibromochloromethane	6.6	ND	µg/kg	Tetrachloroethene	6.6	ND	µg/kg
1,2-Dibromo-3-chloropropane	6.6	ND	µg/kg	Toluene	6.6	45.5	µg/kg
1,2-Dibromoethane	6.6	ND	µg/kg	1,2,3-Trichlorobenzene	6.6	ND	µg/kg
Dibromomethane	6.6	ND	µg/kg	1,2,4-Trichlorobenzene	6.6	ND	µg/kg
1,2-Dichlorobenzene	6.6	ND	µg/kg	1,1,1-Trichloroethane	6.6	ND	µg/kg
1,3-Dichlorobenzene	6.6	ND	µg/kg	1,1,2-Trichloroethane	6.6	ND	µg/kg
1,4-Dichlorobenzene	6.6	ND	µg/kg	Trichloroethene	6.6	ND	µg/kg
Dichlorodifluoromethane	6.6	ND	µg/kg	Trichlorofluoromethane	6.6	ND	µg/kg
1,1-Dichloroethane	6.6	ND	µg/kg	1,2,3-Trichloropropane	6.6	ND	µg/kg
1,2-Dichloroethane	6.6	ND	µg/kg	1,2,4-Trimethylbenzene	13.2	156	µg/kg
1,1-Dichloroethene	6.6	ND	µg/kg	1,3,5-Trimethylbenzene	6.6	38.7	µg/kg
cis-1,2-Dichloroethene	6.6	ND	µg/kg	Vinyl Chloride	6.6	ND	µg/kg
trans-1,2-Dichloroethene	6.6	ND	µg/kg	m&p-Xylene	6.6	184	µg/kg
Dichloromethane	6.6	ND	µg/kg	o-Xylene	6.6	109	µg/kg
				Diisopropyl Ether	6.6	ND	µg/kg
				MTBE	6.6	ND	µg/kg

ND: Not Detected

B: Detected in method blank.

J: Detected but below detection limit. Estimated concentration
Determined according to modified EPA GC-MS Method 8260.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.: TP-1b D = 10-12
Sample Matrix: Soil
Date Collected: 7/25/94
Project: Bob's Service
Project #: 10-0232.00

Date Received: 7/27/94
Lab Batch ID: 9407047
Lab Sample ID: 005123
Reviewed By: DCS

Parameter Number	Parameter	PQL	Concentration	Units	Comments	Date Analyzed
78920	Gasoline Range Organics (GRO)	6.9	ND	mg/kg	None	8/04/94
	Total Lead		14.6	mg/kg	None	8/11/94
	Digestion Date					8/05/94

ND: Not Detected
J: Detected but below PQL. Estimated concentration
PQL: Practical Quantitation Limit
GRO/DRO: Determined by Modified Wisconsin WDNR LUST Guidance.
PVOC: Determined according to Modified EPA Method 8020.
CONCENTRATION: Results on dry weight basis

GRO Comments:

1. Significant early eluting peaks before GRO window.
2. Significant late eluting peaks after GRO window.
3. Majority of GRO compounds in early portion of window.
4. Majority of GRO compounds in later portion of window.
5. GRO window shows a raised baseline.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.:	TP-1b D = 10-12	Date Received:	7/27/94
Sample Matrix:	Soil	Lab Batch ID:	9407047
Date Collected:	7/25/94	Lab Sample ID:	005123
Project:	Bob's Service	Date Analyzed:	8/06/94
Project #:	10-0232.00	Reviewed By:	DCS

Parameter	Detection Limit	Sample Conc.	Units	Parameter	Detection Limit	Sample Conc.	Units
Benzene	2.7	ND	µg/kg	1,2-Dichloropropane	2.7	ND	µg/kg
Bromobenzene	2.7	ND	µg/kg	1,3-Dichloropropane	2.7	ND	µg/kg
Bromochloromethane	2.7	ND	µg/kg	2,2-Dichloropropane	2.7	ND	µg/kg
Bromodichloromethane	2.7	ND	µg/kg	1,1-Dichloropropene	2.7	ND	µg/kg
Bromoform	2.7	ND	µg/kg	cis-1,3-Dichloropropene	2.7	ND	µg/kg
n-Butylbenzene	2.7	ND	µg/kg	trans-1,3-Dichloropropene	2.7	ND	µg/kg
sec-Butylbenzene	2.7	ND	µg/kg	Ethylbenzene	2.7	ND	µg/kg
t-Butylbenzene	2.7	ND	µg/kg	Hexachlorobutadiene	2.7	ND	µg/kg
Carbon Tetrachloride	2.7	ND	µg/kg	Isopropylbenzene	2.7	ND	µg/kg
Chlorobenzene	2.7	ND	µg/kg	p-Isopropyltoluene	2.7	ND	µg/kg
Chloroethane	2.7	ND	µg/kg	Naphthalene	5.4	ND	µg/kg
Chloroform	2.7	ND	µg/kg	n-Propylbenzene	2.7	ND	µg/kg
Chloromethane	2.7	ND	µg/kg	Styrene	2.7	ND	µg/kg
2-Chlorotoluene	2.7	ND	µg/kg	1,1,1,2-Tetrachloroethane	2.7	ND	µg/kg
4-Chlorotoluene	2.7	ND	µg/kg	1,1,2,2-Tetrachloroethane	2.7	ND	µg/kg
Dibromochloromethane	2.7	ND	µg/kg	Tetrachloroethene	2.7	ND	µg/kg
1,2-Dibromo-3-chloropropane	2.7	ND	µg/kg	Toluene	2.7	ND	µg/kg
1,2-Dibromoethane	2.7	ND	µg/kg	1,2,3-Trichlorobenzene	2.7	ND	µg/kg
Dibromomethane	2.7	ND	µg/kg	1,2,4-Trichlorobenzene	2.7	ND	µg/kg
1,2-Dichlorobenzene	2.7	ND	µg/kg	1,1,1-Trichloroethane	2.7	ND	µg/kg
1,3-Dichlorobenzene	2.7	ND	µg/kg	1,1,2-Trichloroethane	2.7	ND	µg/kg
1,4-Dichlorobenzene	2.7	ND	µg/kg	Trichloroethene	2.7	ND	µg/kg
Dichlorodifluoromethane	2.7	ND	µg/kg	Trichlorofluoromethane	2.7	ND	µg/kg
1,1-Dichloroethane	2.7	ND	µg/kg	1,2,3-Trichloropropane	2.7	ND	µg/kg
1,2-Dichloroethane	2.7	ND	µg/kg	1,2,4-Trimethylbenzene	5.4	ND	µg/kg
1,1-Dichloroethene	2.7	ND	µg/kg	1,3,5-Trimethylbenzene	2.7	ND	µg/kg
cis-1,2-Dichloroethene	2.7	ND	µg/kg	Vinyl Chloride	2.7	ND	µg/kg
trans-1,2-Dichloroethene	2.7	ND	µg/kg	m&p-Xylene	2.7	ND	µg/kg
Dichloromethane	2.7	ND	µg/kg	o-Xylene	2.7	ND	µg/kg
				Diisopropyl Ether	2.7	ND	µg/kg
				MTBE	2.7	ND	µg/kg

ND: Not Detected

B: Detected in method blank.

J: Detected but below detection limit. Estimated concentration
Determined according to modified EPA GC-MS Method 8260.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.:	TP-2 D = 5-7	Date Received:	7/27/94
Sample Matrix:	Soil	Lab Batch ID:	9407047
Date Collected:	7/25/94	Lab Sample ID:	005124
Project:	Bob's Service	Reviewed By:	DCS
Project #:	10-0232.00		

Parameter Number	Parameter	PQL	Concentration	Units	Comments	Date Analyzed
78920	Gasoline Range Organics (GRO)	6.4	ND	mg/kg	None	8/04/94
	Total Lead		13.8	mg/kg	None	8/11/94
	Digestion Date					8/05/94

ND: Not Detected
J: Detected but below PQL. Estimated concentration
PQL: Practical Quantitation Limit
GRO/DRO: Determined by Modified Wisconsin WDNR LUST Guidance.
PVOC: Determined according to Modified EPA Method 8020.
CONCENTRATION: Results on dry weight basis

GRO Comments:

1. Significant early eluting peaks before GRO window.
2. Significant late eluting peaks after GRO window.
3. Majority of GRO compounds in early portion of window.
4. Majority of GRO compounds in later portion of window.
5. GRO window shows a raised baseline.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.:	TP-2 D = 5-7	Date Received:	7/27/94
Sample Matrix:	Soil	Lab Batch ID:	9407047
Date Collected:	7/25/94	Lab Sample ID:	005124
Project:	Bob's Service	Date Analyzed:	8/06/94
Project #:	10-0232.00	Reviewed By:	DES

Parameter	Detection Limit	Sample Conc.	Units	Parameter	Detection Limit	Sample Conc.	Units
Benzene	2.3	6.5	µg/kg	1,2-Dichloropropane	2.3	ND	µg/kg
Bromobenzene	2.3	ND	µg/kg	1,3-Dichloropropane	2.3	ND	µg/kg
Bromochloromethane	2.3	ND	µg/kg	2,2-Dichloropropane	2.3	ND	µg/kg
Bromodichloromethane	2.3	ND	µg/kg	1,1-Dichloropropene	2.3	ND	µg/kg
Bromoform	2.3	ND	µg/kg	cis-1,3-Dichloropropene	2.3	ND	µg/kg
n-Butylbenzene	2.3	ND	µg/kg	trans-1,3-Dichloropropene	2.3	ND	µg/kg
sec-Butylbenzene	2.3	ND	µg/kg	Ethylbenzene	2.3	ND	µg/kg
t-Butylbenzene	2.3	ND	µg/kg	Hexachlorobutadiene	2.3	ND	µg/kg
Carbon Tetrachloride	2.3	ND	µg/kg	Isopropylbenzene	2.3	ND	µg/kg
Chlorobenzene	2.3	ND	µg/kg	p-Isopropyltoluene	2.3	ND	µg/kg
Chloroethane	2.3	ND	µg/kg	Naphthalene	4.6	ND	µg/kg
Chloroform	2.3	ND	µg/kg	n-Propylbenzene	2.3	ND	µg/kg
Chloromethane	2.3	ND	µg/kg	Styrene	2.3	ND	µg/kg
2-Chlorotoluene	2.3	ND	µg/kg	1,1,1,2-Tetrachloroethane	2.3	ND	µg/kg
4-Chlorotoluene	2.3	ND	µg/kg	1,1,2,2-Tetrachloroethane	2.3	ND	µg/kg
Dibromochloromethane	2.3	ND	µg/kg	Tetrachloroethene	2.3	ND	µg/kg
1,2-Dibromo-3-chloropropane	2.3	ND	µg/kg	Toluene	2.3	ND	µg/kg
1,2-Dibromoethane	2.3	ND	µg/kg	1,2,3-Trichlorobenzene	2.3	ND	µg/kg
Dibromomethane	2.3	ND	µg/kg	1,2,4-Trichlorobenzene	2.3	ND	µg/kg
1,2-Dichlorobenzene	2.3	ND	µg/kg	1,1,1-Trichloroethane	2.3	ND	µg/kg
1,3-Dichlorobenzene	2.3	ND	µg/kg	1,1,2-Trichloroethane	2.3	ND	µg/kg
1,4-Dichlorobenzene	2.3	ND	µg/kg	Trichloroethene	2.3	ND	µg/kg
Dichlorodifluoromethane	2.3	ND	µg/kg	Trichlorofluoromethane	2.3	ND	µg/kg
1,1-Dichloroethane	2.3	ND	µg/kg	1,2,3-Trichloropropane	2.3	ND	µg/kg
1,2-Dichloroethane	2.3	ND	µg/kg	1,2,4-Trimethylbenzene	4.6	ND	µg/kg
1,1-Dichloroethene	2.3	ND	µg/kg	1,3,5-Trimethylbenzene	2.3	ND	µg/kg
cis-1,2-Dichloroethene	2.3	ND	µg/kg	Vinyl Chloride	2.3	ND	µg/kg
trans-1,2-Dichloroethene	2.3	ND	µg/kg	m&p-Xylene	2.3	ND	µg/kg
Dichloromethane	2.3	ND	µg/kg	o-Xylene	2.3	2.8	µg/kg
				Diisopropyl Ether	2.3	ND	µg/kg
				MTBE	2.3	ND	µg/kg

ND: Not Detected

B: Detected in method blank.

J: Detected but below detection limit. Estimated concentration
Determined according to modified EPA GC-MS Method 8260.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.: TP-2 D = 10-12
Sample Matrix: Soil
Date Collected: 7/25/94
Project: Bob's Service
Project #: 10-0232.00

Date Received: 7/27/94
Lab Batch ID: 9407047
Lab Sample ID: 005125
Reviewed By: DCS

Parameter Number	Parameter	PQL	Concentration	Units	Comments	Date Analyzed
78920	Gasoline Range Organics (GRO)	6.8	ND	mg/kg	None	8/04/94
	Total Lead		16.1	mg/kg	None	8/11/94
	Digestion Date					8/05/94

ND: Not Detected

J: Detected but below PQL. Estimated concentration

PQL: Practical Quantitation Limit

GRO/DRO: Determined by Modified Wisconsin WDNRLUST Guidance.

PVOC: Determined according to Modified EPA Method 8020.

CONCENTRATION: Results on dry weight basis

GRO Comments:

1. Significant early eluting peaks before GRO window.
2. Significant late eluting peaks after GRO window.
3. Majority of GRO compounds in early portion of window.
4. Majority of GRO compounds in later portion of window.
5. GRO window shows a raised baseline.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.:	TP-2 D = 10-12	Date Received:	7/27/94
Sample Matrix:	Soil	Lab Batch ID:	9407047
Date Collected:	7/25/94	Lab Sample ID:	005125
Project:	Bob's Service	Date Analyzed:	8/06/94
Project #:	10-0232.00	Reviewed By:	DLS

Parameter	Detection Limit	Sample Conc.	Units	Parameter	Detection Limit	Sample Conc.	Units
Benzene	2.6	ND	µg/kg	1,2-Dichloropropane	2.6	ND	µg/kg
Bromobenzene	2.6	ND	µg/kg	1,3-Dichloropropane	2.6	ND	µg/kg
Bromochloromethane	2.6	ND	µg/kg	2,2-Dichloropropane	2.6	ND	µg/kg
Bromodichloromethane	2.6	ND	µg/kg	1,1-Dichloropropene	2.6	ND	µg/kg
Bromoform	2.6	ND	µg/kg	cis-1,3-Dichloropropene	2.6	ND	µg/kg
n-Butylbenzene	2.6	ND	µg/kg	trans-1,3-Dichloropropene	2.6	ND	µg/kg
sec-Butylbenzene	2.6	ND	µg/kg	Ethylbenzene	2.6	ND	µg/kg
t-Butylbenzene	2.6	ND	µg/kg	Hexachlorobutadiene	2.6	ND	µg/kg
Carbon Tetrachloride	2.6	ND	µg/kg	Isopropylbenzene	2.6	ND	µg/kg
Chlorobenzene	2.6	ND	µg/kg	p-Isopropyltoluene	2.6	ND	µg/kg
Chloroethane	2.6	ND	µg/kg	Naphthalene	5.3	ND	µg/kg
Chloroform	2.6	ND	µg/kg	n-Propylbenzene	2.6	ND	µg/kg
Chloromethane	2.6	ND	µg/kg	Styrene	2.6	ND	µg/kg
2-Chlorotoluene	2.6	ND	µg/kg	1,1,1,2-Tetrachloroethane	2.6	ND	µg/kg
4-Chlorotoluene	2.6	ND	µg/kg	1,1,2,2-Tetrachloroethane	2.6	ND	µg/kg
Dibromochloromethane	2.6	ND	µg/kg	Tetrachloroethene	2.6	ND	µg/kg
1,2-Dibromo-3-chloropropane	2.6	ND	µg/kg	Toluene	2.6	ND	µg/kg
1,2-Dibromoethane	2.6	ND	µg/kg	1,2,3-Trichlorobenzene	2.6	ND	µg/kg
Dibromomethane	2.6	ND	µg/kg	1,2,4-Trichlorobenzene	2.6	ND	µg/kg
1,2-Dichlorobenzene	2.6	ND	µg/kg	1,1,1-Trichloroethane	2.6	ND	µg/kg
1,3-Dichlorobenzene	2.6	ND	µg/kg	1,1,2-Trichloroethane	2.6	ND	µg/kg
1,4-Dichlorobenzene	2.6	ND	µg/kg	Trichloroethene	2.6	ND	µg/kg
Dichlorodifluoromethane	2.6	ND	µg/kg	Trichlorofluoromethane	2.6	ND	µg/kg
1,1-Dichloroethane	2.6	ND	µg/kg	1,2,3-Trichloropropane	2.6	ND	µg/kg
1,2-Dichloroethane	2.6	ND	µg/kg	1,2,4-Trimethylbenzene	5.3	ND	µg/kg
1,1-Dichloroethene	2.6	ND	µg/kg	1,3,5-Trimethylbenzene	2.6	ND	µg/kg
cis-1,2-Dichloroethene	2.6	ND	µg/kg	Vinyl Chloride	2.6	ND	µg/kg
trans-1,2-Dichloroethene	2.6	ND	µg/kg	m&p-Xylene	2.6	ND	µg/kg
Dichloromethane	2.6	ND	µg/kg	o-Xylene	2.6	ND	µg/kg
				Diisopropyl Ether	2.6	ND	µg/kg
				MTBE	2.6	ND	µg/kg

ND: Not Detected

B: Detected in method blank.

J: Detected but below detection limit. Estimated concentration
Determined according to modified EPA GC-MS Method 8260.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.:	TP-3 D = 7.5-9.5	Date Received:	7/27/94
Sample Matrix:	Soil	Lab Batch ID:	9407047
Date Collected:	7/25/94	Lab Sample ID:	005126
Project:	Bob's Service	Reviewed By:	DLS
Project #:	10-0232.00		

Parameter Number	Parameter	PQL	Concentration	Units	Comments	Date Analyzed
78920	Gasoline Range Organics (GRO)	6.4	52.8	mg/kg	None	8/04/94
	Total Lead		12.9	mg/kg	None	5/11/94
	Digestion Date					8/05/94

ND: Not Detected
J: Detected but below PQL. Estimated concentration
PQL: Practical Quantitation Limit
GRO/DRO: Determined by Modified Wisconsin WDNR LUST Guidance.
PVOC: Determined according to Modified EPA Method 8020.
CONCENTRATION: Results on dry weight basis

GRO Comments:

1. Significant early eluting peaks before GRO window.
2. Significant late eluting peaks after GRO window.
3. Majority of GRO compounds in early portion of window.
4. Majority of GRO compounds in later portion of window.
5. GRO window shows a raised baseline.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.:	TP-3 D = 7.5-9.5	Date Received:	7/27/94
Sample Matrix:	Soil	Lab Batch ID:	9407047
Date Collected:	7/25/94	Lab Sample ID:	005126
Project:	Bob's Service	Date Analyzed:	8/07/94
Project #:	10-0232.00	Reviewed By:	DCS

Parameter	Detection Limit	Sample Conc.	Units	Parameter	Detection Limit	Sample Conc.	Units
Benzene	6.5	58.5	µg/kg	1,2-Dichloropropane	6.5	ND	µg/kg
Bromobenzene	6.5	ND	µg/kg	1,3-Dichloropropane	6.5	ND	µg/kg
Bromochloromethane	6.5	ND	µg/kg	2,2-Dichloropropane	6.5	ND	µg/kg
Bromodichloromethane	6.5	ND	µg/kg	1,1-Dichloropropene	6.5	ND	µg/kg
Bromoform	6.5	ND	µg/kg	cis-1,3-Dichloropropene	6.5	ND	µg/kg
n-Butylbenzene	6.5	213	µg/kg	trans-1,3-Dichloropropene	6.5	ND	µg/kg
sec-Butylbenzene	6.5	86.8	µg/kg	Ethylbenzene	6.5	147	µg/kg
t-Butylbenzene	6.5	ND	µg/kg	Hexachlorobutadiene	6.5	ND	µg/kg
Carbon Tetrachloride	6.5	ND	µg/kg	Isopropylbenzene	6.5	130	µg/kg
Chlorobenzene	6.5	ND	µg/kg	p-Isopropyltoluene	6.5	ND	µg/kg
Chloroethane	6.5	ND	µg/kg	Naphthalene	13.0	14.7	µg/kg
Chloroform	6.5	ND	µg/kg	n-Propylbenzene	6.5	306	µg/kg
Chloromethane	6.5	ND	µg/kg	Styrene	6.5	ND	µg/kg
2-Chlorotoluene	6.5	ND	µg/kg	1,1,1,2-Tetrachloroethane	6.5	ND	µg/kg
4-Chlorotoluene	6.5	ND	µg/kg	1,1,2,2-Tetrachloroethane	6.5	ND	µg/kg
Dibromochloromethane	6.5	ND	µg/kg	Tetrachloroethene	6.5	ND	µg/kg
1,2-Dibromo-3-chloropropane	6.5	ND	µg/kg	Toluene	6.5	ND	µg/kg
1,2-Dibromoethane	6.5	ND	µg/kg	1,2,3-Trichlorobenzene	6.5	ND	µg/kg
Dibromomethane	6.5	ND	µg/kg	1,2,4-Trichlorobenzene	6.5	ND	µg/kg
1,2-Dichlorobenzene	6.5	ND	µg/kg	1,1,1-Trichloroethane	6.5	ND	µg/kg
1,3-Dichlorobenzene	6.5	ND	µg/kg	1,1,2-Trichloroethane	6.5	ND	µg/kg
1,4-Dichlorobenzene	6.5	ND	µg/kg	Trichloroethene	6.5	ND	µg/kg
Dichlorodifluoromethane	6.5	ND	µg/kg	Trichlorofluoromethane	6.5	ND	µg/kg
1,1-Dichloroethane	6.5	ND	µg/kg	1,2,3-Trichloropropane	6.5	ND	µg/kg
1,2-Dichloroethane	6.5	ND	µg/kg	1,2,4-Trimethylbenzene	13.0	ND	µg/kg
1,1-Dichloroethene	6.5	ND	µg/kg	1,3,5-Trimethylbenzene	6.5	8.3	µg/kg
cis-1,2-Dichloroethene	6.5	ND	µg/kg	Vinyl Chloride	6.5	ND	µg/kg
trans-1,2-Dichloroethene	6.5	ND	µg/kg	m&p-Xylene	6.5	ND	µg/kg
Dichloromethane	6.5	ND	µg/kg	o-Xylene	6.5	ND	µg/kg
				Diisopropyl Ether	6.5	ND	µg/kg
				MTBE	6.5	ND	µg/kg

ND: Not Detected

B: Detected in method blank.

J: Detected but below detection limit. Estimated concentration
Determined according to modified EPA GC-MS Method 8260.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.: TP-3 D = 10-12
Sample Matrix: Soil
Date Collected: 7/25/94
Project: Bob's Service
Project #: 10-0232.00

Date Received: 7/27/94
Lab Batch ID: 9407047
Lab Sample ID: 005127
Reviewed By: DCS

Parameter Number	Parameter	PQL	Concentration	Units	Comments	Date Analyzed
78920	Gasoline Range Organics (GRO)	7.1	ND	mg/kg	None	8/04/94
	Total Lead		14.8	mg/kg	None	8/11/94
	Digestion Date					8/05/94

ND: Not Detected
J: Detected but below PQL. Estimated concentration
PQL: Practical Quantitation Limit
GRO/DRO: Determined by Modified Wisconsin WDNR LUST Guidance.
PVOC: Determined according to Modified EPA Method 8020.
CONCENTRATION: Results on dry weight basis

GRO Comments:

1. Significant early eluting peaks before GRO window.
2. Significant late eluting peaks after GRO window.
3. Majority of GRO compounds in early portion of window.
4. Majority of GRO compounds in later portion of window.
5. GRO window shows a raised baseline.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.:	<u>TP-3 D = 10-12</u>	Date Received:	<u>7/27/94</u>
Sample Matrix:	<u>Soil</u>	Lab Batch ID:	<u>9407047</u>
Date Collected:	<u>7/25/94</u>	Lab Sample ID:	<u>005127</u>
Project:	<u>Bob's Service</u>	Date Analyzed:	<u>8/06/94</u>
Project #:	<u>10-0232.00</u>	Reviewed By:	<u>DCS</u>

Parameter	Detection Limit	Sample Conc.	Units	Parameter	Detection Limit	Sample Conc.	Units
Benzene	2.8	ND	µg/kg	1,2-Dichloropropane	2.8	ND	µg/kg
Bromobenzene	2.8	ND	µg/kg	1,3-Dichloropropane	2.8	ND	µg/kg
Bromochloromethane	2.8	ND	µg/kg	2,2-Dichloropropane	2.8	ND	µg/kg
Bromodichloromethane	2.8	ND	µg/kg	1,1-Dichloropropene	2.8	ND	µg/kg
Bromoform	2.8	ND	µg/kg	cis-1,3-Dichloropropene	2.8	ND	µg/kg
n-Butylbenzene	2.8	ND	µg/kg	trans-1,3-Dichloropropene	2.8	ND	µg/kg
sec-Butylbenzene	2.8	ND	µg/kg	Ethylbenzene	2.8	ND	µg/kg
t-Butylbenzene	2.8	ND	µg/kg	Hexachlorobutadiene	2.8	ND	µg/kg
Carbon Tetrachloride	2.8	ND	µg/kg	Isopropylbenzene	2.8	ND	µg/kg
Chlorobenzene	2.8	ND	µg/kg	p-Isopropyltoluene	2.8	ND	µg/kg
Chloroethane	2.8	ND	µg/kg	Naphthalene	5.6	ND	µg/kg
Chloroform	2.8	ND	µg/kg	n-Propylbenzene	2.8	ND	µg/kg
Chloromethane	2.8	ND	µg/kg	Styrene	2.8	ND	µg/kg
2-Chlorotoluene	2.8	ND	µg/kg	1,1,1,2-Tetrachloroethane	2.8	ND	µg/kg
4-Chlorotoluene	2.8	ND	µg/kg	1,1,2,2-Tetrachloroethane	2.8	ND	µg/kg
Dibromochloromethane	2.8	ND	µg/kg	Tetrachloroethene	2.8	ND	µg/kg
1,2-Dibromo-3-chloropropane	2.8	ND	µg/kg	Toluene	2.8	ND	µg/kg
1,2-Dibromoethane	2.8	ND	µg/kg	1,2,3-Trichlorobenzene	2.8	ND	µg/kg
Dibromomethane	2.8	ND	µg/kg	1,2,4-Trichlorobenzene	2.8	ND	µg/kg
1,2-Dichlorobenzene	2.8	ND	µg/kg	1,1,1-Trichloroethane	2.8	ND	µg/kg
1,3-Dichlorobenzene	2.8	ND	µg/kg	1,1,2-Trichloroethane	2.8	ND	µg/kg
1,4-Dichlorobenzene	2.8	ND	µg/kg	Trichloroethene	2.8	ND	µg/kg
Dichlorodifluoromethane	2.8	ND	µg/kg	Trichlorofluoromethane	2.8	ND	µg/kg
1,1-Dichloroethane	2.8	ND	µg/kg	1,2,3-Trichloropropane	2.8	ND	µg/kg
1,2-Dichloroethane	2.8	ND	µg/kg	1,2,4-Trimethylbenzene	5.6	ND	µg/kg
1,1-Dichloroethene	2.8	ND	µg/kg	1,3,5-Trimethylbenzene	2.8	ND	µg/kg
cis-1,2-Dichloroethene	2.8	ND	µg/kg	Vinyl Chloride	2.8	ND	µg/kg
trans-1,2-Dichloroethene	2.8	ND	µg/kg	m&p-Xylene	2.8	ND	µg/kg
Dichloromethane	2.8	ND	µg/kg	o-Xylene	2.8	ND	µg/kg
				Diisopropyl Ether	2.8	ND	µg/kg
				MTBE	2.8	ND	µg/kg

ND: Not Detected

B: Detected in method blank.

J: Detected but below detection limit. Estimated concentration
Determined according to modified EPA GC-MS Method 8260.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.: TP-4 D = 5-7
Sample Matrix: Soil
Date Collected: 7/25/94
Project: Bob's Service
Project #: 10-0232.00

Date Received: 7/27/94
Lab Batch ID: 9407047
Lab Sample ID: 005128
Reviewed By: DLS

Parameter Number	Parameter	PQL	Concentration	Units	Comments	Date Analyzed
78920	Gasoline Range Organics (GRO)	7.4	ND	mg/kg	None	8/04/94
	Total Lead		15.6	mg/kg	None	8/11/94
	Digestion Date					8/05/94

ND: Not Detected
J: Detected but below PQL. Estimated concentration
PQL: Practical Quantitation Limit
GRO/DRO: Determined by Modified Wisconsin WDNR LUST Guidance.
PVOC: Determined according to Modified EPA Method 8020.
CONCENTRATION: Results on dry weight basis

GRO Comments:

1. Significant early eluting peaks before GRO window.
2. Significant late eluting peaks after GRO window.
3. Majority of GRO compounds in early portion of window.
4. Majority of GRO compounds in later portion of window.
5. GRO window shows a raised baseline.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.:	TP-4 D = 5-7	Date Received:	7/27/94
Sample Matrix:	Soil	Lab Batch ID:	9407047
Date Collected:	7/25/94	Lab Sample ID:	005128
Project:	Bob's Service	Date Analyzed:	8/06/94
Project #:	10-0232.00	Reviewed By:	DCS

Parameter	Detection Limit	Sample Conc.	Units	Parameter	Detection Limit	Sample Conc.	Units
Benzene	2.8	ND	µg/kg	1,2-Dichloropropane	2.8	ND	µg/kg
Bromobenzene	2.8	ND	µg/kg	1,3-Dichloropropane	2.8	ND	µg/kg
Bromochloromethane	2.8	ND	µg/kg	2,2-Dichloropropane	2.8	ND	µg/kg
Bromodichloromethane	2.8	ND	µg/kg	1,1-Dichloropropene	2.8	ND	µg/kg
Bromoform	2.8	ND	µg/kg	cis-1,3-Dichloropropene	2.8	ND	µg/kg
n-Butylbenzene	2.8	ND	µg/kg	trans-1,3-Dichloropropene	2.8	ND	µg/kg
sec-Butylbenzene	2.8	ND	µg/kg	Ethylbenzene	2.8	ND	µg/kg
t-Butylbenzene	2.8	ND	µg/kg	Hexachlorobutadiene	2.8	ND	µg/kg
Carbon Tetrachloride	2.8	ND	µg/kg	Isopropylbenzene	2.8	ND	µg/kg
Chlorobenzene	2.8	ND	µg/kg	p-Isopropyltoluene	2.8	ND	µg/kg
Chloroethane	2.8	ND	µg/kg	Naphthalene	5.7	ND	µg/kg
Chloroform	2.8	ND	µg/kg	n-Propylbenzene	2.8	ND	µg/kg
Chloromethane	2.8	ND	µg/kg	Styrene	2.8	ND	µg/kg
2-Chlorotoluene	2.8	ND	µg/kg	1,1,1,2-Tetrachloroethane	2.8	ND	µg/kg
4-Chlorotoluene	2.8	ND	µg/kg	1,1,2,2-Tetrachloroethane	2.8	ND	µg/kg
Dibromochloromethane	2.8	ND	µg/kg	Tetrachloroethene	2.8	ND	µg/kg
1,2-Dibromo-3-chloropropane	2.8	ND	µg/kg	Toluene	2.8	ND	µg/kg
1,2-Dibromoethane	2.8	ND	µg/kg	1,2,3-Trichlorobenzene	2.8	ND	µg/kg
Dibromomethane	2.8	ND	µg/kg	1,2,4-Trichlorobenzene	2.8	ND	µg/kg
1,2-Dichlorobenzene	2.8	ND	µg/kg	1,1,1-Trichloroethane	2.8	ND	µg/kg
1,3-Dichlorobenzene	2.8	ND	µg/kg	1,1,2-Trichloroethane	2.8	ND	µg/kg
1,4-Dichlorobenzene	2.8	ND	µg/kg	Trichloroethene	2.8	ND	µg/kg
Dichlorodifluoromethane	2.8	ND	µg/kg	Trichlorofluoromethane	2.8	ND	µg/kg
1,1-Dichloroethane	2.8	ND	µg/kg	1,2,3-Trichloropropane	2.8	ND	µg/kg
1,2-Dichloroethane	2.8	ND	µg/kg	1,2,4-Trimethylbenzene	5.7	ND	µg/kg
1,1-Dichloroethene	2.8	ND	µg/kg	1,3,5-Trimethylbenzene	2.8	ND	µg/kg
cis-1,2-Dichloroethene	2.8	ND	µg/kg	Vinyl Chloride	2.8	ND	µg/kg
trans-1,2-Dichloroethene	2.8	ND	µg/kg	m&p-Xylene	2.8	ND	µg/kg
Dichloromethane	2.8	ND	µg/kg	o-Xylene	2.8	ND	µg/kg
				Diisopropyl Ether	2.8	ND	µg/kg
				MTBE	2.8	ND	µg/kg

ND: Not Detected

B: Detected in method blank.

J: Detected but below detection limit. Estimated concentration
Determined according to modified EPA GC-MS Method 8260.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.:	TP-4 D = 10-12	Date Received:	7/27/94
Sample Matrix:	Soil	Lab Batch ID:	9407047
Date Collected:	7/25/94	Lab Sample ID:	005129
Project:	Bob's Service	Reviewed By:	DCS
Project #:	10-0232.00		

Parameter Number	Parameter	PQL	Concentration	Units	Comments	Date Analyzed
78920	Gasoline Range Organics (GRO)	7.6	ND	mg/kg	None	8/05/94
	Total Lead		15.0	mg/kg	None	8/11/94
	Digestion Date					8/05/94

ND: Not Detected
J: Detected but below PQL. Estimated concentration
PQL: Practical Quantitation Limit
GRO/DRO: Determined by Modified Wisconsin WDNR LUST Guidance.
PVOC: Determined according to Modified EPA Method 8020.
CONCENTRATION: Results on dry weight basis

GRO Comments:

1. Significant early eluting peaks before GRO window.
2. Significant late eluting peaks after GRO window.
3. Majority of GRO compounds in early portion of window.
4. Majority of GRO compounds in later portion of window.
5. GRO window shows a raised baseline.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.:	TP-4 D = 10-12	Date Received:	7/27/94
Sample Matrix:	Soil	Lab Batch ID:	9407047
Date Collected:	7/25/94	Lab Sample ID:	005129
Project:	Bob's Service	Date Analyzed:	8/06/94
Project #:	10-0232.00	Reviewed By:	DJS

Parameter	Detection Limit	Sample Conc.	Units	Parameter	Detection Limit	Sample Conc.	Units
Benzene	2.8	ND	µg/kg	1,2-Dichloropropane	2.8	ND	µg/kg
Bromobenzene	2.8	ND	µg/kg	1,3-Dichloropropane	2.8	ND	µg/kg
Bromochloromethane	2.8	ND	µg/kg	2,2-Dichloropropane	2.8	ND	µg/kg
Bromodichloromethane	2.8	ND	µg/kg	1,1-Dichloropropene	2.8	ND	µg/kg
Bromoform	2.8	ND	µg/kg	cis-1,3-Dichloropropene	2.8	ND	µg/kg
n-Butylbenzene	2.8	ND	µg/kg	trans-1,3-Dichloropropene	2.8	ND	µg/kg
sec-Butylbenzene	2.8	ND	µg/kg	Ethylbenzene	2.8	ND	µg/kg
t-Butylbenzene	2.8	ND	µg/kg	Hexachlorobutadiene	2.8	ND	µg/kg
Carbon Tetrachloride	2.8	ND	µg/kg	Isopropylbenzene	2.8	ND	µg/kg
Chlorobenzene	2.8	ND	µg/kg	p-Isopropyltoluene	2.8	ND	µg/kg
Chloroethane	2.8	ND	µg/kg	Naphthalene	5.6	ND	µg/kg
Chloroform	2.8	ND	µg/kg	n-Propylbenzene	2.8	ND	µg/kg
Chloromethane	2.8	ND	µg/kg	Styrene	2.8	ND	µg/kg
2-Chlorotoluene	2.8	ND	µg/kg	1,1,1,2-Tetrachloroethane	2.8	ND	µg/kg
4-Chlorotoluene	2.8	ND	µg/kg	1,1,2,2-Tetrachloroethane	2.8	ND	µg/kg
Dibromochloromethane	2.8	ND	µg/kg	Tetrachloroethene	2.8	ND	µg/kg
1,2-Dibromo-3-chloropropane	2.8	ND	µg/kg	Toluene	2.8	ND	µg/kg
1,2-Dibromoethane	2.8	ND	µg/kg	1,2,3-Trichlorobenzene	2.8	ND	µg/kg
Dibromomethane	2.8	ND	µg/kg	1,2,4-Trichlorobenzene	2.8	ND	µg/kg
1,2-Dichlorobenzene	2.8	ND	µg/kg	1,1,1-Trichloroethane	2.8	ND	µg/kg
1,3-Dichlorobenzene	2.8	ND	µg/kg	1,1,2-Trichloroethane	2.8	ND	µg/kg
1,4-Dichlorobenzene	2.8	ND	µg/kg	Trichloroethene	2.8	ND	µg/kg
Dichlorodifluoromethane	2.8	ND	µg/kg	Trichlorofluoromethane	2.8	ND	µg/kg
1,1-Dichloroethane	2.8	ND	µg/kg	1,2,3-Trichloropropane	2.8	ND	µg/kg
1,2-Dichloroethane	2.8	ND	µg/kg	1,2,4-Trimethylbenzene	5.6	ND	µg/kg
1,1-Dichloroethene	2.8	ND	µg/kg	1,3,5-Trimethylbenzene	2.8	ND	µg/kg
cis-1,2-Dichloroethene	2.8	ND	µg/kg	Vinyl Chloride	2.8	ND	µg/kg
trans-1,2-Dichloroethene	2.8	ND	µg/kg	m&p-Xylene	2.8	ND	µg/kg
Dichloromethane	2.8	3.3	µg/kg	o-Xylene	2.8	ND	µg/kg
				Diisopropyl Ether	2.8	ND	µg/kg
				MTBE	2.8	ND	µg/kg

ND: Not Detected

B: Detected in method blank.

J: Detected but below detection limit. Estimated concentration
Determined according to modified EPA GC-MS Method 8260.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.:	TP-5 D = 2.5-4.5	Date Received:	7/27/94
Sample Matrix:	Soil	Lab Batch ID:	9407047
Date Collected:	7/25/94	Lab Sample ID:	005130
Project:	Bob's Service	Reviewed By:	DLS
Project #:	10-0232.00		

Parameter Number	Parameter	PQL	Concentration	Units	Comments	Date Analyzed
78920	Gasoline Range Organics (GRO)	5.8	ND	mg/kg	None	8/05/94
	Total Lead		4.45	mg/kg	None	8/11/94
	Digestion Date					8/05/94

ND: Not Detected
J: Detected but below PQL. Estimated concentration
PQL: Practical Quantitation Limit
GRO/DRO: Determined by Modified Wisconsin WDNR LUST Guidance.
PVOC: Determined according to Modified EPA Method 8020.
CONCENTRATION: Results on dry weight basis

GRO Comments:

1. Significant early eluting peaks before GRO window.
2. Significant late eluting peaks after GRO window.
3. Majority of GRO compounds in early portion of window.
4. Majority of GRO compounds in later portion of window.
5. GRO window shows a raised baseline.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.:	TP-5 D = 2.5-4.5	Date Received:	7/27/94
Sample Matrix:	Soil	Lab Batch ID:	9407047
Date Collected:	7/25/94	Lab Sample ID:	005130
Project:	Bob's Service	Date Analyzed:	8/06/94
Project #:	10-0232.00	Reviewed By:	DES

Parameter	Detection Limit	Sample Conc.	Units	Parameter	Detection Limit	Sample Conc.	Units
Benzene	2.2	ND	µg/kg	1,2-Dichloropropane	2.2	ND	µg/kg
Bromobenzene	2.2	ND	µg/kg	1,3-Dichloropropane	2.2	ND	µg/kg
Bromochloromethane	2.2	ND	µg/kg	2,2-Dichloropropane	2.2	ND	µg/kg
Bromodichloromethane	2.2	ND	µg/kg	1,1-Dichloropropene	2.2	ND	µg/kg
Bromoform	2.2	ND	µg/kg	cis-1,3-Dichloropropene	2.2	ND	µg/kg
n-Butylbenzene	2.2	ND	µg/kg	trans-1,3-Dichloropropene	2.2	ND	µg/kg
sec-Butylbenzene	2.2	ND	µg/kg	Ethylbenzene	2.2	ND	µg/kg
t-Butylbenzene	2.2	ND	µg/kg	Hexachlorobutadiene	2.2	ND	µg/kg
Carbon Tetrachloride	2.2	ND	µg/kg	Isopropylbenzene	2.2	ND	µg/kg
Chlorobenzene	2.2	ND	µg/kg	p-Isopropyltoluene	2.2	ND	µg/kg
Chloroethane	2.2	ND	µg/kg	Naphthalene	4.4	ND	µg/kg
Chloroform	2.2	ND	µg/kg	n-Propylbenzene	2.2	ND	µg/kg
Chloromethane	2.2	ND	µg/kg	Styrene	2.2	ND	µg/kg
2-Chlorotoluene	2.2	ND	µg/kg	1,1,1,2-Tetrachloroethane	2.2	ND	µg/kg
4-Chlorotoluene	2.2	ND	µg/kg	1,1,2,2-Tetrachloroethane	2.2	ND	µg/kg
Dibromochloromethane	2.2	ND	µg/kg	Tetrachloroethene	2.2	ND	µg/kg
1,2-Dibromo-3-chloropropane	2.2	ND	µg/kg	Toluene	2.2	ND	µg/kg
1,2-Dibromoethane	2.2	ND	µg/kg	1,2,3-Trichlorobenzene	2.2	ND	µg/kg
Dibromomethane	2.2	ND	µg/kg	1,2,4-Trichlorobenzene	2.2	ND	µg/kg
1,2-Dichlorobenzene	2.2	ND	µg/kg	1,1,1-Trichloroethane	2.2	ND	µg/kg
1,3-Dichlorobenzene	2.2	ND	µg/kg	1,1,2-Trichloroethane	2.2	ND	µg/kg
1,4-Dichlorobenzene	2.2	ND	µg/kg	Trichloroethene	2.2	ND	µg/kg
Dichlorodifluoromethane	2.2	ND	µg/kg	Trichlorofluoromethane	2.2	ND	µg/kg
1,1-Dichloroethane	2.2	ND	µg/kg	1,2,3-Trichloropropane	2.2	ND	µg/kg
1,2-Dichloroethane	2.2	ND	µg/kg	1,2,4-Trimethylbenzene	4.4	ND	µg/kg
1,1-Dichloroethene	2.2	ND	µg/kg	1,3,5-Trimethylbenzene	2.2	ND	µg/kg
cis-1,2-Dichloroethene	2.2	ND	µg/kg	Vinyl Chloride	2.2	ND	µg/kg
trans-1,2-Dichloroethene	2.2	ND	µg/kg	m&p-Xylene	2.2	ND	µg/kg
Dichloromethane	2.2	ND	µg/kg	o-Xylene	2.2	ND	µg/kg
				Diisopropyl Ether	2.2	ND	µg/kg
				MTBE	2.2	ND	µg/kg

ND: Not Detected

B: Detected in method blank.

J: Detected but below detection limit. Estimated concentration
Determined according to modified EPA GC-MS Method 8260.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.: TP-5 D = 10-12
Sample Matrix: Soil
Date Collected: 7/25/94
Project: Bob's Service
Project #: 10-0232.00

Date Received: 7/27/94
Lab Batch ID: 9407047
Lab Sample ID: 005131
Reviewed By: DCS

Parameter Number	Parameter	PQL	Concentration	Units	Comments	Date Analyzed
78920	Gasoline Range Organics (GRO)	6.9	ND	mg/kg	None	8/05/94
	Total Lead		13.4	mg/kg	None	8/11/94
	Digestion Date					8/05/94

ND: Not Detected
J: Detected but below PQL. Estimated concentration
PQL: Practical Quantitation Limit
GRO/DRO: Determined by Modified Wisconsin WDNR LUST Guidance.
PVOC: Determined according to Modified EPA Method 8020.
CONCENTRATION: Results on dry weight basis

GRO Comments:

1. Significant early eluting peaks before GRO window.
2. Significant late eluting peaks after GRO window.
3. Majority of GRO compounds in early portion of window.
4. Majority of GRO compounds in later portion of window.
5. GRO window shows a raised baseline.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.:	TP-5 D = 10-12	Date Received:	7/27/94
Sample Matrix:	Soil	Lab Batch ID:	9407047
Date Collected:	7/25/94	Lab Sample ID:	005131
Project:	Bob's Service	Date Analyzed:	8/07/94
Project #:	10-0232.00	Reviewed By:	DCS

Parameter	Detection Limit	Sample Conc.	Units	Parameter	Detection Limit	Sample Conc.	Units
Benzene	2.7	ND	µg/kg	1,2-Dichloropropane	2.7	ND	µg/kg
Bromobenzene	2.7	ND	µg/kg	1,3-Dichloropropane	2.7	ND	µg/kg
Bromochloromethane	2.7	ND	µg/kg	2,2-Dichloropropane	2.7	ND	µg/kg
Bromodichloromethane	2.7	ND	µg/kg	1,1-Dichloropropene	2.7	ND	µg/kg
Bromoforn	2.7	ND	µg/kg	cis-1,3-Dichloropropene	2.7	ND	µg/kg
n-Butylbenzene	2.7	ND	µg/kg	trans-1,3-Dichloropropene	2.7	ND	µg/kg
sec-Butylbenzene	2.7	ND	µg/kg	Ethylbenzene	2.7	ND	µg/kg
t-Butylbenzene	2.7	ND	µg/kg	Hexachlorobutadiene	2.7	ND	µg/kg
Carbon Tetrachloride	2.7	ND	µg/kg	Isopropylbenzene	2.7	ND	µg/kg
Chlorobenzene	2.7	ND	µg/kg	p-Isopropyltoluene	2.7	ND	µg/kg
Chloroethane	2.7	ND	µg/kg	Naphthalene	5.4	ND	µg/kg
Chloroform	2.7	ND	µg/kg	n-Propylbenzene	2.7	ND	µg/kg
Chloromethane	2.7	ND	µg/kg	Styrene	2.7	ND	µg/kg
2-Chlorotoluene	2.7	ND	µg/kg	1,1,1,2-Tetrachloroethane	2.7	ND	µg/kg
4-Chlorotoluene	2.7	ND	µg/kg	1,1,2,2-Tetrachloroethane	2.7	ND	µg/kg
Dibromochloromethane	2.7	ND	µg/kg	Tetrachloroethene	2.7	ND	µg/kg
1,2-Dibromo-3-chloropropane	2.7	ND	µg/kg	Toluene	2.7	ND	µg/kg
1,2-Dibromoethane	2.7	ND	µg/kg	1,2,3-Trichlorobenzene	2.7	ND	µg/kg
Dibromomethane	2.7	ND	µg/kg	1,2,4-Trichlorobenzene	2.7	ND	µg/kg
1,2-Dichlorobenzene	2.7	ND	µg/kg	1,1,1-Trichloroethane	2.7	ND	µg/kg
1,3-Dichlorobenzene	2.7	ND	µg/kg	1,1,2-Trichloroethane	2.7	ND	µg/kg
1,4-Dichlorobenzene	2.7	ND	µg/kg	Trichloroethene	2.7	ND	µg/kg
Dichlorodifluoromethane	2.7	ND	µg/kg	Trichlorofluoromethane	2.7	ND	µg/kg
1,1-Dichloroethane	2.7	ND	µg/kg	1,2,3-Trichloropropane	2.7	ND	µg/kg
1,2-Dichloroethane	2.7	ND	µg/kg	1,2,4-Trimethylbenzene	5.4	ND	µg/kg
1,1-Dichloroethene	2.7	ND	µg/kg	1,3,5-Trimethylbenzene	2.7	ND	µg/kg
cis-1,2-Dichloroethene	2.7	ND	µg/kg	Vinyl Chloride	2.7	ND	µg/kg
trans-1,2-Dichloroethene	2.7	ND	µg/kg	m&p-Xylene	2.7	ND	µg/kg
Dichloromethane	2.7	ND	µg/kg	o-Xylene	2.7	ND	µg/kg
				Diisopropyl Ether	2.7	ND	µg/kg
				MTBE	2.7	ND	µg/kg

ND: Not Detected

B: Detected in method blank.

J: Detected but below detection limit. Estimated concentration

Determined according to modified EPA GC-MS Method 8260.

CENTRAL WISCONSIN ENVIRO LAB, INC.

Wisconsin Certification No. 737125510

LABORATORY ANALYSIS RESULTS

Sample I.D.:	<u>Trip Blank</u>	Date Received:	<u>7/27/94</u>
Sample Matrix:	<u>Water - Methanol</u>	Lab Batch ID:	<u>9407047</u>
Date Collected:	<u>7/25/94</u>	Lab Sample ID:	<u>005132</u>
Project:	<u>Bob's Service</u>	Reviewed By:	<u>DCS</u>
Project #:	<u>10-0232.00</u>		

Parameter Number	Parameter	PQL	Concentration	Units	Comments	Date Analyzed
78920	Gasoline Range Organics (GRO)	2500	ND	µg/l	None	8/05/94

ND: Not Detected
J: Detected but below PQL. Estimated concentration
PQL: Practical Quantitation Limit
GRO/DRO: Determined by Modified Wisconsin WDNR LUST Guidance.
PVOC: Determined according to Modified EPA Method 8020.
CONCENTRATION: Results on dry weight basis

GRO Comments:

1. Significant early eluting peaks before GRO window.
2. Significant late eluting peaks after GRO window.
3. Majority of GRO compounds in early portion of window.
4. Majority of GRO compounds in later portion of window.
5. GRO window shows a raised baseline.

CWEL

CHAIN OF CUSTODY RECORD

See on See
CWEL Batch # 9407047
Soils

PROJECT NO.		PROJECT NAME / CLIENT				NO. OF CON- TAINERS						REMARKS			
10-023200		Bob's Service													
SAMPLERS: (Signature)							GRO	VOC	%Solids	Total Pb	PID Screen (field)				
Soil Rosemond															
SAMPLE NO.	DATE	TIME	COMP	GRAB	SAMPLE LOCATION										
2372	7/25/94	9:10		x	TP-1a D=5-7	4 glass	x	x	x	x	1135	CWEL LAB ID 005120			
2373	7/25/94	9:35		x	TP-1a D=10-12	4 glass					NR	21			
2374	7/25/94	9:55		x	TP-1b D=5-7	4 glass					1176	22			
2375	7/25/94	10:10		x	TP-1b D=10-12	4 glass					NR	23			
2376	7/25/94	10:45		x	TP-2 D=5-7	4 glass					NR	24			
2377	7/25/94	11:05		x	TP-2 D=10-12	4 glass					NR	25			
2378	7/25/94	12:15		x	TP-3 D=7.5-9.5	4 glass					44.6	26			
2379	7/25/94	12:20		x	TP-3 D=10-12	4 glass					1.5	27			
2380	7/25/94	11:30		x	TP-4 D=5-7	4 glass					NR	28			
2381	7/25/94	11:40		x	TP-4 D=10-12	4 glass					NR	29			
2382	7/25/94	12:50		x	TP-5 D=2.5-4.5	4 glass					NR	30			
2383	7/25/94	1:10		x	TP-5 D=10-12	4 glass		✓	✓	✓	NR	31			
					Metland Blank	1 glass	✓					32			
RELINQUISHED BY: (Signature)						DATE/TIME		RECEIVED BY: (Signature)		RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)	
Soil Rosemond						7/26/94 12:40		Dug Avram							
RELINQUISHED BY: (Signature)						DATE/TIME		RECEIVED BY: (Signature)		RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)	
RELINQUISHED BY: (Signature)						DATE/TIME		RECEIVED FOR LABORATORY BY: (Signature)		DATE/TIME		REMARKS:			
								Bridgette Boudjir		7/27/94 10:20					

AYRES
 ASSOCIATES

 Owen Ayres & Associates, Inc.
 Engineers/Architects/Scientists/Photogrammetrists
 1300 W. Clairemont Avenue, P.O. Box 1590, Eau Claire, WI 54702-1590, (715) 834-3161



11/27/95

TERRI HAZELTON
AYRES ASSOCIATES
3433 OAKWOOD HILLS PKWY.
EAU CLAIRE, WI 54702

Date Sampled: 10/30/95
Date Received: 11/01/95
Submission # : 9511000033

Project Name: **BOB'S SERVICE**
Project Number: **10-0232.00**

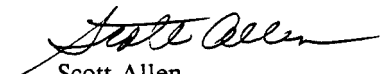
Dear TERRI HAZELTON :

Please find enclosed a revised laboratory report of samples submitted to MSA Environmental for the project listed above. This report is titled "Revised Analytical Report" at the top of the page, and supercedes any previous reports. All tests were performed in accordance with applicable EPA and WI DNR guidelines and methodologies.

Copies of the report, as well as all original analytical data, are retained by the laboratory for a minimum of three years from the date of analysis. Samples submitted to the laboratory will be disposed of by procedures acceptable to regulatory agencies, unless prior arrangements are made by the submitting client.

Thank you for the opportunity to serve you. Should any questions or concerns arise, please feel free to contact me.

Sincerely,
MID-STATE ASSOCIATES, INC.


Scott Allen
Analytical Section Manager

**REVISED
ANALYTICAL REPORT**

Client I.D. No.: LA2000000173

Work Order No.: 9511000033

Report Date: 11/27/95

Date Received: 11/01/95

Arrival Temperature: On Ice

AYRES ASSOCIATES
TERRI HAZELTON
3433 OAKWOOD HILLS PKWY.
EAU CLAIRE, WI 54702Project Name: **BOB'S SERVICE**Project Number: **10-0232.00**

Sample I.D. #: 114090 Sample Description: BW-1,S-3

Date Sampled: 10/30/95

Analyte	Result	Units	LOD	LOQ
Gasoline Range Organics- WDNR Modified GRO	<1.0	mg/kg	1.0	3.3
Extraction Date GRO	11/02/95			
Analysis Date GRO	11/04/95			
LUST Total Percent Solids--EPA 5030	67.6	%		
VOC Analysis Date	11/06/95			
VOC Extraction Date	11/04/95			
Analytical Method	8021			
Benzene	<0.025	mg/Kg	0.010	0.033
Bromobenzene	<0.025	mg/Kg	0.015	0.050
Bromodichloromethane	<0.025	mg/Kg	0.010	0.033
n-Butylbenzene	<0.025	mg/Kg	0.020	0.067
sec-Butylbenzene	<0.025	mg/Kg	0.020	0.067
tert-Butylbenzene	<0.025	mg/Kg	0.010	0.033
Carbon tetrachloride	<0.025	mg/Kg	0.015	0.050
Chlorobenzene	<0.025	mg/Kg	0.010	0.033
Chloroethane	<0.025	mg/Kg	0.020	0.067
Chloroform	<0.025	mg/Kg	0.010	0.033
Chloromethane	<0.025	mg/Kg	0.025	0.083
2-Chlorotoluene	<0.025	mg/Kg	0.015	0.050
4-Chlorotoluene	<0.025	mg/Kg	0.015	0.050
Chlorodibromomethane	<0.025	mg/Kg	0.010	0.033
1,2-Dibromo-3-chloropropane	<0.025	mg/Kg	0.010	0.033
1,2-Dibromoethane (EDB)	<0.025	mg/Kg	0.010	0.033
1,2-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
1,3-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
1,4-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
Dichlorodifluoromethane	<0.025	mg/Kg	0.020	0.067
1,1-Dichloroethane	<0.025	mg/Kg	0.010	0.033
1,2-Dichloroethane	<0.025	mg/Kg	0.010	0.033
1,1-Dichloroethene	<0.025	mg/Kg	0.020	0.067
cis-1,2-Dichloroethene	<0.025	mg/Kg	0.010	0.033
trans-1,2-Dichloroethene	<0.025	mg/Kg	0.010	0.033
1,2-Dichloropropane	<0.025	mg/Kg	0.010	0.033
1,3-Dichloropropane	<0.025	mg/Kg	0.015	0.050
2,2-Dichloropropane	<0.025	mg/Kg	0.010	0.033
Diisopropyl ether	<0.025	mg/Kg	0.010	0.033
Ethylbenzene	<0.025	mg/Kg	0.010	0.033
Hexachlorobutadiene	<0.025	mg/Kg	0.015	0.050
Isopropylbenzene	<0.025	mg/Kg	0.010	0.033
p-Isopropyltoluene	<0.025	mg/Kg	0.010	0.033
Methylene chloride (Dichloromethane)	<0.050	mg/Kg	0.050	0.17
Methyl-tert-butyl ether	<0.025	mg/Kg	0.020	0.067
Naphthalene	<0.025	mg/Kg	0.010	0.033
n-Propylbenzene	<0.025	mg/Kg	0.015	0.050
1,1,2,2-Tetrachloroethane	<0.025	mg/Kg	0.010	0.033
Tetrachloroethene	<0.025	mg/Kg	0.020	0.067
Toluene	<0.025	mg/Kg	0.010	0.033
1,2,3-Trichlorobenzene	<0.025	mg/Kg	0.020	0.067

Submitted By:

**REVISED
ANALYTICAL REPORT**

Client I.D. No.: LA2000000173

Work Order No.: 9511000033

Report Date: 11/27/95

Date Received: 11/01/95

Arrival Temperature: On Ice

AYRES ASSOCIATES
TERRI HAZELTON
3433 OAKWOOD HILLS PKWY.
EAU CLAIRE, WI 54702

Project Name: **BOB'S SERVICE**

Project Number: **10-0232.00**

Sample I.D. #: 114090 Sample Description: BW-1,S-3

Date Sampled: 10/30/95

Analyte	Result	Units	LOD	LOQ
1,2,4-Trichlorobenzene	<0.025	mg/Kg	0.020	0.067
1,1,1-Trichloroethane	<0.025	mg/Kg	0.025	0.083
1,1,2-Trichloroethane	<0.025	mg/Kg	0.010	0.033
Trichloroethene	<0.025	mg/Kg	0.010	0.033
Trichlorofluoromethane	<0.025	mg/Kg	0.020	0.067
1,2,4-Trimethylbenzene	<0.025	mg/Kg	0.020	0.067
1,3,5-Trimethylbenzene	<0.025	mg/Kg	0.015	0.050
Vinyl chloride	<0.025	mg/Kg	0.020	0.067
m&p-Xylene	<0.025	mg/Kg	0.020	0.067
o-Xylene	<0.025	mg/Kg	0.020	0.067

Sample I.D. #: 114091 Sample Description: BW-1,S-5

Date Sampled: 10/30/95

Analyte	Result	Units	LOD	LOQ
Gasoline Range Organics- WDNR Modified GRO	<1.0	mg/kg	1.0	3.3
Extraction Date GRO	11/02/95			
Analysis Date GRO	11/03/95			
LUST Total Percent Solids--EPA 5030	86.3	%		
VOC Analysis Date	11/06/95			
VOC Extraction Date	11/04/95			
Analytical Method	8021			
Benzene	<0.025	mg/Kg	0.010	0.033
Bromobenzene	<0.025	mg/Kg	0.015	0.050
Bromodichloromethane	<0.025	mg/Kg	0.010	0.033
n-Butylbenzene	<0.025	mg/Kg	0.020	0.067
sec-Butylbenzene	<0.025	mg/Kg	0.020	0.067
tert-Butylbenzene	<0.025	mg/Kg	0.010	0.033
Carbon tetrachloride	<0.025	mg/Kg	0.015	0.050
Chlorobenzene	<0.025	mg/Kg	0.010	0.033
Chloroethane	<0.025	mg/Kg	0.020	0.067
Chloroform	<0.025	mg/Kg	0.010	0.033
Chloromethane	<0.025	mg/Kg	0.025	0.083
2-Chlorotoluene	<0.025	mg/Kg	0.015	0.050
4-Chlorotoluene	<0.025	mg/Kg	0.015	0.050
Chlorodibromomethane	<0.025	mg/Kg	0.010	0.033
1,2-Dibromo-3-chloropropane	<0.025	mg/Kg	0.010	0.033
1,2-Dibromoethane (EDB)	<0.025	mg/Kg	0.010	0.033
1,2-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
1,3-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
1,4-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
Dichlorodifluoromethane	<0.025	mg/Kg	0.020	0.067
1,1-Dichloroethane	<0.025	mg/Kg	0.010	0.033
1,2-Dichloroethane	<0.025	mg/Kg	0.010	0.033
1,1-Dichloroethene	<0.025	mg/Kg	0.020	0.067
cis-1,2-Dichloroethene	<0.025	mg/Kg	0.010	0.033
trans-1,2-Dichloroethene	<0.025	mg/Kg	0.010	0.033

Submitted By: 

**REVISED
ANALYTICAL REPORT**

Client I.D. No.: LA2000000173

Work Order No.: 9511000033

Report Date: 11/27/95

Date Received: 11/01/95

Arrival Temperature: On Ice

AYRES ASSOCIATES
TERRI HAZELTON
3433 OAKWOOD HILLS PKWY.
EAU CLAIRE, WI 54702

Project Name: **BOB'S SERVICE**

Project Number: **10-0232.00**

Sample I.D. #: 114091 Sample Description: BW-1, S-5

Date Sampled: 10/30/95

Analyte	Result	Units	LOD	LOQ
1,2-Dichloropropane	<0.025	mg/Kg	0.010	0.033
1,3-Dichloropropane	<0.025	mg/Kg	0.015	0.050
2,2-Dichloropropane	<0.025	mg/Kg	0.010	0.033
Diisopropyl ether	<0.025	mg/Kg	0.010	0.033
Ethylbenzene	<0.025	mg/Kg	0.010	0.033
Hexachlorobutadiene	<0.025	mg/Kg	0.015	0.050
Isopropylbenzene	<0.025	mg/Kg	0.010	0.033
p-Isopropyltoluene	<0.025	mg/Kg	0.010	0.033
Methylene chloride (Dichloromethane)	<0.050	mg/Kg	0.050	0.17
Methyl-tert-butyl ether	<0.025	mg/Kg	0.020	0.067
Naphthalene	<0.025	mg/Kg	0.010	0.033
n-Propylbenzene	<0.025	mg/Kg	0.015	0.050
1,1,2,2-Tetrachloroethane	<0.025	mg/Kg	0.010	0.033
Tetrachloroethene	<0.025	mg/Kg	0.020	0.067
Toluene	<0.025	mg/Kg	0.010	0.033
1,2,3-Trichlorobenzene	<0.025	mg/Kg	0.020	0.067
1,2,4-Trichlorobenzene	<0.025	mg/Kg	0.020	0.067
1,1,1-Trichloroethane	<0.025	mg/Kg	0.025	0.083
1,1,2-Trichloroethane	<0.025	mg/Kg	0.010	0.033
Trichloroethene	<0.025	mg/Kg	0.010	0.033
Trichlorofluoromethane	<0.025	mg/Kg	0.020	0.067
1,2,4-Trimethylbenzene	<0.025	mg/Kg	0.020	0.067
1,3,5-Trimethylbenzene	<0.025	mg/Kg	0.015	0.050
Vinyl chloride	<0.025	mg/Kg	0.020	0.067
m&p-Xylene	<0.025	mg/Kg	0.020	0.067
o-Xylene	<0.025	mg/Kg	0.020	0.067

Sample I.D. #: 114092 Sample Description: B-2, S-1

Date Sampled: 10/30/95

Analyte	Result	Units	LOD	LOQ
Gasoline Range Organics- WDNR Modified GRO	1400	mg/kg	1.0	3.3
Sample contained fractions lighter and heavier than GRO hydrocarbons.				
Extraction Date GRO	11/02/95			
Analysis Date GRO	11/03/95			
LUST Total Percent Solids--EPA 5030	70.7	%		
VOC Analysis Date	11/06/95			
Elevated reporting limit due to sample dilution, sample contained high levels of target and/or non-target compounds.				
VOC Extraction Date	11/04/95			
Analytical Method	8021			
Benzene	17	mg/Kg	0.010	0.033
Bromobenzene	<1.2	mg/Kg	0.015	0.050
Bromodichloromethane	<1.2	mg/Kg	0.010	0.033
n-Butylbenzene	10	mg/Kg	0.020	0.067
sec-Butylbenzene	<1.2	mg/Kg	0.020	0.067
tert-Butylbenzene	<1.2	mg/Kg	0.010	0.033

Submitted By: 

Client I.D. No.: LA2000000173

Work Order No.: 9511000033

Report Date: 11/27/95

Date Received: 11/01/95

Arrival Temperature: On Ice

AYRES ASSOCIATES
TERRI HAZELTON
3433 OAKWOOD HILLS PKWY.
EAU CLAIRE, WI 54702

Project Name: **BOB'S SERVICE**

Project Number: **10-0232.00**

Sample I.D. #: 114092 Sample Description: B-2,S-1

Date Sampled: 10/30/95

Analyte	Result	Units	LOD	LOQ
Carbon tetrachloride	<1.2	mg/Kg	0.015	0.050
Chlorobenzene	<1.2	mg/Kg	0.010	0.033
Chloroethane	<1.2	mg/Kg	0.020	0.067
Chloroform	<1.2	mg/Kg	0.010	0.033
Chloromethane	<1.2	mg/Kg	0.025	0.083
2-Chlorotoluene	<1.2	mg/Kg	0.015	0.050
4-Chlorotoluene	<1.2	mg/Kg	0.015	0.050
Chlorodibromomethane	<1.2	mg/Kg	0.010	0.033
1,2-Dibromo-3-chloropropane	<1.2	mg/Kg	0.010	0.033
1,2-Dibromoethane (EDB)	<1.2	mg/Kg	0.010	0.033
1,2-Dichlorobenzene	<1.2	mg/Kg	0.010	0.033
1,3-Dichlorobenzene	<1.2	mg/Kg	0.010	0.033
1,4-Dichlorobenzene	<1.2	mg/Kg	0.010	0.033
Dichlorodifluoromethane	<1.2	mg/Kg	0.020	0.067
1,1-Dichloroethane	<1.2	mg/Kg	0.010	0.033
1,2-Dichloroethane	<1.2	mg/Kg	0.010	0.033
1,1-Dichloroethene	<1.2	mg/Kg	0.020	0.067
cis-1,2-Dichloroethene	<1.2	mg/Kg	0.010	0.033
trans-1,2-Dichloroethene	<1.2	mg/Kg	0.010	0.033
1,2-Dichloropropane	<1.2	mg/Kg	0.010	0.033
1,3-Dichloropropane	<1.2	mg/Kg	0.015	0.050
2,2-Dichloropropane	<1.2	mg/Kg	0.010	0.033
Diisopropyl ether	5.7	mg/Kg	0.010	0.033
Ethylbenzene	14	mg/Kg	0.010	0.033
Hexachlorobutadiene	<1.2	mg/Kg	0.015	0.050
Isopropylbenzene	<1.2	mg/Kg	0.010	0.033
p-Isopropyltoluene	<1.2	mg/Kg	0.010	0.033
Methylene chloride (Dichloromethane)	<2.5	mg/Kg	0.050	0.17
Methyl-tert-butyl ether	<1.2	mg/Kg	0.020	0.067
Naphthalene	2.0	mg/Kg	0.010	0.033
n-Propylbenzene	3.6	mg/Kg	0.015	0.050
1,1,2,2-Tetrachloroethane	<1.2	mg/Kg	0.010	0.033
Tetrachloroethene	<1.2	mg/Kg	0.020	0.067
Toluene	25	mg/Kg	0.010	0.033
1,2,3-Trichlorobenzene	<1.2	mg/Kg	0.020	0.067
1,2,4-Trichlorobenzene	<1.2	mg/Kg	0.020	0.067
1,1,1-Trichloroethane	<1.2	mg/Kg	0.025	0.083
1,1,2-Trichloroethane	<1.2	mg/Kg	0.010	0.033
Trichloroethene	<1.2	mg/Kg	0.010	0.033
Trichlorofluoromethane	<1.2	mg/Kg	0.020	0.067
1,2,4-Trimethylbenzene	36	mg/Kg	0.020	0.067
1,3,5-Trimethylbenzene	8.6	mg/Kg	0.015	0.050
Vinyl chloride	<1.2	mg/Kg	0.020	0.067
m&p-Xylene	52	mg/Kg	0.020	0.067
o-Xylene	20	mg/Kg	0.020	0.067

Submitted By:

**REVISED
ANALYTICAL REPORT**

Client I.D. No.: LA2000000173

Work Order No.: 9511000033

Report Date: 11/27/95

Date Received: 11/01/95

Arrival Temperature: On Ice

AYRES ASSOCIATES
TERRI HAZELTON
3433 OAKWOOD HILLS PKWY.
EAU CLAIRE, WI 54702

Project Name: **BOB'S SERVICE**

Project Number: **10-0232.00**

Sample I.D. #:114093 Sample Description:B-2,S-6

Date Sampled:10/30/95

Analyte	Result	Units	LOD	LOQ
Gasoline Range Organics- WDNR Modified GRO	1.9	mg/kg	1.0	3.3
Estimated value, concentration was less than LOQ.				
Extraction Date GRO	11/02/95			
Analysis Date GRO	11/04/95			
LUST Total Percent Solids--EPA 5030	88.3	%		
VOC Analysis Date	11/06/95			
VOC Extraction Date	11/04/95			
Analytical Method	8021			
Benzene	<0.025	mg/Kg	0.010	0.033
Bromobenzene	<0.025	mg/Kg	0.015	0.050
Bromodichloromethane	<0.025	mg/Kg	0.010	0.033
n-Butylbenzene	<0.025	mg/Kg	0.020	0.067
sec-Butylbenzene	<0.025	mg/Kg	0.020	0.067
tert-Butylbenzene	<0.025	mg/Kg	0.010	0.033
Carbon tetrachloride	<0.025	mg/Kg	0.015	0.050
Chlorobenzene	<0.025	mg/Kg	0.010	0.033
Chloroethane	<0.025	mg/Kg	0.020	0.067
Chloroform	<0.025	mg/Kg	0.010	0.033
Chloromethane	<0.025	mg/Kg	0.025	0.083
2-Chlorotoluene	<0.025	mg/Kg	0.015	0.050
4-Chlorotoluene	<0.025	mg/Kg	0.015	0.050
Chlorodibromomethane	<0.025	mg/Kg	0.010	0.033
1,2-Dibromo-3-chloropropane	<0.025	mg/Kg	0.010	0.033
1,2-Dibromoethane (EDB)	<0.025	mg/Kg	0.010	0.033
1,2-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
1,3-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
1,4-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
Dichlorodifluoromethane	<0.025	mg/Kg	0.020	0.067
1,1-Dichloroethane	<0.025	mg/Kg	0.010	0.033
1,2-Dichloroethane	<0.025	mg/Kg	0.010	0.033
1,1-Dichloroethene	<0.025	mg/Kg	0.020	0.067
cis-1,2-Dichloroethene	<0.025	mg/Kg	0.010	0.033
trans-1,2-Dichloroethene	<0.025	mg/Kg	0.010	0.033
1,2-Dichloropropane	<0.025	mg/Kg	0.010	0.033
1,3-Dichloropropane	<0.025	mg/Kg	0.015	0.050
2,2-Dichloropropane	<0.025	mg/Kg	0.010	0.033
Diisopropyl ether	<0.025	mg/Kg	0.010	0.033
Ethylbenzene	<0.025	mg/Kg	0.010	0.033
Hexachlorobutadiene	<0.025	mg/Kg	0.015	0.050
Isopropylbenzene	<0.025	mg/Kg	0.010	0.033
p-Isopropyltoluene	<0.025	mg/Kg	0.010	0.033
Methylene chloride (Dichloromethane)	<0.050	mg/Kg	0.050	0.17
Methyl-tert-butyl ether	<0.025	mg/Kg	0.020	0.067
Naphthalene	<0.025	mg/Kg	0.010	0.033
n-Propylbenzene	<0.025	mg/Kg	0.015	0.050
1,1,2,2-Tetrachloroethane	<0.025	mg/Kg	0.010	0.033
Tetrachloroethene	<0.025	mg/Kg	0.020	0.067
Toluene	<0.025	mg/Kg	0.010	0.033

Submitted By: AA

**REVISED
ANALYTICAL REPORT**

Client I.D. No.: LA2000000173

Work Order No.: 9511000033

Report Date: 11/27/95

Date Received: 11/01/95

Arrival Temperature: On Ice

AYRES ASSOCIATES
TERRI HAZELTON
3433 OAKWOOD HILLS PKWY.
EAU CLAIRE, WI 54702

Project Name: BOB'S SERVICE

Project Number: 10-0232.00

Sample I.D. #: 114093 **Sample Description:** B-2, S-6


Date Sampled: 10/30/95

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>LOD</u>	<u>LOQ</u>
1,2,3-Trichlorobenzene	<0.025	mg/Kg	0.020	0.067
1,2,4-Trichlorobenzene	<0.025	mg/Kg	0.020	0.067
1,1,1-Trichloroethane	<0.025	mg/Kg	0.025	0.083
1,1,2-Trichloroethane	<0.025	mg/Kg	0.010	0.033
Trichloroethene	<0.025	mg/Kg	0.010	0.033
Trichlorofluoromethane	<0.025	mg/Kg	0.020	0.067
1,2,4-Trimethylbenzene	<0.025	mg/Kg	0.020	0.067
1,3,5-Trimethylbenzene	<0.025	mg/Kg	0.015	0.050
Vinyl chloride	<0.025	mg/Kg	0.020	0.067
m&p-Xylene	<0.025	mg/Kg	0.020	0.067
o-Xylene	<0.025	mg/Kg	0.020	0.067

Sample I.D. #: 114094 **Sample Description:** B-3, S-4

Date Sampled: 10/30/95

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>LOD</u>	<u>LOQ</u>
Gasoline Range Organics- WDNR Modified GRO	2.8	mg/kg	1.0	3.3
Sample contained fractions lighter than GRO hydrocarbons. Estimated value, concentration was less than LOQ.				
Extraction Date GRO	11/02/95			
Analysis Date GRO	11/04/95			
LUST Total Percent Solids--EPA 5030	84.0	%		
VOC Analysis Date	11/06/95			
VOC Extraction Date	11/04/95			
Analytical Method	8021			
Benzene	0.050	mg/Kg	0.010	0.033
Bromobenzene	<0.025	mg/Kg	0.015	0.050
Bromodichloromethane	<0.025	mg/Kg	0.010	0.033
n-Butylbenzene	<0.025	mg/Kg	0.020	0.067
sec-Butylbenzene	<0.025	mg/Kg	0.020	0.067
tert-Butylbenzene	<0.025	mg/Kg	0.010	0.033
Carbon tetrachloride	<0.025	mg/Kg	0.015	0.050
Chlorobenzene	<0.025	mg/Kg	0.010	0.033
Chloroethane	<0.025	mg/Kg	0.020	0.067
Chloroform	<0.025	mg/Kg	0.010	0.033
Chloromethane	<0.025	mg/Kg	0.025	0.083
2-Chlorotoluene	<0.025	mg/Kg	0.015	0.050
4-Chlorotoluene	<0.025	mg/Kg	0.015	0.050
Chlorodibromomethane	<0.025	mg/Kg	0.010	0.033
1,2-Dibromo-3-chloropropane	<0.025	mg/Kg	0.010	0.033
1,2-Dibromoethane (EDB)	<0.025	mg/Kg	0.010	0.033
1,2-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
1,3-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
1,4-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
Dichlorodifluoromethane	<0.025	mg/Kg	0.020	0.067
1,1-Dichloroethane	<0.025	mg/Kg	0.010	0.033
1,2-Dichloroethane	<0.025	mg/Kg	0.010	0.033

Submitted By: 

**REVISED
ANALYTICAL REPORT**

Client I.D. No.: LA2000000173

Work Order No.: 9511000033

Report Date: 11/27/95

Date Received: 11/01/95

Arrival Temperature: On Ice

AYRES ASSOCIATES
TERRI HAZELTON
3433 OAKWOOD HILLS PKWY.
EAU CLAIRE, WI 54702

Project Name: **BOB'S SERVICE**

Project Number: **10-0232.00**

Sample I.D. #: 114094 Sample Description: B-3, S-4

Date Sampled: 10/30/95

Analyte	Result	Units	LOD	LOQ
1,1-Dichloroethene	<0.025	mg/Kg	0.020	0.067
cis-1,2-Dichloroethene	<0.025	mg/Kg	0.010	0.033
trans-1,2-Dichloroethene	<0.025	mg/Kg	0.010	0.033
1,2-Dichloropropane	<0.025	mg/Kg	0.010	0.033
1,3-Dichloropropane	<0.025	mg/Kg	0.015	0.050
2,2-Dichloropropane	<0.025	mg/Kg	0.010	0.033
Diisopropyl ether	0.042	mg/Kg	0.010	0.033
Ethylbenzene	0.047	mg/Kg	0.010	0.033
Hexachlorobutadiene	<0.025	mg/Kg	0.015	0.050
Isopropylbenzene	<0.025	mg/Kg	0.010	0.033
p-Isopropyltoluene	<0.025	mg/Kg	0.010	0.033
Methylene chloride (Dichloromethane)	<0.050	mg/Kg	0.050	0.17
Methyl-tert-butyl ether	<0.025	mg/Kg	0.020	0.067
Naphthalene	<0.025	mg/Kg	0.010	0.033
n-Propylbenzene	<0.025	mg/Kg	0.015	0.050
1,1,2,2-Tetrachloroethane	<0.025	mg/Kg	0.010	0.033
Tetrachloroethene	<0.025	mg/Kg	0.020	0.067
Toluene	0.034	mg/Kg	0.010	0.033
1,2,3-Trichlorobenzene	<0.025	mg/Kg	0.020	0.067
1,2,4-Trichlorobenzene	<0.025	mg/Kg	0.020	0.067
1,1,1-Trichloroethane	<0.025	mg/Kg	0.025	0.083
1,1,2-Trichloroethane	<0.025	mg/Kg	0.010	0.033
Trichloroethene	<0.025	mg/Kg	0.010	0.033
Trichlorofluoromethane	<0.025	mg/Kg	0.020	0.067
1,2,4-Trimethylbenzene	0.092	mg/Kg	0.020	0.067
1,3,5-Trimethylbenzene	<0.025	mg/Kg	0.015	0.050
Vinyl chloride	<0.025	mg/Kg	0.020	0.067
m&p-Xylene	0.18	mg/Kg	0.020	0.067
o-Xylene	0.057	mg/Kg	0.020	0.067

Estimated value, concentration was less than LOQ.

Sample I.D. #: 114095 Sample Description: B-3, S-5

Date Sampled: 10/30/95

Analyte	Result	Units	LOD	LOQ
Gasoline Range Organics- WDNR Modified GRO	1.6	mg/kg	1.0	3.3
Estimated value, concentration was less than LOQ. Sample contained fractions lighter than GRO hydrocarbons.				
Extraction Date GRO	11/04/95			
Analysis Date GRO	11/06/95			
LUST Total Percent Solids--EPA 5030	88.4	%		
VOC Analysis Date	11/06/95			
VOC Extraction Date	11/04/95			
Analytical Method	8021			
Benzene	<0.025	mg/Kg	0.010	0.033
Bromobenzene	<0.025	mg/Kg	0.015	0.050
Bromodichloromethane	<0.025	mg/Kg	0.010	0.033

Submitted By: 

Client I.D. No.: LA2000000173

Work Order No.: 9511000033

Report Date: 11/27/95

Date Received: 11/01/95

Arrival Temperature: On Ice

AYRES ASSOCIATES
TERRI HAZELTON
3433 OAKWOOD HILLS PKWY.
EAU CLAIRE, WI 54702

Project Name: **BOB'S SERVICE**

Project Number: **10-0232.00**

Sample I.D. #: 114095 Sample Description: B-3, S-5

Date Sampled: 10/30/95

Analyte	Result	Units	LOD	LOQ
n-Butylbenzene	0.040	mg/Kg	0.020	0.067
Estimated value, concentration was less than LOQ.				
sec-Butylbenzene	<0.025	mg/Kg	0.020	0.067
tert-Butylbenzene	<0.025	mg/Kg	0.010	0.033
Carbon tetrachloride	<0.025	mg/Kg	0.015	0.050
Chlorobenzene	<0.025	mg/Kg	0.010	0.033
Chloroethane	<0.025	mg/Kg	0.020	0.067
Chloroform	<0.025	mg/Kg	0.010	0.033
Chloromethane	<0.025	mg/Kg	0.025	0.083
2-Chlorotoluene	<0.025	mg/Kg	0.015	0.050
4-Chlorotoluene	<0.025	mg/Kg	0.015	0.050
Chlorodibromomethane	<0.025	mg/Kg	0.010	0.033
1,2-Dibromo-3-chloropropane	<0.025	mg/Kg	0.010	0.033
1,2-Dibromoethane (EDB)	<0.025	mg/Kg	0.010	0.033
1,2-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
1,3-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
1,4-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
Dichlorodifluoromethane	<0.025	mg/Kg	0.020	0.067
1,1-Dichloroethane	<0.025	mg/Kg	0.010	0.033
1,2-Dichloroethane	<0.025	mg/Kg	0.010	0.033
1,1-Dichloroethene	<0.025	mg/Kg	0.020	0.067
cis-1,2-Dichloroethene	<0.025	mg/Kg	0.010	0.033
trans-1,2-Dichloroethene	<0.025	mg/Kg	0.010	0.033
1,2-Dichloropropane	<0.025	mg/Kg	0.010	0.033
1,3-Dichloropropane	<0.025	mg/Kg	0.015	0.050
2,2-Dichloropropane	<0.025	mg/Kg	0.010	0.033
Diisopropyl ether	<0.025	mg/Kg	0.010	0.033
Ethylbenzene	0.029	mg/Kg	0.010	0.033
Estimated value, concentration was less than LOQ.				
Hexachlorobutadiene	<0.025	mg/Kg	0.015	0.050
Isopropylbenzene	<0.025	mg/Kg	0.010	0.033
p-Isopropyltoluene	<0.025	mg/Kg	0.010	0.033
Methylene chloride (Dichloromethane)	<0.050	mg/Kg	0.050	0.17
Methyl-tert-butyl ether	<0.025	mg/Kg	0.020	0.067
Naphthalene	<0.025	mg/Kg	0.010	0.033
n-Propylbenzene	<0.025	mg/Kg	0.015	0.050
1,1,2,2-Tetrachloroethane	<0.025	mg/Kg	0.010	0.033
Tetrachloroethene	<0.025	mg/Kg	0.020	0.067
Toluene	<0.025	mg/Kg	0.010	0.033
1,2,3-Trichlorobenzene	<0.025	mg/Kg	0.020	0.067
1,2,4-Trichlorobenzene	<0.025	mg/Kg	0.020	0.067
1,1,1-Trichloroethane	<0.025	mg/Kg	0.025	0.083
1,1,2-Trichloroethane	<0.025	mg/Kg	0.010	0.033
Trichloroethene	<0.025	mg/Kg	0.010	0.033
Trichlorofluoromethane	<0.025	mg/Kg	0.020	0.067
1,2,4-Trimethylbenzene	0.18	mg/Kg	0.020	0.067
1,3,5-Trimethylbenzene	<0.025	mg/Kg	0.015	0.050
Vinyl chloride	<0.025	mg/Kg	0.020	0.067

Submitted By: 

**REVISED
ANALYTICAL REPORT**

Client I.D. No.: LA2000000173

Work Order No.: 9511000033

Report Date: 11/27/95

Date Received: 11/01/95

Arrival Temperature: On Ice

AYRES ASSOCIATES
TERRI HAZELTON
3433 OAKWOOD HILLS PKWY.
EAU CLAIRE, WI 54702

Project Name: **BOB'S SERVICE**

Project Number: **10-0232.00**

Sample I.D. #:114095 **Sample Description:**B-3,S-5

Date Sampled:10/30/95

Analyte	Result	Units	LOD	LOQ
m&p-Xylene	0.14	mg/Kg	0.020	0.067
o-Xylene	0.040	mg/Kg	0.020	0.067
Estimated value, concentration was less than LOQ.				

Sample I.D. #:114096 **Sample Description:**B-4,S-4

Date Sampled:10/30/95

Analyte	Result	Units	LOD	LOQ
Gasoline Range Organics- WDNR Modified GRO	<1.0	mg/kg	1.0	3.3
Extraction Date GRO	11/04/95			
Analysis Date GRO	11/06/95			
LUST Total Percent Solids--EPA 5030	83.7	%		
VOC Analysis Date	11/06/95			
VOC Extraction Date	11/04/95			
Analytical Method	8021			
Benzene	<0.025	mg/Kg	0.010	0.033
Bromobenzene	<0.025	mg/Kg	0.015	0.050
Bromodichloromethane	<0.025	mg/Kg	0.010	0.033
n-Butylbenzene	<0.025	mg/Kg	0.020	0.067
sec-Butylbenzene	<0.025	mg/Kg	0.020	0.067
tert-Butylbenzene	<0.025	mg/Kg	0.010	0.033
Carbon tetrachloride	<0.025	mg/Kg	0.015	0.050
Chlorobenzene	<0.025	mg/Kg	0.010	0.033
Chloroethane	<0.025	mg/Kg	0.020	0.067
Chloroform	<0.025	mg/Kg	0.010	0.033
Chloromethane	0.032	mg/Kg	0.025	0.083
Estimated value, concentration was less than LOQ. Suspected background contamination.				
Estimated value, compound did not meet calibration criteria.				
2-Chlorotoluene	<0.025	mg/Kg	0.015	0.050
4-Chlorotoluene	<0.025	mg/Kg	0.015	0.050
Chlorodibromomethane	<0.025	mg/Kg	0.010	0.033
1,2-Dibromo-3-chloropropane	<0.025	mg/Kg	0.010	0.033
1,2-Dibromoethane (EDB)	<0.025	mg/Kg	0.010	0.033
1,2-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
1,3-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
1,4-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
Dichlorodifluoromethane	<0.025	mg/Kg	0.020	0.067
1,1-Dichloroethane	<0.025	mg/Kg	0.010	0.033
1,2-Dichloroethane	<0.025	mg/Kg	0.010	0.033
1,1-Dichloroethene	<0.025	mg/Kg	0.020	0.067
cis-1,2-Dichloroethene	<0.025	mg/Kg	0.010	0.033
trans-1,2-Dichloroethene	<0.025	mg/Kg	0.010	0.033
1,2-Dichloropropane	<0.025	mg/Kg	0.010	0.033
1,3-Dichloropropane	<0.025	mg/Kg	0.015	0.050
2,2-Dichloropropane	<0.025	mg/Kg	0.010	0.033
Diisopropyl ether	<0.025	mg/Kg	0.010	0.033

Submitted By: AS

Client I.D. No.: LA2000000173

Work Order No.: 9511000033

Report Date: 11/27/95

Date Received: 11/01/95

Arrival Temperature: On Ice

AYRES ASSOCIATES
TERRI HAZELTON
3433 OAKWOOD HILLS PKWY.
EAU CLAIRE, WI 54702

Project Name: **BOB'S SERVICE**

Project Number: **10-0232.00**

Sample I.D. #: 114096 **Sample Description:** B-4,S-4

Date Sampled: 10/30/95

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>LOD</u>	<u>LOQ</u>
Ethylbenzene	<0.025	mg/Kg	0.010	0.033
Hexachlorobutadiene	<0.025	mg/Kg	0.015	0.050
Isopropylbenzene	<0.025	mg/Kg	0.010	0.033
p-Isopropyltoluene	<0.025	mg/Kg	0.010	0.033
Methylene chloride (Dichloromethane)	<0.050	mg/Kg	0.050	0.17
Methyl-tert-butyl ether	<0.025	mg/Kg	0.020	0.067
Naphthalene	<0.025	mg/Kg	0.010	0.033
n-Propylbenzene	<0.025	mg/Kg	0.015	0.050
1,1,2,2-Tetrachloroethane	<0.025	mg/Kg	0.010	0.033
Tetrachloroethene	<0.025	mg/Kg	0.020	0.067
Toluene	<0.025	mg/Kg	0.010	0.033
1,2,3-Trichlorobenzene	<0.025	mg/Kg	0.020	0.067
1,2,4-Trichlorobenzene	<0.025	mg/Kg	0.020	0.067
1,1,1-Trichloroethane	<0.025	mg/Kg	0.025	0.083
1,1,2-Trichloroethane	<0.025	mg/Kg	0.010	0.033
Trichloroethene	<0.025	mg/Kg	0.010	0.033
Trichlorofluoromethane	<0.025	mg/Kg	0.020	0.067
1,2,4-Trimethylbenzene	<0.025	mg/Kg	0.020	0.067
1,3,5-Trimethylbenzene	<0.025	mg/Kg	0.015	0.050
Vinyl chloride	<0.025	mg/Kg	0.020	0.067
m&p-Xylene	<0.025	mg/Kg	0.020	0.067
o-Xylene	<0.025	mg/Kg	0.020	0.067

Sample I.D. #: 114097 **Sample Description:** B-4,S-5

Date Sampled: 10/30/95

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>LOD</u>	<u>LOQ</u>
Gasoline Range Organics- WDNR Modified GRO	<1.0	mg/kg	1.0	3.3
Extraction Date GRO	11/04/95			
Analysis Date GRO	11/06/95			
LUST Total Percent Solids--EPA 5030	86.1	%		
VOC Analysis Date	11/06/95			
VOC Extraction Date	11/04/95			
Analytical Method	8021			
Benzene	<0.025	mg/Kg	0.010	0.033
Bromobenzene	<0.025	mg/Kg	0.015	0.050
Bromodichloromethane	<0.025	mg/Kg	0.010	0.033
n-Butylbenzene	<0.025	mg/Kg	0.020	0.067
sec-Butylbenzene	<0.025	mg/Kg	0.020	0.067
tert-Butylbenzene	<0.025	mg/Kg	0.010	0.033
Carbon tetrachloride	<0.025	mg/Kg	0.015	0.050
Chlorobenzene	<0.025	mg/Kg	0.010	0.033
Chloroethane	<0.025	mg/Kg	0.020	0.067
Chloroform	<0.025	mg/Kg	0.010	0.033
Chloromethane	<0.025	mg/Kg	0.025	0.083
2-Chlorotoluene	<0.025	mg/Kg	0.015	0.050
4-Chlorotoluene	<0.025	mg/Kg	0.015	0.050

Submitted By:

**REVISED
ANALYTICAL REPORT**

Client I.D. No.: LA2000000173

Work Order No.: 9511000033

Report Date: 11/27/95

Date Received: 11/01/95

Arrival Temperature: On Ice

AYRES ASSOCIATES
TERRI HAZELTON
3433 OAKWOOD HILLS PKWY.
EAU CLAIRE, WI 54702

Project Name: **BOB'S SERVICE**

Project Number: **10-0232.00**

Sample I.D. #: 114097 **Sample Description:** B-4,S-5

Date Sampled: 10/30/95

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>LOD</u>	<u>LOQ</u>
Chlorodibromomethane	<0.025	mg/Kg	0.010	0.033
1,2-Dibromo-3-chloropropane	<0.025	mg/Kg	0.010	0.033
1,2-Dibromoethane (EDB)	<0.025	mg/Kg	0.010	0.033
1,2-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
1,3-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
1,4-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
Dichlorodifluoromethane	<0.025	mg/Kg	0.020	0.067
1,1-Dichloroethane	<0.025	mg/Kg	0.010	0.033
1,2-Dichloroethane	<0.025	mg/Kg	0.010	0.033
1,1-Dichloroethene	<0.025	mg/Kg	0.020	0.067
cis-1,2-Dichloroethene	<0.025	mg/Kg	0.010	0.033
trans-1,2-Dichloroethene	<0.025	mg/Kg	0.010	0.033
1,2-Dichloropropane	<0.025	mg/Kg	0.010	0.033
1,3-Dichloropropane	<0.025	mg/Kg	0.015	0.050
2,2-Dichloropropane	<0.025	mg/Kg	0.010	0.033
Diisopropyl ether	<0.025	mg/Kg	0.010	0.033
Ethylbenzene	<0.025	mg/Kg	0.010	0.033
Hexachlorobutadiene	<0.025	mg/Kg	0.015	0.050
Isopropylbenzene	<0.025	mg/Kg	0.010	0.033
p-Isopropyltoluene	<0.025	mg/Kg	0.010	0.033
Methylene chloride (Dichloromethane)	<0.050	mg/Kg	0.050	0.17
Methyl-tert-butyl ether	<0.025	mg/Kg	0.020	0.067
Naphthalene	<0.025	mg/Kg	0.010	0.033
n-Propylbenzene	<0.025	mg/Kg	0.015	0.050
1,1,2,2-Tetrachloroethane	<0.025	mg/Kg	0.010	0.033
Tetrachloroethene	<0.025	mg/Kg	0.020	0.067
Toluene	<0.025	mg/Kg	0.010	0.033
1,2,3-Trichlorobenzene	<0.025	mg/Kg	0.020	0.067
1,2,4-Trichlorobenzene	<0.025	mg/Kg	0.020	0.067
1,1,1-Trichloroethane	<0.025	mg/Kg	0.025	0.083
1,1,2-Trichloroethane	<0.025	mg/Kg	0.010	0.033
Trichloroethene	<0.025	mg/Kg	0.010	0.033
Trichlorofluoromethane	<0.025	mg/Kg	0.020	0.067
1,2,4-Trimethylbenzene	<0.025	mg/Kg	0.020	0.067
1,3,5-Trimethylbenzene	<0.025	mg/Kg	0.015	0.050
Vinyl chloride	<0.025	mg/Kg	0.020	0.067
m&p-Xylene	<0.025	mg/Kg	0.020	0.067
o-Xylene	<0.025	mg/Kg	0.020	0.067

Sample I.D. #: 114098 **Sample Description:** B-5,S-4

Date Sampled: 10/30/95

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>LOD</u>	<u>LOQ</u>
Gasoline Range Organics- WDNR Modified GRO	<1.0	mg/kg	1.0	3.3
Extraction Date GRO	11/04/95			
Analysis Date GRO	11/06/95			
LUST Total Percent Solids--EPA 5030	66.9	%		

Submitted By: 

**REVISED
ANALYTICAL REPORT**

Client I.D. No.: LA2000000173

Work Order No.: 9511000033

Report Date: 11/27/95

Date Received: 11/01/95

Arrival Temperature: On Ice

AYRES ASSOCIATES
TERRI HAZELTON
3433 OAKWOOD HILLS PKWY.
EAU CLAIRE, WI 54702Project Name: **BOB'S SERVICE**Project Number: **10-0232.00**

Sample I.D. #: 114098 Sample Description: B-5, S-4

Date Sampled: 10/30/95

Analyte	Result	Units	LOD	LOQ
VOC Analysis Date	11/06/95			
VOC Extraction Date	11/04/95			
Analytical Method	8021			
Benzene	<0.025	mg/Kg	0.010	0.033
Bromobenzene	<0.025	mg/Kg	0.015	0.050
Bromodichloromethane	<0.025	mg/Kg	0.010	0.033
n-Butylbenzene	<0.025	mg/Kg	0.020	0.067
sec-Butylbenzene	<0.025	mg/Kg	0.020	0.067
tert-Butylbenzene	<0.025	mg/Kg	0.010	0.033
Carbon tetrachloride	<0.025	mg/Kg	0.015	0.050
Chlorobenzene	<0.025	mg/Kg	0.010	0.033
Chloroethane	<0.025	mg/Kg	0.020	0.067
Chloroform	<0.025	mg/Kg	0.010	0.033
Chloromethane	<0.025	mg/Kg	0.025	0.083
2-Chlorotoluene	<0.025	mg/Kg	0.015	0.050
4-Chlorotoluene	<0.025	mg/Kg	0.015	0.050
Chlorodibromomethane	<0.025	mg/Kg	0.010	0.033
1,2-Dibromo-3-chloropropane	<0.025	mg/Kg	0.010	0.033
1,2-Dibromoethane (EDB)	<0.025	mg/Kg	0.010	0.033
1,2-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
1,3-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
1,4-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
Dichlorodifluoromethane	<0.025	mg/Kg	0.020	0.067
1,1-Dichloroethane	<0.025	mg/Kg	0.010	0.033
1,2-Dichloroethane	<0.025	mg/Kg	0.010	0.033
1,1-Dichloroethene	<0.025	mg/Kg	0.020	0.067
cis-1,2-Dichloroethene	<0.025	mg/Kg	0.010	0.033
trans-1,2-Dichloroethene	<0.025	mg/Kg	0.010	0.033
1,2-Dichloropropane	<0.025	mg/Kg	0.010	0.033
1,3-Dichloropropane	<0.025	mg/Kg	0.015	0.050
2,2-Dichloropropane	<0.025	mg/Kg	0.010	0.033
Diisopropyl ether	<0.025	mg/Kg	0.010	0.033
Ethylbenzene	<0.025	mg/Kg	0.010	0.033
Hexachlorobutadiene	<0.025	mg/Kg	0.015	0.050
Isopropylbenzene	<0.025	mg/Kg	0.010	0.033
p-Isopropyltoluene	<0.025	mg/Kg	0.010	0.033
Methylene chloride (Dichloromethane)	<0.050	mg/Kg	0.050	0.17
Methyl-tert-butyl ether	<0.025	mg/Kg	0.020	0.067
Naphthalene	<0.025	mg/Kg	0.010	0.033
n-Propylbenzene	<0.025	mg/Kg	0.015	0.050
1,1,2,2-Tetrachloroethane	<0.025	mg/Kg	0.010	0.033
Tetrachloroethene	<0.025	mg/Kg	0.020	0.067
Toluene	<0.025	mg/Kg	0.010	0.033
1,2,3-Trichlorobenzene	<0.025	mg/Kg	0.020	0.067
1,2,4-Trichlorobenzene	<0.025	mg/Kg	0.020	0.067
1,1,1-Trichloroethane	<0.025	mg/Kg	0.025	0.083
1,1,2-Trichloroethane	<0.025	mg/Kg	0.010	0.033
Trichloroethene	<0.025	mg/Kg	0.010	0.033

Submitted By: AA

**REVISED
ANALYTICAL REPORT**

Client I.D. No.: LA2000000173

Work Order No.: 9511000033

Report Date: 11/27/95

Date Received: 11/01/95

Arrival Temperature: On Ice

AYRES ASSOCIATES
TERRI HAZELTON
3433 OAKWOOD HILLS PKWY.
EAU CLAIRE, WI 54702

Project Name: **BOB'S SERVICE**

Project Number: **10-0232.00**

Sample I.D. #: 114098 **Sample Description:** B-5, S-4

Date Sampled: 10/30/95

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>LOD</u>	<u>LOQ</u>
Trichlorofluoromethane	<0.025	mg/Kg	0.020	0.067
1,2,4-Trimethylbenzene	<0.025	mg/Kg	0.020	0.067
1,3,5-Trimethylbenzene	<0.025	mg/Kg	0.015	0.050
Vinyl chloride	<0.025	mg/Kg	0.020	0.067
m&p-Xylene	<0.025	mg/Kg	0.020	0.067
o-Xylene	<0.025	mg/Kg	0.020	0.067

Sample I.D. #: 114099 **Sample Description:** B-5, S-5

Date Sampled: 10/30/95

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>LOD</u>	<u>LOQ</u>
Gasoline Range Organics- WDNR Modified GRO	<1.0	mg/kg	1.0	3.3
Extraction Date GRO	11/04/95			
Analysis Date GRO	11/06/95			
LUST Total Percent Solids--EPA 5030	73.1	%		
VOC Analysis Date	11/06/95			
VOC Extraction Date	11/04/95			
Analytical Method	8021			
Benzene	<0.025	mg/Kg	0.010	0.033
Bromobenzene	<0.025	mg/Kg	0.015	0.050
Bromodichloromethane	<0.025	mg/Kg	0.010	0.033
n-Butylbenzene	<0.025	mg/Kg	0.020	0.067
sec-Butylbenzene	<0.025	mg/Kg	0.020	0.067
tert-Butylbenzene	<0.025	mg/Kg	0.010	0.033
Carbon tetrachloride	<0.025	mg/Kg	0.015	0.050
Chlorobenzene	<0.025	mg/Kg	0.010	0.033
Chloroethane	<0.025	mg/Kg	0.020	0.067
Chloroform	<0.025	mg/Kg	0.010	0.033
Chloromethane	<0.025	mg/Kg	0.025	0.083
2-Chlorotoluene	<0.025	mg/Kg	0.015	0.050
4-Chlorotoluene	<0.025	mg/Kg	0.015	0.050
Chlorodibromomethane	<0.025	mg/Kg	0.010	0.033
1,2-Dibromo-3-chloropropane	<0.025	mg/Kg	0.010	0.033
1,2-Dibromoethane (EDB)	<0.025	mg/Kg	0.010	0.033
1,2-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
1,3-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
1,4-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
Dichlorodifluoromethane	<0.025	mg/Kg	0.020	0.067
1,1-Dichloroethane	<0.025	mg/Kg	0.010	0.033
1,2-Dichloroethane	<0.025	mg/Kg	0.010	0.033
1,1-Dichloroethene	<0.025	mg/Kg	0.020	0.067
cis-1,2-Dichloroethene	<0.025	mg/Kg	0.010	0.033
trans-1,2-Dichloroethene	<0.025	mg/Kg	0.010	0.033
1,2-Dichloropropane	<0.025	mg/Kg	0.010	0.033
1,3-Dichloropropane	<0.025	mg/Kg	0.015	0.050
2,2-Dichloropropane	<0.025	mg/Kg	0.010	0.033
Diisopropyl ether	<0.025	mg/Kg	0.010	0.033

Submitted By: 

**REVISED
ANALYTICAL REPORT**

Client I.D. No.: LA2000000173

Work Order No.: 9511000033

Report Date: 11/27/95

Date Received: 11/01/95

Arrival Temperature: On Ice

AYRES ASSOCIATES
TERRI HAZELTON
3433 OAKWOOD HILLS PKWY.
EAU CLAIRE, WI 54702

Project Name: **BOB'S SERVICE**

Project Number: **10-0232.00**

Sample I.D. #: 114099 **Sample Description:** B-5, S-5

Date Sampled: 10/30/95

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>LOD</u>	<u>LOQ</u>
Ethylbenzene	<0.025	mg/Kg	0.010	0.033
Hexachlorobutadiene	<0.025	mg/Kg	0.015	0.050
Isopropylbenzene	<0.025	mg/Kg	0.010	0.033
p-Isopropyltoluene	<0.025	mg/Kg	0.010	0.033
Methylene chloride (Dichloromethane)	<0.050	mg/Kg	0.050	0.17
Methyl-tert-butyl ether	<0.025	mg/Kg	0.020	0.067
Naphthalene	<0.025	mg/Kg	0.010	0.033
n-Propylbenzene	<0.025	mg/Kg	0.015	0.050
1,1,2,2-Tetrachloroethane	<0.025	mg/Kg	0.010	0.033
Tetrachloroethene	<0.025	mg/Kg	0.020	0.067
Toluene	<0.025	mg/Kg	0.010	0.033
1,2,3-Trichlorobenzene	<0.025	mg/Kg	0.020	0.067
1,2,4-Trichlorobenzene	<0.025	mg/Kg	0.020	0.067
1,1,1-Trichloroethane	<0.025	mg/Kg	0.025	0.083
1,1,2-Trichloroethane	<0.025	mg/Kg	0.010	0.033
Trichloroethene	<0.025	mg/Kg	0.010	0.033
Trichlorofluoromethane	<0.025	mg/Kg	0.020	0.067
1,2,4-Trimethylbenzene	<0.025	mg/Kg	0.020	0.067
1,3,5-Trimethylbenzene	<0.025	mg/Kg	0.015	0.050
Vinyl chloride	<0.025	mg/Kg	0.020	0.067
m&p-Xylene	<0.025	mg/Kg	0.020	0.067
o-Xylene	<0.025	mg/Kg	0.020	0.067

Sample I.D. #: 114100 **Sample Description:** MeOH BLANK

Date Sampled: 10/30/95

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>LOD</u>	<u>LOQ</u>
Gasoline Range Organics	<1.0	mg/kg	1.0	3.3
Extraction Date GRO	11/06/95			
Analysis Date GRO	11/07/95			
VOC Analysis Date	11/05/95			
VOC Extraction Date	11/04/95			
Analytical Method	8021			
Benzene	<0.025	mg/Kg	0.010	0.033
Bromobenzene	<0.025	mg/Kg	0.015	0.050
Bromodichloromethane	<0.025	mg/Kg	0.010	0.033
n-Butylbenzene	<0.025	mg/Kg	0.020	0.067
sec-Butylbenzene	<0.025	mg/Kg	0.020	0.067
tert-Butylbenzene	<0.025	mg/Kg	0.010	0.033
Carbon tetrachloride	<0.025	mg/Kg	0.015	0.050
Chlorobenzene	<0.025	mg/Kg	0.010	0.033
Chloroethane	<0.025	mg/Kg	0.020	0.067
Chloroform	<0.025	mg/Kg	0.010	0.033
Chloromethane	<0.025	mg/Kg	0.025	0.083
2-Chlorotoluene	<0.025	mg/Kg	0.015	0.050
4-Chlorotoluene	<0.025	mg/Kg	0.015	0.050
Chlorodibromomethane	<0.025	mg/Kg	0.010	0.033

Submitted By: 

**REVISED
ANALYTICAL REPORT**

Client I.D. No.: LA2000000173

Work Order No.: 9511000033

Report Date: 11/27/95

Date Received: 11/01/95

Arrival Temperature: On Ice

AYRES ASSOCIATES
TERRI HAZELTON
3433 OAKWOOD HILLS PKWY.
EAU CLAIRE, WI 54702

Project Name: **BOB'S SERVICE**

Project Number: **10-0232.00**

Sample I.D. #: 114100 Sample Description: MeOH BLANK

Date Sampled: 10/30/95

Analyte	Result	Units	LOD	LOQ
1,2-Dibromo-3-chloropropane	<0.025	mg/kg	0.010	0.033
1,2-Dibromoethane (EDB)	<0.025	mg/Kg	0.010	0.033
1,2-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
1,3-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
1,4-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
Dichlorodifluoromethane	<0.025	mg/Kg	0.020	0.067
1,1-Dichloroethane	<0.025	mg/Kg	0.010	0.033
1,2-Dichloroethane	<0.025	mg/Kg	0.010	0.033
1,1-Dichloroethene	<0.025	mg/Kg	0.020	0.067
cis-1,2-Dichloroethene	<0.025	mg/Kg	0.010	0.033
trans-1,2-Dichloroethene	<0.025	mg/Kg	0.010	0.033
1,2-Dichloropropane	<0.025	mg/Kg	0.010	0.033
1,3-Dichloropropane	<0.025	mg/Kg	0.015	0.050
2,2-Dichloropropane	<0.025	mg/Kg	0.010	0.033
Diisopropyl ether	<0.025	mg/Kg	0.010	0.033
Ethylbenzene	<0.025	mg/Kg	0.010	0.033
Hexachlorobutadiene	<0.025	mg/Kg	0.015	0.050
Isopropylbenzene	<0.025	mg/Kg	0.010	0.033
p-Isopropyltoluene	<0.025	mg/Kg	0.010	0.033
Methylene chloride (Dichloromethane)	<0.050	mg/Kg	0.050	0.17
Methyl-tert-butyl ether	<0.025	mg/Kg	0.020	0.067
Naphthalene	<0.025	mg/Kg	0.010	0.033
n-Propylbenzene	<0.025	mg/Kg	0.015	0.050
1,1,2,2-Tetrachloroethane	<0.025	mg/Kg	0.010	0.033
Tetrachloroethene	<0.025	mg/Kg	0.020	0.067
Toluene	<0.025	mg/Kg	0.010	0.033
1,2,3-Trichlorobenzene	<0.025	mg/Kg	0.020	0.067
1,2,4-Trichlorobenzene	<0.025	mg/Kg	0.020	0.067
1,1,1-Trichloroethane	<0.025	mg/Kg	0.025	0.083
1,1,2-Trichloroethane	<0.025	mg/Kg	0.010	0.033
Trichloroethene	<0.025	mg/Kg	0.010	0.033
Trichlorofluoromethane	<0.025	mg/Kg	0.020	0.067
1,2,4-Trimethylbenzene	<0.025	mg/Kg	0.020	0.067
1,3,5-Trimethylbenzene	<0.025	mg/Kg	0.015	0.050
Vinyl chloride	<0.025	mg/Kg	0.020	0.067
m&p-Xylene	<0.025	mg/Kg	0.020	0.067
o-Xylene	<0.025	mg/Kg	0.020	0.067

Sample I.D. #: 114101 Sample Description: W-1

Date Sampled: 10/30/95

Analyte	Result	Units	LOD	LOQ
Gasoline Range Organics-WDNR Modified GRO	<50	ug/L	50	170
Analysis Date GRO	11/04/95			
Benzene	<0.2	ug/L	0.2	0.7
Bromobenzene	<0.2	ug/L	0.2	0.7
Bromodichloromethane	<0.2	ug/L	0.2	0.7

Submitted By: 

Note: Use of this form is voluntary but is requested by the Department pursuant to ch. NR 149, NR 500-540, NR 158 and NR 419, Wis. Adm. Code. Personally identifiable information will be used for no other purpose.

Return for Credit - 30 days

Sample Collector(s) Jim Hicks	Title/Work Station/Company Ayres Associates #10-0232.00	Telephone Number (include area code) 715 834 3161
Property Owner Bob's Service - Falun	Property Address 10531 S.H. 70, Falun, WI 54872	Telephone Number (include area code) 715 689 2445

I hereby certify that I received, properly handled, and disposed of these samples as noted below:

Relinquished By (Signature) Jim Hicks	Date/Time 10/1/95 9AM	Received By (Signature) Kor Campbell
Relinquished By (Signature)	Date/Time 11/1/95 10:00	Received By (Signature)
Relinquished By (Signature)	Date/Time 11/1/95 2:59 PM	Received for Laboratory By (Signature)

Sample Condition on Receipt by Laboratory
LABORATORY USE ONLY

Temperature of temperature blank: **0.00**

If samples were received on ice and there was ice remaining, you may report the temperature as "received on ice". If all of the ice was melted, the temperature of the melt may be substituted for a temperature blank.

Field ID Number ¹	Date Collected	Time Collected	Sample Type ²	Device ³	Preserv. Type	Field Screening	Description	Analysis Type	Lab ID Number	No./Type of Containers	Cracked /Broken	Improperly Sealed	Good Condition	Other Comments
B-W-1-S-3	10/30/95	9:20AM	Soil	Split	Meth.	0.3	3-60 ml vials, 1-cup	GRO, VOC	114090					
B-W-1-S-5	"	9:30AM	"	"	"	"	"	"	114091					
B-2-S-1	"	10:25AM	"	"	"	525	2-60 ml vials, 1-cup	"	114092					
B-2-S-6	"	10:50AM	"	"	"	30	"	"	114093					
B-3-S-4	"	11:35AM	"	"	"	16	"	"	114094					
B-3-S-5	"	11:40AM	"	"	"	14	"	"	114095					
B-4-S-7	"	12:35AM	"	"	"	0	"	"	114096					
B-4-S-5	"	12:40AM	"	"	"	0	"	"	114097					
B-5-S-4	"	12:50PM	"	"	"	0	"	"	114098					
B-5-S-5	"	1:30PM	"	"	"	0	"	"	114099					
Methanol Blank	"	-	-	-	-	-	1-60 ml vial	GRO	114100					
"	"	-	-	-	-	-	"	VOCs	V					
W-1	10/30/95	2:45PM	Water	boiler	HCL	-	4-40 ml vials	GRO, VOCs	114101					
Tripe Blank	-	-	-	-	-	-	1-40 ml vials	"	114102					

¹ Sample description must clearly correlate the sample ID to the sampling location shown on a map.

³ Type of sampling device; split spoon, hand auger, metal spatula, soil syringe, etc.

² Specify groundwater, surface water, soil, leachate, sludge, etc.

DEPARTMENT USE/OPTIONAL FOR SOIL SAMPLERS

Disposition of unused portion of sample

Laboratory should: ☐ Dispose ☐ Return

☐ Retain for ___ days ☐ Other

DD

DEPARTMENT USE ONLY

Split samples: Offered? ☐ Yes ☐ No (Check one)

Accepted? ☐ Yes ☐ No (Check one)

Accepted By: _____
Signature

APPENDIX E

GROUND WATER ANALYTICAL RESULTS

**REVISED
ANALYTICAL REPORT**

Client I.D. No.: LA2000000173

Work Order No.: 9511000033

Report Date: 11/27/95

Date Received: 11/01/95

Arrival Temperature: On Ice

AYRES ASSOCIATES
TERRI HAZELTON
3433 OAKWOOD HILLS PKWY.
EAU CLAIRE, WI 54702

Project Name: **BOB'S SERVICE**

Project Number: **10-0232.00**

Sample I.D. #: 114100 Sample Description: MeOH BLANK

Date Sampled: 10/30/95

Analyte	Result	Units	LOD	LOQ
1,2-Dibromo-3-chloropropane	<0.025	mg/kg	0.010	0.033
1,2-Dibromoethane (EDB)	<0.025	mg/Kg	0.010	0.033
1,2-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
1,3-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
1,4-Dichlorobenzene	<0.025	mg/Kg	0.010	0.033
Dichlorodifluoromethane	<0.025	mg/Kg	0.020	0.067
1,1-Dichloroethane	<0.025	mg/Kg	0.010	0.033
1,2-Dichloroethane	<0.025	mg/Kg	0.010	0.033
1,1-Dichloroethene	<0.025	mg/Kg	0.020	0.067
cis-1,2-Dichloroethene	<0.025	mg/Kg	0.010	0.033
trans-1,2-Dichloroethene	<0.025	mg/Kg	0.010	0.033
1,2-Dichloropropane	<0.025	mg/Kg	0.010	0.033
1,3-Dichloropropane	<0.025	mg/Kg	0.015	0.050
2,2-Dichloropropane	<0.025	mg/Kg	0.010	0.033
Diisopropyl ether	<0.025	mg/Kg	0.010	0.033
Ethylbenzene	<0.025	mg/Kg	0.010	0.033
Hexachlorobutadiene	<0.025	mg/Kg	0.015	0.050
Isopropylbenzene	<0.025	mg/Kg	0.010	0.033
p-Isopropyltoluene	<0.025	mg/Kg	0.010	0.033
Methylene chloride (Dichloromethane)	<0.050	mg/Kg	0.050	0.17
Methyl-tert-butyl ether	<0.025	mg/Kg	0.020	0.067
Naphthalene	<0.025	mg/Kg	0.010	0.033
n-Propylbenzene	<0.025	mg/Kg	0.015	0.050
1,1,2,2-Tetrachloroethane	<0.025	mg/Kg	0.010	0.033
Tetrachloroethene	<0.025	mg/Kg	0.020	0.067
Toluene	<0.025	mg/Kg	0.010	0.033
1,2,3-Trichlorobenzene	<0.025	mg/Kg	0.020	0.067
1,2,4-Trichlorobenzene	<0.025	mg/Kg	0.020	0.067
1,1,1-Trichloroethane	<0.025	mg/Kg	0.025	0.083
1,1,2-Trichloroethane	<0.025	mg/Kg	0.010	0.033
Trichloroethene	<0.025	mg/Kg	0.010	0.033
Trichlorofluoromethane	<0.025	mg/Kg	0.020	0.067
1,2,4-Trimethylbenzene	<0.025	mg/Kg	0.020	0.067
1,3,5-Trimethylbenzene	<0.025	mg/Kg	0.015	0.050
Vinyl chloride	<0.025	mg/Kg	0.020	0.067
m&p-Xylene	<0.025	mg/Kg	0.020	0.067
o-Xylene	<0.025	mg/Kg	0.020	0.067

Sample I.D. #: 114101 Sample Description: W-1 = B/w - 1

Date Sampled: 10/30/95

Analyte	Result	Units	LOD	LOQ
Gasoline Range Organics-WDNR Modified GRO	<50	ug/L	50	170
Analysis Date GRO	11/04/95			
Benzene	<0.2	ug/L	0.2	0.7
Bromobenzene	<0.2	ug/L	0.2	0.7
Bromodichloromethane	<0.2	ug/L	0.2	0.7

Submitted By: 

**REVISED
ANALYTICAL REPORT**

Client I.D. No.: LA2000000173

Work Order No.: 9511000033

Report Date: 11/27/95

Date Received: 11/01/95

Arrival Temperature: On Ice

AYRES ASSOCIATES
TERRI HAZELTON
3433 OAKWOOD HILLS PKWY.
EAU CLAIRE, WI 54702


Project Name: BOB'S SERVICE

Project Number: 10-0232.00

Sample I.D. #: 114101
Sample Description: W-1

Date Sampled: 10/30/95

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>LOD</u>	<u>LOQ</u>
n-Butylbenzene	<0.2	ug/L	0.2	0.7
sec-Butylbenzene	<0.2	ug/L	0.2	0.7
tert-Butylbenzene	<0.2	ug/L	0.2	0.7
Carbon tetrachloride	<0.2	ug/L	0.2	0.7
Chlorobenzene	<0.2	ug/L	0.2	0.7
Chloroethane	<1.0	ug/L	1.0	3.3
Chloroform	<0.2	ug/L	0.2	0.7
Chloromethane	<1.1	ug/L	1.1	3.7
2-Chlorotoluene	<0.3	ug/L	0.3	1.0
4-Chlorotoluene	<0.2	ug/L	0.2	0.7
Chlorodibromomethane	<0.2	ug/L	0.2	0.7
1,2-Dibromo-3-chloropropane	<0.3	ug/L	0.3	1.0
1,2-Dibromoethane (EDB)	<0.2	ug/L	0.2	0.7
1,2-Dichlorobenzene	<0.2	ug/L	0.2	0.7
1,3-Dichlorobenzene	<0.2	ug/L	0.2	0.7
1,4-Dichlorobenzene	<0.3	ug/L	0.3	1.0
Dichlorodifluoromethane	<0.5	ug/L	0.5	1.7
1,1-Dichloroethane	<0.2	ug/L	0.2	0.7
1,2-Dichloroethane	<0.2	ug/L	0.2	0.7
1,1-Dichloroethene	<0.7	ug/L	0.7	2.3
cis-1,2-Dichloroethene	<0.2	ug/L	0.2	0.7
trans-1,2-Dichloroethene	<0.3	ug/L	0.3	1.0
1,2-Dichloropropane	<0.2	ug/L	0.2	0.7
1,3-Dichloropropane	<0.4	ug/L	0.4	1.3
2,2-Dichloropropane	<0.2	ug/L	0.2	0.7
Diisopropyl ether	<0.2	ug/L	0.2	0.7
Ethylbenzene	<0.2	ug/L	0.2	0.7
Hexachlorobutadiene	<0.3	ug/L	0.3	1.0
Isopropylbenzene	<0.2	ug/L	0.2	0.7
p-Isopropyltoluene	<0.2	ug/L	0.2	0.7
Methylene chloride (Dichloromethane)	<1.1	ug/L	1.1	3.7
Methyl-tert-butyl ether	<0.2	ug/L	0.2	0.7
Naphthalene	<0.2	ug/L	0.2	0.7
n-Propylbenzene	<0.2	ug/L	0.2	0.7
1,1,2,2-Tetrachloroethane	<0.2	ug/L	0.2	0.7
Tetrachloroethene	<0.4	ug/L	0.4	1.3
Toluene	<0.2	ug/L	0.2	0.7
1,2,3-Trichlorobenzene	<0.2	ug/L	0.2	0.7
1,2,4-Trichlorobenzene	<0.2	ug/L	0.2	0.7
1,1,1-Trichloroethane	<0.3	ug/L	0.3	1.0
1,1,2-Trichloroethane	<1.0	ug/L	1.0	3.3
Trichloroethene	<0.3	ug/L	0.3	1.0
Trichlorofluoromethane	<0.6	ug/L	0.6	2.0
1,2,4-Trimethylbenzene	<0.3	ug/L	0.3	1.0
1,3,5-Trimethylbenzene	<0.2	ug/L	0.2	0.7
Vinyl chloride	<0.5	ug/L	0.5	1.7
m&p-Xylene	<0.4	ug/L	0.4	1.3
o-Xylene	<0.2	ug/L	0.2	0.7

Submit ed By: 

**REVISED
ANALYTICAL REPORT**

Client I.D. No.: LA2000000173

Work Order No.: 9511000033

Report Date: 11/27/95

Date Received: 11/01/95

Arrival Temperature: On Ice

AYRES ASSOCIATES
TERRI HAZELTON
3433 OAKWOOD HILLS PKWY.
EAU CLAIRE, WI 54702

Project Name: **BOB'S SERVICE**

Project Number: **10-0232.00**

Sample
I.D. #:114101 **Sample**
Description:W-1

Date Sampled:10/30/95

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>LOD</u>	<u>LOQ</u>
Analysis Date VOC's	11/03/95			
Analysis Method	8021			

Sample
I.D. #:114102 **Sample**
Description:TRIP BLANK

Date Sampled:10/30/95

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>LOD</u>	<u>LOQ</u>
Gasoline Range Organics-WDNR Modified GRO	<50	ug/L	50	170
Analysis Date GRO	11/04/95			
Benzene	<0.2	ug/L	0.2	0.7
Bromobenzene	<0.2	ug/L	0.2	0.7
Bromodichloromethane	<0.2	ug/L	0.2	0.7
n-Butylbenzene	<0.2	ug/L	0.2	0.7
sec-Butylbenzene	<0.2	ug/L	0.2	0.7
tert-Butylbenzene	<0.2	ug/L	0.2	0.7
Carbon tetrachloride	<0.2	ug/L	0.2	0.7
Chlorobenzene	<0.2	ug/L	0.2	0.7
Chloroethane	<1.0	ug/L	1.0	3.3
Chloroform	<0.2	ug/L	0.2	0.7
Chloromethane	<1.1	ug/L	1.1	3.7
2-Chlorotoluene	<0.3	ug/L	0.3	1.0
4-Chlorotoluene	<0.2	ug/L	0.2	0.7
Chlorodibromomethane	<0.2	ug/L	0.2	0.7
1,2-Dibromo-3-chloropropane	<0.3	ug/L	0.3	1.0
1,2-Dibromoethane (EDB)	<0.2	ug/L	0.2	0.7
1,2-Dichlorobenzene	<0.2	ug/L	0.2	0.7
1,3-Dichlorobenzene	<0.2	ug/L	0.2	0.7
1,4-Dichlorobenzene	<0.3	ug/L	0.3	1.0
Dichlorodifluoromethane	<0.5	ug/L	0.5	1.7
1,1-Dichloroethane	<0.2	ug/L	0.2	0.7
1,2-Dichloroethane	<0.2	ug/L	0.2	0.7
1,1-Dichloroethene	<0.7	ug/L	0.7	2.3
cis-1,2-Dichloroethene	<0.2	ug/L	0.2	0.7
trans-1,2-Dichloroethene	<0.3	ug/L	0.3	1.0
1,2-Dichloropropane	<0.2	ug/L	0.2	0.7
1,3-Dichloropropane	<0.4	ug/L	0.4	1.3
2,2-Dichloropropane	<0.2	ug/L	0.2	0.7
Diisopropyl ether	<0.2	ug/L	0.2	0.7
Ethylbenzene	<0.2	ug/L	0.2	0.7
Hexachlorobutadiene	<0.3	ug/L	0.3	1.0
Isopropylbenzene	<0.2	ug/L	0.2	0.7
p-Isopropyltoluene	<0.2	ug/L	0.2	0.7
Methylene chloride (Dichloromethane)	<1.1	ug/L	1.1	3.7
Methyl-tert-butyl ether	<0.2	ug/L	0.2	0.7
Naphthalene	<0.2	ug/L	0.2	0.7
n-Propylbenzene	<0.2	ug/L	0.2	0.7
1,1,2,2-Tetrachloroethane	<0.2	ug/L	0.2	0.7

Submitted By:

**REVISED
ANALYTICAL REPORT**

Client I.D. No.: LA2000000173

Work Order No.: 9511000033

Report Date: 11/27/95

Date Received: 11/01/95

Arrival Temperature: On Ice

AYRES ASSOCIATES
TERRI HAZELTON
3433 OAKWOOD HILLS PKWY.
EAU CLAIRE, WI 54702Project Name: **BOB'S SERVICE**Project Number: **10-0232.00**

Sample I.D. #: 114102 Sample Description: TRIP BLANK

Date Sampled: 10/30/95

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>LOD</u>	<u>LOQ</u>
Tetrachloroethene	<0.4	ug/L	0.4	1.3
Toluene	<0.2	ug/L	0.2	0.7
1,2,3-Trichlorobenzene	<0.2	ug/L	0.2	0.7
1,2,4-Trichlorobenzene	<0.2	ug/L	0.2	0.7
1,1,1-Trichloroethane	<0.3	ug/L	0.3	1.0
1,1,2-Trichloroethane	<1.0	ug/L	1.0	3.3
Trichloroethene	<0.3	ug/L	0.3	1.0
Trichlorofluoromethane	<0.6	ug/L	0.6	2.0
1,2,4-Trimethylbenzene	<0.3	ug/L	0.3	1.0
1,3,5-Trimethylbenzene	<0.2	ug/L	0.2	0.7
Vinyl chloride	<0.5	ug/L	0.5	1.7
m&p-Xylene	<0.4	ug/L	0.4	1.3
o-Xylene	<0.2	ug/L	0.2	0.7
Analysis Date VOC's	11/04/95			
Analysis Method	8021			

Comments for entire Work Order:
NoneSubmitted By: 

Note: Use of this form is voluntary but is requested by the Department pursuant to ch. NR 149, NR 500-540, NR 158 and NR 419, Wis. Adm. Code. Personally identifiable information will be used for no other purpose.

Return for Credit - 30 4oz Jars

Sample Collector(s) <u>Jim Hicks</u>	Title/Work Station/Company <u>Ayres Associates #10-0232.00</u>	Telephone Number (include area code) <u>715 834 3161</u>
Property Owner <u>Bob's Service - Falun</u>	Property Address <u>10531 S.T.H. 70, Falun, WI 54872</u>	Telephone Number (include area code) <u>715 689 2445</u>

I hereby certify that I received, properly handled, and disposed of these samples as noted below:

Relinquished By (Signature) <u>Jim Hicks</u>	Date/Time <u>11/1/95 9AM</u>	Received By (Signature) <u>Ron Campbell</u>
Relinquished By (Signature)	Date/Time <u>11-1-95 10:30</u>	Received By (Signature)
Relinquished By (Signature)	Date/Time <u>11/1/95 2:59 PM</u>	Received for Laboratory By (Signature)

Sample Condition on Receipt by Laboratory
LABORATORY USE ONLY
Temperature of temperature blank: 0.00
If samples were received on ice and there was ice remaining, you may report the temperature as "received on ice". If all of the ice was melted, the temperature of the melt may be substituted for a temperature blank.

Field ID Number ¹	Date Collected	Time Collected	Sample Type ²	Preserv. Type	Field Screening	Description	Analysis Type	Lab ID Number	No./Type of Containers	Cracked /Broken	Improperly Sealed	Good Condition	Other Comments
B/W-1, S-3	10/30/95	9:20AM	Soil	MeTh.	0.3	3-60 ml vials, 1-cup	GRD, VOC	114090					
B/W-1, S-5	"	9:30AM	"	"	"	"	"	114091					
B-2, S-1	"	10:25AM	"	"	525	2-60 ml vials, 1-cup	"	114092					
B-2, S-6	"	10:50AM	"	"	30	"	"	114093					
B-3, S-4	"	11:35AM	"	"	16	"	"	114094					
B-3, S-5	"	11:40AM	"	"	14	"	"	114095					
B-4, S-7	"	12:35AM	"	"	0	"	"	114096					
B-4, S-5	"	12:40AM	"	"	0	"	"	114097					
B-5, S-4	"	12:50PM	"	"	0	"	"	114098					
B-5, S-5	"	1:30PM	"	"	0	"	"	114099					
MaThanel Blank	"	-	-	-	-	1-60 ml vial	GRD	114100					
"	"	-	-	-	-	"	VOCs	V					
W-1	10/30/95	2:45PM	Water	HCL	-	4-40 ml vials	GRD, VOCs	114101					
Trip Blank	-	-	-	-	-	1-40 ml vials	"	114102					

¹ Sample description must clearly correlate the sample ID to the sampling location shown on a map.

³ Type of sampling device; split spoon, hand auger, metal spatula, soil syringe, etc.

² Specify groundwater, surface water, soil, leachate, sludge, etc.

DEPARTMENT USE/OPTIONAL FOR SOIL SAMPLERS

Disposition of unused portion of sample

Laboratory should: ☐ Dispose ☐ Retain for ___ days
☐ Return ☐ Other

DD

DEPARTMENT USE ONLY

Split samples: Offered? ☐ Yes ☐ No (Check one)

Accepted? ☐ Yes ☐ No (Check one)

Accepted By: _____

Signature

APPENDIX F

**MONITORING WELL CONSTRUCTION
AND DEVELOPMENT FORMS**

Facility /Project Name BOB'S SERVICE STATION	Local Grid Location of Well N. _____ E. _____ ft. _____ S. _____ ft. _____ W. _____	Well Name B/W-1 (TEMPORARY WELL)
Facility License, Permit or Monitoring Number	Grid Origin Location Lat. _____ Long. _____ or _____ St. Plane _____ ft. N. _____ ft. E. _____	Wis. Unique Well Number _____ DNR Well Number _____
Type of Well Water Table Observation Well <u>11</u> VAPOR _____ Piezometer <u>12</u>	Section Location of Waste/Source NW 1/4 of NW 1/4, Sec 19, T38N, R17W	Date Well Installed 10/30/95
Distance Well Is From Waste/Source Boundary ft. _____	Location of Well Relative to Waste/Source u <input checked="" type="checkbox"/> Upgradient s _____ Sidegradient d _____ Downgradient n _____ Not Known	Well Installed By: (Person's Name and Firm) GARY WELNER MIDWEST ENGINEERING SERVICES
Is Well A Point of Enforcement Std. Application? Yes _____ No <input checked="" type="checkbox"/>		

A. Protective Pipe, top elevation N.A. ft. MSL
B. Well casing, top elevation 98.67 ft. MSL
C. Land surface elevation 98.20 ft. MSL
D. Surface seal, bottom N.A. ft. MSL or _____ ft.

12. USCS classification of soil near screen:
GP _____ GM _____ GC _____ GW _____ SW _____ SP ☒
SM _____ SC _____ ML _____ MH _____ CL ☒ CH _____
Bedrock _____
13. Sieve analysis attached? Yes _____ No ☒
14. Drilling method used: Rotary _____ 50
Hollow Stem Auger ☒ 41
Other _____
15. Drilling fluid use Air _____ 01 Water _____ 02
Drilling Mud _____ 03 None ☒ 99
16. Drilling additives used? Yes _____ No ☒
Describe _____
17. Source of water (attach analysis): _____

E. Bentonite seal, to N.A. ft. MSL or _____ ft.
F. Fine sand, top N.A. ft. MSL or _____ ft.
G. Filter pack, top 96.00 ft. MSL or 2.00 ft.
H. Screen joint, top 98.20 ft. MSL or 0.00 ft.
I. Well bottom 88.20 ft. MSL or 10.00 ft.
J. Filter pack, botto 83.70 ft. MSL or 14.50 ft.
K. Borehole, bottom 83.70 ft. MSL or 14.50 ft.
L. Borehole, diamet 8.0 in
M. O.D. well casing 2.37 in
N. I.D. well casing 2.06 in

1. Cap and Lock? Yes _____ No ☒

2. Protective cover pipe:
a. Inside diameter: N.A. in.
b. Length: N.A. ft.

c. Material: Steel _____ 04
Other _____
d. Additional protection? Yes _____ No _____
If yes, describe _____

3. Surface seal: Bentonite _____ 30
Concrete _____ 01
N.A. _____ Other ☒

4. Material between well casing and protective pipe:
Bentonite _____ 30
Annular Space Seal _____
N.A. _____ Other ☒

5. Annular space seal: a. Granular Bentonite _____ 33
b. Lbs/gal mud weight Bentonite-sand slurry _____ 35
c. Lbs/gal mud weight _____ Bentonite slurry _____ 31
d. % Bentonite _____ Bentonite-cement grout _____ 50
e. cubic ft volume added for any of the above _____
f. How installed: Tremie _____ 01
Tremie pumped _____ 02
Gravity _____ 08

6. Bentonite seal: a. Bentonite granules _____ 33
b. 1/4in. 3/8in. 1/2in. Bentonite Pellets _____ 32
c. _____ Other _____

7. Fine sand material: Manufacturer, product name and mesh size
a. _____
b. Volume Added _____

8. Filter pack material: Manufacturer, product name and mesh size
a. **AMERICAN MATERIALS #30**
b. Volume Added _____

9. Well casing: Flush threaded PVC schedule 40 ☒ 23
Flush threaded PVC schedule 80 _____ 24
Other _____

10. Screen material:
a. Screen type: Factory cut ☒ 11
Continuous slot _____ 01
Other _____

b. Manufacturer _____
c. Slot size: _____ 0.010 in.
d. Slotted length: _____ 10.0 ft.

11. Backfill Material (below filter pack): None _____ 14
AMERICAN MATERIALS #30 Other ☒

Note: Elevations are based on assumed local datum, not MSL.

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature James E. Rich

Firm

AYRES ASSOCIATES

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147, and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instruction for more information including where the completed form should be sent.

[illegible]

APPENDIX G

OPINIONS OF PROBABLE REMEDIATION COSTS

ALTERNATIVE 1

SOIL EXCAVATION WITH ASPHALT INCORPORATION

THIS ESTIMATE INCLUDES THE ENGINEERING, ANALYTICAL AND CONSTRUCTION COSTS ASSOCIATED WITH EXCAVATION OF CONTAMINATED SOIL, AND OFF-SITE ASPHALT INCORPORATION

1. ENGINEERING

ENGINEERING COSTS INCLUDES PROVISIONS FOR ENGINEERING DESIGN, CONSTRUCTION BID DOCUMENT PREPARATION AND CONSTRUCTION OBSERVATION.

PROJECT MANAGEMENT	\$ 1,400
STATE SUBMITTALS	\$ 1,700
PLANS & SPECS/BIDDING	\$ 5,000
PRE-CON. MEETING	\$ 1,000

CONSTRUCTION OBS.	\$ 1,700
CONSTRUCTION DOC.	\$ 3,600
DIRECT COSTS	\$ 900
TOTAL	\$ 15,300

2. CONSTRUCTION AND ANALYTICAL COSTS

COSTS OUTLINED IN THIS SECTION INCLUDE THE COSTS OF SOIL EXCAVATION, HAULING, DISPOSAL, ANALYTICAL COSTS, BACKFILL PURCHASE AND PLACEMENT, AND GROUND WATER PUMPING, HAULING, AND TREATING DURING EXCAVATION

CONSTRUCTION COSTS

CONTAM SOIL REMOVAL	\$ 4,500
TRANSPORTATION	\$ 3,400
ASPHALT INCORP.	\$ 17,500
CLEAN BACKFILL	\$ 2,900
LAWN REPLACEMENT	\$ 900
BASE COURSE REPLACE	\$ 100
EXCAVATION DEWATER	\$ 3,600
DIRECT COSTS	\$ 300
SUBTOTAL	\$ 33,200

ANALYTICAL COSTS

SOIL SAMPLING	\$ 3,300
SUBTOTAL	\$ 3,300

SUMMARY

CONSTRUCTION COSTS	\$ 33,200
ANALYTICAL COSTS	\$ 3,300
TOTAL	\$ 36,500

3. SITE CLOSURE

THIS SECTION INCLUDES ENGINEERING DOCUMENTATION COSTS ASSOCIATED WITH SITE CLOSURE

ENGINEERING CLOSURE COSTS

CLOSURE DOCUMENTS	\$ 1,000
PECFA CLAIM	\$ 500
TOTAL	\$ 1,500

4. SUMMARY

YEAR 1

ENGINEERING DESIGN COSTS	\$ 15,300
CONSTRUCTION COSTS	\$ 33,200
CONSTRUCTION ANALYTICAL COSTS	\$ 3,300
SITE CLOSURE COSTS	\$ 1,500
TOTAL COSTS	\$ 53,300

PROJECT: BOB'S SERVICE STATION - FALUN, WI	PREPARED BY: JOSEPH F. HOEME, E.I.T.	DATE: 12/15/95
JOB NO.: 10-0232.00	CHECKED BY: JAN M. SMIT, P.E. JS	DATE: 4/3/96

ALTERNATIVE 2

SOIL EXCAVATION WITH COMMERCIAL BIOPILE TREATMENT

THIS ESTIMATE INCLUDES THE ENGINEERING, ANALYTICAL AND CONSTRUCTION COSTS ASSOCIATED WITH EXCAVATION OF CONTAMINATED SOIL, AND COMMERCIAL BIOPILE TREATMENT

1. ENGINEERING

ENGINEERING COSTS INCLUDES PROVISIONS FOR ENGINEERING DESIGN, CONSTRUCTION BID DOCUMENT PREPARATION AND CONSTRUCTION OBSERVATION.

PROJECT MANAGEMENT	\$ 1,400
STATE SUBMITTALS	\$ 1,700
PLANS & SPECS/BIDDING	\$ 5,000
PRE-CON. MEETING	\$ 1,000

CONSTRUCTION OBS.	\$ 1,700
CONSTRUCTION DOC.	\$ 3,600
DIRECT COSTS	\$ 900
TOTAL	\$ 15,300

2. CONSTRUCTION AND ANALYTICAL COSTS

COSTS OUTLINED IN THIS SECTION INCLUDE THE COSTS OF SOIL EXCAVATION, HAULING, DISPOSAL, ANALYTICAL COSTS, BACKFILL PURCHASE AND PLACEMENT, AND GROUND WATER PUMPING, HAULING, AND TREATING DURING EXCAVATION

CONSTRUCTION COSTS

CONTAM SOIL REMOVAL	\$ 4,500
TRANSPORTATION	\$ 4,900
BIOPILE DISPOSAL	\$ 11,800
CLEAN BACKFILL	\$ 2,900
LAWN REPLACEMENT	\$ 900
BASE COURSE REPLACE	\$ 100
EXCAVATION DEWATER	\$ 3,600
DIRECT COSTS	\$ 300
SUBTOTAL	\$ 29,000

ANALYTICAL COSTS

SOIL SAMPLING	\$ 3,300
SUBTOTAL	\$ 3,300

SUMMARY

CONSTRUCTION COSTS	\$ 29,000
ANALYTICAL COSTS	\$ 3,300
TOTAL	\$ 32,300

3. SITE CLOSURE

THIS SECTION INCLUDES ENGINEERING DOCUMENTATION COSTS ASSOCIATED WITH SITE CLOSURE

ENGINEERING CLOSURE COSTS

CLOSURE DOCUMENTS	\$ 1,000
PECFA CLAIM	\$ 500
TOTAL	\$ 1,500

4. SUMMARY

ENGINEERING DESIGN COSTS	\$ 15,300
CONSTRUCTION COSTS	\$ 29,000
CONSTRUCTION ANALYTICAL COSTS	\$ 3,300
SITE CLOSURE COSTS	\$ 1,500
TOTAL COSTS	\$ 49,100

PROJECT: BOB'S SERVICE STATION - FALUN, WI	PREPARED BY: JOSEPH F. HOEME, E.I.T.	DATE: 12/15/95
JOB NO.: 10-0232.00	CHECKED BY: JAN M. SMIT, P.E. JS	DATE: 4/3/96

ALTERNATIVE 3 **SOIL EXCAVATION WITH THERMAL DESORPTION**

THIS ESTIMATE INCLUDES THE ENGINEERING, ANALYTICAL AND CONSTRUCTION COSTS ASSOCIATED WITH EXCAVATION OF CONTAMINATED SOIL, AND OFF-SITE THERMAL DESORPTION

1. ENGINEERING

ENGINEERING COSTS INCLUDES PROVISIONS FOR ENGINEERING DESIGN, CONSTRUCTION BID DOCUMENT PREPARATION AND CONSTRUCTION OBSERVATION.

PROJECT MANAGEMENT	\$ 1,400
STATE SUBMITTALS	\$ 1,700
PLANS & SPECS/BIDDING	\$ 5,000
PRE-CON. MEETING	\$ 1,000

CONSTRUCTION OBS.	\$ 1,700
CONSTRUCTION DOC.	\$ 3,600
DIRECT COSTS	\$ 900
TOTAL	\$ 15,300

2. CONSTRUCTION AND ANALYTICAL COSTS

COSTS OUTLINED IN THIS SECTION INCLUDE THE COSTS OF SOIL EXCAVATION, HAULING, DISPOSAL, ANALYTICAL COSTS, BACKFILL PURCHASE AND PLACEMENT, AND GROUND WATER PUMPING, HAULING, AND TREATING DURING EXCAVATION

CONSTRUCTION COSTS

CONTAM SOIL REMOVAL	\$ 4,500
TRANSPORTATION	\$ 4,600
THERMAL DESORPTION	\$ 19,700
CLEAN BACKFILL	\$ 2,900
LAWN REPLACEMENT	\$ 900
BASE COURSE REPLACE	\$ 100
EXCAVATION DEWATER	\$ 3,600
DIRECT COSTS	\$ 300
SUBTOTAL	\$ 36,600

ANALYTICAL COSTS

SOIL SAMPLING	\$ 3,300
SUBTOTAL	\$ 3,300

SUMMARY

CONSTRUCTION COSTS	\$ 36,600
ANALYTICAL COSTS	\$ 3,300
TOTAL	\$ 39,900

3. SITE CLOSURE

THIS SECTION INCLUDES ENGINEERING DOCUMENTATION COSTS ASSOCIATED WITH SITE CLOSURE

ENGINEERING CLOSURE COSTS

CLOSURE DOCUMENTS	\$ 1,000
PECFA CLAIM	\$ 500
TOTAL	\$ 1,500

4. SUMMARY

ENGINEERING DESIGN COSTS	\$ 15,300
CONSTRUCTION COSTS	\$ 36,600
CONSTRUCTION ANALYTICAL COSTS	\$ 3,300
SITE CLOSURE COSTS	\$ 1,500
TOTAL COSTS	\$ 56,700

PROJECT: BOB'S SERVICE STATION - FALUN, WI	PREPARED BY: JOSEPH F. HOEME, E.I.T.	DATE: 12/15/95
JOB NO.: 10-0232.00	CHECKED BY: JAN M. SMIT, P.E. JS	DATE: 4/3/96